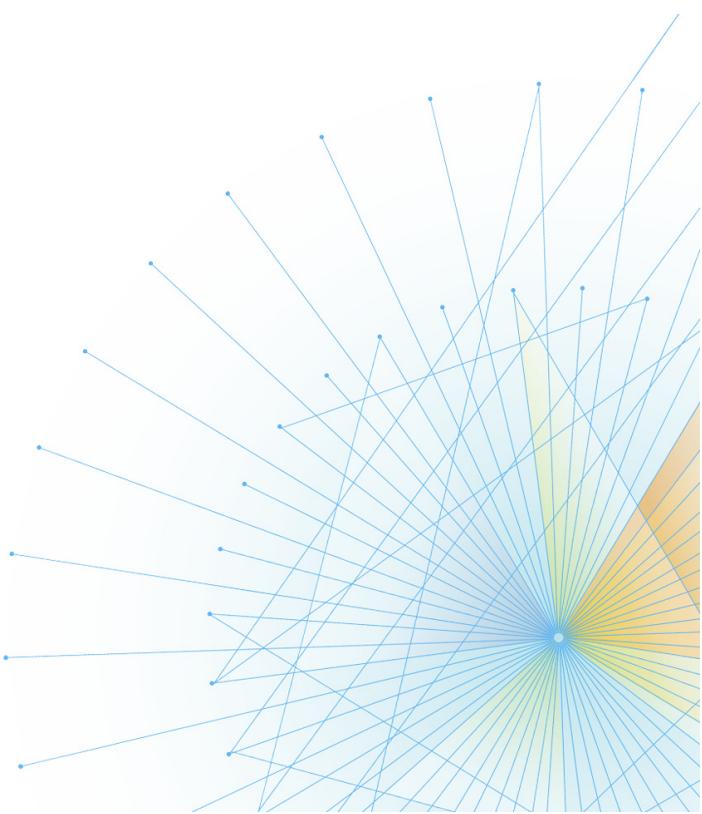




The Mainframe Software Partner For The Next 50 Years

File-AID/MVS User Guide

Release 17.02



Please direct questions about File-AID
or comments on this document to:

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Contents

Introduction	13
What's In This Guide?	13
Alerts.....	14
Related Publications	14
Online Documentation	15
Getting Help	15
Getting Started with File-AID	17
Logging on to TSO with File-AID	17
Accessing File-AID	18
Steps:.....	18
Creating Your Training Files.....	19
Steps:.....	19
Setting Your File-AID Default Parameters	20
Steps:.....	20
Reviewing and Changing Your Default Values	21
Steps:.....	21
Browsing a Data File	23
Accessing the Browse Function (Option 1)	24
Selecting Records to Browse	24
Selecting the Browse Input Dataset	26
Specifying Temporary Selection Criteria.....	27
Specifying the Selection Criteria Options	28
Formatted Selection Criteria Screen	30
Viewing Layout in Column Location Order.....	31
Formatted Selection Criteria - Field Offsets	31
Suppressing the Display of Field Redefinitions	32
Formatted Selection Criteria - Without Redefines	32
Defining Formatted Field Selection Criteria	33
Defining a Compound AND Condition	35
Defining Unformatted Field Selection Criteria.....	36
Processing Your Selection	37
Formatted Display of First Selected Record.....	38
Status Display Feature1	38
Displaying the Next Record in the Dataset.....	39
Displaying the Previous Record in the Dataset	41
Displaying the User Profile Options	42
Removing the Profile Settings Information	44
Specifying the Type of Field Information to Display.....	45
Result of SHOW PICTURE	45

Displaying the Offset for Each Field	46
Result of SHOW OFFSET	46
Displaying Current Field Length and Format	48
Result of SHOW FORMAT	48
Displaying Field Numbers	49
Result of SHOW NUMBER.....	49
Displaying Only Specific Fields by Number (DISPLAY)	50
Result of DISPLAY ONLY command	50
Excluding Fields from the Display.....	52
Result of DISPLAY OFF	52
Adding Fields to the Display.....	53
Result of DISPLAY 34 ON	53
Redisplaying all the Fields of a Record	54
Result of DISPLAY ALL.....	54
Searching for Data Using the FIND Primary Command	55
Displaying the FIND Command Screen	55
FIND Command Prompt Screen.....	55
Specifying a FIND Using The Command Prompt Screen.....	56
Result of FIND command	57
Invoking Character Mode (CHAR) from Formatted Mode	58
Controlling the Records Not Selected Line.....	58
Displaying Data in Hexadecimal Format	59
Result of HEX ON.....	59
Redisplaying Character Format from Hexadecimal Format	60
Displaying the Column Number Information Line	61
Searching for Data In a Specific Column	62
Invoking Vertical Formatted Mode (VFMT) from Character Mode	63
Vertical Formatted (VFMT) Display.....	63
Removing the Mode Prompt Message Line	64
Specifying the Type of Information to Display	65
Displaying the Offset for Each Column.....	66
Displaying the Length and Format of Each Field.....	67
Selecting Fields to Display by Field Number	68
Changing the Display Format of a Field.....	69
Displaying Hexadecimal Notation for a Specified Field.....	69
Result of DISPLAY 21 HEX	69
Returning Fields to Their Standard Display Format.....	71
Redisplaying All Fields	72
Result of DISPLAY ALL.....	72
Exiting the Browse Function	73
Viewing the Last Referenced File List	74
Requesting Related File List	75
Locking Dataset in File List.....	75
Returning To Primary Menu	76

Allocating a VSAM Cluster	77
Accessing the VSAM Utility (Option 3.5)	77
Choosing a VSAM Utility Option	78
Using an Existing Dataset's Allocation Attributes	78
Allocating a Cluster	79
Verifying Allocation Parameters	80
Specifying Extended Allocation Parameters	81
Generating the Batch JCL Information.....	82
Executing the JCL	83
Saving the JCL.....	83
Exit the VSAM Utility	83
Full-Screen Editing	85
Accessing the Edit Function (Option 2)	86
Specifying the Dataset to Edit	86
Copying Data Into a File With the COPY Command	88
Specifying the "Copy From" Dataset	89
Result of COPY	89
Removing Informational Flags from the Display	90
RESET result	90
Protecting Keys	91
P99 result.....	91
Invoking Formatted Mode.....	92
Controlling the Display of Redefines Fields	93
Holding and Hiding Fields	95
Specifying a Field Number to Conduct a Search For Invalid Data	97
Result of FIND INVALID /19	98
Resetting Hold and Hide	99
Printing the Currently Displayed Record	100
Directing The FPRINT Report to a Dataset or SYSOUT	100
Specifying Additional Print Parameters for New Dataset.....	102
Changing Data Using the CHANGE Command	103
Specifying the CHANGE Parameters.....	104
CHANGE Result	104
Navigating within a Formatted Record	105
Scroll DOWN Result.....	106
Scroll UP Result	107
Creating a New Record by Copying the Currently Displayed Record	108
Record REPEATED Result	108
Displaying the New Record	109
FWD Result - Record 5 is a Repeat of Record 4	109
Entering New Data Values in a Repeated Record	110
Protecting New Record Key Fields	111
PROTECT Result	111
Navigating to a Record by Its Key Value	112
KEY Result - Key Specification Screen	112

Scrolling to Another Record by Specifying a Key Value.....	113
Successful KEY Specification - Key 34010 Found.....	113
Using Character Mode	114
Switching To Character Mode	114
Removing Informational Lines and Markers (RESET Command)	115
Assigning Labels.....	116
Using the CHANGE Command With Labels	116
CHANGE Result	117
Reversing Changes (UNDO).....	118
UNDO Result	118
Removing the Line Label Values	118
Editing With Line Commands	120
C (Copy) Line Command	120
C (Copy) Line command Result	121
Sorting the Records of the Dataset	122
Deleting Duplicate Records - D (Delete) Line Command	123
Invoking Vertical Formatted Mode	124
Displaying a Subset of Fields	124
Using the CHANGE ANY Command.....	126
CHANGE ANY Result	126
Printing Records in Vertical Formatted Mode.....	127
Terminate Edit Function	128
Controlling Automatic Save Processing	128
Specify Audit Trail Dataset and JOB Statements	129
Comparing Files	131
Accessing the Compare Function (Option 10)	131
Formatted Compare	132
Specifying the "Old" Dataset	132
Specifying the "New" Dataset.....	133
Specifying Execution Options.....	134
Selecting Your Compare - Criteria Options.....	135
Specifying Print Options for a Formatted Compare	136
Specifying Formatted Field Criteria	138
Viewing Formatted Compare Criteria	140
Executing Compare	142
Analyzing the Compare Report	143
Viewing the Compare Summary Report.....	144
Printing the Report.....	145
Simple Unformatted Compare of PDS/PDSE Libraries	147
Specifying the "Old" Dataset	147
Specifying the "New" Dataset.....	148
Specifying Execution Options.....	149
Selecting Your Compare - Criteria Options.....	150
Specifying Print Options for an Unformatted Compare	151
Specifying Unformatted Criteria	154

Executing Compare	155
Analyzing the Compare Reports.....	156
Printing the Report.	159
Load Library Compare.....	160
Specifying the "New" Load Library	161
Specifying Execution Options.....	162
Selecting Your Compare - Load Library Criteria	163
Specifying Load Library Print Options.....	165
Viewing Formatted Compare Criteria	166
Executing Compare	167
Analyzing the Compare Report	168
Viewing the Compare Summary Report.....	169
Printing the Report.	170
Source Code Compare	172
Specifying the "New" Source Code Library.....	173
Specifying Execution Options.....	174
Selecting Your Compare - Source Criteria.....	175
Specifying Source Print Options.....	177
Source Print Options (Page 1)	177
Source Print Options (Page 2)	179
Viewing Source Compare Criteria	181
Executing Compare	182
Analyzing the Compare Results Member Summary	183
Analyzing the Compare Report	184
Viewing the Compare Summary Report.....	185
Editing the New Member.....	186
Saving the Modified Member.....	187
Printing the Report.	188
JCL Compare.....	190
Specifying the "New" JCL Dataset.....	191
Specifying Execution Options.....	192
Selecting Your Compare - JCL Criteria	193
Specifying JCL Print Options.....	194
JCL Print Options (Page 1)	194
JCL Print Options (Page 2)	196
Viewing JCL Compare Criteria	199
Executing Compare	200
Analyzing the Compare Results Member Summary	201
Analyzing the Compare Report	202
Viewing the Compare Summary Report.....	203
Printing the Report.	204
Scanning and Updating Datasets	207
Accessing the Search/Update Utility (Option 3.6)	207
Defining Your Search/Update Request.....	207
Generating a PDS Find/Change Member List of Selected Members.....	209

Using PDS Member Selection Features	210
Specifying Quick Selection Criteria	211
Viewing the Initial PDS Find/Change Member List	213
Issuing Commands on the PDS Find/Change Screen	213
Editing or Browsing Selected Members	214
Specifying a CHANGE to All Selected Members	215
Using the CHANGE Command Prompt Screen	215
Viewing the Change Results Preview	217
Confirming Your Update	217
Returning to the Search/Update Entry Screen	218
Scanning Datasets for Specific Records (Option B)	220
Using the Dataset S/X Selection List	221
Requesting PDS Member Selection Processing	222
Using the Manual Member S/X Selection List	222
Specify Selection Criteria	224
Browsing Scan Results	225
Specifying Global Changes - (Option U)	226
Specifying Change Criteria	227
Preview Changes	228
Apply Changes (Confirm Update)	229
Processing Your Update In Batch	230
Reviewing Change Criteria	231
Submit Batch JCL	232
Copying Selected PDS Members	233
Accessing the Copy Utility (Option 3.3)	233
Defining Your Copy Request	234
Specifying a Copy of Selected Members	235
Using PDS Member Processing and Selection Features	236
"FROM" PDS Member Processing	236
"TO" PDS Member Processing	236
Specifying PPO Options	237
Specifying Temporary Selection Criteria	238
Specifying the Unformatted Data Test	239
Ending Selection Criteria Specification	240
Generate Batch JCL	241
Editing Your Generated Copy JCL	242
Finding Files On Disk	243
Scanning the System Catalog (3.4 Catalog Utility)	244
Accessing the Catalog Utility (Option 3.4)	244
Selecting the Catalog Utility	245
Specifying Catalog Search Options	246
Working With Your Dataset List (Primary and Line Commands)	248
Reviewing the Tutorial - Summary of Primary and Line Commands	249
Selecting a Dataset for Processing	250

Ending Dataset Processing	251
Scanning DASD Volumes to Find Files (3.7 VTOC Utility)	252
Accessing the VTOC Utility (Option 3.7)	252
Specifying VTOC Search Options	253
Specifying the OPTION	253
Performing VTOC Processing in Batch	253
Specifying the Volume Selection Information	254
Specifying the Optional Search Name	254
Specifying the Catalog to Use	255
Using the Display Confirm Delete option	255
Using the Display Volume Summary option	255
Performing the Name Search	256
Selecting a Dataset for Processing	257
Ending Dataset Processing	257
Viewing Load Module Information	259
Accessing the Library Utility (Option 3.1)	259
Defining Your Library Request	260
Generating a Member List	261
Using the Load Library Processing Options	262
Processing the Member List Using Primary Commands	263
Processing the Member List Using Line Commands	264
Viewing the Load Module's CSECTS in Address Order	266
Viewing Layouts	269
Accessing the View Utility (Option 8)	269
Specifying the Record Layout to be Interpreted	270
Viewing the Interpreted Layout	271
Reformatting Records	273
Accessing the Reformat Function (Option 9)	273
Creating a New Reformat Definition	274
Identifying the Source and Target Record Layouts	275
Using the Reformat Definition Editor	276
Entering Constants	278
Initializing New Fields	281
Hiding Sensitive Data On Output	282
Establishing Selection Criteria	283
Executing the Reformat Online at Your Terminal	284
Browsing the Reformatted File	286
Printing File Contents	287
Accessing the Print Selection Menu (Option 5)	287
Selecting the Type of File To Be Printed	288
Requesting a Print of a Data File	289
Submitting the Print Job	290
Viewing the Report Output	291
Requesting a Vertical Format Print of a Data File	292

Vertical Format Print (VPRINT) JCL Specification	292
Exiting the Print Function	293
Extracting a Selected Subset of Records to Create a Test File	295
Accessing the Selection Criteria Function (Option 6)	295
Specifying the Selection Criteria Datasets	296
Defining Formatted Field Selections.	297
Viewing a Layout with Field Numbers in Column Location Order	298
Changing Array Setting to EVERY	299
Defining Formatted Field Selection Criteria	300
Defining an ANDed Selection Criteria Subset.....	301
Defining an ORed Selection Criteria Set	301
Saving Your Permanent Selection Criteria Member	303
Exiting the Selection Criteria Utility	303
Accessing the Copy Utility (3.3).	305
Specifying the "FROM" and "TO" Datasets and Selection Criteria Member.....	306
Exiting the Copy Utility	307
Creating Selection Criteria Using Global Fields	309
Accessing the Selection Criteria Function (Option 6)	309
Specifying the Selection Criteria Datasets	310
Defining Global Fields	311
Specifying the Global Field Definition.	313
Defining Formatted Selection Criteria	314
Entering Selection Criteria	315
Initializing Global Field.....	316
Replacing Values of Global Field	317
Specifying Field-to-Field Criteria	318
Selecting a Field to Assign to Global Field.....	319
Reviewing Data Replace Criteria.....	320
Inserting Second Test	321
Specifying Selection Criteria.....	322
Testing the Value of the GLOBAL Field	323
Exiting Formatted Selection Criteria	324
Viewing Your Selection Criteria	325
Reviewing Your Selection Criteria	326
Specifying the Browse Datasets and Selection Criteria Member	327
Verifying Selection Criteria in Browse	328
Verifying Selection Based on Conditions Set in Previous Records.....	329
Automating Layout Usage with XREF	331
Accessing the XREF Function (Option 7)	331
Creating a New XREF Member	331
Defining the XREF	333
Defining Layout Selection Rules Using Formatted Criteria	334
Using the PPO Member Filters.....	336
Selecting a Layout Member from a Member List	337

Defining the Formatted XREF Criteria	338
Defining the Formatted Layout Selection Condition	338
Defining Unformatted XREF Criteria	340
Defining the Unformatted Layout Selection Condition.....	341
Defining Formatted XREF Criteria Using Beginning Data-Name	343
Accessing the List of Available Layouts Screen	343
Selecting a Layout Structure from an Available Layouts List	344
Defining the Formatted Layout Selection - Compound Condition	345
Setting a Default Base Layout	346
Saving the New XREF Member	347
Exiting XREF and Returning to Main Menu	348
Using the XREF Member - Record Layout Usage	349
Browsing Formatted Data Records with an XREF.....	350
Requesting the XREF Usage	351
Scrolling with the FWD Command	352
Printing Your Data Records with XREF	353
Routing Your FPRINT	354
Using File-AID/Batch	355
Specifying Your Batch Processing Request	355
Dataset Identifier	356
Function Name	356
Selection, Action, and Control Parameters	357
Executing the File-AID Batch Utility Interactively (Option 3.8)	358
Defining Datasets to Process	358
Performing the Totaling Function	359
Entering Control Statements	360
Exiting Interactive Execution	361
Submitting File-AID/Batch JCL.....	362
Examples of Customer Uses of File-AID/Batch	363
Applying Mass Changes to a JCL Library	363
Copying From One Input File to Create Multiple Output Files	364
Scanning and Printing Data in a Load Library	364
Segmented Record File Layout Automation	365
How to Identify Segments in a Segmented Record File	365
Specifying XREF Layout Status	366
Understanding the XREF Logic Processing Technique.....	366
Using the NEXT Command to See the Next Segment	366
Using the PREV Command to See the Previous Segment	366
Using the TOP Command to Return to the BASE Segment	366
Editing Commands for Segmented Records	366
Manual Layout Selection	366
Review the Sample Segmented Record XREF.....	367
Viewing an Existing XREF Member	368
Using the VIEW Command	369

Browsing the XREF View Criteria	370
Using the XREF to Browse a Segmented Record File.	371
Viewing the Next Segment Using the NEXT Command.	372
Understanding NEXT Command Processing	373
Jumping to Another Record with the LR (Locate Record) Command	374
Keeping a Command On the Command Line with & (Ampersand)	374
Continue Reviewing Segments in Record 13.	375
Continue Reviewing Segments	375
Continue Reviewing Segments	376
Continue Reviewing Segments	376
Viewing the Last Segment	377
Exiting File-AID with the RETURN Command.	377
Allocating and Editing Version 2 PDSE with Member Generation	379
Accessing the Dataset Utility (Option 3.2)	379
Allocating a Version 2 PDSE with Member Generation.	380
Allocating Version 2 PDSE Parameters	381
Copying "FROM" EMPMAST "TO" PDSEV2.	382
Specifying the Dataset to Edit	383
Editing Data In the Original Member.	384
Displaying Generation Members	385
Viewing Data of Relative Generation -1	387
Editing Data of Current Member (Generation 0)	388
Editing Data of a Previous Generation Member	390
Reducing Number of Generations to List	391
Changing Edit Mode.	393
Defining Your Copy Request for a Version 2 PDSE	396
Allocating a New Version 2 PDSE.	397
Specifying PPO Options for Version 2 PDSE.	398
XFACOPY Sample Training Files	401
Listing of Sample Files	401

Introduction

This document provides information and examples for all users of Compuware's Release 17.2 File-AID/MVS data management system. Use this document to learn about File-AID's facilities. By using the Compuware supplied test data, you can follow the examples shown in this document to practice using File-AID at your own pace and at your own terminal.

The chapters are arranged to explain the most frequently used capabilities of File-AID first. However, the table of contents at the beginning of this book or the index at the back may provide faster access to the example information you need.

What's In This Guide?

The following list briefly describes the contents of each chapter.

- [**Getting Started with File-AID**](#): Access File-AID, set defaults and establish test data files.
- [**Browsing a Data File**](#): Browse any data file using selection criteria and source layouts as templates over the data.
- [**Allocating a VSAM Cluster**](#): Allocate a new, smaller version of a test VSAM cluster using attributes of the production file.
- [**Full-Screen Editing**](#): Full-screen editing using source layouts.
- [**Comparing Files**](#): Compare any two files using record layouts to report differences field by field.
- [**Scanning and Updating Datasets**](#): Use FIND and CHANGE across all PDS members, and scan or update any dataset with the Search/Update utility.
- [**Copying Selected PDS Members**](#): Copy selected PDS members based on member names, ISPF statistics and/or data content.
- [**Finding Files On Disk**](#): Find files with Catalog or VTOC searches.
- [**Viewing Load Module Information**](#): View load module information and other PDS management facilities using the Library utility.
- [**Viewing Layouts**](#): View interpreted COBOL and PL/I source layouts.
- [**Reformatting Records**](#): Reformat records using the old and new source layouts as templates for data conversion.
- [**Printing File Contents**](#): Print data files using optional source layouts with the Print utility.
- [**Extracting a Selected Subset of Records to Create a Test File**](#): Use selection criteria to copy a subset of production data for test purposes.
- [**Creating Selection Criteria Using Global Fields**](#): Use global field and field-to-field in selection criteria to select records based on conditions in previous records.
- [**Automating Layout Usage with XREF**](#): Use the cross reference (XREF) facility for defining source layout usage for different record types based on data values.
- [**Using File-AID/Batch**](#): File-AID/Batch examples, interactive online facilities, and background JCL requirements.

- [**Segmented Record File Layout Automation**](#): Segmented record processing with advanced XREF usage.
- [**Allocating and Editing Version 2 PDSE with Member Generation**](#): Describes how to allocate and edit a Version 2 PDSE with member generation, including selecting a generation other than the current.
- [**XFACOPY Sample Training Files**](#): Describes the characteristics of the sample training files provided with File-AID/MVS.

Alerts

The alerts found in this guide include:



Information important to remember.



A note or tip providing additional information.

Related Publications

- *File-AID/MVS Online Reference Manual*: Detailed reference document for users of File-AID/MVS. This manual describes the online product features, screens, options, fields, and commands.
- *File-AID Batch Reference Manual*: Detailed reference document for users of File-AID/Batch. This manual provides information necessary to fully use the batch features of File-AID.
- *File-AID Installation and Configuration Guide*: Provides an abbreviated set of steps to quickly configure File-AID products, including File-AID/MVS.
- *File-AID Advanced Configuration Guide*: Provides advanced configuration topics on how to configure all File-AID products, including File-AID/MVS, on your system. It is intended for database administrators and the systems group responsible for File-AID at your installation.
- *File-AID Reference Summary*: Summary of File-AID options and commands. This reference is intended for any user of File-AID.
- *File-AID User's Guide*: Step-by-step procedures on how to use File-AID functions. This document also contains transition information for users upgrading from a previous File-AID release.
- *File-AID SMF Record Mapping Reference JES V4*: Instructions and reference information for installing and using the File-AID SMF Record Mapping facility.
- *Compuware Installer Mainframe Products SMP/E Installation Guide*: Instructions on how to perform the SMP/E installation of Compuware mainframe products, including File-AID/MVS.
- *File-AID Training Guide*: Overview of File-AID to first-time users. This guide is made available during the File-AID training session conducted by Compuware.
- **IBM Documentation**: File-AID documentation does not document ISPF functions. It is assumed that the File-AID user is familiar with the ISPF environment. For more information on ISPF functions, refer to the current version and release of the following documents:
 - *ISPF Getting Started*

- *ISPF User's Guide*
 - *ISPF Dialog Developer's Guide and Reference*
 - *ISPF Services Guide*
 - *MVS JCL Reference*.
- **Innovative Data Processing, Inc. Documentation:** File-AID reference manuals assume that Innovation Access Method (IAM) users are familiar with the IAM environment. Refer to the *Innovation Access Method User Manual* for more information.

Online Documentation

The File-AID/MVS product installation package does not include the product documentation. Access the File-AID/MVS documentation from the Compuware Support Center website at <https://support.compuware.com> in the following electronic formats:

- Release Notes in HTML format
- Product manuals in PDF format
- Product manuals in HTML format.

The product documentation is available for viewing or downloading:

- View PDF files with the free Adobe Reader, available at <http://www.adobe.com>.
- View HTML files with any standard web browser.

Getting Help

If problems arise, please consult your manual or the File-AID/MVS technical representative at your site. If problems persist, contact Compuware for technical support:

Visit the Compuware Support Center, <https://support.compuware.com>, to find product documentation, knowledge articles, and other technical resources. You can open a case with the Customer Solutions team, order products, and much more.

Contact Customer Solutions by phone:

- USA and Canada: 1-800-538-7822 or 1-313-227-5444.
- All other countries: Contact your local Compuware office. Contact information is available at <https://support.compuware.com>.

Visit Compuware on the web at <http://www.compuware.com> for additional product information.

Getting Started with File-AID

This document is designed to give you some hands on practice with File-AID. You need to know how to access the installed version of File-AID at your site in order to use these examples online.

In the screen examples, **underlined** values indicate entries you should make. The **Steps** section is an ordered list that describes the procedure to follow to accomplish the specific task, including the data values and commands you are to enter and the keys you need to press. All values are distinguished in each step in ****boldface**** type.

Logging on to TSO with File-AID

File-AID/MVS is designed to be accessed from an ISPF menu such as the ISPF/PDF PRIMARY OPTION MENU shown in [Figure 1](#). The option code is usually F. A special logon PROC or allocation CLIST may be required at your site in order to define the File-AID libraries to your TSO session. Your site may choose its own logon method and ISPF menu for access to File-AID.

Figure 1. ISPF/PDF PRIMARY OPTION MENU - Select F for File-AID

```

----- ISPF/PDF PRIMARY OPTION MENU -----
OPTION ==> F

      USERID - XXXXXXXX
0  ISPF PARMs   - Specify terminal and user parameters    TIME - 15:06
1  BROWSE       - Display source data or output listings   TERMINAL - 3278
2  EDIT         - Create or change source data           PF KEYS - 24
3  UTILITIES    - Perform utility functions
4  FOREGROUND   - Invoke language processors in foreground
5  BATCH        - Submit job for language processing
6  COMMAND      - Enter TSO Command, CLIST, or REXX exec
7  DIALOG TEST  - Perform dialog testing
8  LM UTILITIES - Perform library administrator utility functions
9  IBM PRODUCTS - Additional IBM program development products
10 SCLM         - Software Configuration and Library Manager
C  CHANGES      - Display summary of changes for this release
F  File-AID     - File-AID data management system
P  PRODUCTS     - COMPUWARE Products
S  SDSF         - System Display and Search Facility
U  USER         - User Dialogs
T  TUTORIAL    - Display information about ISPF/PDF
X  EXIT         - Terminate ISPF using log and list defaults

Enter END command to terminate ISPF.

```

Accessing File-AID

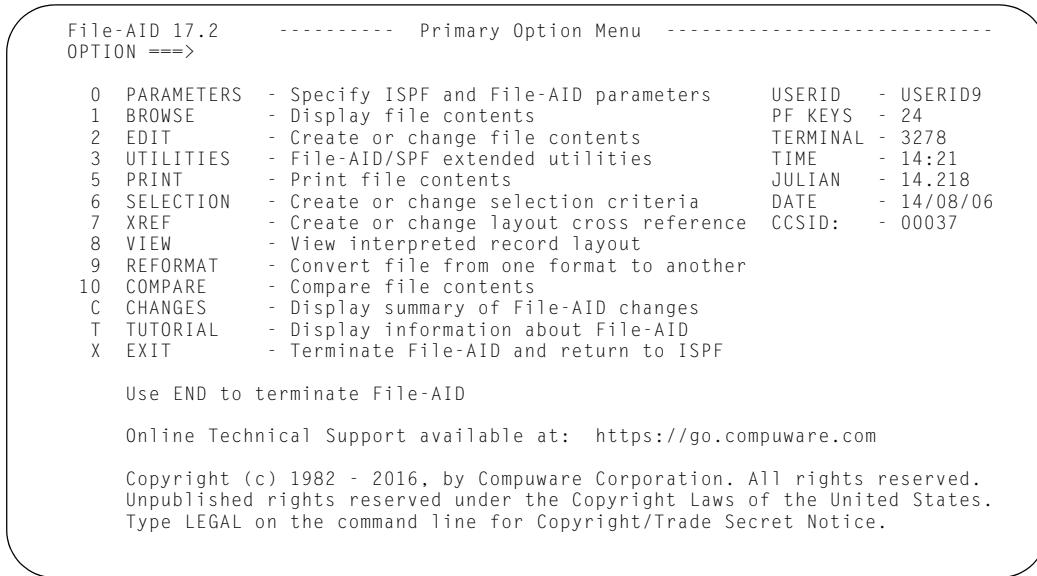
Steps:

1. Log on to TSO using the appropriate logon PROC or allocation CLIST for File-AID.
2. Use the appropriate option code (for example, ISPF option F) or execution CLIST (for example, TSO FASTART) to display the File-AID Primary Option Menu.

After you select option F from the ISPF/PDF PRIMARY OPTION MENU (or the option code on another ISPF menu as defined at your site), or you execute the correct CLIST, the File-AID Primary Option Menu is displayed as shown in [Figure 2](#).

Use the following space to note the method of access at your installation:

Figure 2. File-AID Primary Option Menu

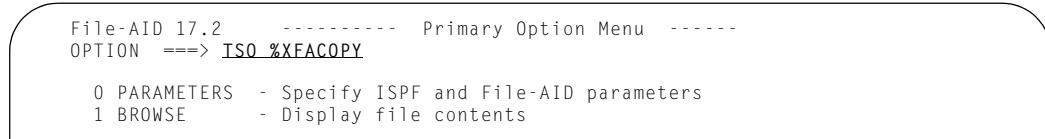


Creating Your Training Files

Follow the instructions in [Installing Training Files](#) of the *File-AID Advanced Configuration Guide* to create a master set of sample files to assist with product verification and user training. A CLIST, XFACOPY, is provided with File-AID from which you can create your own set of sample files that are prefixed with your TSO user ID as the high-level qualifier.

Throughout the *File-AID/MVS User Guide*, screen examples and data displays reflect these sample files. [XFACOPY Sample Training Files](#) lists the sample files with a short description.

Figure 3. Create test files - TSO XFACOPY command



Steps:

1. On the COMMAND line of any screen (see [Figure 3](#) above), execute the XFACOPY CLIST by issuing the command **TSO %XFACOPY**.

Notes:

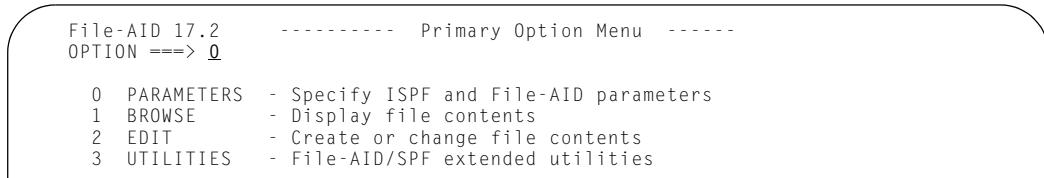
- a. Your site may have a different procedure for executing the XFACOPY CLIST. If you receive an error message, contact the person who installed File-AID at your site.
 - b. Whenever three asterisks (****) are displayed, press Enter to continue.
2. Before creating your new training files, File-AID displays the following message:
XFACOPY PREPARING TO CREATE *userid.FASAMP* TRAINING FILES
ANSWER "Y" TO PERMIT DELETE OF OLD AND CREATION OF NEW *userid.FASAMP* FILES
 3. Type a Y and press Enter to begin creating your training files.
 4. The XFACOPY process takes a couple of minutes to complete and should display status messages as it progresses. Remember, whenever three asterisks (****) are displayed, press Enter to continue.
 5. When XFACOPY is finished executing, File-AID displays an informational message, similar to the following message:

```
XFACOPY PROCESSING HAS COMPLETED!  
XFACOPY - YOUR TRAINING FILES (userid.FASAMP..) ARE NOW READY  
***
```

Setting Your File-AID Default Parameters

The first time you access File-AID Compuware recommends that you review your operating defaults. After you establish the defaults, File-AID saves them from session to session.

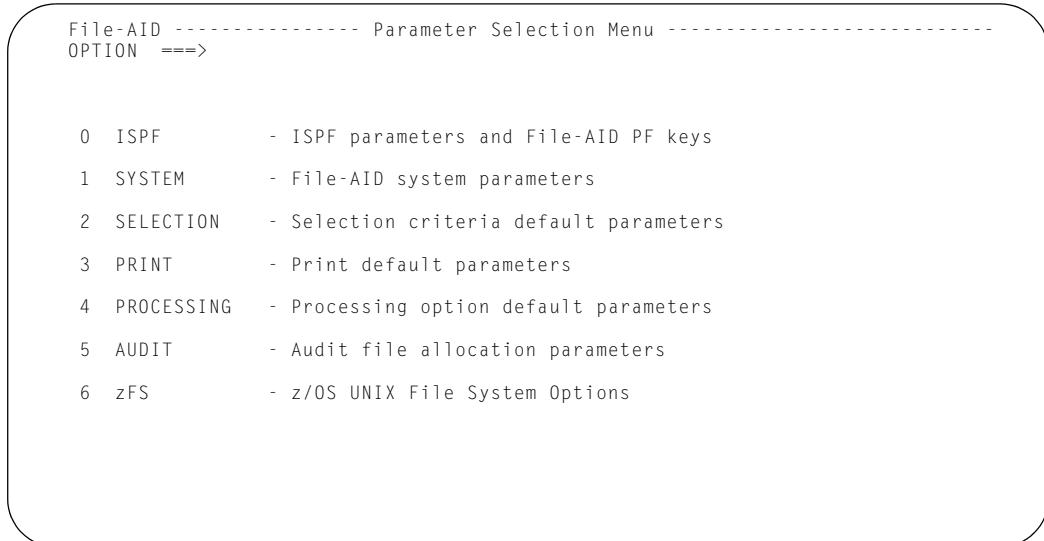
Figure 4. Selecting Option 0 to set default Parameters



Steps:

1. Select File-AID option 0.
2. Press Enter. File-AID displays the Parameter Selection Menu screen ([Figure 5](#)).

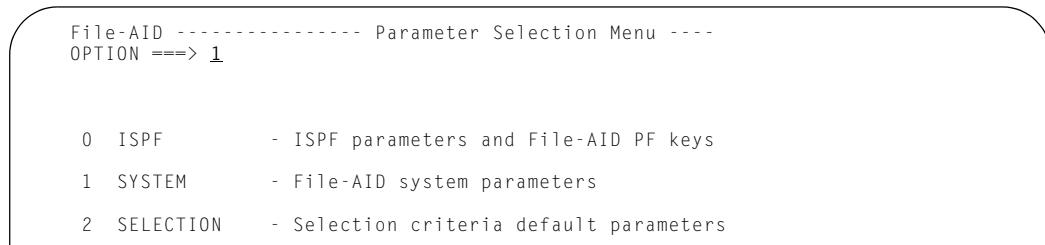
Figure 5. File-AID Parameter Selection Menu



Reviewing and Changing Your Default Values

Take a moment to review each of the choices on the Parameter Selection Menu ([Figure 5](#) on page 20). Use this opportunity to make any desired changes. The changes you make are saved from session to session.

Figure 6. Selecting Option 1 SYSTEM - File-AID System Parameters



Steps:

1. Select each option and look at the defaults that have been pre-set for you.
2. Press **PF1** (HELP) to view tutorial information on each default parameter. Make any changes you like.
3. Use the **END** command or press **PF3** (set as the default for the **END** command) to save any changes you have made. File-AID redisplays the Parameter Selection Menu.
4. Use the **KEYS** command, or select option 0, to review or change your File-AID PF key settings. The **KEYS** command is valid on every File-AID screen.

Browsing a Data File

File-AID enables you to browse a file created through any standard MVS access method (including IAM files). You can display the entire dataset or a selected subset of records. You can supply record layouts and view your data in four display modes:

- Character
- Formatted
- Vertical formatted.
- Unformatted

This chapter discusses several of the primary commands that you can use in the Browse function. Refer to the *File-AID/MVS Online Reference Manual* for a complete list of the primary and line commands that are supported in the Browse and Edit functions.

Character Mode

The character browse mode provides a full-screen view of the data. From character mode, you can use the FMT primary command to redisplay the data in formatted mode, the VFMT primary command to redisplay the data in Vertical Formatted mode, or UNFMT primary command to redisplay the data in Unformatted mode.

Formatted Mode

The formatted browse mode lets you view data using a record layout. This mode presents data one record at a time and formats each record field-by-field. Record layouts can be either COBOL (FD: 01 level) or PL/I (Declare). Cross references (XREFs) are used to define automatic selection of record layouts for datasets with multiple record types.

From Formatted mode, you can use the CHAR primary command to redisplay the data in Character mode, the VFMT primary command to redisplay the data in Vertical Formatted mode, or UNFMT primary command to redisplay the data in Unformatted mode.

Vertical Formatted Mode

The vertical formatted browse mode also provides a full-screen view of the data. This mode, however, uses the record layout fields as column headers.

From Vertical Formatted mode, you can use the CHAR primary command to redisplay the data in Character mode, the FMT primary command to redisplay the data in Formatted mode, or the UNFMT primary command to redisplay the data in Unformatted mode.

Unformatted Mode

The unformatted browse mode provides a full-screen display of your data one record at a time without record layout formatting. File-AID displays 70 characters of data per line until all data for the record is shown or the screen is filled.

Access Unformatted mode by selecting Browse or Edit mode U (Unformatted) or entering the UNFMT primary command from Character, Formatted, or Vertical Formatted mode of Browse or Edit. From Unformatted mode, use the CHAR primary command to redisplay the data in Character mode, the

FMT primary command to redisplay the data in Formatted mode, or VFMT primary command to redisplay the data in Vertical Formatted mode.



If your double byte character spans the boundary of the display line, it will not display in Unformatted mode. To view this data, switch to Character mode and scroll the record to the desired position, then return to Unformatted mode to view the character in Unformatted mode.

Accessing the Browse Function (Option 1)

The Browse function is shown as option 1 on the File-AID Primary Option Menu.

Steps:

1. Enter a 1 in the OPTION field on the File-AID Primary Option Menu (not shown here).
2. Press Enter. File-AID displays the Browse - Dataset Specification screen as illustrated in [Figure 7](#).

Selecting Records to Browse

Figure 7. Browse - Dataset Specification Screen
Description: Using a Pattern Dataset Name.

File-AID ----- Browse - Dataset Specification -----		
COMMAND ==>		
Browse Mode	==> E	(F=Fmt; C=Char; V=Vfmt; U=Unfmt)
Specify Browse Information:		
Dataset name or zFS path	==> FASAMP.*	
Member name	==>	(Blank or pattern for member list)
Volume serial	==>	(If dataset is not cataloged)
Specify Record Layout and XREF Information:		
Record layout usage	==> S	(S = Single; X = XREF; N = None)
Record layout dataset	==> FASAMP_LAYOUTS	
Member name	==> EMPLOYEE	(Blank or pattern for member list)
XREF dataset name	==>	
Member name	==>	(Blank or pattern for member list)
Specify Selection Criteria Information: (E = Existing; T = Temporary; M = Modify; Q = Quick; N = None)		
Selection criteria usage	==> I	M = Modify; Q = Quick; N = None)
Selection dataset name	==>	
Member name	==>	(Blank or pattern for member list)

Use the Browse - Dataset Specification screen to define your browse request, which consists of:

- Browse Mode
- Browse Dataset
- Record Layout and XREF Information
- Selection Criteria Usage Information.

In this exercise, you create temporary selection criteria to view a subset of records. You supply a record layout to view the data in formatted and vertical formatted display modes.

Steps:

1. Type an F in the Browse Mode field to request the Formatted mode for viewing your data records.
2. Type the dataset name and pattern character FASAMP.* in the Dataset name or zFS path field.

The asterisk is a pattern character. It represents any single-level qualifier, or partial-level qualifier when it is preceded by 1 to 7 characters. When you use a pattern character in a dataset name, File-AID displays a list of dataset names that match the pattern you specified. You can then use the S line command to select a dataset from this list. Other valid pattern characters include question mark (?) and percent (%) (single character), as well as plus (+) and slash (/). Refer to the *File-AID/MVS Online Reference Manual* for more information on pattern dataset names.

3. Type an **S** in the Record layout usage field to indicate that you are using a single layout member to describe your data records.
4. Type the dataset name **FASAMP.LAYOUTS** in the Record layout dataset field.

The record layout dataset is a dataset containing the source code for one or more record layouts. You can use a layout that is embedded in a source program. An XREF member is used to extract an embedded layout from a source member. A record layout dataset can be a sequential, partitioned, PANVALET, or LIBRARIAN dataset. File-AID Release 6 *map* libraries are fully supported. The record layout must be a valid COBOL or PL/I declaration. Otherwise, the displayed data may be invalid.

Specifying a Concatenation List

To specify a concatenation list to be used in place of the Record Layout dataset, enter a plus sign followed by the member name (**+membername**) of the member containing the list. Enter this in the **Record layout dataset** field instead of the Record Layout dataset name. For example, if the member RLPROD contains the list to be used, enter **+RLPROD** instead of a Record Layout Dataset name. You specified the name of the concatenation list dataset in Option 0.1, File-AID system parameters (see “Concatenation List DSN” on page 3-5 of the *File-AID/MVS Online Reference Manual*). The concatenation list dataset contains members known as concatenation lists. Each such list contains names of record layout datasets, each of which in turn contains record layout members.

The concatenation list is used in place of the single Record Layout dataset name. If the concatenated libraries contain duplicate member names, File-AID will always select the first occurrence of the member name.

5. Type the member name **EMPLOYEE** in the layout Member name field.

If you do not specify a member, File-AID displays a list of members. You can then select a member from this list.

6. Type a **T** in the Selection criteria usage field to indicate that you want to create a new temporary selection criteria specification.

Selection criteria enables you to select specific records in a data file for processing. Usage option T (Temporary) dynamically invokes the Selection Criteria function and presents the Selection Criteria Menu (see [Figure 9](#) on page 27).

When you specify either T or Q in the Selection criteria usage field on the Browse - Dataset Specification screen, File-AID permits you to save your temporary selection criteria by issuing the SAVE command. File-AID displays a screen to give you the opportunity to save your criteria permanently in a selection criteria dataset. Your sample training file, userid.FASAMP.SELCRIT, may be used to save selection criteria you create.

7. Press Enter. File-AID displays the Dataset List illustrated in [Figure 8](#) on page 26.

Selecting the Browse Input Dataset

Since you entered an asterisk pattern character as part of the dataset name in the Dataset name field on the Browse - Dataset Specification screen, File-AID displays a list of datasets that match the pattern you specified. Select the dataset you want to use from this list.

Steps:

1. Enter the **S** (select) line command next to the dataset **userid.FASAMP.EMPMAST**.
In the figure below, **userid** is shown as **USERID9**. Your TSO ID should appear on your list.
2. Press Enter. File-AID displays the Selection Criteria Menu screen illustrated in [Figure 9](#) on page 27.

Figure 8. Catalog Utility Dataset List ScreenDescription: Selecting From a List of Datasets Matching Your Pattern.

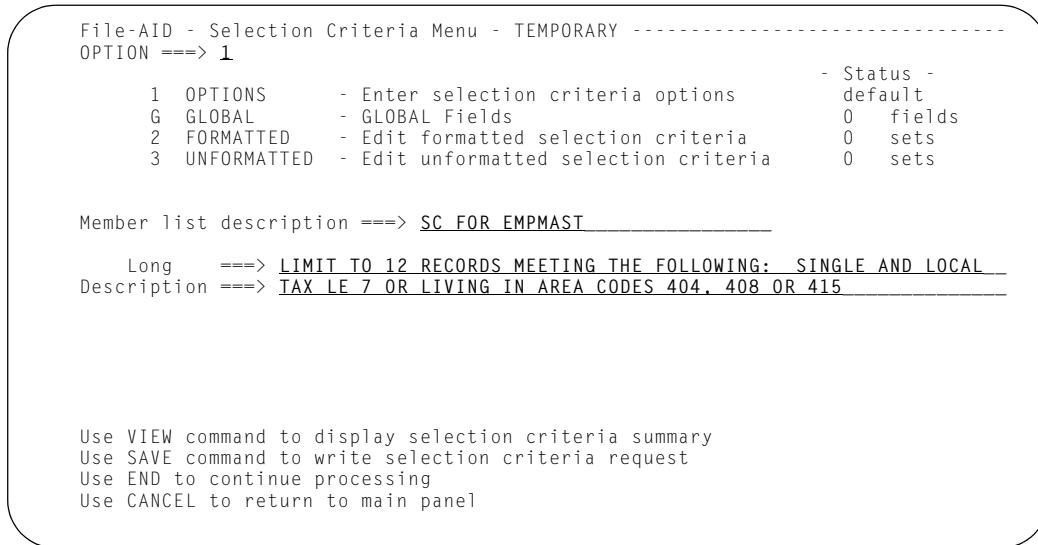
COMMAND	CATALOG UTILITY DATASET LIST	Type	Volume	Status
	----- DATASET NAME -----	--Type--	-Volume-	-Status-
	USERID9.FASAMP.COMPARE	CLUSTER	PRD928	
	USERID9.FASAMP.EMPLOYEE	CLUSTER	PRD928	
	USERID9.FASAMP.EMPLOYEE2	NON-VSAM	PRD925	
S	USERID9.FASAMP.EMPMAST	NON-VSAM	PRD925	
	USERID9.FASAMP.INVFILE	NON-VSAM	PRD925	
	USERID9.FASAMP.INVFILE2	NON-VSAM	PRD925	
	USERID9.FASAMP.JCL	NON-VSAM	PRD925	
	USERID9.FASAMP.LAYOUTS	NON-VSAM	PRD925	
	USERID9.FASAMP.LOADLIB1	NON-VSAM	PRD925	
	USERID9.FASAMP.LOADLIB2	NON-VSAM	PRD925	
	USERID9.FASAMP.QDRFILE	NON-VSAM	PRD925	
	USERID9.FASAMP.RFMTDEF	NON-VSAM	PRD925	
	USERID9.FASAMP.SEGFILE	NON-VSAM	PRD925	
	USERID9.FASAMP.SELCRIT	NON-VSAM	PRD925	
	USERID9.FASAMP.XREF	NON-VSAM	PRD925	
***** BOTTOM OF DATA *****				

More About the Catalog Utility Dataset List

- S is the only valid line command and may be specified for only one dataset.
- The Dataset List of matching names is displayed whenever you use a pattern character to specify a dataset name on *any* File-AID screen.

Specifying Temporary Selection Criteria

Figure 9. File-AID Selection Criteria Menu Screen



Use the Selection Criteria Menu screen to access facilities for defining selection conditions based on formatted or unformatted field selection criteria, global variables, and/or options for reading records.

Option 1 (Enter selection criteria options) displays the Selection Criteria Options screen. Here you can tell File-AID where you want to begin selecting records, establish a random read pattern, and set limits on the number of records processed.

Steps:

1. Enter a **1** in the OPTION field.
2. Enter the description **SC FOR EMPMAST** in the Member list description field.
Since this is temporary selection criteria the description is optional. However, if you decide to **SAVE** this criteria permanently, File-AID displays this description on the Member List screen.
3. Enter the description **LIMIT TO 12 RECORDS MEETING THE FOLLOWING: SINGLE AND LOCAL TAX LE 7 OR LIVING IN AREA CODES 404, 408, OR 415** in the Long Description field.
Once again, since this is temporary criteria, descriptions are not needed unless you **SAVE** your temporary criteria.
4. Press Enter. File-AID displays the Selection Criteria Options screen as shown in [Figure 10](#) on page 28.

More About Temporary Selection Criteria

- From the criteria menu you can access selection options, global variables, or either of the two types of field selection criteria: formatted and unformatted.
- Formatted selection criteria allow you to select records based on data within a field as specified by a record layout.
- Unformatted selection criteria allow you to select records based on freeform data specifications without using a record layout.
- Processing of your temporary selection criteria occurs when you **END** from the menu.

- If you specify usage option Q (Quick) on the Browse - Dataset Specification screen, File-AID creates temporary criteria but bypasses the Selection criteria menu screen and takes you directly to the unformatted selection criteria screen. When you END from the unformatted screen, your selection criteria is applied immediately. With usage Q, default options are used and all records are read and selected based on the defaults you establish in your 0.2 Selection Parameters for number of records to search and select.

Specifying the Selection Criteria Options

Figure 10. Selection Criteria Options Screen

File-AID ----- Selection Criteria Options -----
COMMAND ==> FMT

Specify Selection Criteria Options:

Starting record key	====>	Start at the following record key (both blank for start of dataset)
- OR -		
Starting RBA or RRN	====>	OR at the following RBA or RRN
Initial records to skip	====> 0	then skip this many records
Subsequent Selection Interval:		
Records to select	====> 1	then repeat the following
Records to skip	====> 0	- select this many records - then skip this many records until
Number of records to search	====> ALL	you have read this many records
Number of records to select	====> 12	or selected this many records
SEQ/VSAM processing direction	====> F	(F = Forward; B = Backward)

Use ENTER to return to selection criteria menu

The Selection Criteria Options screen allows you to control the selection of records based on a starting record key, RBA or RRN, and record counts. File-AID reads and selects records in a file based on the values you specify on this screen. File-AID then compares the selected records to any formatted and unformatted selection criteria to determine if any of the selected records match the selection criteria.

In this example, you limit the number of selected matching records to 12.

Steps:

1. Type a value of 12 in the Number of records to select field.

The value you specify in this field sets the limit for the total number of records that File-AID selects from the dataset. Valid values are ALL (the default), 0 (means all), and 1 through 999999.

2. Type FMT in the COMMAND field.

The FMT primary command invokes the Formatted Selection Criteria screen.

3. Press Enter. File-AID displays the EMPLOYEE record layout as illustrated in [Figure 11](#) on page 30.

More About Selection Criteria Options

- If no command is issued, both END or ENTER produce the same result: you are returned to the selection criteria menu.
 - The "Starting record key" field enables you to specify a random starting point for File-AID to begin selecting records. You can specify this field for VSAM KSDS and keyed BDAM files. All

records before the starting record key are not selected, regardless of matching formatted or unformatted field selection criteria.

- The "Starting RBA or RRN" field enables you to specify a random starting point for record selection in a VSAM or BDAM dataset. All records before the specified starting RBA or RRN are not selected, regardless of matching formatted or unformatted field selection criteria.
- The "Initial records to skip" field tells File-AID how many records to skip before processing the dataset. Valid values are 0 through 999999. A value of 0 (zero) tells File-AID to process all records in the dataset.
- The Subsequent Selection Interval: "Records to select" field tells File-AID how many records to retrieve from the dataset per interval. Valid values are 1 through 999999. The default value is 1. File-AID applies all field selection criteria after it retrieves each record.

The Subsequent Selection Interval: "Records to skip" field tells File-AID how many records to skip after it reaches the value you specified in the "Records to select" field. A value greater than 0 (zero) establishes the selection interval. Valid values are 0 through 999999. A value of 0 (zero) tells File-AID to ignore the "Interval Records to select" value.

- The "Number of records to search" field tells File-AID the maximum number of records to read from the dataset. This parameter can prevent excessive I/O processing when searching large files. Valid values are ALL and 0 through 999999. The default for the field is ALL. Both ALL and 0 (zero) indicate to search the entire file.
- The "Number of records to select" field tells File-AID the maximum number of records to select if the records match the selection criteria. Valid values are ALL and 0 through 999999. The default for the field is ALL. Both ALL and 0 (zero) indicate no limit on the number of records selected. You may establish your own default value for these fields by using option 0.2 (Selection Criteria Parameters).
- The "SEQ/VSAM processing direction" field indicates the direction in which File-AID is to read the file (sequential or VSAM). Valid values are F (forward) and B (backward). If you specify a value of B when processing a file other than a sequential or VSAM file, File-AID ignores the value and starts processing at the beginning of the file.

Formatted Selection Criteria Screen

Figure 11. Formatted Selection Criteria Screen

File-AID --- Formatted Selection Criteria -----
COMMAND ==> SCROLL ==> PAGE

SET 1 OF 1 EMPLOYEE-MASTER-FILE GBL = N
--- FIELD LEVEL/NAME ---- -FORMAT- RO -----+---1-----2-----3-----+
***** TOP OF DATA *****
5 EMP-NUMBER 5/AN
5 EMP-LAST-NAME 15/AN
5 EMP-FIRST-NAME 10/AN
5 EMP-MID-INIT 1/AN
5 FILLER 2/AN
5 EMP-TITLE 30/AN
5 EMP-PERSONAL-INFO SYNC 23/GRP
10 EMP-NATL-ID-NUMBER 9/NUM
10 FILLER 1/AN
10 EMP-DATE-OF-BIRTH 6/AN
10 EMP-DOB-REDEF REDEFINES EMP-DATE-OF-BIRTH
10 EMP-DOB-REDEF SYNC 6/GRP
15 EMP-DOB-MM 2/NUM
15 EMP-DOB-DD 2/NUM
15 EMP-DOB-YY 2/NUM
10 EMP-HIRE-DATE 6/AN
Valid RO: EQ,NE,GT,GE,LT,LE,CO,NC,BT,NB,VA,NV,VU,NU,MX,NO,FM,FF
Commands: View

General Information About Formatted Selection Criteria

Press PF1 to access the tutorial panels for Formatted Selection Criteria. The topic Primary Commands lists all available commands for the formatted screen. Some of the valid commands include:

CAPS	Use CAPS OFF to establish exact case testing for character fields. Default CAPS ON provides tests for any case and translates entered lowercase characters to uppercase.
DISPLAY	Control fields displayed and format of fields.
END	Return to the Selection Criteria Menu screen.
SHOW	Control information displayed in center column (OFFSET, FORMAT, PICTURE).
OFFSET	Control format of offset shown (COLUMNS, RELATIVE, HEX).
OPTIONS	Jump to Selection Criteria Options screen.
UNFMT	Jump to Unformatted Selection Criteria screen.
ZERO	Control zero suppress for numeric fields.

Profile tailoring commands

See [Table 1](#) on page 42 for a complete list of the user profile options and the corresponding profile commands.

Viewing Layout in Column Location Order

Issue the SHOW OFFSET command to see the offset of each layout field. (To define unformatted field criteria later in this example, you need to know the offset of the EMP-CON-HOME-PHONE field.)

Figure 12. Formatted Selection Criteria Screen (SHOW OFFSET Command)

```
File-AID --- Formatted Selection Criteria -----
COMMAND ==> SHOW_OFFSET
      SET 1 OF 1          EMPLOYEE-MASTER-FILE
      ---- FIELD LEVEL/NAME ----- -FORMAT- RO -----+---1---
***** ***** ***** ***** ***** TOP OF DATA *****
5 EMP-NUMBER           5/AN
```

Steps:

1. Type **SHOW OFFSET** in the COMMAND field.
2. Press Enter. File-AID redisplays the Formatted Selection Criteria screen as shown in [Figure 13](#) displaying the column position of the first byte of each field.

Formatted Selection Criteria - Field Offsets

Figure 13. Formatted Selection Criteria - Field Offset Information

```
File-AID --- Formatted Selection Criteria -----
COMMAND ==>                               SCROLL ==> PAGE
      SET 1 OF 1          EMPLOYEE-MASTER-FILE          GBL = N
      ---- FIELD LEVEL/NAME ----- COLUMNS- RO -----+---1---+---2---+---3---+-
***** ***** ***** ***** ***** TOP OF DATA *****
5 EMP-NUMBER           1
5 EMP-LAST-NAME        6
5 EMP-FIRST-NAME       21
5 EMP-MID-INIT         31
5 FILLER               32
5 EMP-TITLE             34
5 EMP-PERSONAL-INFO   64
10 EMP-NATL-ID-NUMBER 64
10 FILLER               73
10 EMP-DATE-OF-BIRTH   74
10 EMP-DOB-REDEF REDEFINES EMP-DATE-OF-BIRTH
10 EMP-DOB-REDEF        74
    15 EMP-DOB-MM        74
    15 EMP-DOB-DD        76
    15 EMP-DOB-YY        78
10 EMP-HIRE-DATE        80
Valid RO: EQ,NE,GT,GE,LT,LE,CO,NC,BT,NB,VA,NV,VU,NU,MX,NO,FM,FF
Commands: View
```

Suppressing the Display of Field Redefinitions

Issue the REDEFINES OFF command to suppress the display of field redefinitions. REDEFINES can be abbreviated REDEF.



The REDEFINES profile setting command issued during selection criteria definition is temporary and does not affect the browse/edit formatted display profile setting. Most other profile setting commands *will* affect the browse/edit profile. Upon initial entry to the formatted selection criteria screen, File-AID temporarily sets REDEFINES ON.

Figure 14. Suppress Redefinitions (REDEF OFF Command)

```
File-AID --- Formatted Selection Criteria -----
COMMAND ==> REDEF OFF
      SET 1 OF 1          EMPLOYEE-MASTER-FILE
----- FIELD LEVEL/NAME ----- COLUMNS- RO -----+---1---+
***** TOP OF DATA *****
5 EMP-NUMBER           1
```

Steps:

1. Type REDEF OFF in the COMMAND field.
2. Press Enter. File-AID redisplays the Formatted Selection Criteria screen as shown in [Figure 15](#) and suppresses the EMP-DOB redefinitions of EMP-DATE-OF-BIRTH.

Formatted Selection Criteria - Without Redefines

Figure 15. Formatted Selection Criteria Entry Screen - Without Redefines

```
File-AID --- Formatted Selection Criteria -----
COMMAND ==>                                     SCROLL ==> PAGE
      SET 1 OF 1          EMPLOYEE-MASTER-FILE          GBL = N
----- FIELD LEVEL/NAME ----- COLUMNS- RO -----+---1---+---2---+---3---+
***** TOP OF DATA *****
5 EMP-NUMBER           1
5 EMP-LAST-NAME        6
5 EMP-FIRST-NAME       21
5 EMP-MID-INIT         31
5 FILLER               32
5 EMP-TITLE             34
5 EMP-PERSONAL-INFO    64
10 EMP-NATL-ID-NUMBER  64
10 FILLER               73
10 EMP-DATE-OF-BIRTH    74
10 EMP-HIRE-DATE        80
10 EMP-MARITAL-STATUS   86
5 EMP-WITHOLD-INFO      87
10 EMP-LIFE-INS-WITHOLD-AMT 87
10 EMP-NATL-TAX-WITHOLD-PCT 93
10 EMP-REGION-TAX-WITHOLD-PCT
Valid RO: EQ,NE,GT,GE,LT,LE,CO,NC,BT,NB,VA,NV,VU,NU,MX,NO,FM,FF
Commands: View
```

Defining Formatted Field Selection Criteria

You can selectively choose records for processing by defining one or more conditions that a record must meet in order to be selected. With formatted selection criteria, you can select records based on the value of a specified field within the record layout. To search for a specific field value, you must define a test condition for that field. The test condition consists of the field name, a relational operator (RO), and the value for which you want to test.

The relational operator is entered under the RO column on the screen and can be specified in a letter or symbolic format (for example, "equal to" can be specified as EQ or =). The field value is entered to the right of the relational operator. Numeric field data is always entered as a decimal value (digits 0-9) with a decimal point if needed.

Steps:

1. Type **EQ** in the RO column next to the field name **EMP-MARITAL-STATUS**.
2. Type an **S** in the data area (to the right of the EQ you just typed) to define the test "MARITAL-STATUS EQUAL TO S".
3. Type **DOWN** in the COMMAND field and press Enter (or use PF8) to view more layout fields. File-AID scrolls the Formatted Selection Criteria screen down one full page as shown in [Figure 17](#) on page 35.

Figure 16. Specifying a Formatted Selection Criteria Test Condition

```

File-AID --- Formatted Selection Criteria -----
COMMAND ===> DOWN                                SCROLL ===> PAGE

SET 1 OF 1          EMPLOYEE-MASTER-FILE          GBL = N
---- FIELD LEVEL/NAME ----- COLUMNS- RO -----+---+---+---+---+---+
***** TOP OF DATA *****
5 EMP-NUMBER           1
5 EMP-LAST-NAME        6
5 EMP-FIRST-NAME       21
5 EMP-MID-INIT         31
5 FILLER                32
5 EMP-TITLE              34
5 EMP-PERSONAL-INFO      64
10 EMP-NATL-ID-NUMBER    64
10 FILLER                73
10 EMP-DATE-OF-BIRTH      74
10 EMP-HIRE-DATE         80
10 EMP-MARITAL-STATUS     86   EO_S
5 EMP-WITHOLD-INFO        87
10 EMP-LIFE-INS-WITHOLD-AMT 87
10 EMP-NATL-TAX-WITHOLD-PCT 93
10 EMP-REGION-TAX-WITHOLD-PCT
Valid RO: EQ,NE,GT,GE,LT,LE,CO,NC,BT,NB,VA,NV,VU,NU,MX,NO,FM,FF
Commands: View

```

More About Selection Criteria

- Other relational operators (RO) supported include:

NE	Not equal
LE	Less than or equal
LT	Less than
GT	Greater than
GE	Greater than or equal
EQ	Equal
CO	Contains
NC	Not contains

BT	Between (specify value1:value2 - endpoints inclusive)
NB	Not between (specify value1:value2 - endpoints exclusive)
VA	Valid character, text, numeric, or packed data based on the specified data type. VA operator will treat character and text as numeric.
NV	Not valid character, text, numeric, or packed data based on the specified data type. NV operator will treat character and text as numeric.
VU	Valid unsigned display numeric data based on the specified data type where the last digit must not contain a sign. VU operator will treat character and text as numeric. VU cannot be used on packed data.
NU	Not valid unsigned display numeric data based on the specified data type where the last digit must not contain a sign. NU operator will treat character and text as numeric. NU cannot be used on packed data.

- To specify a search argument that contains case-sensitive data, you must enter the CAPS OFF primary command.
- Multiple values can be tested in non-numeric fields using the CO and EQ operators by separating the values with commas. For example: EQ ABC,DEF,GHI
- You can use the REPEAT or INSERT command to add a new selection criteria *set*. Sets are *ORed* together and only one of the test sets must be true. If a record fails to match CRITERIA NUMBER 1 in an *ORed* condition, File-AID tests the record to see if CRITERIA NUMBER 2 matches. Adding the parameter AND to the REPEAT or INSERT command creates an *ANDed* subset to the current criteria set: A record must match the criteria in subset 1.1 AND 1.2 to be selected. As soon as a record matches any set, File-AID selects it. If a record fails to match any formatted set, it is checked against each unformatted set. If the record fails all tests, it is not selected.

Defining a Compound AND Condition

When you specify test conditions for more than one field in a criteria set, File-AID links the tests together (the tests are *ANDed*) and requires that all the conditions be true before it selects a record. You can use the REPEAT or INSERT command to add a new selection criteria *set*. Sets are *ORed*.

Figure 17. Formatted Selection Criteria - Compound AND Condition

```

File-AID --- Formatted Selection Criteria -----+-----+-----+-----+-----+
COMMAND ==> UNFMT          COLUMNS 00099 00198
                               SCROLL ==> PAGE

      SET 1 OF 1           EMPLOYEE-MASTER-FILE           GBL = N
      ---- FIELD LEVEL/NAME ----- COLUMNS- R0 -----+-----+-----+-----+
      10 EMP-REGION-TAX-WITHOLD-PCT
                           96
      10 EMP-LOCAL-TAX-WITHOLD-PCT   99    LE 7
      5  EMP-HOME-ADDRESS        102
      10 EMP-STREET-ADDRESS      102
      10 FILLER                  127
      10 EMP-CITY                 128
      10 EMP-STATE-PROV-CNTY     143
      15 EMP-STATE                143
      15 FILLER                  145
      10 EMP-POSTAL-CODE         147
      5  EMP-EMERGENCY-CONTACT    152
      10 EMP-CONTACT-NAME       152
      10 FILLER                  177
      10 EMP-CON-WORK-PHONE      179
      10 EMP-CON-HOME-PHONE      189
Valid RO: EQ,NE,GT,GE,LT,LE,CO,NC,BT,NB,VA,NV,VU,NU,MX,NO,FM,FF
Commands: View

```

Steps:

1. Type **LE** in the RO column next to the field name **EMP-LOCAL-TAX-WITHOLD-PCT**.
2. Type a **7** in data area to define the test.

You have now created a compound criteria set matching records with MARITAL-STATUS EQUAL TO S *and* EMP-LOCAL-TAX-WITHOLD-PCT LESS THAN OR EQUAL TO 7.

3. Notice the column offset (189) of the EMP-CON-HOME-PHONE field. In [Figure 18](#) on page 36 you define a test to select records based on the value of the area code (first three characters of the PHONE field) using unformatted selection criteria.
4. Type **UNFMT** in the COMMAND field.

Instead of entering the UNFMT command, you could enter the END primary command to return to the Selection Criteria Menu and then select option 3 (Unformatted). Or, you could have entered the 3 command. 3 is an alias for UNFMT.

5. Press Enter to display the Unformatted Selection Criteria screen as shown in [Figure 18](#) on page 36.

Defining Unformatted Field Selection Criteria

Without using a record layout, you can define a test condition based on the known position of a field or you can scan for a data value contained within the record.

Japanese Data: DBCS and single byte Katakana data is accepted as selection criteria data values for data types C (Character) and T (Text). With unformatted selection criteria, File-AID removes leading or trailing shift characters from DBCS data unless the value is enclosed in double quotes. When KANA is specified for the Character Set option on the System Parameters screen (option 0.1), C (Character) and T (Text) identifiers are both treated as case-sensitive C (Character) data.

In this example, you want to select records that have area code 404, 408, or 415 in the **EMP-CON-HOME-PHONE** field, which starts at column position 189. You can test for data matching any one of a list of values by separating each test value with a comma.

Figure 18. Unformatted Selection Criteria ScreenDescription: Testing for a List of Values

Steps:

1. Type **189** on the first entry line under the Position column.

The Position tells File-AID where in the record to begin the search.

2. Verify that the value of the relational operator is "equal to" (either EQ or =).

The relational operator default value is EQ. Use option 0.2 Selection Defaults if you want to change the default.

3. Type **404,408,415** in the Data Value column.

File-AID interprets a comma in the search argument as an OR condition within the current set. To search for a comma as data, you must enclose the comma in double quotes (for example, "data,contains,commas").

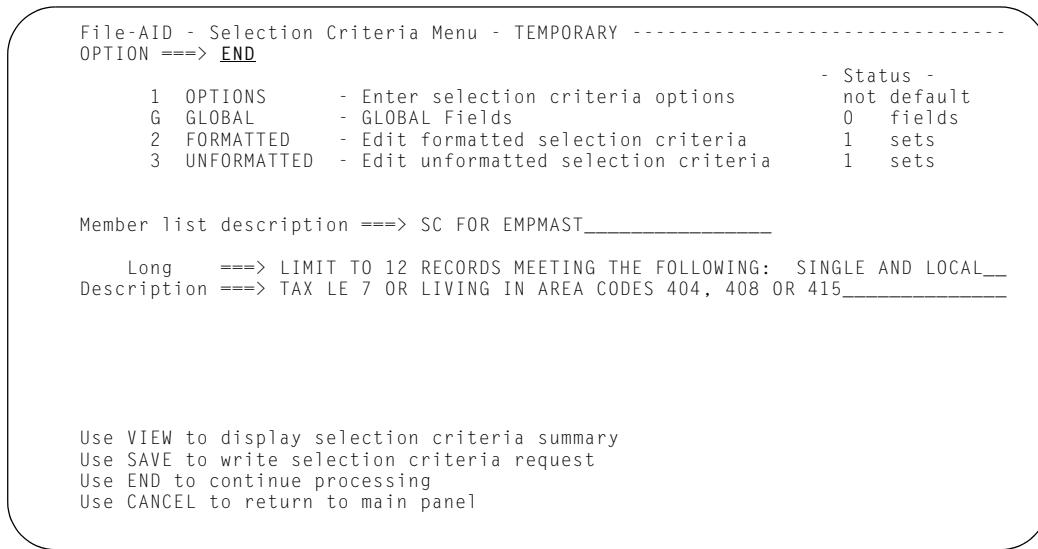
4. Type END in the COMMAND field.

5. Press Enter. File-AID returns to the Selection Criteria Menu screen as shown in [Figure 19](#) on page 37.

Processing Your Selection

Use the END primary command from the Selection Criteria Menu to indicate that you have finished creating and reviewing your temporary selection criteria and are now ready to see the results. Before processing, you may optionally use the VIEW command to review your selection criteria.

Figure 19. Selection Criteria Menu - END to Initiate Processing



Steps:

1. Type END in the OPTION field.
2. Press Enter. File-AID displays the Browse formatted screen for the first selected record in the dataset **USERID9.FASAMP.EMPMAST** as shown in [Figure 20](#) on page 38.

Formatted Display of First Selected Record

After File-AID reads the data file and applies your selection criteria, the first record that matches your selection criteria is displayed in formatted mode as shown in [Figure 20](#) on page 38. Recall that you specified F (formatted) as the value in the Browse Mode field on the Browse - Dataset Specification screen ([Figure 7](#) on page 24).

The length of the record is indicated in the LENGTH field at the right on line three of the display heading. (You can type over this value when using the Edit function on variable length records.)

Figure 20. Browse - Formatted Mode - First Selected Record

```

File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==>
RECORD: 1 EMPLOYEE-MASTER-FILE SCROLL ==> PAGE
----- FIELD LEVEL/NAME ----- COLUMNS- 1-----2-----3-----4
5 EMP-NUMBER 1 00090 LENGTH: 198
5 EMP-LAST-NAME 6 MARTIN
5 EMP-FIRST-NAME 21 EDWARD
5 EMP-MID-INIT 31 M
5 FILLER 32
5 EMP-TITLE 34 AIRPLANE MANUFACTURER
5 EMP-PERSONAL-INFO SYNC 64
10 EMP-NATL-ID-NUMBER 64 427890125
10 FILLER 73
10 EMP-DATE-OF-BIRTH 74 101954
10 EMP-HIRE-DATE 80 920101
10 EMP-MARITAL-STATUS 86 M
5 EMP-WITHOLD-INFO 87
10 EMP-LIFE-INS-WITHOLD-AMT 87 -3000.00
10 EMP-NATL-TAX-WITHOLD-PCT 93 -74.00
10 EMP-REGION-TAX-WITHOLD-PCT

XVJER223 FA223- Records read = 13, selected = 12, error records skipped = 0
Enter CHAR (character mode), VFMT (vertical format), UNFMT (unformatted)

```

Status Display Feature1

File-AID reads your data file and compares each record to your selection criteria. If your file contains a large number of records and you have not placed limits on the number of records to search and select, it may take several seconds before your selected records are presented. File-AID provides a special *real-time* File Processing Status screen (not shown here) to keep you informed about the number of records processed. File-AID automatically displays (refreshes) this screen whenever you have to wait more than five (5) seconds for results. You may use the ATTN key to stop processing and view partial results.

Displaying the Next Record in the Dataset

You can use the UP, DOWN, BACK (or LEFT), and FORWARD (or RIGHT) primary commands to navigate within a formatted display of a record and to move to the next or previous record. In formatted mode, the UP and DOWN primary commands enable you to view more fields within the current record. The BACK (alias LEFT) and FORWARD (aliases: FWD, RIGHT) primary commands scroll the display to the previous and next records, respectively.

Now, use the FORWARD (FWD) command to tell File-AID to scroll the display to the next record.

Figure 21. Display Next Record (FWD Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==> FWD
RECORD: 1           EMPLOYEE-MASTER-FILE
---- FIELD LEVEL/NAME ----- COLUMNS- -----1-----+
5 EMP-NUMBER           1 00090
```

Steps:

1. Type **FWD** in the COMMAND field.
2. Press Enter. File-AID displays the next selected record, as shown in [Figure 22](#) on page 39.

Figure 22. Browse - FWD Result - Formatted Display of Record 2

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- COL 1 101
COMMAND ==>                                     SCROLL ==> PAGE
RECORD: 2           EMPLOYEE-MASTER-FILE          LENGTH: 198
---- FIELD LEVEL/NAME ----- COLUMNS- -----1-----2-----3-----4
5 EMP-NUMBER           1 00200
5 EMP-LAST-NAME         6 JACKSON
5 EMP-FIRST-NAME        21 JOSEPH
5 EMP-MID-INIT          31 C
5 FILLER                 32
5 EMP-TITLE              34 ORATOR
5 EMP-PERSONAL-INFO      64
10 EMP-NATL-ID-NUMBER    64 275587177
10 FILLER                 73
10 EMP-DATE-OF-BIRTH     74 020462
10 EMP-HIRE-DATE         80 920121
10 EMP-MARITAL-STATUS      86 S
5 EMP-WITHOLD-INFO        87
10 EMP-LIFE-INS-WITHOLD-AMT   87 0
10 EMP-NATL-TAX-WITHOLD-PCT   93 55.00
10 EMP-REGION-TAX-WITHOLD-PCT   96 20.00
10 EMP-LOCAL-TAX-WITHOLD-PCT   99 0
Enter CHAR (character mode), VFMT (vertical format), UNFMT (unformatted)
```

More About Navigating To Browse Your Formatted Records

- Each of the navigation commands has a corresponding PF key set as the default in your user profile. The default settings are:

PF7	UP
PF8	DOWN
PF10	LEFT (BACK)
PF11	RIGHT (FORWARD)

- You can specify a number of records to scroll forward. For example, if record number 10 is the currently displayed record and you enter **RIGHT 8**, File-AID displays the 18th record in the dataset.
- You can specify a number of records to scroll backward. For example, if record number 10 is the currently displayed record and you enter **BACK 8**, File-AID displays the 2nd *selected* record in the dataset.
- Note that the number of the record is indicated in the RECORD field located in line three of the display heading.
- Another navigation command is **LR n** (locate record number *n*). For example, **LR 4** displays selected record number 4.

Displaying the Previous Record in the Dataset

The BACK command tells File-AID to scroll the display to the previous record.

Figure 23. Display Previous Record (BACK Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ===> BACK
RECORD: 2                      EMPLOYEE-MASTER-FILE
---- FIELD LEVEL/NAME ----- COLUMNS-----1-----+
5 EMP-NUMBER                   1 00200
```

Steps:

1. Type **BACK** in the COMMAND field.
2. Press Enter. File-AID displays the previous selected record, as shown in [Figure 24](#).

Figure 24. Browse - BACK Result - Formatted Display of Record 1

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- COL 1 101
COMMAND ===> SCROLL ==> PAGE
RECORD: 1                      EMPLOYEE-MASTER-FILE LENGTH: 198
---- FIELD LEVEL/NAME ----- COLUMNS-----1-----+-----2-----+-----3-----+-----4
5 EMP-NUMBER                   1 00090
5 EMP-LAST-NAME                6 MARTIN
5 EMP-FIRST-NAME               21 EDWARD
5 EMP-MID-INIT                 31 M
5 FILLER                       32
5 EMP-TITLE                     34 AIRPLANE MANUFACTURER
5 EMP-PERSONAL-INFO SYNC       64
10 EMP-NATL-ID-NUMBER          64 427890125
10 FILLER                       73
10 EMP-DATE-OF-BIRTH            74 101954
10 EMP-HIRE-DATE               80 920101
10 EMP-MARITAL-STATUS           86 M
5 EMP-WITHOLD-INFO              87
10 EMP-LIFE-INS-WITHOLD-AMT    87 -3000.00
10 EMP-NATL-TAX-WITHOLD-PCT     93 -74.00
10 EMP-REGION-TAX-WITHOLD-PCT   96 25.00
10 EMP-LOCAL-TAX-WITHOLD-PCT    99 5.00
Enter CHAR (character mode), VFMT (vertical format), UNFMT (unformatted)
```

Displaying the User Profile Options

Use the PROFILE primary command to display the current profile settings. The profile options that are displayed vary by display mode and record layout language. [Table 1](#) on page 42 lists all of the profile options, the type of information each option controls, the mode under which it is displayed and language dependencies (COBOL or PL/I).

Figure 25. Browse - Formatted Mode (PROFILE Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==> PROF
RECORD: 1 EMPLOYEE-MASTER-FILE
---- FIELD LEVEL/NAME ----- COLUMNS-----1-----+
5 EMP-NUMBER 1 00090
```

Steps:

1. Type PROF in the COMMAND field.
2. Press Enter. File-AID displays three profile lines at the top of the data area as shown in [Figure 26](#).

Figure 26. Browse - Formatted Mode - After PROFILE Command

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- COL 1 98
COMMAND ==> SCROLL ==> PAGE
RECORD: 1 EMPLOYEE-MASTER-FILE LENGTH: 198
---- FIELD LEVEL/NAME ----- FORMAT -----+-----1-----+-----2-----+-----3-----+-----4
=PROF> ..CAPS OFF....FILLER ON....GROUP ON....OCCURS ON....OFFSET COLUMNS.....
=PROF> ..PICT OFF....PROT OFF....REDEF OFF....SHOW LEVEL....SYNC ON.....
=PROF> ..ZERO OFF....MESSAGE ON....PRESERVE ON.....
5 EMP-NUMBER 1 00090
5 EMP-LAST-NAME 6 MARTIN
5 EMP-FIRST-NAME 21 EDWARD
5 EMP-MID-INIT 31 M
5 FILLER 32
5 EMP-TITLE 34 AIRPLANE MANUFACTURER
5 EMP-PERSONAL-INFO SYNC 64
10 EMP-NATL-ID-NUMBER 64 427890125
10 FILLER 73
10 EMP-DATE-OF-BIRTH 74 101954
10 EMP-HIRE-DATE 80 920101
10 EMP-MARITAL-STATUS 86 M
5 EMP-WITHOLD-INFO 87
10 EMP-LIFE-INS-WITHOLD-AMT 87 -3000.00
10 EMP-NATL-TAX-WITHOLD-PCT 93 -74.00
10 EMP-REGION-TAX-WITHOLD-PCT
Enter CHAR (character mode), VFMT (vertical format), UNFMT (unformatted)
```

More About Profile Settings

- Each option has a corresponding primary command to let you change the setting (for example, GROUP ON or GROUP OFF). A summary of profile options is shown in [Table 1](#).

Table 1. User Profile Options

Option	Mode	Language	Controls display of ...
ALIGN	FMT	PL/I	ALIGNED/UNALIGNED term
ARRAY	FMT	PL/I	ARRAY information
AUTOSAVE	All modes	any	ON or OFF issue SAVE on END
BOUNDS	CHAR,VFMT	any	current bounds settings
CAPS	All modes	any	ON or OFF uppercase entered text

Table 1. User Profile Options (Continued)

Option	Mode	Language	Controls display of ...
COMPLEX	FMT	PL/I	COMPLEX term
FILLER	FMT, VFMT	COBOL, PL/I	FILLER fields
GROUP	FMT	COBOL, PL/I	occurrences of group-level items
HEX	CHAR, UNFMT, VFMT	any	hexadecimal display of data
MESSAGE	all modes	any	mode command prompt line
OCCURS	FMT	COBOL	array declaration lines
OFFSET	FMT, VFMT	COBOL, PL/I	format for display of field offset information
PAD	CHAR	any	PAD character for shift
PICTURE	FMT	COBOL, PL/I	PICTURE or DISPLAY line for numeric data fields
PROTECT	FMT	COBOL, PL/I	ON or OFF key data protection
REDEFINES	FMT, VFMT	COBOL	data item redefinitions
REFLNG	FMT	PL/I	field length reference lines for BIT and CHAR
SETUNDO	All modes	any	ON or OFF toggle UNDO support
SHOW	FMT, VFMT	COBOL, PL/I	LEVEL, NUMBER, FORMAT, OFFSET, or PICTURE information
STATS	CHAR, VFMT	any	ISPF statistics update
SYNC	FMT	COBOL	SYNC term for layout fields
ZERO	FMT, VFMT	COBOL, PL/I	leading zeros in numeric data fields.

Removing the Profile Settings Information

Use the RESET (RES) command to hide the profile information lines (indicated with =PROF>).

Figure 27. Browse - Formatted Mode (RESET Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ===> RES
RECORD: 1 EMPLOYEE-MASTER-FILE
----- FIELD LEVEL/NAME ----- COLUMNS- -----+---1---+
=PROF> ..CAPS OFF....FILLER ON....GROUP ON....OCCURS ON
```

Steps:

1. Type **RES** in the COMMAND field.
2. Press Enter. File-AID redisplays the screen without the profile information lines. shown in [Figure 28.](#)

Figure 28. Browse - RESET Result - =PROF> Lines Gone

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- COL 1 101
COMMAND ===>
RECORD: 1 EMPLOYEE-MASTER-FILE SCROLL ===> PAGE
----- FIELD LEVEL/NAME ----- COLUMNS- -----+---1---+---2---+---3---+---4 LENGTH: 198
5 EMP-NUMBER 1 00090
5 EMP-LAST-NAME 6 MARTIN
5 EMP-FIRST-NAME 21 EDWARD
5 EMP-MID-INIT 31 M
5 FILLER 32
5 EMP-TITLE 34 AIRPLANE MANUFACTURER
5 EMP-PERSONAL-INFO SYNC 64
10 EMP-NATL-ID-NUMBER 64 427890125
10 FILLER 73
10 EMP-DATE-OF-BIRTH 74 101954
10 EMP-HIRE-DATE 80 920101
10 EMP-MARITAL-STATUS 86 M
5 EMP-WITHOLD-INFO 87
10 EMP-LIFE-INS-WITHOLD-AMT 87 -3000.00
10 EMP-NATL-TAX-WITHOLD-PCT 93 -74.00
10 EMP-REGION-TAX-WITHOLD-PCT 96 25.00
10 EMP-LOCAL-TAX-WITHOLD-PCT 99 5.00
Enter CHAR (character mode), VFMT (vertical format), UNFMT (unformatted)
```

Specifying the Type of Field Information to Display

The SHOW primary command (abbrev. S) sets the display of various types of field information for a record. You now use SHOW PICTURE to change the center column to display data element PICTURE information for each field.

Figure 29. Browse - Formatted Mode (SHOW PICTURE Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==> SHOW PICTURE
RECORD: 1 EMPLOYEE-MASTER-FILE
---- FIELD LEVEL/NAME ----- COLUMNS-----1-----+
5 EMP-NUMBER 1 00090
```

Steps:

1. Type **SHOW PICTURE** in the COMMAND field.
2. Press Enter. File-AID redisplays the screen, changing the heading of the Field Description area to PICTURE and displaying the data declaration of each elementary item. The changed display is shown in [Figure 30](#).

Result of SHOW PICTURE

Figure 30. Browse - Formatted Mode - After SHOW PICTURE Command

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- COL 1 101
COMMAND ==> SCROLL ==> PAGE
RECORD: 1 EMPLOYEE-MASTER-FILE LENGTH: 198
---- FIELD LEVEL/NAME ----- PICTURE-----1-----2-----3-----4
5 EMP-NUMBER X(5) 00090
5 EMP-LAST-NAME X(15) MARTIN
5 EMP-FIRST-NAME X(10) EDWARD
5 EMP-MID-INIT X M
5 FILLER XX
5 EMP-TITLE X(30) AIRPLANE MANUFACTURER
5 EMP-PERSONAL-INFO GROUP
10 EMP-NATL-ID-NUMBER 9(9) 427890125
10 FILLER X
10 EMP-DATE-OF-BIRTH X(6) 101954
10 EMP-HIRE-DATE X(6) 920101
10 EMP-MARITAL-STATUS X M
5 EMP-WITHOLD-INFO GROUP
10 EMP-LIFE-INS-WITHOLD-AMT S9(4)V99 -3000.00
10 EMP-NATL-TAX-WITHOLD-PCT S999V99 -74.00
10 EMP-REGION-TAX-WITHOLD-PCT
S999V99 25.00
10 EMP-LOCAL-TAX-WITHOLD-PCT
S999V99 5.00
Enter CHAR (character mode), VFMT (vertical format), UNFMT (unformatted)
```

More About the SHOW Command

- Valid syntax for the SHOW command includes:

SHOW PICTURE	Change center column heading to PICTURE and information for each field to show the data declaration (see Figure 30). Abbrev: S P.
SHOW FORMAT	Change center column heading to FORMAT and shows the length and format of each field (see Figure 34 on page 48). Abbrev: S F.
SHOW OFFSET	Change center column heading to COLUMNS and show the offset of each field relative to byte 1 (see Figure 32 on page 46). Abbrev: S O.

You can tailor the offset using the OFFSET primary command (see [Displaying the Offset for Each Field](#) on page 46 for a description of the OFFSET command and its parameters).

SHOW LEVEL	Change left column heading to FIELD LEVEL/NAME and show the hierarchical level number (see Figure 30 on page 45). Abbrev: S L.
SHOW NUMBER	Change left column heading to FIELD NUMBER/NAME and show the system-assigned field number (see Figure 36 on page 49). Abbrev: S N.

Displaying the Offset for Each Field

The command SHOW OFFSET is used to change the center column to display information about the offset of each field.

Figure 31. Browse - Formatted Mode (SHOW OFFSET Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ===> SHOW OFFSET
RECORD: 1 EMPLOYEE-MASTER-FILE
----- FIELD LEVEL/NAME ----- PICTURE-----1-----
5 EMP-NUMBER X(5) 00090
```

Steps:

1. Type **SHOW OFFSET** in the COMMAND field.
(tip) SHOW may be abbreviated to S. Keyword OFFSET may be abbreviated to O. Therefore "S O" is the same as "SHOW OFFSET". Most commands can be shortened as long as they can be uniquely identified.
2. Press Enter. File-AID redisplays the screen, changing the heading of the Field Description area to indicate the format of the record's offset and displaying the offset of each field from the beginning of the record.

Result of SHOW OFFSET

Figure 32. Browse - Formatted Mode - After SHOW OFFSET Command

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- COL 1 101
COMMAND ===> SCROLL ===> PAGE
RECORD: 1 EMPLOYEE-MASTER-FILE LENGTH: 198
----- FIELD LEVEL/NAME ----- COLUMNS -----1-----2-----3-----4
5 EMP-NUMBER 1 00090
5 EMP-LAST-NAME 6 MARTIN
5 EMP-FIRST-NAME 21 EDWARD
5 EMP-MID-INIT 31 M
5 FILLER 32
5 EMP-TITLE 34 AIRPLANE MANUFACTURER
5 EMP-PERSONAL-INFO 64
10 EMP-NATL-ID-NUMBER 64 427890125
10 FILLER 73
10 EMP-DATE-OF-BIRTH 74 101954
10 EMP-HIRE-DATE 80 920101
10 EMP-MARITAL-STATUS 86 M
5 EMP-WITHOLD-INFO 87
10 EMP-LIFE-INS-WITHOLD-AMT 87 -3000.00
10 EMP-NATL-TAX-WITHOLD-PCT 93 -74.00
10 EMP-REGION-TAX-WITHOLD-PCT 96 25.00
10 EMP-LOCAL-TAX-WITHOLD-PCT 99 5.00
Enter CHAR (character mode), VFMT (vertical format), UNFMT (unformatted)
```

More About the SHOW OFFSET Command

- Offset information can be displayed in three ways by using the OFFSET primary profile command.

Valid syntax for the OFFSET (OFST) command includes:

OFFSET RELATIVE	Change the center column to RELATIVE and show a decimal offset of each field relative to byte 0. Abbrev: O R.
OFFSET HEX	Change the center column to REL(HEX) and show the offset of each field in a hexadecimal format relative to byte 0. Abbrev: O H.
OFFSET COLUMNS	Change the center column to COLUMNS and show the offset of each field relative to byte 1 (see Figure 32 on page 46). Abbrev: O C.

Displaying Current Field Length and Format

You now use SHOW FORMAT to change the center column to display data element length and usage information for each field.

Figure 33. Browse - Formatted Mode (SHOW FORMAT Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ===> SHOW FORMAT
RECORD:      1           EMPLOYEE-MASTER-FILE
---- FIELD LEVEL/NAME ----- COLUMNS- ---+---1---+-
5 EMP-NUMBER           1 00090
```

Steps:

1. Type **SHOW FORMAT** in the COMMAND field.
2. Press Enter. File-AID redisplays the screen, changing the heading of the Field Description area to **FORMAT** and displaying the field length and format of each field.

Result of SHOW FORMAT

Figure 34. Browse - Formatted Mode - After SHOW FORMAT Command

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- COL 1 101
COMMAND ===>                                     SCROLL ===> PAGE
RECORD:      1           EMPLOYEE-MASTER-FILE          LENGTH:   198
---- FIELD LEVEL/NAME ----- -FORMAT- ---+---1---+---2---+---3---+---4
5 EMP-NUMBER           5/AN    00090
5 EMP-LAST-NAME        15/AN   MARTIN
5 EMP-FIRST-NAME       10/AN   EDWARD
5 EMP-MID-INIT          1/AN    M
5 FILLER                2/AN
5 EMP-TITLE             30/AN   AIRPLANE MANUFACTURER
5 EMP-PERSONAL-INFO    23/GRP
10 EMP-NATL-ID-NUMBER  9/NUM   427890125
10 FILLER                1/AN
10 EMP-DATE-OF-BIRTH    6/AN    101954
10 EMP-HIRE-DATE        6/AN    920101
10 EMP-MARITAL-STATUS   1/AN    M
5 EMP-PERSONAL-INFO    15/GRP
10 EMP-LIFE-INS-WITHOLD-AMT 6/SNUM -3000.00
10 EMP-NATL-TAX-WITHOLD-PCT 3/PS    -74.00
10 EMP-REGION-TAX-WITHOLD-PCT 3/PS    25.00
10 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS    5.00
Enter CHAR (character mode), VFMT (vertical format), UNFMT (unformatted)
```

Displaying Field Numbers

File-AID assigns a sequential field number to each layout field. These field numbers can be used in several commands to control the display and to refer to specific fields more easily.

Figure 35. Browse - Formatted Mode (SHOW NUMBER Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==> SHOW NUMBER
RECORD:      1           EMPLOYEE-MASTER-FILE
---- FIELD LEVEL/NAME ----- -FORMAT- - - + - 1 - - +
5 EMP-NUMBER          5/AN    00090
```

Steps:

1. Type **SHOW NUMBER** in the COMMAND field.
2. Press Enter. File-AID redisplays the screen, changing the heading of the Field Name area to FIELD NUMBER/NAME and displaying the File-AID-assigned number for each field. The changed display is shown in [Figure 36](#).

Result of SHOW NUMBER

Figure 36. Browse - Formatted Mode - After SHOW NUMBER Command

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- COL 1 101
COMMAND ==>
RECORD:      1           EMPLOYEE-MASTER-FILE           SCROLL ==> PAGE
---- FIELD NUMBER/NAME ----- -FORMAT- - - + - 1 - - + - 2 - - + - 3 - - + - 4 LENGTH: 198
1 EMP-NUMBER          5/AN    00090
2 EMP-LAST-NAME       15/AN   MARTIN
3 EMP-FIRST-NAME      10/AN   EDWARD
4 EMP-MID-INIT         1/AN    M
5 FILLER               2/AN
6 EMP-TITLE            30/AN   AIRPLANE MANUFACTURER
7 EMP-PERSONAL-INFO    23/GRP
8 EMP-NATL-ID-NUMBER   9/NUM   427890125
9 FILLER               1/AN
10 EMP-DATE-OF-BIRTH   6/AN    101954
15 EMP-HIRE-DATE       6/AN    920101
16 EMP-MARITAL-STATUS   1/AN    M
17 EMP-WITHOLD-INFO     15/GRP
18 EMP-LIFE-INS-WITHOLD-AMT 6/SNUM -3000.00
19 EMP-NATL-TAX-WITHOLD-PCT 3/PS   -74.00
20 EMP-REGION-TAX-WITHOLD-PCT 3/PS   25.00
21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS   5.00
Enter CHAR (character mode), VFMT (vertical format), UNFMT (unformatted)
```

Displaying Only Specific Fields by Number (DISPLAY)

The DISPLAY command references the File-AID-assigned field numbers. You can use the DISPLAY primary command to display several types of information including:

- All or selected fields of a record
- The display format (HEX for example) for individual layout fields
- One or all redefinitions of the same data.

In this example, you request a display of only a few fields of this layout.

Figure 37. Browse - Formatted Mode (DISPLAY ONLY Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==> DISPLAY 1-6 16 21 ONLY
RECORD:      1          EMPLOYEE-MASTER-FILE
---- FIELD NUMBER/NAME ----- -FORMAT- -----+-----+
1 EMP-NUMBER           5/AN    00090
```

Steps:

1. Type **DISPLAY 1-6 16 21 ONLY** in the COMMAND field.

You can separate the field numbers by blanks or commas. You may specify individual fields and/or field *ranges* (two fields connected by a hyphen: a-b).

2. Press Enter. Only the data items in fields 1 through 6, 16, and 21 are displayed as illustrated in [Figure 38](#).

Result of DISPLAY ONLY command

Figure 38. Browse - Formatted Mode - After DISPLAY ONLY Command

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- COL 1 101
COMMAND ==>
RECORD:      1          EMPLOYEE-MASTER-FILE          SCROLL ==> PAGE
---- FIELD NUMBER/NAME ----- -FORMAT- -----+-----2-----3-----4
***** TOP OF DATA *****
1 EMP-NUMBER           5/AN    00090
2 EMP-LAST-NAME        15/AN   MARTIN
3 EMP-FIRST-NAME       10/AN   EDWARD
4 EMP-MID-INIT         1/AN    M
5 FILLER                2/AN
6 EMP-TITLE            30/AN   AIRPLANE MANUFACTURER
16 EMP-MARITAL-STATUS   1/AN    M
21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS    5.00
***** BOTTOM OF DATA *****
```

Enter CHAR (character mode), VFMT (vertical format), UNFMT (unformatted)

More About the DISPLAY Command

- You can specify up to nine field numbers or field ranges, listed in any order.
- The abbreviation for DISPLAY is DIS.

- The ON, OFF, and ONLY parameters can be placed before, after, or in any position within the field list.
- In formatted mode, the set of fields that you define with the DISPLAY command is associated with a record layout and reused each time a record is mapped to that layout. You can define a separate set of fields to be displayed for each record layout if an XREF is in use.
- The SHOW NUMBER command is used to tailor the display to show the field numbers.
- The FPRINT command generates a report of one or more records and uses the current SHOW and DISPLAY settings to determine which fields are to appear on the report. (What you see is what you get.)
- Unicode fields:

The DISPLAY parameters **NATIONAL** or **UT16** interpret data as Unicode UTF-16 and convert it to EBCDIC via IBM conversion services with the terminal CCSID. When conversion fails, original data are displayed in hexadecimal format. Limited to even bytes.

Excluding Fields from the Display

The DISPLAY OFF command can be used to hide additional fields.

Figure 39. Browse - Formatted Mode (DISPLAY OFF Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==> DIS 3-6 OFF
RECORD:      1          EMPLOYEE-MASTER-FILE
---- FIELD NUMBER/NAME ----- -FORMAT- -----+-----+
1 EMP-NUMBER           5/AN    00090
```

Steps:

1. Type **DIS 3-6 OFF** in the COMMAND field.
2. Press Enter. File-AID redisplays the screen, excluding fields 3-6 (EMP-FIRST-NAME, EMP-MID-INIT, FILLER, and EMP-TITLE) from the display as illustrated in [Figure 40](#).

Result of DISPLAY OFF

Figure 40. Browse - Formatted Mode - After DISPLAY 3-6 OFF Command

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- COL 1 101
COMMAND ==>                                     SCROLL ==> PAGE
RECORD:      1          EMPLOYEE-MASTER-FILE          LENGTH:   198
---- FIELD NUMBER/NAME ----- -FORMAT- -----+-----+-----+-----+
***** TOP OF DATA ***** 1 EMP-NUMBER           5/AN    00090
2 EMP-LAST-NAME          15/AN   MARTIN
16 EMP-MARITAL-STATUS     1/AN     M
21 EMP-LOCAL-TAX-WITHOLD-PCT  3/PS    5.00
***** BOTTOM OF DATA *****
```

Enter CHAR (character mode), VFMT (vertical format), UNFMT (unformatted)

Adding Fields to the Display

A subsequent DISPLAY command only changes what is requested by the current command.

Figure 41. Browse - Formatted Mode (DISPLAY ON Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ===> DIS 34 ON
RECORD: 1                      EMPLOYEE-MASTER-FILE
----- FIELD NUMBER/NAME ----- -FORMAT- -----+-----1-----+
1 EMP-NUMBER                  5/AN    00090
```

Steps:

1. Type **DIS 34 ON** in the COMMAND field.
2. Press Enter. File-AID redisplays the screen and adds field 34 to the set of currently displayed fields as illustrated in [Figure 42](#).

Result of DISPLAY 34 ON

Figure 42. Browse - Formatted Mode - After DIS 34 ON Command

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- COL 1 101
COMMAND ===> SCROLL ===> PAGE
RECORD: 1                      EMPLOYEE-MASTER-FILE LENGTH: 198
----- FIELD NUMBER/NAME ----- -FORMAT- -----+-----1-----2-----3-----4
***** TOP OF DATA *****
1 EMP-NUMBER                  5/AN    00090
2 EMP-LAST-NAME                15/AN   MARTIN
16 EMP-MARITAL-STATUS          1/AN     M
21 EMP-LOCAL-TAX-WITHOLD-PCT
                                3/PS    5.00
34 EMP-CON-HOME-PHONE          10/AN   4155556981
***** BOTTOM OF DATA *****
```

Enter CHAR (character mode), VFMT (vertical format), UNFMT (unformatted)

Redisplaying all the Fields of a Record

To redisplay all fields, use the DISPLAY ALL command. No field numbers are allowed with this syntax.

Figure 43. Browse - Formatted Mode (DISPLAY ALL Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----  
COMMAND ==> DIS ALL  
RECORD: 1 EMPLOYEE-MASTER-FILE  
---- FIELD NUMBER/NAME ----- -FORMAT- - - + - - 1 - - + -  
1 EMP-NUMBER 5/AN 00090
```

Steps:

1. Type **DIS ALL** in the COMMAND field.
 2. Press Enter. File-AID redisplays the screen with all of the fields for record 1 as illustrated in [Figure 44](#).

Result of DISPLAY ALL

Figure 44. Browse - Formatted Mode - After DISPLAY ALL

Searching for Data Using the FIND Primary Command

The FIND (F) primary command searches for and displays, if found, data meeting specified conditions.

Displaying the FIND Command Screen

When you enter the FIND command without parameters, File-AID displays the FIND Command screen. Use the FIND Command screen to specify the search conditions.

Figure 45. FIND command with no parameters

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==> F
RECORD: 1                      EMPLOYEE-MASTER-FILE
----- FIELD NUMBER/NAME ----- -FORMAT- -----+---+
1 EMP-NUMBER                  5/AN    00090
```

Steps:

1. Type F in the COMMAND field.
2. Press Enter. File-AID displays the FIND Command screen as illustrated in [Figure 46](#).

FIND Command Prompt Screen

Use the FIND Command screen to specify the search conditions.

Figure 46. FIND Command Prompt Screen

```
File-AID ----- FIND Command -----
COMMAND ==>

Specify FIND operands:
  Operator      ==>          (EQ; NE; LT; GT; LE; GE)
  Find string   ==>
  Modifier      ==> NEXT      (NEXT; ALL; FIRST; LAST; PREV)
  Lines to search ==>        (NX = Nonexcluded; X = Excluded; Blank = all)

Specify the Following Fields to Limit the Range of Search for this FIND:
  Field name    ==>
  or
  Field number  ==>
  or
  Start column  ==>          End column ==>          (Column number(s))
  Start range   ==>          End range  ==>          (Label or line number)

NOTE: You may bypass this screen by entering the FIND command with operands:
FIND string      (NEXT)      (NX)      (col-1 (col-2))      (range)
F (op) string    (ALL)       (X)       (/field name)
VALID           (FIRST)     (/field number)
INVALID         (LAST)
*               (PREV)
```

Specifying a FIND Using The Command Prompt Screen

Figure 47. FIND Command Prompt Screen - FIND JONES in EMP-LAST-NAME

```

File-AID ----- FIND Command -----
COMMAND ==>

Specify FIND operands:
  Operator      ==> EQ      (EQ; NE; LT; GT; LE; GE)
  Find string   ==> JONES
  Modifier      ==> NEXT   (NEXT; ALL; FIRST; LAST; PREV)
  Lines to search ==>      (NX = Nonexcluded; X = Excluded; Blank = all)

Specify the Following Fields to Limit the Range of Search for this FIND:
  Field name    ==> EMP-LAST-NAME
  or
  Field number   ==>
  or
  Start column   ==>      End column ==>          (Column number(s))
  Start range    ==>      End range  ==>          (Label or line number)

NOTE: You may bypass this screen by entering the FIND command with operands:
FIND string      (NEXT)   (NX)   (col-1 (col-2))   (range)
F (op) string    (ALL)    (X)    (/field name)
VALID           (FIRST)   ()     (/field number)
INVALID         (LAST)    ()     (PREV)
*
```

The fields on the FIND Command screen correspond to the FIND primary command syntax parameters. Refer to the *File-AID/MVS Online Reference Manual* for information on the FIND command syntax. A sample of the FIND syntax is displayed on the bottom half of the screen.

Steps:

1. Type **EQ** in the Operator field.

The relational operator EQ indicates that data must equal the value specified in the Find string field. Other valid operators are listed to the right of the field name. EQ is assumed when no operator is specified.

2. Type **JONES** in the Find string field.

The Find string field contains the value that you want to match defined by the value you specify in the Operator field.

3. Type **NEXT** in the Modifier field.

The value you specify in the Modifier field tells File-AID where to begin and in which direction to search. Using the NEXT value, File-AID searches forward in the dataset starting at the current cursor position.

4. Type **EMP-LAST-NAME** in the Field name field.

Use the Field name field to limit the search to this field only in each record.

5. Press Enter. File-AID searches the **EMP-LAST-NAME** field in each record to find the value **JONES**. When found, the screen is automatically scrolled to show the data found as illustrated in [Figure 48](#) on page 57.

Result of FIND command

Figure 48. Browse - FIND Result - JONES found in Record 6

File-AID - Browse - USERID9.FASAMP.EMPMAST -----			'JONES' FOUND
COMMAND ==>			SCROLL ==> PAGE
RECORD:	FORMAT	LENGTH:	198
----- FIELD NUMBER/NAME -----	-----+-----1-----+-----2-----+-----3-----+-----4		
2 EMP-LAST-NAME	15/AN JONES		
3 EMP-FIRST-NAME	10/AN GEORGE		
4 EMP-MID-INIT	1/AN B		
5 FILLER	2/AN		
6 EMP-TITLE	30/AN COUNTRY SINGER		
7 EMP-PERSONAL-INFO SYNC	23/GRP		
8 EMP-NATL-ID-NUMBER	9/NUM 463813456		
9 FILLER	1/AN		
10 EMP-DATE-OF-BIRTH	6/AN 090944		
15 EMP-HIRE-DATE	6/AN 920221		
16 EMP-MARITAL-STATUS	1/AN S		
17 EMP-PERSONAL-INFO SYNC	15/GRP		

More About the FIND Command

- In order for File-AID to search for exact case data, you must specify the Find value as a delimited string with a C (explicit character) data type. For example, 'Jones' matches the values of Jones, jones, and JONES. However, C'Jones' matches only the value of Jones.
- The Find string parameter can be any one of the following data type strings:

Simple	Value without quotes or data types specified. Matches both upper and lowercase values. The Find string, JONES, in Figure 47 on page 56 is an example of a simple data type string.
Delimited	Specified with single quotes. The string can include imbedded spaces For example, 'delim ited' and T'delim ited' are equivalent.
Character	Expressed as C'string' explicit case
Hexadecimal	Expressed as X'hex digits'.
Decimal	A number using digits 0—9. Used when a field-name/number is also specified.
Packed	Expressed as P'signed decimal number'.
VALID and INVALID	These validity keywords are used with a field-name/number to determine if the field contains valid or invalid data based on the layout definition of the field (a layout is required).

- For Unicode data, the FIND command has these restrictions:
 1. Only supports hex format.
 2. The parameters VALID and INVALID are not supported.
 3. In FMT mode and VFMT HEX OFF mode, the cursor does not point to the exact position of the found string.

Invoking Character Mode (CHAR) from Formatted Mode

Character mode data displays are full-screen presentations of multiple records of a dataset. The command structure and display layout are similar to those of ISPF. The displayed data can consist of the entire dataset or only a selected subset of records (when selection criteria is used).

Figure 49. Browse - Invoking Character Mode (CHAR Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==> CHAR
RECORD: 6 EMPLOYEE-MASTER-FILE
----- FIELD NUMBER/NAME ----- FORMAT -----+---+
2 EMP-LAST-NAME 15/AN JONES
```

Steps:

1. Type CHAR in the COMMAND field.
2. Press Enter. File-AID displays your data records in character mode, placing the cursor on record 6 as shown in [Figure 50](#).

Figure 50. Browse - Character Mode Full Screen Display

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- LINE 0000 COL 1 80
COMMAND ==> SCROLL ==> PAGE
***** TOP OF DATA *****-CAPS OFF-*
00090MARTIN EDWARD M AIRPLANE MANUFACTURER 427890125 1019549
----- 1 RECORD(S) NOT SELECTED
00200JACKSON JOSEPH C ORATOR 275587177 0204629
10000ANDREWS GEORGE ACTOR 576312032 0422489
15000MURPHY RONALD L PAINTER 987654321 1202559
18034SCHNEIDER ELLEN C NURSE 341559549 0329609
21035JONES GEORGE B COUNTRY SINGER 463813456 0909449
25100ROBERTS WILLIAM R POLITICIAN 879563325 0508659
27007ALLEN JOYCE M AUTHOR 783458334 0121329
30001RICHARDS REX W RODEO CLOWN 632764534 0401409
31000SAVAGE JONATHON C ELECTRICIAN 348567992 0622509
34010SMITH JANET AIRLINE ATTENDANT 557782984 1123599
34011JACOBS DIANA DOCTOR 225368395 0217579
***** BOTTOM OF DATA *****-CAPS OFF-*
```

Enter FMT (formatted mode), VFMT (vertical format), UNFMT (unformatted mode)

Controlling the Records Not Selected Line

When using selection criteria, records which did not match your selection criteria are indicated with an information line:

- - - n RECORDS NOT SELECTED - - -

The appearance of the "NOT SELECTED" information line is controlled by the 0.1 System parameter "Display records not selected line" default.

Displaying Data in Hexadecimal Format

The Character mode display shows multiple records in a full screen, unformatted display.

Use the HEX ON primary command to view your data in three-line character and hexadecimal format. HEX display is valid in character mode and in vertical formatted mode (VFMT).

Figure 51. Display Data in Hex (HEX Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==> HEX ON
***** TOP OF DATA *****
00090MARTIN EDWARD M AIRPLANE MANUFACTURER
```

Steps:

1. Return the cursor to the COMMAND field. When switching to Character mode from Formatted or Vertical Formatted mode, the cursor is positioned on the byte of data that was at the top of the formatted display.
2. Type **HEX ON** in the COMMAND field.
3. Press Enter. File-AID redisplays the screen and presents the data in its hexadecimal notation.

Result of HEX ON

Figure 52. Character Mode - After HEX ON

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- LINE 0000 COL 1 80
COMMAND ==> SCROLL ==> PAGE
***** TOP OF DATA *****-CAPS OFF-*
00090MARTIN EDWARD M AIRPLANE MANUFACTURER 427890125 1019549
FFFFFDCCDEC044444444CCECDC4444D44CCDDCDC4DCDECCCEEDCD44444444FFFFFFFF4FFFFFF
000904193950000000054619400004001997315504154613349590000000042789012501019549
----- 1 RECORD(S) NOT SELECTED
00200JACKSON JOSEPH C ORATOR 275587177 0204629
FFFFFDCCDED44444444DDECDC4444C44DCCEDD444444444444444444FFFFFFFF4FFFFFF
0020011322650000000162578000030069136900000000000000000000000000027558717700204629
-----
10000ANDREWS GEORGE ACTOR 576312032 0422489
FFFFFCDCDCE44444444CCDC44444444CCEDD444444444444444444FFFFFFFF4FFFFFF
10000154956200000007569750000001336900000000000000000000000000057631203200422489
-----
15000MURPHY RONALD L PAINTER 987654321 1202559
FFFFFDDEDCE44444444DCCDC4444D44DCDEC044444444444444444FFFFFFFF4FFFFFF
150004497880000000096513400003007195359000000000000000000000098765432101202559
-----
18034SCHNEIDER ELLEN C NURSE 341559549 0329609
FFFFFECCDC444444CDDCD44444C44DEC444444444444444444FFFFFFFF4FFFFFF
18034238559459000005335500003005492500000000000000000000034155954900329609
-----
Enter FMT (formatted mode), VFMT (vertical format), UNFMT (unformatted mode)
```

Redisplaying Character Format from Hexadecimal Format

Use HEX OFF to return to display only the character value for each line.

Figure 53. Display Characters Only (HEX OFF)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==> HEX OFF
***** TOP OF DATA *****
00090MARTIN      EDWARD      M AIRPLANE MANUFACTURER
FFFFFDCECD44444444CCECDC4444D44CCDDCDC4DCDECCCEEDCD44
0009041939500000000546194000040019973155041546133495900
----- 1
```

Steps:

1. Type **HEX OFF** in the COMMAND field.
2. Press Enter. File-AID redisplays the screen in character format as illustrated in [Figure 54](#).

Figure 54. Browse - Character Mode - After HEX OFF

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- LINE 0000 COL 1 80
COMMAND ==>
***** TOP OF DATA *****-CAPS OFF-*
SCROLL ==> PAGE
00090MARTIN      EDWARD      M AIRPLANE MANUFACTURER      427890125 1019549
----- 1 RECORD(S) NOT SELECTED
00200JACKSON     JOSEPH      C ORATOR                  275587177 0204629
10000ANDREWS     GEORGE      ACTOR                  576312032 0422489
15000MURPHY      RONALD      L PAINTER                 987654321 1202559
18034SCHNEIDER   ELLEN       C NURSE                  341559549 0329609
21035JONES       GEORGE      B COUNTRY SINGER        463813456 0909449
25100ROBERTS    WILLIAM      R POLITICIAN             879563325 0508659
27007ALLEN       JOYCE       M AUTHOR                 783458334 0121329
30001RICHARDS   REX          W RODEO CLOWN           632764534 0401409
31000SAVAGE      JONATHON    C ELECTRICIAN            348567992 0622509
34010SMITH       JANET       AIRLINE ATTENDANT        557782984 1123599
34011JACOBS     DIANA       DOCTOR                 225368395 0217579
***** BOTTOM OF DATA *****-CAPS OFF-*
```

Enter FMT (formatted mode), VFMT (vertical format), UNFMT (unformatted mode)

Displaying the Column Number Information Line

The COLS (COL) primary command displays the COLS information line. The information line is a ruler which allows you to identify the specific location of data in the data area of the screen.

Figure 55. Display COLS Ruler (COLS command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ===> COL
*****TOP OF DATA*****
00090MARTIN      EDWARD      M AIRPLANE MANUFACTURER
```

Steps:

1. Type COL in the COMMAND field.
2. Press Enter. File-AID displays the ruler line at the top of the data display as illustrated in [Figure 56](#).

Figure 56. Browse - Character Mode - After COLS Command

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- LINE 0000 COL 1 80
COMMAND ===>
SCROLL ===> PAGE
-----1-----2-----3-----4-----5-----6-----7-----8
*****TOP OF DATA *****-CAPS OFF-*
00090MARTIN      EDWARD      M AIRPLANE MANUFACTURER      427890125 1019549
-----1 RECORD(S) NOT SELECTED-----
00200JACKSON     JOSEPH      C ORATOR          275587177 0204629
10000ANDREWS     GEORGE      ACTOR           576312032 0422489
15000MURPHY      RONALD      L PAINTER         987654321 1202559
18034SCHNEIDER   ELLEN       C NURSE           341559549 0329609
21035JONES       GEORGE      B COUNTRY SINGER 463813456 0909449
25100ROBERTS    WILLIAM      R POLITICIAN      879563325 0508659
27007ALLEN       JOYCE       M AUTHOR          783458334 0121329
30001RICHARDS    REX        W RODEO CLOWN    632764534 0401409
31000SAVAGE      JONATHON    C ELECTRICIAN    348567992 0622509
34010SMITH       JANET       AIRLINE ATTENDANT 557782984 1123599
34011JACOBS      DIANA       DOCTOR          225368395 0217579
*****BOTTOM OF DATA *****-CAPS OFF-*
Enter FMT (formatted mode), VFMT (vertical format), UNFMT (unformatted mode)
```

More About COLS Command

- When you scroll the data display to the right beyond column 100, the ruler is useful for determining the last two (low-order) digits of the column number. The range of columns displayed is indicated in the top right corner of the display (except when overwritten by an error message).
- If the record key is included in the display, the COLS line contains spaces to separate the key's position.
- In the Edit function, COLS is a line command not a primary command.
- Use the COLS OFF or RESET command to remove the column number information line.

Searching for Data In a Specific Column

This example illustrates how you can use the column numbers of the ruler line in combination with the FIND primary command to search an exact location for a data value.

Figure 57. FIND Command Example

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==> FIND POLITICIAN 34
-----+-----1-----+-----2-----+-----3-----+-----4-----+-----5-----+
*****TOP OF DATA *****

00090MARTIN      EDWARD      M    AIRPLANE MANUFACTURER
```

Steps:

1. Type FIND POLITICIAN 34 in the COMMAND field.

In the FIND primary command syntax, **POLITICIAN** is the Find string field value and **34** is the value of the Start column field. When you specify a Start column number, the value you specify as the Find string value must begin in the specified column position. If the value you are looking for is a number, enclose the number in single quotes (for example, FIND '18034' 1).

2. Press Enter. File-AID positions the cursor on the P in POLITICIAN. If necessary the display is automatically scrolled so that the found string is visible. File-AID indicates that it has found the search value by displaying the message '**POLITICIAN**' FOUND in the upper-right hand corner of the screen as shown in [Figure 58](#).

Figure 58. FIND result - Cursor on P in POLITICIAN

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- 'POLITICIAN' FOUND
COMMAND ==> SCROLL ==> PAGE
-----+-----1-----+-----2-----+-----3-----+-----4-----+-----5-----+-----6-----+-----7-----+-----8
*****TOP OF DATA *****-CAPS OFF-*
00090MARTIN      EDWARD      M    AIRPLANE MANUFACTURER      427890125 1019549
                                         1 RECORD(S) NOT SELECTED
00200JACKSON     JOSEPH      C    ORATOR                  275587177 0204629
10000ANDREWS      GEORGE      ACTOR                576312032 0422489
15000MURPHY       RONALD      L    PAINTER                987654321 1202559
18034SCHNEIDER   ELLEN       C    NURSE                 341559549 0329609
21035JONES        GEORGE      B    COUNTRY SINGER      463813456 0909449
25100ROBERTS     WILLIAM      R    POLITICIAN            879563325 0508659
27007ALLEN        JOYCE       M    AUTHOR                783458334 0121329
30001RICHARDS     REX         W    RODEO CLOWN          632764534 0401409
31000SAVAGE       JONATHON    C    ELECTRICIAN          348567992 0622509
34010SMITH        JANET       AIRLINE ATTENDANT      557782984 1123599
34011JACOBS       DIANA       DOCTOR              225368395 0217579
*****BOTTOM OF DATA *****-CAPS OFF-*
```

Enter FMT (formatted mode), VFMT (vertical format), UNFMT (unformatted mode)

Invoking Vertical Formatted Mode (VFMT) from Character Mode

The vertical formatted (VFMT) mode browse display is the same as the character mode browse display except that it uses the record layout field names as headings at the top of each column with the data formatted and arranged below each heading.

Figure 59. Invoking Vertical Formatted Mode (VFMT Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ===> VFMT
-----+---+---+---+---+---+---+---+---+---+---+---+
*****00090MARTIN      EDWARD      M AIRPLANE MANUFACTURER *****
```

Steps:

1. Type VFMT in the COMMAND field.
2. Press Enter. File-AID redisplays the screen with the column headings positioned at the top of the data display as illustrated in [Figure 60](#).

Vertical Formatted (VFMT) Display

Figure 60. Browse - Vertical Formatted Mode

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- LINE 0000 COL 1 49
COMMAND ===>
EMP-NUMBER EMP-LAST-NAME   EMP-FIRST-NAME   EMP-MID-INIT FILLER   EMP-TITLE
5/AN        15/AN          10/AN           1/AN        2/AN        30/AN
(1-5)       (6-20)         (21-30)        (31-31)     (32-33)    (34-49)
1----- 2----- 3----- 4----- 5----- 6-----
*****00090      MARTIN      EDWARD      M      AIRPLANE MANUFAC
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
00200      JACKSON      JOSEPH      C      ORATOR
10000      ANDREWS      GEORGE      C      ACTOR
15000      MURPHY       RONALD      L      PAINTER
18034      SCHNEIDER    ELLEN       C      NURSE
21035      JONES        GEORGE      B      COUNTRY SINGER
25100      ROBERTS     WILLIAM      R      POLITICIAN
27007      ALLEN        JOYCE       M      AUTHOR
30001      RICHARDS    REX         W      RODEO CLOWN
31000      SAVAGE       JONATHON    C      ELECTRICIAN
34010      SMITH        JANET       DIANA
34011      JACOBS       DIANA
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
***** BOTTOM OF DATA *****-CAPS OFF-*
```

Enter FMT (formatted mode), CHAR (character mode), UNFMT (unformatted mode)

More About Vertical Formatted Mode

- A single record layout must be available to use the VFMT command. You cannot invoke the VFMT command if you are using an XREF or you have not specified a layout.
- If no layout was specified (layout usage=N), the COMPILE primary command lets you dynamically compile a layout for use by VFMT and FMT.
- Field offsets are always shown in the heading. For example (1-5).
- File-AID assigned field numbers are indicated by the dash line in each field heading. For example 1----- means "field number 1".
- The VPRINT primary command prints the current record and any number of subsequent records in a vertical formatted report. Use the FIELDS operand to specify exactly which fields to include in the report.

Removing the Mode Prompt Message Line

To help guide you, File-AID uses the last line of the display to list valid display mode primary commands.

Enter FMT (formatted mode), CHAR (character mode),...

After you become familiar with the basic commands (CHAR, FMT, VFMT, and HEX), you can turn off the display of this message line with the MESSAGE (MSG) command.

Figure 61. Suppress Mode Prompt Message Line (MESSAGE OFF)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ===> MSG OFF
-----+-----+-----+-----+-----+-----+
*****TOP OF DATA*****
EMP-NUMBER EMP-LAST-NAME    EMP-FIRST-NAME EMP-MID-INIT
5/AN        15/AN          10/AN          1/AN
(1-5)      (6-20)         (21-30)        (31-31)
1-----2-----3-----4-----
*****TOP OF DATA*****
00090      MARTIN        EDWARD        M
-----+-----+-----+-----+
00200      JACKSON       JOSEPH        C
```

Steps:

1. Type **MSG OFF** in the COMMAND field.
2. Press Enter. File-AID redisplays the screen without the message line as shown in [Figure 62](#).

Figure 62. Browse - Vertical Formatted Mode - After MSG OFF Command
Description: Lower Portion of Screen - Prompt Line Gone

```
30001      RICHARDS      REX          W          RODEO CLOWN
31000      SAVAGE        JONATHON     C          ELECTRICIAN
34010      SMITH         JANET        DIANA      AIRLINE ATTENDAN
34011      JACOBS        DOCTOR
*****BOTTOM OF DATA *****-CAPS OFF-*
```

More About the MESSAGE Command

- You can specify the command as MESSAGE or MSG.
- Use MSG ON to redisplay the line.
- Setting is remembered from session to session.

Specifying the Type of Information to Display

When you invoke the SHOW (S) primary command in vertical formatted mode, File-AID changes the second line of the column headings to identify the type of information you want to display.

The SHOW primary command sets the display of various types of field information for a record. Valid keywords for the SHOW command are:

SHOW PICTURE	Change second line of each column heading to show the data declaration (see Figure 64).
SHOW FORMAT	Change second line of each column heading to format of each field (see Figure 62 on page 64).
SHOW OFFSET	Change second line of each column heading to show the offset of each field relative to byte 1 (see Figure 66 on page 66).

Figure 63. Display Field Picture Information (SHOW PICTURE)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ===> SHOW_PICTURE
-----+-----+-----+-----+-----+-----+
***** TOP OF DATA *****
EMP-NUMBER EMP-LAST-NAME EMP-FIRST-NAME EMP-MID-INIT
5/AN      15/AN        10/AN       1/AN
(1-5)    (6-20)      (21-30)    (31-31)
1----- 2----- 3----- 4-----
```

Steps:

1. Type **SHOW PICTURE** in the COMMAND field.
2. Press Enter. File-AID redisplays the screen, changing the second line of each column heading to show the type and maximum length of the items in the column. The changed display is shown in [Figure 64](#).

Figure 64. Browse - Vertical Formatted Mode - After SHOW PICTURE

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- LINE 0000 COL 1 49
COMMAND ===> SCROLL ===> PAGE
EMP-NUMBER EMP-LAST-NAME EMP-FIRST-NAME EMP-MID-INIT FILLER EMP-TITLE
X(5)      X(15)        X(10)       X          XX      X(30)
(1-5)    (6-20)      (21-30)    (31-31)  (32-33) (34-49)
1----- 2----- 3----- 4----- 5----- 6-----
***** TOP OF DATA *****-CAPS OFF-*
00090    MARTIN      EDWARD      M          AIRPLANE MANUFAC
-----+-----+-----+-----+-----+-----+-----+
00200    JACKSON     JOSEPH     C          ORATOR
10000    ANDREWS     GEORGE
```

More About the SHOW Command

- Note that the field number (for example, 1----- 2 -----, etc.) is shown as part of the column heading and, therefore, you do not need to use the SHOW NUMBER command in vertical formatted mode.
- The offsets of each field (for example, (1-5) (6-20) etc.) are also shown in the third line of each column heading. As a result, you probably do not need to use the SHOW OFFSET command. However, the OFFSET commands (OFFSET HEX, OFFSET REL, and OFFSET COL) are valid for tailoring the offset display.

Displaying the Offset for Each Column

Use SHOW OFFSET to change the second line of each column heading to show the offset of each field relative to byte 1.

Figure 65. Display Field Offset Information (SHOW OFFSET)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----  
COMMAND ==> SHOW OFFSET  
-----+-----2-----+-----3-----+-----4-----+-----5-----+  
***** TOP OF DATA *****  
EMP-NUMBER EMP-LAST-NAME    EMP-FIRST-NAME EMP-MID-INIT  
5/AN        15/AN           10/AN          1/AN  
(1-5)       (6-20)          (21-30)        (31-31)  
1----- 2----- 3----- 4-----
```

Steps:

1. Type **SHOW OFFSET** in the COMMAND field.
 2. Press Enter. File-AID redisplays the screen, changing the second line of each column heading to show the offset for each column of data. The changed display is shown in [Figure 66](#).

Figure 66. Browse - Vertical Formatted Mode - After SHOW OFFSET

Displaying the Length and Format of Each Field

Use SHOW FORMAT (abbrev: S F) to change the heading to show the length and usage of each field.

Figure 67. Display Field Format Information (SHOW FORMAT)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ===> S_F
-----+-----+-----+-----+-----+-----+
-----1-----2-----3-----4-----5-----+
*****TOP OF DATA*****
EMP-NUMBER EMP-LAST-NAME EMP-FIRST-NAME EMP-MID-INIT
1          6           21          31
(1-5)      (6-20)      (21-30)     (31-31)
1-----2-----3-----4-----
```

Steps:

1. Type **S F** in the COMMAND field.
2. Press Enter. File-AID redisplays the screen, changing the second line of the column headings to describe the field length and format of each column of data items. The changed display is shown in [Figure 68](#).

The length of a field is expressed in bytes. The length indicates the actual number of bytes occupied by the field and not the data item size. The PICTURE parameter displays the size of the data item.

Figure 68. Browse - Vertical Formatted Mode - After SHOW FORMAT Command

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- LINE 0000 COL 1 49
COMMAND ===> SCROLL ===> PAGE
-----+-----+-----+-----+-----+-----+
-----1-----2-----3-----4-----5-----6-----+
EMP-NUMBER EMP-LAST-NAME EMP-FIRST-NAME EMP-MID-INIT FILLER EMP-TITLE
5/AN       15/AN        10/AN        1/AN        2/AN        30/AN
(1-5)      (6-20)      (21-30)     (31-31)     (32-33)     (34-49)
1-----2-----3-----4-----5-----6-----+
*****TOP OF DATA*****-CAPS OFF-*
00090      MARTIN      EDWARD      M          AIRPLANE MANUFAC
00200      JACKSON      JOSEPH      C          ORATOR
10000      ANDREWS      GEORGE
```

1 RECORD(S) NOT SELECTED

Selecting Fields to Display by Field Number

You can use the DISPLAY primary command to display two types of information:

- All or selected fields of a record;
- The display format for individual layout fields.

In vertical formatted mode, the field number associated with the data in a column is displayed on the screen in the fourth line of the column heading information (for example, 1----- 2-----, etc.).

Figure 69. Display Specific Fields (DISPLAY fields ONLY)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==> DIS 16 21 34 ONLY
-----+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
*****TOP OF DATA*****
EMP-NUMBER EMP-LAST-NAME EMP-FIRST-NAME EMP-MID-INIT
5/AN      15/AN      10/AN      1/AN
(1-5)     (6-20)     (21-30)    (31-31)
1----- 2----- 3----- 4-----
```

Steps:

1. Type **DIS 16 21 34 ONLY** in the COMMAND field.
2. Press Enter. The data items for fields 16, 21, and 34 only are redisplayed on the screen as illustrated in [Figure 70](#).

Figure 70. Vertical Formatted Mode - After DISPLAY 16 21 34 ONLY

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- LINE 0000 COL 86 198
COMMAND ==> SCROLL ==> PAGE
EMP-MARITAL-STATUS EMP-LOCAL-TAX-WITHOLD-PCT EMP-CON-HOME-PHONE
1/AN      3/PS      10/AN
(86-86)   (99-101)  (189-198)
16----- 21----- 34-----
*****TOP OF DATA*****-CAPS OFF-*
M          5.00 4155556981
----- 1 RECORD(S) NOT SELECTED
S          0 2125559021
S          15.00 4045559021
S          0 3125559021
S          0 4085551245
S          7.00 4085551245
S          0 4085559021
S          0 7135559021
```

Changing the Display Format of a Field

You can use the DISPLAY primary command to change the display format of one or more fields on the display. The DISPLAY command enables you to display field data in different formats. The default format is the format defined in the record layout for each field.

You can specify the following formats: binary (BIN), bit (BIT), character (CHAR), packed decimal data (DEC), decimal floating point number (FLOAT), DBCS character (DBCS), and hexadecimal (HEX). This command changes the display format; it does not change the record layout definition of the field. Refer to the *File-AID/MVS Online Reference Manual* for a complete description of the DISPLAY primary command.

Displaying Hexadecimal Notation for a Specified Field

Use the DISPLAY *fields* HEX command to change the display format of one or more fields to horizontal hex. In this example, the field EMP-LOCAL-TAX-WITHOLD-PCT (field number 21) is shown in hex.

Figure 71. Display Field Data in HEX - (DISPLAY field HEX)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ==> DIS 21 HEX
-----+-----1-----+-----2-----+-----3-----+-----4-----+-----5-----+
*****+*****TOP OF DATA*****+*****EMP-MARITAL-STATUS EMP-LOCAL-TAX-WITHOLD-PCT EMP-CON-HO
1/AN      3/PS      10/AN
(86-86)    (99-101)   (189-198)
16-----21-----34-----
*****TOP OF DATA*****+*****M      5.00 4155556981
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
S          0 2125559021
S          15.00 4045559021
```

Steps:

1. Type **DIS 21 HEX** in the COMMAND field.
2. Press Enter. The data items in field 21 only are redisplayed in hexadecimal notation as illustrated in [Figure 72](#).

Result of DISPLAY 21 HEX

The display format of the 3-byte packed signed numeric field, EMP-LOCAL-TAX-WITHOLD-PCT changes from a normalized, zero suppressed, decimal value (5.00) to the horizontal hex value (000500C). The format information in the heading of field 21 also changes to 3/HEX.

Figure 72. Vertical Formatted Mode - After DISPLAY 21 HEX

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- LINE 0000 COL 86 198
COMMAND ===> SCROLL ===> PAGE
EMP-MARITAL-STATUS EMP-LOCAL-TAX-WITHOLD-PCT EMP-CON-HOME-PHONE
1/AN 3/HEX 10/AN
(86-86) (99-101) (189-198)
16----- 21----- 34-----
***** TOP OF DATA *****-CAPS OFF-*
M 00500C 4155556981
----- 1 RECORD(S) NOT SELECTED
S 00000C 2125559021
S 01500C 4045559021
S 00000C 3125559021
S 00000C 4085551245
S 00700C 4085551245
S 00700C 7175550855
```

More About the DISPLAY Command

- The DISPLAY field definitions you specify are retained until you exit the Browse/Edit function.
- DISPLAY and SHOW command settings affect both Vertical (VFMT) and Formatted (FMT) modes.

Returning Fields to Their Standard Display Format

To return a field to its internal format as defined by the record layout, use the RESET keyword of the DISPLAY primary command.

Figure 73. Return Field Display to Standard - (DISPLAY field RESET)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ===> DIS 21 RESET
-----+---1---+---2---+---3---+---4---+---5---+
*****TOP OF DATA *****
EMP-MARITAL-STATUS EMP-LOCAL-TAX-WITHOLD-PCT EMP-CON-HO
1/AN 3/HEX 10/AN
(86-86) (99-101) (189-198)
16-----21-----34-----
*****TOP OF DATA *****
M 00500C 4155556981
S 00000C 2125559021
S 01500C 4045559021
```

Steps:

1. Type **DIS 21 RESET** in the COMMAND field.
2. Press Enter. Field 21 is displayed normalized in decimal format as illustrated in [Figure 74](#).

Figure 74. Vertical Formatted Mode - After DISPLAY 21 RESET

```
File-AID - Browse - USERID9.FASAMP.EMPMAST ----- LINE 0000 COL 86 198
COMMAND ===> SCROLL ==> PAGE
EMP-MARITAL-STATUS EMP-LOCAL-TAX-WITHOLD-PCT EMP-CON-HOME-PHONE
1/AN 3/PS 10/AN
(86-86) (99-101) (189-198)
16-----21-----34-----
*****TOP OF DATA *****-CAPS OFF-*
M 5.00 4155556981
S 0 2125559021
S 15.00 4045559021
S 0 3125559021
S 0 4085551245
S 7.00 4085551245
S 0 4085559021
```

Redisplaying All Fields

Use the DISPLAY ALL command to redisplay all fields.

Figure 75. Redisplay All Fields - (DISPLAY ALL)

```

File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ===> DIS ALL
-----+-----+-----+-----+-----+-----+
-----1-----2-----3-----4-----5-----+
*****TOP OF DATA*****
EMP-MARITAL-STATUS EMP-LOCAL-TAX-WITHOLD-PCT EMP-CON-HO
1/AN            3/PS           10/AN
(86-86)        (99-101)       (189-198)
16-----21-----34-----
*****TOP OF DATA*****
M                5.00 4155556981
- - - - - - - - - - - - - - - - - - - - -
S                0 2125559021
S                15.00 4045559021

```

Steps:

1. Type **DIS ALL** in the COMMAND field.
2. Press Enter. File-AID redisplays all of the fields.

Result of DISPLAY ALL

Note that when the screen is redisplayed, it is positioned with field number 16 as the first field on the left side of the display. To display the columns containing the data items for fields 1-15, enter the LEFT primary command. To display the columns containing data items following field number 19, enter the RIGHT primary command. The affect of the LEFT and RIGHT commands is similar in character and vertical formatted modes.

Also note that field 17 is not shown because it is a group item. Usually, only elementary items are presented in vertical formatted mode.

Figure 76. Vertical Formatted Mode - After DISPLAY ALL

```

File-AID - Browse - USERID9.FASAMP.EMPMAST ----- LINE 0000 COL 86 95
COMMAND ===> SCROLL ===> PAGE
EMP-MARITAL-STATUS EMP-LIFE-INS-WITHOLD-AMT EMP-NATL-TAX-WITHOLD-PCT
1/AN            6/SNUM          3/PS
(86-86)        (87-92)        (93-95)
16-----18-----19-----
*****TOP OF DATA *****-CAPS OFF-*
M              -3000.00        -74.00
- - - - - - - - - - - - - - - - - - - - - - - - - - 1 RECORD(S) NOT SELECTED
S                0               55.00
S                0 INVALID
S              5000.00          7.00
S              5000.00          65.00
S                0               49.00
S              5000.00          45.00
S              5000.00 INVALID

```

Exiting the Browse Function

To exit the Browse session, use the END primary command.

Figure 77. Exiting the Browse Session - (END Command)

```
File-AID - Browse - USERID9.FASAMP.EMPMAST -----
COMMAND ===> END
-----+-----+-----+-----+-----+-----+
EMP-MARITAL-STATUS EMP-LIFE-INS-WITHOLD-AMT EMP-NATL-TA
1/AN              6/SNUM            3/PS
(86-86)          (87-92)          (93-95)
16-----18-----19-----
*****TOP OF DATA *****
M                -3000.00
-----0
S
```

Steps:

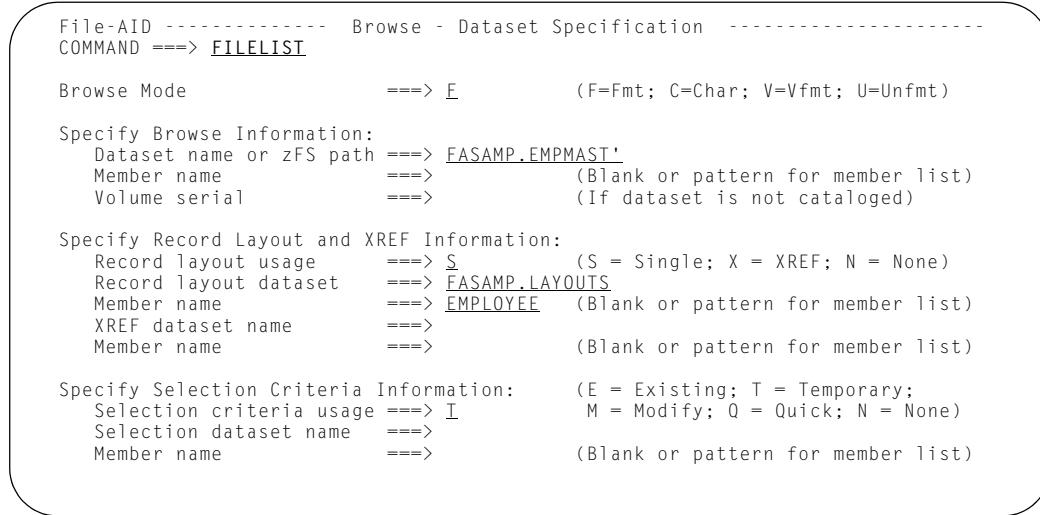
1. Type END in the COMMAND field.
2. Press Enter. File-AID displays the Browse - Dataset Specification screen ([Figure 78](#) on page 74).

Viewing the Last Referenced File List

By default, File-AID prefills the fields of the Browse or Edit Dataset Specification screen with your last saved entries. Another way to select a browse or edit dataset is to use the Last Referenced File List, shown in [Figure 79](#) on page 75. It lists up to the last 50 files that you Browsed and/or Edited with File-AID. It is displayed when you enter the FILELIST primary command (see [Figure 78](#)) or blank out the Dataset name or zFS path field on the Browse or Edit Dataset Specification screen.

Primary commands enable you to sort by filename or referenced date and locate an entry by filename. Line commands allow you to select a file for processing, lock, unlock, and delete entries from the list, display the complete zFS path name, and display related dataset information.

Figure 78. Browse - Dataset Specification with FILELIST Screen



Steps:

1. Type **FILELIST** in the COMMAND field (or blank out the Dataset name or zFS path field).
2. Press Enter. File-AID displays the Last Referenced File List screen as shown in [Figure 79](#) on page 75.

Requesting Related File List

The related dataset information includes the Record Layout/XREF and Selection Criteria files that you associated with the referenced files.

Figure 79. Last Referenced File List Screen

File-AID ----- Last Referenced File List ----- Row 1 to 3 of 3				
COMMAND ==>		SCROLL ==> CSR		
S = Select for processing; M = Modify before processing I = Info; L = Lock; U = Unlock; D = Delete; P = zFS Pathname display				
File Name				SETS RL SC LOCK REFERENCED
I	USERID9.FASAMP.EMPMAST		1	2008/01/10
	USERID9.FASAMP.ORDRFILE		1 X	2008/01/09
	USERID9.FASAMP.EMPLOYEE		2 1	2008/01/09
***** Bottom of data *****				

Steps:

1. Enter the I line command to the left of file name EMPMAST.
2. Press Enter. File-AID displays the Related File List screen (shown in [Figure 80](#)).

More About the Last Referenced File List

- The SORT primary command lets you sort the list by filename (SORT NAME) or referenced date (SORT DATE).
- The LOCATE primary command finds the first occurrence of the specified beginning filename string (LOCATE USERID0.FASAMP.ORD).

Locking Dataset in File List

The Related File list, shown in [Figure 80](#), shows detailed information for a selected entry on the Last Referenced File List including the Record Layout, XREF, and Selection Criteria file(s) associated with that file. When there are multiple sets of Related File(s) they are all displayed. If you want to make sure that a file and its related entries stay in the list, enter the Lock line command.

Figure 80. Related File List Screen

File-AID ----- Related File List ----- Row 1 to 1 of 1				
COMMAND ==>		SCROLL ==> CSR		
S = Select for processing; M = Modify before processing L = Lock; U = Unlock; D = Delete; P = zFS Pathname display				
L	USERID9.FASAMP.EMPMAST			Referenced Date 2008/01/10 14:51
	Volume Serial:	I/O Exit:		
		Layout: USERID9.FASAMP.LAYOUTS(EMPLOYEE)		
	Xref:			
	Selection:			
***** Bottom of data *****				

Steps:

1. Type the L line command in front of the list entry for the EMPMAST dataset.
2. Press Enter. File-AID redisplays the Related File List screen ([Figure 81](#)) with the LOCKED status for EMPMAST.

Returning To Primary Menu

This concludes the Browsing a Data File chapter.

Figure 81. Related File List Screen with Locked Entry

```
File-AID ----- Related File List ----- Row 1 to 1 of 1
COMMAND ===> RETURN                               SCROLL ===> CSR
S = Select for processing; M = Modify before processing
L = Lock; U = Unlock; D = Delete; P = zFS Pathname display
Referenced Date
2008/01/10 14:51
LOCKED
USERID9.FASAMP.EMPMAST
Volume Serial:          I/O Exit:
Layout: USERID9.FASAMP.LAYOUTS(EMPLOYEE)
Xref:
Selection:
***** Bottom of data *****
```

Steps:

1. Type RETURN in the COMMAND field.
2. Press Enter. File-AID displays the File-AID Primary Option Menu. ([Figure 2](#) on page 18).

Allocating a VSAM Cluster

File-AID has a utility for managing VSAM datasets and IAM datasets. The features of this utility include:

- Allocating clusters (KSDS, ESDS, RRDS, and LINEAR)
- Allocating alternate indexes
- Building alternate indexes
- Deleting objects
- Renaming objects
- Displaying detailed information
- Modifying cluster attributes
- Generating IDCAMS control statements
- Redefining (Delete/Define) clusters
- Allocating and deleting dataspaces
- Allocating IAM datasets.

Accessing the VSAM Utility (Option 3.5)

The VSAM utility is located on the File-AID Extended Utilities menu (option 3) as utility number 5.

Steps:

1. From the File-AID Primary Option Menu (not shown here), select option 3.5.
2. Press Enter. File-AID displays the VSAM Utility screen as illustrated in [Figure 82](#) on page 78.

Choosing a VSAM Utility Option

The VSAM utility screen ([Figure 82](#)) is where you specify which VSAM option you want to perform and the necessary background information needed to process the request. The selected option is typed in the OPTION field near the top of the screen. Options for processing include:

- A - Allocate VSAM or IAM file
- D - Delete any dataset
- DR - Delete/Define any VSAM dataset
- X - Allocate alternate index
- P - Allocate path
- B - Build index
- R - Rename clusters
- M - Modify cluster attributes
- S - Allocate dataspace
- T - Delete dataspace
- blank - Display information on any dataset

Figure 82. VSAM Utility Screen - Choose an Option

```

File-AID ----- VSAM Utility -----
OPTION ==>

A      - Allocate cluster          D  - Delete
S      - Allocate dataspace       DR - Delete/Define
X      - Allocate alternate index  T  - Delete dataspace
B      - Build alternate index    P  - Allocate path
BLANK - Display dataset information R - Rename component
                                         M - Modify component

Specify Dataset Information:
Dataset name      ==> FASAMP.EMPMAST
Volume serial     ==>           (Required for options S & T)

Process Online or Batch ==> O  (O = Online; B = Batch; F = Formatted Batch)

Specify Model Dataset Information:
Dataset name      ==>

Specify Catalog to use if other than Default System Catalog:
Catalog name      ==>
Catalog password   ==>           (If catalog is password protected)

-----  

For dataset allocations only, the optional model dataset is used to  

prefill the allocation information on the allocation panel.

```

Using an Existing Dataset's Allocation Attributes

Processing information you supply includes:

- Name of the dataset to act on
- How to process the option (online or batch)
- Name of a dataset to use as a model for allocation attributes (optional)

If you want to model a new VSAM cluster after a specific existing dataset, you can enter the name of the existing dataset in the Model Dataset Information area. You may use a pattern in the name field to get a list of matching dataset names to select from (for example, FASAMP.*). File-AID copies the allocation attributes of the existing dataset to the new dataset. The existing dataset must be cataloged and accessible through a normal catalog search. Any type of dataset can be used as a model including sequential files. If you do not select a dataset as a model, File-AID uses allocation attributes of the most recently allocated or displayed dataset to define a new cluster.

Allocating a Cluster

The Allocate cluster option (A) lets you allocate new VSAM clusters and IAM datasets online or in batch. All VSAM dataset types (KSDS, ESDS, RRDS, and LINEAR) are supported.

Figure 83. VSAM Utility Screen

```

File-AID ----- VSAM Utility -----
OPTION ==> A
  A   - Allocate cluster          D  - Delete
  S   - Allocate dataspace       DR - Delete/Define
  X   - Allocate alternate index T   - Delete dataspace
  B   - Build alternate index    P   - Allocate path
  BLANK - Display dataset information R  - Rename component
                                         M  - Modify component

Specify Dataset Information:
  Dataset name      ==> FASAMP.EMPLOYEE1
  Volume serial     ==> (Required for option S & T)

Process Online or Batch ==> B (O = Online; B = Batch; F = Formatted Batch)

Specify Model Dataset Information:
  Dataset name      ==> FASAMP.EMPLOYEE

Specify Catalog to use if other than Default System Catalog:
  Catalog name      ==>
  Catalog password   ==> (If catalog is password protected)

For dataset allocations only, the optional model dataset is used to
prefill the allocation information on the allocation panel.

```

Steps:

1. Type an **A** in the OPTION field.
2. Type **FASAMP.EMPLOYEE1** in the Dataset name field under the Specify Dataset Information section.
3. Type a **B** in the Process Online or Batch field to request batch processing which generates IDCAMS control statements.
4. Type **FASAMP.EMPLOYEE** in the Dataset name field under the Specify Model Dataset Information section.
5. Press Enter. File-AID displays the Allocate New VSAM Cluster screen as illustrated in [Figure 84](#) on page 80.

More About Process Option Formatted Batch

F (Formatted Batch) is only valid for option “BLANK - Display dataset information”. Formatted Batch produces a report that uses the same layout as the online report.

Verifying Allocation Parameters

You can type over any of the fields to customize your cluster attributes. A second screen of attributes is available by specifying a value of YES in the "Extended allocate" field located at the bottom of the screen.

Figure 84. Allocate New VSAM Cluster Screen

```

File-AID ----- Allocate New VSAM Cluster -----
COMMAND ===>
Component names:
Cluster:           'USERID9.FASAMP.EMPLOYEE1'
Data component     ===> 'USERID9.FASAMP.EMPLOYEE1.DATA'
Index component   ===> 'USERID9.FASAMP.EMPLOYEE1.INDEX'
Dataset type       ===> KSDS      (KSDS; ESDS; RRDS; LINEAR)
Owner ID          ===> USERID9
Specify SMS Class Information:
Storage    ===> STDDODFW Data ===> Management ===> SAMPLE@S

Space Allocation: DATA Component   KSDS INDEX Component (Blank for default)
Volume serial     ===> PRD928      ===> PRD902
Units             ===> TRKS        ===> TRKS      (TRKS; CYLs; RECs; K; M)
Primary           ===> 1           ===> 1        (Amount in above units)
Secondary         ===> 1           ===> 1        (Amount in above units)
Reuseable         ===> YES          (Y = Yes; N = No)
Key length        ===> 5            (1 - 255 - Required for KSDS only)
Key position      ===> 0            (0 - maximum record - KSDS only)
Average Recordsize ===> 198          (Not allowed for LINEAR)
Maximum Recordsize ===> 198          (Not allowed for LINEAR)
Expiration date   ===>
Extended allocate ===> Y           (YYYY/MM/DD or blank)
                                         (Y = Yes; N = No - use SMS defaults)

```

Steps:

1. Verify that the value in the "Extended allocate" field is Y. If it is not, type Y in the field.
2. Press Enter. Since you specified a value of Y (Yes) in the Extended allocate field, File-AID displays an additional allocation attributes screen as shown in [Figure 85](#) on page 81.



The value displayed in the Volume serial field will not be the same value shown in this example. The value you see is unique to your installation and is the same as the model dataset (FASAMP.EMPLOYEE).

More About VSAM Allocation

- Use an OWNER ID of \$IAM to identify the dataset as an IAM dataset.
- For variable length records, "Maximum Recordsize" must be larger than "Average Recordsize" but not larger than the "Data C/I size".

Specifying Extended Allocation Parameters

The second allocation screen contains additional attributes for defining a VSAM cluster that you may want to specify to customize your cluster attributes.

Step:

1. Press Enter. File-AID displays the JCL Specification screen as illustrated in [Figure 86](#) on page 82.

Figure 85. Allocate VSAM Cluster Screen (continued)

```
File-AID ----- Allocate VSAM Cluster (continued) -----
COMMAND ==>

Specify Multiple Volumes      ==> NO      (Y = Yes; N = No - use SMS defaults)
Control Interval - percent free ==> 0      Data C/I size ==> 2048
Control Area     - percent free ==> 0      Index C/I size ==> 2048
                                                Buffer space ==> 6144
Specify Allocation options:
  Region share option      ==> 3      (1; 2; 3; 4)
  System share option      ==> 3      (3; 4)
  Write check              ==> NO     (Y = Yes; N = No)
  Erase on delete          ==> NO     (Y = Yes; N = No)
  Imbedded index           ==> NO     (Y = Yes; N = No)
  Replicated index         ==> NO     (Y = Yes; N = No)
  Load option               ==> RECOV   (S = Speed; R = Recovery)
  Spanned records          ==> NO     (Y = Yes; N = No)

Specify Mass Storage Options:
  Stage option             ==> STAGE   (S = Stage; B = Bind;
                                             C = Cylinder Fault)
  Destage wait              ==> NO     (Y = Yes; N = No)
```

More About Allocate New VSAM Cluster

- If the Data C/I size, Index C/I size, or Buffer space fields contain a value of zero or blanks, File-AID automatically calculates the optimum size for each one.
- If you perform the allocation request online, File-AID processes the request immediately and redisplays the VSAM utility screen with a message:

CLUSTER ALLOCATED

- If any errors occur, issue the HELP command (PF1) once to see a long message describing the error and twice to access the File-AID tutorial describing the return code. If errors occur during IDCAMS invocation, File-AID displays an IDCAMS error screen when you issue the VIEW command.

Generating the Batch JCL Information

Use the JCL Specification screen to specify the JCL information for batch processing. As illustrated in this step, enter the JCL primary command to generate and display the JCL before you submit it for processing.

Steps:

1. Type JCL in the COMMAND field.
2. Type an asterisk (*) in the Sysout class field.
3. If necessary, change information in the JOB statement information fields to represent a valid JOB statement for you at your site:

Your JOB statement information stays set from function to function and session to session until you change it on any JCL Specification screen in File-AID.
4. Press Enter. File-AID generates the JCL and displays it on the ISPF/EDIT screen as illustrated in [Figure 87](#) on page 83.

Figure 86. JCL Specification Screen

```
File-AID ----- JCL Specification -----
COMMAND ==> JCL

JCL Information for Batch Processing:

Sysout class    ==> *

JOB Statement Information:
====> //useridA JOB (ACCOUNT),'your name'.
====> //                CLASS=x,MSGCLASS=x,NOTIFY=userid
====>
====>

Use JCL command to edit generated JCL
Use SUBMIT command to submit batch job
Use END to return to main panel without submitting job
```

Executing the JCL

Use the SUBMIT primary command to submit the batch job. SUB is a valid abbreviation for the SUBMIT command.

Steps:

1. Type **SUB** in the COMMAND field.
2. Press Enter. File-AID submits the JCL for background execution and redisplays the ISPF/EDIT screen. A message at the bottom of the display indicates that File-AID has successfully submitted the job.
3. (optional) Use your site's job output display facilities to review the results of the VSAM allocation job.

Figure 87. VSAM Utility - EDIT Screen (SUBMIT Command)

```

EDIT ---- SYS08010.T095427.RA000.USERID9.R0043070 ----- COLUMNS 001 072
COMMAND ==> SUB                               SCROLL ==> CSR
***** *****TOP OF DATA***** *****
000001 //USERID9A JOB (ACCOUNT), 'your name',
000002 //           CLASS=A,MSGCLASS=A,NOTIFY=USERID9
000003 /* YOU ARE VIEWING JCL THAT FILE-AID/MVS HAS GENERATED TO
000004 /* PERFORM THE REQUIRED FUNCTION.
000005 /*
000006 /* YOU CAN CHANGE THIS JCL IF DESIRED AND USE THE SUBMIT PRIMARY
000007 /* COMMAND TO SUBMIT THE JOB. THE CREATE OR REPLACE PRIMARY COMMAND
000008 /* CAN BE USED TO KEEP THIS JOBSTREAM FOR FUTURE USE.
000009 /*
000010 /* USE THE END COMMAND TO EXIT WITHOUT SUBMITTING THE JOB.
000011 //JS10      EXEC PGM=IDCAMS
000012 //SYSPRINT DD SYSOUT=*
000013 //SYSIN    DD *
000014   DEFINE CLUSTER -
000015     (NAME(USERID9.FASAMP.EMPLOYEE1) -
000016       BUFFERSPACE(6144) -
000017       INDEXED -
000018       KEYS(5 0) -
000019       MANAGEMENTCLASS(SAMPLE@S) -
000020       OWNER(USERID9) -
000021       RECORDSIZE(198 198) -

```

Saving the JCL

Since you are in an Edit session, you can use the primary commands CREATE or REPLACE with the "C999" line command to save the JCL to a PDS of your choice.

Exit the VSAM Utility

Use the END command several times to exit the VSAM utility and return to the File-AID Primary Option Menu now.

Steps:

1. Enter the END command (press PF3) TWO OR THREE TIMES until the File-AID Primary Option Menu reappears.

Full-Screen Editing

File-AID enables you to edit a file created through any standard MVS access method (including IAM files). You can edit the entire dataset or a selected subset of records. You can supply record layouts and edit your data in four display modes:

- Character
- Formatted
- Vertical formatted
- Unformatted

This chapter discusses several of the primary commands and line commands that you can use in the Edit function. Refer to the *File-AID/MVS Online Reference Manual* for a complete list of the primary and line commands that are supported in the Edit function.

Character Mode

The character edit mode provides full-screen editing of the data. You can use line commands, similar to ISPF line commands, to move (M), copy (C), insert (I), delete (D), repeat (R), and exclude (X) records. From character mode, you can use the FMT primary command to redisplay the data in Formatted mode, the VFMT primary command to redisplay the data in Vertical Formatted mode, or UNFMT primary command to redisplay the data in Unformatted mode.

Formatted Mode

The formatted edit mode lets you edit data using a record layout. This mode presents data one record at a time and formats each record field-by-field. Record layouts can be either COBOL (FD: 01 level) or PL/I (Declare). Cross references (XREFs) are used to define multiple record layouts for datasets with varying record types.

From formatted mode, you can use the CHAR primary command to redisplay the data in character mode, the VFMT primary command to redisplay the data in Vertical Formatted mode, or UNFMT primary command to redisplay the data in Unformatted mode

Vertical Formatted Mode

The vertical formatted edit mode also provides a full-screen view of the data. This mode, however, uses the record layout fields as column headers. From vertical formatted mode, you can use the CHAR primary command to redisplay the data in character mode, the FMT primary command to redisplay the data in Formatted mode, or UNFMT primary command to redisplay the data in Unformatted mode.

Unformatted Mode

The unformatted edit mode provides a full-screen display of your data one record at a time without record layout formatting. File-AID displays 70 characters of data per line until all data for the record is shown or the screen is filled.

Access Unformatted mode by selecting Browse or Edit mode U (Unformatted) or entering the UNFMT primary command from Character, Formatted, or Vertical Formatted mode of Browse or Edit. From Unformatted mode, use the CHAR primary command to redisplay the data in Character mode, the

FMT primary command to redisplay the data in Formatted mode, or VFMT primary command to redisplay the data in Vertical Formatted mode.



If your double byte character spans the boundary of the display line, it will not display in Unformatted mode. To view this data, switch to Character mode and scroll the record to the desired position, then return to Unformatted mode to view the character in Unformatted mode.

Accessing the Edit Function (Option 2)

Steps:

1. To access the Edit function, enter a 2 in the OPTION field on the File-AID Primary Option Menu (not shown here).
2. Press Enter. File-AID displays the Edit - Dataset Specification screen as illustrated in [Figure 88](#).

Specifying the Dataset to Edit

Use the Edit - Dataset Specification screen to define your edit request, which consists of:

- Edit Mode
- Edit Dataset
- Audit trail usage
- Record Layout and XREF Information
- Selection Criteria Usage Information.

Figure 88. Edit - Dataset Specification Screen

```

File-AID ----- Edit - Dataset Specification -----
COMMAND ==>

Edit Mode      ==> C      (F=Fmt; C=Char; V=Vfmt; U=Unfmt)

Specify Edit Information:
Dataset name or zFS path ==> FASAMP.EMPLOYEE
Member name      ==>          (Blank or pattern for member list)
Volume serial    ==>          (If dataset is not cataloged)
Disposition       ==> OLD    (SHR or OLD)
Create audit trail ==> Y     (Y = Yes; N = No)

Specify Record Layout and XREF Information:
Record layout usage   ==> S      (S = Single; X = XREF; N = None)
Record layout dataset ==> FASAMP.LAYOUTS
Member name           ==> EMPLOYEE (Blank or pattern for member list)
XREF dataset name    ==>
Member name           ==>          (Blank or pattern for member list)

Specify Selection Criteria Information: (E = Existing; T = Temporary;
Selection criteria usage ==> N      M = Modify; Q = Quick; N = None)
Selection criteria DSN  ==>
Member                 ==>          (Blank or pattern for member list)

```

Steps:

1. Type a C in the Edit Mode field.

2. Type **FASAMP.EMPLOYEE1** in the Dataset name or zFS path field.



If you did not create the new cluster **FASAMP.EMPLOYEE1** in [Allocating a VSAM Cluster](#), use the dataset **FASAMP.EMPLOYEE**.

3. Type **OLD** in the Disposition field.

The value of OLD prevents other users from accessing the dataset while you are editing it.

4. Type a **Y** in the Create audit trail field.

File-AID lets you specify whether or not you want to create an audit trail dataset, which stores the before and after images of any changed, new, and deleted records. File-AID provides the opportunity for you to print the audit trail report at the end of the Edit session. For information on audit trail dataset allocation, naming conventions, and how to print the dataset, refer to *File-AID/MVS Online Reference* manual.

5. Type an **S** in the Record layout usage field.

The S value tells File-AID to use a single record layout dataset to describe the edit dataset.

6. Type **FASAMP.LAYOUTS** in the Record layout dataset field and **EMPLOYEE** in the Member name field.

7. Type an **N** in the Selection criteria usage field.

8. Press Enter. If you specified your new cluster, **USERID9.FASAMP.EMPLOYEE1**, File-AID displays the Edit screen as shown in [Figure 89](#) on page 88.



If you did not create a new VSAM cluster, and specified dataset **FASAMP.EMPLOYEE**, skip the next few pages and resume with [Invoking Formatted Mode](#) on page 92.

Copying Data Into a File With the COPY Command

If you did not create a new VSAM cluster, **FASAMP.EMPLOYEE1**, in [Allocating a VSAM Cluster](#), skip this step and resume with [Invoking Formatted Mode](#) on page 92.

Since the dataset is empty you are shown a full screen of input lines just like ISPF. Use the COPY primary command to display the Edit COPY screen where you specify the source dataset.

Steps:

1. Type **COPY** in the COMMAND field.
 2. Press Enter. File-AID displays the Edit COPY screen as shown in [Figure 90](#) on page 89.

Figure 89. Character Edit - COPY Command

More About the COPY Command

- Usually, when using the external file command COPY, you must specify a destination using the A (After) or B (Before) line commands. In this case, since the file is empty, no destination marker is needed.
 - If you know the name of the dataset you want to copy, you may specify the dataset name with the COPY command by using the following syntax: **COPY dataset name**. Pattern dataset names are permitted with the COPY command.
 - When copying records into a keyed file, the file being copied from must have records in key sequence.
 - For keyed files, the MERGE command is similar to the COPY command except records are automatically inserted in key sequence and no destination marker (A, B) is needed.

Specifying the "Copy From" Dataset

Use the Edit COPY screen to specify the name of the dataset from which you want to copy records for the new dataset.

Figure 90. Edit COPY Screen

```

File-AID ----- Edit COPY -----
COMMAND ==>

Current dataset: USERID9.FASAMP.EMPLOYEE1

Enter "FROM" dataset:
Dataset name ==> FASAMP.EMPLOYEE
Member ==> (Blank/pattern for member list)
Volume serial ==> (If not cataloged)

Use ENTER to perform copy/merge
Use END to cancel

```

Steps:

1. Type **FASAMP.EMPLOYEE** in the Dataset name field.
2. Press Enter. File-AID executes the copy process, reads the records of your FASAMP.EMPLOYEE file into your current edit session, and displays the Edit screen as illustrated in [Figure 91](#).

Result of COPY

Figure 91. Character Mode Edit - After COPY of FASAMP.EMPLOYEE

```

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- DATASET COPIED
COMMAND ==> SCROLL ==> PAGE
***** *****TOP OF DATA *****CAPS OFF-*
==NEW> 00090 MARTIN EDWARD M AIRPLANE MANUFACTURER 42789012
==NEW> 00100 MULSTROM ROBERTA A HOLLYWOOD SEAMSTRESS 34657365
==NEW> 00200 JACKSON JOSEPH C ORATOR 27558717
==NEW> 10000 ANDREWS GEORGE ACTOR 57631203
==NEW> 15000 MURPHY RONALD L PAINTER 98765432
==NEW> 18034 SCHNEIDER ELLEN C NURSE 34155954
==NEW> 21035 JONES GEORGE B COUNTRY SINGER 46381345
==NEW> 25100 ROBERTS WILLIAM R POLITICIAN 87956332
==NEW> 27007 ALLEN JOYCE M AUTHOR 78345833
==NEW> 30001 RICHARDS REX W RODEO CLOWN 63276453
==NEW> 31000 SAVAGE JONATHON C ELECTRICIAN 34856799

```

Removing Informational Flags from the Display

File-AID adds the newly copied records to the display and flags each new record with a ==NEW> marker. File-AID also displays the message **DATASET COPIED** in the upper right corner of the screen to indicate that the copy process was successful.

To clear the NEW flags from the display, use the RESET primary command.

Figure 92. Issue RESET Command to Clear Flags and Pending Commands

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- DATASET COPIED
COMMAND ===> RESET                               SCROLL ===> PAGE
***** ***** ***** ***** ***** ***** ***** ***** CAPS OFF-*
==NEW> 00090 MARTIN      EDWARD     M AIRPLANE MANUFACTURER    42789012
==NEW> 00100 MULSTROM    ROBERTA    A HOLLYWOOD SEAMSTRESS   34657365
```

Steps:

1. Type **RESET** in the COMMAND field.
2. Press Enter. File-AID redisplays the Edit screen with the sequence number field column replacing the NEW flags as shown in [Figure 93](#).

RESET result

Figure 93. After RESET Command - ==NEW> Markers Removed

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 00001 00071
COMMAND ===>                               SCROLL ===> PAGE
***** ***** ***** ***** ***** ***** ***** ***** CAPS OFF-*
000001 00090 MARTIN      EDWARD     M AIRPLANE MANUFACTURER    42789012
000002 00100 MULSTROM    ROBERTA    A HOLLYWOOD SEAMSTRESS   34657365
000003 00200 JACKSON     JOSEPH     C ORATOR                 27558717
000004 10000 ANDREWS     GEORGE     ACTOR                  57631203
000005 15000 MURPHY      RONALD     L PAINTER                98765432
000006 18034 SCHNEIDER   ELLEN      C NURSE                  34155954
000007 21035 JONES       GEORGE     B COUNTRY SINGER      46381345
000008 25100 ROBERTS    WILLIAM    R POLITICIAN              87956332
000009 27007 ALLEN       JOYCE      M AUTHOR                 78345833
000010 30001 RICHARDS   REX        W RODEO CLOWN             63276453
000011 31000 SAVAGE     JONATHON   C ELECTRICIAN            34856799
000012 34010 SMITH      JANET      AIRLINE ATTENDANT      55778298
000013 34011 JACOBS     DIANA      DOCTOR                 22536839
000014 36010 SIMPSON    ALEX       CARTOONIST             12345678
000015 39310 BARNETT    EDWARD    E SALESMAN               54378914
000016 39500 WILLIAMS   EDITH      A DESIGNER               98765432
000017 41000 RICHARDSON MARJORIE   M PROGRAMMER ANALYST  34658365
000018 41400 MOORE      THOMAS     M SYSTEMS ADMINISTRATOR 22637364
000019 42017 BENNETT    WILLIAM   D SALES SUPPORT          14657355
000020 44018 WILHELM    HEINRICH   L DIPLOMAT               46657335
000021 50021 SORENTO    ROBERTA   A U.N. INTERPRETER      34657365
```

Protecting Keys

Since this is a keyed file, all newly inserted records have the key field unprotected to let you enter a new key value. Once you have set new key values, you can use the P (Protect) line command to lock the key fields.

The P (Protect) line command sets key protection on for keyed records preventing the inadvertent overtyping of key values.

To protect all the new keys, use the P99 (Protect 99 lines) line command.

Figure 94. Protect New Keys - P99 Line Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ===>
***** ***** ***** ***** ***** ***** TOP OF DATA *****
P99 01 00090 MARTIN      EDWARD    M AIRPLANE MANUF
00002 00100 MULSTROM     ROBERTA   A HOLLYWOOD SEAM
00003 00200 JACKSON      JOSEPH    C ORATOR
```

Steps:

1. Type **P99** in the line command area for line 1.
2. Press Enter. File-AID redisplays the Edit screen with keys protected.

P99 result

After the P99 line command you can see that the keys (first five characters of each record) are highlighted and protected.

Figure 95. After P99 Line Command - Keys are Highlighted and Protected

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 00001 00071
COMMAND ===> SCROLL ==> PAGE
***** ***** ***** ***** ***** ***** TOP OF DATA *****-CAPS OFF-*
000001 00090 MARTIN      EDWARD    M AIRPLANE MANUFACTURER        42789012
000002 00100 MULSTROM     ROBERTA   A HOLLYWOOD SEAMSTRESS       34657365
000003 00200 JACKSON      JOSEPH    C ORATOR                  27558717
000004 10000 ANDREWS     GEORGE    ACTOR                   57631203
000005 15000 MURPHY      RONALD    L PAINTER                 98765432
000006 18034 SCHNEIDER   ELLEN     C NURSE                  34155954
000007 21035 JONES       GEORGE    B COUNTRY SINGER        46381345
000008 25100 ROBERTS     WILLIAM   R POLITICIAN             87956332
000009 27007 ALLEN       JOYCE     M AUTHOR                  78345833
000010 30001 RICHARDS    REX       W RODEO CLOWN            63276453
000011 31000 SAVAGE      JONATHON  C ELECTRICIAN            34856799
000012 34010 SMITH       JANET     AIRLINE ATTENDANT        55778298
000013 34011 JACOBS      DIANA     DOCTOR                  22536839
000014 36010 SIMPSON     ALEX      CARTOONIST              12345678
000015 39310 BARNETT    EDWARD    E SALESMAN                54378914
000016 39500 WILLIAMS    EDITH     A DESIGNER               98765432
000017 41000 RICHARDSON  MARJORIE  M PROGRAMMER ANALYST      34658365
000018 41400 MOORE       THOMAS    M SYSTEMS ADMINISTRATOR    22637364
000019 42017 BENNETT     WILLIAM   D SALES SUPPORT          14657355
000020 44018 WILHELM     HEINRICH L DIPLOMAT              46657335
```

Invoking Formatted Mode

To view each record alongside its layout, you invoke the formatted mode using the FMT line command.

The S (Select) line command is an alias for FMT. Another method is to use the FMT *primary* command.

Figure 96. Switch to Formatted Mode with FMT Line Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ===>
***** *****TOP OF DATA *****
FMT 01 00090 MARTIN      EDWARD    M AIRPLANE MANUF
000002 00100 MULSTROM   ROBERTA   A HOLLYWOOD SEAM
000003 00200 JACKSON    JOSEPH    C ORATOR
```

Steps:

1. Type FMT in line 1.
2. Press Enter. File-AID redisplays the record in the formatted display mode as illustrated in [Figure 97](#).

Figure 97. Edit - Formatted Display Mode - Overtype Values to Change Data

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 00001 00095
COMMAND ===> SCROLL ===> PAGE
RECORD: 1           EMPLOYEE-MASTER-FILE          LENGTH: 198
----- FIELD NUMBER/NAME ----- FORMAT- 1---+---2---+---3---+---4
1 EMP-NUMBER        5/AN 00090
2 EMP-LAST-NAME    15/AN MARTIN
3 EMP-FIRST-NAME   10/AN EDWARD
4 EMP-MID-INIT     1/AN M
5 FILLER            2/AN
6 EMP-TITLE         30/AN AIRPLANE MANUFACTURER
7 EMP-PERSONAL-INFO 23/GRP
8 EMP-NATL-ID-NUMBER 9/NUM 427890125
9 FILLER            1/AN
10 EMP-DATE-OF-BIRTH 6/AN 101954
11 EMP-DOB-REDEF REDEFINES EMP-DATE-OF-BIRTH
11 EMP-DOB-REDEF   6/GRP
12 EMP-DOB-MM       2/NUM 10
13 EMP-DOB-DD       2/NUM 19
14 EMP-DOB-YY       2/NUM 54
15 EMP-HIRE-DATE    6/AN 920101
16 EMP-MARITAL-STATUS 1/AN M
17 EMP-WITHOLD-INFO 15/GRP
18 EMP-LIFE-INS-WITHOLD-AMT 6/SNUM -3000.00
19 EMP-NATL-TAX-WITHOLD-PCT 3/PS -74.00
```

Controlling the Display of Redefines Fields

When the source language is COBOL, the REDEFINES ON/OFF command gives you control of the appearance of fields which redefine other fields. REDEFINES is a profile option and remains set from session to session until you change it.

To suppress the display of fields which redefine other fields, use the REDEFINES (REDEF) OFF command.

Figure 98. Suppress REDEFINES Fields - REDEF OFF

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ==> REDEF OFF
RECORD: 1 EMPLOYEE-MASTER-FILE
----- FIELD NUMBER/NAME ----- FORMAT -----+---1---+
1 EMP-NUMBER 5/AN 00090
2 EMP-LAST-NAME 15/AN MARTIN
```

Steps:

1. Type REDEF OFF in the COMMAND field.
2. Press Enter. File-AID redisplays the screen and suppresses the display of the EMP-DOB-REDEF group and elementary subordinate items as illustrated in [Figure 104](#).

Figure 99. Edit - Formatted Mode - After REDEF OFF Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000101
COMMAND ==>
RECORD: 1 EMPLOYEE-MASTER-FILE SCROLL ==> PAGE LENGTH: 198
----- FIELD NUMBER/NAME ----- FORMAT -----+---1---+---2---+---3---+---4
1 EMP-NUMBER 5/AN 00090
2 EMP-LAST-NAME 15/AN MARTIN
3 EMP-FIRST-NAME 10/AN EDWARD
4 EMP-MID-INIT 1/AN M
5 FILLER 2/AN
6 EMP-TITLE 30/AN AIRPLANE MANUFACTURER
7 EMP-PERSONAL-INFO 23/GRP
8 EMP-NATL-ID-NUMBER 9/NUM 427890125
9 FILLER 1/AN
10 EMP-DATE-OF-BIRTH 6/AN 101954
15 EMP-HIRE-DATE 6/AN 920101
16 EMP-MARITAL-STATUS 1/AN M
17 EMP-WITHOLD-INFO 15/GRP
18 EMP-LIFE-INS-WITHOLD-AMT 6/SNUM -3000.00
19 EMP-NATL-TAX-WITHOLD-PCT 3/PS -74.00
20 EMP-REGION-TAX-WITHOLD-PCT 3/PS 25.00
21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS 5.00
22 EMP-HOME-ADDRESS 50/GRP
```

More About the REDEFINES Command

- You can specify the command as REDEFINES, REDEF, or RED. Refer to the primary commands section of the *File-AID/MVS Online Reference Manual* for more information on the REDEFINES command syntax.
- The REDEFINES setting is part of your user profile.
- Use the PROFILE command to display the current REDEFINES value.
- If REDEFINES is set to OFF, you may issue the DISPLAY REDEFINES *n* command (where *n* is a field number or name of a redefined or redefining data structure that is not currently visible because

REDEFINES are suppressed). The DISPLAY REDEFINES *n* command displays the hidden structure while hiding the currently displayed definition of the data area. For example (see [Figure 97](#) on page 92 for reference), DISPLAY REDEF 11, redisplays the hidden *redefines* structure EMP-DOB-REDEF and suppresses the display of the redefined field EMP-DATE-OF-BIRTH.

Holding and Hiding Fields

When in formatted display mode you can customize the display of the fields with the HIDE and HOLD commands. The HOLD command specifies the ORDER of data items to HOLD on the screen when scrolling in Formatted and Vertical Formatted mode of Browse and Edit. The fields are kept on the screen in the ORDER specified. The HIDE command enables you to exclude fields or a range of fields from your display. It is similar to the "Display OFF field" command.

To display the HIDE and HOLD Settings window use either the HOLD, HIDE, or HIDE ALL command.

Figure 100. Enter HOLD command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ===> HOLD
RECORD: 1 EMPLOYEE-MASTER-FILE
----- FIELD NUMBER/NAME ----- FORMAT -----+---+
1 EMP-NUMBER 5/AN 00090
2 EMP-LAST-NAME 15/AN MARTIN
```

Steps:

1. Type **HOLD** in the COMMAND field.
2. Press Enter. File-AID displays the HIDE and HOLD Settings window as illustrated in [Figure 101](#).

Figure 101. HIDE and HOLD Settings window

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
C HIDE and HOLD Settings Row 1 to 11 of 34 COLUMNS 000001 000101
R Command ===> Scroll ===> PAGE SCROLL ===> PAGE
L LENGTH: 198
Line Commands: H - HOLD, X - HIDE, R - RESET
RER
1
2
3
4 NUM FIELD NAME STATUS
5 -----
6 1 EMP-NUMBER
7 H 2 EMP-LAST-NAME
8 3 EMP-FIRST-NAME
9 4 EMP-MID-INIT
10 5 FILLER
11 6 EMP-TITLE
X 7 EMP-PERSONAL-INFO
X 8 EMP-NATL-ID-NUMBER
X 9 FILLER
10 10 EMP-DATE-OF-BIRTH
11 11 EMP-DOB-REDEF
21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS 5.00
22 EMP-HOME-ADDRESS 50/GRP
```

Steps:

1. Type **H** in front of field EMP-LAST-NAME.
2. Type **X** in front of fields EMP-PERSONAL-INFO, EMP-NATL-ID-NUMBER, and FILLER.
3. Press Enter. File-AID redisplays the window with the updated STATUS as illustrated in [Figure 102](#) on page 96. Notice that the list has been reordered with the held field EMP-LAST-NAME on top.

Figure 102. HIDE and HOLD Status displayed

```

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000101
C HIDE and HOLD Settings SCROLL ==> PAGE
R Row 1 to 11 of 34 LENGTH: 198
- Command ==> END Scroll ==> PAGE
1
2 Line Commands: H - HOLD, X - HIDE, R - RESET
3
4 NUM FIELD NAME STATUS
5 -----
6 - 2 EMP-LAST-NAME HOLD
7 - 1 EMP-NUMBER
- 3 EMP-FIRST-NAME
- 4 EMP-MID-INIT
- 5 FILLER
- 6 EMP-TITLE
- 7 EMP-PERSONAL-INFO HIDE
- 8 EMP-NATL-ID-NUMBER HIDE
- 9 FILLER
- 10 EMP-DATE-OF-BIRTH HIDE
- 11 EMP-DOB-REDEF

21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS 5.00
22 EMP-HOME-ADDRESS 50/GRP

```

Steps:

1. Type **END** in the COMMAND field.
2. Press Enter. File-AID redisplays the Edit screen as illustrated in [Figure 103](#). Notice that the list has been reordered with the held field on top.

Figure 103. Edit - Formatted Mode - After HIDE and HOLD

```

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000006 000127
COMMAND ==> SCROLL ==> PAGE
RECORD: 1 EMPLOYEE-MASTER-FILE LENGTH: 198
----- FIELD NUMBER/NAME ----- FORMAT -----+---1---+---2---+---3---+---4
***** TOP OF DATA *****
2 EMP-LAST-NAME 15/AN MARTIN
1 EMP-NUMBER 5/AN 00090
3 EMP-FIRST-NAME 10/AN EDWARD
4 EMP-MID-INIT 1/AN M
5 FILLER 2/AN
6 EMP-TITLE 30/AN AIRPLANE MANUFACTURER
10 EMP-DATE-OF-BIRTH 6/AN 101954
15 EMP-HIRE-DATE 6/AN 920101
16 EMP-MARITAL-STATUS 1/AN M
17 EMP-WITHOLD-INFO 15/GRP
18 EMP-LIFE-INS-WITHOLD-AMT 6/SNUM -3000.00
19 EMP-NATL-TAX-WITHOLD-PCT 3/PS -74.00
20 EMP-REGION-TAX-WITHOLD-PCT
3/PS 25.00
21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS 5.00
22 EMP-HOME-ADDRESS 50/GRP
23 EMP-STREET-ADDRESS 25/AN 859 O'FARREL ST.
24 FILLER 1/AN

```

More About the HIDE and HOLD Commands

- You can redisplay the HIDE and HOLD Settings pop-up at any time by entering HOLD <blank>, HIDE <blank>, or HIDE ALL in the Command field.
- The fields which are HIDDEN using the HIDE (or Display OFF) are redisplayed by using RESET (or RESET HIDE), Display ON, DISPLAY ONLY, or HOLD on that field.
- Fields are identified by their field numbers. In VFMT mode each field number is always shown at the left of each field's heading "ruler". Reverse range is supported with the HIDE command.

- Entering a second HOLD command on a field already HELD moves that field to the end of the HOLD fields displayed. For example, HOLD 3,2,1 displays 3,2,1,4,5... And entering HOLD 2 subsequently displays 3,1,2,4,5...
- Any fields which were hidden by Display OFF, Display ONLY or HIDE are redisplayed when HOLD, DISPLAY ONLY, or DISPLAY ON is entered with that field number.
- All held or hidden fields are released by entering the RESET primary command. All held fields are released by the RESET HOLD primary command.

Specifying a Field Number to Conduct a Search For Invalid Data

You can use the FIND primary command to search for and display data that matches the search condition. When you specify the VALID or INVALID parameters with the FIND command, you must identify a field in the record layout.

File-AID compares the actual data in the specified field of each record with the field declaration in the record layout. If File-AID finds a match, valid or invalid as specified, it repositions the field at the top of the display and places an informational message at the top right-hand corner of the screen.

When indicating the record layout field, you enter a forward slash (/) followed by either a full or partial field name or the File-AID assigned field number.



If field numbers are not already displayed as shown in [Figure 104](#) on page 97 issue the SHOW NUMBER command.

Figure 104. Search for INVALID data in field 19 - FIND INVALID /19

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE -----
COMMAND ==> FIND INVALID /19
RECORD: 1 EMPLOYEE-MASTER-FILE
----- FIELD NUMBER/NAME ----- FORMAT- -----+---1---+
2 EMP-LAST-NAME 15/AN MARTIN
1 EMP-NUMBER 5/AN 00090
```

Steps:

1. Type FIND INVALID /19 in the COMMAND field.
2. Press Enter. File-AID finds invalid data in field 19 (EMP-NATL-TAX-WITHOLD-PCT) of record number 4. The layout is scrolled to show field 19's data at the top of the display.

Result of FIND INVALID /19

Notice the message X'404040' FOUND in the top right corner of the screen. Press PF1 to see the long description of this (or any) message: **FS407 Search for /19 EQ INVALID was successful.**

The cursor is positioned in the data area on the X'40... The invalid data is automatically displayed in hex for easy viewing and correction.

Figure 105. Edit - Formatted Mode - FIND INVALID Result

```

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- X'404040' FOUND
COMMAND ===> SCROLL ===> PAGE
RECORD: 4 EMPLOYEE-MASTER-FILE LENGTH: 198
----- FIELD NUMBER/NAME ----- FORMAT-----1-----2-----3-----4
2 EMP-LAST-NAME 15/AN ANDREWS
19 EMP-NATL-TAX-WITHOLD-PCT 3/PS X'404040'
20 EMP-REGION-TAX-WITHOLD-PCT
21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS 25.00
22 EMP-HOME-ADDRESS SYNC 3/PS 15.00
50/GRP

```

More About the FIND Command

- If you enter the FIND command without specifying any parameters, the FIND Command screen is displayed to assist you with FIND command entry and syntax (see [Figure 47](#) on page 56).
- File-AID assigns field numbers sequentially, starting at the top of the record layout. Each elementary or group data item name is assigned a unique field number. If a data item occurs more than once, each occurrence is assigned the same field number, since each data item shares the same data name. To search a specific array element indicate the subscript in the following way - FIND INVALID /field(subscript).

You can use the File-AID-assigned field number in conjunction with several primary commands to selectively display your data. You can use the field number to:

- Indicate the field to search when using the FIND INVALID command (Ex. FIND INVALID /field-number).
- Use the DISPLAY command to specify a field or range of fields that you want to display in a format that is different from the default display format (Ex. DISPLAY 1 2-5 10 HEX).
- Reposition the display to a specified field by using the field number(s) with the LOCATE primary command (Ex. LOCATE /field-number).
- Specify which fields you want to display or hide by using the field number(s) with the DISPLAY primary command (Ex. DISPLAY 1 2 18 ONLY).
- For Unicode data, the FIND command has these restrictions:
 1. Only supports hex format.
 2. The parameters VALID and INVALID are not supported.
 3. In FMT mode and VFMT HEX OFF mode, the cursor does not point to the exact position of the found string.

Resetting Hold and Hide

Use the RESET command to reverse the effects of the previously specified HIDE and HOLD Settings.

Figure 106. Enter RESET command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ==> RESET HIDE HOLD
RECORD: 4 EMPLOYEE-MASTER-FILE
----- FIELD NUMBER/NAME ----- FORMAT- -----+----1----+-
2 EMP-LAST-NAME 15/AN ANDREWS
19 EMP-NATL-TAX-WITHOLD-PCT 3/PS X'404040'
```

Steps:

1. Type **RESET HIDE HOLD** in the COMMAND field.
2. Press Enter. File-AID redisplays the Edit screen as illustrated in [Figure 107](#). Notice that the previously held field is no longer the top field on the current screen display. The display of the record starts again with field 1, the result of the **RESET HIDE HOLD** command.

Figure 107. Edit - Formatted Mode - After RESET HIDE HOLD

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- INVALID PACKED SIGN
COMMAND ==> SCROLL ==> PAGE
RECORD: 4 EMPLOYEE-MASTER-FILE LENGTH: 198
----- FIELD NUMBER/NAME ----- FORMAT- -----+----1----+----2----+----3----+----4
1 EMP-NUMBER 5/AN 10000
2 EMP-LAST-NAME 15/AN ANDREWS
3 EMP-FIRST-NAME 10/AN GEORGE
4 EMP-MID-INIT 1/AN
5 FILLER 2/AN
6 EMP-TITLE 30/AN ACTOR
7 EMP-PERSONAL-INFO 23/GRP
8 EMP-NATL-ID-NUMBER 9/NUM 576312032
9 FILLER 1/AN
10 EMP-DATE-OF-BIRTH 6/AN 042248
15 EMP-HIRE-DATE 6/AN 920131
16 EMP-MARITAL-STATUS 1/AN S
17 EMP-WITHOLD-INFO 15/GRP
18 EMP-LIFE-INS-WITHOLD-AMT 6/SNUM 0
19 EMP-NATL-TAX-WITHOLD-PCT 3/PS X'404040'
20 EMP-REGION-TAX-WITHOLD-PCT 3/PS 25.00
21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS 15.00
22 EMP-HOME-ADDRESS 50/GRP
```

Printing the Currently Displayed Record

The FPRINT primary command enables you to print the current record and any number of subsequent records following the current record. FPRINT (FP) is valid only in the formatted mode. When you issue the FPRINT command, File-AID displays the Print Parameters screen.

Figure 108. Print One or More Formatted Records - FPRINT Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ===> FPRINT
RECORD:        4          EMPLOYEE-MASTER-FILE
---- FIELD NUMBER/NAME ----- FORMAT-----+---1---+---+
1 EMP-NUMBER      5/AN    10000
2 EMP-LAST-NAME   15/AN   ANDREWS
```

Steps:

1. Type **FPRINT** in the COMMAND field.
2. Press Enter. File-AID displays the Print Parameters screen illustrated in [Figure 109](#).

Figure 109. Print Parameters Screen

```
File-AID ----- Print Parameters -----
COMMAND ===>

Number of lines/page     ===> 55      (0 = Suppress page headings)
Sysout class             ===> A
Number of copies          ===> 1

Enter One of the Following Optional Destinations:
Destination printer      ===>      (Local or remote printer)
-- OR --
External JES Node ID     ===>      (Predefined JES Node and symbolic ID
Target VM/TSO ident       ===>      of intended receiver of output)
-- OR --
Sysout writer name        ===>      (Installation assigned output writer)
-- OR --
Print dataset name         ===>      (DSORG=PS; RECFM=VBA; LRECL=187)
Disposition                ===>      (NEW, SHR, MOD, OLD)
Volume serial               ===>

Use ENTER to continue, END to cancel
```

More About the FPRINT Command

- FPRINT without any parameters prints one (1) record. To print several records starting at this record, use the command **FPRINT n** where *n* is the number of records to print. If *n* is "0" or "ALL", File-AID prints all records starting at the currently displayed record.

DIRECTING THE FPRINT REPORT TO A DATASET OR SYSOUT

FPRINT output may be routed to SYSOUT, a local or remote printer, a JES Node ID, a sysout writer, or to a new or existing dataset. You now route your FPRINT output to a new dataset.

Figure 110. Print Parameters Screen - Put FPRINT Report in NEW Dataset

File-AID ----- Print Parameters -----
COMMAND ==>

Number of lines/page ==> 55 (0 = Suppress page headings)
Sysout class ==> A
Number of copies ==> 1

Enter One of the Following Optional Destinations:

Destination printer ==> (Local or remote printer)
- - - OR - - -
External JES Node ID ==> (Predefined JES Node and symbolic ID
Target VM/TSO ident ==> of intended receiver of output)
- - - OR - - -
Sysout writer name ==> (Installation assigned output writer)
- - - OR - - -
Print dataset name ==> FASAMP.PRINT
Disposition ==> NEW (NEW, SHR, MOD, OLD)
Volume serial ==>

Use ENTER to continue, END to cancel

Steps:

1. Type **FASAMP.PRINT** in the Print dataset name field.
2. Type **NEW** in the Disposition field.

Since the dataset **FASAMP.PRINT** does not currently exist, you must specify the disposition of the dataset as **NEW**.

3. Press Enter. Since you are creating a new print file (Disposition equals **NEW**), File-AID displays the Print Dataset Attributes Specification screen where you must enter additional print attributes as illustrated in [Figure 111](#) on page 102.

More About the Print Parameters

- You can send the output to SYSOUT (Destination Printer) or another system (JES Node ID and Ident) or to a print writer (Sysout writer) or to a dataset (Print dataset name). Only one destination is accepted per FPRINT request. By default, your report is sent to SYSOUT with a destination of LOCAL.
- FPRINT output is "wysiwyg" (what you see is what you get). Any format tailoring (SHOW) or field display tailoring (DISPLAY) is reflected in the report so that the output matches what you see on the formatted mode screen.

Specifying Additional Print Parameters for New Dataset

Whenever you request a NEW dataset, you must specify space allocation values.

Figure 111. New Print Dataset Attributes Specification ScreenDescription: (SMS Allocation Fields Not Shown Automatically Appear If Applicable)

```
File-AID ----- Print Dataset Attributes Specification -----
COMMAND ===>

Print Dataset Allocation Information:
  Generic unit      ===>
  Space units       ===> TRKS      (BLKS; TRKS; CYLS)
  Primary quantity  ===> 1        (In above units)
  Secondary quantity ===> 1      (In above units)

Use ENTER to print, END to cancel print
```

Steps:

1. Accept the default space allocation values or specify your own values.
2. Press Enter. File-AID processes your print request, writing the output to the dataset **FASAMP.PRINT**. You can then browse the file or copy it to a printer at a later time.

Changing Data Using the CHANGE Command

Use the CHANGE primary command to search for a specified value or condition and change it to a new value. If File-AID finds a match, it changes the data to the new value that you specify. If you enter the CHANGE command without specifying any parameters, File-AID displays the CHANGE Command screen where you can enter your change parameters.

Figure 112. Initiate a Change - CHANGE Command With No Parameters

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ==> CHANGE
RECORD:        4          EMPLOYEE-MASTER-FILE
---- FIELD NUMBER/NAME ----- -FORMAT- - - +-----1-----+-----+
1 EMP-NUMBER      5/AN    10000
2 EMP-LAST-NAME   15/AN   ANDREWS
```

Steps:

1. Type **CHANGE** in the COMMAND field.
2. Press Enter. File-AID displays the CHANGE Command screen as shown in [Figure 113](#) on page 103.

Figure 113. CHANGE Command Prompt Screen

```
File-AID ----- CHANGE Command -----
COMMAND ==>

Specify CHANGE operands:
  Operator      ==>           (EQ, NE, LT, GT, LE, GE)
  From string   ==>
  To string     ==>
  Modifier      ==> NEXT      (NEXT, ALL, FIRST, LAST, PREV)
  Lines to search ==>         (NX = Nonexcluded; X = Excluded; Blank = all)

Specify the Following Fields to Limit the Range of Search for this CHANGE:
  Field name    ==>
  or
  Field number  ==>
  or
  Start column   ==>          End column ==>           (Column number(s))
  Start range    ==>          End range  ==>           (Label or line number)

NOTE: You may bypass this screen by entering the CHANGE command with operands:
CHANGE string      string2  (NEXT)  (NX)  (col-1 (col-2))  (range)
CHG   (op) string   (ALL)   (X)   (/field name)
C     VALID          (FIRST)  (/field number)
      INVALID         (LAST)
      ANY or *        (PREV)
```

Specifying the CHANGE Parameters

Use the CHANGE Command prompt screen to enter your change criteria. Using this screen helps you to enter valid values and to learn about the CHANGE command syntax.

Figure 114. CHANGE Command Screen - CHANGE ALL INVALID to 0 (zero)

```

File-AID ----- CHANGE Command -----
COMMAND ==>

Specify CHANGE operands:
  Operator      ==>          (EQ, NE, LT, GT, LE, GE)
  From string   ==> INVALID
  To string     ==> 0
  Modifier      ==> ALL       (NEXT, ALL, FIRST, LAST, PREV)
  Lines to search ==>        (NX = Nonexcluded; X = Excluded; Blank = all)

Specify the Following Fields to Limit the Range of Search for this CHANGE:
  Field name    ==> EMP-NATL-TAX-WITHOLD-PCT
  or
  Field number   ==>
  or
  Start column   ==>           End column ==>          (Column number(s))
  Start range    ==>           End range  ==>          (Label or line number)

NOTE: You may bypass this screen by entering the CHANGE command with operands:
CHANGE string      string2  (NEXT)  (NX)  (col-1 (col-2))  (range)
CHG   (op) string   (ALL)    (X)    (/field name)
C     VALID         (FIRST)   (LAST)   (/field number)
      INVALID        (PREV)
      ANY or *        (PREV)

```

Steps:

1. Type **INVALID** in the "From string" field.

Using the **INVALID** keyword in the "From string" field tells File-AID to search the specified field for data that does not match its field declaration in the record layout.

2. Type a **0** (zero) in the "To string" field.

The value you enter in the "To string" field is the value that you want File-AID to substitute for the "From String" value. In this case, for any value that File-AID finds to be invalid.

3. Type **ALL** in the Modifier field.

The **ALL** modifier tells File-AID to search all records for the condition you specified.

4. Type **EMP-NATL-TAX-WITHOLD-PCT** in the "Field name" field.

This value tells File-AID which field in the layout to search for invalid values.

5. Press Enter. File-AID applies the CHANGE command as illustrated in [Figure 115](#).

CHANGE Result

After the CHANGE, File-AID displays record number 4 on the Edit screen with **EMP-NATL-TAX-WITHOLD-PCT** positioned at the top of the display and a value of 0 (zero) has replaced the invalid value. The cursor is placed on the new 0.

The message, **EQ INVALID CHANGED**, appears in the top right-hand corner of the display. Press PF1 (HELP) for details regarding the number of times File-AID applied the change you specified (message for this example: XVJFS410 FS410-/EMP-NATL-TAX-WITHOLD-PCT EQ INVALID - changed to 0 3 times on 3 record(s).).

Figure 115. Edit - CHANGE Result - INVALID Data In Record 4 Changed

```

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- EQ INVALID CHANGED
COMMAND ==> SCROLL ==> PAGE
RECORD: 4 EMPLOYEE-MASTER-FILE LENGTH: 198
---- FIELD NUMBER/NAME ----- -FORMAT- -----+-----1-----+-----2-----+-----3-----+-----4
***** TOP OF DATA *****
1 EMP-NUMBER 5/AN 10000
2 EMP-LAST-NAME 15/AN ANDREWS
3 EMP-FIRST-NAME 10/AN GEORGE
4 EMP-MID-INIT 1/AN
5 FILLER 2/AN
6 EMP-TITLE 30/AN ACTOR
7 EMP-PERSONAL-INFO 23/GRP
8 EMP-NATL-ID-NUMBER 9/NUM 576312032
9 FILLER 1/AN
10 EMP-DATE-OF-BIRTH 6/AN 042248
15 EMP-HIRE-DATE 6/AN 920131
16 EMP-MARITAL-STATUS 1/AN S
17 EMP-WITHOLD-INFO 15/GRP
18 EMP-LIFE-INS-WITHOLD-AMT 6/SNUM 0
19 EMP-NATL-TAX-WITHOLD-PCT 3/PS 0
20 EMP-REGION-TAX-WITHOLD-PCT 3/PS 25.00
21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS 15.00

```

More About the CHANGE Command

- You can specify the CHANGE command parameters on the CHANGE Command screen or specify the parameters with the CHANGE keyword in the COMMAND field.

Navigating within a Formatted Record

You can use the UP, DOWN, BACK (or LEFT), and FORWARD (or RIGHT) primary commands to navigate within a formatted display of a record and to move to the next or previous record. In formatted mode, the UP and DOWN primary commands enable you to view more fields within the current record. The BACK (alias LEFT) and FORWARD (aliases: FWD, RIGHT) primary commands scroll the display to the previous and next records, respectively. Each of these primary commands has a corresponding PF key set as the default in your user profile. The default settings are:

PF7	UP
PF8	DOWN
PF10	LEFT (BACK)
PF11	RIGHT (FORWARD)

Figure 116. Scroll DOWN to See Bottom of Layout

```

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ==> DOWN
RECORD: 4 EMPLOYEE-MASTER-FILE
---- FIELD NUMBER/NAME ----- -FORMAT- -----+-----1-----+-----+
1 EMP-NUMBER 5/AN 10000
2 EMP-LAST-NAME 15/AN ANDREWS

```

Steps:

1. Type **DOWN** in the COMMAND field.
2. Press Enter. Since you did not specify a specific number of lines to scroll, File-AID repositions the cursor based on the value specified in the SCROLL field located in the upper right corner of the display (in this example SCROLL ==> PAGE.)

Scroll DOWN Result

File-AID redisplays record number 4 with field 22 of the record located at the top of the screen as shown in [Figure 117](#).

Figure 117. Formatted Mode - After DOWN (PAGE) Scroll Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000102 000198
COMMAND ===>                                     SCROLL ==> PAGE
RECORD:    4                                     EMPLOYEE-MASTER-FILE          LENGTH:    198
----- FIELD NUMBER/NAME ----- -FORMAT- -----+---1---+---2---+---3---+---4
22 EMP-HOME-ADDRESS      50/GRP
23 EMP-STREET-ADDRESS    25/AN   375 MERRIVALE W. SQ.
24 FILLER                1/AN
25 EMP-CITY               15/AN   SUNNYVALE
26 EMP-STATE-PROV-CNTY   4/GRP
27 EMP-STATE              2/AN   CA
28 FILLER                2/AN
29 EMP-POSTAL-CODE       5/NUM   94134
30 EMP-EMERGENCY-CONTACT 47/GRP
31 EMP-CONTACT-NAME      25/AN   DICK
32 FILLER                2/AN
33 EMP-CON-WORK-PHONE    10/AN   4045552010
34 EMP-CON-HOME-PHONE    10/AN   4045559021
***** BOTTOM OF DATA *****
```

Figure 118. Scroll UP to See Beginning of Layout

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ==> UP
RECORD:    4                                     EMPLOYEE-MASTER-FILE
----- FIELD NUMBER/NAME ----- -FORMAT- -----+---1---+---+
22 EMP-HOME-ADDRESS      50/GRP
23 EMP-STREET-ADDRESS    25/AN   375 MERRIVALE W. S
```

Steps:

1. Type **UP** in the COMMAND field.
2. Press Enter. File-AID redisplays record number 4 with the first field of the record located at the top of the screen as shown in [Figure 117](#).

Scroll UP Result

In this example, the **EMP-NUMBER** field name is highlighted to distinguish it as the key field of the record, and therefore, a protected field. The key field data (number 10000 in this example) is protected and may not be changed, protected data is not highlighted. The remainder of the data items are highlighted to distinguish them as unprotected fields which you may change.

Figure 119. Formatted Mode - After UP (PAGE) Scroll Command

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----			COLUMNS 00001 00101	SCROLL ==> PAGE
COMMAND ==>	RECORD: 4	EMPLOYEE-MASTER-FILE	LENGTH: 198	
---	FIELD NUMBER/NAME -----	FORMAT-----1-----2-----3-----4		
***** TOP OF DATA *****			*****	*****
1	EMP-NUMBER	5/AN 10000		
2	EMP-LAST-NAME	15/AN ANDREWS		
3	EMP-FIRST-NAME	10/AN GEORGE		
4	EMP-MID-INIT	1/AN		
5	FILLER	2/AN		
6	EMP-TITLE	30/AN ACTOR		
7	EMP-PERSONAL-INFO	23/GRP		
8	EMP-NATL-ID-NUMBER	9/NUM 576312032		
9	FILLER	1/AN		
10	EMP-DATE-OF-BIRTH	6/AN 042248		
15	EMP-HIRE-DATE	6/AN 920131		
16	EMP-MARITAL-STATUS	1/AN S		
17	EMP-WITHOLD-INFO	15/GRP		
18	EMP-LIFE-INS-WITHOLD-AMT	6/SNUM 0		
19	EMP-NATL-TAX-WITHOLD-PCT	3/PS 0		
20	EMP-REGION-TAX-WITHOLD-PCT	3/PS 25.00		
21	EMP-LOCAL-TAX-WITHOLD-PCT	3/PS 15.00		

More About Scroll Commands

In formatted mode, the SCROLL field value of CSR (cursor) moves the line on which the cursor is positioned to the bottom (UP) or top (DOWN) of the display. (If the cursor is already on the top or bottom of the display or not visible on the screen, File-AID scrolls the data a full page.)

Creating a New Record by Copying the Currently Displayed Record

The REPEAT primary command lets you copy the currently displayed record and to add one or more copies of it immediately following the currently displayed record.



For the REPEAT Command to work in this example, set the processing parameter “Display line number in EDIT” to YES (see [Display line number in EDIT](#) on page 80).

Figure 120. Create a New Record - REPEAT Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ==> REPEAT
RECORD:        4          EMPLOYEE-MASTER-FILE
---- FIELD NUMBER/NAME ----- -FORMAT- - - + - - - 1 - - + -
1 EMP-NUMBER           5/AN    10000
2 EMP-LAST-NAME        15/AN   ANDREWS
```

Steps:

1. Type REPEAT in the COMMAND field.
 2. Press Enter. File-AID copies record number 4, inserts the new record (number 5) immediately following the currently displayed record. File-AID redisplays the screen with the message RECORD REPEATED displayed in the top right corner as shown in Figure 121.

Record REPEATED Result

Figure 121. Edit - Formatted Mode - REPEAT a Record

```

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- RECORD REPEATED
COMMAND ==> SCROLL ==> PAGE
RECORD: 4 EMPLOYEE-MASTER-FILE LENGTH: 198
---- FIELD NUMBER/NAME ---- -FORMAT-----+---1---+---2---+---3---+---4
***** ***** TOP OF DATA *****
1 EMP-NUMBER      5/AN   10000
2 EMP-LAST-NAME   15/AN   ANDREWS
3 EMP-FIRST-NAME  10/AN   GEORGE
4 EMP-MID-INIT    1/AN
5 FILLER          2/AN
6 EMP-TITLE       30/AN   ACTOR
7 EMP-PERSONAL-INFO 23/GRP
8 EMP-NATL-ID-NUMBER 9/NUM   576312032
9 FILLER          1/AN
10 EMP-DATE-OF-BIRTH 6/AN    042248
15 EMP-HIRE-DATE   6/AN    920131
16 EMP-MARITAL-STATUS 1/AN    S
17 EMP-WITHOLD-INFO 15/GRP
18 EMP-LIFE-INS-WITHOLD-AMT 6/SNUM 0
19 EMP-NATL-TAX-WITHOLD-PCT 3/PS   0
20 EMP-REGION-TAX-WITHOLD-PCT 3/PS   25.00
21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS   15.00

```

More About the REPEAT Command

- You can specify the REPEAT command as REPEAT, REP, or R. Refer to the information on primary commands in the *File-AID/MVS Online Reference Manual* for a complete explanation of the command syntax.
- To insert more than one copy of a record, specify a numerical value as a parameter with the command (for example, REPEAT 5).
- You can use the INSERT primary command to create a new formatted data record. If you use the FORWARD (FWD, RIGHT) command from a record you create with the INSERT command, File-AID adds the edited record to the dataset and creates a new initialized input record. This is called INPUT mode. You must enter values in one or more fields of an INPUT record in order for the record to be added. INPUT mode ends when you issue any other command except scroll FWD.
- Key fields of inserted and repeated records are unprotected so that you can enter values for the key of the new record.

Displaying the New Record

To display the new record you created with the REPEAT command, use the FWD (forward) primary command. The FWD command tells File-AID to display the next sequential record, which is record number 5 in this example.

Figure 122. Edit - Use FWD Command To See Repeated New Record

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ==> FWD
RECORD: 4 EMPLOYEE-MASTER-FILE
---- FIELD NUMBER/NAME ----- FORMAT - - - + - - - 1 - - - + - -
1 EMP-NUMBER 5/AN 10000
2 EMP-LAST-NAME 15/AN ANDREWS
```

Steps:

1. Type FWD in the COMMAND field.
2. Press Enter. File-AID scrolls to record number 5 as shown in [Figure 123](#).

FWD Result - Record 5 is a Repeat of Record 4

Note the change to the key field's (EMP-NUMBER) protection status when you use the FWD command to display record number 5, the new repeated record.

Figure 123. After FWD - Repeated Record 5 Appears

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 00001 00101
COMMAND ===> SCROLL ==> PAGE
RECORD: 5 EMPLOYEE-MASTER-FILE LENGTH: 198
---- FIELD NUMBER/NAME ----- -FORMAT- -----+---1---+---2---+---3---+---4
***** TOP OF DATA *****
1 EMP-NUMBER 5/AN 10000
2 EMP-LAST-NAME 15/AN ANDREWS
3 EMP-FIRST-NAME 10/AN GEORGE
4 EMP-MID-INIT 1/AN
5 FILLER 2/AN
6 EMP-TITLE 30/AN ACTOR
7 EMP-PERSONAL-INFO 23/GRP
8 EMP-NATL-ID-NUMBER 9/NUM 576312032
9 FILLER 1/AN
10 EMP-DATE-OF-BIRTH 6/AN 042248
15 EMP-HIRE-DATE 6/AN 920131
16 EMP-MARITAL-STATUS 1/AN S
17 EMP-WITHOLD-INFO 15/GRP
18 EMP-LIFE-INS-WITHOLD-AMT 6/SNUM 0
19 EMP-NATL-TAX-WITHOLD-PCT 3/PS 0
20 EMP-REGION-TAX-WITHOLD-PCT 3/PS 25.00
21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS 15.00
```

Entering New Data Values in a Repeated Record

Key fields are automatically protected from change in existing records. When you use the REPEAT (or INSERT) command to add a record to the dataset, the protection status of the key field is off to enable you to define the value of the new key.

In this example, you enter new data for the new record (number 5) that you created using the REPEAT command on record number 4. To change data, type over the existing data values as shown in [Figure 124](#).

Figure 124. Edit - Formatted Mode - Entering Data Values For New Record 5

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 00001 00101
COMMAND ===> SCROLL ==> PAGE
RECORD: 5 EMPLOYEE-MASTER-FILE LENGTH: 198
---- FIELD NUMBER/NAME ----- -FORMAT- -----+---1---+---2---+---3---+---4
***** TOP OF DATA *****
1 EMP-NUMBER 5/AN 10001
2 EMP-LAST-NAME 15/AN SMITH
3 EMP-FIRST-NAME 10/AN MARY
4 EMP-MID-INIT 1/AN
5 FILLER 2/AN
6 EMP-TITLE 30/AN ACTRESS
7 EMP-PERSONAL-INFO 23/GRP
8 EMP-NATL-ID-NUMBER 9/NUM 536340982
9 FILLER 1/AN
10 EMP-DATE-OF-BIRTH 6/AN 052858
15 EMP-HIRE-DATE 6/AN 940504
16 EMP-MARITAL-STATUS 1/AN S
17 EMP-WITHOLD-INFO 15/GRP
18 EMP-LIFE-INS-WITHOLD-AMT 6/SNUM 0
19 EMP-NATL-TAX-WITHOLD-PCT 3/PS 0
20 EMP-REGION-TAX-WITHOLD-PCT 3/PS 25.00
21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS 15.00
```

Steps:

1. Since record number 4 was copied, record number 5 contains the same values. Type over the existing values with new data exactly as shown above in [Figure 124](#).
2. Press Enter.

Protecting New Record Key Fields

Once you have entered values for a new key, you can turn on key protection to prevent typeover changes. To turn the protection status on, use the PROTECT primary command.

When you set the protection status to ON, you cannot edit the data in the key field for the currently displayed record. When the protection status is on, the name of the key field is highlighted.

Figure 125. Edit - PROTECT New Key

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ==> PROTECT
RECORD: 5 EMPLOYEE-MASTER-FILE
---- FIELD NUMBER/NAME ----- FORMAT- 1-----+
1 EMP-NUMBER 5/AN 10001
2 EMP-LAST-NAME 15/AN SMITH
3 EMP-FIRST-NAME 10/AN MARY
```

Steps:

1. Type PROTECT in the COMMAND field.

Since the default value of the PROTECT command is ON, you do not have to enter the ON parameter with the command.

2. Press Enter. File-AID prohibits you from editing the key field for the currently displayed record.

PROTECT Result

Since you invoked the PROTECT command on record number 5, the key field (EMP-NUMBER) and its data are protected. As illustrated in [Figure 126](#), the field name with its data is highlighted to distinguish it as a protected field. The other data items remain unprotected.

Figure 126. After PROTECT - EMP-NUMBER is Protected

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 00001 00101
COMMAND ==>
RECORD: 5 EMPLOYEE-MASTER-FILE SCROLL ==> PAGE LENGTH: 198
---- FIELD NUMBER/NAME ----- FORMAT- 1-----2-----3-----4
***** TOP OF DATA *****
1 EMP-NUMBER 5/AN 10001
2 EMP-LAST-NAME 15/AN SMITH
3 EMP-FIRST-NAME 10/AN MARY
4 EMP-MID-INIT 1/AN
5 FILLER 2/AN
6 EMP-TITLE 30/AN ACTRESS
7 EMP-PERSONAL-INFO 23/GRP
8 EMP-NATL-ID-NUMBER 9/NUM 536340982
```

More About the PROTECT Command

- Use the PROFILE command to display the current PROTECT value.

Navigating to a Record by Its Key Value

Use the KEY command to scroll directly to the record that matches the value of the specified key (VSAM-KSDS only).

Figure 127. Scroll Using KEY Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ==> KEY
RECORD: 5 EMPLOYEE-MASTER-FILE
---- FIELD NUMBER/NAME ----- -FORMAT- -----+-----1-----+
1 EMP-NUMBER 5/AN 10001
2 EMP-LAST-NAME 15/AN SMITH
3 EMP-FIRST-NAME 10/AN MARY
```

Steps:

1. Type KEY in the COMMAND field.
2. Press Enter. File-AID displays the Key Specification screen (as illustrated in [Figure 128](#)) where you specify the value that you want File-AID to locate in the EMP-NUMBER.

KEY Result - Key Specification Screen

Figure 128. KEY Value Specification Screen

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000005
COMMAND ==>
SCROLL ==> PAGE
KEY POSITION: 1 KEY LENGTH: 5 RECORD NUMBER: 5
KEY VALUE SPECIFICATION
---- FIELD NUMBER/NAME ----- -FORMAT- -----+-----1-----+-----2-----+-----3-----+-----4
*****TOP OF DATA***** BOTTOM OF DATA*****
1 EMP-NUMBER 5/AN 10001
*****BOTTOM OF DATA*****
```

Use RIGHT, LEFT commands to browse through keys
 Use ENTER when the key value has been fully specified
 Use CANCEL command to terminate KEY SPECIFICATION without processing the key

More About the KEY Command

- You may enter a key value with the KEY command. You may also use the optional keyword "NEXT" to find the record with same or next highest key value. Example, KEY 23456 NEXT, positions you to the record with a key equal to 23456 or the next highest key.
- The KEY command is only valid for VSAM-KSDS files.
- For RRDS and BDAM files use the LR (Locate Record) command in Formatted Mode. In Character and Vertical modes use the LOCATE (L) primary command.

Scrolling to Another Record by Specifying a Key Value

In this example, the key field is **EMP-NUMBER** and you want to scroll to the record for employee number 34010. Using the KEY Value Specification screen, you can specify 34010 as the key value that you want File-AID to search for and locate. The KEY command and the KEY Value Specification screen feature eliminate the need to scroll through a dataset to find a specific record.

Figure 129. Scroll Using KEY Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000005
COMMAND ==>
KEY POSITION: 1      KEY LENGTH: 5      RECORD NUMBER: 5
SCROLL ==> PAGE
KEY VALUE SPECIFICATION
--- FIELD NUMBER/NAME ----- -FORMAT- ---+---1---+---2---+---3---+---4
***** TOP OF DATA *****
1 EMP-NUMBER      5/AN 34010
***** BOTTOM OF DATA *****
```

Steps:

1. Type **34010** over the displayed key field value 10001.
2. Press Enter. File-AID locates employee number 34010 in record number 13 and displays that record as shown in [Figure 130](#) on page 113.

Successful KEY Specification - Key 34010 Found

When the key is found, the message **KEY OR KEY NEXT FOUND**, is displayed at the top right corner of the screen.

Figure 130. Edit - Formatted Mode - Scrolled To Key 34010 - Record 13

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- KEY OR KEY NEXT FOUND
COMMAND ==>
RECORD: 13          EMPLOYEE-MASTER-FILE           SCROLL ==> PAGE
LENGTH: 198
--- FIELD NUMBER/NAME ----- -FORMAT- ---+---1---+---2---+---3---+---4
***** TOP OF DATA *****
1 EMP-NUMBER      5/AN 34010
2 EMP-LAST-NAME   15/AN SMITH
3 EMP-FIRST-NAME  10/AN JANET
4 EMP-MID-INIT    1/AN
5 FILLER          2/AN
6 EMP-TITLE       30/AN AIRLINE ATTENDANT
7 EMP-PERSONAL-INFO 23/GRP
8 EMP-NATL-ID-NUMBER 9/NUM 557782984
9 FILLER          1/AN
10 EMP-DATE-OF-BIRTH 6/AN 112359
15 EMP-HIRE-DATE   6/AN 920411
16 EMP-MARITAL-STATUS 1/AN S
17 EMP-WITHOLD-INFO 15/GRP
18 EMP-LIFE-INS-WITHOLD-AMT 6/SNUM 4000.00
19 EMP-NATL-TAX-WITHOLD-PCT 3/PS 30.00
20 EMP-REGION-TAX-WITHOLD-PCT 3/PS 15.00
21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS 7.00
```

Using Character Mode

The Character mode command structure and display layout are similar to those of the ISPF/PDF editor. The displayed or edited data can consist of the entire dataset or can be restricted, by using selection criteria, to a selected subset of records.

Switching To Character Mode

Use the CHAR command to switch from Formatted to Character mode.

Figure 131. Switch to Character Mode Using the CHAR Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ===> CHAR
RECORD: 13 EMPLOYEE-MASTER-FILE
---- FIELD NUMBER/NAME ----- -FORMAT- -----+-----1-----+
1 EMP-NUMBER 5/AN 34010
2 EMP-LAST-NAME 15/AN SMITH
```

Steps:

1. Type **CHAR** in the COMMAND field.
2. Press Enter. File-AID redisplays the dataset in character format as shown in [Figure 132](#).

Figure 132. Edit - Character Mode

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 00001 00071
COMMAND ===>
***** *****TOP OF DATA*****-CAPS OFF-* SCROLL ===> PAGE
000001 00090 MARTIN EDWARD M AIRPLANE MANUFACTURER 42789012
000002 00100 MULSTROM ROBERTA A HOLLYWOOD SEAMSTRESS 34657365
000003 00200 JACKSON JOSEPH C ORATOR 27558717
==CHG> 10000 ANDREWS GEORGE ACTOR 57631203
==NEW> 10001 SMITH MARY ACTRESS 53634098
000006 15000 MURPHY RONALD L PAINTER 98765432
000007 18034 SCHNEIDER ELLEN C NURSE 34155954
000008 21035 JONES GEORGE B COUNTRY SINGER 46381345
000009 25100 ROBERTS WILLIAM R POLITICIAN 87956332
==CHG> 27007 ALLEN JOYCE M AUTHOR 78345833
000011 30001 RICHARDS REX W RODEO CLOWN 63276453
000012 31000 SAVAGE JONATHON C ELECTRICIAN 34856799
000013 34010 SMITH JANET AIRLINE ATTENDANT 55778298
000014 34011 JACOBS DIANA DOCTOR 22536839
000015 36010 SIMPSON ALEX CARTOONIST 12345678
000016 39310 BARNETT EDWARD E SALESMAN 54378914
000017 39500 WILLIAMS EDITH A DESIGNER 98765432
000018 41000 RICHARDSON MARJORIE M PROGRAMMER ANALYST 34658365
000019 41400 MOORE THOMAS M SYSTEMS ADMINISTRATOR 22637364
000020 42017 BENNETT WILLIAM D SALES SUPPORT 14657355
000021 44018 WILHELM HEINRICH L DIPLOMAT 46657335
```

More About Switching to Character Mode

- When switching from Formatted mode to Character or Vertical modes, the cursor is positioned on the *data* of the current record. This helps you see which record you were on in Formatted mode.



IMPORTANT. Be sure to HOME the cursor before typing a command so as to not change any data values. If you do happen to type a command into your data, use PA2 to reset the display. Or, if you pressed Enter, use the UNDO command to reverse your overtype.

- If the cursor is located on a data value in formatted mode, the cursor is displayed on the same byte in character mode.
- Use the MSG ON command to see the help line showing valid mode switching commands on the last line of your screen.

Removing Informational Lines and Markers (RESET Command)

You can use the RESET primary command to remove from the display the following line types:

- Special lines (=INFO>, =NOTE>, =PROF>, =COLS>, =MASK>, =OVLY>, =BNDS>, etc.)
- Excluded lines (n LINES NOT DISPLAYED)
- Status flags in sequence number fields (==CHG>, ==NEW>, ==SEQ>, =UNDO>, etc.)
- Pending line commands (C, A, B, etc.).

Figure 133. Clear Status Flags - RESET Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ===> RESET
***** *****TOP OF DATA *****
000001 00090 MARTIN    EDWARD      M AIRPLANE MANUFAC
000002 00100 MULSTROM   ROBERTA     A HOLLYWOOD SEAMST
```

Steps:

1. HOME the cursor.
2. Type **RESET** in the COMMAND field.
3. Press Enter. File-AID clears the display of the results from all previously entered commands as illustrated in [Figure 134](#).

Figure 134. Edit - Character Mode - After RESET Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 00001 00071
COMMAND ===> SCROLL ===> PAGE
***** *****TOP OF DATA *****-CAPS OFF-*
000001 00090 MARTIN    EDWARD      M AIRPLANE MANUFACTURER      42789012
000002 00100 MULSTROM   ROBERTA     A HOLLYWOOD SEAMSTRESS    34657365
000003 00200 JACKSON   JOSEPH      C ORATOR                 27558717
000004 10000 ANDREWS   GEORGE     ACTOR                  57631203
000005 10001 SMITH     MARY        ACTRESS                53634098
000006 15000 MURPHY   RONALD     L PAINTER                98765432
000007 18034 SCHNEIDER ELLEN      C NURSE                  34155954
000008 21035 JONES    GEORGE     B COUNTRY SINGER       46381345
000009 25100 ROBERTS  WILLIAM    R POLITICIAN              87956332
000010 27007 ALLEN    JOYCE      M AUTHOR                 78345833
000011 30001 RICHARDS  REX        W RODEO CLOWN            63276453
000012 31000 SAVAGE   JONATHON   C ELECTRICIAN             34856799
000013 34010 SMITH    JANET      AIRLINE ATTENDANT      55778298
000014 34011 JACOBS   DIANA      DOCTOR                  22536839
000015 36010 SIMPSON  ALEX       CARTOONIST              12345678
```

More About the RESET Command

- RESET does not have any effect on NOT SELECTED lines.

Assigning Labels

A line label refers to the location of a line in a dataset. A line label is specified as a period followed by a 1-5 character alphabetic string entered in a sequence number field. You can assign a label to any line. You can then use the labels at a later time to delimit the range of some commands including: CHANGE, FIND, and SORT.

Figure 135. Edit - Assigning Line Labels .A and .B

File-AID - Edit - USERID9.FASAMP.EMPLOYEE ----- COLUMNS 00001 00071			
COMMAND ==> SCROLL ==> PAGE			
***** ***** TOP OF DATA *****-CAPS OFF-*			
000001 00090 MARTIN	EDWARD	M	AIRPLANE MANUFACTURER 42789012
000002 00100 MULSTROM	ROBERTA	A	HOLLYWOOD SEAMSTRESS 34657365
.A 03 00200 JACKSON	JOSEPH	C	ORATOR 27558717
000004 10000 ANDREWS	GEORGE		ACTOR 57631203
000005 10001 SMITH	MARY		ACTRESS 53634098
000006 15000 MURPHY	RONALD	L	PAINTER 98765432
000007 18034 SCHNEIDER	ELLEN	C	NURSE 34155954
000008 21035 JONES	GEORGE	B	COUNTRY SINGER 46381345
000009 25100 ROBERTS	WILLIAM	R	POLITICIAN 87956332
.B 10 27007 ALLEN	JOYCE	M	AUTHOR 78345833
000011 30001 RICHARDS	REX	W	RODEO CLOWN 63276453
000012 31000 SAVAGE	JONATHON	C	ELECTRICIAN 34856799
000013 34010 SMITH	JANET		AIRLINE ATTENDANT 55778298
000014 34011 JACOBS	DIANA		DOCTOR 22536839

Steps:

1. Type .A in the sequence number field of line 3.
2. Type .B in the sequence number field of line 10.
3. Press Enter. You use these labels as part of the syntax of the CHANGE command syntax as illustrated in [Figure 136](#).

Using the CHANGE Command With Labels

You can use line labels in character (and vertical formatted) mode in conjunction with the CHANGE primary command as parameters. Using labels restricts the scope of the CHANGE to only those lines within the labeled lines (inclusive).

The CHANGE command also accepts boolean comparison operators in the search string, including:

EQ	Equal (default)
NE	Not equal
GT	Greater than
GE	Greater or equal
LT	Less than
LE	Less or equal.

For example, the command **CHANGE NE 'XXX' 'XXX' 1 3** changes columns 1 through 3 to XXX if they are not equal to XXX.

Figure 136. CHANGE Command - Using column and line label ranges

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 -----
COMMAND ===> C_NE '' 'Z' .A .B 15 45 ALL
***** *****TOP OF DATA *****
000001 00090 MARTIN      EDWARD   M AIRPLANE MANUFAC
000002 00100 MULSTROM    ROBERTA  A HOLLYWOOD SEAMST
```

Steps:

1. Type **C NE '' 'Z' .A .B 15 45 ALL** in the COMMAND field.

The syntax of this CHANGE command consists of the CHANGE command keyword, a relational operator, the "from" and "to" values, and the range within which the change must occur. Ranges for records (lines) to change and columns are optional.

The CHANGE command in this example changes all non-blank (NE '') values to the letter Z between column number 15 and 45 starting at line label .A and ending at line label .B..

2. Press Enter. File-AID redisplays the screen and identifies those lines that have been changed by **==CHG>** label in the sequence number fields as shown in [Figure 137](#) on page 117.

CHANGE Result**Figure 137.** Edit - After CHANGE Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- NE '' CHANGED
COMMAND ===> SCROLL ===> PAGE
***** *****TOP OF DATA *****-CAPS OFF-*
000001 00090 MARTIN      EDWARD   M AIRPLANE MANUFACTURER        42789012
000002 00100 MULSTROM    ROBERTA  A HOLLYWOOD SEAMSTRESS       34657365
==CHG> 00200 JACKSON     ZZZZZZ   Z ZZZZZZ                      27558717
==CHG> 10000 ANDREWS     ZZZZZZ   Z ZZZZZZ                      57631203
==CHG> 10001 SMITH       ZZZZ    Z ZZZZ                         57631203
==CHG> 15000 MURPHY     ZZZZZZ   Z ZZZZZZ                      98765432
==CHG> 18034 SCHNEIDER   ZZZZZZ   Z ZZZZZZ                      34155954
==CHG> 21035 JONES       ZZZZZZ   Z ZZZZZZ ZZZZER              46381345
==CHG> 25100 ROBERTS     ZZZZZZ   Z ZZZZZZZZ                     87956332
==CHG> 27007 ALLEN       ZZZZ    Z ZZZZZZ                      78345833
000011 30001 RICHARDS    REX      W RODEO CLOWN                 63276453
000012 31000 SAVAGE      JONATHON C ELECTRICIAN                34856799
000013 34010 SMITH       JANET    AIRLINE ATTENDANT            55778298
000014 34011 JACOBS      DIANA    DOCTOR                      22536839
000015 36010 SIMPSON     ALEX     CARTOONIST                 12345678
000016 20210 BARNETT     EDWARD   F SALESMAN                  54270014
```

Reversing Changes (UNDO)

You can use the UNDO primary command to reverse the last change you made to your records. All changes are reversible, including:

- Typing over data and pressing Enter
 - CHANGE command
 - DELETE command
 - COPY and MERGE commands
 - C, D, R, and M line commands
 - (shift left
 -) shift right.

Figure 138. Reverse CHANGE - UNDO Command

Steps:

1. Type **UNDO** in the COMMAND field.
 2. Press Enter. File-AID redisplays the screen with the dataset restored to the values prior to the **CHANGE** command. File-AID indicates the number of changes that were undone in the message located in the top right corner of the display as shown in [Figure 139](#) on page 118.

UNDO Result

Figure 139. Edit - Character Mode After UNDO Command

```

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- 106 CHANGES UNDONE
COMMAND ===> SCROLL ===> PAGE
***** **** * *****-CAPS OFF-*
000001 00090 MARTIN      EDWARD    M AIRPLANE MANUFACTURER      42789012
000002 00100 MULSTROM     ROBERTA   A HOLLYWOOD SEAMSTRESS      34657365
=UNDO> 00200 JACKSON     JOSEPH    C ORATOR                 27558717
=UNDO> 10000 ANDREWS     GEORGE    ACTOR                  57631203
=UNDO> 10001 SMITH       MARY      ACTOR                  57631203
=UNDO> 15000 MURPHY     RONALD    L PAINTER                98765432
=UNDO> 18034 SCHNEIDER   ELLEN     C NURSE                 34155954
=UNDO> 21035 JONES       GEORGE    B COUNTRY SINGER        46381345
=UNDO> 25100 ROBERTS     WILLIAM   R POLITICIAN              87956332
=UNDO> 27007 ALLEN       JOYCE     M AUTHOR                 78345833
000011 30001 RICHARDS    REX       W RODEO CLOWN             63276453
000012 31000 SAVAGE      JONATHON   C ELECTRICIAN            34856799
000013 34010 SMITH       JANET     AIRLINE ATTENDANT        55778298
000014 34011 JACOBS      DIANA     DOCTOR                 22536839

```

More About the UNDO Command

- The SETUNDO OFF command can be issued to disable UNDO processing. This might be used to improve performance when performing large changes (CHANGE ALL, DELETE, COPY etc.).

Removing the Line Label Values

When you define a line label, File-AID continues to display the line label(s) in the sequence number field. Use the RESET primary command with its **line-type** parameter **LABEL** to remove the line label(s).

Figure 140. Issue the RESET and RESET LABEL commands

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- 106 CHANGES UNDONE
 COMMAND ==> RESET:RESET LABEL SCROLL ==> PAGE
 ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** CAPS OFF-*

		TOP	OF	DATA	
000001	00090 MARTIN	EDWARD	M	AIRPLANE MANUFACTURER	42789012
000002	00100 MULSTROM	ROBERTA	A	HOLLYWOOD SEAMSTRESS	34657365
=UNDO>	00200 JACKSON	JOSEPH	C	ORATOR	27558717
=UNDO>	10000 ANDREWS	GEORGE		ACTOR	57631203

Steps:

1. Type **RESET;RESET LABEL** in the COMMAND field.

The semi-colon (;) is a command delimiter permitting you to enter multiple commands with one press of Enter.

2. Press Enter. The UNDO flags disappear and the labels .A and .B are cleared as shown in [Figure 141](#) on page 119.

Figure 141. Edit - Character Mode - After RESET LABEL

Editing With Line Commands

File-AID supports most of the familiar ISPF Edit line commands and has some additional commands. Refer to the *File-AID/MVS Reference Summary* for a complete list of valid edit line commands. The following example illustrates using some of the File-AID line commands.

C (Copy) Line Command

You can place one or more copies of the data on a line to one or more destinations using the destination line commands A (After), B (Before) or H (Here).

Figure 142. Edit - Character Mode (Copy Line Command)

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000071 COMMAND ==> SCROLL ==> PAGE				
***** *****TOP OF DATA*****-CAPS OFF-*				
000001 00090 MARTIN	EDWARD	M	AIRPLANE MANUFACTURER	42789012
C00002 00100 MULSTROM	ROBERTA	A	HOLLYWOOD SEAMSTRESS	34657365
000003 00200 JACKSON	JOSEPH	C	ORATOR	27558717
000004 10000 ANDREWS	GEORGE		ACTOR	57631203
000005 10001 SMITH	MARY		ACTOR	57631203
A00006 15000 MURPHY	RONALD	L	PAINTER	98765432
000007 18034 SCHNEIDER	ELLEN	C	NURSE	34155954
000008 21035 JONES	GEORGE	B	COUNTRY SINGER	46381345
A00009 25100 ROBERTS	WILLIAM	R	POLITICIAN	87956332
000010 27007 ALLEN	JOYCE	M	AUTHOR	78345833
000011 30001 RICHARDS	REX	W	RODEO CLOWN	63276453
A30012 31000 SAVAGE	JONATHON	C	ELECTRICIAN	34856799
000013 34010 SMITH	JANET		AIRLINE ATTENDANT	55778298

Steps:

1. Type a C in line 2.
2. Type an A in the sequence number field of line numbers 6 and 9.
3. Type an A3 in the sequence number field of line number 12.
4. Press Enter. File-AID inserts a single copy of the data in line number 2 after line numbers 6 and 9 and three copies of the data after line number 12. The inserted copies and the resulting change to the line numbers are illustrated in [Figure 143](#).

C (Copy) Line command Result

Figure 143. Edit - Character Mode - After Copy

```

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000071
COMMAND ===> SCROLL ===> PAGE
***** *****TOP OF DATA *****CAPS OFF-*  

000001 00090 MARTIN    EDWARD   M AIRPLANE MANUFACTURER      42789012  

000002 00100 MULSTROM   ROBERTA   A HOLLYWOOD SEAMSTRESS     34657365  

000003 00200 JACKSON   JOSEPH    C ORATOR                 27558717  

000004 10000 ANDREWS   GEORGE    ACTOR                  57631203  

000005 10001 SMITH     MARY      ACTOR                  57631203  

000006 15000 MURPHY   RONALD    L PAINTER                98765432  

--SEQ> 00100 MULSTROM   ROBERTA   A HOLLYWOOD SEAMSTRESS     34657365  

000008 18034 SCHNEIDER ELLEN     C NURSE                  34155954  

000009 21035 JONES    GEORGE    B COUNTRY SINGER        46381345  

000010 25100 ROBERTS  WILLIAM   R POLITICIAN              87956332  

--SEQ> 00100 MULSTROM   ROBERTA   A HOLLYWOOD SEAMSTRESS     34657365  

000012 27007 ALLEN    JOYCE     M AUTHOR                 78345833  

000013 30001 RICHARDS  REX       W RODEO CLOWN            63276453  

000014 31000 SAVAGE   JONATHON   C ELECTRICIAN             34856799  

--SEQ> 00100 MULSTROM   ROBERTA   A HOLLYWOOD SEAMSTRESS     34657365  

--DUP> 00100 MULSTROM   ROBERTA   A HOLLYWOOD SEAMSTRESS     34657365  

--DUP> 00100 MULSTROM   ROBERTA   A HOLLYWOOD SEAMSTRESS     34657365  

000018 34010 SMITH    JANET     AIRLINE ATTENDANT       55778298  

000019 34011 JACOBS   DIANA     DOCTOR                 22536839  

000020 36010 SIMPSON  ALEX      CARTOONIST              12345678  

000021 39310 BARNETT  EDWARD    E SALESMAN               54378914

```

More About the C (Copy) Line Command

- Multiple destination markers (A, B, or H) may be used with any single line copy (C) or move (M) or block copy (CC) or block move (MM).
- Multiple copy or move lines or multiple blocks are not permitted.
- Use the OVERLAY primary command or the OVLY line command to establish an *overlay mask* before using the O (Overlay) or OO (Overlay block) line commands as a destination for C (Copy) or M (Move).

Sorting the Records of the Dataset

Use the SORT KEYS primary command to sort the records of your dataset based on the record key.

Figure 144. Arrange Records in Key Sequence - SORT KEYS

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000071				
COMMAND ==> <u>SORT KEYS</u>		SCROLL ==> PAGE		
***** *****TOP OF DATA *****-CAPS OFF-*				
000001 00090 MARTIN	EDWARD	M	AIRPLANE MANUFACTURER	42789012
000002 00100 MULSTROM	ROBERTA	A	HOLLYWOOD SEAMSTRESS	34657365
000003 00200 JACKSON	JOSEPH	C	ORATOR	27558717
000004 10000 ANDREWS	GEORGE		ACTOR	57631203
000005 10001 SMITH	MARY		ACTOR	57631203
000006 15000 MURPHY	RONALD	L	PAINTER	98765432
==SEQ> 00100 MULSTROM	ROBERTA	A	HOLLYWOOD SEAMSTRESS	34657365
000008 18034 SCHNEIDER	ELLEN	C	NURSE	34155954

Steps:

1. Type **SORT KEYS** in the COMMAND field.
2. Press Enter. File-AID redisplays the dataset in ascending key (first five characters of each record) order. The number of records sorted is indicated in the message in the top right corner of the display as illustrated in [Figure 145](#) on page 122.

Figure 145. Edit - After SORT KEYS

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- 56 RECORDS SORTED				
COMMAND ==>		SCROLL ==> PAGE		
***** *****TOP OF DATA *****-CAPS OFF-*				
000001 00090 MARTIN	EDWARD	M	AIRPLANE MANUFACTURER	42789012
000002 00100 MULSTROM	ROBERTA	A	HOLLYWOOD SEAMSTRESS	34657365
==DUP> 00100 MULSTROM	ROBERTA	A	HOLLYWOOD SEAMSTRESS	34657365
==DUP> 00100 MULSTROM	ROBERTA	A	HOLLYWOOD SEAMSTRESS	34657365
==DUP> 00100 MULSTROM	ROBERTA	A	HOLLYWOOD SEAMSTRESS	34657365
==DUP> 00100 MULSTROM	ROBERTA	A	HOLLYWOOD SEAMSTRESS	34657365
000008 00200 JACKSON	JOSEPH	C	ORATOR	27558717
000009 10000 ANDREWS	GEORGE		ACTOR	57631203

More About the SORT Command

- You can sort records on one or more fields by using the syntax:

SORT from to A/D from to A/D ...

or

SORT /field-name A/D /field-name A/D

where "from" and "to" are column locations of the field(s) to be used as sort fields and **/field-name** is the name of field in a supplied record layout. A/D indicates ascending (A) or descending (D) sequence; if you do not specify either A or D, File-AID assumes an A (ascending) sequence order.

- If a keyed file is sorted on a field other than the key field, you are not able to save your changes until all records are in key sequence. In this case, use the SORT KEY command to return the records to key sequence before saving your changes.
- The default parameter for SORT is KEYS for a keyed file. Thus the commands SORT and SORT KEYS are the same.

- For RRDS and BDAM files the SORT command sorts records in relative record number (RRN or RBN) order.
- EBCDIC and Unicode UTF-16 SORT Order:

The collating sequence of Unicode is different than that of EBCDIC. The SORT command allows you to reorder the data. The SORT command always operates on the underlying data; thus, when the data is Unicode, the results may be different than for EBCDIC data.

Deleting Duplicate Records - D (Delete) Line Command

Use the D (Delete) and DD (Delete Block) line commands to delete records.

Figure 146. DD (Delete block) - Delete Duplicate Records

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- 56 RECORDS SORTED
COMMAND ==> SCROLL ==> PAGE
***** ***** TOP OF DATA *****-CAPS OFF-*
000001 00090 MARTIN EDWARD M AIRPLANE MANUFACTURER 42789012
000002 00100 MULSTROM ROBERTA A HOLLYWOOD SEAMSTRESS 34657365
DD P> 00100 MULSTROM ROBERTA A HOLLYWOOD SEAMSTRESS 34657365
==DUP> 00100 MULSTROM ROBERTA A HOLLYWOOD SEAMSTRESS 34657365
==DUP> 00100 MULSTROM ROBERTA A HOLLYWOOD SEAMSTRESS 34657365
==DUP> 00100 MULSTROM ROBERTA A HOLLYWOOD SEAMSTRESS 34657365
DD P> 00100 MULSTROM ROBERTA A HOLLYWOOD SEAMSTRESS 34657365
000008 00200 JACKSON JOSEPH C ORATOR 27558717
000009 10000 ANDREWS GEORGE ACTOR 57631203
000010 10000 ANDREWS GEORGE ACTOR 57631203
```

Steps:

- Type **DD** (delete block) in the sequence number field of line numbers 3 and 7.
- Press Enter. File-AID deletes the lines of data between the delete block commands as illustrated in [Figure 147](#) on page 123.

Figure 147. After Duplicates Have Been Deleted

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000071
COMMAND ==> SCROLL ==> PAGE
***** ***** TOP OF DATA *****-CAPS OFF-*
000001 00090 MARTIN EDWARD M AIRPLANE MANUFACTURER 42789012
000002 00100 MULSTROM ROBERTA A HOLLYWOOD SEAMSTRESS 34657365
000003 00200 JACKSON JOSEPH C ORATOR 27558717
000004 10000 ANDREWS GEORGE ACTOR 57631203
000005 10001 SMITH MARY ACTOR 57631203
000006 15000 MURPHY RONALD L PAINTER 98765432
000007 18034 SCHNEIDER ELLEN C NURSE 34155954
000008 21035 JONES GEORGE B COUNTRY SINGER 46381345
000009 25100 ROBERTS WILLIAM R POLITICIAN 87956332
000010 27007 ALLEN JOYCE M AUTHOR 78345833
000011 30001 RICHARDS REX W RODEO CLOWN 63276453
000012 31000 SAVAGE JONATHON C ELECTRICIAN 34856799
000013 34010 SMITH JANET AIRLINE ATTENDANT 55778298
000014 34011 JACOBS DIANA DOCTOR 22536839
```

Invoking Vertical Formatted Mode

The vertical formatted mode edit display is similar to the character mode edit display except that it uses the record layout field names as headings at the top of each column with the data formatted and arranged below each heading.

Figure 148. Switch to Vertical Formatted Mode - VFMT Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000071
COMMAND ===> VFMT                               SCROLL ===> PAGE
***** *****TOP OF DATA *****CAPS OFF-*  

000001 00090 MARTIN      EDWARD    M AIRPLANE MANUFACTURER        42789012
000002 00100 MULSTROM    ROBERTA   A HOLLYWOOD SEAMSTRESS       34657365
000003 00200 JACKSON    JOSEPH    C ORATOR                  27558717
```

Steps:

1. Type VFMT in the COMMAND field.
2. Press Enter. File-AID redisplays the Edit screen in vertical formatted mode as shown in [Figure 149](#) on page 124.

Figure 149. Edit - Vertical Formatted Mode

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000033
COMMAND ===>
      EMP-NUMBER EMP-LAST-NAME    EMP-FIRST-NAME EMP-MID-INIT FILLER
      5/AN        15/AN          10/AN          1/AN          2/AN
      (1-5)      (6-20)         (21-30)        (31-31)        (32-33)
      1----- 2----- 3----- 4----- 5-----  

***** *****TOP OF DATA *****CAPS OFF-*  

000001 00090 MARTIN      EDWARD    M
000002 00100 MULSTROM    ROBERTA   A
000003 00200 JACKSON    JOSEPH    C
000004 10000 ANDREWS    GEORGE
000005 10001 SMITH      MARY
000006 15000 MURPHY     RONALD    L
000007 18034 SCHNEIDER  ELLEN     C
000008 21035 JONES      GEORGE    B
000009 25100 ROBERTS    WILLIAM   R
000010 27007 ALLEN      JOYCE     M
000011 30001 RICHARDS   REX       W
000012 31000 SAVAGE     JONATHON  C
000013 34010 SMITH      JANET
000014 34011 JACOBS     DIANA
000015 36010 SIMPSON    ALEX
000016 39310 BARNETT    EDWARD    E
000017 39500 WILLIAMS   EDITH    A
```

Displaying a Subset of Fields

You can tailor the vertical formatted display to show only certain fields by using the DISPLAY command, just like in formatted mode. The full syntax of the DISPLAY command is shown in the *File-AID/MVS Reference Summary* and the *File-AID/MVS Online Reference Manual* and in the online tutorials.

DISPLAY ON/OFF/ONLY field-list/ALL

where *field-list* is a list of up to 10 field numbers or field-number ranges (for example, **DISPLAY ONLY 1 2 5-8 15-20**).

Figure 150. Tailoring the Fields To Appear - DISPLAY ONLY

```

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000033
COMMAND ===> DISPLAY 1 2 18 ONLY SCROLL ==> PAGE
      EMP-NUMBER EMP-LAST-NAME    EMP-FIRST-NAME EMP-MID-INIT FILLER
      5/AN        15/AN          10/AN          1/AN          2/AN
      (1-5)       (6-20)         (21-30)        (31-31)        (32-33)
      1----- 2----- 3----- 4----- 5-----
***** ***** ***** ***** ***** TOP OF DATA *****-CAPS OFF-*
000001 00090      MARTIN      EDWARD      M

```

Steps:

1. Type **DISPLAY 1 2 18 ONLY** in the COMMAND field.
2. Press Enter. File-AID redisplays the screen with columns 1, 2, and 18 only as illustrated in [Figure 151](#) on page 125.

Figure 151. Edit - Vertical Mode - Fields 1 2 and 18 Only

```

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000092
COMMAND ===> SCROLL ==> PAGE
      EMP-NUMBER EMP-LAST-NAME    EMP-LIFE-INS-WITHOLD-AMT
      5/AN        15/AN          6/SNUM
      (1-5)       (6-20)         (87-92)
      1----- 2----- 18-----
***** ***** ***** ***** ***** TOP OF DATA *****-CAPS OFF-*
000001 00090      MARTIN      -3000.00
000002 00100      MULSTROM     8000.00
000003 00200      JACKSON      0
000004 10000      ANDREWS     0
000005 10001      SMITH       0
000006 15000      MURPHY      5000.00
000007 18034      SCHNEIDER   5000.00
000008 21035      JONES       0
000009 25100      ROBERTS     5000.00
000010 27007      ALLEN      5000.00
000011 30001      RICHARDS   3000.00
000012 31000      SAVAGE     5000.00
000013 34010      SMITH      4000.00
000014 34011      JACOBS     400.00
000015 36010      SIMPSON    5000.00
000016 39310      BARNETT    5000.00
000017 39500      WILLIAMS   0

```

Using the CHANGE ANY Command

You can unconditionally change data in one or more records using the CHANGE ANY command. If you specify the CHANGE command without any parameters, File-AID displays the CHANGE Command screen (see [Figure 113](#) on page 103).

Figure 152. Unconditional Change - CHANGE ANY

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000092
COMMAND ==> CHANGE ANY /18 0 ALL SCROLL ==> PAGE
EMP-NUMBER EMP-LAST-NAME EMP-LIFE-INS-WITHOLD-AMT
5/AN 15/AN 6/SNUM
(1-5) (6-20) (87-92)
1----- 2----- 18-----
***** ***** TOP OF DATA *****-CAPS OFF-*
000001 00090 MARTIN -3000.00
000002 00100 MULSTROM 8000.00

Steps:

1. Type CHANGE ANY /18 0 ALL in the COMMAND field.

The CHANGE command in this example changes *any* value in field number 18 (EMP-LIFE-INS-WITHOLD-AMT) of *all* records to a value of 0 (zero).

2. Press Enter.

CHANGE ANY Result

File-AID redisplays the screen with the changed values and displays a confirmation message at the top right corner of the screen as shown in [Figure 153](#) on page 126. File-AID displays a change flag (==CHG>) next to each changed line in the dataset.

Figure 153. Edit - After CHANGE ANY /18 0 Command

Printing Records in Vertical Formatted Mode

The VPRINT primary command enables you to print the current record and any number of subsequent records following the current record. The default is print ALL records when a limit is not specified. VPRINT (VP) is valid only in the vertical formatted mode. You can send output to SYSOUT, a printer, or a dataset.

You can specify one of two output formats, TRUNC or NOTRUNC. The default is set in Option 0.3 with the "Truncate for VPRINT cmd" parameter.

VPRINT TRUNC

The VPRINT TRUNC online report output width is 120 characters. This is the standard form that has been part of the product prior to Release 9.0.1. For VPRINT TRUNC, you can specify the number of records to print, starting with the current record. The default is 0 or ALL. 0 (zero) prints the current and all subsequent records in the file.

The report format includes spaces separating the fields. When the VPRINT output exceeds the report width, File-AID displays the VPRINT DATA TRUNCATION informational message, **VP001-Data truncation occurred while processing VPRINT request**. Unless you have pre-allocated a print dataset, VPRINT TRUNC continues with the [Print Parameters Screen](#) where you specify more output options (see [Figure 155](#) on page 128).

VPRINT NOTRUNC

The VPRINT NOTRUNC output does not truncate data. For VPRINT NOTRUNC, you can specify the number of records to print, starting with the first record in the file. The default is 0 or ALL. 0 (zero) prints the first and all subsequent records in the file.

The report format includes spaces separating the fields. When the VPRINT output exceeds the page width, File-AID prints the record on multiple pages. If the second "page depth" exceeds the print width, another "page depth" will be printed and so on until the entire record has been printed. VPRINT NOTRUNC continues with the [Vertical Format Print \(VPRINT\) JCL Specification](#) Screen where you specify more output options (see [Vertical Format Print \(VPRINT\) JCL Specification](#) on page 292).

Figure 154. Printing Records in Vertical Formatted Mode - VPRINT TRUNC Command

```
File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000092
COMMAND ===> VPRINT TRUNC                                SCROLL ===> PAGE
      EMP-NUMBER  EMP-LAST-NAME    EMP-LIFE-INS-WITHOLD-AMT
      5/AN        15/AN          6/SNUM
      (1-5)       (6-20)         (87-92)
      1----- 2----- 18-----
***** ***** ***** ***** ***** ***** TOP OF DATA *****-CAPS OFF-*
==CHG> 00090      MARTIN           0
==CHG> 00100      MULSTROM         0
==CHG> 00200      JACKSON          0
==CHG> 10000      ANDREWS          0
==CHG> 10001      SMITH            0
==CHG> 15000      MURPHY           0
==CHG> 18034      SCHNEIDER        0
==CHG> 21035      JONES            0
==CHG> 25100      ROBERTS          0
==CHG> 27007      ALLEN            0
==CHG> 30001      RICHARDS         0
==CHG> 31000      SAVAGE           0
==CHG> 34010      SMITH            0
==CHG> 34011      JACOBS           0
==CHG> 36010      SIMPSON          0
==CHG> 39310      BARNETT          0
==CHG> 39500      WILLIAMS         0
```

Steps:

1. Type VPRINT TRUNC in the COMMAND field.

2. Press Enter. File-AID displays the Print Parameters screen illustrated in [Figure 155](#). See [Directing The FPRINT Report to a Dataset or SYSOUT](#) on page 100 for information of specifying Print Parameters.

Figure 155. Print Parameters Screen

```
File-AID ----- Print Parameters -----
COMMAND ==>

Number of lines/page      ==> 55          (0 = Suppress page headings)
Sysout class              ==> A
Number of copies           ==> 1

Enter One of the Following Optional Destinations:

Destination printer       ==>          (Local or remote printer)
- - - OR - - -
External JES Node ID      ==>          (Predefined JES Node and symbolic ID
Target VM/TSO ident        ==>          of intended receiver of output)
- - - OR - - -
Sysout writer name         ==>          (Installation assigned output writer)
- - - OR - - -
Print dataset name          ==>          (DSORG=PS; RECFM=VBA; LRECL=187)
Disposition                 ==>          (NEW, SHR, MOD, OLD)
Volume serial                ==>

Use ENTER to continue, END to cancel
```

Terminate Edit Function

Use the END command to terminate processing of your Edit session.

Controlling Automatic Save Processing

When you END the edit session File-AID checks the value of your AUTOSAVE user profile value. If AUTOSAVE is OFF, File-AID prompts you to save or cancel the changes made to the dataset before it terminates the Edit function by displaying the message **DATA CHANGED-SAVE/CANCEL** at the top right corner of the screen. You must then type SAVE to save your changes, or CANCEL to cancel your changes leaving the original dataset undisturbed.

If AUTOSAVE is ON, your data is checked for correct key sequence and, if valid, the changes you have made are used to update the dataset.

Figure 156. Exit Edit and Save Changes - END Command

File-AID - Edit - USERID9.FASAMP.EMPLOYEE1 ----- COLUMNS 000001 000092
COMMAND ==> END SCROLL ==> CSR
EMP-NUMBER EMP-LAST-NAME EMP-LIFE-INS-WITHOLD-AMT
5/AN 15/AN 6/SNUM
(1-5) (6-20) (87-92)
1----- 2----- 18-----
***** ***** TOP OF DATA *****-CAPS OFF-*
==CHG> 00090 MARTIN 0
==CHG> 00100 MULSTROM 0

Steps:

1. Type END in the COMMAND field.

2. Press Enter. File-AID displays the Disposition of Audit Trail screen as shown in [Figure 157](#) on page 129.

Specify Audit Trail Dataset and JOB Statements

File-AID displays the Disposition of Audit Trail screen when you specify a value of Y in the Create audit trail field on the Edit - Dataset Specification screen. To generate the Audit report, complete the Disposition of Audit Trail screen fields and press Enter.

Figure 157. Disposition of Audit Trail Screen

```
File-AID ----- Disposition of Audit Trail -----
COMMAND ==>

Audit trail disposition ==> PD          (PK = Print dataset and keep;
                                         PD = Print dataset and delete;
                                         D = Delete dataset without printing)

Audit trail dataset      ==> 'USERID9.FILEAID.AUDT.D120607.T144612.M751'

Audit trail description ==> Enter a description of your edit session
                           ==> on these two lines.

Specify Batch JCL Information:
Sysout class           ==> *

Specify JOB Statement Information:
==> //USERID9A JOB (ACCOUNT),'your name'..
==> //      CLASS=L,MSGCLASS=X,NOTIFY=USERID9
==>
==>

Use JCL command to edit generated JCL
Use ENTER to submit batch job
Use END to keep audit trail without printing
```

Steps:

1. Type **PD** in the Audit trail disposition field.
2. Verify that the JOB statement shown is valid for your site. Use a *hold* Sysout class to enable online viewing of the report.
3. Press Enter. File-AID submits the audit trail batch job.
4. When the job completes, use your online Sysout browsing facilities to examine the report.

More About the Disposition of Audit Trail Screen

- Use the JCL command to view the generated Audit Trail report print JCL.
- Use the END command to save the audit trail dataset without printing the report. The Audit Trail report can be printed later by using the File-AID Print Audit Trail utility option 5.5.
- The name of the audit trail dataset cannot be changed on this screen.

Comparing Files

The File-AID Compare function compares any two similar files and produces reports showing any differences. Special features let you use existing keys or your own sort fields to synchronize the files. You can also supply record layouts to the Compare function that can be used for:

- Reporting differences field by field
- Specifying certain fields to be excluded from the compare
- Specifying sync keys using field names.

You may optionally use standard File-AID selection criteria to select only a subset of records to be compared. Other features let you control the format and level of results reporting and to limit the number of records compared or the number of differences to report.

Like many other File-AID utilities, you can specify online or batch processing of your compare.

Unicode Considerations

The Compare function accepts layouts including NATIONAL and/or NATIONAL Numeric fields. However, these fields are treated as Character and the Compare Report does not print Unicode data with Unicode Conversion.

Accessing the Compare Function (Option 10)

The Compare function is located on the File-AID Primary Option Menu as option 10.

Steps:

1. From the File-AID Primary Option Menu (not shown here), select File-AID option 10.
2. Press Enter. File-AID displays the [Compare - OLD Dataset Specification Screen](#) as illustrated in [Figure 158](#) on page 132.

Formatted Compare

This example illustrates the process of comparing two keyed VSAM (KSDS) clusters. It compares an updated file to a backup of the file saved before the file was changed. The training datasets *hlq.FASAMP.COMPARE* and *hlq.FASAMP.EMPLOYEE* contain the before and after records respectively.

Specifying the "Old" Dataset

The [Compare - OLD Dataset Specification Screen](#) allows you to specify the compare mode and the name of the OLD dataset you want to compare as well as any record layout, XREF, and selection criteria information for this dataset.

Figure 158. Compare - OLD Dataset Specification Screen

```

File-AID ----- Compare - OLD Dataset Specification -----
COMMAND ==>

Compare Mode      ==> E (F = Formatted; U = Unformatted;
                           L = Load Library; S = Source code; J = JCL)
Specify OLD Dataset Information:
Dataset name or zFS path ==> 'USERID9.FASAMP.COMPARE'
Member name        ==>          (Blank or pattern for member list)
Volume serial     ==>          (If dataset is not catalogued)

Specify Record Layout and XREF Information:
Record layout usage ==> S   (S = Single; X = XREF; N = None)
Record layout dataset ==> 'USERID9.FASAMP.LAYOUTS'
Member name        ==> EMPLOYEE (Blank or pattern for member list)
XREF dataset name ==>
Member name        ==>          (Blank or pattern for member list)

Specify Selection Criteria Information:
Selection criteria usage ==> N   (E = Existing; T = Temporary;
                           M = Modify; Q = Quick; N = None)
Selection dataset name ==>
Member name        ==>          (Blank or pattern for member list)

```

Steps:

1. Type an **F** in the Compare Mode field.
2. Type **FASAMP.COMPARE** in the "OLD" Dataset name field.
3. Type an **S** in the Record layout usage field.
4. Type **FASAMP.LAYOUTS** in the Record layout dataset field.
5. Type **EMPLOYEE** in the Member name field.
6. Press Enter. File-AID displays the Compare - NEW Dataset Specification screen as illustrated in [Figure 159](#) on page 133.

Specifying the "New" Dataset

The [Compare - NEW Dataset Specification Screen](#) allows you to specify the NEW dataset you want to compare and any new record layout, XREF, and selection criteria information for this dataset. It displays the Compare Mode and Record layout usage that you specified on the [Compare - OLD Dataset Specification Screen](#) on page 132.

Figure 159. Compare - NEW Dataset Specification Screen

```
File-AID ----- Compare - NEW Dataset Specification -----
COMMAND ==>

Compare Mode: FORMATTED

OLD Dataset Name: USERID9.FASAMP.COMPARE
Specify NEW Dataset Information:
  Dataset name or zFS path ==> 'USERID9.FASAMP.EMPLOYEE'
  Member name      ==>          (Blank or pattern for member list)
  Volume serial    ==>          (If dataset is not catalogued)

OLD Record Layout Usage: SINGLE
Specify Record Layout and XREF Information:
  Record layout dataset ==> 'USERID9.FASAMP.LAYOUTS'
  Member name        ==> EMPLOYEE          (Blank or pattern for member list)
  XREF dataset name ==>
  Member name        ==>          (Blank or pattern for member list)

Specify Selection Criteria Information: (E = Existing; T = Temporary;
  Selection criteria usage ==> N           M = Modify; Q = Quick; N = None)
  Selection dataset name ==>
  Member name         ==>          (Blank or pattern for member list)
```

Steps:

1. Type **FASAMP.EMPLOYEE** in the "NEW" Dataset name field.
2. Press Enter. File-AID displays the [Compare - Execution Options Screen](#) as illustrated in [Figure 160](#) on page 134.

Specifying Execution Options

The [Compare - Execution Options Screen](#), as shown in [Figure 160](#), allows you to specify whether you want to process the compare online or batch. In addition, this screen allows you to specify the compare criteria dataset information that is required when you choose to use existing compare criteria.

In this example, simply press Enter to process online (the default).

Figure 160. Compare - Execution Options Screen

```
File-AID ----- Compare - Execution Options -----
COMMAND ===>

Specify Execution Options:
Process online or batch ===> O      (O = Online; B = Batch)

Specify Compare Criteria Information:
Compare criteria usage ===> N      (E = Existing; T = Temporary/New;
                                         M = Modify; Q = Quick; N = None)
Compare criteria dataset ===>
Member name ===>                  (Blank or pattern for member list)
```

Steps:

1. Press Enter. File-AID displays the [Compare - Criteria Options Screen](#) as illustrated in [Figure 161](#) on page 135.

Selecting Your Compare - Criteria Options

The [Compare - Criteria Options Screen](#), as shown in [Figure 161](#), allows you to specify processing and output options for your compare.

Compare Type

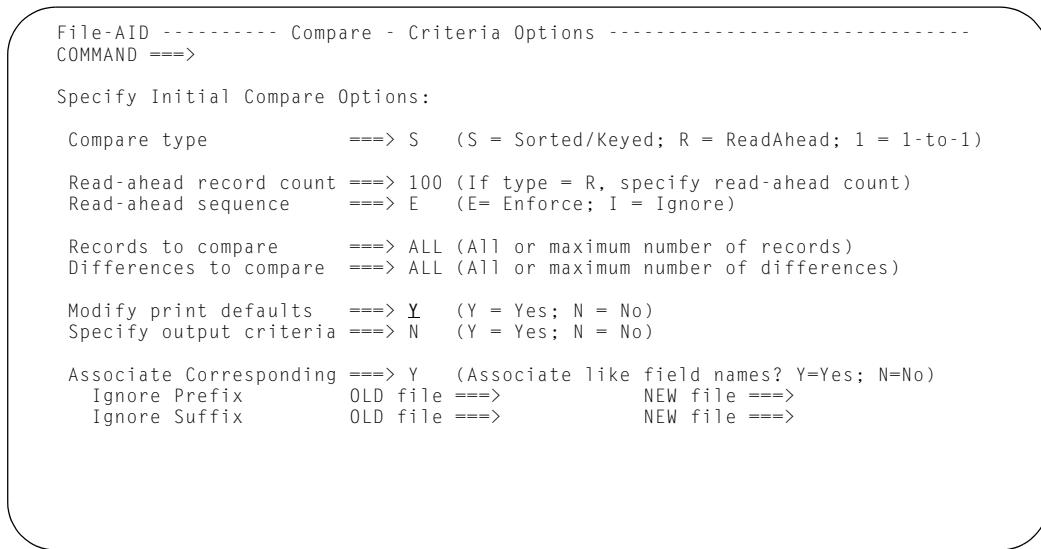
- S (Sorted/Keyed)** is the default compare type.
- R (ReadAhead)** for a non-keyed file.
- 1 (1-TO-1)** For a 1-TO-1 record compare, specify 1 (one) in the Compare type file. File-AID compares "OLD" record 1 to "NEW" record 1, "OLD" record 2 to "NEW" record 2, etc.

Controlling Processing Limits

You can control the number of records to compare and the number of differences to report before stopping the compare.

By default, all records are compared and all differences are reported. Use a number (1-999) to specify the maximum number of records to process.

Figure 161. Compare - Criteria Options Screen



Steps:

1. Type Y in the Modify print defaults field.
2. Press Enter. File-AID displays the [Compare - Print Options \(Page 1\) Screen](#) screen as illustrated in [Figure 162](#) on page 136.

Specifying Print Options for a Formatted Compare

The [Compare - Print Options \(Page 1\) Screen](#), as shown in [Figure 162](#), is displayed when you specify a Y in the Modify print defaults field on the [Compare - Criteria Options Screen](#). The Compare Print Options screens ([Figure 162](#) and [Figure 163](#) on page 137) enable you to control your compare report.

The Compare mode (Formatted or Unformatted) specified on the Compare - OLD Dataset Specification screen determines which Print Options are presented.

Specifying Print Format

File-AID has four different formats available to report differences in records:

- | | |
|----------------------|---|
| F (Formatted) | Uses record layouts to show differences field by field. Old fields are printed next to new fields in side-by-side columns. |
| H (Hex) | Prints each differing record showing character and vertical hexadecimal values for each byte of data. Differences are underlined. |
| C (Character) | Prints each differing record showing only printable characters (default). |
| M (Mixed) | Prints valid character data as characters and unprintable data in hexadecimal. |

Specifying a Reporting Limit

The Max differences to report field (default ALL) is used to limit the size of the report when a large number of differences are expected.

Specifying the Level of Information to Report

The next four options allow you to control the level of information to include in the Compare report:

- Print CHANGED records
 - Print INSERTED records
 - Print DELETED records
 - Print MATCHED records



Even if you specify No for the above four options, a Summary Report is generated.

Figure 162. Compare - Print Options (Page 1) Screen

File-AID ----- Compare - Print Options (Page 1) -----
COMMAND ==>

Specify initial print options:

Print format	==> F	(F = Formatted; H = Hex; C = Char; M = Mixed)
Max differences to report	==> ALL	(All or maximum number to report)
Print CHANGED records	==> Y	(Y = Yes; N = No)
Print INSERTED records	==> N	(Y = Yes; N = No)
Print DELETED records	==> N	(Y = Yes; N = No)
Print MATCHED records	==> N	(Y = Yes; N = No)
(a Summary Report is ALWAYS generated)		

Steps:

1. Press Enter. File-AID displays the [Compare - Print Options \(Page 2 of 2\) Screen](#) as illustrated in [Figure 163](#) on page 137.

Formatted Report Option

The Formatted Report Option allows you to specify one of the following print formats:

- E (Entire)** Print the entire report (this is the default).
A (Associated) Print all associated fields.
C (Compared) Print only the compared fields.

Compared Fields Option

The Compared Fields Option allows you to specify one of the following options:

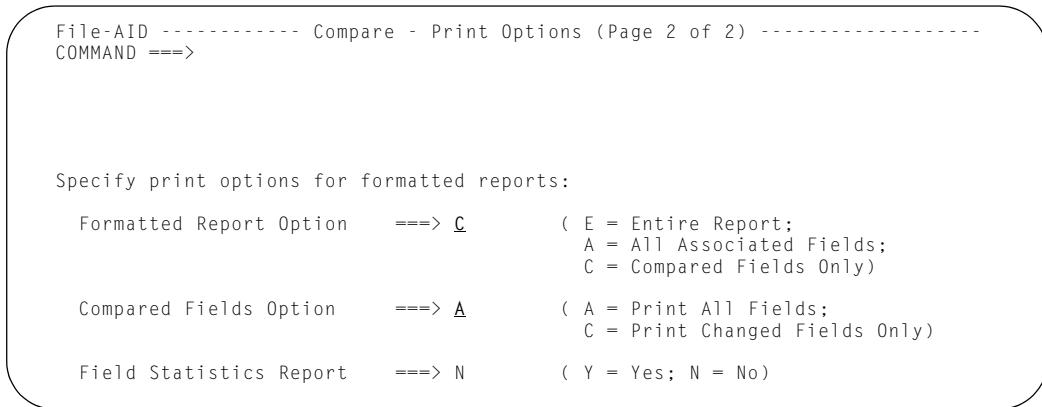
- A (All)** Print all fields that are selected for comparison (this is the default).
C (Changed) Print only the fields that are selected for comparison and are changed.

Field Statistics Report

The Field Statistics Report option allows you to specify one of the following options

- Y (Yes)** Create a list of compared fields and report the number of times changes were found for that field and the percentage that this field's changes represent of the total number of changed records.
N (No) Suppress this report.

Figure 163. Compare - Print Options (Page 2 of 2) Screen

**Steps:**

1. Type **C** in the Formatted Report Option field.
2. Press Enter. File-AID displays the [Compare - Formatted Criteria Screen](#) as illustrated in [Figure 164](#) on page 139

Specifying Formatted Field Criteria

The [Compare - Formatted Criteria Screen](#), as shown in [Figure 164](#), enables you to tailor field criteria for your compare. The default is to compare all fields.

Sync/Key Specification

Entering an **S** in the Cmd field for a particular field displays the Sorted Sync/Key Specification pop-up. This pop-up enables you to specify the key order and direction for the selected field (or position). If comparing like formatted keyed files, File-AID automatically knows where the key field is and you do not need to specify any sync key information.

Sync key information is used to detect more precisely when new records have been added and old records deleted.

You can specify any elementary item(s) to be used as the key field(s). You can identify the sync key(s) using a record layout (F - Formatted) or without a layout (U - Unformatted).

Tolerance Value Specification

Entering a **T** in the Cmd field for a numeric field displays the Tolerance Value Specification pop-up. This pop-up enables you to specify a tolerance amount for a field that File-AID uses to determine "close-enough" matches for your compare.

Case Insensitive Compare

Entering a **T** in the Cmd field for a character field converts the field data to uppercase. Use this when you want to compare without regard to case.

Select Print Only

Entering a **P** in the Cmd field for a field sets the field to print only. The field is shown on the report but File-AID does not compare the field.

Select Field for Compare

Entering a **C** in the Cmd field for a field selects the field for comparison. This is the default.

Reset Status

Entering an **R** in the Cmd field for a field resets the Status Display field (to blanks - exclude from compare).

Figure 164. Compare - Formatted Criteria Screen

File-AID ----- Compare - Formatted Criteria -----			
COMMAND ==>		SCROLL ==> PAGE	
OLD FILE - USERID9.FASAMP.COMPARE -----			
Cmd	Field Name	Format	Status Display
	EMPLOYEE-MASTER-FILE	GRP 198	
-	EMP-NUMBER	C 5	SYNCKEY,ORDER=001,ASCENDING
-	EMP-LAST-NAME	C 15	COMPARISON FIELD
-	EMP-FIRST-NAME	C 10	COMPARISON FIELD
-	EMP-MID-INIT	C 1	COMPARISON FIELD
-	FILLER	C 2	COMPARISON FIELD
-	EMP-TITLE	C 30	COMPARISON FIELD
	EMP-PERSONAL-INFO	GRP 23	
-	EMP-NATL-ID-NUMBER	Z 9	COMPARISON FIELD
-	FILLER	C 1	COMPARISON FIELD
-	EMP-DATE-OF-BIRTH	C 6	COMPARISON FIELD
	EMP-DOB-REDEF	REDEFINE	EMP-DATE-OF-BIRTH
	EMP-DOB-REDEF	GRP 6	
-	EMP-DOB-MM	Z 2	COMPARISON FIELD
-	EMP-DOB-DD	Z 2	COMPARISON FIELD
-	EMP-DOB-YY	Z 2	COMPARISON FIELD
-	EMP-HIRE-DATE	C 6	COMPARISON FIELD
-	EMP-MARITAL-STATUS	C 1	COMPARISON FIELD
Cmd: S = Sync/Key, T = Tolerance/Text, P = Print, C = Compare, R = Reset			

Step:

1. Press Enter to select the default compare of all fields.

Viewing Formatted Compare Criteria

File-AID displays the [Compare - Criteria Build Complete Screen](#) as shown in [Figure 165](#).

Figure 165. Compare - Criteria Build Complete Screen

```
File-AID ----- Compare - Criteria Build Complete -----
COMMAND ===> VIEW

Your COMPARE Criteria are complete. You may:

Use ENTER to execute COMPARE.
Use END to return to previous panel.
Use SAVE to save your criteria.
Use VIEW to inspect your criteria.
Use CANCEL to exit COMPARE (SAVE will not be issued).
```

Steps:

1. Type **VIEW** in the Command field to display the Compare criteria.
2. Press Enter to select the default compare of all fields.

[Figure 166](#) through [Figure 168](#) display the current Compare Criteria. Press <PF8> to scroll forward through the criteria.

Figure 166. Compare - View Criteria Screen (Page 1 of 3)

```
Menu Utilities Compilers Help
-----
BROWSE      USERID9.FILEAID.CC.D01064.T160701      Line 00000000 Col 001 080
Command ===>                                         Scroll ===> CSR
***** Top of Data *****
*
*  COMPARE OPTIONS
0000 COMPARE_MODE=FORMATTED
0000 COMPARE_TYPE=SORTED
0000 RECORDS_TO_COMPARE=ALL
0000 DIFFERENCES_TO_COMPARE=ALL
*
*  PRINT OPTIONS
0000 PRINT_FORMAT=FORMATTED
0000 MAX_DIFFERENCES_TO_REPORT=ALL
0000 RECORD_TYPES_TO_PRINT=CHANGED
0000 FORMATTED_REPORT_STYLE=COMPARED
0000 COMPARED_FIELDS_PRINT_OPTION=ALL
0000 FIELD_STATISTICS_REPORT=NO
*
*  OUTPUT OPTIONS
*   NOT SPECIFIED
```

Figure 167. Compare - View Criteria Screen (Page 2 of 3)

```

Menu Utilities Compilers Help
-----
BROWSE      USERID9.FILEAID.CC.D01064.T160701      Line 00000020 Col 001 080
Command ===>                                         Scroll ===> CSR
*
* SYNC/KEY OPTIONS
0000 OLD_SYNC/KEY_MEMBER=EMPLOYEE,
          LAYOUT_NAME=EMPLOYEE-MASTER-FILE
0000 SYNC/KEY001:OLD_NAME=EMP-NUMBER,OLD_POSITION=00001,
          SORTED=YES,SEQUENCE=ASCENDING
*
* COMPARE FIELDS SET 0001
0001 OLD_LAYOUT_MEMBER=EMPLOYEE,
          LAYOUT_NAME=EMPLOYEE-MASTER-FILE
0001 FIELD0002:OLD_NAME=EMP-NUMBER,OLD_POSITION=00001
0001 FIELD0003:OLD_NAME=EMP-LAST-NAME,OLD_POSITION=00006
0001 FIELD0004:OLD_NAME=EMP-FIRST-NAME,OLD_POSITION=00021
0001 FIELD0005:OLD_NAME=EMP-MID-INIT,OLD_POSITION=00031
0001 FIELD0006:OLD_NAME=FILLER,OLD_POSITION=00032
0001 FIELD0007:OLD_NAME=EMP-TITLE,OLD_POSITION=00034
0001 FIELD0009:OLD_NAME=EMP-NATL-ID-NUMBER,OLD_POSITION=00064
0001 FIELD0010:OLD_NAME=FILLER,OLD_POSITION=00073
0001 FIELD0011:OLD_NAME=EMP-DATE-OF-BIRTH,OLD_POSITION=00074
0001 FIELD0014:OLD_NAME=EMP-DOB-MM,OLD_POSITION=00074

```

Figure 168. Compare - View Criteria Screen (Page 3 of 3)

```

Menu Utilities Compilers Help
-----
BROWSE      USERID9.FILEAID.CC.D01064.T160701      Line 00000020 Col 001 080
Command ===>                                         Scroll ===> CSR
0001 FIELD0015:OLD_NAME=EMP-DOB-DD,OLD_POSITION=00076
0001 FIELD0016:OLD_NAME=EMP-DOB-YY,OLD_POSITION=00078
0001 FIELD0017:OLD_NAME=EMP-HIRE-DATE,OLD_POSITION=00080
0001 FIELD0018:OLD_NAME=EMP-MARITAL-STATUS,OLD_POSITION=00086
0001 FIELD0020:OLD_NAME=EMP-LIFE-INS-WITHOLD-AMT,OLD_POSITION=00087
0001 FIELD0021:OLD_NAME=EMP-NATL-TAX-WITHOLD-PCT,OLD_POSITION=00093
0001 FIELD0022:OLD_NAME=EMP-REGION-TAX-WITHOLD-PCT,OLD_POSITION=00096
0001 FIELD0023:OLD_NAME=EMP-LOCAL-TAX-WITHOLD-PCT,OLD_POSITION=00099
0001 FIELD0025:OLD_NAME=EMP-STREET-ADDRESS,OLD_POSITION=00102
0001 FIELD0026:OLD_NAME=FILLER,OLD_POSITION=00127
0001 FIELD0027:OLD_NAME=EMP-CITY,OLD_POSITION=00128
0001 FIELD0029:OLD_NAME=EMP-STATE,OLD_POSITION=00143
0001 FIELD0030:OLD_NAME=FILLER,OLD_POSITION=00145
0001 FIELD0031:OLD_NAME=EMP-POSTAL-CODE,OLD_POSITION=00147
0001 FIELD0033:OLD_NAME=EMP-CONTACT-NAME,OLD_POSITION=00152
0001 FIELD0034:OLD_NAME=FILLER,OLD_POSITION=00177
0001 FIELD0035:OLD_NAME=EMP-CON-WORK-PHONE,OLD_POSITION=00179
0001 FIELD0036:OLD_NAME=EMP-CON-HOME-PHONE,OLD_POSITION=00189
***** Bottom of Data *****

```

Step:

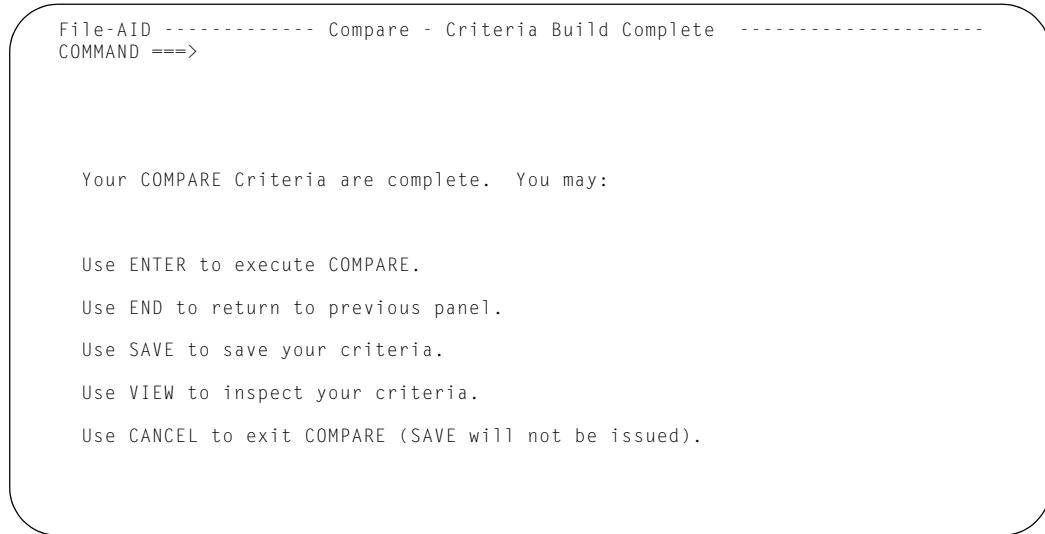
1. Press <PF3> (END) when you are finished browsing the compare criteria.

Executing Compare

File-AID redisplays the [Compare - Criteria Build Complete Screen](#) as shown in [Figure 169](#). At this point, you can choose to save the new compare criteria by entering the SAVE primary command and File-AID prompts you to enter Compare Criteria dataset information.

In this example, press Enter to execute the comparison. When online processing is requested, compare processing occurs in the foreground of your terminal.

Figure 169. Compare - Criteria Build Complete Screen



Steps:

1. Press Enter to select the default compare of all fields.

Analyzing the Compare Report

The compare report is written to a temporary dataset and, upon completion, File-AID displays the temporary dataset in an ISPF Browse session as shown in [Figure 170](#).

You may need to scroll the report to the right to see information beyond column 80. All Browse commands are active including the FIND primary command and standard scroll commands (PF7, PF8, PF10, PF11).

If batch processing is specified, File-AID displays the JCL Specification screen (not shown here) from which you can enter the SUBMIT command to run the Compare function in the background. Use standard batch output review facilities to browse and print your compare report.

Figure 170. Compare - Online Report Screen

Step:

1. Enter **DOWN MAX** and **LEFT MAX** to display the last page of the report, which shows the COMPARE SUMMARY REPORT (see [Figure 171](#) on page 144).

Viewing the Compare Summary Report

At the end of the Compare output, a summary report of the results of the compare is produced as shown in [Figure 171](#).

Also shown are the results of the selection criteria and any special compare criteria specified.

After reviewing the summary report, use the END command to exit the Compare reports.

Figure 171. Compare Report - Summary

```
Menu Utilities Compilers Help
-----
BROWSE   USERID9.FILEID.CR.D04023.T160614      Line 00000297 Col 001 080
Command ==>                               Scroll ==> CSR
File-AID 17.2   COMPARE LOAD LIBRARY SUMMARY REPORT   USERID-USERID9   DATE
"OLD" DSN: USERID9.FASAMP.LOADLIB1      "NEW" DSN: USE
=====
DATASET CHARACTERISTICS:          OLD DATASET    NEW DATAS
  DATASET TYPE:                  PDS            PDS
  BLOCKSIZE:                   6144           6144
COMPARE CRITERIA
  COMPARE MODE:                 LOAD LIBRARY
  MEMBER CRITERIA:             NAME, EPA, ATTRIBUTES
  CSECT CRITERIA:              NONE
REPORT FORMAT PARAMETERS:
  PRINT DETAIL REPORT:         YES
  PRINT MEMBER SUMMARY REPORT: YES
  PRINT MEMBERS SELECTED:      CHANGED
  PRINT MEMBER NAME REPORT:   YES
  PDS NAME REPORT COLUMNS:    8
COMPARE STATISTICS:
```

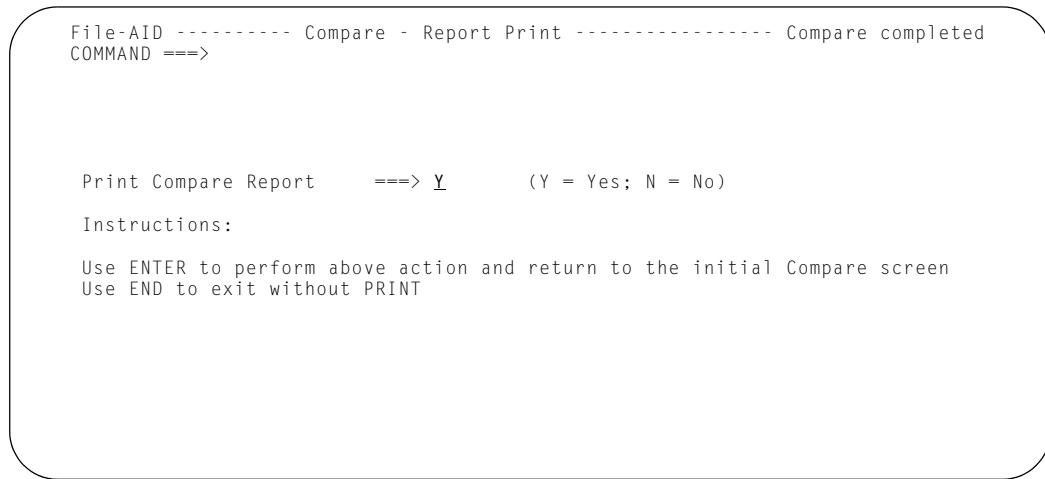
Step:

1. Press <PF3> (END) to exit the report.

Printing the Report

After you have browsed the Compare report, File-AID displays the [Compare Report - Print Screen](#) allowing you to print the report.

Figure 172. Compare Report - Print Screen



Steps:

1. Type a Y in the Print Compare Report field to print the compare report.
2. Press Enter.

File-AID displays the [Print Parameters Screen](#) as illustrated in [Figure 173](#).

Figure 173. Print Parameters Screen

```
File-AID ----- Print Parameters -----
COMMAND ===>

Number of lines/page      ==> 55      (0 = Suppress page headings)
Sysout class              ==> A
Number of copies           ==> 1

Enter One of the Following Optional Destinations:

Destination printer       ==>          (Local or remote printer)
- - - OR - - -
External JES Node ID      ==>          (Predefined JES Node and symbolic ID
Target VM/TSO ident        ==>          of intended receiver of output)
- - - OR - - -
Sysout writer name         ==>          (Installation assigned output writer)
- - - OR - - -
Print dataset name          ==>
Disposition                ==> OLD      (NEW; SHR; MOD; OLD)
Volume serial               ==>

Use ENTER to continue, END to cancel
```



Any change to Number of lines/page will NOT reformat the compare report.
The report format is determined by the values in effect during report generation.

Step:

1. Press Enter after making any necessary adjustments to the print parameters.

File-AID redisplays the [Compare - OLD Dataset Specification Screen](#) as shown in [Figure 174](#).

Figure 174. Compare - OLD Dataset Specification Screen

```
File-AID ----- Compare - OLD Dataset Specification -----
COMMAND ===>

Compare Mode             ==> F  (F = Formatted; U = Unformatted;
                                L = Load Library; S = Source code; J = JCL)
Specify OLD Dataset Information:
Dataset name or zFS path ==> 'USERID9.FASAMP.COMPARE'
Member name               ==>          (Blank or pattern for member list)
Volume serial              ==>          (If dataset is not catalogued)

Specify Record Layout and XREF Information:
Record layout usage       ==> S  (S = Single; X = XREF; N = None)
Record layout dataset     ==> 'USERID9.FASAMP.LAYOUTS'
Member name                ==> EMPLOYEE  (Blank or pattern for member list)
XREF dataset name         ==>
Member name                ==>          (Blank or pattern for member list)

Specify Selection Criteria Information:      (E = Existing; T = Temporary;
Selection criteria usage ==> N            M = Modify; Q = Quick; N = None)
Selection dataset name    ==>
Member name                ==>          (Blank or pattern for member list)
```

Step:

1. Continue with [Simple Unformatted Compare of PDS/PDSE Libraries](#) on page 147 or enter the END command (press PF3) to redisplay the File-AID Primary Option Menu.

Simple Unformatted Compare of PDS/PDSE Libraries

This example illustrates the process of comparing two PDS/PDSE libraries without Selection Criteria. It compares the sample library FASAMP.COBSRC.OLD to FASAMP.COBSRC.NEW.

Specifying the "Old" Dataset

The [Compare - OLD Dataset Specification Screen](#) allows you to specify the compare mode and the name of the OLD dataset you want to compare as well as any record layout, XREF, and selection criteria information for this dataset.

Figure 175. Compare - OLD Dataset Specification Screen

```
File-AID ----- Compare - OLD Dataset Specification -----
COMMAND ==>

Compare Mode      ==> U (F = Formatted; U = Unformatted;
                           L = Load Library; S = Source code; J = JCL)
Specify OLD Dataset Information:
  Dataset name or zFS path ==> 'USERID9.FASAMP.COBSRC.OLD'
  Member name           ==> *
                           (Blank or pattern for member list)
  Volume serial         ==>                   (If dataset is not catalogued)

Specify Record Layout and XREF Information:
  Record layout usage   ==> N             (S = Single; X = XREF; N = None)
  Record Layout dataset ==> 'USERID9.FASAMP.LAYOUTS'
  Member name           ==> EMPLOYEE       (Blank or pattern for member list)
  XREF dataset name    ==>
  Member name           ==>                   (Blank or pattern for member list)

Specify Selection Criteria Information:
  Selection criteria usage ==> N          (E = Existing; T = Temporary;
                                             M = Modify; Q = Quick; N = None)
  Selection dataset name ==>
  Member name           ==>                   (Blank or pattern for member list)
```

Steps:

1. Type a U in the Compare Mode field to select Unformatted Compare.
2. Type the name of a PDS or PDSE library, for example '**'USERID9.FASAMP.COBSRC.OLD'**, in the "OLD" Dataset name field.
3. Type an * in the Member name field to select ALL members.
4. Type an N in the Record layout usage field.
5. Type an N in the Selection criteria usage field.
6. Press Enter. File-AID displays the Compare - NEW Dataset Specification screen as illustrated in [Figure 176](#) on page 148.

Specifying the "New" Dataset

The [Compare - NEW Dataset Specification Screen](#) allows you to specify the NEW dataset you want to compare and any new record layout, XREF, and selection criteria information for this dataset. It displays the Compare Mode and Record layout usage that you specified on the [Compare - OLD Dataset Specification Screen](#) on page 147.



When you select multiple members in the [Compare - OLD Dataset Specification Screen](#) on page 147, you cannot specify any members in the Member name field for the new. Only if you compare a single member from the old PDS/PDSE, can you specify a different member name for the new.

Figure 176. Compare - NEW Dataset Specification Screen

```
File-AID ----- Compare - NEW Dataset Specification -----
COMMAND ==>

Compare Mode: UNFORMATTED

OLD Dataset Name: USERID9.FASAMP.COBSRC.OLD
Specify NEW Dataset Information:
  Dataset name or zFS path ==> 'USERID9.FASAMP.COBSRC.NEW'
  Member name      ==> (Blank or pattern for member list)
  Volume serial    ==> (If dataset is not catalogued)

OLD Record Layout Usage: SINGLE
Specify Record Layout and XREF Information:
  Record layout dataset ==> 'USERID9.FASAMP_LAYOUTS'
  Member name          ==> EMPLOYEE (Blank or pattern for member list)
  XREF dataset name   ==>
  Member name          ==> (Blank or pattern for member list)

Specify Selection Criteria Information: (E = Existing; T = Temporary;
  Selection criteria usage ==> N M = Modify; Q = Quick; N = None)
  Selection dataset name ==>
  Member name          ==> (Blank or pattern for member list)
```

Steps:

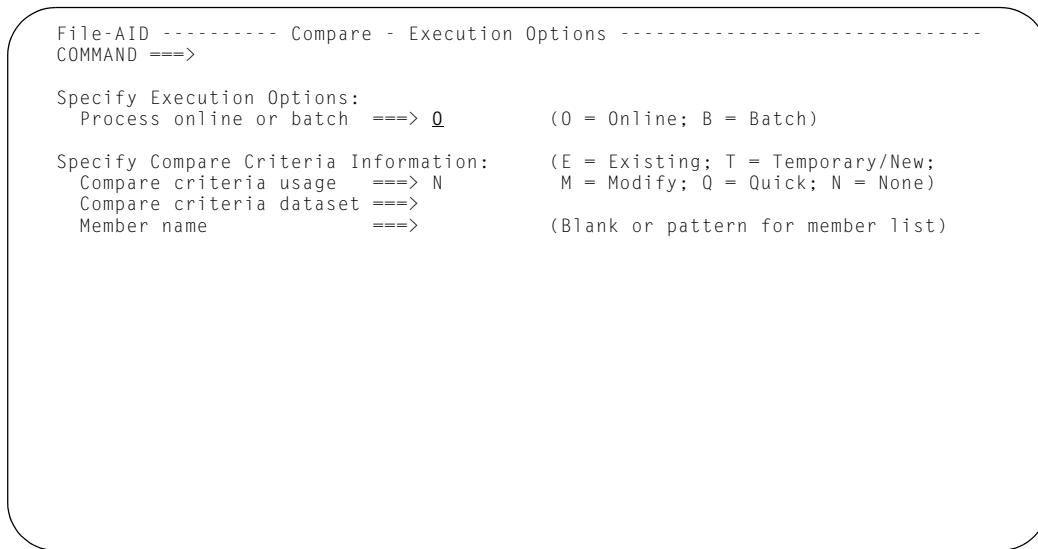
1. Type the name of a PDS or PDSE library that you want to compare to the OLD library, for example '**'USERID9.FASAMP.COBSRC.NEW'**' in the "NEW" Dataset name field.
2. Press Enter.
File-AID displays the [Compare - Execution Options Screen](#) as illustrated in [Figure 177](#) on page 149.

Specifying Execution Options

The [Compare - Execution Options Screen](#), as shown in [Figure 177](#), allows you to specify whether you want to process the compare online or batch. Selecting batch will let you keep the JCL generated by File-AID for later use. In addition, this screen allows you to specify the compare criteria dataset information that is required when you choose to use existing compare criteria.

In this example, choose process online (the default).

Figure 177. Compare - Execution Options Screen



Steps:

1. Type **O** in the Process online or batch field.
2. Press Enter. File-AID displays the [Compare - PDS Criteria Options Screen](#) as illustrated in [Figure 178](#) on page 150.

Selecting Your Compare - Criteria Options

The [Compare - PDS Criteria Options Screen](#), as shown in [Figure 178](#), allows you to specify processing and output options for your PDS/PDSE compare.

Compare Type

S (Sorted/Keyed) is the default compare type.

R (ReadAhead) for a non-keyed file.

1 (1-TO-1) For a 1-TO-1 record compare, specify 1 (one) in the Compare type file. File-AID compares "OLD" record 1 to "NEW" record 1, "OLD" record 2 to "NEW" record 2, etc.



1. Use **1** if the old and new file members have the same number of records (no inserts and/or deletes).
2. Use **R** if the old and new file members can have inserts and deletes.

Controlling Processing Limits

You can control the number of records to compare and the number of differences to report before stopping the compare.

By default, all records are compared and all differences are reported. Use a number (1-999) to specify the maximum number of records to process.

Figure 178. Compare - PDS Criteria Options Screen

File-AID ----- Compare - PDS Criteria Options -----
COMMAND ==>

Specify Initial Compare Options:

Compare type	==> 1 (S = Sorted/Keyed; R = ReadAhead; 1 = 1-to-1)
Read-ahead record count	==> 100 (If type = R, specify read-ahead count)
Read-ahead sequence	==> E (E= Enforce; I = Ignore)
Records to compare	==> ALL (All or maximum number of records)
Differences to compare	==> ALL (All or maximum number of differences)
Modify print defaults	==> Y (Y = Yes; N = No)
Specify output criteria	==> N (Y = Yes; N = No)

Steps:

1. Type **1** in the Compare type field.
2. Type **Y** in the Modify print defaults field.
3. Press Enter. File-AID displays the [Compare - Print Options \(Page 1\) Screen](#) screen as illustrated in [Figure 179](#) on page 152.

Specifying Print Options for an Unformatted Compare

The [Compare - Print Options \(Page 1\) Screen](#), as shown in [Figure 179](#), displays when you specify a Y in the Modify print defaults field on the [Compare - PDS Criteria Options Screen](#). The Compare Print Options screens ([Figure 179](#) and [Figure 180](#) on page 153) enable you to control your compare report.

The Compare mode (Formatted or Unformatted) specified on the Compare - OLD Dataset Specification screen determines which Print Options are presented.

Specifying Print Format for Unformatted Compare

File-AID has three different formats available to report differences in records:

- H (Hex)** Prints each differing record showing character and vertical hexadecimal values for each byte of data. Differences are underlined.
- C (Character)** Prints each differing record showing only printable characters (default).
- M (Mixed)** Prints valid character data as characters and unprintable data in hexadecimal.

Specifying a Reporting Limit

The Max differences to report field (default ALL) is used to limit the size of the report when a large number of differences are expected.

Specifying the Level of Information to Report

The next four options allow you to control the level of information to include in the Compare report:

- Print CHANGED records
- Print INSERTED records
- Print DELETED records
- Print MATCHED records



Even if you specify No for the above four options, a Summary Report is generated.

Specifying PDS Compare Options

PDS report options

Specify one of the following valid entries:

- **M** :Member name report. The report lists the PDS members in column format and flags the compare results by member name.
- **D** :Detail report. Prints the standard Compare Detail report for each member compared.
- **B** :Both (default). Prints both the Member name report and the standard Compare Detail report.

MEMBER name report columns

Specify the number of print columns to use for the format of the Member Name report. Valid entries are 1 to 8. The default is 8.

Figure 179. Compare - Print Options (Page 1) Screen

```
File-AID ----- Compare - Print Options (Page 1 ) -----
COMMAND ===>

Specify initial print options:

Print format      ==> C      (H = Hex; C = Char; M = Mixed)
Max differences to report    ==> ALL   (All or maximum number to report)
Print CHANGED records    ==> Y      (Y = Yes; N = No)
Print INSERTED records    ==> Y      (Y = Yes; N = No)
Print DELETED records    ==> Y      (Y = Yes; N = No)
Print MATCHED records    ==> N      (Y = Yes; N = No)
(a Summary Report is ALWAYS generated)

PDS report options    ==> B      (M = Member name report;
                                         D = Detail report; B = Both)

MEMBER name report columns ==> 8     ( 1 - 8 print columns)
```

Steps:

1. Type **C** in the Print format field.
2. Type **ALL** in the Max differences to report field.
3. Type **Y** in the Print CHANGED records field.
4. Type **Y** in the Print INSERTED records field.
5. Type **Y** in the Print DELETED records field.
6. Type **B** in the PDS report options field.
7. Press Enter. File-AID displays the [Compare - Print Options \(Page 2 of 2\) Screen](#) as illustrated in [Figure 180](#) on page 153.

Specify options for HEX, CHAR, or MIXED reports:

Unformatted Report Style

Specify the report style to print:

U

Ultra-condensed report style produces the minimum number of report print lines. It also enables you to specify additional print report options listed on the Compare - Print Options (Page 3 of 3) screen.

S

Standard report style is the full Compare report.

C

(Default) Condensed report style has reduced heading lines and enables you to specify the additional options listed on the Compare - Print Options (Page 3 of 3) screen.

OLD/NEW Print Sequence

Specify the print sequence for OLD and NEW records:

G

(Default) Print entire OLD record before printing corresponding NEW record.

A

Alternate print lines between OLD and NEW records for each 100 positions.

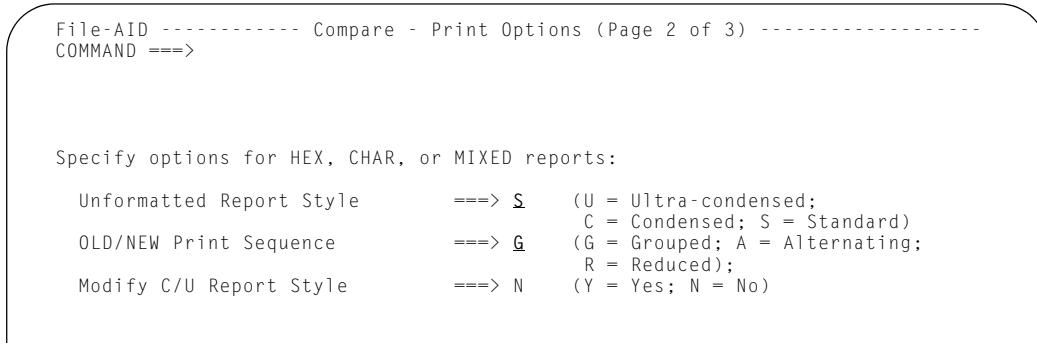
R

Reduces print lines in Alternate sequence for Standard report style. Valid only for Standard report style.

Modify C/U Report Style

Enter Y (Yes) to specify additional report options for the ultra-condensed or condensed report styles on Print Options - Page 3. Use N (No) to accept the defaults (or prior settings).

Figure 180. Compare - Print Options (Page 2) Screen



Steps:

1. Type **S** in the Unformatted Report Style field.
2. Type **G** in the OLD/NEW Print Sequence field.
3. Press Enter. File-AID displays the [Compare - Unformatted Criteria](#) screen as illustrated in [Figure 181](#) on page 154

Specifying Unformatted Criteria

The [Compare - Unformatted Criteria](#) screen ([Figure 181](#)) enables you to specify field criteria (up to 50) for your compare. The field criteria can either be Compare or Exclude commands.

For the Compare field criteria, OLD and NEW field TYPE, the two field types must be the same or you may mix Binary, Packed, or Zoned data. When the NEW information is left blank, File-AID defaults to the OLD information.

For the Exclude field criteria, the field type must be character (C) or blanks. All Exclude field criteria must be the same for the OLD and NEW, the values for position, length and field type are copied from the OLD to the NEW.



When comparing two character fields with different lengths, File-AID will only compare up to the shortest length field. For example, if you have a 198 length field for your OLD and a 199 length field for your NEW and all the data in the first 198 bytes are the same for both fields, File-AID considers these as matching. File-AID does not include the 199th byte within the compare.

For this example, skip the field criteria specification.

Figure 181. Compare - Unformatted Criteria

File-AID ----- Compare - Unformatted Criteria -----								SCROLL ==> PAGE
COMMAND ==>				OLD				NEW
Cmd	Pos.	Length	Type	Pos.	Length	Type	Status	Display
-	1	80	C	1	80	C	COMPARISON FIELD	
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
-	-----	-----	---	-----	-----	---		
Cmd: S = Sync/Key, T = Tolerance/Text, C = Compare, X = Exclude, R = Reset								

Step:

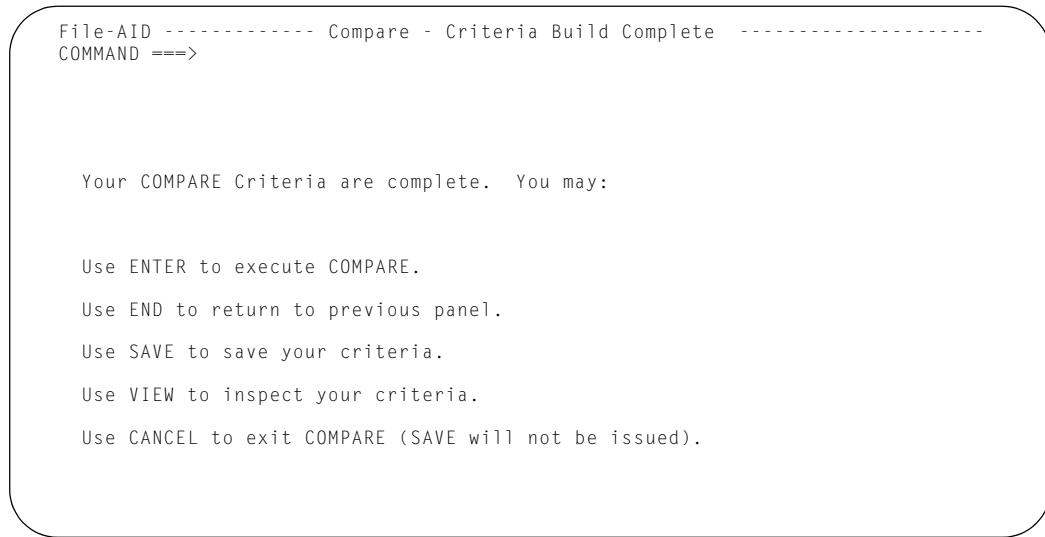
1. Press Enter to skip specifying unformatted criteria.

Executing Compare

File-AID displays the [Compare - Criteria Build Complete Screen](#) as shown in [Figure 182](#).

In this example, press Enter to execute the comparison. When online processing is requested, compare processing occurs in the foreground of your terminal.

Figure 182. Compare - Criteria Build Complete Screen



Steps:

1. Press Enter to execute the compare.

Analyzing the Compare Reports

The compare reports are written to a temporary dataset and, upon completion, File-AID displays the temporary dataset in an ISPF Browse session as shown in [Figure 183](#).

For each member, you will receive a

- COMPARE DETAIL REPORT ([Figure 183](#))
- COMPARE CRITERIA CONTENTS REPORT ([Figure 184](#))
- COMPARE SUMMARY REPORT ([Figure 185](#))

The last report, COMPARE PDS MEMBER NAME REPORT ([Figure 186](#)), includes all members.



1. If you do not request the Detail Report (or Both) the Member Name Report will not show any changes since it will only compare member names. None of the contents will be compared.
2. If you specify a Read-Ahead report without a Sync-Key you will not see any CHANGED records. CHANGED records will be reported as INSERTED and DELETED records.

[Figure 183](#) shows a sample report of an unformatted compare in standard report style. The report displays the OLD compare lines/block ahead of the NEW compare lines/block. CHANGE identifies the changed positions with the change marker (-). BOTH shows the matching lines of the changed record.

You may need to scroll the report to the right to see information beyond column 80. All Browse commands are active including the FIND primary command and standard scroll commands (PF7, PF8, PF10, PF11).

If batch processing is specified, File-AID displays the JCL Specification screen (not shown here) from which you can enter the SUBMIT command to run the Compare function in the background. Use standard batch output review facilities to browse and print your compare report.

Figure 183. Compare Detail Report

```

Menu Utilities Compilers Help
-----
BROWSE      USERID9.FILEAID.CR.D17290.T115454      Line 0000 Compare completed
Command ==> F 'COMPARE CRITERIA CONTENTS REPORT'   Scroll ==> CSR
***** Top of Data *****
FILE-AID 17.2                                         COMPARE DETAIL REPORT

"OLD" DSN: USERID9.FASAMP.COBSRC.OLD(CBLPGM1)
"NEW" DSN: USERID9.FASAMP.COBSRC.NEW(CBLPGM1)

CHANGED RECORD                                     "OLD" FILE RECORD: 5
                                                 1   2   3   4   5
RCD POSITIONS  -----+---0-----0-----+---0-----+---0-----0-
"OLD"       1     80   000500* TRIANGLE TYPE
CHANGE
"NEW"       1     80   000500* TRIANGLE Type DETERMINATION
CHANGE

CHANGED RECORD                                     "OLD" FILE RECORD: 7
                                                 1   2   3   4   5
RCD POSITIONS  -----+---0-----0-----+---0-----+---0-----0-
"OLD"       1     80   000700 ENVIRONMENT DIVISION.

```

Step:s

1. Scroll through the COMPARE DETAIL REPORT for the first compared member to view the changes.
2. Enter F 'COMPARE CRITERIA CONTENTS REPORT' to display the beginning of the COMPARE CRITERIA CONTENTS REPORT for the first member (see [Figure 184](#) on page 157).

Figure 184. Compare Criteria Contents Report

```

Menu Utilities Compilers Help
-----
BROWSE USERID9.FILEAID.CR.D17290.T115454 Line 0000000333 Col 001 080
Command ==> F 'COMPARE SUMMARY REPORT'          Scroll ==> CSR
** END OF REPORT *
FILE-AID 17.2                                     COMPARE CRITERIA CONTENTS REPORT

COMPARE CRITERIA DSN:

COMPARE CRITERIA CONTENTS:
RECORD COMPARE CRITERIA:
    COMPARE TYPE:                               ONE-TO-ONE
    MAX NUMBER OF RECORDS TO COMPARE:           0 (0 = NO LIMIT)
    MAX NUMBER OF DIFFERENCES TO COMPARE:        0 (0 = NO LIMIT)

=====
OLD LAYOUT MEMBER:                               NEW LAYOUT
NUM OLD-RECORD-LAYOUT      START FORMAT STATUS FIELD| NUM NEW-RECOR
-----|-----|-----|-----|-----|-----|-----|-----|
1          1 C     80 COMPARE   1| 1
END OF RECORD. LENGTH = 80                         END OF RE
** END OF REPORT *

```

3. Enter F 'COMPARE SUMMARY REPORT' to display the beginning of the COMPARE SUMMARY REPORT for the first member (see [Figure 185](#) on page 157).

Figure 185. Compare Summary Report

```

Menu Utilities Compilers Help
-----
BROWSE USERID9.FILEAID.CR.D17290.T115454 Line 0000000333 Col 001 080
Command ==> F 'COMPARE PDS MEMBER NAME REPORT'          Scroll ==> CSR
** END OF REPORT *
FILE-AID 17.2                                     COMPARE SUMMARY REPORT

"OLD" DSN: USERID9.FASAMP.COBSRC.OLD(CBLPGM1)
"NEW" DSN: USERID9.FASAMP.COBSRC.NEW(CBLPGM1)

COMPARE CRITERIA:
    COMPARE MODE:                               UNFORMATTED

REPORT FORMAT PARAMETERS:
    PRINT FORMAT:                             CHARACTER
    MAX NUMBER OF DIFFERENCES TO REPORT:      0 (0 = NO LIMIT)
    PRINT RECORDS SELECTED:                   CHANGED, INSERTED, DELET
    PDS REPORT OPTIONS:                      MEMBER NAME AND DETAIL R
    PDS NAME REPORT COLUMNS:                 8
    UNFORMATTED REPORT STYLE:                STANDARD
    OLD/NEW PRINT SEQUENCE:                  GROUPED

COMPARE STATISTICS:
    "OLD" DATASET RECORDS READ:             99
    "NEW" DATASET RECORDS READ:             99
    "OLD" DATASET RECORDS COMPARED:        99
    "NEW" DATASET RECORDS COMPARED:        99
    NUMBER OF RECORDS MATCHED:             66
    NUMBER OF RECORDS CHANGED:              33
    NUMBER OF RECORDS INSERTED:            0
    NUMBER OF RECORDS DELETED:             0

** END OF REPORT *

```

4. Enter F 'COMPARE PDS MEMBER NAME REPORT' to display the beginning of the COMPARE PDS MEMBER NAME REPORT for all compared members (see [Figure 186](#) on page 158).

At the end of the PDS Compare output, the Compare PDS Member Name Report lists all compared members indicating the results of the compare in [Figure 186](#).

After reviewing the reports, use the END command to exit the Compare reports.

Figure 186. Compare PDS Member Name Report

```
Menu Utilities Compilers Help
-----
BROWSE      USERID9.FILEAID.CR.D17290.T115454        Li CHARS 'COMPARE PDS MEMBE
Command ==>                               Scroll ==> CSR
FILE-AID 17.2  COMPARE PDS MEMBER NAME REPORT      USERID-USERID9      DATE 17
"OLD" DSN: USERID9.FASAMP.COBSRC.OLD          "NEW" DSN: USE
=====
MEMBER NAMES LISTED HORIZONTALLY PRECEDED BY (M)ATCHED, (C)HANGED, (I)NSERTED, (
(C)CBLPGM1    (M)CBLPGM2    (D)CBLPGM3    (I)CBLPGM4
*** MEMBER CONTENT WAS COMPARED. MATCHED (M) MEANS THE COMPARED FIELDS WERE THE
NUMBER OF MATCHED MEMBERS:           1
NUMBER OF CHANGED MEMBERS:          1
NUMBER OF INSERTED MEMBERS:         1
NUMBER OF DELETED MEMBERS:          1
NUMBER OF MEMBERS NOT FOUND:        0
***** Bottom of Data *****
```

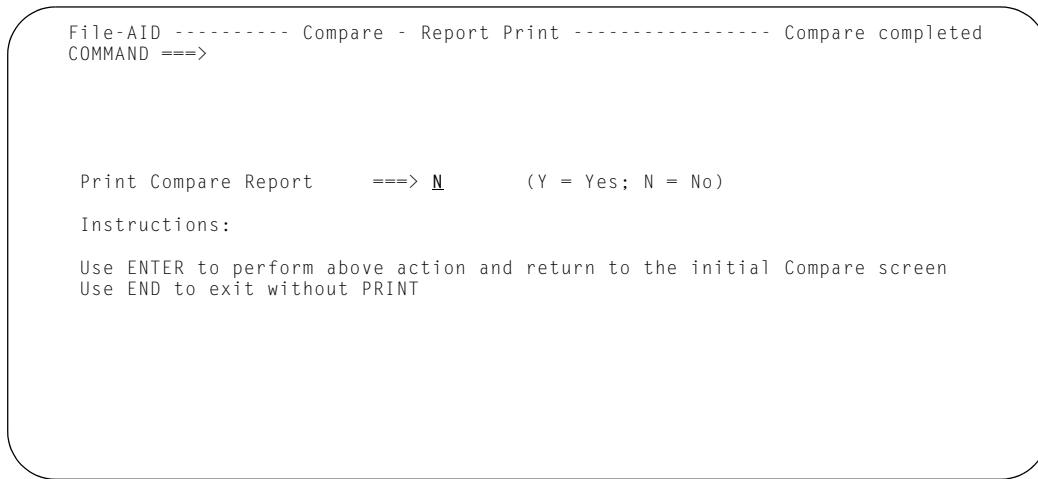
Step:

1. Press <PF3> (END) to exit the report.

Printing the Report

After you have browsed the Compare report, File-AID displays the [Compare - Report Print Screen](#) allowing you to print the report.

Figure 187. Compare - Report Print Screen

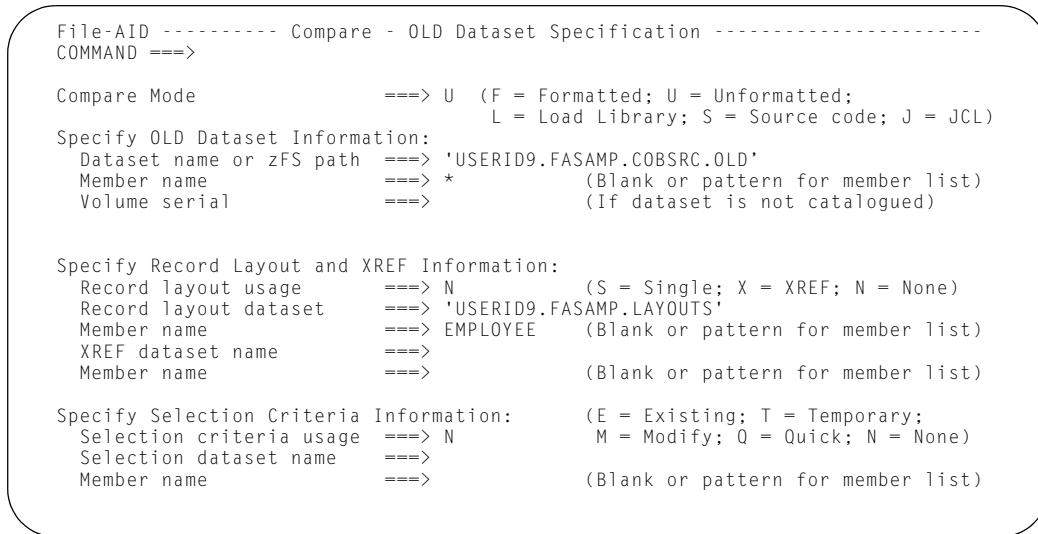


Steps:

1. Type a N (default) in the Print Compare Report field to skip printing the compare report.
2. Press Enter.

File-AID redisplays the [Compare - OLD Dataset Specification Screen](#) as shown in [Figure 188](#).

Figure 188. Compare - OLD Dataset Specification Screen



Step:

1. Continue with [Load Library Compare](#) on page 160 or enter the END command (press PF3) to redisplay the File-AID Primary Option Menu.

Load Library Compare

The following example illustrates the process of comparing two Load Libraries.

- Compare on Entry Point and Link Attributes of the load modules.
- Compare all modules in the Load Libraries.
- Report only changes resulting from the compare.
- Process on-line.
- Use Temporary/New/None Compare Criteria.
- Produce 4 reports:
 - Detailed
 - Member Summary
 - Load Library Summary
 - Member Name.

The training datasets *hlq.FASAMP.LOADLIB1* and *hlq.FASAMP.LOADLIB2* contain the before and after records respectively.

Figure 189. Compare - OLD Dataset Specification Screen

```

File-AID ----- Compare - OLD Dataset Specification -----
COMMAND ===>

Compare Mode      ==> L  (F = Formatted; U = Unformatted;
                           L = Load Library; S = Source code; J = JCL)
Specify OLD Dataset Information:
  Dataset name or zFS path ==> 'USERID9.FASAMP.LOADLIB1'
  Member name           ==> *
                           (Blank or pattern for member list)
  Volume serial         ==>           (If dataset is not catalogued)

Specify Record Layout and XREF Information:
  Record layout usage   ==> N    (S = Single; X = XREF; N = None)
  Record layout dataset ==>
  Member name           ==>           (Blank or pattern for member list)
  XREF dataset name     ==>
  Member name           ==>           (Blank or pattern for member list)

Specify Selection Criteria Information: (E = Existing; T = Temporary;
                                         M = Modify; Q = Quick; N = None)
  Selection criteria usage ==> N
  Selection dataset name ==>
  Member name           ==>           (Blank or pattern for member list)

```

Steps:

1. Type an **L** in the Compare Mode field.
2. Type **FASAMP.LOADLIB1** in the "OLD" Dataset name field.
3. Specify an ***** for member name to include all modules.
4. Type an **N** in the Record layout usage field.
5. Press Enter. File-AID displays the [Compare - NEW Dataset Specification Screen](#) as illustrated in [Figure 190](#) on page 161.

Specifying the "New" Load Library

The [Compare - NEW Dataset Specification Screen](#) allows you to specify the NEW load library you want to compare. It displays the Compare Mode that you specified on the Compare - OLD Dataset Specification screen.

Figure 190. Compare - NEW Dataset Specification Screen

```
File-AID ----- Compare - NEW Dataset Specification -----
COMMAND ==>

Compare Mode: LOAD LIBRARY

OLD Dataset Name: USERID9.FASAMP.LOADLIB1
Specify NEW Dataset Information:
  Dataset name or zFS path ==> 'USERID9.FASAMP.LOADLIB2'
  Member name      ==>          (Blank or pattern for member list)
  Volume serial    ==>          (If dataset is not catalogued)

OLD Record Layout Usage: SINGLE
Specify Record Layout and XREF Information:
  Record layout dataset ==>
  Member name          ==>          (Blank or pattern for member list)
  XREF dataset name    ==>
  Member name          ==>          (Blank or pattern for member list)

Specify Selection Criteria Information: (E = Existing; T = Temporary;
  Selection criteria usage ==> N           M = Modify; Q = Quick; N = None)
  Selection dataset name ==>
  Member name          ==>          (Blank or pattern for member list)
```

Steps:

1. Type **FASAMP.LOADLIB2** in the "NEW" Dataset name field.
2. Press Enter. File-AID displays the [Compare - Execution Options Screen](#) as illustrated in [Figure 191](#) on page 162.

Specifying Execution Options

The [Compare - Execution Options Screen](#), as shown in [Figure 191](#), allows you to specify whether you want to process the compare online or batch. In addition, this screen allows you to specify the compare criteria dataset information that is required when you choose to use existing compare criteria.

In this example, simply press Enter to process online (the default).

Figure 191. Compare - Execution Options Screen

```
File-AID ----- Compare - Execution Options -----
COMMAND ===>

Specify Execution Options:
Process online or batch ===> O      (O = Online; B = Batch)

Specify Compare Criteria Information:
Compare criteria usage ===> N      (E = Existing; T = Temporary/New;
                                         M = Modify; Q = Quick; N = None)
Compare criteria dataset ===>
Member name           ===>          (Blank or pattern for member list)
```

Steps:

1. Press Enter. File-AID displays the [Compare - Load Library Criteria Screen](#) as illustrated in [Figure 192](#) on page 164.

Selecting Your Compare - Load Library Criteria

The [Compare - Load Library Criteria Screen](#), as shown in [Figure 192](#) on page 164, allows you to specify processing and output options for your compare.

Use "S" to select member compare criteria

Use the following fields to specify the load library member criteria that you want File-AID to use in the comparison.

Module Name	File-AID automatically selects the module (or member) name. It is the minimum member criteria required for compare load libraries to execute.
Load Module Size	Compare load module sizes.
Entry Point	Compare load module entry point address.
Link Attributes	Compare load module link attributes.
Link Date	Compare load module link edit dates.

Use "S" to select CSECT compare criteria

Use the following fields to specify the CSECT compare criteria that you want File-AID to use in the comparison. CSECT Name must be selected to use CSECT information in the criteria.

CSECT Name	Enter an S to compare CSECT names. This field must be selected to compare on any of the following CSECT information.
CSECT Size	Compare CSECT lengths.
Language	Compare language types in which the CSECT is coded (i.e. Assembler, COBOL, C, PL/I, etc.).
CSECT Date	Compare CSECT (compile/assembly) dates.
IDR ZAP Data	Compare zap identification information.
Text	Compare CSECT content, such as instructions or constants.

Controlling Processing Limits

Stop text compare threshold	Specify ALL or a number from 0 to 99999 that specifies the maximum number of unlike bytes that File-AID includes on the Compare Detail Report for each CSECT. The Stop text compare threshold is used to minimize the report print lines when instructions have been added/deleted near the beginning of a CSECT. ALL or 0 eliminates a threshold.
Specify CSECT selection criteria	Specify Y (Yes) to display the CSECT Selection Criteria screen. The default is N (No) which compares all CSECTs. E (Existing) is displayed as an option if an M was specified for the Compare criteria usage field on the Compare Executions Options screen and the compare criteria specified contains CSECT selection criteria. Specify an E to simply use the existing criteria. Specify Y to override the existing criteria or an N to compare all CSECTs.
Modify print defaults	Specify whether you want to modify the print options for the Compare Report. All default print option values are the last print option values that you entered for the load library compare.

Figure 192. Compare - Load Library Criteria Screen

```

File-AID ----- Compare - Load Library Criteria -----
COMMAND ==>

Use "S" to select member compare criteria:
S Module Name
_ Load Module Size
S Entry Point
S Link Attributes
_ Link Date

Use "S" to select CSECT compare criteria:
CSECT Name
_ CSECT Size
_ Language
_ CSECT Date
_ IDR ZAP Data
_ Text

Stop text compare threshold      ==> 100      (All or maximum number of
                                           differences for a CSECT)
Specify CSECT selection criteria ==> N        (Y = Yes; N = No)
Modify print defaults           ==> Y        (Y = Yes; N = No)

```

Steps:

1. Type **S** in the Entry Point field.
2. Type **S** in the Link Attributes field.
3. Type **Y** in the Modify print defaults field.
4. Press Enter. File-AID displays the [Compare - Load Library Print Options Screen](#) as illustrated in [Figure 193](#) on page 165.

Specifying Load Library Print Options

The [Compare - Load Library Print Options Screen](#), as shown in [Figure 193](#), is displayed when you specify a Y in the Modify print defaults field on the [Compare - Load Library Criteria Screen](#). The Compare Load Library Print Options screen enables you to control your compare report.

Specify Detail Report Print Options

File-AID has six different detail report print options:

Print detail report	Y (Yes) includes the details specified on Load Library Criteria screen in the Compare Report.
Print member summary report	Y (Yes) prints a summary of differences by member.
Print changed members	Y (Yes) prints the changed members.
Print inserted members	Y (Yes) prints the inserted members.
Print deleted members	Y (Yes) prints the deleted members.
Print matched members	Y (Yes) prints the matched members.

Even if you suppress printing the CHANGED, INSERTED, DELETED, and MATCHED members, Compare always generates a Summary Report.

Specify Member Name Report Print Options

Print member name report	Y (Yes) prints a list of the members processed and their status (changed, inserted, deleted, or matched).
Member name report columns	Specify the number of columns to use for the Member Name Report. Valid entries are 1-8.

Figure 193. Compare - Load Library Print Options Screen

```
File-AID ----- Compare - Load Library Print Options -----
COMMAND ==>

Specify Detail Report Print Options:
  Print detail report    ==> Y      (Y = Yes; N = No)
  Print member summary report    ==> Y      (Y = Yes; N = No)

  Print CHANGED members    ==> Y      (Y = Yes; N = No)
  Print INSERTED members    ==> N      (Y = Yes; N = No)
  Print DELETED members    ==> N      (Y = Yes; N = No)
  Print MATCHED members    ==> N      (Y = Yes; N = No)
  (a Summary Report is ALWAYS generated)

Specify Member Name Report Print Options:
  Print member name report    ==> Y      (Y = Yes; N = No)
  Member name report columns    ==> 8      (1 - 8 print columns)
```

Steps:

1. Type Y in the Print detail report field.
2. Type Y in the Print member summary report field.
3. Type Y in the Print CHANGED members field.
4. Type Y in the Print member name report field.
5. Press Enter. File-AID displays the [Compare - Criteria Build Complete Screen](#) as illustrated in [Figure 194](#) on page 166.

Viewing Formatted Compare Criteria

File-AID displays the [Compare - Criteria Build Complete Screen](#) as shown in [Figure 194](#).

Figure 194. Compare - Criteria Build Complete Screen

```
File-AID ----- Compare - Criteria Build Complete -----
COMMAND ==> VIEW

Your COMPARE Criteria are complete. You may:

Use ENTER to execute COMPARE.
Use END to return to previous panel.
Use SAVE to save your criteria.
Use VIEW to inspect your criteria.
Use CANCEL to exit COMPARE (SAVE will not be issued).
```

Steps:

1. Type **VIEW** in the Command field to display the Compare criteria.
2. Press Enter to select the default compare of all fields.

[Figure 195](#) displays the current Compare Criteria.

Figure 195. Compare - View Criteria Screen

```
Menu Utilities Compilers Help
-----
BROWSE      USERID9.FILEAID.CC.D01066.T153225      Line 00000000 Col 001 080
Command ==>
***** Top of Data *****
*
*   COMPARISON OPTIONS
0000 COMPARE_MODE=LOAD_LIBRARY
0000 MEMBER=
0000 LOAD_LIBRARY_MEMBER_CRITERIA=NAME,EPA,ATTRIBUTES
0000 LOAD_LIBRARY_TEXT_COMPARE_THRESHOLD=00100
0000 LOAD_LIBRARY_CSECT_SELECTION_LIST_TYPE=NONE
*
*   PRINT OPTIONS
0000 RECORD_TYPES_TO_PRINT=CHANGED
0000 PDS_COMPARE=BOTH
0000 MEMBER_NAME_REPORT_COLUMNS=8
0000 LOAD_LIBRARY_MEMBER_SUMMARY_REPORT=YES
***** Bottom of Data *****
```

Step:

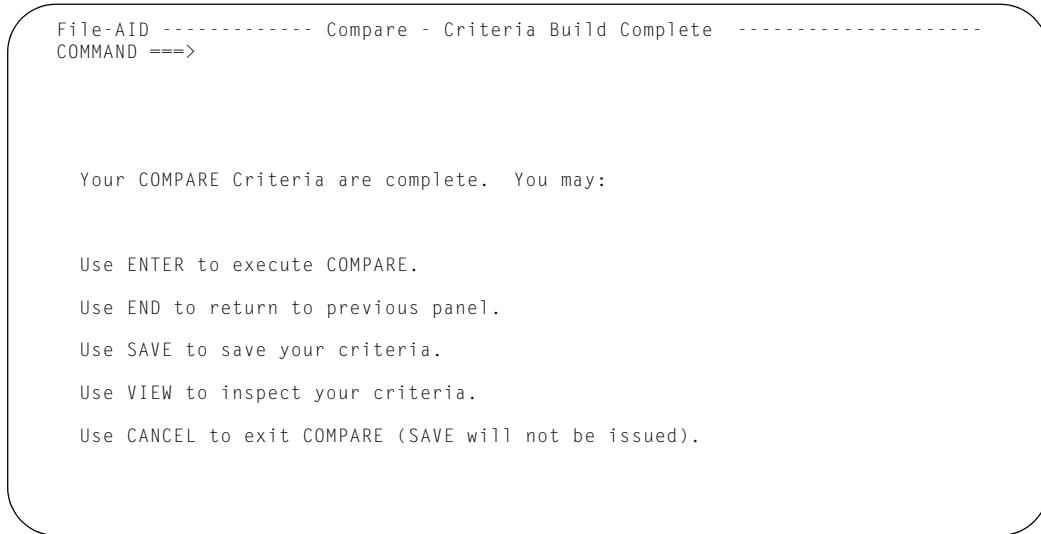
1. Press <PF3> (END) when you are finished viewing the compare load library criteria.

Executing Compare

File-AID redisplays the [Compare - Criteria Build Complete Screen](#) as shown in [Figure 196](#). At this point, you can choose to save the new compare criteria by entering the SAVE primary command and File-AID prompts you to enter Compare Criteria dataset information.

In this example, press Enter to execute the comparison. When online processing is requested, compare processing occurs in the foreground of your terminal.

Figure 196. Compare - Criteria Build Complete Screen



Steps:

1. Press Enter to select the default compare of all fields.

Analyzing the Compare Report

The compare report is written to a temporary dataset and, upon completion, File-AID displays the temporary dataset in an ISPF Browse session as shown in [Figure 197](#).

You may need to scroll the report to the right to see information beyond column 80. All Browse commands are active including the FIND primary command and standard scroll commands (PF7, PF8, PF10, PF11).

If batch processing is specified, File-AID displays the JCL Specification screen (not shown here) from which you can enter the SUBMIT command to run the Compare function in the background. Use standard batch output review facilities to browse and print your compare report.

Figure 197. Compare - Online Report Screen

```

Menu Utilities Compilers Help
-----
BROWSE    USERID9.FILEAID.CR.D04023.T105050      Line 00000000 Col 001 080
Command ==> F 'COMPARE LOAD LIBRARY SUMMARY REPORT'      Scroll ==> CSR
***** Top of Data *****
File-AID 17.2   COMPARE LOAD LIBRARY DETAIL REPORT      USERID-USERID9      DATE
"OLD" DSN: USERID9.FASAMP.LOADLIB1      "NEW" DSN: USE
=====
MEMBER     FILE      STATUS     EPA/ADDR   RMODE   AMODE   ATTRIBUTES
-----
AGER0100   OLD       CHANGED      0        ANY      31      RENT REUS
           NEW       CHANGED      24       24      REUS
DACOMMON   OLD       CHANGED      1A10      0        24      RENT REUS
           NEW       CHANGED
IGZEOPT    OLD       CHANGED      0        ANY      31      RENT REUS
           NEW       CHANGED
                               **** E N D O F R E
File-AID 17.2   LOAD LIBRARY MEMBER SUMMARY REPORT      USERID-USERID9      DATE
"OLD" DSN: USERID9.FASAMP.LOADLIB1      "NEW" DSN: USE
=====
```

Step:

1. Enter the F 'COMPARE LOAD LIBRARY SUMMARY REPORT' command to locate the summary report.
2. Enter DOWN and LEFT MAX to display the Compare Load Library Summary Report' as displayed in [Figure 198](#) on page 169.

Viewing the Compare Summary Report

Towards the end of the Compare output, a summary report of the results of the compare is produced as shown in [Figure 198](#). It also includes the results of the selection criteria and any special compare criteria specified.

Use scroll commands to view the remaining parts of the reports.

The last report in this exercise is the PDS Member Name Report.

After reviewing the reports, use the END command to exit the report and return to the [Compare Report - Print Screen](#).

Figure 198. Compare Report - Summary

```
Menu Utilities Compilers Help
-----
BROWSE   USERID9.FILEAID.CR.D04023.T160614      Line 00000297 Col 001 080
Command ===>                                         Scroll ===> CSR
File-AID 17.2  COMPARE LOAD LIBRARY SUMMARY REPORT  USERID-USERID9  DATE
"OLD" DSN: USERID9.FASAMP.LOADLIB1                 "NEW" DSN: USE
=====
DATASET CHARACTERISTICS:                         OLD DATASET    NEW DATAS
  DATASET TYPE:                                PDS            PDS
  BLOCKSIZE:                                 6144          6144

COMPARE CRITERIA:                               LOAD LIBRARY
  COMPARE MODE:                                NAME, EPA, ATTRIBUTES
  MEMBER CRITERIA:                            NONE

REPORT FORMAT PARAMETERS:
  PRINT DETAIL REPORT:                      YES
  PRINT MEMBER SUMMARY REPORT:                YES
  PRINT MEMBERS SELECTED:                   CHANGED
  PRINT MEMBER NAME REPORT:                  YES
  PDS NAME REPORT COLUMNS:                  8

COMPARE STATISTICS:
```

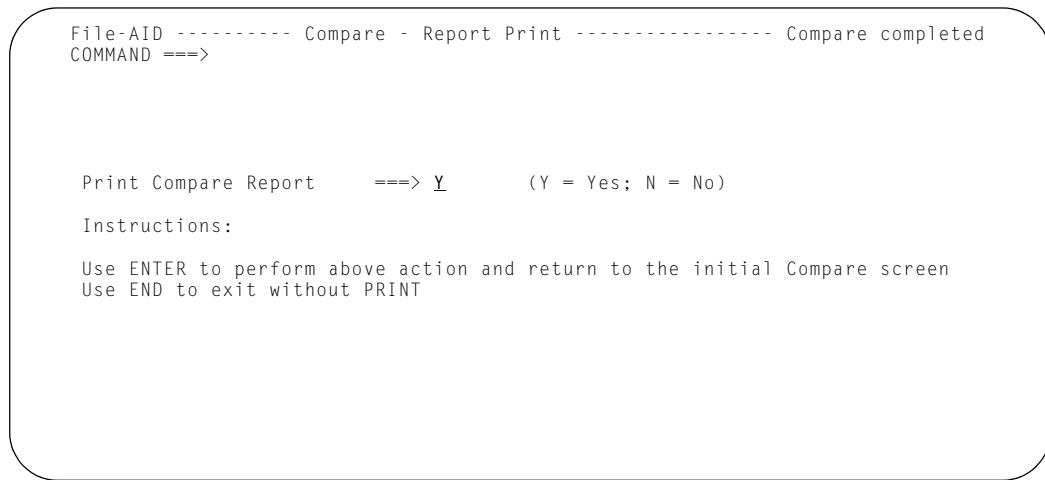
Step:

1. Press <PF3> (END) to exit the report.

Printing the Report

After you have browsed the Compare report, File-AID displays the [Compare Report - Print Screen](#) allowing you to print the report. Type a "Y" in the Print Compare Report field to print a copy of the report.

Figure 199. Compare Report - Print Screen



Steps:

1. Type a Y in the Print Compare Report field to print the compare report.
2. Press Enter.

File-AID displays the [Print Parameters Screen](#) as illustrated in [Figure 200](#).

Figure 200. Print Parameters Screen

```
File-AID ----- Print Parameters -----
COMMAND ==>

Number of lines/page      ==> 55          (0 = Suppress page headings)
Sysout class              ==> A
Number of copies           ==> 1

Enter One of the Following Optional Destinations:

Destination printer       ==>             (Local or remote printer)
- - - OR - - -
External JES Node ID     ==>             (Predefined JES Node and symbolic ID
Target VM/TSO ident       ==>             of intended receiver of output)
- - - OR - - -
Sysout writer name        ==>             (Installation assigned output writer)
- - - OR - - -
Print dataset name         ==>             (DSORG=PS; RECFM=VBA; LRECL=187)
Disposition                ==> OLD          (NEW; SHR; MOD; OLD)
Volume serial               ==>

Use ENTER to continue, END to cancel
```



Any change to Number of lines/page will NOT reformat the compare report.
The report format is determined by the values in effect during report generation.

Step:

1. Press Enter after making any necessary adjustments to the print parameters.

File-AID redisplays the [Compare - OLD Dataset Specification Screen](#) as shown in [Figure 201](#).

Figure 201. Compare - OLD Dataset Specification Screen

```
File-AID ----- Compare - OLD Dataset Specification -----
COMMAND ==>

Compare Mode            ==> L  (F = Formatted; U = Unformatted;
                                L = Load Library; S = Source code; J = JCL)
Specify OLD Dataset Information:
  Dataset name or zFS path ==> 'USERID9.FASAMP.LOADLIB1'
  Member name              ==> *
                                (Blank or pattern for member list)
  Volume serial             ==>             (If dataset is not catalogued)

Specify Record Layout and XREF Information:
  Record layout usage      ==> N          (S = Single; X = XREF; N = None)
  Record layout dataset    ==>
  Member name               ==>
  XREF dataset name        ==>
  Member name               ==>             (Blank or pattern for member list)

Specify Selection Criteria Information:
  Selection criteria usage ==> N          (E = Existing; T = Temporary;
                                M = Modify; Q = Quick; N = None)
  Selection dataset name   ==>
  Member name               ==>             (Blank or pattern for member list)
```

Step:

1. Continue with [Source Code Compare](#) on page 172 or enter the END command (press PF3) to redisplay the File-AID Primary Option Menu.

Source Code Compare

The following example illustrates the process of comparing two Source Code Libraries.

- Compare all members in the source code libraries.
- Process on-line.
- Report shifted data as changed data.
- Produce these reports:
 - Detailed
 - Member Summary.
- Use Edit-Helper to edit the new member while seeing the compare results.

The training datasets *hlq.FASAMP.COBSRC.OLD* and *hlq.FASAMP.COBSRC.NEW* contain the old and new COBOL source respectively.

Figure 202. Compare - OLD Dataset Specification Screen

```

File-AID ----- Compare - OLD Dataset Specification -----
COMMAND ===>

Compare Mode      ==> S  (F = Formatted; U = Unformatted;
                           L = Load Library; S = Source code; J = JCL)
Specify OLD Dataset Information:
  Dataset name or zFS path ==> 'USERID9.FASAMP.COBSRC.OLD'
  Member name           ==> *
                           (Blank or pattern for member list)
  Volume serial         ==>           (If dataset is not catalogued)

Specify Record Layout and XREF Information:
  Record layout usage   ==> N    (S = Single; X = XREF; N = None)
  Record layout dataset ==>
  Member name           ==>           (Blank or pattern for member list)
  XREF dataset name    ==>
  Member name           ==>           (Blank or pattern for member list)

Specify Selection Criteria Information:
  Selection criteria usage ==> N    (E = Existing; T = Temporary;
                                         M = Modify; Q = Quick; N = None)
  Selection dataset name ==>
  Member name           ==>           (Blank or pattern for member list)

```

Steps:

1. Type an **S** in the Compare Mode field.
2. Type **FASAMP.COBSRC.OLD** in the "OLD" Dataset name field.
3. Specify an ***** for Member name to compare all members.
4. Type an **N** in the Record layout usage field.
5. Press Enter. File-AID displays the [Compare - NEW Dataset Specification Screen](#) as illustrated in [Figure 203](#) on page 173.

Specifying the "New" Source Code Library

The [Compare - NEW Dataset Specification Screen](#) allows you specify the NEW source code library you want to compare. It displays the Compare Mode that you specified on the Compare - OLD Dataset Specification screen.

Figure 203. Compare - NEW Dataset Specification Screen

```
File-AID ----- Compare - NEW Dataset Specification -----
COMMAND ==>

Compare Mode: SOURCE

OLD Dataset Name: USERID9.FASAMP.LOADLIB1
Specify NEW Dataset Information:
  Dataset name or zFS path ==> 'USERID9.FASAMP.COBSRC.NEW'
  Member name      ==>          (Blank or pattern for member list)
  Volume serial    ==>          (If dataset is not catalogued)

OLD Record Layout Usage: SINGLE
Specify Record Layout and XREF Information:
  Record layout dataset ==>
  Member name          ==>          (Blank or pattern for member list)
  XREF dataset name    ==>
  Member name          ==>          (Blank or pattern for member list)

Specify Selection Criteria Information: (E = Existing; T = Temporary;
  Selection criteria usage ==> N           M = Modify; Q = Quick; N = None)
  Selection dataset name ==>
  Member name          ==>          (Blank or pattern for member list)
```

Steps:

1. Type **FASAMP.COBSRC.NEW** in the "NEW" Dataset name field.
2. Press Enter. File-AID displays the [Compare - Execution Options Screen](#) as illustrated in [Figure 204](#) on page 174.

Specifying Execution Options

The [Compare - Execution Options Screen](#), as shown in [Figure 204](#), allows you to specify whether you want to process the compare online or batch. In addition, this screen allows you to specify the compare criteria dataset information that is required when you choose to use existing compare criteria.

In this example, simply press Enter to process online (the default).

Figure 204. Compare - Execution Options Screen

```
File-AID ----- Compare - Execution Options -----
COMMAND ===>

Specify Execution Options:
Process online or batch ===> O          (O = Online; B = Batch)

Specify Compare Criteria Information:
Compare criteria usage ===> N          (E = Existing; T = Temporary/New;
                                         M = Modify; Q = Quick; N = None)
Compare criteria dataset ===>
Member name           ===>             (Blank or pattern for member list)
```

Step:

1. Press Enter. File-AID displays the [Compare - Source Criteria Screen](#) as illustrated in [Figure 205](#) on page 176.

Selecting Your Compare - Source Criteria

The [Compare - Source Criteria Screen](#), as shown in [Figure 205](#), allows you to specify processing and output options for your Source compare.

Compare Criteria

Use the following fields to specify the source criteria that you want File-AID to use in the comparison.

Source code language	Specify the language of the source code: 1 specifies COBOL, 2 specifies PL/1.
Line compare synchronization	Specify how to synchronize the compare. L Line content. C COBOL sequence number. Columns 1-6. S Standard sequence number. Columns 73-80.
Case Sensitive	Specify if case sensitivity is relevant to the compare. A Case must remain as is. C Convert to uppercase.
Columns to compare	Enter the column range (1-80) for the compare. Blank columns to compare will use the language default: 7-72 for COBOL. 2-72 for PL/1.

Exclude Options

Use the following fields to specify what you want File-AID to exclude during the comparison.

Exclude comments	Enter Y (Yes--default) to exclude comments or N (No) to include the comments in the compare. COBOL comments start with an '*' in column 7 OR a '/' in column 7 followed by the comment. PL/1 comments start with a '/*' and end with an */'.
Exclude blank lines	Enter Y (Yes--default) to exclude blank lines or N (No) to include blank lines in the compare.

Exclude compiler directives Enter Y (Yes--default) to exclude compiler directives or N (No) to include compiler directives in the compare.

COBOL directives include but are not limited to:

- 'D' in column 7
- '/' in column 7 (the rest of the line is blank)
- EJECT
- SKIP1/2/3
- READY TRACE
- *CONTROL

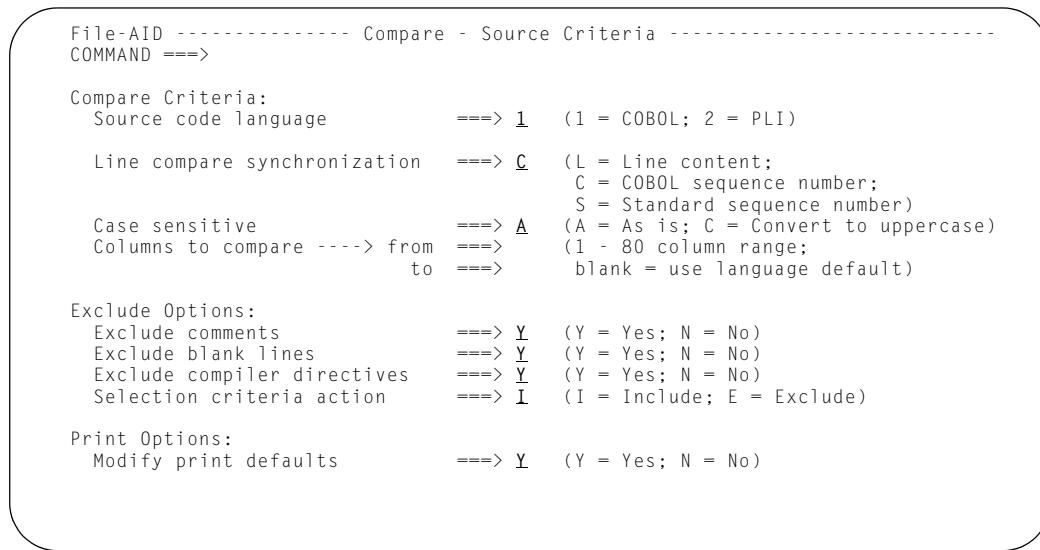
PL/I directives include but are not limited to:

- %onprint,
- %note,
- %option,
- %page,
- %pop,
- %print,
- %skip,
- decl,
- declare

Selection criteria action Specify whether to I (Include) or E (Exclude) lines meeting the selection criteria in the compare.

Modify print defaults Specify whether you want to modify the print options for the Compare Report. Print option values are saved in your user profile. Valid entries are Y (Yes) and N (No). All default print option values are the last print option values that you entered for the last source compare.

Figure 205. Compare - Source Criteria Screen



Steps:

1. Type 1 in the Source code language field.
2. Type C in the Line compare synchronization field.
3. Type A in the Case sensitive field.
4. Type Y in the Exclude comments field.

5. Type Y in the Exclude blank lines field.
6. Type Y in the Exclude compiler directives field.
7. Type I in the Selection criteria action field.
8. Type Y in the Modify print defaults field.
9. Press Enter. File-AID displays the [Compare - Print Options \(Page 1\) Screen](#) as illustrated in [Figure 206](#) on page 178.

Specifying Source Print Options

The [Compare - Print Options \(Page 1\) Screen](#), as shown in [Figure 206](#) on page 178, is displayed when you specify a Y in the Modify print defaults field on the Compare - Source Criteria screen. The Compare Source Print Options screen enables you to control your compare reports, what you want to view online, what to include in the reports, and what reports to print.

The values specified for the print options are saved in your user profile. Subsequent compare reports use the last values that were entered even if you do *not* return to this screen.

Source Print Options (Page 1)

Online Report Viewing Options:

Display interactive member summary screen	Specify Y (Yes) to display the interactive screen where you view the member list with a compare summary for each member and select member(s) to B (Browse), E (Edit), or X (Exclude) the compare results. Note: The separate member name report (if requested) cannot be viewed from this summary screen. However, the interactive member summary screen displays a similar one-line summary of statistics for each member compared.
	Specify N (No) to skip the member summary screen and directly browse the compare report(s).

Detail Report Print Options

File-AID provides these detail report print options:

Print detail report	Y (Yes) includes the details specified on Source Criteria screen in the Compare Report.
Print member summary report	Y (Yes) prints a summary of differences by member.
Detail report style	Specify S (Standard) for standard report style or A (Across) for across (side-by-side) report style.
Modify detail report content	Specify Y (Yes) if you want to modify the detail report content or N (No) to skip modification
Print CHANGED members	Y (Yes) prints the changed members.
Print INSERTED members	Y (Yes) prints the inserted members.
Print DELETED members	Y (Yes) prints the deleted members.
Print MATCHED members	Y (Yes) prints the matched members.

Even if you suppress printing the CHANGED, INSERTED, DELETED, and MATCHED members, Compare always generates a Summary Report.

Member Name Report Print Options

Print member name report Y (Yes) prints a list of the members processed and their status (changed, inserted, deleted, or matched).

Member name report columns Specify the number of columns to use for the Member Name Report. Valid entries are 1-8.

Figure 206. Compare - Print Options (Page 1) Screen

```
File-AID ----- Compare - Source Print Options (Page 1) -----
COMMAND ==>

Online Report Viewing Options:
Display interactive member summary screen ==> Y (Y = Yes; N = No)

Detail Report Print Options:
Print detail report           ==> Y (Y = Yes; N = No)
Print member summary report   ==> Y (Y = Yes; N = No)
Detail report style          ==> S (S = Standard; A = Across)
Modify detail report content ==> Y (Y = Yes; N = No)

Print CHANGED members        ==> Y (Y = Yes; N = No)
Print INSERTED members       ==> Y (Y = Yes; N = No)
Print DELETED members        ==> Y (Y = Yes; N = No)
Print MATCHED members        ==> N (Y = Yes; N = No)
(a Summary Report is ALWAYS generated)

Member Name Report Print Options:
Print member name report      ==> N (Y = Yes; N = No)
Member name report columns    ==> 8 (1 - 8 print columns)
```

Steps:

1. Type Y in the Display interactive member summary field.
2. Type Y in the Print detail report field.
3. Type Y in the Print member summary report field.
4. Type S in the Detail report style field.
5. Type Y in the Modify detail report content field.
6. Type Y in the Print CHANGED members field.
7. Type Y in the Print INSERTED members field.
8. Type Y in the Print DELETED members field.
9. Type N in the Print MATCHED members field.
10. Type N in the Print member name report field.
11. Press Enter. File-AID displays the [Compare - Print Options \(Page 2\) Screen](#) as illustrated in [Figure 207](#) on page 180.

Source Print Options (Page 2)

Data Print Options:

Lines to print	Specify A (All) for all lines to print or C (Changed) for changed lines only to print.
Shifted data reporting	Specify M (Matched) to report shifted data as matched or C (Changed) to report shifted data as changed data.
Print new file excluded lines	Specify Y (Yes) if you want the excluded lines of the New file to print or N (No) to suppress printing of the excluded lines. This option is ignored if Lines To Print is set to ALL.
Print source context ID lines	Specify whether you want the source context ID lines to be printed or to suppress printing of source context ID lines. This option is ignored unless Lines To Print is set to ALL. Excluded context ID lines will not print on the detail report.
	COBOL context ID lines are DIVISION lines, Section lines, 01 layout levels, and Paragraph names. PL/I context ID lines are DCL, DECLARE, and statement prefix labels.
Number of context lines to print	Specify the number (0-9) of context lines you want to be printed on the detail report. This option is ignored unless Lines To Print is set to ALL. Context Lines that are matched and non-excluded will print on the report based on the number entered. These lines will print before and after every change block. Context lines can include context ID lines.

Report Format Options

Status value for matched lines	Specify the status to be printed for matched lines:
M	(Matched) Prints the status <MAT> for each matched line.
B	(Blank) The status remains blank for each matched line.
Print old and new line numbers	Specify Y (Yes) to print both old and new line numbers or N (No) to suppress printing of both line numbers.

Across Report Style Options

Print old file matched lines	Specify Y (Yes) if you want old file matched lines to be printed or N (No) to suppress print of old file matched lines.
Print old file excluded lines	Specify Y (Yes) if you want the excluded lines of the old file to print or N (No) to suppress printing of the excluded lines
Data width to report	Specify one of the following width options to print source compare data for the across report style:
N	(Normal) for a 133 character report. Normal prints 61 characters of data for old and new each. If "Print old and new line numbers" is set to Yes, then 55 characters of data are printed. Source data is truncated equally on the right for both old and new file which means that changed data past position 61 or 55 is not visible, but the line is still marked as changed.
W	(Wide) for a 183 character report. Prints 80 characters of data for old and new each.

Flag Line Options

Underline changes	Specify one of the following:
O	(Old) Underline changes in OLD record.
N	(New) Underline changes in NEW record.
B	(Both) Underline changes in both OLD and NEW record.
blank	(Neither) Do not underline changes in either the OLD or NEW file.
CHANGED data underline character	Specify the character to be used as the one that underlines the changed data.

Figure 207. Compare - Print Options (Page 2) Screen

```

File-AID ----- Compare - Source Print Options (Page 2 of 2) -----
COMMAND ==>

Data Print Options:
  Lines to print      ==> A      (A = All; C = Changes only)
  Shifted data reporting ==> C      (M = Matched; C = Changed)
  Print new file excluded lines ==> Y      (Y = Yes; N = No)
  Print source context ID lines ==> Y      (Y = Yes; N = No)
  Number of context lines to print ==> 0      (0 - 9 context lines)

Report Format Options:
  Status value for matched lines ==> M      (B = blank; M = MATCH or <MAT>)
  Print old and new line numbers ==> Y      (Y = Yes; N = No)

Across Report Style Options:
  Print old file matched lines ==> N      (Y = Yes; N = No)
  Print old file excluded lines ==> N      (Y = Yes; N = No)
  Data width to report ==> N      (N = Normal; W = Wide)

Flag Line Options:
  Underline changes ==> B      (O = Old; N = New;
                                B = Both; blank = neither)
  CHANGED data underline character ==> ~

```

Steps:

1. Type **A** in the Lines to print field.
2. Type **C** in the Shifted data reporting field.
3. Type **Y** in the Print new file excluded lines field.
4. Type **Y** in the Print source context ID lines field.
5. Type **0** in the Number of context lines to print field.
6. Type **M** in the Status value for matched lines field.
7. Type **Y** in the Print old and new line numbers field.
8. Type **N** in the Print old file matched lines field.
9. Type **N** in the Print old file excluded lines field.
10. Type **N** in the Data width to report field.
11. Type **B** in the Underline changes field.
12. Type **~** in the CHANGED data underline character field.
13. Press Enter. File-AID displays the [Compare - Criteria Build Complete Screen](#) as illustrated in [Figure 208](#) on page 181.

Viewing Source Compare Criteria

File-AID displays the [Compare - Criteria Build Complete Screen](#) as shown in [Figure 208](#).

Figure 208. Compare - Criteria Build Complete Screen

```
File-AID ----- Compare - Criteria Build Complete -----
COMMAND ==> VIEW

Your COMPARE Criteria are complete. You may:

Use ENTER to execute COMPARE.
Use END to return to previous panel.
Use SAVE to save your criteria.
Use VIEW to inspect your criteria.
Use CANCEL to exit COMPARE (SAVE will not be issued).
```

Steps:

1. Type **VIEW** in the Command field to display the Compare criteria.
2. Press Enter.

[Figure 209](#) displays the current Compare Criteria.

Figure 209. Compare - View Source Criteria Screen

```
Menu Utilities Compilers Help
-----
BROWSE      USERID9.FILEAID.CC.D03316.T171211      Line 00000000 Col 001 080
Command ==>
***** Top of Data *****
*
*   COMPARISON OPTIONS
0000 COMPARISON_MODE=SOURCE
0000 MEMBER=*
0000 SOURCE_LANGUAGE=COBOL
0000 SOURCE_SYNCHRONIZATION=COBOL
0000 SOURCE_CASE_SENSITIVE=ASIS
0000 SOURCE_COLUMNS_TO_COMPARE=07,72
0000 SOURCE_COMPARE_EXCLUDE=COMMENT,BLANK,DIRECTIVE
0000 SOURCE_SELECTION_CRITERIA_ACTION=INCLUDE
*
*   PRINT OPTIONS
0000 MEMBER_TYPES_TO_PRINT=CHANGED,DELETED,INSERTED
0000 PDS_COMPARE=DETAIL
0000 SOURCE_DETAIL_REPORT_STYLE=STANDARD
0000 SOURCE_MEMBER_SUMMARY_REPORT=YES
0000 SOURCE_DETAIL_REPORT=YES
0000 SOURCE_DETAIL_REPORT_LINES_PRINTED=ALL
0000 SOURCE_REPORT_SHIFTED_DATA_REPORTING=CHANGED
```

Step:

1. Press <PF3> (END) when you are finished viewing the compare source criteria.

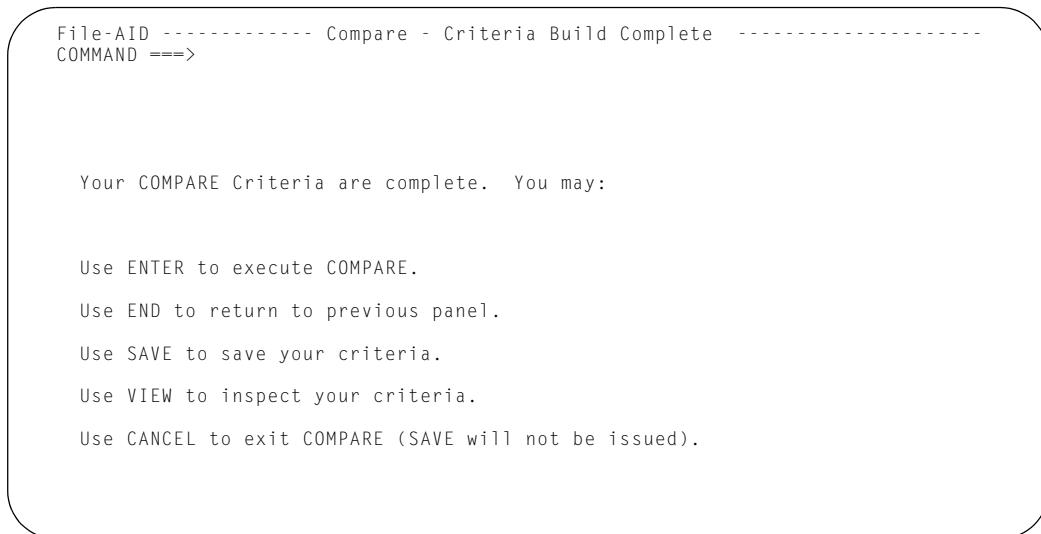
Executing Compare

File-AID redisplays the [Compare - Criteria Build Complete Screen](#) as shown in [Figure 210](#). At this point, you can choose to save the new compare criteria by entering the SAVE primary command and File-AID prompts you to enter Compare Criteria dataset information.

In this example, press Enter to execute the comparison. When online processing is requested, compare processing occurs in the foreground of your terminal.

If batch processing is specified, File-AID displays the JCL Specification screen (not shown here) from which you can enter the SUBMIT command to run the Compare function in the background. Use standard batch output review facilities to browse and print your compare report.

Figure 210. Compare - Criteria Build Complete Screen



Steps:

1. Press Enter to execute source compare as specified in the compare criteria and print options.

Analyzing the Compare Results Member Summary

The [Compare Results - Member Summary](#) screen, shown in [Figure 211](#), displays the Member Summary report when you set [Display interactive member summary screen](#) and [Print member summary report](#) to Y on the [Compare - Print Options \(Page 1\) Screen](#) on page 178.

The member summary identifies the old and new datasets and lists the compared members.

The compare report for each member is written to a temporary dataset. File-AID displays the temporary dataset in an ISPF Browse session as shown in [Figure 212](#) on page 184 when you enter the B line command. You can also exclude a member, so File-AID will not print the detail compare report for the excluded member.

Figure 211. Compare Results - Member Summary

```
File-AID ----- Compare Results - Member Summary----- Row 1 to 3 of 3
COMMAND ==> SCROLL ==> CSR

Old dataset: USERID9.FASAMP.COBSRC.OLD
New dataset: USERID9.FASAMP.COBSRC.NEW
Line commands: B = Browse report; X = eXclude detail print; E = Edit-helper
----- (Shifted) -----
S Name      Result    0-Line N-Line Match Change Delete Insert 0-excl N-excl
B CBLPGM1   CHANGED   99     99     60     26     2     1     11    12
_ CBLPGM3   DELETED   .       .       .       .       .       .       .
_ CBLPGM4   INSERTED  .       .       .       .       .       .       .
***** END OF MEMBER SUMMARY *****
```

Step:

1. Enter the B line command for the changed member to browse the report. File-AID displays the report for your analysis (see [Figure 212](#) on page 184).

Analyzing the Compare Report

The compare report is written to a temporary dataset and, upon completion, File-AID displays the temporary dataset in an ISPF Browse session as shown in [Figure 212](#).

You may need to scroll the report to the right to see information beyond column 80. All Browse commands are active including the FIND primary command and standard scroll commands (PF7, PF8, PF10, PF11).

If batch processing is specified, File-AID displays the JCL Specification screen (not shown here) from which you can enter the SUBMIT command to run the Compare function in the background. Use standard batch output review facilities to browse and print your compare report.

Figure 212. Compare - Online Report Screen

```

Menu Utilities Compilers Help
-----
BROWSE   USERID9.FILEAID.CR.D01066.T105050          Line 00000000 Col 001 132
Command ===>                                         Scroll ===> CSR
***** Top of Data *****
File-AID 17.2  COMPARE SOURCE DETAIL REPORT        USERID-
USERID9      DATE 2003/11/12    TIME 15:52:52
OLD DSN: USERID9.FASAMP.COBSRC.OLD(CBLPGM1)        NEW DSN: USERID9.FA
SAMP.COBSRC.NEW(CBLPGM1)

OLD-# NEW-# STATUS ----+---1----+---2----+---3----+---4----+---5----+---+
6-----+---7-----+---8

          00001 00001 MATCH  000100 IDENTIFICATION DIVISION.
          00010000
          00002 00002 MATCH  000200 PROGRAM-
ID.     CBLPGM1.                               00020000
          00003 X      000300*-----
          00030000
          00004 X      000400* Program CBLPGM1
          00040000
          00005 X      000500* TRIANGLE Type DETERMINATION

```

Step:

1. Enter DOWN MAX and LEFT MAX to display the last page of the report, which shows the COMPARE SUMMARY REPORT (see [Figure 213](#) on page 185).

Viewing the Compare Summary Report

At the end of the Compare output, a summary report of the results of the compare is produced as shown in [Figure 213](#).

After reviewing the summary report, use the END command to return to the [Compare Results - Member Summary](#).

Figure 213. Compare Report - Summary

```
Menu Utilities Compilers Help
-----
BROWSE      USERID9.FILEAID.CT.D03316.T160614      Line 00000188 Col 001 080
Command ===>                               Scroll ===> CSR

COMPARE STATISTICS:          OLD FILE   NEW FILE
  LINES READ:                 99         99
  LINES EXCLUDED:              11         12
  LINES COMPARED:              88         87

  NUMBER OF MATCHED LINES:    60         60
  NUMBER OF CHANGED LINES:    26         26
  NUMBER OF SHIFTED LINES:    1          1 (INCLUDED IN CHANGED)
  NUMBER OF DELETED LINES:    2
  NUMBER OF INSERTED LINES:   1

***** E N D   O F   R E P O R T *****
***** Bottom of Data *****
```

Step:

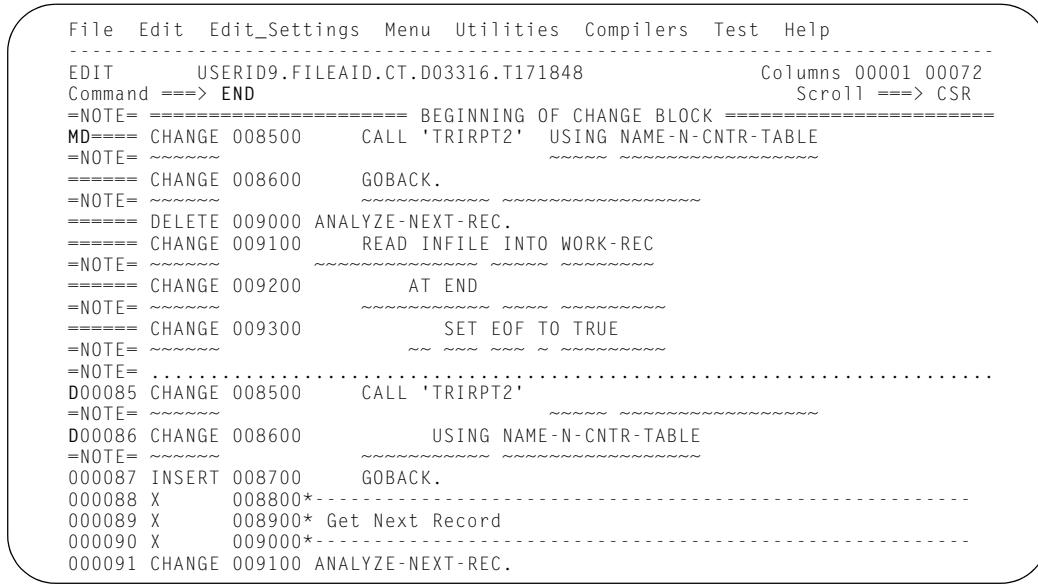
1. Press <PF3> (END) to exit the report and return to the [Compare Results - Member Summary](#) screen (see [Figure 211](#) on page 183).
2. Enter the E line command for the changed member to edit the NEW dataset. File-AID displays the NEW dataset with the differences inserted as notes (see [Figure 214](#) on page 186).

Editing the New Member

The [Compare Edit-Helper Screen](#), shown in [Figure 214](#), displays the Edit-Helper when you enter the E line command for a compared member on the [Compare Results - Member Summary](#).

For this exercise, turn the old line 008500 into a data line, delete new lines 008500 and 008600, then save the edited NEW member.

Figure 214. Compare Edit-Helper Screen



```

File Edit Edit_Settings Menu Utilities Compilers Test Help
-----
EDIT      USERID9.FILEAID.CT.D03316.T171848          Columns 00001 00072
Command ==> END                                     Scroll ==> CSR
=NOTE= ===== BEGINNING OF CHANGE BLOCK =====
MD==== CHANGE 008500      CALL 'TRIRPT2' USING NAME-N-CNTR-TABLE
=NOTE= ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~
===== CHANGE 008600      GOBACK.
=NOTE= ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~
===== DELETE 009000 ANALYZE-NEXT-REC.
===== CHANGE 009100      READ INFILE INTO WORK-REC
=NOTE= ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~
===== CHANGE 009200      AT END
=NOTE= ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~
===== CHANGE 009300      SET EOF TO TRUE
=NOTE= ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~
=NOTE= ..... D00085 CHANGE 008500      CALL 'TRIRPT2'
=NOTE= ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~
D00086 CHANGE 008600      USING NAME-N-CNTR-TABLE
=NOTE= ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~
000087 INSERT 008700      GOBACK.
000088 X    008800*-----.
000089 X    008900* Get Next Record
000090 X    009000*-----.
000091 CHANGE 009100 ANALYZE-NEXT-REC.

```

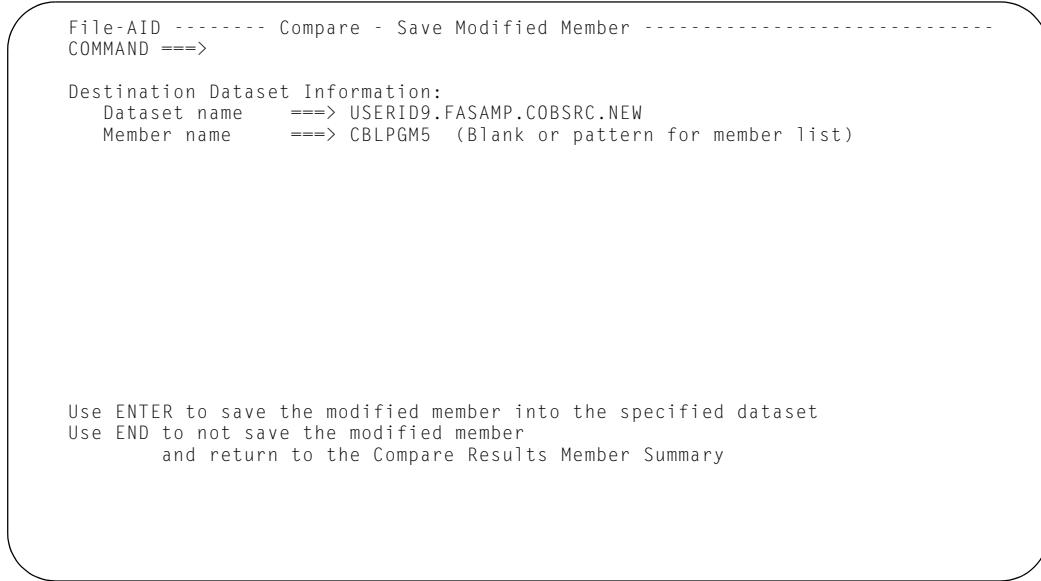
Steps:

1. Enter DOWN MAX to display the bottom of the file.
2. Enter UP until the BEGINNING OF CHANGE BLOCK starting with line 008500 displays.
3. Enter MD line command for OLD line 008500 to change the OLD line in the NOTE to a data line in the NEW file.
4. Enter D line command for NEW lines 008500 and 008600 to delete the NEW lines.
5. Press <PF3> (END) to exit the edit session. As you made changes to the NEW file, you return to the [Compare Save Modified Member Screen](#) (see [Figure 215](#) on page 187).

Saving the Modified Member

The [Compare Save Modified Member Screen](#), shown in [Figure 215](#), displays when you exit the [Compare Edit-Helper Screen](#). Your edit changes to the NEW member are only saved if you specify a dataset. File-AID strips out the temporarily inserted NOTE lines from the compare.

Figure 215. Compare Save Modified Member Screen



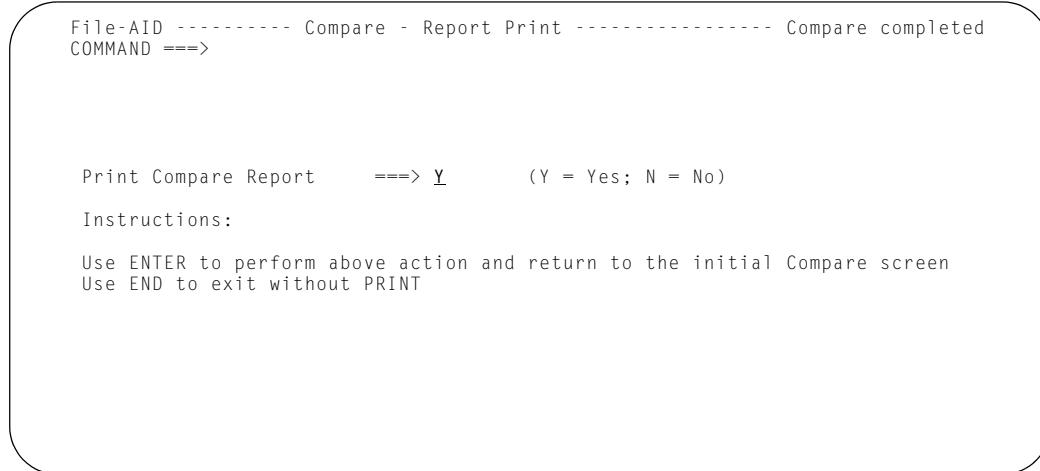
Steps:

1. Enter **USERID9.FASAMP.COBSRC.NEW** in the Dataset name field.
2. Enter **CBLPGM5** in the Member name field.
3. Press Enter to return to the [Compare Results - Member Summary](#) screen.

Printing the Report

After you have browsed the Compare report, File-AID displays the [Compare Report - Print Screen](#) allowing you to print the report. Type a "Y" in the Print Compare Report field to print a copy of the report.

Figure 216. Compare Report - Print Screen

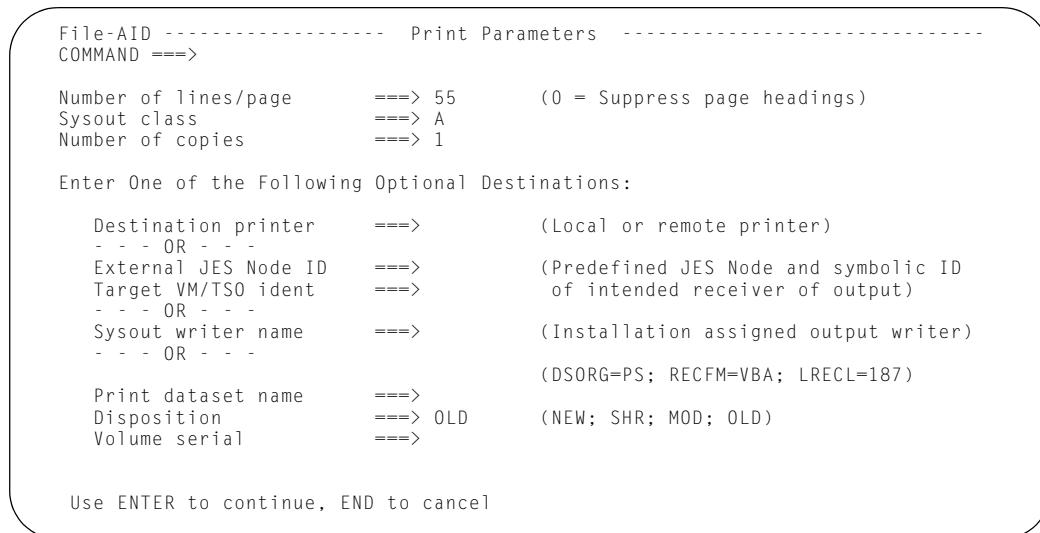


Steps:

1. Type a Y in the Print Compare Report field to print the compare report.
2. Press Enter.

File-AID displays the [Print Parameters Screen](#) as illustrated in [Figure 217](#).

Figure 217. Print Parameters Screen



Any change to Number of lines/page will NOT reformat the compare report.
The report format is determined by the values in effect during report generation.

Step:

1. Press Enter after making any necessary adjustments to the print parameters.

File-AID redisplays the [Compare - OLD Dataset Specification Screen](#) as shown in [Figure 218](#).

Figure 218. Compare - OLD Dataset Specification Screen

```
File-AID ----- Compare - OLD Dataset Specification -----
COMMAND ==>

Compare Mode      ===> S  (F = Formatted; U = Unformatted;
                           L = Load Library; S = Source code; J = JCL)
Specify OLD Dataset Information:
  Dataset name or zFS path ==> 'USERID9.FASAMP.COBSRC.OLD'
  Member name           ==> *          (Blank or pattern for member list)
  Volume serial         ==>          (If dataset is not catalogued)

Specify Record Layout and XREF Information:
  Record layout usage   ==> N      (S = Single; X = XREF; N = None)
  Record layout dataset ==>
  Member name           ==>          (Blank or pattern for member list)
  XREF dataset name    ==>
  Member name           ==>          (Blank or pattern for member list)

Specify Selection Criteria Information:      (E = Existing; T = Temporary;
  Selection criteria usage ==> N            M = Modify; Q = Quick; N = None)
  Selection dataset name ==>
  Member name           ==>          (Blank or pattern for member list)
```

Step:

1. Continue with [JCL Compare](#) on page 190 or enter the END command (press PF3) to redisplay the File-AID Primary Option Menu.

JCL Compare

The following example illustrates the process of comparing two JCL datasets.

- Compare all members in the JCL datasets.
- Process online.
- Select the keyword compare.
- Produce these reports:
 - Detailed
 - Across (side-by-side)
 - Member Summary.
- Use Edit-Helper to edit the new member while seeing the compare results.

The training datasets *hlq.FASAMP.JCL.OLD* and *hlq.FASAMP.JCL.NEW* contain the old and new JCL respectively.

Figure 219. Compare - OLD Dataset Specification Screen

```
File-AID ----- Compare - OLD Dataset Specification -----
COMMAND ==>

Compare Mode      ==> J  (F = Formatted; U = Unformatted;
                           L = Load Library; S = Source code; J = JCL
Specify OLD Dataset Information:
  Dataset name or zFS path ==> 'USERID9.FASAMP.JCL.OLD'
  Member name           ==> *
                           (Blank or pattern for member list)
  Volume serial         ==>                   (If dataset is not catalogued)

Specify Record Layout and XREF Information:
  Record layout usage   ==> N    (S = Single; X = XREF; N = None)
  Record layout dataset ==>
  Member name           ==>                   (Blank or pattern for member list)
  XREF dataset name     ==>
  Member name           ==>                   (Blank or pattern for member list)

Specify Selection Criteria Information:      (E = Existing; T = Temporary;
  Selection criteria usage ==> N            M = Modify; Q = Quick; N = None)
  Selection dataset name ==>
  Member name           ==>                   (Blank or pattern for member list)
```

Steps:

1. Type a **J** in the Compare Mode field.
2. Type **FASAMP.JCL.OLD** in the "OLD" Dataset name field.
3. Specify an ***** for Member name to compare all members.
4. Type an **N** in the Record layout usage field.
5. Press Enter. File-AID displays the [Compare - NEW Dataset Specification Screen](#) as illustrated in [Figure 220](#) on page 191.

Specifying the "New" JCL Dataset

The Compare NEW Dataset Specification screen allows you to specify the NEW JCL dataset you want to compare. It displays the Compare Mode that you specified on the Compare - OLD Dataset Specification screen.

Figure 220. Compare - NEW Dataset Specification Screen

```
File-AID ----- Compare - NEW Dataset Specification -----
COMMAND ==>

Compare Mode: JCL

OLD Dataset Name: USERID9.FASAMP.LOADLIB1
Specify NEW Dataset Information:
  Dataset name or zFS path ==> 'USERID9.FASAMP.JCL.NEW'
  Member name      ==>          (Blank or pattern for member list)
  Volume serial    ==>          (If dataset is not catalogued)

OLD Record Layout Usage: SINGLE
Specify Record Layout and XREF Information:
  Record layout dataset ==>
  Member name          ==>          (Blank or pattern for member list)
  XREF dataset name    ==>
  Member name          ==>          (Blank or pattern for member list)

Specify Selection Criteria Information: (E = Existing; T = Temporary;
  Selection criteria usage ==> N           M = Modify; Q = Quick; N = None)
  Selection dataset name ==>
  Member name          ==>          (Blank or pattern for member list)
```

Steps:

1. Type **FASAMP.JCL.NEW** in the "NEW" Dataset name field.
2. Press Enter. File-AID displays the [Compare - Execution Options Screen](#) as illustrated in [Figure 221](#) on page 192.

Specifying Execution Options

The [Compare - Execution Options Screen](#), as shown in [Figure 221](#), allows you to specify whether you want to process the compare online or batch. In addition, this screen allows you to specify the compare criteria dataset information that is required when you choose to use existing compare criteria.

In this example, simply press Enter to process online (the default).

Figure 221. Compare - Execution Options Screen

```
File-AID ----- Compare - Execution Options -----
COMMAND ===>

Specify Execution Options:
Process online or batch ===> O          (O = Online; B = Batch)

Specify Compare Criteria Information:
Compare criteria usage ===> N          (E = Existing; T = Temporary/New;
                                         M = Modify; Q = Quick; N = None)
Compare criteria dataset ===>
Member name                  ===>        (Blank or pattern for member list)
```

Steps:

1. Press Enter. File-AID displays the [Compare - JCL Criteria Screen](#) as illustrated in [Figure 222](#) on page 193.

Selecting Your Compare - JCL Criteria

The [Compare - JCL Criteria Screen](#), as shown in [Figure 222](#) on page 193, allows you to specify processing and output options for your JCL compare.

Compare Criteria

Use the following fields to specify the JCL criteria that you want File-AID to use in the comparison.

Compare type Specify the compare type for JCL: **K** for Keyword, **L** for Line compare.

Exclude Options

Use the following fields to specify what you want File-AID to exclude during the comparison.

Exclude Comments Enter Y (Yes--default) to exclude comments or N (No) to include the comments in the compare.

Exclude in-stream data Enter Y (Yes--default) to exclude instream data in the JCL compare or N (No) to include instream data in the JCL compare.

Print Options

Modify print defaults Specify whether you want to modify the print options for the Compare Report. Print option values are saved in your user profile. Valid entries are Y (Yes) and N (No). All default print option values are the last print option values that you entered for the last source compare.

Figure 222. Compare - JCL Criteria Screen

File-AID ----- Compare - JCL Criteria -----
COMMAND ==>

Compare criteria:
Compare type ==> **K** (K = Keyword; L = Line)

Exclude Options:
Exclude comments ==> **Y** (Y = Yes; N = No)
Exclude in-stream data ==> **N** (Y = Yes; N = No)

Print Options:
Modify print defaults ==> **Y** (Y = Yes; N = No)

Steps:

1. Type **K** in the Compare type field to specify keyword JCL compare.
2. Type **Y** in the Exclude comments field.
3. Type **N** in the Exclude in-stream data field.
4. Type **Y** in the Modify print defaults field.
5. Press Enter. File-AID displays the Compare - JCL Print Options (Page 1) screen as illustrated in [Figure 223](#) on page 195.

Specifying JCL Print Options

The [Compare - JCL Print Options \(Page 1\) Screen](#), as shown in [Figure 223](#), is displayed when you specify a Y in the Modify print defaults field on the [Compare - JCL Criteria Screen](#). The [Compare - JCL Print Options \(Page 1\) Screen](#) enables you to control your compare reports, what you want to view online, what to include in the reports, and what reports to print.

The values specified for the print options are saved in your user profile. Subsequent compare reports use the last values that were entered even if you do **not** return to this screen.

JCL Print Options (Page 1)

Online Report Viewing Options:

Display interactive member summary screen	Specify Y (Yes) to display the interactive screen where you view the member list with a compare summary for each member and select member(s) to B (Browse), E (Edit), or X (Exclude) the compare results.
	Note: The separate member name report (if requested) cannot be viewed from this summary screen. However, the interactive member summary screen displays a similar one-line summary of statistics for each member compared.
	Specify N (No) to skip the member summary screen and directly browse the compare report(s).

Detail Report Print Options

File-AID provides these detail report print options:

Print detail report	Y (Yes) includes the details specified on JCL Criteria screen in the Compare Report.
Print member summary report	Y (Yes) prints a summary of differences by member.
Detail report style	Specify S (Standard) for standard report style or A (Across) for across (side-by-side) report style.
Modify detail report content	Specify Y (Yes) if you want to modify the detail report content or N (No) to skip modification
Print CHANGED members	Y (Yes) prints the changed members.
Print INSERTED members	Y (Yes) prints the inserted members.
Print DELETED members	Y (Yes) prints the deleted members.
Print MATCHED members	Y (Yes) prints the matched members.

Even if you suppress printing the CHANGED, INSERTED, DELETED, and MATCHED members, Compare always generates a Summary Report.

Member Name Report Print Options

Print member name report	Y (Yes) prints a list of the members processed and their status (changed, inserted, deleted, or matched).
Member name report columns	Specify the number of columns to use for the Member Name Report. Valid entries are 1-8.

Figure 223. Compare - JCL Print Options (Page 1) Screen

```
File-AID ----- Compare - JCL Print Options (Page 1) -----
COMMAND ==>

Online Report Viewing Options:
  Display interactive member summary screen ==> Y (Y = Yes; N = No)

Detail Report Print Options:
  Print detail report           ==> Y (Y = Yes; N = No)
  Print member summary report   ==> Y (Y = Yes; N = No)
  Detail report style          ==> A (S = Standard; A = Across)
  Modify detail report content ==> Y (Y = Yes; N = No)

  Print CHANGED members        ==> Y (Y = Yes; N = No)
  Print INSERTED members       ==> Y (Y = Yes; N = No)
  Print DELETED members        ==> Y (Y = Yes; N = No)
  Print MATCHED members        ==> N (Y = Yes; N = No)
  (a Summary Report is ALWAYS generated)

Member Name Report Print Options:
  Print member name report     ==> N (Y = Yes; N = No)
  Member name report columns   ==> 8 (1 - 8 print columns)
```

Steps:

1. Type Y in the Display interactive member summary screen field.
2. Type Y in the Print detail report field.
3. Type Y in the Print member summary report field.
4. Type A in the Detail report style field.
5. Type Y in the Modify detail report content field.
6. Type Y in the Print CHANGED members field.
7. Type Y in the Print INSERTED members field.
8. Type Y in the Print DELETED members field.
9. Type N in the Print MATCHED members field.
10. Type N in the Print member name report field.
11. Press Enter. File-AID displays the [Compare - JCL Print Options \(Page 2\) Screen](#) as illustrated in [Figure 224](#) on page 197.

JCL Print Options (Page 2)

Data Print Options:

Statements to print	Specify A (All) for all statements to print or C (Changed) for changed statements only to print.
Print new file excluded lines	Specify Y (Yes) if you want the excluded lines of the New file to print or N (No) to suppress printing of the excluded lines If set to YES, Statements to Print must be set to ALL to see the New File Excluded lines.
Print matched in-stream data	Specify Y (Yes) if you want matched instream data to be printed or N (No) to suppress printing of matched instream data. If set to YES, Statements to Print must be set to ALL to see the Matched In-Stream Data lines.

Report Format Options

Status value for matched lines	Specify the status to be printed for matched lines:
M	(Matched) Prints the status <MAT> for each matched line.
B	(Blank) The status remains blank for each matched line.
Print old and new line numbers	Specify Y (Yes) to print both old and new line numbers or N (No) to suppress printing of both line numbers.
Print job/step header lines	Specify Y (Yes) to print the job/step header lines or N (No) to suppress printing of job/step header lines.

Across Report Style Options

Print old file matched lines	Specify Y (Yes) if you want old file matched lines to be printed or N (No) to suppress print of old file matched lines.
Print old file excluded lines	Specify Y (Yes) if you want the excluded lines of the old file to print or N (No) to suppress printing of the excluded lines
Data width to report	Specify one of the following width options to print JCL compare data for the across report style:
N	(Normal) for a 133 character report. Normal prints 61 characters of data for old and new each. If "Print old and new line numbers" is set to Yes, then 55 characters of data are printed. JCL data is truncated equally on the right for both old and new file which means that changed data past position 61 or 55 is not visible, but the line is still marked as changed.
W	(Wide) for a 183 character report. Prints 80 characters of data for old and new each.

Flag Line Options

Underline changes	Specify one of the following:
O	(Old) Underline changes in OLD record.
N	(New) Underline changes in NEW record.
B	(Both) Underline changes in both OLD and NEW record.
blank	(Neither) Do not underline changes in either the OLD or NEW file.
CHANGED data underline character	Specify the character to be used as the one to underline the changed data. This character is used in JCL keyword and line compare to indicate the changed data. It is also printed under the word CHANGE as an eye catcher on the line compare report.
Keyword underline character	Specify the character to be used as the one to underline the keyword for the changed data. This character is used in JCL keyword compare to indicate the keyword that has changes associated with it. It is also printed under the word CHANGE as an eye catcher on the keyword compare report. The actual changes have the Changed Data Underline Character as described above.



For Keyword compares only: Character **I** is used to underline inserted keywords and data, Character **D** is used to underline deleted keywords and data.

Figure 224. Compare - JCL Print Options (Page 2) Screen

File-AID ----- Compare - JCL Print Options (Page 2 of 2) -----		
COMMAND ==>		
Data Print Options:		
Statements to print	==> A	(A = All; C = Changes only)
Print new file excluded lines	==> Y	(Y = Yes; N = No)
Print matched in-stream data	==> Y	(Y = Yes; N = No)
Report Format Options:		
Status value for matched lines	==> M	(B = blank; M = MATCH or <MAT>)
Print old and new line numbers	==> Y	(Y = Yes; N = No)
Print job/step header lines	==> Y	(Y = Yes; N = No)
Across Report Style Options:		
Print old file matched lines	==> N	(Y = Yes; N = No)
Print old file excluded lines	==> N	(Y = Yes; N = No)
Data width to report	==> N	(N = Normal; W = Wide)
Flag Line Options:		
Underline changes	==> B	(O = Old; N = New; B = Both; blank = neither)
CHANGED data underline character	==> ±	
Keyword underline character	==> ≈	

Steps:

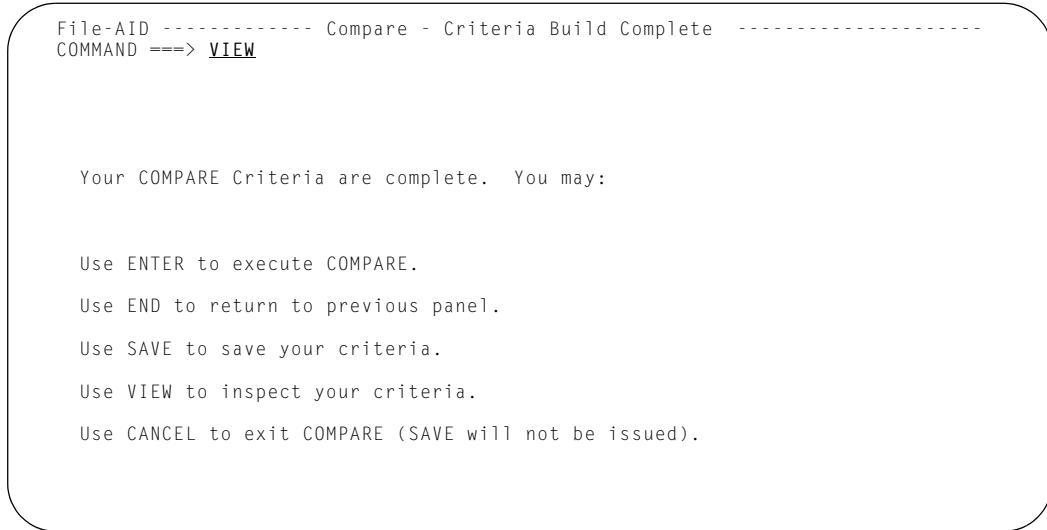
1. Type **A** in the Statements to print field.
2. Type **Y** in the Print new file excluded lines field.
3. Type **Y** in the Print matched in-stream data field.
4. Type **M** in the Status value for matched lines field.

5. Type Y in the Print old and new line numbers field.
6. Type Y in the Print job/step header lines field
7. Type N in the Print old file matched lines field.
8. Type N in the Print old file excluded lines field.
9. Type N in the Data width to report field.
10. Type **B** in the Underline changes field.
11. Type + in the CHANGED data underline character field.
12. Type ~ in the Keyword underline character field.
13. Press Enter. File-AID displays the [Compare - Criteria Build Complete Screen](#) as illustrated in [Figure 225](#) on page 199.

Viewing JCL Compare Criteria

File-AID displays the [Compare - Criteria Build Complete Screen](#) as shown in [Figure 225](#).

Figure 225. Compare - Criteria Build Complete Screen

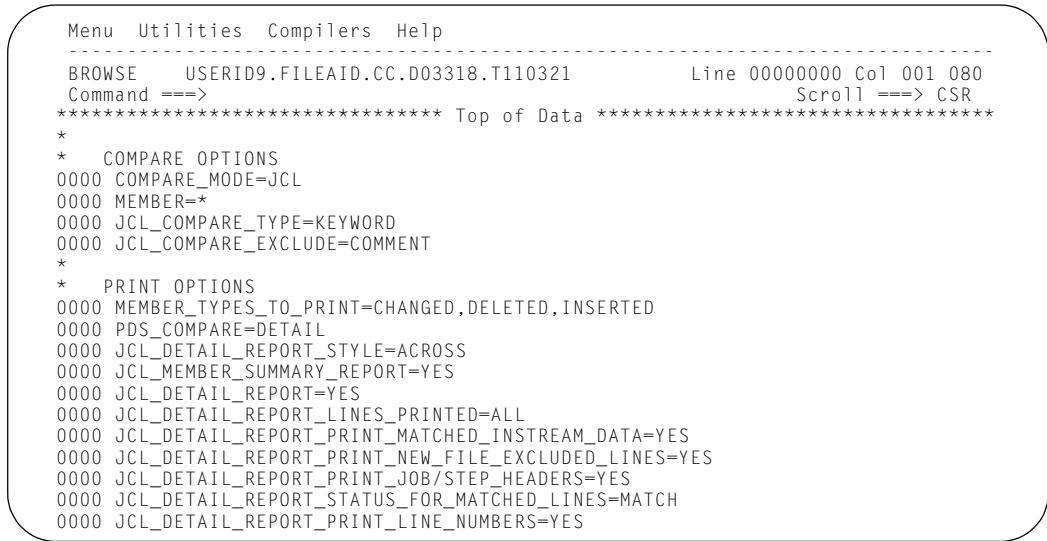


Steps:

1. Type **VIEW** in the Command field to display the Compare criteria.
2. Press Enter.

[Figure 226](#) displays the current Compare Criteria.

Figure 226. Compare - View JCL Criteria Screen



Step:

1. Press <PF3> (END) when you are finished viewing the compare JCL criteria.

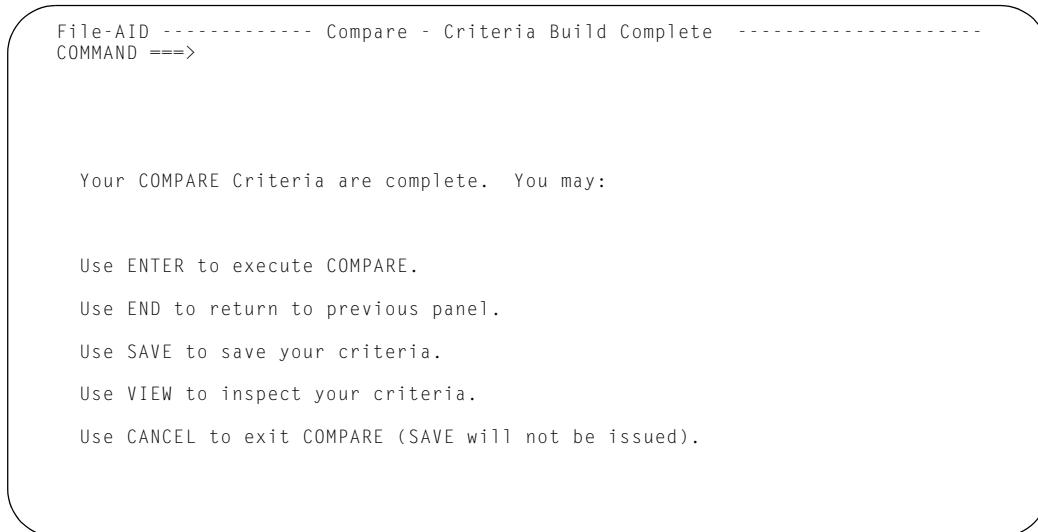
Executing Compare

File-AID redisplays the [Compare - Criteria Build Complete Screen](#) as shown in [Figure 227](#). At this point, you can choose to save the new compare criteria by entering the SAVE primary command and File-AID prompts you to enter Compare Criteria dataset information.

In this example, press Enter to execute the comparison. When online processing is requested, compare processing occurs in the foreground of your terminal.

If batch processing is specified, File-AID displays the JCL Specification screen (not shown here) from which you can enter the SUBMIT command to run the Compare function in the background. Use standard batch output review facilities to browse and print your compare report.

Figure 227. Compare - Criteria Build Complete Screen



Steps:

1. Press Enter to execute JCL compare as specified in the compare criteria and print options.

Analyzing the Compare Results Member Summary

The [Compare Results - Member Summary](#) screen, shown in [Figure 228](#), displays the Member Summary report when you set [Display interactive member summary screen](#) and [Print member summary report](#) to Y on the [Compare - Print Options \(Page 1\) Screen](#) on page 178.

The member summary lists the compared members and identifies the old and new datasets.

The compare report for each member is written to a temporary dataset. File-AID displays the temporary dataset in an ISPF Browse session as shown in [Figure 229](#) on page 202 when you enter the B line command. You can also exclude a member, so File-AID will not print the detail compare report for the excluded member.

Figure 228. Compare Results - Member Summary

```
File-AID ----- Compare Results - Member Summary----- Row 1 to 3 of 3
COMMAND ==> SCROLL ==> CSR

Old dataset: USERID9.FASAMP.JCL.OLD
New dataset: USERID9.FASAMP.JCL.NEW
Line commands: B = Browse report; X = eXclude detail print; E = Edit-helper
                ----- Statements ----- Lines ---
S Name      Result    0-Read N-Read Match Change Delete Insert 0-excl N-excl
B JCL2      CHANGED   12     12     10     2     .     .     6     6
_ JCL3      DELETED   .       .       .       .       .       .
_ JCL4      INSERTED  .       .       .       .       .       .
***** END OF MEMBER SUMMARY *****
```

Step:

1. Enter the B line command for the changed member to browse the report.

Analyzing the Compare Report

The compare report is written to a temporary dataset and, upon completion, File-AID displays the temporary dataset in an ISPF Browse session as shown in [Figure 229](#).

You may need to scroll the report to the right to see information beyond column 80. All Browse commands are active including the FIND primary command and standard scroll commands (PF7, PF8, PF10, PF11).

If batch processing is specified, File-AID displays the JCL Specification screen (not shown here) from which you can enter the SUBMIT command to run the Compare function in the background. Use standard batch output review facilities to browse and print your compare report.



For Keyword compares only: Character **I** is used to underline inserted keywords and data, Character **D** is used to underline deleted keywords and data.

Figure 229. Compare - Online Report Screen

```

Menu Utilities Compilers Help

SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS
SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS
BROWSE USERID9.FILEAID.CT.D03318.T112250
Line 00000000 Col 001 132
Command ===>
Scroll ===> CSR
***** Top of Data
*****
FILE-AID 17.2 COMPARE JCL DETAIL REPORT           USERID-USERID9 DATE 2003/11/14
TIME 11:22:44      PAGE    1
OLD DSN: USERID9.FASAMP.JCL.OLD(JCL2)            NEW DSN:
USERID9.FASAMP.JCL.NEW(JCL2)

----+---1----+---2----+---3----+---4----+---5----+ OLD-# STATUS NEW-# ----+
1----+---2----+---3----+---4----+---5----+
JOB     NAME = MYJOB    FILE = OLD/NEW  STATUS = CHANGED
                               <MAT> 00001 //MYJOB
JOB (ACCOUNTING),
NOTIFY=TSouser,           *** TSO USE
                                         00002 //*

```

Step:

- Enter **DOWN MAX** and **LEFT MAX** to display the last page of the report, which shows the [Compare Report - Summary](#) (see [Figure 230](#) on page 203).

Viewing the Compare Summary Report

At the end of the Compare output, a summary report of the results of the compare is produced as shown in [Figure 230](#).

Also shown are the results of the selection criteria and any special compare criteria specified.

After reviewing the summary report, use the END command to exit the Compare function and return to the File-AID Primary Option Menu.

Figure 230. Compare Report - Summary

```
Menu Utilities Compilers Help
-----
BROWSE      USERID9.FILEAID.CT.D03318.T112250          Line 00000067 Col 001 080
Command ==>                                         Scroll ==> CSR

COMPARE STATISTICS:           OLD FILE   NEW FILE
  LINES READ:                 34          33
  LINES EXCLUDED:              6           6
  LINES COMPARED:             28          27

  STATEMENTS COMPARED:        12          12
  NUMBER OF MATCHED STATEMENTS: 10          10
  NUMBER OF CHANGED STATEMENTS: 2           2
  NUMBER OF DELETED STATEMENTS: 0
  NUMBER OF INSERTED STATEMENTS: 0

  STEPS COMPARED:              2           2
  NUMBER OF MATCHED STEPS:     0           0
  NUMBER OF CHANGED STEPS:     2           2
  NUMBER OF DELETED STEPS:     0
  NUMBER OF INSERTED STEPS:    0

***** E N D   O F   R E P O R T   *****
***** ***** Bottom of Data ***** *****
```

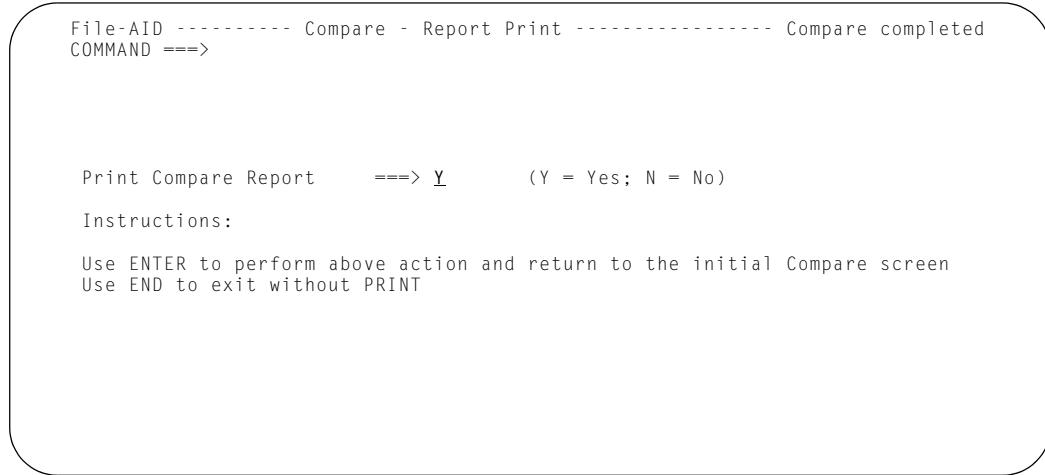
Steps:

1. Press <PF3> (END) to exit the report.
2. Press <PF3> (END) to exit the [Compare Results - Member Summary](#) screen.

Printing the Report

After you have browsed the Compare report, File-AID displays the [Compare Report - Print Screen](#) allowing you to print the report. Type a "Y" in the Print Compare Report field to print a copy of the report.

Figure 231. Compare Report - Print Screen



Steps:

1. Type a Y in the Print Compare Report field to print the compare report.
2. Press Enter.

File-AID displays the Print Parameters screen as illustrated in [Figure 232](#).

Figure 232. Print Parameters Screen

```
File-AID ----- Print Parameters -----
COMMAND ==>

Number of lines/page      ==> 55      (0 = Suppress page headings)
Sysout class              ==> A
Number of copies           ==> 1

Enter One of the Following Optional Destinations:

Destination printer       ==>          (Local or remote printer)
--- OR ---
External JES Node ID     ==>          (Predefined JES Node and symbolic ID
Target VM/TSO ident       ==>          of intended receiver of output)
--- OR ---
Sysout writer name        ==>          (Installation assigned output writer)
--- OR ---
Print dataset name         ==>          (DSORG=PS; RECFM=VBA; LRECL=187)
Disposition                ==> OLD      (NEW; SHR; MOD; OLD)
Volume serial               ==>

Use ENTER to continue, END to cancel
```



Any change to Number of lines/page will NOT reformat the compare report.
The report format is determined by the values in effect during report generation.

Step:

1. Press Enter after making any necessary adjustments to the print parameters.

File-AID redisplays the [Compare - OLD Dataset Specification Screen](#) as shown in [Figure 233](#).

Figure 233. Compare - OLD Dataset Specification Screen

```
File-AID ----- Compare - OLD Dataset Specification -----
COMMAND ==>

Compare Mode             ==> J  (F = Formatted; U = Unformatted;
                                L = Load Library; S = Source code; J = JCL)
Specify OLD Dataset Information:
  Dataset name or zFS path ==> 'USERID9.FASAMP.JCL.OLD'
  Member name              ==> *          (Blank or pattern for member list)
  Volume serial              ==>          (If dataset is not catalogued)

Specify Record Layout and XREF Information:
  Record layout usage      ==> N          (S = Single; X = XREF; N = None)
  Record layout dataset    ==>
  Member name              ==>          (Blank or pattern for member list)
  XREF dataset name        ==>
  Member name              ==>          (Blank or pattern for member list)

Specify Selection Criteria Information:
  Selection criteria usage ==> N          (E = Existing; T = Temporary;
                                M = Modify; Q = Quick; N = None)
  Selection dataset name   ==>
  Member name              ==>          (Blank or pattern for member list)
```

Step:

1. Enter the **END** command (press **PF3**) to redisplay the File-AID Primary Option Menu.

Scanning and Updating Datasets

The File-AID 3.6 Search/Update utility is a powerful utility for scanning and making changes to any MVS file, including CA Panvalet and CA Librarian libraries.

The M suboption (PDS Find/Change and Member List Processing) gives you an easy to use FIND command to isolate a list of members matching your criteria. For PDS/PDSE datasets you may use the CHANGE command to perform changes across all or selected members.

Accessing the Search/Update Utility (Option 3.6)

The Search/Update utility is located on File-AID's Extended Utilities menu (Option 3) as utility number 6.

Step:

1. From the File-AID Primary Option Menu (not shown here), select File-AID option **3.6** to access the Search/Update utility entry screen ([Figure 234](#) on page 208).



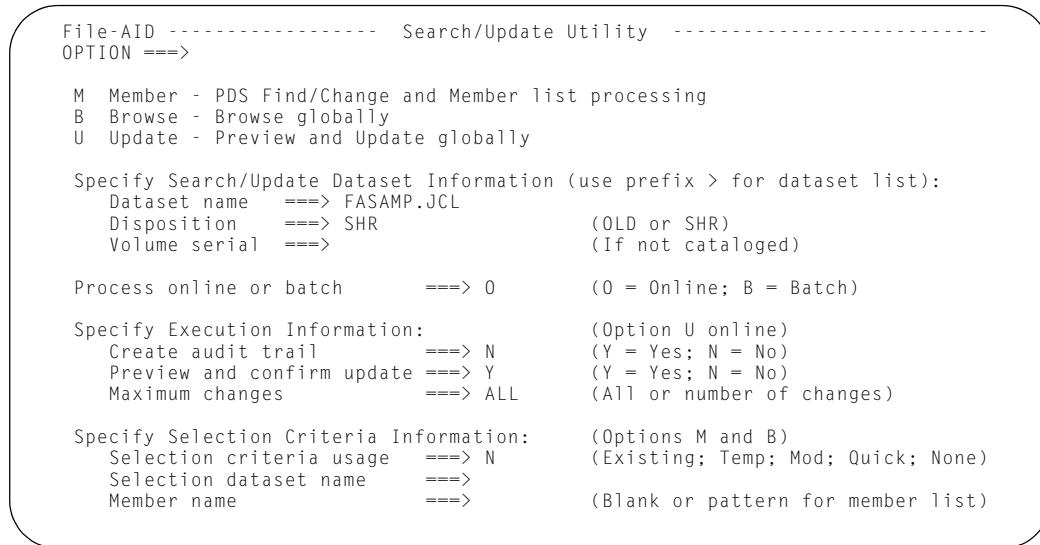
When viewing a list of datasets presented by the File-AID 3.4 Catalog utility or 3.7 VTOC utility, you can select a dataset for Search/Update processing by issuing the line command 6.

Defining Your Search/Update Request

The Search/Update entry screen (see [Figure 234](#) on page 208) captures your:

- Main request option:
 - M for PDS Find/Change and Member List Processing
 - B for scanning any dataset(s)
 - U for single or multiple dataset global change preview and update (CA Panvalet, and CA Librarian libraries are not eligible for multiple dataset processing. If they are included in the list of selected datasets, they will be listed in the exception report of the resulting work file.)
- Dataset name:
 - Specify a pattern for multiple dataset processing (options Band U only)
 - Precede a file containing a list of files with special character > for multiple dataset processing (options B and U only)
- Disposition (options M and U only: SHR or OLD)
- Processing option: online or batch
- Standard File-AID selection criteria usage (options M and B only):
 - N - No selection criteria - process all records
 - E - Use existing criteria member
 - M - Modify an existing criteria member
 - T - Create new temporary selection criteria
 - Q - Create new temporary unformatted selection criteria

Figure 234. Search/Update Utility Entry Screen



When option U is requested, selection criteria usage is ignored. The Search/Update utility automatically provides *temporary* unformatted selection criteria for defining your change. For option M (PDS Find/Change) online, you may use selection criteria to limit the initial member list to only those members which contain matching records.

For all options, you may set the "Process online or batch" field to perform your Search/Update request online (O) at your terminal, or to generate JCL for File-AID/Batch execution as a background (B) job in MVS. Multiple dataset processing for options B and U is available for both batch and online processing.

When running option U (Update) online, special processing options you may request include:

- An audit trail report of changes applied
- A preview of your changes (which you may optionally print after viewing)
- A limit to the number of changes you wish to preview or apply.

Full support for updating Panvalet and Librarian libraries is available in the U (Update) option as long as multiple dataset processing is not invoked. When you select online processing, you may see a preview of the change statements. Updating is always performed in batch as a background job in MVS. File-AID automatically generates the correct JCL for the appropriate update utility. If you just wish to scan Panvalet or Librarian libraries, you may choose either the M option to work with a member list matching your FIND command entries, or the B option to generate a display or report summarizing the members matching your selection criteria.

Generating a PDS Find/Change Member List of Selected Members

This example lists all members of your sample JCL partitioned dataset (PDS) library (FASAMP.JCL) that contain a job step that executes program name FILEAID (for example, EXEC PGM=FILEAID). Then it shows you how to use the CHANGE command to update selected members.

You use option M (Member) - PDS Find/Change and Member list processing. Temporary unformatted selection criteria (usage code Q) is defined to determine the initial list of matching members.

Figure 235. Search/Update Utility Entry Screen

File-AID ----- Search/Update Utility -----	
OPTION ==> M	
M Member - PDS Find/Change and Member list processing	
B Browse - Browse globally	
U Update - Preview and Update globally	
Specify Search/Update Dataset Information (use prefix > for dataset list):	
Dataset name ==>	FASAMP.JCL
Disposition ==>	SHR (OLD or SHR)
Volume serial ==>	(If not cataloged)
Process online or batch ==>	O (O = Online; B = Batch)
Specify Execution Information:	
Create audit trail ==>	N (Y = Yes; N = No)
Preview and confirm update ==>	Y (Y = Yes; N = No)
Maximum changes ==>	ALL (All or number of changes)
Specify Selection Criteria Information:	
Selection criteria usage ==>	Q (Options M and B)
Selection dataset name ==>	(Existing; Temp; Mod; Quick; None)
Member name ==>	(Blank or pattern for member list)

Steps:

1. Type **M** in the OPTION field.
2. Enter **FASAMP.JCL** in the Dataset name field.
3. Enter the Disposition as **SHR**.
4. Make sure processing option is **O** (online).
5. Type **Q** in the selection criteria usage field.
Q (Quick) requests temporary unformatted field selection criteria only.
6. Press Enter.

More About the Search/Update Entry Screen

- Standard File-AID dataset and member name entry is supported including using a wildcard character in either dataset name (for example, **FASAMP.***) or member name (for example, **FASAMP.JCL(CNV*)**).
- For option M only, the dataset specified must be a PDS, Panvalet, or Librarian library.
- For options B or U, all file types are valid including VSAM, BDAM, PDS, sequential, Panvalet and Librarian, File-AID considers PDS, Panvalet, and Librarian libraries as if they were one big sequential file, processing all members together.
- Multiple dataset processing is only available for options B or U.

Using PDS Member Selection Features

When your dataset is a PDS, Panvalet, or Librarian file, special member processing is automatically provided to let you select all members or a subset of members based on:

- Member name
 - Name mask (for example, A?B or AB*)
 - Name range (for example, From AB through BC)
- ISPF statistics
 - Last modified user ID range (PDS, Panvalet only)
 - Date created range (PDS only)
 - Date last modified range
- Manual selection or exclusion of individual members from a list of members matching your member criteria.

The default is to select all members.

Figure 236. Search/Update Utility - PDS Processing Options Screen

```

File-AID ----- PDS Processing Options -----
COMMAND ==>

Dataset: USERID9.FASAMP.JCL

Process in JCL format      ==> N      (Y = Yes; N = No)

Specify Member Selection Options (Blank for All Members)
Member name mask          ==>
Member name range          ==>      to ==>
Last modified userid       ==>      to ==>
Creation date              ==>      to ==>      (YY/MM/DD)
Modification date          ==>      to ==>      (YY/MM/DD)

Use ENTER to continue, END to return to dataset specification screen

```

Step:

1. You want all members (the default), just press Enter to continue to the next screen.

More About PDS Processing Options (PPO)

- In several File-AID functions, you may specify a range of PDS members to be processed by the current function. In addition to the 3.6 Search/Update utility, you may use the member selection features in the following:
 - Browse (1)
 - Edit (2)
 - Copy (3.3)
 - Print Data (5.1)
 - Print XREF (5.2)
 - Print Selection Criteria (5.3)
 - Print Layouts (5.4)
 - When selecting record layouts in any function and a blank or pattern member name is specified.
- If a member mask like **FASAMP.JCL(CNV*)** was specified on the entry screen, the mask, **CNV***, would automatically be transferred to the "Member name mask" field, ready for selection.

- If you are scanning JCL members and your selection criteria is looking for multiple conditions within a logical JCL statement (for example, a DD statement containing both DISP=OLD and UNIT=TAPE), use "Process in JCL format" = Y.
- Use a member name of * (asterisk) on the entry screen to select all members and to bypass the PPO screen. For example, FASAMP.JCL(*).
- If your selected datasets included one or more Version 2 PDSEs for Search/Update utility option B, Browse, you can specify how many member generations to process with the [Maximum number of generations to include in search](#) prompt in the PDS Processing Option screen.

Specifying Quick Selection Criteria

Because you specified selection criteria usage code Q (Quick), the next screen displayed is the Unformatted Selection Criteria screen as shown in [Figure 237](#). You use this screen to specify what data condition(s) you are looking for in a record in order for the member containing that record to be included on your member list.

In this example, you are looking for a JCL statement containing the string PGM=FILEAID.

You use the CO (Contains) relational operator (RO) to specify a scan of each statement starting at Position 1. No length is specified because File-AID defaults the length of a scan to: "end of the record".

Figure 237. Search/Update Utility - Unformatted Field Selection Criteria Screen

Cmd	/OR	Position	Length	RO	Data	Value
1				CO	PGM=FILEAID	EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ

Steps:

1. On the first line type 1 in the Position column.
2. Type CO in the RO column.
3. Type PGM=FILEAID in the Data Value area.
4. Use the END command or PF key (default PF3) to proceed with PDS scanning and member list generation.

More About Unformatted Selection Criteria

- Use the END command immediately on entry to select all members before specifying any conditions.

- In the AND/OR column, AND is used to define complex criteria conditions, OR starts a new set of selection criteria. If a record fails to meet the conditions of a set, the next set is examined.
- After using a CO (Contains) relational operator, you can specify a Position value as relative to the location of the matching string (for example, Position +5 means the fifth byte after the first byte of the matched string).
- Valid RO include: EQ, NE, LT, LE, GT, GE, BT (Between), NB (Not Between), CO (Contains), NC (Not Contains), NV (Not Valid), VA (Valid), NU (Not Valid Unsigned), and VU (Valid Unsigned).
- Data Value is assumed to be mixed case text (matches any case in data), as if data type T (Text) is specified.
- If data string contains special characters or embedded blanks, enclose the string in single ('') or double quotes (""). If the special character is a comma, use double quotes.
- For exact case searches, enclose the string in quotes and use the C (Character) data type (for example, C'John Smith').
- You can use CO or EQ relational operators to look for multiple strings by separating the strings with commas (for example, ABC,DEF,GHI looks for ABC or DEF or GHI at the specified position).
- For BT or NB, use a colon (:) to delimit the endpoints of the range. BT includes the endpoints. NB excludes the endpoints. For example, BT C'A:C' means a value between A and C.
- Valid Data Value types include:

T (text)	Any case
C (text)	Explicit case
P (packed decimal)	Numeric values (for example, P'1', P'-50', P'1,22,333')
X (hex)	Hex value (for example, X'F1F2' X'C1C2C3')
N (numeric)	Display format (for example, N'11' = X'F1F1')
B (binary)	Numeric value of binary field (for example, B'16' is equivalent to X'00000010')
M (mask)	One byte of 8 bits or 2 hexadecimal digits (for example, M'11110000' and M'F0' are equivalent).

Japanese Data: DBCS and single byte Katakana data is accepted as data values for C (Character) and T (Text) data types. File-AID removes leading or trailing shift characters from DBCS data unless the value is enclosed in double quotes.

When the KANA install option is specified for the Character Set Table in the Batch Product Option Variables, C (Character) and T (Text) identifiers are both treated as case-sensitive C (Character) data.

Viewing the Initial PDS Find/Change Member List

File-AID scans your PDS looking at members meeting your member selection criteria and looks at each record to see if it meets the conditions you specified in your Unformatted Selection Criteria.

A list of matching members is generated and presented with the PDS Find/Change member list screen as shown below in [Figure 238](#).

Figure 238. Search/Update Utility - PDS Find/Change Member List (M Option)

```

File-AID - PDS Find/Change - USERID9.FASAMP.JCL ----- ROW 1 TO 15 OF 15
COMMAND ===>                                         SCROLL ===> CSR
  Use FIND or CHANGE command to process across the following members.
  (Omit FIND/CHANGE operands for a prompt panel.)
  Use RESET command to get a full member list.
  Line commands: S or V View; E Edit; B Browse; X eXclude
-----
S  NAME      HITS VV.MM CREATED     CHANGED      SIZE INIT MOD   ID
B  BATVTOC    1 01.00 95/02/06 95/02/06 11:08   23   23   0  USERID9
E  COPY       1 01.00 95/02/06 95/02/06 11:08   22   22   0  USERID9
X  CVT6XMAP   1 01.00 95/02/06 95/02/06 11:08   37   37   0  USERID9
X  CVT70SEL   1 01.00 95/02/06 95/02/06 11:08   22   22   0  USERID9
X  CVT70XRF   1 01.00 95/02/06 95/02/06 11:08   21   21   0  USERID9
DROP          1 01.00 95/02/06 95/02/06 11:08   20   20   0  USERID9
DUMP          1 01.00 95/02/06 95/02/06 11:08   18   18   0  USERID9
JCLCNVRT    1 01.00 95/02/06 95/02/06 11:08   23   23   0  USERID9
LIST          1 01.00 95/02/06 95/02/06 11:08   17   17   0  USERID9
PRINT         1 01.00 95/02/06 95/02/06 11:08   18   18   0  USERID9
SKELETON     1 01.00 95/02/06 95/02/06 11:08   23   23   0  USERID9
SPACE         1 01.00 95/02/06 95/02/06 11:08   20   20   0  USERID9
TALLY         1 01.00 95/02/06 95/02/06 11:08   21   21   0  USERID9
UPDATE        1 01.00 95/02/06 95/02/06 11:08   27   27   0  USERID9
USER          1 01.00 95/02/06 95/02/06 11:08   31   31   0  USERID9
*****
***** BOTTOM OF DATA *****

```

Steps:

1. Use the E (Select for PDF/Edit) line command in the S column to the left of member COPY.
2. Use the X (Exclude) line command to the left of the members: CVT6XMAP, CVT70SEL, and CVT70XRF.
3. Press Enter.

Issuing Commands on the PDS Find/Change Screen

Use the primary commands FIND and CHANGE to specify scans and changes to the list of members. Both commands feature a prompt screen to help you specify parameters. The CONDENSE/NOCONDENSE option lets you compress the member list result to include only matching members. Both commands have a default preview to let you view a summary of results.

Use the S (or E) (Edit) line command to select a member for Edit processing (ISPF Edit). The B (Browse) line command selects a member for Browse processing. The X (Exclude) line command removes a member from the list.

The RESET primary command re-reads the file directory and generates a list of **all members**. PDS processing options and selection criteria are not used when the RESET command is issued.

More About the PDS Find/Change Member List

- The HITS column is displayed when selection criteria has been specified. The HITS value indicates the number of times the criteria was found in each member.
- Standard ISPF-like UP/DOWN scrolling is supported as is the use of the LOCATE *mem* and SELECT *mem* primary commands.

- You can sort the list using the SORT command with one of the following parameters: VV.MM, CREATED, CHANGED, SIZE, INIT, MOD, ID (for example, SORT CHANGED).

Editing or Browsing Selected Members

When you use the E (Select for Edit) line command, File-AID invokes an ISPF Edit session on the member as shown below in [Figure 239](#).

Use the END command to exit the Edit session and save your changes. Use the CANCEL command to exit the Edit session and discard any changes you have made to this member. In either case you are returned to the member list.

Steps:

1. Notice the //JOBLIB DD and the DSN=???????.FA.VVRRMM.LOAD string. Later in this example you specify a CHANGE to this DSN.
2. Use the END primary command (PF3) to return to the member list.

Figure 239. Search/Update Utility - Edit Session From Member List

```

EDIT ---- USERID9.FASAMP.JCL(COPY) - 01.00 ----- COLUMNS 001 072
COMMAND ==> END                                     SCROLL ==> PAGE
***** *****TOP OF DATA*****
000001 //?????A JOB (####,CCCC),'YOUR USERNAME'.
000002 //          CLASS=A,TIME=2,MSGCLASS=A,NOTIFY=?????
000003 /**
000004 /* THIS IS A SAMPLE JOB TO COPY AN INPUT DATASET TO AN OUTPUT DATASET.
000005 /* ONLY THOSE RECORDS WHICH MEET THE FOLLOWING CRITERIA WILL BE COPIED
000006 /* AND PRINTED.
000007 /* - IF POSITION 1 IS EQUAL TO '3'
000008 /* - IF POSITION 56 IS EQUAL TO 'A' OR 'B'
000009 /**
000010 //JOBLIB    DD  DSN=???????.FA.VVRRMM.LOAD,DISP=SHR
000011 //STEP1    EXEC PGM=FILEAID
000012 //SYSPRINT DD  SYSOUT=*
000013 //SYSLIST  DD  SYSOUT=*
000014 //SYSTOTAL DD  SYSOUT=*
000015 //SYSUDUMP DD  SYSOUT=*
000016 //DD01     DD  DSN=?????.FASAMP.INVFILE,DISP=SHR
000017 //DD010    DD  DSN=?????.FASAMP.INVCOPY,DISP=(NEW,CATLG,DELETE),
000018 //          UNIT=####,SPACE=(TRK,(1,1))
000019 //SYSIN    DD  *
000020 $#DD01 COPY RDW=3,IF=(1,EQ,C'3'),IF=(56,EQ,C'A,B'),PRINT=0
000021 /*

```

More About Member Browsing or Editing

- PF keys remain set as you have them defined in File-AID. The ISPF PF keys are not re-established until you exit from File-AID.
- The COPY member in the example shows you the sample JCL and control cards needed for a typical File-AID/Batch execution.
- If you have selected multiple members from the member list, when you exit from one member, the next member is displayed in an Edit session rather than returning you to the member list.
- If the member is from a Panvalet or Librarian library, File-AID Edit is used to present the data and you are not permitted to save any changes you key in.

Specifying a CHANGE to All Selected Members

Upon return to the member list, notice that the excluded members (CVT6XMAP, CVT70SEL, CVT70XRF) are no longer listed. Once a member has been excluded (or compressed for not matching a FIND/CHANGE) it can only be redisplayed by using the RESET command or returning to the Search/Update entry screen.

Use the CHANGE command without parameters to access the CHANGE command prompt screen.

Figure 240. Search/Update Utility - Member List After Edit and Excludes

```

File-AID - PDS Find/Change - USERID9.FASAMP.JCL ----- ROW 2 to 12 of 12
COMMAND ==> CHANGE SCROLL ==> CSR
Use FIND or CHANGE command to process across the following members.
(Omit FIND/CHANGE operands for a prompt panel.)
Use RESET command to get a full member list.
Line commands: S or V View; E Edit; B Browse; X eXclude
-----
S NAME      HITS VV.MM CREATED     CHANGED      SIZE INIT MOD ID
COPY        1 01.00 95/02/06 95/02/06 11:08    22   22   0 USERID9
DROP        1 01.00 95/02/06 95/02/06 11:08    20   20   0 USERID9
DUMP        1 01.00 95/02/06 95/02/06 11:08    18   18   0 USERID9
JCLCNVRT   1 01.00 95/02/06 95/02/06 11:08    23   23   0 USERID9
LIST        1 01.00 95/02/06 95/02/06 11:08    17   17   0 USERID9
PRINT       1 01.00 95/02/06 95/02/06 11:08    18   18   0 USERID9
SKELETON   1 01.00 95/02/06 95/02/06 11:08    23   23   0 USERID9
SPACE       1 01.00 95/02/06 95/02/06 11:08    20   20   0 USERID9
TALLY       1 01.00 95/02/06 95/02/06 11:08    21   21   0 USERID9
UPDATE      1 01.00 95/02/06 95/02/06 11:08    27   27   0 USERID9
USER        1 01.00 95/02/06 95/02/06 11:08    31   31   0 USERID9
*****
***** BOTTOM OF DATA *****

```

Steps:

1. Type **CHANGE** in the command line
2. Press Enter.

Using the CHANGE Command Prompt Screen

The CHANGE command prompt screen in the PDS Find/Change utility is similar to the File-AID Edit CHANGE command screen. Basically, you specify the "From string" and the "To string", set any other optional parameters you want and press Enter.

Usually you use the CO (Contains) relational operator and leave the "Start column" and "End column" fields blank to search from the beginning to the end of each record.

Figure 241. Search/Update Utility - Specify CHANGE Parameters

```

File-AID ----- PDS Change Command -----
COMMAND ==>
From string      ==> ????????.FA.VVRRMM.LOAD
To string        ==> SYS9.FA.MXVJ170.SXVJLOAD
Start column     ==>           End column ==>
Relational operator ==> CO      (CO, EQ, NE, LT, LE, GE, GT)
Confirm changes   ==> Y       (Y = Yes; N = No)
Condense member list ==> N      (Y = Yes; N = No)
PDS statistics    ==> Y       (Y = Yes; N = No; A = Add)
Maximum changes   ==> ALL     (ALL or number of changes)

You may bypass this screen by entering the CHANGE command with operands:
C(HANGE) string-1 string-2 ((NO)CONFirm) ((NO)CONDense) (col-1 (col-2)) Max(n)

EXAMPLES: c abc xyz      change abc (upper or lower case) to XYZ
          c c'Abc' c'xyz'    change Abc (exactly as entered) to xyz
          c a,b,c xyz      change a or b or c (upper or lower case) to XYZ
          c "a,b,c" xyz     change a,b,c (upper or lower case) to XYZ

```

Steps:

1. Type ????????.FA.VVRRMM.LOAD in the "From string"
2. Type SYS9.FA.MXVJ170.SXVJLOAD in the "To string"
3. Type CO in the "Relational operator" field
4. Type Y in the "Confirm changes" field
5. Type N in the "Condense member list" field
6. Type Y in the "PDS Statistics" field
7. Type ALL in the "Maximum changes" field
8. Press Enter.

More About the CHANGE Command Prompt Screen

- Most of the entries you make on this screen are saved from session to session (From and To strings reset on exit from 3.6).
- The "Confirm changes" field gives you a chance to preview your changes before you apply them. You may optionally print the preview if you choose.
- The "Condense member list" field gives you a option to automatically exclude from the member list all those members which did not contain the "From string".
- The "Maximum changes" field lets you control the number of changes to preview (Confirm = yes) or apply (Confirm = no). When you confirm your preview of changes, you may specify a different value (ALL for example) for number of changes to apply.
- Advanced users can issue the CHANGE command on the PDS Find/Change Member List command line by using the correct syntax. A sample of the syntax is shown in the lower portion of the prompt screen. For example,
CHANGE ABC XYZ NOCONDENSE.

Viewing the Change Results Preview

File-AID scans all members listed, then copies matching records to a temporary work file where it applies your change. The temporary work file is then presented using ISPF Browse as shown in [Figure 242](#).

When you are done viewing the changes, use the END command to continue to the Confirm Update screen.

The results preview is not shown if you specify the NOCONFIRM parameter with the CHANGE command or set the "Preview changes" field to N on the CHANGE command prompt screen.

Figure 242. Search/Update Utility - CHANGE Results Preview

```
BROWSE -- USERID9.FILEAID.WF.D95089.T120922           LINE 00000000 COL 001 080
Command ===> END                                     SCROLL ===> CSR
XVJER041 ER041-Records-read=263 listed=9 with 9 changes
==>USERID9.FASAMP.JCL OPENED AS PO,RECFM=FB,LRECL=80,BLKSIZE=3120,VOL=PRD912
***** MEMBER BATVTOC *****
----- RECORD=7 -----
//JOBLIB DD DSN=SYS9.FA.MXVJ170.SXVJLOAD,DISP=SHR
***** MEMBER COPY *****
----- RECORD=34 -----
//JOBLIB DD DSN=SYS9.FA.MXVJ170.SXVJLOAD,DISP=SHR
***** MEMBER DROP *****
----- RECORD=55 -----
//JOBLIB DD DSN=SYS9.FA.MXVJ170.SXVJLOAD,DISP=SHR
***** MEMBER DUMP *****
----- RECORD=76 -----
//JOBLIB DD DSN=SYS9.FA.MXVJ170.SXVJLOAD,DISP=SHR
***** MEMBER PRINT *****
----- RECORD=137 -----
//JOBLIB DD DSN=SYS9.FA.MXVJ170.SXVJLOAD,DISP=SHR
***** MEMBER SPACE *****
----- RECORD=181 -----
//JOBLIB DD DSN=SYS9.FA.MXVJ170.SXVJLOAD,DISP=SHR
***** MEMBER TALLY *****
----- RECORD=137 -----
```

Step:

1. Use the END primary command (PF3) in the COMMAND field to continue to the Confirm Update screen.

Confirming Your Update

When you END from the preview of changes, the Confirm Update screen is presented as shown in [Figure 243](#). Press Enter to apply the changes and to return to the member list.

Optionally, you may request a report of your previewed changes or change the maximum number of changes to perform. If you request printing, a Print Options screen (not shown here) is displayed to capture your report destination (Sysout or dataset).

Figure 243. Search/Update Utility - Confirm Update Screen

```

File-AID ----- Search/Update Confirm Update -----
COMMAND ==>
XVJERO41 ER041-Records-read=263 listed=9 with 9 changes

Ready to perform update

Perform update      ==> Y      (Y = Yes; N = No)
Print previewed changes ==> N      (Y = Yes; N = No)
Maximum changes      ==> ALL    (All or number of changes to perform)
Maintain PDS statistics ==> Y      (Y = Yes; N = No; A = Add)

Instructions:

Use ENTER to perform above actions and return to the initial screen
Use END to exit without UPDATE or PRINT

CAUTION: DISP=SHR was specified. Other users may be editing this
file and some of your changes may be lost.

CAUTION: Maximum Changes = ALL, may result in more changed records
than were displayed in the Preview

```

Step:

1. Press Enter to perform the update and return to the member list.

More About Confirm Update

- If your initial dataset disposition was SHR, a CAUTION message appears to warn you of the potential of another user simultaneously editing a member you are about to update. If this condition exists and a member you update is saved by another user, your change could be lost. If this is a concern, use the OLD disposition when performing changes.
- To print without updating, change the "Perform update" field to N and the "Print previewed changes" field to Y, then press Enter.
- To return to the member list without printing or performing your update, use the END command (PF3).

Returning to the Search/Update Entry Screen

The member list is redisplayed after performing your update as shown in [Figure 244](#). Note the confirmation message on line three of the screen:

XVJERO42 ER042-Records-read=263 updated=9 with 9 changes.

Observe the HITS count indicating the number of times the change was performed in each member. Some members show a HITS count of 0 (zero). If you had requested the "Condense member list = Y" option, these members would not appear but would be excluded.

You may continue to work with your list of members, using the B (Browse) and S (Edit) line commands and the FIND and CHANGE primary commands.

The END command returns you to the Search/Update Utility screen.

Figure 244. Search/Update Utility - Member List After CHANGE

```
File-AID - PDS Find/Change - USERID9.FASAMP.JCL ----- ROW 2 TO 12 OF 12
COMMAND ==> END                                     SCROLL ==> PAGE
XVJER042 ER042-Records-read=263 updated=9 with 9 changes
(Omit FIND/CHANGE operands for a prompt panel.)
Use RESET command to get a full member list.
Line commands: S or V View; E Edit; B Browse; X eXclude

S  NAME      HITS VV.MM   CREATED     CHANGED     SIZE  INIT  MOD   ID
COPY          1 01.00 95/02/06 95/02/06 11:08    22    22    0  USERID9
DROP          1 01.00 95/02/06 95/02/06 11:08    20    20    0  USERID9
DUMP          1 01.00 95/02/06 95/02/06 11:08    18    18    0  USERID9
JCLCNVRT      0 01.00 95/02/06 95/02/06 11:08    23    23    0  USERID9
LIST          0 01.00 95/02/06 95/02/06 11:08    17    17    0  USERID9
PRINT         1 01.00 95/02/06 95/02/06 11:08    18    18    0  USERID9
SKELETON      0 01.00 95/02/06 95/02/06 11:08    23    23    0  USERID9
SPACE         1 01.00 95/02/06 95/02/06 11:08    20    20    0  USERID9
TALLY          1 01.00 95/02/06 95/02/06 11:08    21    21    0  USERID9
UPDATE         1 01.00 95/02/06 95/02/06 11:08    27    27    0  USERID9
USER           1 01.00 95/02/06 95/02/06 11:08    31    31    0  USERID9
*****
***** BOTTOM OF DATA *****
```

Step:

1. Use the END primary command (PF3) to return to the Search/Update entry screen.

Scanning Datasets for Specific Records (Option B)

The Search/Update B (Browse) option on the Search/Update Utility panel ([Figure 245](#)) lets you scan any type of file. When scanning one or multiple datasets, File-AID treats the selected dataset(s) as one big sequential file and shows all records matching your search criteria in the browse result file.

The name of each dataset and PDS member containing your record(s) is shown as an information line in the result file.

In this example, you use the optional *multiple* dataset and member selection list processing features of the Dataset List ([Figure 246](#) on page 221) and PDS Processing Options (PPO) ([Figure 247](#) on page 222) screens.

You view all records containing PGM=FILEAID or PGM=&P.

Figure 245. Search/Update Utility - Browse PDS (Option B)

```

File-AID ----- Search/Update Utility ----- FUNCTION COMPLETED
OPTION ===> B

M Member - PDS Find/Change and Member list processing
B Browse - Browse globally
U Update - Preview and Update globally

Specify Search/Update Dataset Information (use prefix > for dataset list):
Dataset name ===> FASAMP.JCL*
Disposition ===> SHR (OLD or SHR)
Volume serial ===> (If not cataloged)

Process online or batch ===> Q (Q = Online; B = Batch)

Specify Execution Information: (Option U online)
Create audit trail ===> N (Y = Yes; N = No)
Preview and confirm update ===> Y (Y = Yes; N = No)
Maximum changes ===> ALL (All or number of changes)

Specify Selection Criteria Information: (Options M and B)
Selection criteria usage ===> Q (Existing; Temp; Mod; Quick; None)
Selection dataset name ===>
Member name ===> (Blank or pattern for member list)

```

Steps:

1. Type a **B** in the OPTION field.
2. Type **FASAMP.JCL*** in the Dataset name field.
3. Press Enter.

More About Multiple Dataset Processing:

- Options B (Browse) and U (Update) allow specifying a file containing a list of files in the Dataset Name field for multiple file processing if preceded by special character >, for example:

```
Dataset name ===> >'userid.DSN.LIST'
```

- The file containing a list of files must be QSAM F 80 and can't be a pattern dataset.
- The names within the file must be fully qualified with quotes, or if without quotes, File-AID will add the userid prefix.
- All datasets in the list of files are automatically SELECTED in the "Dataset List" with their current status.
- Multiple dataset processing is not available when an I/O exit is specified.

Using the Dataset S/X Selection List

When you specify a pattern in the "Dataset name" field, File-AID displays a list of datasets that match the specified pattern.

You can either:

- Select all datasets using the **S ALL** primary command; or,
- Select one or more datasets using the **S** or **SS** (block) line command; or,
- Exclude one or more datasets using the **X** or **XX** (block) line command.

Only those datasets that you select are examined to see if they have any records matching any selection criteria you specify.

After using the **S** or **X** line commands to indicate which of your dataset(s) are to be selected or excluded, use the **END** command or PF key (default PF3) to continue processing your scan.

Figure 246. Search/Update Utility - Dataset S/X List Processing

```

File-AID ----- Dataset List ----- Select Dataset/s
COMMAND ==> S ALL SCROLL ==> CSR
----- DATASET NAME -----
S/X ----- DATASET NAME ----- --Type-- -Status-
USERID9.FASAMP.JCL NON-VSAM
USERID9.FASAMP.JCL.NEW NON-VSAM
USERID9.FASAMP.JCL.OLD NON-VSAM
***** Bottom of data *****

```

Steps:

1. Type **S ALL** primary command.
 2. Press Enter.
- The Status column for all three datasets changes to **SELECTED**.
3. Use the **END** command or PF key (PF3) to continue processing.

More About the Multiple Dataset Selection List

- You may use the **S ALL** primary command to select all datasets;
- You may use **S** (or **SS**) to select datasets; any datasets not selected are excluded.
- You may use **X** (or **XX**) to exclude datasets; any datasets not excluded are selected.
- If the **S** line or **S ALL** primary command is issued before any **X** line command, the status for the selected datasets changes to **SELECTED**, making the remaining datasets (Status is blank) **EXCLUDED**.
- If the **X** line command is issued before any other primary or line command, the status for the excluded datasets changes to **EXCLUDED**, making the remaining datasets (Status is blank) **SELECTED**.
- At least one dataset must be selected (**S** or **X**) or you return to the Search/Update Utility screen with the message **NO DATASET SELECTED**.
- For Batch processing, the maximum number of datasets that can be processed is 100.
- Use the **PRINT** primary command to print the dataset list.

Requesting PDS Member Selection Processing

Since you are scanning multiple PDSs, the PDS Processing Options (PPO) screen ([Figure 247](#)) is displayed for each selected PDS to let you specify processing options and member selection.

You select members whose names fall in the range D through U and request a display of the Member Selection List.

Figure 247. Search/Update Utility Option B - PDS Processing Options

```

File-AID ----- PDS Processing Options -----
COMMAND ==>

Dataset: USERID9.FASAMP.JCL

Include record information    ==> N      (Y = Yes; N = No)
Process in JCL format       ==> N      (Y = Yes; N = No)

Specify Member Selection Options (Blank for All Members)
Member name mask            ==>
Member name range           ==> D      to ==> U
Last modified userid        ==>
Creation date               ==>          to ==>          (YY/MM/DD)
Modification date           ==>          to ==>          (YY/MM/DD)

Display member selection list ==> Y      (Y = Yes; N = No)

Use ENTER to continue, END to skip this dataset and continue

```

Steps:

1. Type a **D** in the "Member name" range (from) and **U** in the corresponding "to" field.
2. Type a **Y** in the "Display member selection list" field.

The "Display member selection list" field displays only for Search/Update options B (Browse) and U (Update) and in the Copy utility (3.3) and Print functions (5.x). You may set a default (Y/N) for this field in the 0.4 Processing Parameters function.

3. Press Enter.

Using the Manual Member S/X Selection List

When you specify a **Y** in the "Display member selection list" field, File-AID displays a list of members that match the specified PPO ranges.

You must either:

- Select one or more members using the **S** or **SS** (block) line command; or,
- Exclude one or more members using the **X** or **XX** (block) line command.

Only those members that you select are examined to see if they have any records matching any selection criteria you specify.

After using the **S** or **X** line commands to indicate which of your member(s) are to be selected or excluded, use the **END** command or PF key (default PF3) to continue processing your scan.

Figure 248. Search/Update Utility - Member S/X List Processing

File-AID Member S/X - USERID9.FASAMP.JCL -----								ROW 1 TO 12 OF 12		
								SCROLL ==> PAGE		
S/X	NAME	VV.MM	CREATED	CHANGED	SIZE	INIT	MOD	ID		
	DROP	01.01	95/02/06	95/03/30 12:16	20	20	0	USERID9		
	DUMP	01.01	95/02/06	95/03/30 12:16	18	18	0	USERID9		
	JCLCNVRT	01.00	95/02/06	95/02/06 11:08	23	23	0	USERID9		
	LIST	01.00	95/02/06	95/02/06 11:08	17	17	0	USERID9		
	PRINT	01.01	95/02/06	95/03/30 12:16	18	18	0	USERID9		
<u>XX</u>	SAMPLE01	01.00	95/02/06	95/02/06 11:08	14	14	0	USERID9		
	SAMPLE02	01.00	95/02/06	95/02/06 11:08	17	17	0	USERID9		
<u>XX</u>	SKELETON	01.00	95/02/06	95/02/06 11:08	23	23	0	USERID9		
	SPACE	01.01	95/02/06	95/03/30 12:16	20	20	0	USERID9		
	TALLY	01.01	95/02/06	95/03/30 12:16	21	21	0	USERID9		
	UPDATE	01.01	95/02/06	95/03/30 12:16	27	27	0	USERID9		
	USER	01.01	95/02/06	95/03/30 12:16	31	31	0	USERID9		
***** BOTTOM OF DATA *****										

Steps:

1. Type XX line commands to the left of the SAMPLE01 and SKELETON members.
2. Use the END command or PF key (PF3) to continue processing.
3. As you selected 3 PDSs, File-AID returns to the PDS Processing Options (PPO) screen ([Figure 247](#) on page 222) where you repeat the member selection steps for FASAMP.JCL.NEW and then FASAMP.JCL.OLD.
4. After completing the member selection steps for all selected PDSs, File-AID continues with the Unformatted Selection Criteria screen ([Figure 250](#) on page 224).

More About the Manual Member Selection List

- You may use S (or SS) to select members; any members not selected are excluded.
- You may use X (or XX) to exclude members; any members not excluded are selected.
- You cannot mix the S and X line commands.
- If you press Enter after marking one or more members (S or X), each member marked is indicated with the word SELECTED or EXCLUDED.
- At least one member must be marked (S or X).

Specify Selection Criteria

Because you requested selection criteria usage Q (Quick), the next screen displayed is the Unformatted Selection Criteria screen (see [Figure 250](#)). Temporary criteria last used remains in memory until you exit the current utility so that you can re-use the values.

Use the I (Insert) line command to insert a new criteria line so that you can specify your additional selection criteria.

Figure 249. Search/Update Utility - Quick Unformatted Selection Criteria

```

File-AID ----- Unformatted Selection Criteria ----- ROW 1 TO 1 OF 1
COMMAND ==> END SCROLL ==> CSR

Use END command to continue, use CANCEL command to return to main screen.

AND
Cmd /OR Position Length RO      Search Value / Update Value
----- -----
I   1           CO T'PGM=FILEAID'
***** END OF SELECTION CRITERIA *****

```

Steps:

1. Use the I line command to insert a new criteria line.
2. Press Enter.

Add the additional criteria to search for PGM=&P to see the difference in the browse results when using the B option instead of the M option.

Figure 250. Search/Update Utility - Quick Unformatted Selection Criteria - Inserted Line

```

File-AID ----- Unformatted Selection Criteria ----- ROW 1 TO 2 OF 2
COMMAND ==> END SCROLL ==> CSR

Use END command to continue, use CANCEL command to return to main screen.

AND
Cmd /OR Position Length RO      Data Value
----- -----
I   1           CO T'PGM=FILEAID'
__ OR  1           CO T'PGM=&P'
***** END OF SELECTION CRITERIA *****

```

Steps:

1. Type CO in the RO column in the new line.
2. Type PGM=&P in the Data Value column in the new line.
3. Press ENTER.
4. Use the END command (PF3) to continue processing.

More About Selection Criteria

- The selection shown above scans records from position 1 to the end of the record to see if the record contains (CO) the text string PGM=FILEAID or PGM=&P (any case).
- Line commands (Cmd) you may use include:

D(n) Delete (n) lines (for example, D, D2, D99)

- I(n)** Insert (n) lines (for example, I, I2, I99)
- R(n)** Repeat this line (n) times (for example, R, R2)
- C(n)** Copy (n) lines to destination marker (A (After) or B (Before))
- M(n)** Move (n) lines to destination marker (A (After) or B (Before)).

- Use the CANCEL command to stop Browse processing and return to the Search/Update Utility screen.



The CANCEL command clears all temporary criteria entries.

Browsing Scan Results

The selected members of the selected datasets are scanned for matching records and the results are written to a temporary work file. You are then placed into an ISPF Browse session on the work file.

All standard browse commands are valid, including the scroll commands, FIND, HEX, and COLS.

Each dataset name is identified with a record beginning with ==>, the dataset name, and OPENED AS information.

Each PDS member is identified with a record containing a line of asterisks and the PDS member name.

Each Record is identified with a record containing a line of dashes and the record number.

A message displays indicating the number of Input datasets, Selected datasets, Records read, Records Selected (matched), and Error records skipped in the selected members.

An exception report, if any, at the end of the report lists datasets that were not processed.

Figure 251. Search/Update Utility Scanning Results in Work File (Option B)

```

BROWSE      USERID9.FILEAID.WF.D15057.T095222      Line 00000000 Col 001 080
Command ==>                                         Scroll ==> CSR
***** Top of Data *****
==>USERID9.FASAMP.JCL OPENED AS PO,RECFM=FB,LRECL=80,BLKSIZE=3120,VOL=PRD939
***** MEMBER DROP *****
----- RECORD=9 -----
//STEP1 EXEC PGM=FILEAID,REGION=4096K
***** MEMBER DUMP *****
----- RECORD=30 -----
//STEP1 EXEC PGM=FILEAID,REGION=4096K
***** MEMBER JCLCNVRT *****
----- RECORD=49 -----
//STEP1 EXEC PGM=FILEAID,REGION=4096K
***** MEMBER LIST *****
----- RECORD=72 -----
//STEP1 EXEC PGM=FILEAID,REGION=4096K
***** MEMBER PRINT *****
----- RECORD=166 -----



XVJER883 ER883- Input datasets = 3, Selected datasets = 3, Records read =
413, Selected = 15, Error records skipped = 0
----- RECORD=166 -----



//STEPNAME EXEC PGM=FILEAID,REGION=4096K
***** MEMBER SPACE *****
----- RECORD=166 -----

```

Step:

1. Scroll down to view all selected records with their dataset name, member name, and record number information.
2. Use the END command (PF3) to return to the Search/Update Utility screen.

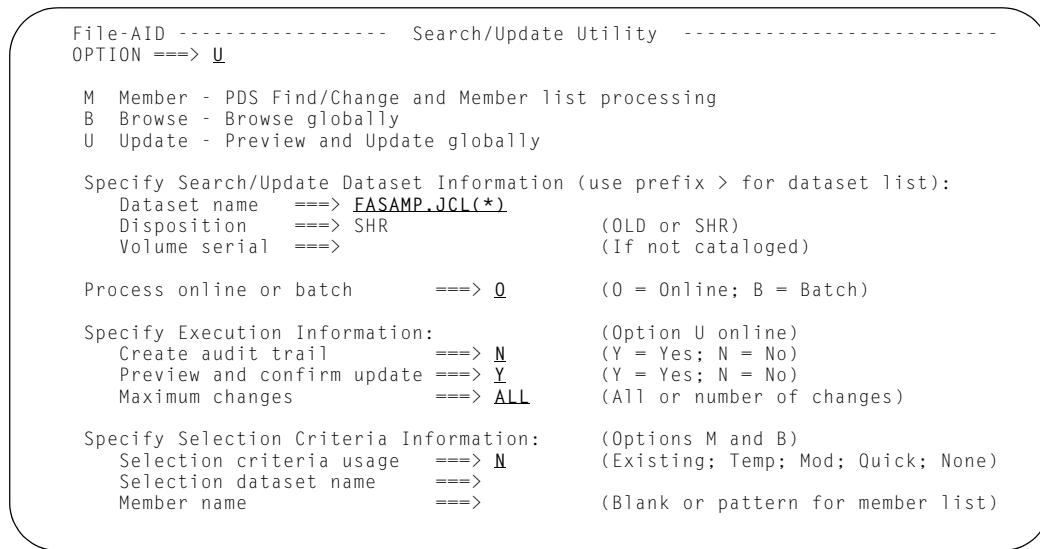
Specifying Global Changes - (Option U)

The Search/Update option U (update) lets you specify, preview, and apply global changes to any type of file. Support is provided for updating Panvalet and Librarian libraries as well as any type of standard MVS file including: VSAM-KSDS, VSAM-RRDS, VSAM-ESDS, BDAM, IAM, sequential and PDS. Updating of VSAM-LDS is not currently supported.

Options provided for Update processing let you select online or batch processing. For online processing, you may select to preview (and print) your changes before you update the file. You may also request an optional audit trail of your changes.

In this example, you set up a simple change to the program name. You change program name FILEAID to FILEAID8. Since your dataset is a PDS, you use a member name of asterisk (*) to select all members for processing and to bypass the PPO screens.

Figure 252. Search/Update UtilityDescription: Updating All Members of a PDS (Option U).



Steps:

1. Type a U in the OPTION field.
2. Type **FASAMP.JCL(*)** in the Dataset name field to indicate processing of all members and to bypass the presentation of the PPO screen.
3. Verify that the Process online or batch option is O.
4. Verify that the Create Audit Trail option is N.
5. Verify that the Preview and Confirm update option is Y.
6. Verify that the Maximum changes value is ALL.
7. Type an N in the selection criteria usage field. Press Enter.

Selection criteria usage is ignored when using option U. Option U automatically provides temporary change criteria screens.

Specifying Change Criteria

Standard selection criteria is not used. Instead, changes are defined using the Search/Update Change Criteria screen, which is nearly identical to the Unformatted Selection Criteria screen. Changes are identified by using special relational operator (RO) "replacement" codes:

R (replace)	Put data at specified position, overlaying data in the record at that point.
E (edit)	Changes found data to new data. Shifts data when lengths of found data and new data are different. Must be preceded by a conditional test.
RA (replace all)	Puts new data in record at all found data points within each record. Overlays existing data. Must be preceded by a conditional test.
EA (edit all)	Changes all found data in a record to new data. Shifts data when lengths of found data and new data are different. Must be preceded by a conditional test.

The selection and change criteria you define remains in memory until you exit from the Search/Update utility. When the Search/Update Change Criteria screen comes up, the selection from the Browse example is still in memory.

You must define a change when using the U (update) option. To specify a change, you must use one of the special relational operator replacement codes (R, E, RA, or EA).

Type E (Edit) in the RO column and a new update value of PGM=FILEAID8 to change the value of PGM=FILEAID in all records and members.

Figure 253. Search/Update Utility - E Edit - New Value Entry

```

File-AID ----- Search/Update Change Criteria ----- ROW 1 TO 2 OF 2
COMMAND ==> END SCROLL ==> PAGE

Use END to continue, CANCEL to return to main screen.

Relational Operator R (Replace) overlays existing data. E (Edit) shifts
existing data. When preceded by CO (Contains), R or E changes first occurrence
of search value in each record, RA or EA changes all occurrences.

AND
Cmd /OR Position Length RO           Search Value / Update Value
----- -----
      1          CO T'PGM=FILEAID'
                  E PGM=FILEAID8
***** END OF SELECTION CRITERIA *****

```

Steps:

1. On line 2, type E in the RO column and **PGM=FILEAID8** in the Search Value / Update Value area.
2. Press Enter.
3. Use the END command (PF3) to continue processing.

More About Change Criteria

- When you use the EA or RA operators, you must precede them with a CO to identify the "from" data to be changed.
- Only the R (replace) operator may be specified without a preceding condition.
- When you enter replacement *text* without an explicit data type, File-AID treats your value as uppercase. Use the C data type to specify exact case replacement data (for example, C'McDonald').

- Specifying an OR in the AND/OR column starts a new change criteria *set*. The new set must contain at least one replacement operator (R, RA, E, EA).



File-AID always processes all *sets* for the current record. If the first set is applied, the next set is still checked and processed for the current record.

Preview Changes

Since you requested a preview of your changes (Preview and Confirm Update = Y), File-AID scans all (or selected) members of your PDS looking for matching records. All matching records are then copied to a temporary work file where they are updated based on your change criteria.

You are then placed into an ISPF Browse session on the work file to preview the results of your changes. If the work file is too small to hold all previewed records, use option 0.1 System Parameters to increase the size of your File-AID work file.

Your file is not updated until you "Confirm Update" your changes after viewing the preview.

After reviewing the preview of your changes, use the END command to access the Confirm Update screen (see [Figure 255](#) on page 229).

Figure 254. Search/Update Utility - Preview Changes Screen

```
BROWSE -- USERID9.FILEAID.WF.D94132.T092156 ----- LINE 00000000 COL 001 080
COMMAND ===> END                                     SCROLL ===> PAGE
XVJER041 ERO41-Records-read=374 listed=15 with 15 changes
==>USERID9.FASAMP.JCL OPENED AS PO,RECFM=FB,LRECL=80,BLKSIZE=3120,VOL=PRD912
***** MEMBER BATVTOC *****
//STEP1 EXEC PGM=FILEAID8
***** MEMBER COPY *****
//STEP1 EXEC PGM=FILEAID8
***** MEMBER CVT6XMAP*****
//STEP1 EXEC PGM=FILEAID8,REGION=8M
***** MEMBER CVT70SEL*****
//STEP1 EXEC PGM=FILEAID8,REGION=8M
***** MEMBER CVT70XRF*****
//STEP1 EXEC PGM=FILEAID8,REGION=8M
***** MEMBER DROP *****
//STEP1 EXEC PGM=FILEAID8
***** MEMBER DUMP *****
//STEP1 EXEC PGM=FILEAID8
***** MEMBER JCLCNVRT*****
//STEP1 EXEC PGM=FILEAID8
***** MEMBER LIST *****
//STEP1 EXEC PGM=FILEAID8
***** MEMBER PRINT *****
//STEP1 EXEC PGM=FILEAID8
```

Steps:

- Review the preview of your changes.
- Use the END command (PF3) to see the Confirm Update screen.

Apply Changes (Confirm Update)

After viewing a preview of your changes, the Confirm Update screen is presented as shown in [Figure 255](#).

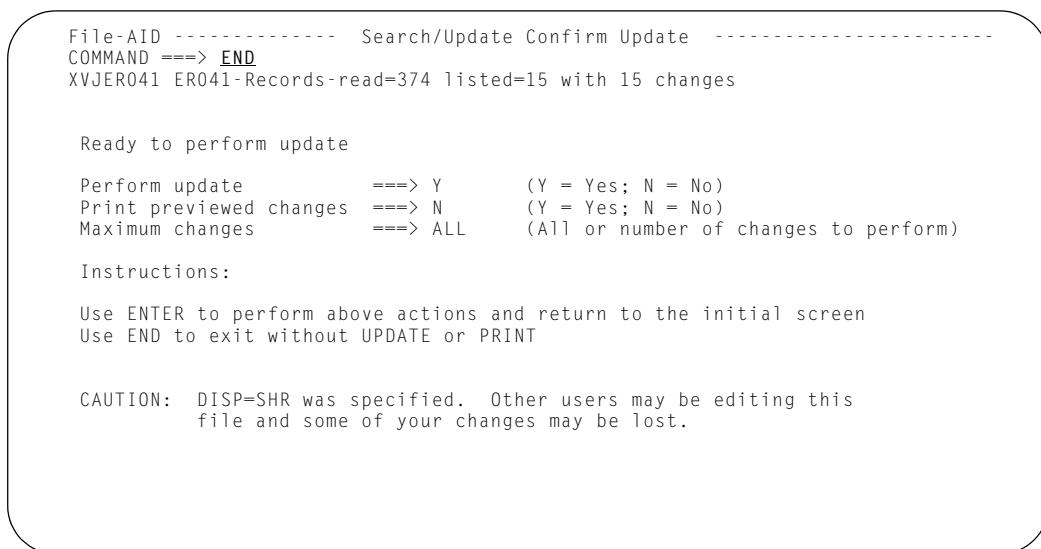
There are two options on this screen that control saving and printing the changes you made to the dataset. The default values of these fields enable you to press Enter to proceed with updating your file to commit your changes:

- Perform Update (Y/N) (default Y)
- Print previewed changes (Y/N) (default N)

You may accept the default settings or change them as you want. For example, you might want to print your previewed changes, but not commit your update at this time.

You can use the END command to return to the Search/Update Utility screen without updating or printing. The END command overrides the Confirm/Update screen default values.

Figure 255. Search/Update Confirm Update Screen



Steps:

1. Use the END command (PF3) to cancel the change and to return to the Search/Update Utility screen. Note the message, **UPDATE CANCELLED**, in the top right corner of the screen as shown in [Figure 256](#) on page 230.

More About the Confirm Update Screen

- When you apply changes, *all* records are examined and the number of changes you specify here in the "Maximum changes" field are performed. The preview may only show you a limited number of changes (if you specified a numerical value in the "Maximum Changes" field on the Search/Update utility screen).
- If you request printing, a print prompt screen is displayed where you specify your print routing request.
- For Panvalet and Librarian updates, this screen is not shown. Instead, File-AID generates JCL to perform the update in batch and displays the SEARCH - JCL Specification screen (see [Figure 258](#) on page 232).

Processing Your Update In Batch

If the dataset you are changing is large, you may set up JCL to run the change as a background batch job.

Figure 256. Search/Update Utility - Batch Processing Request

```
File-AID ----- Search/Update Utility ----- UPDATE CANCELLED
OPTION ==> U

M Member - PDS Find/Change and Member list processing
B Browse - Browse globally
U Update - Preview and Update globally

Specify Search/Update Dataset Information (use prefix > for dataset list):
Dataset name ==> FASAMP.JCL(*)
Disposition ==> SHR (OLD or SHR)
Volume serial ==> (If not cataloged)

Process online or batch ==> B (O = Online; B = Batch)

Specify Execution Information: (Option U online)
Create audit trail ==> N (Y = Yes; N = No)
Preview and confirm update ==> Y (Y = Yes; N = No)
Maximum changes ==> ALL (All or number of changes)

Specify Selection Criteria Information: (Options M and B)
Selection criteria usage ==> N (Existing; Temp; Mod; Quick; None)
Selection dataset name ==>
Member name ==> (Blank or pattern for member list)
```

Steps:

1. Change the Process online or batch option to **B**.
2. Press Enter.

Reviewing Change Criteria

When the Change Criteria screen is displayed as shown below in [Figure 257](#), it still contains the values you specified when you previewed your change. Just use the END command to continue.

Figure 257. Search/Update utility - Change Criteria To Be Applied

```
File-AID ----- Search/Update Change Criteria ----- ROW 1 TO 2 OF 2
COMMAND ==> END                                     SCROLL ==> CSR

Use END command to continue, use CANCEL command to return to main screen.

Relational Operator R (Replace) overlays existing data. E (Edit) shifts
existing data. When preceded by CO (Contains), R or E changes first occurrence
of search value in each record, RA or EA changes all occurrences.

AND
Cmd /OR Position Length RO           Search Value / Update Value
---- -----
      1             CO T'PGM=FILEAID'
    +0             E  C'PGM=FILEAID8'
***** END OF SELECTION CRITERIA *****
```

Step:

1. Use the END command (PF3) to continue.

Submit Batch JCL

The SEARCH - JCL Specification screen is similar to many batch JCL screens in File-AID. The JOB statement is saved from screen to screen and session to session. You have several options:

- Enter the SUBMIT command to generate the JCL and submit the job.
 - Enter the JCL command to generate the JCL and place it in a temporary work file that you are editing.
- From the Edit session, you can use the CREATE or REPLACE primary command with the C999 line command to save the JCL to a PDS, and/or use the SUBMIT command to submit the JCL.
- Enter the END command to exit without JCL generation or submission.

Figure 258. Search/Update Utility - SEARCH - JCL Specification Screen

```

File-AID ----- - SEARCH - JCL Specification -----
COMMAND ===> JCL

JCL Information for Batch Processing:

Sysout class ===> *

JOB Statement Information:
===> //USERID9 JOB (0100,PMGT),'your name',CLASS=A,
===> // MSGCLASS=R,NOTIFY=USERID9
===>
===>

Use JCL command to edit generated JCL
Use SUBMIT command to submit batch job
Use END to return to main - SEARCH panel without submitting job

```

Steps:

1. Type **JCL** on the command line to view the generated JCL.



If you intend to save this JCL, be sure to change the //DD01SC DD statement. Change DISP=(OLD,DELETE) to DISP=SHR to ensure that your temporary change criteria is not deleted when you submit the job.

2. Press Enter.
3. After viewing the generated JCL, use the END command repeatedly until the File-AID Primary Option Menu screen is displayed.

Copying Selected PDS Members

File-AID has a powerful utility for copying all or a selected subset of records from any MVS file. The "From" file and the "To" file can be different file types (for example, from VSAM to PDS member). The Copy utility provides this ability and has special features for copying partitioned data sets (PDS) including member selection based on ISPF statistics like "last changed date".

The Copy utility lets you optionally use standard File-AID selection criteria during the Copy. You may use *existing* selection criteria defined with the Selection utility (Option 6), or dynamically create *temporary* selection criteria.

In this chapter, you practice using the Copy utility to selectively copy (and rename) PDS members based on member name and data content.

Find an example to copy a Version 2 PDSE with generation members in [Allocating and Editing Version 2 PDSE with Member Generation](#), [Defining Your Copy Request for a Version 2 PDSE](#) on page 396.

Accessing the Copy Utility (Option 3.3)

The Copy utility is located on File-AID's Extended Utilities menu (option 3) as utility number 3.

Step:

1. From the File-AID Primary Option Menu (not shown here), select File-AID option 3.3 to access the Copy Utility entry screen ([Figure 259](#) on page 234).

Defining Your Copy Request

The Copy Utility entry screen (see [Figure 259](#)) captures:

- From Dataset or zFS path
- To Dataset or zFS path
- Processing option (online or batch)
- Selection Criteria usage (and optionally a selection criteria dataset and member name).

You may either perform the Copy processing online at your terminal, or generate JCL for File-AID/Batch execution to run your request as a background job in MVS.

Figure 259. Copy Utility Entry Screen

```
File-AID ----- Copy Utility -----
COMMAND ==>

Specify "FROM" Dataset or zFS Path Information:
Dataset or path ==> FASAMP.JCL
Volume serial ==> (If not cataloged)

Specify "TO" Dataset or zFS Path Information:
Dataset or path ==> FASAMP.LAYOUTS
Volume serial ==> (If not cataloged)
Disposition ==> OLD (OLD, MOD, NEW)

Specify Execution Information:
Process online or batch ==> B (O = Online; B = Batch)

Specify Selection Criteria Information: (E = Existing; T = Temporary;
Selection criteria usage ==> I M = Modify; Q = Quick; N = None)
Selection criteria dataset ==>
Member name ==> (Blank or pattern for member list)
```

Specifying a Copy of Selected Members

This example shows how to set up batch JCL to copy selected members of your sample JCL library (**FASAMP.JCL**) to your sample record layouts library (**FASAMP.LAYOUTS**). Only members with names between SPACE and USER, that execute program name FILEAID (for example, EXEC PGM=FILEAID), are copied. A new member name is assigned in the target PDS by appending an X to the original member name (for example, SPACEX, USERX).

Steps:

1. Make sure the FROM dataset name is **FASAMP.JCL** (no member name).
2. Overtype the TO dataset name to read **FASAMP.LAYOUTS**.
3. Type **B** in the Process online or batch field.
4. Type **T** in the Selection criteria usage field.
5. Press Enter.

More About the Copy Utility Screen

- Standard File-AID dataset and member name entry is supported including using wildcard characters in the dataset names (for example, **FASAMP.***) or "FROM" member name (for example, **FASAMP.JCL(CNV*)**).
- The FROM and TO datasets can be different types and record lengths. A Confirm Copy screen may be displayed to warn you of differences and potential record truncation or padding.
- When selection criteria usage is T (Create temporary), Q (Quick temporary) or N (None), the Selection criteria dataset and member are not validated or used.

For E (Use existing) or M (Modify existing), a valid selection criteria dataset and member must be provided.

- When processing a PDS, a member name of asterisk (*) means to copy all members matching your selection criteria. Otherwise, the PDS Processing Options (PPO) screen is always presented to let you specify member handling options.
- When copying from a Version 2 PDSE with member generations, Copy recognizes all member generations and copies all selected member generations (see also [Specifying PPO Options for Version 2 PDSE](#) on page 398) if you specify a **single** Version 2 PDSE in the "FROM" Dataset name field and a **NEW** "TO" Dataset. Member generation is only supported when you **do not** specify
 - I/O exits
 - Selection criteria
 - Batch processing

All other Copy options only recognize the current member (0 generation).

Using PDS Member Processing and Selection Features

When your "FROM" (and "TO") dataset(s) are partitioned (PDS or PDSE), special member processing is automatically provided.

| For a Version 2 PDSE, COPY with selection criteria only copies the current member (0 generation).

"FROM" PDS Member Processing

- You may specify JCL format processing.
- You may specify copying of complete members or just records in each member that match your selection criteria.
- You may select all members or a subset of members based on:
 - Member name
 - Name mask (for example, A?B or AB*)
 - Name range (for example, From AB to BZZZZZ)
 - ISPF statistics
 - Date last modified range
 - Date created range
 - Last modified user ID range
 - Manual selection and/or exclusion of individual members from a list of members matching your member criteria.
- You can also leave the fields blank and press Enter to select all members (the default).

"TO" PDS Member Processing

If your "TO" dataset is also a PDS, you may specify options to control:

- Copying of empty members
- Renaming of members based on a name mask
- Replacement of existing members.

Specifying PPO Options

The PDS Processing Options (PPO) screen (see [Figure 260](#)) lets you define a subset of members to be copied based on member name and/or ISPF statistics.

It also can be used to specify member renaming and other options for copied members.

Figure 260. Copy Utility - PDS to PDS Processing Options Screen

File-AID ----- PDS Processing Options -----		
COMMAND ==>		
FROM Dataset: USERID9.FASAMP.JCL		
Copy entire member	==> Y	(Y = Yes; N = No, selected records only)
Copy empty members	==> N	(Y = Yes; N = No)
Process in JCL format	==> N	(Y = Yes; N = No)
TO Dataset: USERID9.FASAMP.LAYOUTS		
Replace like-named members	==> Y	(Y = Yes; N = No)
Rename copied members mask	==> ??????X	
Specify Member Selection Options (Blank for All Members)		
Member name mask	==>	
Member name range	==> <u>SPACE</u>	to ==> <u>USER</u>
Last modified userid	==>	to ==>
Creation date	==>	to ==> (YY/MM/DD)
Modification date	==>	to ==> (YY/MM/DD)
Display member selection list	==> N	(Y = Yes; N = No)

Steps:

1. Type ??????X in the Rename copied members mask field.
A question mark (?) means to keep original member name character.
2. Type **SPACE** in the "Member name range" (from) and **USER** in the "to" field.
3. Type an N in the Display member selection list field.
4. Press Enter.

More About the Copy PPO Screen

- If a member mask was specified on the entry screen for the FROM dataset (for example, **FASAMP.JCL(CNV*)**), File-AID automatically copies the mask (CNV*) to the Member name mask field, ready for selection.
- If you are scanning JCL members and looking for multiple conditions within a single statement (for example, **DISP=OLD** and **UNIT=TAPE**), use Process In JCL format=Y.
- Use option 0.4 (Processing Parameters) to establish permanent choices for options like Replace like-named members and Copy entire member and Display member selection list fields.
- See [Using the Manual Member S/X Selection List](#) on page 222 for examples of using the member selection list.

Specifying Temporary Selection Criteria

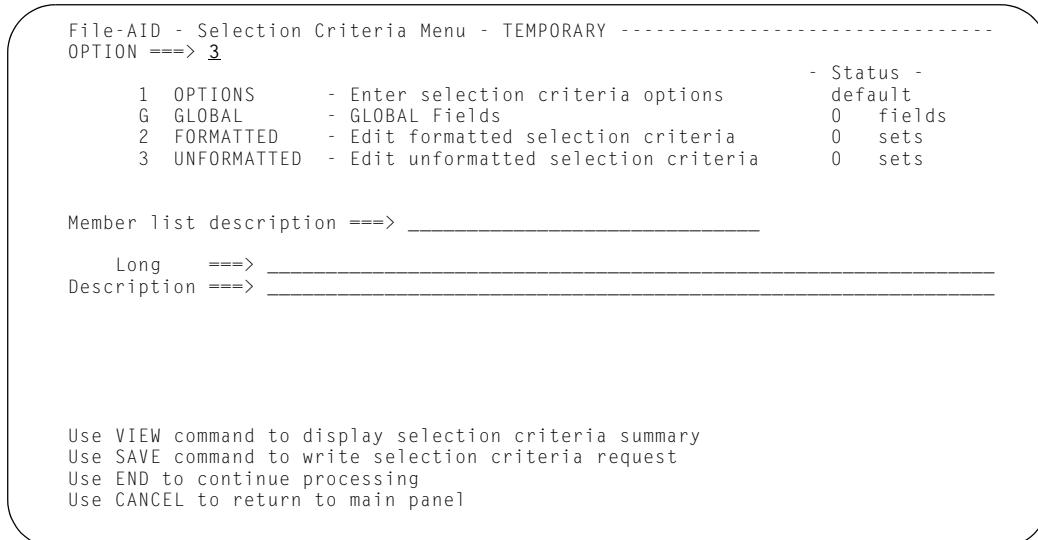
When you have chosen selection criteria usage T (Create Temporary), the next screen displayed is the Selection Criteria Menu screen (TEMPORARY) as shown in [Figure 261](#). You use this screen to access the selection criteria screens to specify what data condition(s) you are looking for in a member in order for that member to be copied.

In this example, you are looking for a JCL statement containing the string PGM=FILEAID. You define this test using Unformatted Selection Criteria. First, you request access to the Unformatted Selection Criteria screen.

Steps:

1. Type 3 on the OPTION line to Edit unformatted selection criteria.
2. Press Enter.

Figure 261. Copy Utility - TEMPORARY Selection Criteria Menu Screen



More About the Selection Criteria Menu Screen

- When processing a PDS, do not use option 1 (OPTIONS). There are no selection criteria options that are applicable to PDS copying.

Specifying the Unformatted Data Test

You use the CO (Contains) relational operator (RO) to specify a scan of each statement starting at Position 1. No length is specified because File-AID defaults the length of a scan to: "end of the record".

Steps:

1. On the first line type **1** in the Position column.
2. Type **CO** in the RO column.
3. Type **PGM=FILEAID** in the Data Value area.
4. Press Enter.
5. Use the END command or PF key (default PF3) to return to the selection criteria menu.

Figure 262. Copy Utility - Unformatted Field Selection Criteria Screen

File-AID ----- Unformatted Selection Criteria --- ROW 1 TO 16 OF 25			
COMMAND ===> END SCROLL ===> CSR			
Use END command to continue, use CANCEL command to return to main screen.			
AND	Cmd /OR	Position	Length RO
-----	-----	-----	----- Data Value
1		CO	PGM=FILEAID
AND		EQ	

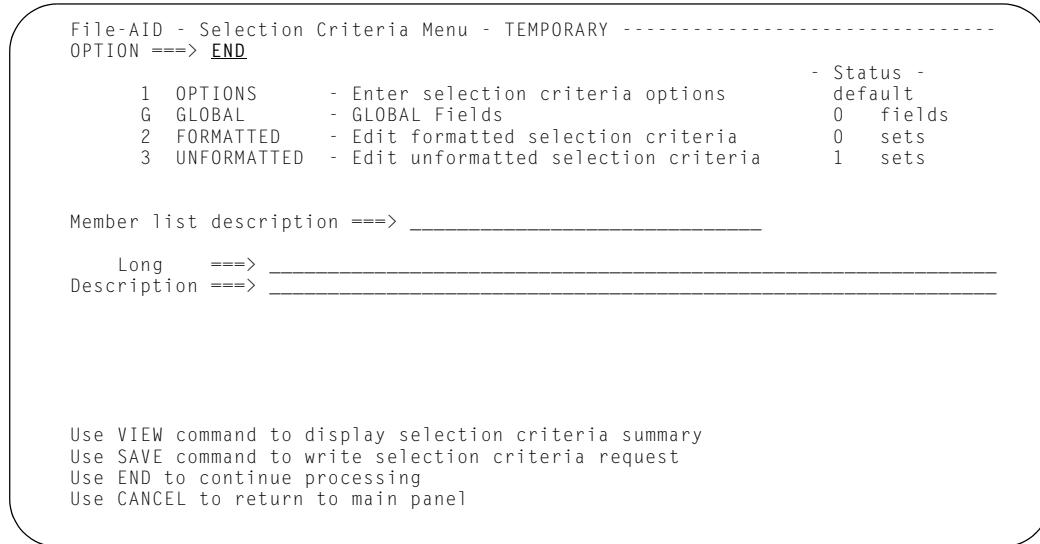
More About Unformatted Selection Criteria

- When you specify CO or EQ relational operators, you can look for multiple strings by separating the strings with commas (for example, ABC,DEF,GHI looks for ABC or DEF or GHI at the specified position).
- Since this example defines unformatted selection criteria only, you could have come directly to this screen by using the Q (Quick) selection criteria usage code on the main Copy screen. When you use the Q (Quick) option, the Selection Criteria Menu screen does not appear and processing occurs immediately after you END from this Unformatted Selection Criteria screen.

Ending Selection Criteria Specification

After returning to the Selection Criteria Menu, use the END command to continue your Copy processing. Notice that the Status for UNFORMATTED shows "1 sets".

Figure 263. Copy Utility - End Criteria Specification - Begin Copy



Step:

1. Use the END command (PF3) to proceed with PDS scanning and member copying (or batch JCL generation).

Generate Batch JCL

Because you requested batch processing, the COPY - JCL Specification screen is displayed next. If you had requested online processing, your copy would execute immediately and you would be returned to the Copy Utility entry screen with a message indicating the results of your copy.

The COPY - JCL Specification screen is similar to many batch JCL screens in File-AID. The JOB statement is saved from screen to screen and session to session. You have several options:

- Enter the SUBMIT command to generate the JCL and submit the job.
- Enter the JCL command to generate the JCL and place it in a temporary work file that you are Editing.
- Enter the END command to exit without JCL generation or submission.

Figure 264. Copy Utility - COPY - JCL Specification

```
File-AID ----- COPY - JCL Specification -----
COMMAND ==> JCL

JCL Information for Batch Processing:

Sysout class    ==> *

JOB Statement Information:
==> //USERID9A JOB (ACCT,INFO),'FILE-AID',CLASS=A,
==> //    MSGCLASS=A,NOTIFY=USERID9
==>
==>

Use JCL command to edit generated JCL
Use SUBMIT command to submit batch job
Use END to return to main COPY panel without submitting job
```

Steps:

1. Type **JCL** on the command line to view the generated JCL.
2. Press Enter.

Editing Your Generated Copy JCL

From the Edit session, you can use the CREATE or REPLACE primary command with the C999 line command to save the JCL to a PDS, and/or use the SUBMIT command to submit the JCL.

Step:

1. After viewing the generated JCL, use the END command repeatedly until the File-AID Primary Option Menu screen is displayed.

Figure 265. Copy Utility - Generated JCL for Batch Processing

```
EDIT --- SYS94138.T152845.RA000.USERID9.R0039174 ----- COLUMNS 001 072
COMMAND ===> END
***** *****TOP OF DATA *****
000001 //USERID9A JOB (ACCT,INFO),'FILE-AID',CLASS=A,
000002 // MSGCLASS=A,NOTIFY=USERID9
000003 /* YOU ARE VIEWING JCL THAT FILE-AID HAS GENERATED TO PERFORM
000004 /* THE REQUIRED FUNCTION. YOU CAN CHANGE THIS JCL IF DESIRED AND USE
000005 /* THE SUBMIT PRIMARY COMMAND TO SUBMIT THE JOB. THE CREATE OR REPLACE
000006 /* PRIMARY COMMAND CAN BE USED TO KEEP THIS JOBSTREAM FOR FUTURE USE.
000007 /* USE THE END COMMAND TO EXIT THE FUNCTION WITHOUT SUBMITTING THE JOB
000008 //FASTEP EXEC PGM=FILEAID
000009 //STEPLIB DD DISP=SHR,DSN=CW.COMMON.FA.ALPHA.LOADLIB
000010 //SYSPRINT DD SYSOUT=*
000011 //SYSLIST DD SYSOUT=*
000012 //DD01 DD DSN=USERID9.FASAMP.JCL,
000013 // DISP=SHR
000014 //DD010 DD DSN=USERID9.FASAMP.LAYOUTS,
000015 // DISP=OLD
000016 //DD01SC DD DSN=USERID9.FILEAID.SC.D940518.T155703(SELECT),
000017 // DISP=(OLD,DELETE)
000018 //SYSIN DD *
000019 $$DD01 COPYMEM CEM=NO,RLM=YES,NEWMEMS=??
000020 MEMBER=(SPACE,TALLY,UPDATE,USER)
```

Finding Files On Disk

File-AID provides two utilities to assist you with finding files:

- 3.4 Catalog Utility: Scans the catalog for datasets matching your dataset name mask (high-level qualifier required).

The advantages provided by the File-AID Catalog utility include:

- More flexibility in using pattern characters in a search name
- Unlimited action regardless of type of dataset listed, including VSAM information display, Browse and Edit (with File-AID), and Delete.

- 3.7 VTOC Utility: Scans volumes for datasets matching your dataset name mask (pattern allowed in high-level qualifier (for example, *.FASAMP.EMP*). Datasets need not be catalogued.



If installation parameter [DISALLOW_ANY_HLQ_WILDCARD](#) is set to **Y**, pattern characters (*, +, %, etc.) in the high level qualifier of a dataset for options 3.4 and 3.7 are **not** allowed.

In this chapter, you practice using these utilities and learn about the line commands (for example, I (Info), 1 (File-AID Browse), and R (Rename)) that enable you to work with the list of datasets you generate.

Scanning the System Catalog (3.4 Catalog Utility)

File-AID has a powerful utility (3.4 Catalog) for scanning the system catalog and listing datasets that match a pattern you specify.

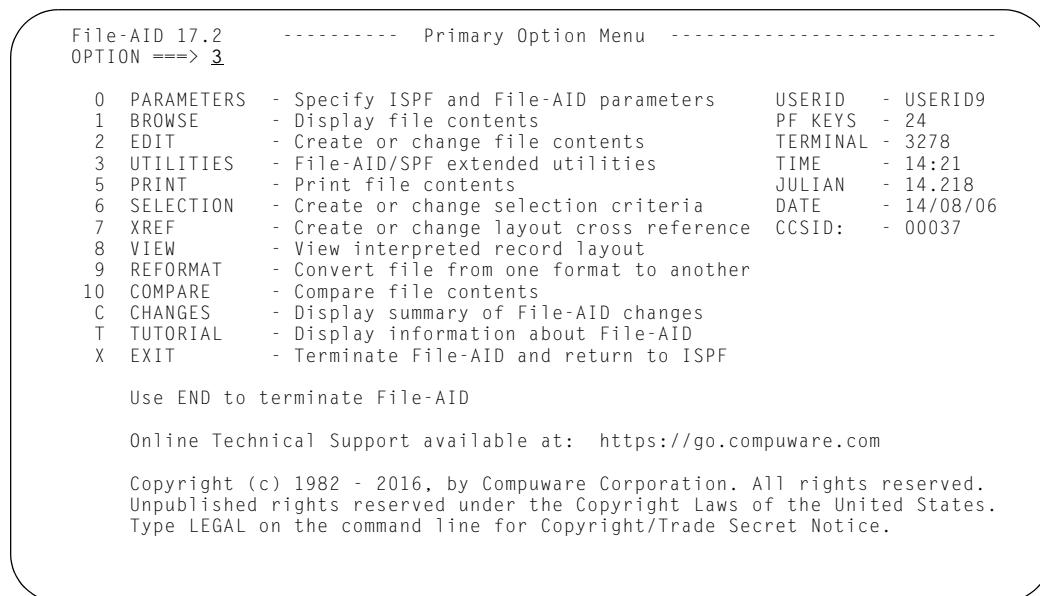
This utility is dynamically invoked for you whenever you specify a pattern dataset name (for example, FASAMP.*) in *any dataset name prompt within File-AID*.

Accessing the Catalog Utility (Option 3.4)

The Catalog utility is located on File-AID's Extended Utilities menu (option 3) as utility number 4.

First select option 3 to display the Extended Utilities menu.

Figure 266. File-AID Primary Option Menu. Selecting Option 3 for Extended Utilities Menu.



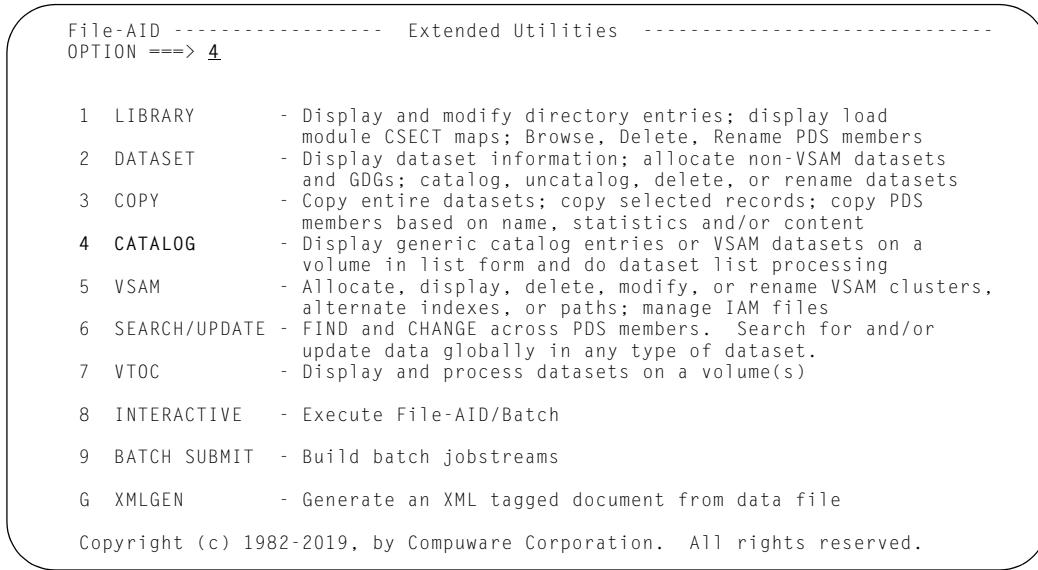
Step:

1. From the File-AID Primary Option Menu ([Figure 266](#)), select File-AID option 3 to view the File-AID Extended Utilities menu.

Selecting the Catalog Utility

Next, select option **4** to view the Catalog Utility entry screen.

Figure 267. File-AID Extended Utilities Menu - Choose Option 4 CATALOG



Step:

1. From the File-AID Extended Utilities menu ([Figure 267](#)), select option **4** to access the Catalog Utility entry screen.

Specifying Catalog Search Options

The Catalog Utility entry screen enables you to generate a list of datasets that start with your user ID prefix by pressing the Enter key just once.

You may choose to specify an explicit search name or other options, including:

- Format option: select the amount of information you want to see in your list of datasets:

Q (Quick)

Very fast; just looks up catalog entry.

S (Short)

Reads catalog entry to show volume.

L (Long)

Gets information from dataset label including space allocated and percent of space used and record format.

Multi-volume datasets are identified by the + (plus sign) following the Volume field with the Short and Long formats.

The default value for the Format option is set by the Format option field on the Parameters screen (option 0.4).

- Clusters only: option to show just cluster name or all components of VSAM clusters (for example, .DATA and .INDEX). The default is to show cluster name only.
- Display confirm delete: option to suppress the display of the confirm screen for each delete request.

In this example, you list your user ID datasets using the LONG format.

Figure 268. Catalog Utility Entry Screen

```

File-AID ----- Catalog Utility -----
OPTION ==> ____

V - Produce volume list of VSAM datasets (non-ICF catalogs only)
BLANK - Generic catalog search

Generic Catalog Search Function:
Search name      ==> _____
Format option    ==> L      (Q = Quick; S = Short; L = Long)
Clusters only    ==> Y      (Y = Yes; N = No)

Volume Dataset List Function:
Volume serial    ==>       (Required for option V)
Translate DSN     ==> N      (Y = Yes; N = No)

Catalog to Search if other than Default System Catalog:
Catalog name     ==>
Catalog password  ==>       (If catalog is password protected)

Display confirm delete ==> Y      (Y = Yes; N = No)

```

Steps:

1. Leave the OPTION field blank.
2. Leave the Search name field blank.

3. Set Format option field to L (long).
4. Press Enter. File-AID generates the list of datasets and displays them on the Catalog Utility Dataset List screen as shown in [Figure 269](#) on page 248.

More About the Catalog Utility Entry Screen

- Rules for the Search Name field include:
 - If you leave the field blank, File-AID automatically lists those datasets starting with your user ID. It also lists any datasets that start with your site optional VSAM high-level qualifier *plus* your VSAM intermediate name as defined in your 0.1 System Parameters default.
 - If you specify a name, you must enter the full, high-level qualifier name without quotes (for example, SYS1).
 - Valid pattern characters include:

? (Question mark) Single character wildcard (for example, SYS1.DB?LIB)

* (Asterisk) Multiple character wildcard (for example, SYS1.DB* and SYS1.FA.*.NODEFOUR)

+ (Plus) Multiple node wildcard (for example, SYS1.+.NODEFOUR).

- The Search Name is reset to blanks when you exit the Catalog utility.
- The V option (Produce volume list of VSAM) is used primarily for sites having pre-ICF catalogs.

Working With Your Dataset List (Primary and Line Commands)

File-AID scans the system catalog and generates a list of datasets matching your search name. In this case, you used the default search name and are viewing a list of your user ID prefix datasets.

You can scroll the list down or up, use the FIND command, print the list, or use line commands to select one or more datasets for processing.

In this example, you look at the File-AID tutorial screen available on any screen by issuing the HELP command or pressing the PF key assigned to the HELP command (PF1). Later, you use the I (Info) line command to view information about a VSAM cluster.

Figure 269. Catalog Utility Dataset List - Long Format

File-AID ----- Catalog Utility Dataset List --- 22 DATASETS SELECTED						
COMMAND ==> SCROLL ===> CSR						
----- D A T A S E T N A M E -----		Org	Volume	Fmt	Trks	%Us Xt
USERID9.FASAMP.COMPARE		VS	PRD928	F	1	100 1
USERID9.FASAMP.EMPLOYEE		VS	PRD928	F	1	100 1
USERID9.FASAMP.EMPLOYEE2		PS	PRD927	FB	1	0 1
USERID9.FASAMP.EMPMAST		PS	PRD927	FB	1	100 1
USERID9.FASAMP.INVFILE		PS	PRD927	VB	1	100 1
USERID9.FASAMP.INVFILE2		PS	PRD927	VB	1	0 1
USERID9.FASAMP.JCL		PO	PRD927	FB	2	100 1
USERID9.FASAMP.LAYOUTS		PO	PRD927	FB	1	100 1
USERID9.FASAMP.ORDRFILE		PS	PRD927	VB	1	100 1
USERID9.FASAMP.RFMTDEF		PO	PRD927	VB	1	100 1
USERID9.FASAMP.SEGFILE		PS	PRD927	VB	1	100 1
USERID9.FASAMP.SELCRIT		PO	PRD927	VB	1	100 1
USERID9.FASAMP.SEQBLK		PS	PRD904	FB	3	33 1
USERID9.FASAMP.XREF		PO	PRD927	VB	1	100 1

Step:

1. Press **PF1** (HELP) two times.

File-AID contains comprehensive tutorials about each screen and command. Pressing PF1 (HELP) displays the tutorial describing your current screen.

If a short message is displayed in the upper right corner (for example, 22 DATASETS SELECTED), the first time you press PF1, File-AID displays the long message associated with the short message. The long message appears on screen line three or sometimes in a message window near the lower portion of your screen. The second time you press PF1, File-AID invokes the related tutorial screen that describes the current function or message.

From the tutorial, you can either select a specific topic when choices are provided or just press Enter from each tutorial screen to sequentially view the information.

Reviewing the Tutorial - Summary of Primary and Line Commands

This tutorial on dataset selection lists summarizes the valid primary and line commands for the Catalog utility and the VTOC utility.

Use the END command (PF3) to return to the File-AID screen you were on when you requested help.

Figure 270. Catalog Utility. The Dataset List Processing Commands Tutorial Screen.

```
File-AID ----- CATALOG - DATASET SELECTION LISTS ----- TUTORIAL
OPTION ==>
+-----+
| DATASET SELECTION LIST PROCESSING |
+-----+
DATASET SELECTION LISTS allow specific primary commands and line commands.
Note: When the Catalog Utility is invoked by specifying a pattern for a DSN,
      the only valid line command is S, to select a dataset for processing.

The following topics are presented in sequence or may be selected by number:
  1 - SCROLLING through dataset selection lists
Primary commands
  2 - F (FIND)....scroll to dataset name containing search text
  3 - L (LOCATE)....scroll to dataset starting with search text
  4 - P (PRINT)....print the list
Line commands-----
  5 - B (BROWSE)      10 - I (INFO-long)      15 - 1 (File-AID Browse)
  6 - C (CATLG)       11 - M (MODIFY)        16 - 2 (File-AID Edit)
  7 - D (DELETE)      12 - R (RENAME)        17 - 6 (File-AID Search /Update)
  8 - E (EDIT)        13 - S (INFO-short or Select)
  9 - F (FREE)        14 - U (UNCATLG)       18 - V (VIEW)
```

Steps:

1. Review the primary and line commands shown in the tutorial in [Figure 270](#). Notice that line command 1 invokes File-AID Browse, 2 invokes File-AID Edit and 6 is File-AID Search/Update.
2. Use the END command (press PF3) to return to the list of your datasets.

More About the Tutorial

- In the tutorial, you can ask for help (PF1) to learn how the tutorial works.
- You can use the TOC primary command to view the table of contents for the tutorial.
- You can use the I primary command to access the alphabetical index for File-AID's tutorial.

Selecting a Dataset for Processing

In order to perform an action on any dataset in the Dataset List, specify a valid line command to the left of the dataset name.

In this example you request information (I line command) on a VSAM cluster.

Figure 271. Catalog Utility Dataset List - I (Info) Request

Catalog Utility Dataset List --- 22 DATASETS SELECTED						
COMMAND ==>		SCROLL	==>	CSR		
	D A T A S E T N A M E	Org	Volume	Fmt	Trks	%Us Xt
I	USERID9.FASAMP.COMPARE	VS	PRD928	F	1	100 1
	USERID9.FASAMP.EMPLOYEE	VS	PRD928	F	1	100 1
	USERID9.FASAMP.EMPLOYEE2	PS	PRD927	FB	1	0 1
	USERID9.FASAMP.EMPMAST	PS	PRD927	FB	1	100 1
	USERID9.FASAMP.INVFILE	PS	PRD927	VB	1	100 1
	USERID9.FASAMP.INVFILE2	PS	PRD927	VB	1	0 1
	USERID9.FASAMP.JCL	PO	PRD927	FB	2	100 1
	USERID9.FASAMP.LAYOUTS	PO	PRD927	FB	1	100 1
	USERID9.FASAMP.QDRDFILE	PS	PRD927	VB	1	100 1
	USERID9.FASAMP.RFMTDEF	PO	PRD927	VB	1	100 1
	USERID9.FASAMP.SEGFILE	PS	PRD927	VB	1	100 1
	USERID9.FASAMP.SELCRIT	PO	PRD927	VB	1	100 1
	USERID9.FASAMP.SEQBLK	PS	PRD904	FB	3	33 1
	USERID9.FASAMP.XREF	PO	PRD927	VB	1	100 1
	USERID9.ISPF.ISPPROF	PO	PRD802	FB	4	50 1
	USERID9.JCL	PO	PRD902	FB	34	100 1
	USERID9.LOGON.CLIST	PO	PRD921	VB	1	100 1
	USERID9.SPFLOG1.LIST	PS	PRD926	VA	8	0 1
	USERID9.SPF1.LIST	PS	PRD918	FBA	2	100 1
	USERID9.SPF2.LIST	PS	PRD915	FBA	16	0 1
	USERID9.SUPERC.LIST	PS	PRD912	FBA	1	100 1

Steps:

1. If necessary, use the command **FIND FASAMP.COMPARE**, to scroll the list of datasets so that your userid.FASAMP.COMPARE dataset is visible in the list of datasets.
2. Write down the VOLUME number of the *hlq*.FASAMP.COMPARE dataset in the space below this sentence. You use this volume in a later example.

VOLUME = _____ <-- Write VOLSER here

3. Place an **I** to the left of the *hlq*.FASAMP.COMPARE dataset.
4. Press Enter. File-AID displays information about FASAMP.COMPARE on the VSAM Information screen shown in [Figure 272](#) on page 251.

Ending Dataset Processing

After performing the function you requested, use the END command to return to the Catalog Utility Dataset List screen.

If you selected more than one dataset to process, File-AID immediately processes the next command request and displays the appropriate screen (File-AID does not display the Catalog Utility Dataset List screen first). After processing your last dataset request, File-AID redisplays the Catalog Utility Dataset List screen scrolled to the last processed dataset.

This example illustrates the processing of a single dataset. In this step, you exit from the Catalog utility and return to the Extended Utilities menu.

Figure 272. Catalog Utility - Sample VSAM Information Display

```
File-AID ----- VSAM Information - (Page 1 of 2) -----
COMMAND ==> END
Catalog: CATALOG.TS02.VPRD915
Cluster: 'USERID9.FASAMP.COMPARE'
Data:   'USERID9.FASAMP.COMPARE.DATA'          Data Volume: PRD928
Index:  'USERID9.FASAMP.COMPARE.INDEX'          Index Volume: PRD928
----- -
Data Component Information:                   Current Allocation Options:
Device type:      3390           Load option:    RECOVERY
Organization:     KSDS            Write check:   NO
KSDS key length:  5              Buffer space:  6144
KSDS key location: 0             Erase on delete: NO
Average record size: 211          Imbedded index: NO
Maximum record size: 211          Replicated index: NO
Allocated Space:   Unit Primary Secondary   Reuse option: YES
Data:             TRACKS       1        1   Share option:  3-3
Index:            TRACKS       1        1   Spanned records: NO
Dataset Date Information:
Creation date:    1994/05/09   Key ranges present: NO
Expiration date:
Modification date: 1994/05/09   AIX-unique keys:
Modification time: 05:48 PM GMT  AIX-upgrade:
                                         Owner ID:
```

Step:

1. Use the END command (press PF3) *THREE TIMES* to return to the Extended Utilities menu.

Scanning DASD Volumes to Find Files (3.7 VTOC Utility)

File-AID has a convenient DASD utility (3.7 VTOC) for scanning the VTOCs of one or more individual (or ranges of) volumes to find datasets.

Datasets you are looking for may be uncataloged. Special displays let you:

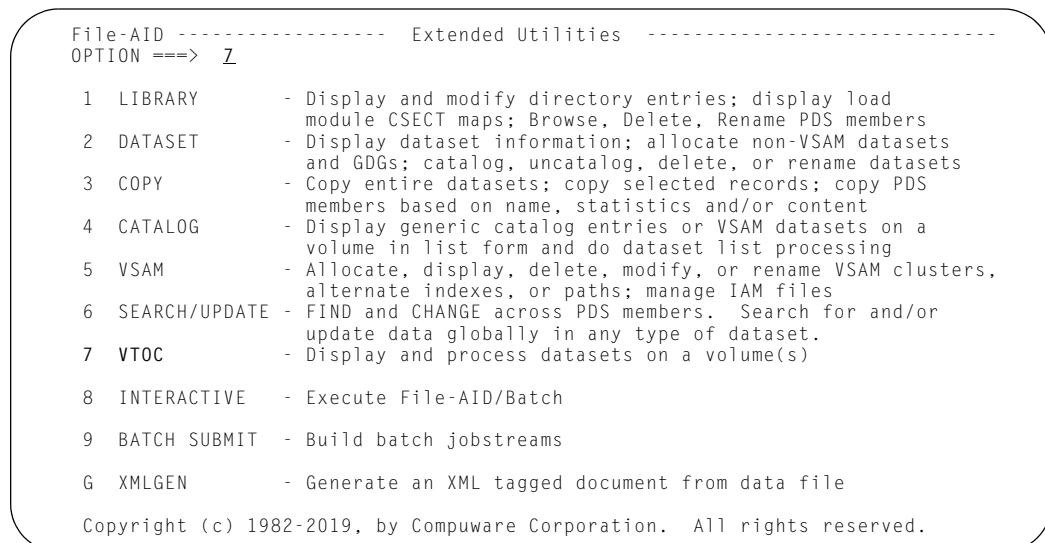
- View a summary of space utilization on your volumes.
- View the extents on a volume in physical sequence.
- Find and list datasets using pattern names including high-level qualifier patterns.

You can also perform many of these functions with File-AID/Batch by submitting JCL to produce reports.

Accessing the VTOC Utility (Option 3.7)

The VTOC utility is located on File-AID's Extended Utilities menu (option 3) as utility number 7.

Figure 273. File-AID Extended Utilities Menu. Selecting the VTOC Utility.



Step:

1. From the File-AID Extended Utilities menu ([Figure 273](#)), select option 7 to access the VTOC Utility entry screen.

Specifying VTOC Search Options

The VTOC Utility entry screen provides several fields and options for specifying your request. In all cases, you must identify the DASD volume(s) to be scanned by using the Volume Selection Information fields.

Figure 274. VTOC Utility - Request Entry Screen

```

File-AID ----- VTOC Utility -----
OPTION ==>

I - List volume information
M - Map VTOC entries in pack location sequence
BLANK - List VTOC entries in dataset name sequence

Volume Selection Information:
  Volume serial      ==>
  Unit name          ==>
  Volume status      ==> (PUB=Public; PRV=Private; STG=Storage)

Generic Search Function:
  Search dataset name ==>
  Max number of names ==> 1000 (For multi-volume operations)

Catalog to use if other than Default System Catalog:
  Catalog name      ==>
  Catalog password    ==> (If catalog is password protected)

Display confirm delete ==> Y (Y = Yes, N = No)
Display Volume Summary ==> Y (Y = Yes, N = No)

```

Specifying the OPTION

The OPTION at the top of the screen defines the format of the results display:

I (List Volume Information)

Produces a summary of your volumes showing space used and free. From the list of volumes, you can use the S line command to view the datasets on the volume in name order, or the M line command to view the extents on the volume in pack location sequence.

M (Map VTOC entries in pack location sequence)

Shows physical order of extents on exactly one volume.

(blank) (List VTOC entries in dataset name sequence)

Produces a list of datasets for one volume or a list of all datasets matching the search name pattern on a range of volumes.

Performing VTOC Processing in Batch

File-AID/Batch has several functions corresponding to the OPTIONS of the VTOC utility. Using these functions you can produce hard copy reports of VTOC information. Sample JCL for performing VTOC functions in batch is provided in your sample JCL library (FASAMP.JCL) member name BATVTOC. The functions include:

VTOCINFO (List Volume Information)

Produces a summary of your volumes showing space used and free. Following the summary, each volume is listed in dataset name order.

VTOCMAP (Map VTOC entries in pack location sequence)

Produces a report of one or more volumes by extent in physical order.

VTOCDSN (List VTOC entries in dataset name sequence)

Produces a list of datasets for one volume or a list of all datasets matching the search name pattern on a range of volumes.

Specifying the Volume Selection Information

The Volume Selection Information fields are used to specify the volume(s) to be scanned.

At least one field must contain a value, multiple fields may be used (for example, Volume serial and Unit name).

- Volume Serial

A list of one or more full or partial volume serial numbers (for example, DISK21,TSO,PROD9). (Asterisk (*) means all volumes currently online.)

- Unit

A list of one or more valid UNIT names (for example, SYSDA,3390,WORK).

- Volume status

Valid status codes are PUB, PRV, and STG.

Specifying the Optional Search Name

The Search name field accepts all standard File-AID pattern characters including pattern characters in the high-order node of the dataset.

Valid pattern characters are as follows:

? (Question mark)

Single character wildcard (for example, SYS1.DB?LIB)

* (Asterisk)

Multiple character wildcard (for example, SYS1.DB* and SYS1.FA.*.NODEFOUR)

+ (Plus)

Multiple node wildcard (for example, +.NODEFOUR).

Use the "Max number of names" field to limit the search and display of found datasets if your pattern might match a large number of datasets.

Specifying the Catalog to Use

These fields are used only to catalog datasets using a catalog other than the system catalog. It only applies to the C (Catalog) line command.

Using the Display Confirm Delete option

Use the Display confirm delete field to suppress the display of a panel to confirm each delete request. This can be convenient when you are performing DASD maintenance and you do not need a confirmation of your delete requests.

Using the Display Volume Summary option

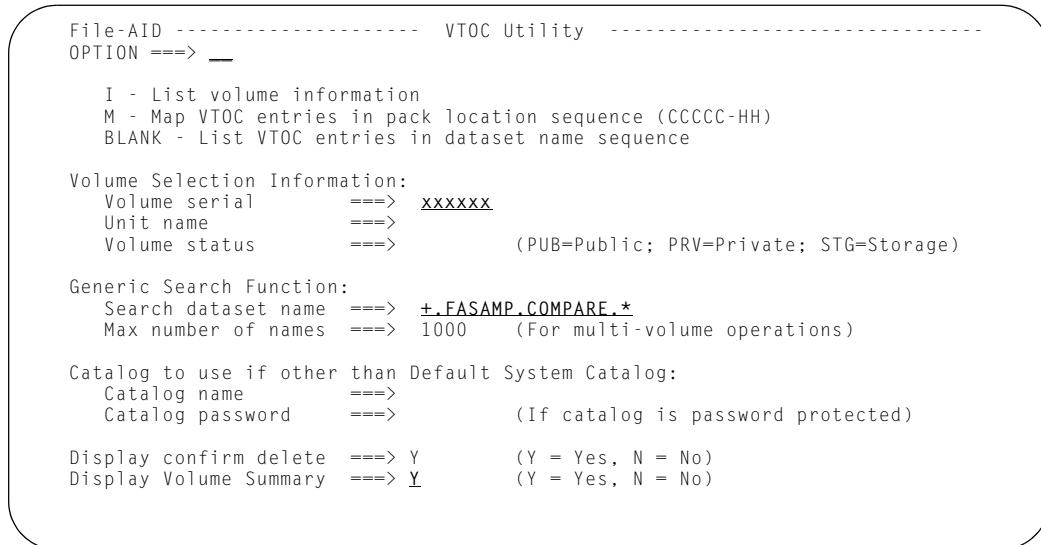
Use the Display Volume Summary field to control the display of the Volume Summary lines on the screens for options blank (dsn list) and M (map). Valid entries are Y (Yes) and N (No).

Performing the Name Search

In this example, you scan a volume and list all datasets matching the search pattern `+.FASAMP.COMPARE.*`. The pattern matches datasets with names:

starting with any number of qualifiers and ending with FASAMP.COMPARE.any-single-qualifier.

Figure 275. VTOC Utility - Specifying a Name Search



Steps:

1. Leave the OPTION field blank.
2. Specify the Volume serial as the value you noted earlier in [Selecting a Dataset for Processing](#) on page 250.
3. Type `+.FASAMP.COMPARE.*` in the Search dataset name field.
4. Type Y in the Display Volume Summary field.
5. Press Enter. File-AID lists the datasets for the specified volume as shown in [Figure 276](#) on page 257.

Selecting a Dataset for Processing

In order to perform an action on any dataset listed, enter a valid line command to the left of the dataset name.

See [Figure 270](#) on page 249 for a list of the valid primary and line commands available for acting on any dataset (or extent when viewing pack location sequence) displayed.

Figure 276. VTOC Utility - List of Datasets Matching a Search Name

File-AID - Utility VTOC List for XXX926 (3390)					-----	8 DATASETS LISTED
COMMAND ==>					SCROLL ==>	CSR
VTOC:	69 Tracks (23 %used)	2640 Free	DSCB'S		8 Datasets
VOL:	50085 Tracks (90 %used)	15 Tracks/cylinder			15 ALT Tracks
FREE:	306 Cyls (MAX= 133)		5026 Trks (MAX= 2004)			130 Free Xtnts
Selected Datasets:	8 Tracks, using	0 % of volume				
----- D A T A S E T N A M E -----					ORG	Trks %Used XTS= Status
XXX010.FASAMP.COMPARE.DATA			VS	1 ?	1	
XXX010.FASAMP.COMPARE.INDEX			VS	1 ?	1	
XXX022.FASAMP.COMPARE.DATA			VS	1 ?	1	
XXX022.FASAMP.COMPARE.INDEX			VS	1 ?	1	
XXX028.FASAMP.COMPARE.DATA			VS	1 ?	1	
XXX028.FASAMP.COMPARE.INDEX			VS	1 ?	1	
XXX029.FASAMP.COMPARE.DATA			VS	1 ?	1	
XXX029.FASAMP.COMPARE.INDEX			VS	1 ?	1	
***** Bottom of data *****					*****	

Ending Dataset Processing

After viewing a list, use the END command to return to the VTOC Utility entry screen. You are done with this example; return to the File-AID Primary Option Menu now.

Step:

1. Use the END command (press PF3) *THREE TIMES* to display the File-AID Primary Option Menu.

Viewing Load Module Information

File-AID has a utility similar to ISPF's 3.1 Library Utility for displaying and managing PDS and PDSE members. Special features for load modules let you display and change the link-edit attributes and to view CSECT information in name or address order, including compiler options for load modules that have CSECTs compiled with any IBM COBOL compiler (excluding OS/VS COBOL) or any IBM Enterprise PL/I for z/OS and OS/390 compiler starting with Release 3.1. The File-AID 3.1 Library utility provides these capabilities and other features for managing partitioned data sets (PDS and PDSE).

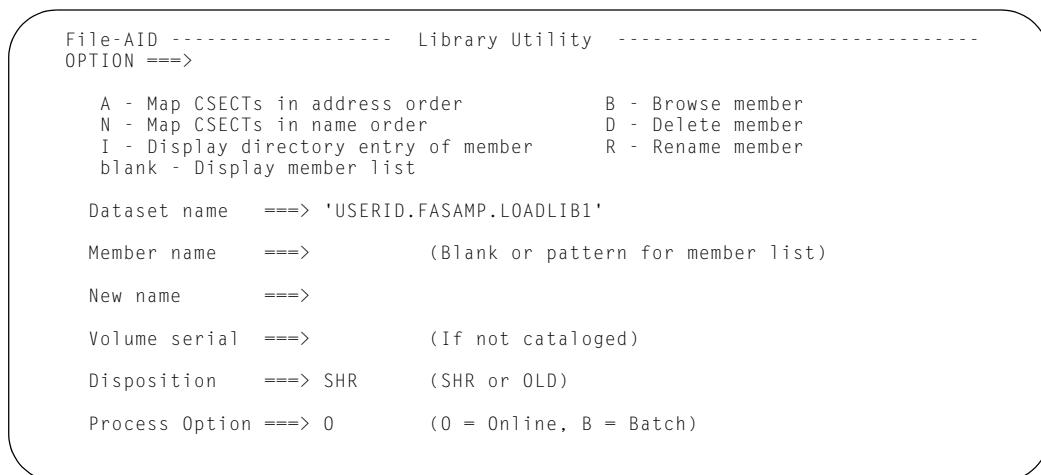
Accessing the Library Utility (Option 3.1)

The Library utility is located on File-AID's Extended Utilities menu (option 3) as utility number 1.

Step:

1. From the File-AID Primary Option Menu (not shown here), select File-AID option 3.1 to access the Library Utility entry screen ([Figure 277](#)).

Figure 277. Library Utility Entry Screen



Defining Your Library Request

The Library Utility entry screen ([Figure 278](#) on page 261) captures your:

- Main request option:

A	list CSECTS in address order
N	list CSECTS in name order
I	show directory entry in hex
B	browse member
D	delete member
R	rename member
blank	list members

After File-AID produces a list of members, all of the options become valid line commands that may be specified for any member listed.

- Dataset name

Standard File-AID dataset name entry is supported including using wildcard character in the dataset name (for example, FASAMP.*)

- Member name (required for all but blank option)

If a member name is specified, it must be a valid full member name, no pattern characters are allowed.

- New name (required and used only by R (Rename))
- Disposition (SHR or OLD)

If the disposition is OLD for a load module library, the S (list directory) option displays (and allows update to some of) the load module's link-edit attributes.

- Process Option

Specify whether to process your Library utility request O (Online) or B (Batch). Batch processing is valid only for load library processing.

Generating a Member List

This example lists all members of the File-AID sample load library (FASAMP.LOADLIB1). Later you are shown how to select a member to view the CSECTS in address order. Use option blank (Display member list).

Figure 278. Library Utility Entry Screen. Requesting a Member List.

The figure shows a terminal window titled "File-AID ----- Library Utility -----". It displays a menu of options and several input fields. The menu includes:

- A - Map CSECTs in address order
- N - Map CSECTs in name order
- I - Display directory entry of member
- blank - Display member list
- B - Browse member
- D - Delete member
- R - Rename member

The input fields show the following values:

- Dataset name ==> 'USERID.FASAMP.LOADLIB1'
- Member name ==> (Blank or pattern for member list)
- New name ==>
- Volume serial ==> (If not catalogued)
- Disposition ==> SHR (SHR or OLD)
- Process Option ==> 0 (0 = Online, B = Batch)

Steps:

1. Leave the OPTION field blank.
2. Type the dataset name '**'USERID.FASAMP.LOADLIB1'**' (or the name of another load library).
3. Verify the value of the Disposition field is **SHR**.
4. Press Enter.

Using the Load Library Processing Options

File-AID displays the Load Library Processing Options screen as shown in [Figure 279](#). Enter "AG*" in the Member name mask field to limit the display to utility load modules beginning with AG.

Figure 279. Load Library Processing Options Screen.

```
File-AID ----- Load Library Processing Options -----
COMMAND ==>

Library Dataset: USERID.FASAMP.LOADLIB1

Specify Member Selection Options (Blank for All Members)
Member name mask ==> AG*
Member name range ==>                               to ==>
Member Rmode    ==>                               (24, ANY)
Member Amode    ==>                               (24, 31, 64, ANY)

Use ENTER to continue, END to return to dataset specification screen
```

Steps:

1. Type AG* in the Member name mask field.
2. Press Enter.

More About Load Library Processing Options

When selecting Processing Option B, Batch (see [Process Option](#) on page 260), the Load Library Processing Options screen displays additional options:

- Member Link Date
- Display member selection list
- Include Compiler Options
- Create a CSV file

Refer to the *File-AID/MVS Online Reference* manual for more information.

Processing the Member List Using Primary Commands

The Library utility member list accepts several primary commands including:

LOCATE *mem*

Scrolls the list to the member with this name

P

Print the directory list to your default printer

DOWN

Scroll down by the scroll amount

UP

Scroll up by the scroll amount

x *mem*

where *x* is either: A (Address order), N (Name order), B (Browse), I or S (Show directory).

Use the S command to show the directory information for member AGER0100.

Figure 280. Library Utility. Using S Primary Command to Show Directory Information.

```
File-AID Library Utility - USERID.FASAMP.LOADLIB1 ----- Row 1 to 3 of 3
COMMAND ===> S_AGER0100                               SCROLL ===> CSR
A/N = CSECT Map; I = Directory Entry; D = Delete; R = Rename; B = Browse
-----
S   NAME      RENAME     SIZE    TTR   ALIAS-OF  AC     EP     R/M A/M ATTRIBUTES
AGER0100          00000CB8 000016           00 00000000 ANY 31  RN  RU
AGER1000          00000FA8 00001F           00 00000000 ANY 31  RN  RU
AGER1001          00000FA0 000028           00 00000000 24 24  RN  RU
***** Bottom of data *****
```

Steps:

1. Type **S AGER0100** in the COMMAND field.
S or I show the directory information for the specified member.
2. Press Enter.

Figure 281. Library Utility. Directory Information.

```

File-AID ----- Directory Information -----
COMMAND ==> END

Dataset: USERID.FASAMP.LOADLIB1(AGER0100) TTR 000016
----- Directory entry in HEX format -----
Char AGER0100.....BS.....H.....
Zone CCCDFFFF001200100000CE00B0B000810000
Numr 17590100006C00C0000220C8C8000821100
....+....1....+....2....+....3....+.

SSI:

----- Link edit attributes -----
EP      000000  SIZE (HEX) 000CB8 (DEC) 3,256
RENT    YES      OVLY     NO          SCTR      NO
REUS    YES      DC       NO          NE        NO
REFR    NO       EP ZERO   YES         ZERO ORIGIN YES
OL      NO       TEST     NO          TEST SYMBOLS NO
EXEC    YES      RLD      YES         1 BLOCK/NO RLD NO
RMODE   ANY     PAGE ALIGN NO          APF CODE   000
AMODE   31

Use END to return to directory menu

```

3. Review the displayed information for the selected load module.
4. Type END
5. Press Enter.

Processing the Member List Using Line Commands

The Library Utility member list screen accepts several line commands, including:

B

Browse the member.

S

View directory entry.

For load modules, this option shows the link-edit attributes. Some attributes may be overtyped when Disposition=OLD.

A

List CSECTs in address order (load module only).

N

List CSECTs in CSECT name order (load module only).

R

Rename member (specify new member name in "Rename" column to right of member name).

D

Delete member.

E

Edit member (non-load module only).

U

Undo (may be used on a *DELETED or *RENAMED member to restore the member after a D (Delete) or R (Rename)).

| You examine the address order display of CSECTS in the AGER0100 load module.

Steps:

- | 1. Type an A to the left of the AGER0100 member name.
- | 2. Press Enter.

Figure 282. Library Utility. Viewing CSECTS in Address Order (The A Line Command).

```
File-AID Library Utility - USERID.FASAMP.LOADLIB1 ----- Row 1 to 3 of 3
COMMAND ==>                                         SCROLL ==> CSR
A/N = CSECT Map; I = Directory Entry; D = Delete; R = Rename; B = Browse
-----
S  NAME      RENAME     SIZE    TTR   ALIAS-OF AC    EP    R/M A/M ATTRIBUTES
A  AGER0100  *INFO      00000CB8 000016        00 00000000 ANY 31  RN RU
      AGER1000          00000FA8 00001F        00 00000000 ANY 31  RN RU
      AGER1001          00000FA0 000028        00 00000000 24 24  RN RU
***** Bottom of data *****
```

Viewing the Load Module's CSECTS in Address Order

Information displayed for a load module includes:

- Link date and job name.
- Detailed information on each CSECT.
 - Name
 - Type
 - Address
 - Length
 - Compiler type
 - Compile date
 - Amode/Rmode
 - Zap ID and date of any applied Zaps
 - Compiler options for load modules that have CSECTS compiled with any IBM COBOL compiler (excluding OS/VS COBOL) or any IBM Enterprise PL/I for z/OS and OS/390 compiler starting with Release 3.1. (Use S line command.)

You may scroll DOWN and UP. You may use the FIND command to locate CSECTS or dates. You may issue the P (print) primary command to direct the display to a printer or dataset.

When File-AID detects long program names in a PDSE load object, it uses a two-line display per SD (Section Definition) or LD (external Label Definition) entry. For readability, SD entries contain the SD name followed by hyphens.

For a PDSE, File-AID identifies the BINDER version.

The END command is used to exit the display.

Figure 283. Library Utility - CSECT Information - Address Order

```
File-AID ADDRESS List of USERID.FASAMP.LOADLIB1(AGER          FUNCTION COMPLETED
COMMAND ===>
AGER0100 was linked on 09/09/1997 by BINDER               SCROLL ===> CSR
S- Symbol - Type ADDR Length Tname 1   Tdate 1   Tname 2   Tdate 2 A/Rmode
-----
S  AGER0100  SD 00000000    848 CBL II 1.3 24/08/97      MIN/ANY
    IGZEOPT  SD 00000848     48 ASM H V2   09/09/97      31/ANY
    IGZEBST  SD 00000890    428 ASM H V2   29/09/88      31/ANY
        IDENT   30/09/88 RSI82731060
    IGZEBST2 LD 000000B1E
***** Bottom of data *****
```

If, as shown in [Figure 283](#), the load library contains load modules that have CSECTS compiled with any IBM COBOL compiler (excluding OS/VS COBOL) or any IBM Enterprise PL/I for z/OS and OS/390 compiler starting with Release 3.1, use the S line command to list the compiler options in effect for the last compile.



An S line command on a non-qualifying CSECT result in an Invalid Selection error and you continue with Step 4 on page 267.

Steps:

1. Type **S** in the S line command column for a CSECT entry with Type SD and a qualifying compiler to display the compiler options used.
2. Press Enter.

COBOL Compiler Options

When selecting a CSECT entry with Type SD and a qualifying compiler, File-AID displays the compiler options used as shown in [Figure 284](#). Use as reference when re-compiling the load modules.

Figure 284. Sample COBOL Compiler Options

```
File-AID ----- Compiler Options ----- Row 1 to 5 of 5
COMMAND ==> RETURN

Module Name.. AGERO100      Link Date.. 24/08/97
CSECT Name... AGERO100     Compiler... CBL II 1.3   AMODE/RMODE.. MIN/ANY

Compiler Options:
-----
NOADV APOST DATA(31) NODECK NODUMP NODYNAM NOFASTSRT LIB LIST MAP NONUM
OBJECT NOOFFSET NOOPTIMIZE NOOUTDD NUMPROC(NOPFD) RENT NOSEQUENCE
SIZE(value) SOURCE NOSSRANGE NOTERM NOTEST NOWORD NOVBREF XREF ZWB NONAME
NUMCLS(PRIM) NODBCS NOAWO TRUNC(OPT) NOCURRENCY

***** Bottom of data *****
```

3. Review the displayed compiler options.

You have completed this example so return to the File-AID Primary Option Menu now.

4. Type RETURN.
5. Press Enter to close the Compiler Options screen and return to the File-AID Primary

Viewing Layouts

File-AID has a helpful function for interpreting COBOL or PL/I record layouts and presenting an information display showing the following information for each field:

- Field name
- Field level as defined in data declaration
- Field length
- Field start and end locations
- Picture of field as defined in data declaration
- System-assigned field number.

Accessing the View Utility (Option 8)

The View utility is located on File-AID's Primary Option Menu as option 8.

Step:

1. From the File-AID Primary Option Menu (not shown here), select File-AID option 8 to access the View Record Layout - Dataset Specification screen ([Figure 285](#) on page 270).

Specifying the Record Layout to be Interpreted

The View Record Layout - Dataset Specification screen (see [Figure 285](#)) is used to specify the dataset name and member name of the record layout to be interpreted.

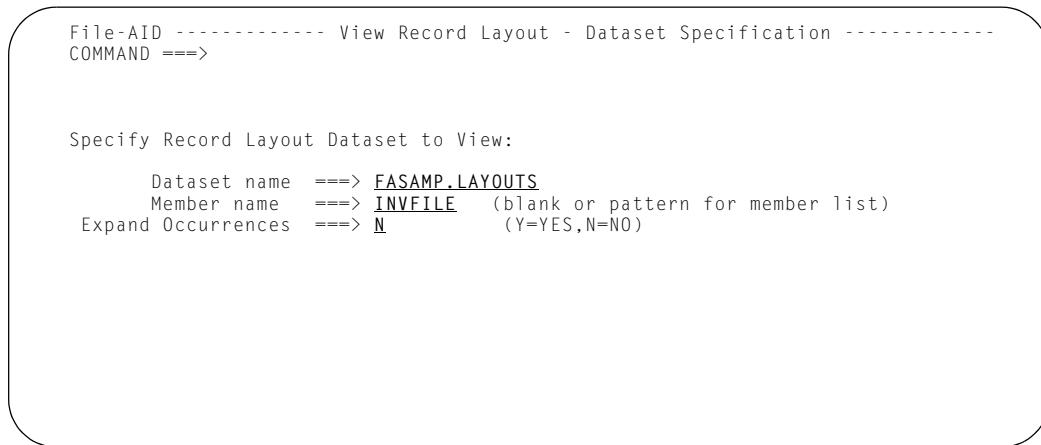
You can specify a pattern dataset name in the Dataset name field. If you do not specify a member, File-AID displays a member list.

In this example, you examine the interpreted record layout for the member INVFILE.

Steps:

1. Type the dataset name **FASAMP.LAYOUTS**.
2. Type the member name **INVFILE**.
3. Type **N** in the Expand Occurrences field.
4. Press Enter.

Figure 285. View Record Layout - Dataset Specification Screen



More About the View Record Layout - Dataset Specification Screen

- The dataset name you specify here is displayed on all screens where you can specify a record layout dataset name (for example, Browse and Edit).
- Record layouts to be interpreted may reside in any supported source library including:
 - PDS (80 byte records)
 - CA Panvalet
 - CA Librarian
 - Compuware *map* library (Release 6 and prior).
- The member specified must contain only data declarations for one or more structures of data beginning at structure level 01. You can specify a data declaration with COBOL or PL/I, but you cannot specify both within a single member.
- When using a multiple structure member in Browse or Edit, issue the formatted mode command, USE, to see a list of all layouts from which you may select an alternate layout.
- To specify a concatenation list to be used in place of the Record Layout dataset, enter a plus sign followed by the member name (+*membername*) of the member containing the list. Enter this in the **Record layout dataset** field instead of the Record Layout dataset name. For example, if the member RLPROD contains the list to be used, enter +RLPROD instead of a Record Layout Dataset

name. You specified the name of the concatenation list dataset in Option 0.1, File-AID system parameters (see [Concatenation List DSN](#) on page 72 of the *File-AID/MVS Online Reference* manual). The concatenation list dataset contains members known as concatenation lists. Each such list contains names of record layout datasets, each of which in turn contains record layout members.

The concatenation list is used in place of the single Record Layout dataset name. If the concatenated libraries contain duplicate member names, File-AID will always select the first occurrence of the member name.

- **Expand occurrences** - When a record layout contains an OCCURS or ODO you can specify to view all occurrences (YES) or only the first occurrence of each field.

Y

(Default) View all occurrences.

N

View only the first occurrence.

Viewing the Interpreted Layout

The VIEW LAYOUT display screen ([Figure 286](#)) accepts the following primary commands:

DOWN

Scrolls down by the scroll amount.

END

Exits from the VIEW LAYOUT screen.

FIND xx

Searches for string *xx* and scrolls to the field.

REPEAT

Repeats previous find.

UP

Scrolls up by the scroll amount.

You are done with this example so return to the File-AID Primary Option Menu now.

Step:

1. Use the END command (press PF3) TWO TIMES to redisplay the File-AID Primary Option Menu.

Figure 286. View Utility - Display of Interpreted Layout with EXPAND OCCURRENCES = NO

File-AID ----- VIEW LAYOUT -----				Row 1 to 21 of 32					
				SCROLL ==> CSR					
Layout: USERID9.FASAMP.LAYOUTS(INVFILE)									
----- FIELD LEVEL/NAME ----- --PICTURE-- FLD START END LENGTH									
INVENTORY-RECORD									
5 INV-PART-NO	X(15)	1	1	513	513	15			
5 INV-DESCRIPTION	X(40)	2	16	55	40				
5 INV-UNIT-OF-MEASURE	XX	3	56	57	2				
5 INV-UNIT-PRICE	S9(5)V99	4	58	61	4				
5 INV-STOCK-INFO(1) OCCURS 2 TIMES	GROUP	5	62	79	18				
10 INV-WAREHOUSE(1)	XXX	6	62	64	3				
10 INV-STATUS(1)	X(6)	7	65	70	6				
10 INV-QTY-DATE(1)	GROUP	8	71	79	9				
15 INV-QTY-ON-HAND(1)	S9(5)	9	71	73	3				
15 INV-LAST-ORDER-DATE(1)	X(6)	10	74	79	6				
10 INV-BO-QTY-DATE REDEFINES INV-QTY-DATE	GROUP	11	71	79	9				
10 INV-BO-QTY-DATE(1)	S9(5)	12	71	73	3				
15 INV-BACKORDERED(1)	X(6)	13	74	79	6				
15 INV-BACKORDER-DATE(1)	GROUP	14	98	107	10				
5 INV-REORDER-INFO	S9(5)	15	98	100	3				
10 INV-REORDER-LEVEL	S9(5)	16	101	103	3				
10 INV-REORDER-QUANTITY	999	17	104	106	3				
10 INV-LEAD-TIME-DAYS									

More About the View Display

- If the member contains multiple 01-level structures, File-AID identifies how many layouts there are and displays a message line to identify the first and next layout(s). For example:

```
Layout: USERID9.FASAMP.LAYOUTS(SEGRECS)
MEMBER CONTAINS 6 LAYOUTS
----- FIELD LEVEL/NAME ----- --PICTURE-- FLD START END LENGTH
> > > > START OF LAYOUT NUMBER 1 < < < <
.
.
.
> > > > START OF LAYOUT NUMBER 2 < < < <
```

Reformatting Records

The Reformat function extends the capabilities of the Copy utility by allowing you to change the format of your file as you are copying it. You define the rules for reformatting by supplying record layouts for the file being copied and for the target file.

Typically you start with a layout which matches a data file. Then, make a copy of the layout and make changes to the new version to reflect the new format of your data file. In the new layout you reorganize the source fields by adding new fields, deleting unwanted fields, changing field sizes and/or reordering fields.

Next you create a reformat definition using the Reformat function. Then, execute the definition to read your original file and write reformatted records to your new file.

You create a reformat definition for the target file by:

- Using optional field selection criteria to selectively copy and/or reformat records
- Defining fields to be moved (including numeric format translations)
- Specifying constant values for new or existing fields

After you create a reformat definition, you can execute the Reformat function online or in batch.

Japanese Users: Reformat does not support Graphic-defined DBCS data fields.

Accessing the Reformat Function (Option 9)

The Reformat function is located on File-AID's Primary Option Menu as option 9.

Steps:

1. Enter a 9 in the OPTION field on the Primary Option Menu (not shown here).
2. Press Enter. File-AID displays the first screen of the Reformat function as shown in [Figure 287](#) on page 274.

Creating a New Reformat Definition

This example illustrates the process of creating a new reformat definition.

Figure 287. Reformat Definition - Specify Reformat Definition Member

```

File-AID ----- REFORMAT DEFINITION -----
OPTION ===> __

blank - Create a new or change an existing reformat definition
D - Dynamically create and execute a temporary reformat definition
E - Execute a previously saved reformat definition

Specify Reformat Definition Dataset:
Dataset name ===> FASAMP.RFMTDEF
Member name ===> EMPNEW
Volume serial ===> (If not cataloged)
Description ===>

Specify Execution Information:
Process online or batch ===> O (O = Online; B = Batch)

```

Steps:

1. Leave OPTION field blank to specify that you want to create a new reformat definition.
2. Enter **FASAMP.RFMTDEF** in the Dataset name field.
The attributes of this dataset are
DSORG=PO,RECFM=VB,LRECL=1576,BLKSIZE=7870.
3. Enter **EMPNEW** in the Member name field.
4. Type an **O** in the Process online or batch field.
5. Press Enter. File-AID displays the Reformat Record Layouts - Create Mode screen as shown in [Figure 288](#) on page 275.

More About the Reformat Definition Screen

- If the member name you specify already exists, File-AID invokes the editor where you can make changes to your reformat definition.
You cannot change record layouts in an existing member; you must create a new member in order to use different layouts or when a layout you want to use has changed.
- You can create and execute a temporary reformat definition by specifying option D. File-AID does not save the reformat definition you create through this option unless you specifically request to save it.
- You can execute an existing reformat definition by specifying option E. This option lets you execute a reformat definition that you previously created and saved. You bypass the editing process when you select option E.
- Contents of your sample reformat library (FASAMP.RFMTDEF) include a member EMPLOYEE2, which matches the new member EMPNEW you are defining in this example.

Identifying the Source and Target Record Layouts

The Reformat Record Layouts - Create Mode screen is displayed only when you are creating a **new** reformat definition. The information you enter on this screen defines the record layouts (source and target) for your new reformat definition.

Figure 288. Reformat Record Layouts - Create Mode. Identify Source and Target Record Layouts and Options

File-AID -----	Reformat Record Layouts -----	CREATE MODE
COMMAND ==>		
Specify Source Record Layout and XREF Information:		
Record layout usage	==> <u>S</u>	(S = Single; X = XREF)
Record layout dataset	==> <u>FASAMP.LAYOUTS</u>	
Member name	==> <u>EMPLOYEE</u>	(Blank or pattern for member list)
XREF dataset name	==>	
Member name	==>	(Blank or pattern for member list)
Specify Target Record Layout and XREF Information:		
Record layout usage	==> <u>S</u>	(S = Single; X = XREF)
Record layout dataset	==> <u>FASAMP.LAYOUTS</u>	
Member name	==> <u>EMPLOYEE2</u>	(Blank or pattern for member list)
XREF dataset name	==>	
Member name	==>	(Blank or pattern for member list)
Move corresponding?	==> <u>YES</u>	(YES or NO)
Ignore prefix	==>	
Ignore suffix	==>	

Steps:

1. Verify that the Record layout usage field in the Source information area of the screen contains a value of **S**.
2. Type **FASAMP.LAYOUTS** in the Record layout dataset field.
3. Type **EMPLOYEE** in the Member name field.
4. Verify that the Record layout usage field in the Target information area of the screen contains a value of **S**.
5. Type **FASAMP.LAYOUTS** in the Record layout dataset field.
6. Type **EMPLOYEE2** in the Member name field.
7. Verify YES in the Move corresponding field.
8. Press Enter. File-AID displays the Reformat Definition Editor screen as shown in [Figure 289](#) on page 276.

More About the Reformat Record Layouts Screen

- When you leave the OPTION field blank to create a new reformat definition, File-AID displays the information flag CREATE MODE in the top right corner of the display.
- When you specify YES in the Move corresponding field, File-AID matches the source and target layout field names and automatically assigns field references to request data movement during the reformat. File-AID does not automatically match COBOL FILLER fields.

Use the optional Ignore prefix and Ignore suffix fields when field names in the source and target layouts are similar, but have a different prefix or suffix. File-AID uses the values in these fields to match field names in this case.

- If you use an XREF for either the source or target layout, File-AID presents a list of layout members for you to choose. If you choose a BASE layout for the source, File-AID automatically reformats only those records with the matching record type values. You must not choose a DEFAULT-BASE layout for a target. If you execute in batch, you need to add DD01XR and DD01RL statements to the batch JCL to identify the XREF member and layouts library.

Using the Reformat Definition Editor

In this example, you use the Reformat Definition Editor to define the new format of the FASAMP.EMPLOYEE2 dataset. Using the editor, complete the following tasks:

- Initialize new and existing fields with literals.
- Define selection criteria to select only those records that meet the criteria for reformatting.

The Reformat Definition Editor screen as shown in [Figure 289](#), is divided into two parts: the source record layout fields are located in the top portion of the screen and the target record layout fields are located in the bottom portion of the screen.

Figure 289. Reformat Definition Editor

```

File-AID ---- REFORMAT Definition Editor - DS:USERID9.FASAMP.RFMTDEF(EMPNEW) -
COMMAND ==> SCROLL ==> PAGE

Source COBOL - EMPLOYEE-MASTER-FILE ---- USERID9.FASAMP.LAYOUTS(EMPLOYEE) -----
Num Field Name          Format Pic   OP Data      Row 1 of 35
  0 EMPLOYEE-MASTER-FILE    GRP/198
  1 EMP-NUMBER             AN/5
  2 EMP-LAST-NAME          AN/15
  3 EMP-FIRST-NAME         AN/10
  4 EMP-MID-INIT            AN/1
  5 FILLER                  AN/2
  6 EMP-TITLE                AN/30
  7 EMP-PERSONAL-INFO       GRP/23
Target COBOL - EMPLOYEE-MASTER-FILE ---- USERID9.FASAMP.LAYOUTS(EMPLOYEE2) -----
Num Field Name          Format Pic   Data      Row 1 of 36
  0 EMPLOYEE-MASTER-FILE    GRP/211
  1 EMP-NUMBER             AN/5      /EMP-NUMBER
  2 EMP-FIRST-NAME          AN/15     /EMP-FIRST-NAME
  3 EMP-MID-INIT            AN/1      /EMP-MID-INIT
  4 EMP-LAST-NAME           AN/20     /EMP-LAST-NAME
  5 EMP-TITLE                AN/30     /EMP-TITLE
  6 EMP-PERSONAL-INFO        GRP/24
  7 EMP-NATL-ID-NUMBER      NUM/9 9V00 /EMP-NATL-ID-NUMBER
Use END Command to Save then End, CANCEL to Cancel, or EX to Execute Reformat

```

Because we asked for Move Corresponding = Y, target fields are pre-filled with references to corresponding source layout fields by field name. For example, /EMP-NUMBER in the target field EMP-NUMBER means to move data from source field name EMP-NUMBER.

When you execute your reformat, moves are performed using the rules of COBOL. If an alphanumeric field is moved to a larger field, blanks are added on the right. If move to a shorter field, data is truncated to the length of the target field.

Scrolling

You can scroll the data in both the source and target windows of the editor independently or at the same time.

The location of the cursor determines which window(s) is scrolled. If the cursor is located within the source layout fields, then only the upper window is scrolled. The lower window only scrolls when the

cursor is located in the lower window fields. If the cursor is on the command line, both windows scroll.

The Existing (Source) Record Layout (Upper Window)

The source window displays information about the source record layout. It is in this window that you specify the field selection criteria to use to select specific records to be reformatted.

The New (Target) Record Layout (Lower Window)

Use the target window fields to specify which source fields to use as a source of data. Optionally, you can specify a constant for a target field to initialize new fields or to mask sensitive data during the reformat.

Field references are specified in the Data Area to the right of each target field, by entering a slash (/) followed by the field name or number. Constants are specified by entering a string of decimal digits for numeric fields or a quoted string for alphanumeric fields.

Notice that on entry to the Reformat Editor, the target fields already contain field references (for example, /EMP-NUMBER, /EMP-FIRST-NAME, etc.). These references are automatically generated when you specify a value of YES in the Move corresponding field.

Commands EX, SAVE, CANCEL, END

Use the following commands from the Reformat Definition Editor:

SAVE

Saves the reformat definition member in the reformat dataset.

EX

Saves the reformat definition and displays either the online or batch Execute Reformat screen.

END

Saves the reformat definition and redisplays the Reformat Definition screen.

CANCEL

Terminates the reformat definition session without saving any changes you made to the reformat definition.

Scrolling Both Windows

When the cursor is positioned in the command line and you specify a scrolling command or press a scrolling PF key (for example: PF8=DOWN, PF7=UP), File-AID scrolls *both windows* in the reformat definition editor.

Figure 290. Reformat Editor - DOWN command Scrolling Both Windows.

```
File-AID ---- REFORMAT Definition Editor - DS:USERID9.FA
COMMAND ==> DOWN

Source COBOL - EMPLOYEE-MASTER-FILE ---- USERID9.FASAMP.
Num Field Name          Format Pic OP Data
 0 EMPLOYEE-MASTER-FILE           GRP/198
```

Steps:

1. Position the cursor in the command line (HOME).
2. Press the PF key for DOWN (PF8),

or

Type the command **DOWN** in the COMMAND field and press Enter.

Result of Scrolling DOWN Both Windows.

Figure 291. Reformat Definition Editor. Establishing Constants in the Target Layout.

```
File-AID ---- REFORMAT Definition Editor - DS:USERID9.FASAMP.RFMTDEF(EMPNEW) -
COMMAND ==> DOWN
SCROLL ==> PAGE
Source COBOL - EMPLOYEE-MASTER-FILE ---- USERID9.FASAMP.LAYOUTS(EMPLOYEE) -----
Num Field Name          Format Pic OP Data      Row 9 of 35
 8 EMP-NATL-ID-NUMBER   NUM/9  9v00
 9 FILLER               AN/1
10 EMP-DATE-OF-BIRTH    AN/6
11 EMP-DOB-REDEF        GRP/6
      Redefines EMP-DATE-OF-BIRTH
12 EMP-DOB-MM           NUM/2  2v00
13 EMP-DOB-DD           NUM/2  2v00
14 EMP-DOB-YY           NUM/2  2v00
Target COBOL - EMPLOYEE-MASTER-FILE ---- USERID9.FASAMP.LAYOUTS(EMPLOYEE2) -----
Num Field Name          Format Pic Data      Row 9 of 36
 8 EMP-NEW-BIRTH-DATE   GRP/7
 9 EMP-DOB-CENTURY     AN/1      '1'
10 EMP-BIRTH-DATE       GRP/6
11 EMP-DOB-YY           NUM/2  2v00 /14
12 EMP-DOB-MM           NUM/2  2v00 /12
13 EMP-DOB-DD           NUM/2  2v00 /13
14 EMP-NEW-HIRE-DATE   GRP/7
15 EMP-HD-CENTURY      AN/1      '1'
Use END Command to Save then End, CANCEL to Cancel, or EX to Execute Reformat
```

Entering Constants

After the DOWN scroll, both layouts are scrolled to show the BIRTH-DATE field (see [Figure 291](#)). Notice how the target layout re-arranges the date from MMDDYY format to YYMMDD format and inserts a new EMP-DOB-CENTURY field.

You assign a constant value of '1' (meaning 19xx) to the new century fields for birth date and hire date.

Steps:

1. Type '1' in EMP-DOB-CENTURY target field Data area.
You must surround an alphanumeric field constant with single quotes.
2. Type /14 in EMP-DOB-YY target field Data area. /14 references the EMP-DOB-YY source field.

3. Type /12 in EMP-DOB-MM target field Data area.
4. Type /13 in EMP-DOB-DD target field Data area.
5. Type '1' in EMP-HD-CENTURY target field Data area.
6. Position the cursor in the command line.
7. Press the PF key for DOWN (PF8),

or

Type the command **DOWN** in the COMMAND field and press Enter.

Resetting Existing Values to a Constant

You may specify a new constant value for any target field. Just type over the field reference with a constant.

In this example, you assign values to the new fields EMP-PAY-GRADE and EMP-NEW-401K-WITHOLD-AMT and also assign a new constant value of 28.5 to the EMP-NATL-TAX-WITHOLD-PCT field.

Figure 292. Reformat Definition Editor. Resetting Existing Values to a Constant Value.

```

File-AID ---- REFORMAT Definition Editor - DS:USERID9.FASAMP.RFMTDEF(EMPNEW) -
COMMAND ===> DOWN                                     SCROLL ===> PAGE
Source COBOL - EMPLOYEE-MASTER-FILE ---- USERID9.FASAMP.LAYOUTS(EMPLOYEE) -----
Num Field Name          Format Pic  OP Data      Row 16 of 35
15  EMP-HIRE-DATE        AN/6
16  EMP-MARITAL-STATUS    AN/1
17  EMP-PERSONAL-INFO     GRP/15
18  EMP-LIFE-INS-WITHOLD-AMT  NUMS/6  4v02
19  EMP-NATL-TAX-WITHOLD-PCT PS/3   3v02
20  EMP-REGION-TAX-WITHOLD-PCT PS/3   3v02
21  EMP-LOCAL-TAX-WITHOLD-PCT PS/3   3v02
22  EMP-HOME-ADDRESS       GRP/50
Target COBOL - EMPLOYEE-MASTER-FILE ---- USERID9.FASAMP.LAYOUTS(EMPLOYEE2) -----
Num Field Name          Format Pic  Data      Row 17 of 36
16  EMP-HIRE-DATE        AN/6   /15
17  EMP-MARITAL-STATUS    AN/1   /EMP-MARITAL-STATUS
18  EMP-PERSONAL-INFO     GRP/20
19  EMP-PAY-GRADE         AN/3   'PAY'
20  EMP-LIFE-INS-WITHOLD-AMT  PS/5   7v02 /EMP-LIFE-INS-WITHOLD-AMT
21  EMP-NATL-TAX-WITHOLD-PCT PS/3   3v02 28.5
22  EMP-NEW-401K-WITHOLD-AMT PS/3   3v02 0
23  EMP-REGION-TAX-WITHOLD-PCT PS/3   3v02 /20
Use END Command to Save then End, CANCEL to Cancel, or EX to Execute Reformat

```

Steps:

- Type **/15** in EMP-HIRE-DATE target field Data area. /15 references the EMP-HIRE-DATE source field.
- Type **'PAY'** in the EMP-PAY-GRADE target field Data area.
- Type **28.5** in the EMP-NATL-TAX-WITHOLD-PCT target field Data area.
Numeric field constants are entered as one or more decimal digits (with optional decimal points or signs) and are not quoted.
- Type **0** in the EMP-NEW-401K-WITHOLD-AMT target field Data area.
Numeric fields are automatically initialized to zero if no constant value or field reference is specified. Alphanumeric fields are initialized to blanks.
- Position the cursor in the command line.
- Press the PF key for DOWN (PF8),
or
Type the command **DOWN** in the COMMAND field and press Enter.

Initializing New Fields

This example illustrates the process of initializing a new field. The zip code needs to be expanded from a five to a nine digit field. You assign a constant "0000" for the new EMP-ZIP-CODE-PLUS-4 field.

Figure 293. Reformat Definition Editor. Initializing New Fields.

```

File-AID ---- REFORMAT Definition Editor - DS:USERID9.FASAMP.RFMTDEF(EMPNEW) -
COMMAND ==> DOWN                                         SCROLL ==> PAGE
Source COBOL - EMPLOYEE-MASTER-FILE ---- USERID9.FASAMP.LAYOUTS(EMPLOYEE) -----
Num Field Name          Format Pic  OP Data      Row 24 of 35
23  EMP-STREET-ADDRESS    AN/25
24  FILLER                AN/1
25  EMP-CITY               AN/15
26  EMP-STATE-PROV-CNTY   GRP/4
27  EMP-STATE              AN/2
28  FILLER                AN/2
29  EMP-POSTAL-CODE       NUM/5  5v00
30  EMP-EMERGENCY-CONTACT GRP/47
Target COBOL - EMPLOYEE-MASTER-FILE ---- USERID9.FASAMP.LAYOUTS(EMPLOYEE2) -----
Num Field Name          Format Pic  Data      Row 25 of 36
24  EMP-LOCAL-TAX-WITHOLD-PCT  PS/3   3v02 /EMP-LOCAL-TAX-WITHOLD-PCT
25  EMP-HOME-ADDRESS        GRP/51
26  EMP-STREET-ADDRESS      AN/25   /EMP-STREET-ADDRESS
27  EMP-CITY                AN/15   /EMP-CITY
28  EMP-STATE               AN/2    /27
29  EMP-NINE-DIGIT-ZIP     GRP/9
30  EMP-POSTAL-CODE        NUM/5  5v00 /29
31  EMP-ZIP-CODE-PLUS-4    AN/4    '0000'
Use END Command to Save then End, CANCEL to Cancel, or EX to Execute Reformat

```

Steps:

1. Type /27 in EMP-STATE target field Data area. /27 references the EMP-STATE source field.
2. Type /29 in EMP-POSTAL-CODE target field Data area.
3. Type '0000' in the EMP-ZIP-CODE-PLUS-4 target field Data area.
4. Position the cursor in the command line.
5. Press the PF key for DOWN (PF8),

or

Type the command **DOWN** in the COMMAND field and press Enter.

Hiding Sensitive Data On Output

Sometimes when copying a file to create test data from production files, there may be sensitive information you want to hide in the target file.

In this example, you assign a generic value to the phone number fields. You also scroll both windows to the top of their layouts using the UP MAX command.

Figure 294. Reformat Definition Editor. Changing Sensitive Data to Generic Data.

```

File-AID ---- REFORMAT Definition Editor - DS:USERID9.FASAMP.RFMTDEF(EMPNEW) -
COMMAND ==> UP MAX                                         SCROLL ==> PAGE
Source COBOL - EMPLOYEE-MASTER-FILE ---- USERID9.FASAMP.LAYOUTS(EMPLOYEE) -----
Num Field Name          Format Pic  OP Data      Row 32 of 35
 31 EMP-CONTACT-NAME    AN/25
 32 FILLER              AN/2
 33 EMP-CON-WORK-PHONE   AN/10
 34 EMP-CON-HOME-PHONE   AN/10
***** BOTTOM OF DATA *****

Target COBOL - EMPLOYEE-MASTER-FILE ---- USERID9.FASAMP.LAYOUTS(EMPLOYEE2) -----
Num Field Name          Format Pic  Data      Row 33 of 36
 32 EMP-EMERGENCY-CONTACT GRP/45
 33 EMP-CONTACT-NAME     AN/25      /EMP-CONTACT-NAME
 34 EMP-CON-WORK-PHONE   AN/10      '8105551212'
 35 EMP-CON-HOME-PHONE   AN/10      '8105551212'
***** BOTTOM OF DATA *****

Use END Command to Save then End, CANCEL to Cancel, or EX to Execute Reformat

```

Steps:

1. Type '8105551212' in the EMP-CON-WORK-PHONE and the EMP-CON-HOME-PHONE target field Data areas.
2. Position the cursor in the COMMAND field.
3. Type the command **UP MAX** and press Enter.

Establishing Selection Criteria

In the upper (Source) window you may specify selection criteria by entering values in the OP and Data fields at the right side of one or more field names.

Only records matching your selection condition are considered for reformatting. During execution you have an option to include or exclude non-selected records in the output file.

To complete your reformat definition you:

1. Set up a selection condition to reformat only those records with an EMP-NUMBER greater than or equal to spaces.
2. Place generic number 999,999,999 in the EMP-NATL-ID-NUMBER field; and
3. Request execution of your reformat with the EX command.

Figure 295. Reformat Definition Editor. Specifying Selection Criteria and Requesting Execution.

```

File-AID ---- REFORMAT Definition Editor - DS:USERID9.FASAMP.RFMTDEF(EMPNEW) -
COMMAND ==> EX                                         SCROLL ==> PAGE
Source COBOL - EMPLOYEE-MASTER-FILE ---- USERID9.FASAMP.LAYOUTS(EMPLOYEE) -----
Num Field Name          Format Pic   OP Data      Row 1 of 35
  0 EMPLOYEE-MASTER-FILE    GRP/198
  1 EMP-NUMBER            AN/5      GE '      '
  2 EMP-LAST-NAME         AN/15
  3 EMP-FIRST-NAME        AN/10
  4 EMP-MID-INIT          AN/1
  5 FILLER                AN/2
  6 EMP-TITLE              AN/30
  7 EMP-PERSONAL-INFO     GRP/23
Target COBOL - EMPLOYEE-MASTER-FILE ---- USERID9.FASAMP.LAYOUTS(EMPLOYEE2) -----
Num Field Name          Format Pic   Data      Row 1 of 36
  0 EMPLOYEE-MASTER-FILE    GRP/211
  1 EMP-NUMBER            AN/5      /EMP-NUMBER
  2 EMP-FIRST-NAME         AN/15     /EMP-FIRST-NAME
  3 EMP-MID-INIT          AN/1      /EMP-MID-INIT
  4 EMP-LAST-NAME          AN/20     /EMP-LAST-NAME
  5 EMP-TITLE              AN/30     /EMP-TITLE
  6 EMP-PERSONAL-INFO     GRP/24
  7 EMP-NATL-ID-NUMBER    NUM/9    9v00 999999999
Use END Command to Save then End, CANCEL to Cancel, or EX to Execute Reformat

```

Steps:

1. Type GE in the OP column to the right of the EMP-NUMBER field.
2. Type ' ' (quote five spaces quote) in the Data column to the right of the GE in the EMP-NUMBER field.
- If you specify another field test, the two conditions are ANDed; both must be valid before the record is selected for reformatting.
3. Overtype reference/8 with the value 999999999 (nine 9s) in the data area to the right of the target EMP-NATL-ID-NUMBER field to provide a generic value on the output file.
4. Type EX in the COMMAND field. Press Enter.

More About Selection Criteria

- If you had used an XREF to define the source layout, record type fields are automatically set and locked by File-AID. Only records of the chosen record type are reformatted.
- You may choose to run your reformat in batch. If you do so you may include a DD01SC (Selection criteria) DD to identify a saved selection criteria definition you created with the Selection Criteria function (option 6).

- At execution time, you have an option to copy all records or only those records matching your selection criteria. Reformatting is only applied to records matching any selection criteria.

Executing the Reformat Online at Your Terminal

When you request execution, your current reformat definition member is saved in your reformat dataset. The message, DEFINITION SAVED, is displayed at the top right corner of the display.

Figure 296. Reformat Execution Screen

```

File-AID ----- Reformat Execution - Online ----- DEFINITION SAVED
OPTION ===>

Display file after reformat ===> N (N=No, B=File-AID Browse, E=File-AID Edit)

Specify Input Dataset:
Dataset name ===>
Member name ===>
Volume serial ===> (If not cataloged)
Disposition ===> SHR (OLD or SHR)

Specify Output Dataset:
Dataset name ===>
Member name ===>
Volume serial ===> (If not cataloged)
Disposition ===> OLD (OLD; SHR; MOD; NEW)

Copy unselected records ===> (Y = Yes, N = No, drop unselected)
Number of records to process ===> 0 (1-9999, 0 = all)

Use END command to END or ENTER to continue REFORMAT MODE

```

Viewing Results Immediately

The Display file after reformat field lets you choose to browse or edit the output file after the reformat has been performed. If you select B (Browse) or E (Edit), File-AID invokes a browse or edit session on the output file. This lets you review and verify your definition.

Controlling Copying of Unselected Records

You can further tailor the reformat process with the "Copy unselected records" and "Number of records to process" fields. The "Copy unselected records" field enables you to specify whether or not you want to copy records that did not match the selection criteria from the input to the output file. If you choose to copy the records that do not match the selection criteria, those records are copied without any changes or reformatting.

Limiting the Total Records Copied

The "Number of records to process" field enables you to control the final size of the dataset. This is usually used to test your reformat definition by limiting processing to a small number of records so that the results are available very quickly.

Specifying the Input and Output Datasets

On the Reformat Execution screen ([Figure 297](#) on page 285), you identify the actual input and output datasets that are to participate in the reformat process.

The Input Dataset contains the records to be read, selected, and reformatted.

The Output Dataset contains the results of the reformat.



If the Output Dataset is fixed length (RECFM=F or FB), the record length (LRECL) must *exactly* match the size of the target record layout. Target field number 0 (zero) (see [Figure 295](#) on page 283) contains the size of the layout in the Format area (for example, GRP/211 - means length 211).

Figure 297. Reformat Execution Screen. Identifying Datasets.

```
File-AID ----- Reformat Execution - Online ----- DEFINITION SAVED
OPTION ==>

Display file after reformat ==> B (N=No, B=File-AID Browse, E=File-AID Edit)

Specify Input Dataset:
Dataset name ==> FASAMP.EMPLOYEE
Member name ==>
Volume serial ==>                               (If not cataloged)
Disposition ==> SHR                           (OLD or SHR)

Specify Output Dataset:
Dataset name ==> FASAMP.EMPLOYEE2
Member name ==>
Volume serial ==>                               (If not cataloged)
Disposition ==> OLD                          (OLD; SHR; MOD; NEW)

Copy unselected records ==> Y      (Y = Yes, N = No, drop unselected)
Number of records to process ==> 0      (1-9999, 0 = all)

Use END command to END or ENTER to continue REFORMAT MODE
```

Steps:

1. Type a **B** in the Display file after reformat field.
2. Enter **FASAMP.EMPLOYEE** in the input Dataset name field.
3. Enter **FASAMP.EMPLOYEE2** in the output Dataset name field.
4. Type a **Y** in the Copy unselected records field.
5. Ensure that there is a **0** (zero) in the "Number of records to process" field. The value 0 tells File-AID to copy all records.
6. Press Enter. File-AID executes the Reformat function and displays the dataset in Browse mode as illustrated in [Figure 298](#) on page 286.

Browsing the Reformatted File

Note that File-AID indicates that the reformatting process is complete with the message, FILE REFORMATTED, at the top right corner of the display as shown in [Figure 298](#).

File-AID displays the reformatted file in formatted Browse mode. Refer to [Browsing a Data File](#) to review which commands you can use to navigate through a dataset in the Browse function.

Use the DOWN and UP scroll commands to examine the reformat results.

When you are done with your review, return to the File-AID Primary Option Menu now.

Figure 298. Browsing the Reformatted File

```

File-AID - Browse - USERID9.FASAMP.EMPLOYEE2 ----- FILE REFORMATTED
COMMAND ===> END                                     SCROLL ===> PAGE
RECORD: 1                                         EMPLOYEE-MASTER-FILE           LENGTH: 211
----- FIELD NUMBER/NAME ----- FORMAT- -----+----1----+----2----+----3----+----4
1 EMP-NUMBER          5/AN   00090
2 EMP-FIRST-NAME      15/AN  EDWARD
3 EMP-MID-INIT         1/AN   M
4 EMP-LAST-NAME        20/AN  MARTIN
5 EMP-TITLE            30/AN  AIRPLANE MANUFACTURER
7 EMP-NATL-ID-NUMBER  9/NUM  999999999
9 EMP-DOB-CENTURY     1/AN   1
11 EMP-DOB-YY          2/NUM  54
12 EMP-DOB-MM          2/NUM  10
13 EMP-DOB-DD          2/NUM  19
15 EMP-HD-CENTURY      1/AN   1
16 EMP-HIRE-DATE       6/AN   920101
17 EMP-MARITAL-STATUS  1/AN   M
19 EMP-PAY-GRADE        3/AN   PAY
20 EMP-LIFE-INS-WITHOLD-AMT 5/PS  -3000.00
21 EMP-NATL-TAX-WITHOLD-PCT 3/PS  28.50
22 EMP-NEW-401K-WITHOLD-AMT 3/PS   0
23 EMP-REGION-TAX-WITHOLD-PCT 3/PS  25.00
24 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS

```

Steps:

1. If necessary, use the FMT command to view the data in Formatted Mode.
2. Type **DOWN** in the COMMAND field.
3. Press Enter.
4. Type **RIGHT** in the COMMAND field.
5. Press Enter.
6. Press PF3 (END) several times until the File-AID Primary Option Menu is displayed.

Printing File Contents

File-AID has several utilities for generating reports that show the contents of your data files as well as contents of the files you create and maintain with File-AID.

When you select the Print utility (option 5), File-AID displays a selection menu where you can choose the type of file you want to print, including:

- Data files
- XREF members (and referenced layouts if requested)
- Selection criteria members
- Interpreted record layouts (similar to the View utility)
- Audit trail files.

Accessing the Print Selection Menu (Option 5)

The Print Selection Menu is located on File-AID's Primary Option Menu as option 5.

Step:

1. From the File-AID Primary Option Menu (not shown here), select File-AID option 5 to access the Print Selection menu ([Figure 299](#) on page 288).

Selecting the Type of File To Be Printed

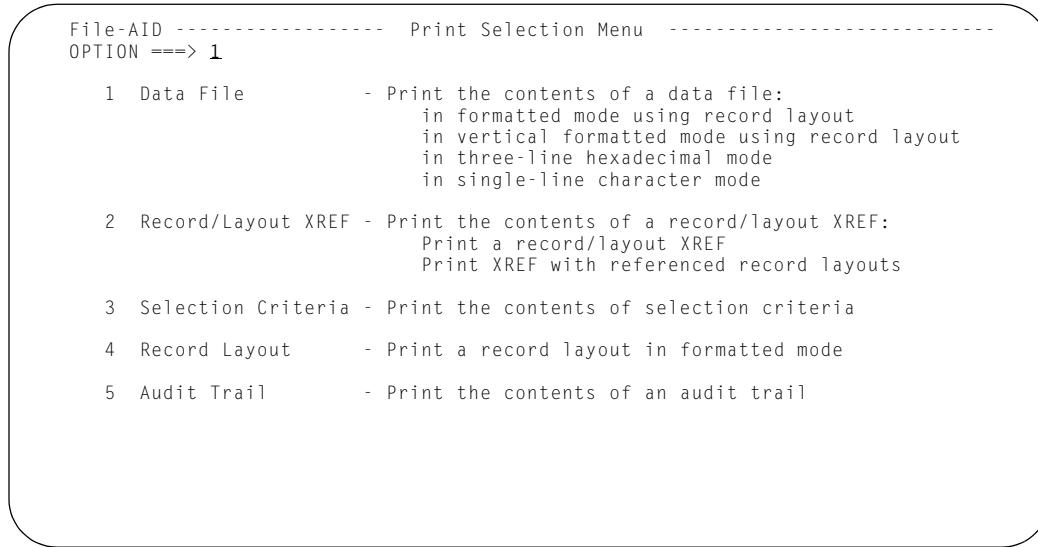
Select an option number on the Print Selection Menu to specify the type of file you want to print. In this example, you print the FASAMP.EMPLOYEE file using a record layout to format the data fields in each record.

Since you want to print a data file, select the Print Data File option (1).

Steps:

1. Type a **1** in the OPTION field to select the Print Data File utility.
2. Press Enter. File-AID displays the Print Data File screen as illustrated in [Figure 300](#) on page 289.

Figure 299. Print Selection Menu



More About the Print Selection Menu

- You can bypass this menu by specifying the option number of the file type on the Primary Option Menu. For example, to go directly from the Primary Option Menu to the Print Data File screen, enter **5.1** in the OPTION field.

Requesting a Print of a Data File

You can print your data file in one of four formats: formatted (using a record layout), vertical formatted (using a record layout), character, or hexadecimal.

If you select the F (formatted) print option, you must specify record layout or XREF information. You must also specify the type of field description information to show on the report. The field description options are:

- **F** (Format) - Field length and current field format
- **N** (Number) - System-assigned field numbers
- **O** (Offset) - Offset of each field from beginning of the dataset
- **P** (Picture) - Representation of the original data declaration for each elementary item.

Record Layout Usage

If you choose print format F (Formatted), you must specify a single record layout or XREF dataset member to define the layout(s) to use for printing the data records. If you select the V (vertical formatted) print option, you must specify a single record layout dataset member (see also [Requesting a Vertical Format Print of a Data File](#) on page 292).

Layout usage is ignored for print formats C (Character) and H (Hex).

Selection Criteria

You may use standard File-AID selection criteria to select specific records for printing. You can use existing field selection criteria (created using the Selection Criteria function) or create temporary field selection criteria (options T (temporary) or Q (quick)).

Figure 300. Print Data File Screen

```

File-AID ----- Print Data File -----
COMMAND ==>

Specify Print Information:
Print format ==> F          (F = Fmt;V = Vfmt;C = Char;H = Hex)
Show        ==> O          (Format, Number, Offset or Picture)

Specify Print Dataset or zFS Path Information:
Dataset or path ==> FASAMP.EMPLOYEE
Member      ==>           (Blank or pattern for member list)
Volume serial ==>

Specify Record Layout and XREF Information:
Record layout usage ==> S          (S = Single; X = XREF; N = None)
Record layout dataset ==> FASAMP.LAYOUTS
Member      ==> EMPLOYEE       (Blank or pattern for member list)
XREF dataset ==>
Member      ==>           (Blank or pattern for member list)

Specify Selection Criteria Information: (E=Use existing; M=Modify existing
Selection criteria usage ==> N          T=Create temporary; N=None)
Selection dataset ==>
Member      ==>           (Blank or pattern member list)

```

Steps:

1. Type an **F** in the Print format field.
2. Type an **O** in the Show field to request field offsets in the formatted report.
3. Verify the values in the other fields are specified as shown in [Figure 300](#). If they are not the same, type over the existing values to change them.
4. Press Enter. File-AID displays the PRINT - JCL Specification screen where you specify the print JCL information for batch processing. This screen is shown in [Figure 301](#) on page 290.

Submitting the Print Job

File-AID executes a print request only through a batch job. The PRINT - JCL Specification screen ([Figure 301](#)) is displayed to let you set your output class and JOB parameters.

From the PRINT - JCL Specification screen, you can invoke several processing commands, including:

JCL

Generates and displays the JCL so you can edit it before you submit it. While editing the JCL you can use the Edit commands CREATE, REPLACE or SUBMIT to save or submit your Print JCL.

SUBMIT

Generates the JCL and processes your print request.

END

Returns to the Print Data File screen without submitting the job.

Steps:

1. Type **SUBMIT** in the COMMAND field to generate and submit the JCL to perform your print request.
2. Verify your JOB parameters and Sysout class. Use a *hold* class so that you can browse your report online.
3. Press Enter. File-AID processes your print request. You can see the results of your print request online as illustrated in [Figure 302](#) on page 291.

Figure 301. PRINT - JCL Specification Screen (SUBMIT Command)

The figure shows a terminal window titled "File-AID ----- PRINT - JCL Specification -----". The command entered is "COMMAND ===> SUBMIT". The screen displays JCL Information for Batch Processing, including a Sysout class of "*" and a JOB Statement Information block. The JOB block specifies //USERID9 JOB (0100,PMGT), 'your name', CLASS=A, MSGCLASS=R, NOTIFY=USERID9. At the bottom, instructions advise using JCL command to edit generated JCL, using SUBMIT command to submit batch job, and using END to return to main PRINT panel without submitting job.

```
File-AID ----- PRINT - JCL Specification -----
COMMAND ===> SUBMIT

JCL Information for Batch Processing:

Sysout class    ===> *

JOB Statement Information:
====> //USERID9 JOB (0100,PMGT), 'your name', CLASS=A,
====> //      MSGCLASS=R, NOTIFY=USERID9
====>
====>

Use JCL command to edit generated JCL
Use SUBMIT command to submit batch job
Use END to return to main PRINT panel without submitting job
```

Viewing the Report Output

Your report is printed and routed to the printer you specified in your JOB statement and sysout class. If you specified a *hold* queue for your sysout class (or MSGCLASS if Sysout class=*) , use split screen and access your output viewing facility to examine the report.

A portion of the report is shown in [Figure 302](#).

Figure 302. Print Data File Result (Formatted Output, Show Offset)

SDSF OUTPUT DISPLAY USERID9B JOB05403 DSID 103 LINE 2 COLUMNS 01- 80
COMMAND INPUT ==> SCROLL ==> CSR
02 JAN 2008 FILE-AID 17.2 PRINT FACILITY 12:40:29 PAGE 1

File Printed FILE CONTENTS REPORT
Type USERID9.FASAMP.EMPLOYEE
VSAM KSDS

RECORD: 1 EMPLOYEE-MASTER-FILE

---- FIELD LEVEL/NAME ----- RELATIVE -----+---1-----+---2-----+---3-----+---4

5 EMP-NUMBER	0	00090
5 EMP-LAST-NAME	5	MARTIN
5 EMP-FIRST-NAME	20	EDWARD
5 EMP-MID-INIT	30	M
5 FILLER	31	
5 EMP-TITLE	33	AIRPLANE MANUFACTURER
5 EMP-PERSONAL-INFO SYNC	63	
10 EMP-NATL-ID-NUMBER	63	427890125
10 FILLER	72	
10 EMP-DATE-OF-BIRTH	73	101954
10 EMP-HIRE-DATE	79	920101
10 EMP-MARITAL-STATUS	85	M

More About the Print Function

- Through the Print function, you can also print XREF members, selection criteria members (existing, not temporary), record layouts, and audit trails from edited files. See the *File-AID/MVS Online Reference Manual* for a complete description of the features of the Print function.

Requesting a Vertical Format Print of a Data File

This example shows how to print your data file in vertical formatted (using a record layout), character, or hexadecimal.

Figure 303. Print Data File Screen

```

File-AID ----- Print Data File -----
COMMAND ===>

Specify Print Information:
Print format    ==> V          (F = Fmt;V = Vfmt;C = Char;H = Hex)
Show           ==> O          (Format, Number, Offset or Picture)

Specify Print Dataset or zFS Path Information:
Dataset or path ==> FASAMP.EMPLOYEE
Member          ==>             (Blank or pattern for member list)
Volume serial   ==>

Specify Record Layout and XREF Information:
Record layout usage ==> S      (S = Single; X = XREF; N = None)
Record layout dataset ==> FASAMP.LAYOUTS
Member          ==> EMPLOYEE (Blank or pattern for member list)
XREF dataset    ==>
Member          ==>             (Blank or pattern for member list)

Specify Selection Criteria Information: (E=Use existing; M=Modify existing
Selection criteria usage ==> N      T=Create temporary; N=None)
Selection dataset ==>
Member          ==>             (Blank or pattern member list)

```

Steps:

1. Type a **V** in the Print format field.
2. Type an **O** in the Show field to request field offsets in the formatted report.
3. Verify the values in the other fields are specified as shown in [Figure 300](#). If they are not the same, type over the existing values to change them.
4. Press Enter. File-AID displays the [VPRINT - JCL Specification Screen](#) where you specify the VPRINT print JCL information for batch processing. This screen is shown in [Figure 304](#) on page 293.

Vertical Format Print (VPRINT) JCL Specification

The VPRINT JCL Specification screen, shown in [Figure 304](#), displays when you selected the vertical print format. It enables you to specify additional print options and JOB Statement Information for the File Contents Report.

Figure 304. VPRINT - JCL Specification Screen

```
File-AID ----- VPRINT - JCL Specification -----
COMMAND ==>

Output Format      ==> P          (P = Print; F = File)
Records to print   ==> ALL        (number to print; ALL)

PRINT - Output Format Options:
  Page Order       ==> 1          (1 = Across then down; 2 = Down then across)
  Even pages per set ==> Y          (Y = Yes; N = No)
FILE - Output Format Options:
  Dataset name     ==>
  Disposition       ==>          (NEW; SHR; MOD; OLD)
  Headers           ==> Y          (Y = Yes, N = No)

Specify Batch JCL Information:
  SYSOUT class     ==> *

JOB Statement Information:
  ==> //PFHIAFOA JOB (ACCOUNT),NAME
  ==>
  ==>
  ==>
  ==>
Use JCL command to edit generated JCL; SUBMIT command to submit batch job
Use END to return to main PRINT panel without submitting job
```

Steps:

1. Type **P** in the Output Format field to select output to the printer.
2. Type **ALL** (or **0**) in the Records to print field to print all records.
3. Type **1** in the Page order field to print all records first across then down.
4. Type **Y** in the Even pages per set field, if your printer supports doublesided printing, otherwise type **N**.
5. Type **SUBMIT** in the COMMAND field to generate and submit the JCL to perform your print request.
6. Verify your JOB parameters and Sysout class.
7. Press Enter. File-AID processes your print request.

Exiting the Print Function

To return to the File-AID Primary Option Menu, use PF3 (the END command).

Step:

1. Press **PF3** (END) until the File-AID Primary Option Menu is displayed.

Extracting a Selected Subset of Records to Create a Test File

In [Browsing a Data File](#) you created temporary selection criteria and in [Copying Selected PDS Members](#) you learned about the Copy utility. In this chapter you learn how to create permanent selection criteria with the File-AID Selection utility (option 6). You then use the selection criteria in the File-AID Copy utility (option 3.3) to create test data by extracting a subset of the records of the sample inventory file (FASAMP.INVFILE) to a test file (FASAMP.INVFILE2).

Accessing the Selection Criteria Function (Option 6)

The Selection Criteria function is option 6 on the File-AID Primary Option Menu.

Steps:

1. Enter a 6 in the OPTION field on the File-AID Primary Option Menu (not shown here).
2. Press Enter. File-AID displays the Selection Criteria - Dataset Specification screen as illustrated in [Figure 305](#) on page 296.

Specifying the Selection Criteria Datasets

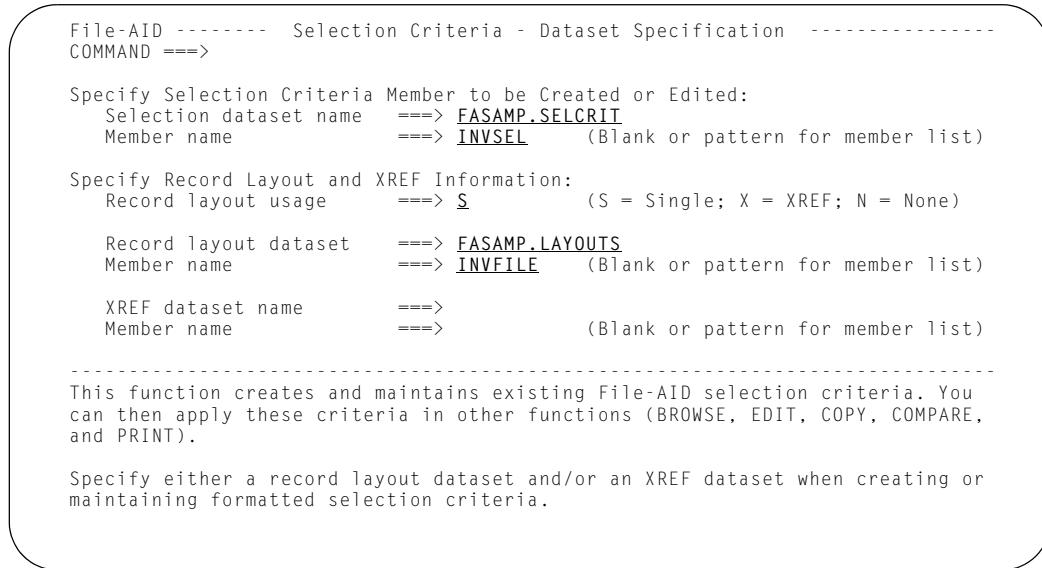
You must specify a partitioned selection dataset to save your criteria members when using this function. The attributes of the dataset are:

```
DSORG=PO,RECFM=VB,LRECL=300,BLKSIZE=x (x = 304 or more)
```

A sample Selection dataset (FASAMP.SELCRIT) is created for you with your other training files. Create a new member "INVSEL" to select inventory file records that have a status of "AVAIL". Use record layouts to define your selection using formatted field selection criteria.

When you define or maintain formatted field selection criteria members, you must specify a single record layout or an XREF member.

Figure 305. Selection Criteria - Dataset Specification Screen



Steps:

- Type **FASAMP.SELCRIT** in the selection Dataset name field.

- Type **INVSEL** in the selection Member name field.

If this member exists, you see the member and are able to specify and save changes. If this is a new member, you define and save a new criteria member. If you leave this field blank or use a mask (for example, MEM*), a member list is displayed from which you can select a member for criteria display and modification.

- Type **S** in the Record layout usage field.
- Type **FASAMP.LAYOUTS** in the Record layout dataset name field.
- Type **INVFILE** in the layout Member name field.
- Press Enter. File-AID displays the Selection Criteria Menu screen as illustrated in [Figure 306](#) on page 297.

Defining Formatted Field Selections

The Selection Criteria Menu lets you access the four components of selection criteria:

OPTIONS

Control selection based on record counts

GLOBAL

Define and edit global variables, which allows you to set indicators and save data values into variables within formatted Selection Criteria; these variables can then be compared as part of the Selection Criteria conditions.

FORMATTED

Use record layout to define tests for record data

UNFORMATTED

Define tests for record data without using layouts (by specifying location, length, operator, and data for each field to be tested).

In this example, you are going to define 3 tests with formatted selection criteria. Criteria Menu option 2 lets you access the Formatted Selection Criteria screen.

Figure 306. Selection Criteria Menu Screen

```

File-AID - Selection Criteria Menu - USERID9.FASAMP.S          CREATE NEW CRITERIA
OPTION ==> 2
      1 OPTIONS      - Enter selection criteria options
      G GLOBAL        - GLOBAL Fields
      2 FORMATTED     - Edit formatted selection criteria
      3 UNFORMATTED   - Edit unformatted selection criteria
                                         - Status -
                                         default
                                         0   fields
                                         0   sets
                                         0   sets

Member list description ==> SELECT BACK ORDERED PARTS

Long    ==> _____
Description ==> _____
```

Use VIEW command to display selection criteria summary
 Use SAVE command to write selection criteria request
 Use END to save selection criteria & return to dataset specification
 Use CANCEL to cancel changes & return to dataset specification

Steps:

1. Type 2 (Formatted Criteria) in the OPTION field.
2. Type **SELECT BACK ORDERED PARTS** in the Member list description field.
3. Press Enter.

Viewing a Layout with Field Numbers in Column Location Order

Issue the SHOW OFFSET command to see the offset of each layout field and the SHOW NUMBER command to see the field numbers instead of the field level numbers.

Many other commands are provided to give you control of the criteria definition process. You may specify multiple field tests within one criteria or you can create a new test by issuing the INSERT or REPEAT commands.

Figure 307. Formatted Selection Criteria - Request Offset Display

```
File-AID --- Formatted Selection Criteria -----
COMMAND ===> SHOW OFFSET;SHOW NUMBER                               SCROLL ===> CSR
SET 1 OF 1           INVENTORY-RECORD                           GBL = N
---- FIELD LEVEL/NAME ----- -FORMAT- RO -----+---1---+---2---+---3---+-
*****TOP OF DATA*****                                         ****
5 INV-PART-NO          15/AN
5 INV-DESCRIPTION       40/AN
                           (POS 38-40)
5 INV-UNIT-OF-MEASURE   2/AN
5 INV-UNIT-PRICE        4/PS
5 INV-STOCK-INFO(ANY) OCCURS 2 TIMES
                           18/GRP
10 INV-WAREHOUSE(ANY)    3/AN
10 INV-STATUS(ANY)       6/AN
10 INV-QTY-DATE(ANY)    9/GRP
15 INV-QTY-ON-HAND(ANY) 3/PS
15 INV-LAST-ORDER-DATE(ANY) 6/AN
10 INV-BO-QTY-DATE REDEFINES INV-QTY-DATE
10 INV-BO-QTY-DATE(ANY) 9/GRP
15 INV-QTY-BACKORDERED(ANY) 3/PS
15 INV-BACKORDER-DATE(ANY) 6/AN
```

Steps:

1. Type **SHOW OFFSET;SHOW NUMBER** in the COMMAND field.
2. Press Enter.

Changing Array Setting to EVERY

The initial (default) display for arrays for Formatted Selection Criteria is OCCURS ANY (synonym ARRAY ANY). ANY displays a single entry for the occurrences and any criteria entered for the ANY occurrence will be applied to all occurrences. The record will meet the Selection Criteria if **any** of the occurrences meet the specified criteria.

EVERY displays a single entry for the occurrences and any criteria entered for the EVERY occurrence will be applied to all occurrences. The record will meet the Selection Criteria if **all** of the occurrences meet the specified criteria.

Figure 308. Formatted Selection Criteria - Changing Array Setting to EVERY

```

File-AID --- Formatted Selection Criteria -----
COMMAND ===> OCC_EVERY                               SCROLL ===> CSR
      SET 1 OF 1           INVENTORY-RECORD          GBL = N
      ---- FIELD NUMBER/NAME ----- COLUMNS- R0 -----+---1-----+---2-----+---3-----+
      ***** TOP OF DATA *****
1 INV-PART-NO           1
2 INV-DESCRIPTION        16
                         53
3 INV-UNIT-OF-MEASURE   56
4 INV-UNIT-PRICE         58
5 INV-STOCK-INFO(ANY) OCCURS 2 TIMES
                         62
6 INV-WAREHOUSE(ANY)    62
7 INV-STATUS(ANY)        65
8 INV-QTY-DATE(ANY)     71
9 INV-QTY-ON-HAND(ANY)  71
10 INV-LAST-ORDER-DATE(ANY)
                         74
11 INV-BO-QTY-DATE REDEFINES INV-QTY-DATE
11 INV-BO-QTY-DATE(ANY)  71
12 INV-QTY-BACKORDERED(ANY)
                         71
13 INV-BACKORDER-DATE(ANY)
                         74

```

Steps:

1. Type **OCC EVERY** in the COMMAND field.
2. Press Enter.

More About Arrays in Formatted Selection Criteria

- The OCCURS command (synonym ARRAY) controls whether the array declaration information for COBOL (PL/I) data is displayed.
- Use the PROFILE command to display the current OCCURS/ARRAY ON or OFF value. Only ON or OFF are saved in the profile.
- The array line contains the name of the array followed by the word ARRAY and the subscript bounds in standard PL/I format. If any of the subscripts are defined by a REFER clause, additional lines that follow the ARRAY line describe each REFER variable.
- ANY, EVERY or ALL is applied per set or subset if any. Each subset may have a different array setting.
- You cannot switch ANY, EVERY or ALL to another if the criteria is specified on any occurrence field in a single set or subset.
- In ANY or EVERY mode, SHOW OFFSET command shows the offsets of the first occurrence.

Defining Formatted Field Selection Criteria

You can choose records for processing by defining one or more conditions that a record must meet in order to be selected. With formatted selection criteria, you can select records based on the value of a specified field within the record layout. To search for a specific field value, you must define a test condition for that field. The test condition consists of the field name, a relational operator, and the value for which you want to test.

The relational operator is entered under the RO column on the screen and can be specified in a letter or symbolic format (for example, "equal to" can be specified as EQ or =). The field value is entered to the right of the relational operator.

In this example, you first define a test for INV-STATUS (EVERY) not equal to "AVAIL".

Notice how each element of an array is displayed with its subscript.

Figure 309. Formatted Selection Criteria - Specifying the First Test

```
File-AID --- Formatted Selection Criteria -----
COMMAND ===> I AND                                     SCROLL ==> CSR
              SET 1 OF 1           INVENTORY-RECORD          GBL = N
----- FIELD NUMBER/NAME ----- COLUMNS- RO -----+---1---+---2---+---3---+-
*****TOP OF DATA***** *****TOP OF DATA***** *****TOP OF DATA***** *****TOP OF DATA*****
1 INV-PART-NO                    1
2 INV-DESCRIPTION                16
                                53
3 INV-UNIT-OF-MEASURE           56
4 INV-UNIT-PRICE                58
5 INV-STOCK-INFO(EVERY) OCCURS 2 TIMES
                                62
6 INV-WAREHOUSE(EVERY)          62
7 INV-STATUS(EVERY)              65 NE_AVAIL
8 INV-QTY-DATE(EVERY)           71
9 INV-QTY-ON-HAND(EVERY)        71
10 INV-LAST-ORDER-DATE(EVERY)   74
                                74
11 INV-BO-QTY-DATE REDEFINES INV-QTY-DATE
11 INV-BO-QTY-DATE(EVERY)       71
12 INV-QTY-BACKORDERED(EVERY)  71
                                74
13 INV-BACKORDER-DATE(EVERY)   74
```

Steps:

- Type NE in the RO column next to the field name INV-STATUS(EVERY).
- Type AVAIL in the data area to define the test "INV-STATUS(EVERY) NOT EQUAL TO AVAIL".
- Type I AND in the COMMAND field to insert an AND criteria subset.
- Press Enter.

More About Formatted Selection Criteria

- When your test condition includes more than one field, File-AID links the tests together (the tests are ANDed) and requires that all the conditions be true before it selects a record.
- You can use the REPEAT or INSERT command to add a new selection criteria set. Sets are ORed together and only one of the test sets must be true. If a record fails to match CRITERIA NUMBER 1 in an ORed condition, File-AID tests the record to see if CRITERIA NUMBER 2 matches. This process continues until a record has been tested for each set. As soon as a record matches any set, File-AID selects it.

- Add the parameter AND to the REPEAT, INSERT or INPUT command to insert an ANDed subset of selection criteria (the set counter displays "AND Set 1.2 of 1") after (default) the current criteria (or before (B) for INSERT or INPUT only).
- Use FWD and BACK commands (RIGHT, LEFT) to scroll among multiple criteria sets.
- Use the DELETE command to remove a set or subset.

Defining an ANDed Selection Criteria Subset

Now, you also define another test for INV-STATUS (EVERY) not equal to "NOSTCK". The first and second test will then be: Select all records with INV-STATUS (EVERY) not equal to "AVAIL" and INV-STATUS (EVERY) not equal to "NOSTCK".

Figure 310. Formatted Selection Criteria - Specifying an ANDed Subset

```
File-AID --- Formatted Selection Criteria -----
COMMAND ===> I                                SCROLL ===> CSR
AND SET 1.2 OF 1      INVENTORY-RECORD        GBL = N
----- FIELD NUMBER/NAME ----- COLUMNS RO -----+---1-----+---2-----+---3-----+
***** TOP OF DATA *****                         *****
1 INV-PART-NO           1
2 INV-DESCRIPTION       16
                           53
3 INV-UNIT-OF-MEASURE  56
4 INV-UNIT-PRICE        58
5 INV-STOCK-INFO(EVERY) OCCURS 2 TIMES
                           62
6 INV-WAREHOUSE(EVERY)   62
7 INV-STATUS(EVERY)      65 NE NOSTCK
8 INV-QTY-DATE(EVERY)    71
9 INV-QTY-ON-HAND(EVERY) 71
10 INV-LAST-ORDER-DATE(EVERY) 74
                               74
11 INV-BO-QTY-DATE REDEFINES INV-QTY-DATE
11 INV-BO-QTY-DATE(EVERY) 71
12 INV-QTY-BACKORDERED(EVERY) 71
                               74
13 INV-BACKORDER-DATE(EVERY)
```

Steps:

1. Type NE in the RO column next to the field name INV-STATUS(EVERY).
2. Type NOSTCK in the data area to define the test "INV-STATUS(EVERY) NOT EQUAL TO NOSTCK".
3. Type I in the COMMAND field to insert a second OR criteria set.
4. Press Enter.

Defining an ORed Selection Criteria Set

Now, you also define another criteria test for INV-STATUS (EVERY) equal to "B/O" and INV-QTY-BACKORDERED(ANY) greater than "10".

Figure 311. Formatted Selection Criteria - Specifying a Test

```

File-AID --- Formatted Selection Criteria -----
COMMAND ===> END                               SCROLL ===> CSR
      SET 2 OF 2           INVENTORY-RECORD          GBL = N
      ---- FIELD NUMBER/NAME ----- COLUMNS RO -----+---1-----+---2-----+---3-----+
      ***** FIELD NUMBER/NAME ----- COLUMNS RO -----+---1-----+---2-----+---3-----+
      ***** TOP OF DATA *****
1 INV-PART-NO           1
2 INV-DESCRIPTION        16
                           53
3 INV-UNIT-OF-MEASURE   56
4 INV-UNIT-PRICE         58
5 INV-STOCK-INFO(ANY) OCCURS 2 TIMES
                           62
6 INV-WAREHOUSE(ANY)     62
7 INV-STATUS(ANY)        65 EQ B/O
8 INV-QTY-DATE(ANY)      71
9 INV-QTY-ON-HAND(ANY)   71
10 INV-LAST-ORDER-DATE(ANY) 74
                           74
11 INV-BO-QTY-DATE REDEFINES INV-QTY-DATE
11 INV-BO-QTY-DATE(ANY) 71
12 INV-QTY-BACKORDERED(ANY) 71 GT 10
13 INV-BACKORDER-DATE(ANY) 74
                           74

```

Steps:

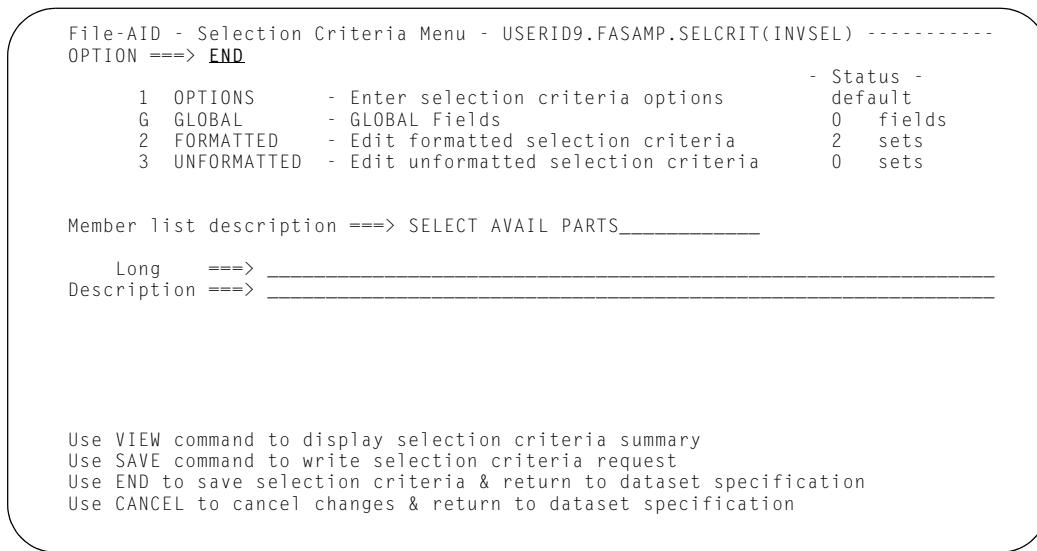
1. Type **EQ** in the RO column next to the field name **INV-STATUS(ANY)**.
2. Type **B/O** in the data area to define the test "INV-STATUS(ANY) EQUAL TO B/O".
3. Type **GT** in the RO column next to the field name **INV-QTY-BACKORDERED(ANY)**.
4. Type **10** in the data area to define the test "INV-QTY-BACKORDERED(ANY) GREATER THAN 10".
5. Type **END** in the COMMAND field to save and exit the Formatted Selection Criteria screen.
6. Press Enter.

Saving Your Permanent Selection Criteria Member

Notice that the status for FORMATTED criteria now shows "2 sets" to reflect the tests you just defined.

When you enter the END primary command from the Selection Criteria menu, File-AID automatically stores the selection criteria member (INVSEL) in the selection criteria dataset (FASAMP.SELCRIT).

Figure 312. Selection Criteria Menu. Specifying END to Save Selection Criteria.



Steps:

1. Type END in the OPTION field.
2. Press Enter. File-AID displays the Selection Criteria - Dataset Specification screen ([Figure 313](#) on page 304) with the message: CRITERIA MEMBER ADDED, if new or CRITERIA MEMBER REPLACED, if member already exists.

More About Selection Criteria Menu

- If you want to review the criteria you created before you save it, the VIEW primary command summarizes the specified options and all of the sets of formatted and unformatted selection criteria into a scrollable display.
- The SAVE command saves your changes but remains on the Selection Criteria Menu screen.
- The CANCEL command lets you exit without saving your member. Any entries you have made are lost and no new member is created.
- If you do not specify any options or change any of the default values, File-AID reads all of the records starting at the beginning of the dataset and stopping when the "Number of Records to Select" default (established in 0.2 Selection Parameters) is reached. File-AID is distributed with a default of "ALL" for "Number of Records to Select". Use the "1 OPTIONS" menu choice to view and change this value for this selection criteria, and/or use option 0.2 to set a different permanent default for yourself.

Exiting the Selection Criteria Utility

Use the END command to exit the Selection Criteria function and return to the File-AID Primary Option Menu now.

Steps:

1. Enter the END command (or press PF3) to redisplay the Primary Option Menu.
2. Press Enter.

| **Figure 313.** Selection Criteria Function. Criteria INVSEL added Message.

```
File-AID ----- Selection Criteria - Dataset Speci    Criteria INVSEL added
COMMAND ==> END

Specify Selection Criteria Member to be Created or Edited:
  Selection dataset name ==> FASAMP.SELCRIT
  Member name      ==> INVSEL      (Blank or pattern for member list)

Specify Record Layout and XREF Information:
  Record layout usage ==> S      (S = Single; X = XREF; N = None)
  Record layout dataset ==> FASAMP.LAYOUTS
  Member name      ==> INVFILE      (Blank or pattern for member list)

  XREF dataset name ==>
  Member name      ==>          (Blank or pattern for member list)

-----
This function creates and maintains existing File-AID selection criteria. You
can then apply these criteria in other functions (BROWSE, EDIT, COPY, COMPARE,
and PRINT).

Specify either a record layout dataset and/or an XREF dataset when creating or
maintaining formatted selection criteria.
```

Accessing the Copy Utility (3.3)

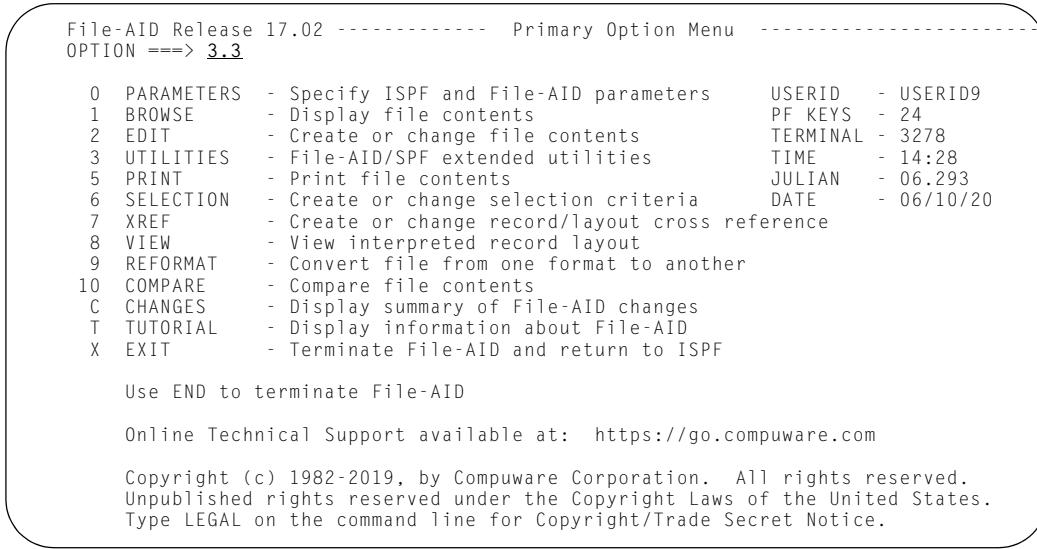
Now that you have defined and saved your selection criteria, you can use your criteria with the Copy utility to extract a subset of records from a master file to create a test file.

The Copy utility is located on the Extended Utilities menu (option 3). You can access it directly by accessing option 3.3 from the Primary Option Menu.

Steps:

1. From the File-AID Primary Option Menu ([Figure 314](#)), select File-AID option 3.3.
2. Press Enter. File-AID displays the Copy Utility screen as illustrated in [Figure 315](#) on page 306.

Figure 314. File-AID Primary Option Menu. Selecting 3.3 COPY Utility.



Specifying the "FROM" and "TO" Datasets and Selection Criteria Member

The last dataset you referenced in any File-AID function or utility is automatically displayed in the FROM dataset or path field. The TO dataset or path field retains the last dataset or path you specified in the Copy utility.

The Selection Criteria dataset and member you last referenced (in this case, through the Selection Criteria function) is displayed in the lower portion of the screen.

You must identify the FROM dataset and the TO dataset and whether or not you want to use selection criteria (Selection criteria usage field). You can choose to run your copy online at your terminal or in batch by specifying the processing option in the Process online or batch field.

In this example, specify an E in the Selection criteria usage field to use existing criteria in the online copy process.

Figure 315. Copy Utility Screen. Use Existing Selection Criteria.

```

File-AID ----- Copy Utility -----
COMMAND ==>

Specify "FROM" Dataset or zFS Path Information:
Dataset or path ==> FASAMP.INVFILE
Volume serial ==>                               (If not cataloged)

Specify "TO" Dataset or zFS Path Information:
Dataset or path ==> FASAMP.INVFILE2
Volume serial ==>                               (If not cataloged)
Disposition ==> OLD                            (OLD, MOD, NEW)

Specify Execution Information:
Process online or batch ==> O                 (O = Online; B = Batch)

Specify Selection Criteria Information: (E = Existing; T = Temporary;
Selection criteria usage ==> E                M = Modify; Q = Quick; N = None)
Selection dataset name ==> FASAMP.SELCRIT
Member name ==> INVSEL                         (Blank or pattern for member list)

```

Steps:

- Type **FASAMP.INVFILE** in the "FROM" Dataset or path field.
- Type **FASAMP.INVFILE2** in the "TO" Dataset or path field.
- Type **OLD** in the Disposition field.
- Type an **O** in the Process online or batch field.

If you specify to run the copy in batch, File-AID displays the standard JCL Specification screen where you can define the batch processing options.

- Type an **E** in the Selection criteria usage field.



Make sure you always check this field before you press Enter. The value last used remains set from session to session.

- Press Enter. File-AID displays the [Record Layout Specification Screen](#) (Figure 316 on page 307).

Figure 316. Record Layout Specification Screen

```

File-AID ----- Record Layout Specification -----
COMMAND ===>

Specify Record Layout and XREF Information:
Record layout usage ===> S           (S = Single; X = XREF)

Record layout dataset ===> FASAMP.LAYOUTS
Member name          ===> INVFILE      (Blank or pattern for member list)

XREF dataset name   ===>
Member name          ===>                  (Blank or pattern for member list)

```

7. Type an **S** in the Record layout usage field to indicate that you are using a single layout member to describe your data records.
8. Type the dataset name **FASAMP.LAYOUTS** in the Record layout dataset field.
9. Type the member name **INVFILE** in the layout Member name field.
10. Press Enter. File-AID executes the copy process immediately and returns with a confirmation message, **12 RECORDS COPIED**.

Exiting the Copy Utility

Use PF3 (the END command) to exit the Copy utility and return to the File-AID Primary Option Menu now.

Figure 317. Copy Utility Screen. RECORDS COPIED Message.

```

File-AID ----- Copy Utility ----- 12 RECORDS COPIED
COMMAND ===> END

Specify "FROM" Dataset or zFS Path Information:
Dataset or path ===> FASAMP.INVFILE
Volume serial     ===>                      (If not cataloged)

Specify "TO" Dataset or zFS Path Information:
Dataset or path ===> FASAMP.INVFILE2
Volume serial     ===>                      (If not cataloged)
Disposition       ===> OLD                  (OLD, MOD, NEW)

Specify Execution Information:
Process online or batch ===> O           (O = Online; B = Batch)

Specify Selection Criteria Information:    (E = Existing; T = Temporary;
Selection criteria usage ===> E            M = Modify; Q = Quick; N = None)
Selection dataset name ===> FASAMP.SELCRIT
Member name        ===> INVSEL      (Blank or pattern for member list)
+-----+
| XVJFS470 FS470-41 records were read from USERID9.FASAMP.INVFILE |
+-----+

```

Steps:

1. Press PF1 (HELP) to view the long message associated with **12 RECORDS COPIED**.
FS470-41 records were read from USERID9.FASAMP.INVFILE
2. Enter the **END** command (press **PF3**) until the File-AID Primary Option Menu is displayed.

(Optional) Use File-AID Browse to view the **FASAMP.INVFILE2** dataset in vertical formatted mode using the **FASAMP.LAYOUTS** record layout member **INVFILE**. Check that all **INV-STATUS (1)** fields have a value of **B/O** in them.

Creating Selection Criteria Using Global Fields

In [Browsing a Data File](#) you created temporary selection criteria. In this chapter you learn how to create permanent selection criteria using a global field (user variable) and Field-to-Field comparisons with the File-AID Selection utility (option 6).

Using global fields makes it possible to perform the following Selection Criteria functions:

- Selection based on conditions in previous records
- Selection based on counts or accumulated values
- Logic controlled selection based on global indicators

Accessing the Selection Criteria Function (Option 6)

The Selection Criteria function is option 6 on the File-AID Primary Option Menu.

Steps:

1. Enter a 6 in the OPTION field on the File-AID Primary Option Menu (not shown here).
2. Press Enter. File-AID displays the Selection Criteria - Dataset Specification screen as illustrated in [Figure 318](#) on page 310.

Specifying the Selection Criteria Datasets

You must specify a partitioned selection dataset to save your criteria members when using this function. The attributes of the dataset are:

DSORG=PO, RECFM=VB, LRECL=300, BLKSIZE=x (x = 304 or more)

A sample Selection dataset (FASAMP.SELCRIT) is created for you with your other training files.

Create a new member "GBLSTATE" to select employee file records that have a middle initial of "C" while the Global field &SAVESTATE equals "CA". Use record layouts to define your selection using formatted field selection criteria.

When you define or maintain formatted field selection criteria members, you must specify a single record layout or an XREF member.

Figure 318. Selection Criteria - Dataset Specification Screen

File-AID ----- Selection Criteria - Dataset Specification -----
COMMAND ==>

Specify Selection Criteria Member to be Created or Edited:
Selection dataset name ==> FASAMP.SELCRIT
Member name ==> GBLSTATE (Blank or pattern for member list)

Specify Record Layout and XREF Information:
Record layout usage ==> S (S = Single; X = XREF; N = None)
Record layout dataset ==> FASAMP.LAYOUTS
Member name ==> EMPLOYEE (Blank or pattern for member list)
XREF dataset name ==>
Member name ==> (Blank or pattern for member list)

This function creates and maintains existing File-AID selection criteria. You can then apply these criteria in other functions (BROWSE, EDIT, COPY, COMPARE, and PRINT).

Specify either a record layout dataset and/or an XREF dataset when creating or maintaining formatted selection criteria.

Steps:

1. Type FASAMP.SELCRIT in the selection Dataset name field.

2. Type GBLSTATE in the selection Member name field.

If this member exists, you see the member and are able to specify and save changes. If this is a new member, you define and save a new criteria member. If you leave this field blank or use a mask (for example, MEM*), a member list is displayed from which you can select a member for criteria display and modification.

3. Type S in the Record layout usage field.

4. Type FASAMP.LAYOUTS in the Record layout dataset name field.

5. Type EMPLOYEE in the layout Member name field.

6. Press Enter. File-AID displays the Selection Criteria Menu screen as illustrated in [Figure 319](#) on page 311.

Defining Global Fields

The Selection Criteria Menu lets you access the four components of selection criteria:

OPTIONS

Control selection based on record counts

GLOBAL

Define and edit global fields (variables), which allows you to set indicators and save data values into variables within formatted Selection Criteria; these variables can then be compared as part of other Formatted Selection Criteria conditions.

FORMATTED

Use record layout to define tests for record data

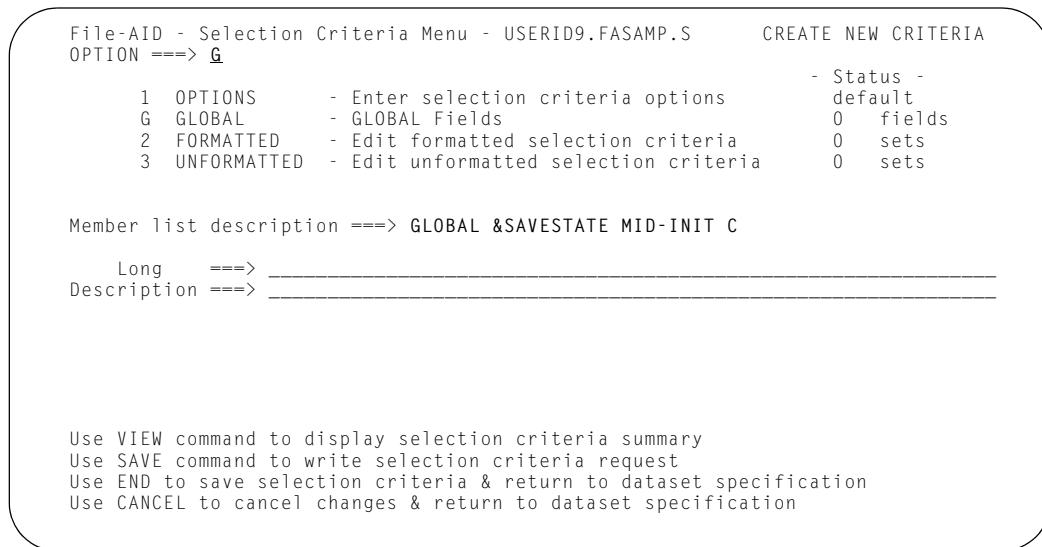
UNFORMATTED

Define tests for record data without using layouts (by specifying location, length, operator, and data for each field to be tested).

The following example demonstrates how a global field can be used to select records based on conditions in previous records.

For this example, you are going to define a global field, activate the global field and perform tests with formatted selection criteria. Criteria Menu option G gives you access to the Define Global Fields screen.

Figure 319. Selection Criteria Menu Screen



Steps:

1. Type **G** (GLOBAL Fields) in the OPTION field.

2. Type **GLOBAL &SAVESTATE MID-INIT C** in the Member list description field.
3. Press Enter.

Specifying the Global Field Definition

Before you can use a Global field in selection criteria, you must first define it.

The [Define Global Fields Screen](#), shown in [Figure 320](#), enables you to view, define and change user global fields. It lists all existing user variables and displays blank lines for definition of additional User variables. Global fields must start with & (ampersand) and they are retained in the order entered.

The example defines Global field &SAVESTATE as character data type with a length of 2.



All references to the Global variable must be removed prior to deleting the Global variable.

Figure 320. Define Global Fields Screen

Define Global Fields		
File-AID Command ===> END	Row 1 to 17 of 51 Scroll ===> PAGE	
Define User global fields:		
Field name	Char/Num	Length
&SAVESTATE	C	2

Steps:

1. Type &SAVESTATE for the Field name to identify the variable.
2. Type C in the Char/Num data type column to specify character data.
3. Type 2 in the Length column to specify character data length.
4. Type END in the COMMAND field to save and exit the [Define Global Fields Screen](#).
5. Press Enter.

Defining Formatted Selection Criteria

After you defined the global field you return to the Selection Criteria Menu. You can use global fields only in Formatted Selection Criteria (Option 2).

Figure 321. Selection Criteria Menu Screen - Selecting Option 2

The screenshot shows the 'File-AID - Selection Criteria Menu - USERID9.FASAMP.S' screen. The 'OPTION' field is set to '2'. The menu lists three options:

1 OPTIONS	- Enter selection criteria options	- Status -
G GLOBAL	- GLOBAL Fields	default
2 FORMATTED	- Edit formatted selection criteria	1 fields
3 UNFORMATTED	- Edit unformatted selection criteria	0 sets
Member list description ==> GLOBAL &SAVSTATE MID-INIT C		
Long ==>	<hr/>	
Description ==>	<hr/>	

At the bottom, instructions for using the menu are provided:

Use VIEW command to display selection criteria summary
Use SAVE command to write selection criteria request
Use END to save selection criteria & return to dataset specification
Use CANCEL to cancel changes & return to dataset specification

Steps:

1. Type 2 (Formatted Selection Criteria) in the OPTION field.
2. Press Enter.

Entering Selection Criteria

The Formatted Selection Criteria screen, shown in [Figure 322](#), allows you to specify selection of records based on field values displayed with a record layout.

Remember, the first part of the example is to look for employee records with a middle initial of A (field EMP-MID-INIT equals A). Then when it finds a matching record, it fills the global field &SAVESTATE with the value of the field EMP-STATE.

This set will not select any records, it just sets the Global Field. You must enter another criteria set to select any records.

Notice that the GBL indicator is still set to N, global fields are not yet part of the selection criteria.

The GBL primary command gives you access to activate and define the value of the global field.

Figure 322. Formatted Selection Criteria - Specifying First Test

```

File-AID --- Formatted Selection Criteria -----
COMMAND ===> GBL                               SCROLL ===> CSR

      SET 1 OF 1          EMPLOYEE-MASTER-FILE           GBL = N
      ---- FIELD NUMBER/NAME ----- COLUMNS RO -----+---1---+---2---+---3---+-
      *****TOP OF DATA***** *****TOP OF DATA***** *****TOP OF DATA*****
1 EMP-NUMBER          5/AN
2 EMP-LAST-NAME       15/AN
3 EMP-FIRST-NAME      10/AN
4 EMP-MID-INIT         1/AN   EQ A
5 FILLER              2/AN
6 EMP-TITLE            30/AN
7 EMP-PERSONAL-INFO   23/GRP
8 EMP-NATL-ID-NUMBER  9/NUM
9 FILLER              1/AN
10 EMP-DATE-OF-BIRTH   6/AN
11 EMP-DOB-REDEF REDEFINES EMP-DATE-OF-BIRTH
11 EMP-DOB-REDEF       6/GRP
    12 EMP-DOB-MM        2/NUM
    13 EMP-DOB-DD        2/NUM
    14 EMP-DOB-YY        2/NUM
15 EMP-HIRE-DATE       6/AN
16 EMP-MARITAL-STATUS  1/AN
17 EMP-WITHOLD-INFO    15/GRP

```

Steps:

1. Type EQ in the RO column next to the field name EMP-MID-INIT.
2. Type A in the data area to define the test “EMP-MID-INIT=A”.
3. Type GBL in the COMMAND field to access the Global Selection Criteria.
4. Press Enter.

Initializing Global Field

The [Global Selection Criteria](#) screen lists all global variables that have been defined with option G of the Selection Criteria Menu.

This panel is used to create criteria which will test values of Global variables.

So far, the global field &SAVESTATE has no value assigned to it. To change or replace the global field's value use the CHG command to access the Data Replace Criteria panel.

Figure 323. Global Selection Criteria

```
File-AID --- Formatted Selection Criteria -----
---  
COMMAND ===> CHG           SCROLL ===> CSR  
      SET 1 OF 1          GLOBAL-FIELDS      GBL=N  
--- FIELD NUMBER/NAME ----- FORMAT- RO -----+---1-----+---2-----+---3-----+--  
*****TOP OF DATA ***** BOTTOM OF DATA *****  
1 &SAVESTATE           2/AN
```

Steps:

1. Type **CHG** in the COMMAND field.
2. Press Enter.

Replacing Values of Global Field

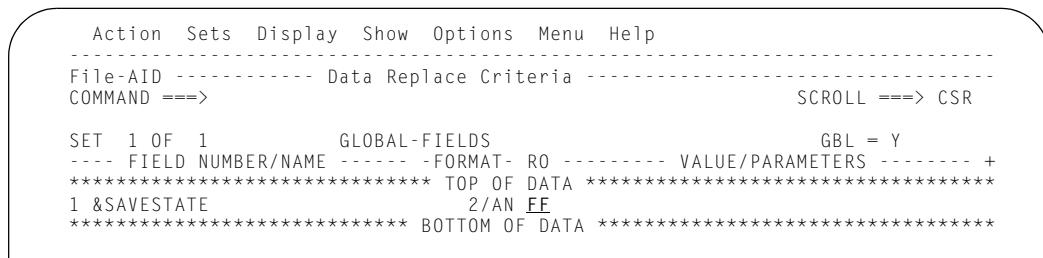
The [Data Replace Criteria](#) screen also lists all global variables defined with option G of the Selection Criteria Menu.

Use this panel to alter the values of global variables. The Relational Operators R (Replace) and FF (Field-to-Field) allow you to assign values to the Global variables.

So far, the global field &SAVESTATE has no value assigned to it. This example calls for the value of the field EMP-STATE to be assigned to &SAVESTATE when the field EMP-MID-INIT has a value of A in a record.

Use the FF Relational Operator to change or replace the global field's value with a value from a field in the record layout.

Figure 324. Data Replace Criteria



```
Action Sets Display Show Options Menu Help
-----
File-AID ----- Data Replace Criteria -----
COMMAND ==>                               SCROLL ==> CSR
-----
SET 1 OF 1          GLOBAL-FIELDS           GBL = Y
---- FIELD NUMBER/NAME ---- FORMAT- RO ----- VALUE/PARAMETERS ----- +
***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** +*
***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** *
1 &SAVESTATE          2/AN FF
***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** *
```

Steps:

1. Type FF in the RO column next to the global field name &SAVESTATE.
2. Press Enter.

Specifying Field-to-Field Criteria

The [Field-to-Field Criteria](#) panel lists a field named C O N S T A N T V A L U E, then all defined global variables, followed by all record layout fields.

When accessed from the Data Replace Criteria panel, [Field-to-Field Criteria](#) allows you to replace a global field value with the value from another field or a combination of fields and/or constants.

For character fields you may string multiple fields and/or constants together by specifying an RO of ||. For numeric, binary, and/or packed fields you may do a calculation to combine multiple fields and/or constants by specifying an RO of +(add), -(subtract), *(multiply), or /(divide).

The field(s) and/or operators you have already selected will be displayed immediately below the "RO" line.

Our example will select the EMP-STATE field, so use a scroll command to display it, if necessary.

Figure 325. Field-to-Field Criteria

File-AID ----- Field-to-Field Change Criteria				SELECT ONE ENTRY
Command ==> <u>DOWN</u>		Scroll ==> CSR		
Field: &SAVESTATE	GLOBAL	Format: 2/CHAR		
RO ==> R				
Available Selections		Format	Constant /SUBSTR(pos:len)	OP
- C O N S T A N T V A L U E	GBL	N/A		
- &SAVESTATE		2/CHAR		
- EMP-NUMBER		5/CHAR		
- EMP-LAST-NAME		15/CHAR		
- EMP-FIRST-NAME		10/CHAR		
- EMP-MID-INIT		1/CHAR		
- FILLER		2/CHAR		
- EMP-TITLE		30/CHAR		
- EMP-PERSONAL-INFO		---	GROUP ---	
- EMP-NATL-ID-NUMBER			9/FIXPIC	
- FILLER			1/CHAR	
- EMP-DATE-OF-BIRTH			6/CHAR	
- EMP-DOB-REDEF			---	GROUP ---
- EMP-DOB-MM			2/FIXPIC	
- EMP-DOB-DD			2/FIXPIC	
- EMP-DOB-YY			2/FIXPIC	

Steps:

1. Type DOWN in the COMMAND field.
2. Press Enter.

Selecting a Field to Assign to Global Field

Now that the desired field is displayed, you can select it with S line command.

For character fields you may string multiple fields and/or constants together by specifying an RO of ||. For numeric, binary, and/or packed fields you may do a calculation to combine multiple fields and/or constants by specifying an RO of +(add), -(subtract), *(multiply), or /(divide).

The field(s) and/or operators you have already selected will be displayed immediately below the "RO" line. The lines below "Available Selections" will consist of one "CONSTANT" line, followed by global fields, if any, and then record layout fields.

The example selects the entire field value without any further operations.

Figure 326. Field-to-Field Criteria

```

File-AID ----- Field-to-Field Change Criteria Row 17 to 32 of 36
Command ===> END Scroll ===> CSR

Field: &SAVESTATE           GLOBAL          Format: 2/CHAR
RO ===> R

Available Selections          Format      Constant /SUBSTR(pos:len)    OP
-----                         ---         -----
- EMP-HIRE-DATE              6/CHAR
- EMP-MARITAL-STATUS          1/CHAR
- EMP-WITHOLD-INFO            --- GROUP ---
- EMP-LIFE-INS-WITHOLD-AMT   6/FIXPIC
- EMP-NATL-TAX-WITHOLD-PCT   3/FIXDEC
- EMP-REGION-TAX-WITHOLD-PCT 3/FIXDEC
- EMP-LOCAL-TAX-WITHOLD-PCT  3/FIXDEC
- EMP-HOME-ADDRESS             --- GROUP ---
- EMP-STREET-ADDRESS          25/CHAR
- FILLER                      1/CHAR
- EMP-CITY                     15/CHAR
- EMP-STATE-PROV-CNTY          --- GROUP ---
S EMP-STATE                   2/CHAR
- FILLER                      2/CHAR
- EMP-POSTAL-CODE              5/FIXPIC
- EMP-EMERGENCY-CONTACT        --- GROUP ---

```

Steps:

1. Type **S** in the Selection field next to "EMP-STATE".
2. Type **END** in the COMMAND field.
3. Press Enter.

Reviewing Data Replace Criteria

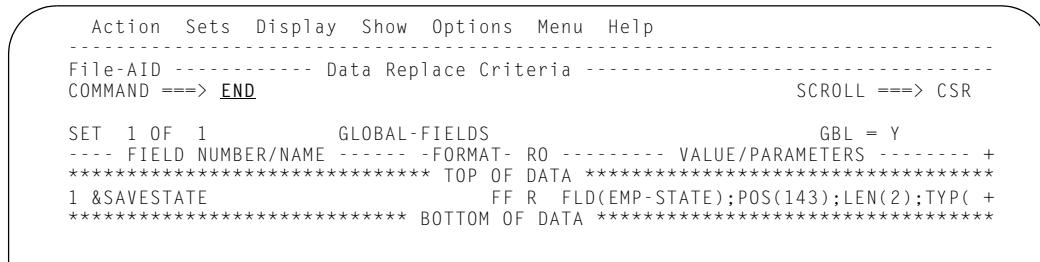
When returning to the [Data Replace Criteria](#) screen, the list of all global variables includes the data replace definition.

Because the example used Field-to-Field criteria, the FORMAT column for the global field now displays FF, the relational operator R, and the description of the operand fields.

Review the Value/Parameter for the global field &SAVESTATE.

The END command completes the global field criteria definition and returns to the Formatted Selection Criteria panel.

Figure 327. Data Replace Criteria



```
Action Sets Display Show Options Menu Help
-----
File-AID ----- Data Replace Criteria -----
COMMAND ==> END                               SCROLL ==> CSR
SET 1 OF 1          GLOBAL-FIELDS           GBL = Y
---- FIELD NUMBER/NAME ----- -FORMAT- RO ----- VALUE/PARAMETERS ----- +
*****TOP OF DATA *****                         *****
1 &SAVESTATE          FF R   FLD(EMP-STATE);POS(143);LEN(2);TYP( +
*****BOTTOM OF DATA *****
```

Steps:

1. Type END in the COMMAND field.
2. Press Enter.

Inserting Second Test

So far in this example, only the criteria to set the value for the global field has been set. Now, another criteria set needs to be defined to actually select a record with field EMP-MID-INIT equals C when at the same time the value of the global field &SAVESTATE equals CA. Set 1 put in the value for the global field.

Figure 328. Formatted Selection Criteria - Insert a Set

```

File-AID --- Formatted Selection Criteria -----
COMMAND ==> INSERT                      SCROLL ==> CSR

      SET  1 OF  1          EMPLOYEE-MASTER-FILE          GBL = Y
      ---- FIELD NUMBER/NAME ----- COLUMNS RO -----+---+---1---+---+---2---+---+---3---+---+
***** * ***** * ***** * ***** * ***** TOP OF DATA * ***** * ***** * ***** * ***** * ***** * *****

1 EMP-NUMBER            5/AN
2 EMP-LAST-NAME         15/AN
3 EMP-FIRST-NAME        10/AN
4 EMP-MID-INIT          1/AN    = A
5 FILLER                2/AN
6 EMP-TITLE             30/AN
7 EMP-PERSONAL-INFO    23/GRP
8 EMP-NATL-ID-NUMBER   9/NUM
9 FILLER                1/AN
10 EMP-DATE-OF-BIRTH    6/AN
11 EMP-DOB-REDEF REDEFINES EMP-DATE-OF-BIRTH
11 EMP-DOB-REDEF         6/GRP
12 EMP-DOB-MM            2/NUM
13 EMP-DOB-DD            2/NUM
14 EMP-DOB-YY            2/NUM
15 EMP-HIRE-DATE         6/AN
16 EMP-MARITAL-STATUS   1/AN
17 EMP-WITHOLD-INFO     15/GRP

```

Steps:

1. Type **INSERT** in the COMMAND field.
2. Press Enter.

Specifying Selection Criteria

After entering the INSERT command, File-AID opens set 2 of 2 where you enter the definition of the second criteria set.

Enter GBL to display the GLOBAL Selection Criteria panel so you can test whether the field global &SAVESTATE equals CA.

Figure 329. Formatted Selection Criteria - Specifying second test

```

File-AID --- Formatted Selection Criteria ----- SELECTION LEVEL INSERTED
COMMAND ===> GBL                               SCROLL ===> CSR

      SET 2 OF 2           EMPLOYEE-MASTER-FILE          GBL = N
      ---- FIELD NUMBER/NAME ---- COLUMNS RO -----+---1-----+---2-----+---3-----+
      *****TOP OF DATA***** *****TOP OF DATA***** *****TOP OF DATA*****
```

1 EMP-NUMBER	5/AN
2 EMP-LAST-NAME	15/AN
3 EMP-FIRST-NAME	10/AN
4 EMP-MID-INIT	1/AN <u>EQ</u> <u>C</u>
5 FILLER	2/AN
6 EMP-TITLE	30/AN
7 EMP-PERSONAL-INFO	23/GRP
8 EMP-NATL-ID-NUMBER	9/NUM
9 FILLER	1/AN
10 EMP-DATE-OF-BIRTH	6/AN
11 EMP-DOB-REDEF	REDEFINES EMP-DATE-OF-BIRTH
11 EMP-DOB-REDEF	6/GRP
12 EMP-DOB-MM	2/NUM
13 EMP-DOB-DD	2/NUM
14 EMP-DOB-YY	2/NUM
15 EMP-HIRE-DATE	6/AN
16 EMP-MARITAL-STATUS	1/AN
17 EMP-WITHOLD-INFO	15/GRP

Steps:

1. Type **EQ** in the RO column next to the field name EMP-MID-INIT.
2. Type **C** in the data area to define the test “EMP-MID-INIT=C”.
3. Type **GBL** in the COMMAND field.
4. Press Enter.

Testing the Value of the GLOBAL Field

The [Global Selection Criteria](#) screen lists all available global variables defined with option G of the Selection Criteria Menu.

Use relational operators to test whether the current value of the global field matches, in this example, CA.

Figure 330. Global Selection Criteria

```
File-AID --- Formatted Selection Criteria -----
---  
COMMAND ===> END          SCROLL ===> CSR  
      SET 2 OF 2           GBL=N  
      GLOBAL-FIELDS  
--- FIELD NUMBER/NAME ----- -FORMAT- RO -----+--- 1 -----+--- 2 -----+--- 3 -----+---  
***** 1 &SAVESTATE          2/AN   EQ CA  ***** TOP OF DATA ***** BOTTOM OF DATA *****
```

Steps:

1. Type EQ in the RO column next to the Global field name &SAVESTATE
2. Type CA in the data area to define the test "&SAVESTATE=CA".
3. Type END in the COMMAND field.
4. Press Enter. That closes the Global Selection panel and returns to the Formatted Selection Criteria panel.

Exiting Formatted Selection Criteria

Now you have completed the criteria definition and you can return to the Selection Criteria Menu.

Figure 331. Formatted Selection Criteria - Specifying second test

```
File-AID --- Formatted Selection Criteria ----- SELECTION LEVEL INSERTED
COMMAND ===> END                                     SCROLL ===> CSR
SET 2 OF 2          EMPLOYEE-MASTER-FILE           GBL = Y
---- FIELD NUMBER/NAME ---- COLUMNS R0 -----1-----2-----3-----+
***** TOP OF DATA *****
1 EMP-NUMBER        5/AN
2 EMP-LAST-NAME     15/AN
3 EMP-FIRST-NAME    10/AN
4 EMP-MID-INIT      1/AN    = C
5 FILLER            2/AN
6 EMP-TITLE          30/AN
7 EMP-PERSONAL-INFO 23/GRP
8 EMP-NATL-ID-NUMBER 9/NUM
9 FILLER            1/AN
10 EMP-DATE-OF-BIRTH 6/AN
11 EMP-DOB-REDEF REDEFINES EMP-DATE-OF-BIRTH
11 EMP-DOB-REDEF    6/GRP
   12 EMP-DOB-MM      2/NUM
   13 EMP-DOB-DD      2/NUM
   14 EMP-DOB-YY      2/NUM
15 EMP-HIRE-DATE     6/AN
16 EMP-MARITAL-STATUS 1/AN
17 EMP-WITHOLD-INFO   15/GRP
```

Steps:

1. Type END in the COMMAND field.
2. Press Enter.

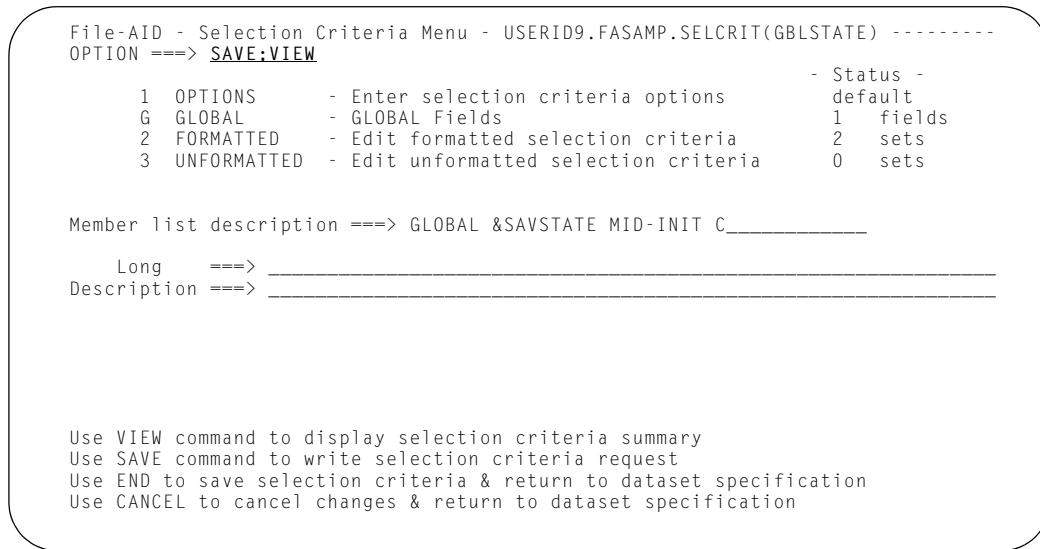
Viewing Your Selection Criteria

Notice that the status for FORMATTED criteria now shows "2 sets" to reflect the tests you just defined.

Enter the SAVE command to permanently store the selection criteria in the specified member.

When you enter the VIEW primary command from the Selection Criteria menu, or any other Criteria panel, File-AID displays your currently defined selection criteria.

Figure 332. Selection Criteria Menu. Specifying VIEW to View Selection Criteria.



Steps:

1. Type **SAVE;VIEW** in the OPTION field.
2. Press Enter.

Reviewing Your Selection Criteria

Scroll the display so you can see the complete Selection Criteria. It defines one global field and two criteria sets.

Set 1 looks for a record with the middle initial A and then stores the EMP-STATE value of that record in the variable.

Set 2 then selects a record if the current value of the global field, which was stored with set 1, equals CA and the middle initial is a C.

To see the selection results, browse the EMPLOYEE dataset using the selection criteria.

Figure 333. View Selection Criteria. Specifying F1 to switch to the Browse Function.

```

File-AID ----- View Criteria ----- Row 1 to 41 of 41
COMMAND ==> F1                                         SCROLL ==> CSR
Use END to exit View Display

***** TOP OF CRITERIA *****
DEFINE BLOCKS=SELECTION,
DESCRIPTION ="GLOBAL &SAVESTATE MID-INIT C",
SELECTION_DSNAMES=USERID9.FASAMP.SELCRIT,
SELECTION_MBRNAME=GBLSTATE,
LAYOUT_DSNAMES=USERID9.FASAMP.LAYOUTS,
LAYOUT_MBRNAME=EMPLOYEE,
INITIAL_SKIP=0,
THEN_SELECT=1,
THEN_SKIP=0,
MAXIMUM_TO_SEARCH=ALL,
MAXIMUM_TO_SELECT=ALL

GLOBAL FIELD_NAME=&SAVESTATE,LENGTH=2,TYPE=C
SELECT SET=1,LAYOUT=EMPLOYEE-MASTER-FILE
IF
  FIELD_NAME=EMP-MID-INIT,
  POSITION=31,LENGTH=1,OPERATOR=EQ,
  TYPE=T,VALUE=A
CHGGBL
  FIELD_NAME=&SAVESTATE,
  OPERATOR=R ,
  FIELD_TO_FIELD=Y,
  TYPE=T,VALUE=FLD(EMP-STATE);POS(143);LEN(2);TYP(C)

SELECT SET=2,LAYOUT=EMPLOYEE-MASTER-FILE
IFGBL
  FIELD_NAME=&SAVESTATE,
  OPERATOR=EQ,
  TYPE=T,VALUE=CA
AND
  FIELD_NAME=EMP-MID-INIT,
  POSITION=31,LENGTH=1,OPERATOR=EQ,
  TYPE=T,VALUE=C
***** END OF CRITERIA *****

```

Steps:

1. Type **F1** in the OPTION field.
2. Press Enter.

Specifying the Browse Datasets and Selection Criteria Member

The last dataset you referenced in any File-AID function or utility is automatically displayed in the Browse dataset or path field.

The Selection Criteria dataset and member you last referenced (in this case, through the Selection Criteria function) is displayed in the lower portion of the screen.

In this example, specify an E in the Selection criteria usage field to use existing criteria in the online browse process.

Figure 334. Browse - Dataset Specification. Use Existing Selection Criteria.

```

File-AID ----- Browse - Dataset Specification -----
COMMAND ==>

Browse Mode      ==> V          (F=Fmt; C=Char; V=Vfmt; U=Unfmt)

Specify Browse Information:
Dataset name or zFS path ==> FASAMP.EMPLOYEE
Member name       ==>          (Blank or pattern for member list)
Volume serial     ==>          (If dataset is not cataloged)

Specify Record Layout and XREF Information:
Record layout usage ==> S          (S = Single; X = XREF; N = None)
Record layout dataset ==> FASAMP.LAYOUTS
Member name        ==> EMPLOYEE    (Blank or pattern for member list)
XREF dataset name ==>
Member name        ==>          (Blank or pattern for member list)

Specify Selection Criteria Information:   (E = Existing; T = Temporary;
Selection criteria usage ==> E          M = Modify; Q = Quick; N = None)
Selection dataset name ==> FASAMP.SELCRIT
Member name         ==> GBLSTATE    (Blank or pattern for member list)

```

Steps:

1. Type V in the Browse Mode field to select vertically formatted browse mode.
2. Type **FASAMP.EMPLOYEE** in the Browse Dataset or path field.
3. Type an **S** in the Record layout usage field to indicate that you are using a single layout member to describe your data records.
4. Type the dataset name **FASAMP.LAYOUTS** in the Record layout dataset field.
5. Type the member name **EMPLOYEE** in the layout Member name field.
6. Type an **E** in the Selection criteria usage field to indicate that you want to use saved selection criteria.
7. Type **FASAMP.SELCRIT** in the Selection dataset name field.
8. Type **GBLSTATE** in the selection Member name field.
9. Press Enter

Verifying Selection Criteria in Browse

As a result of the selection criteria, File-AID displays five records. You can see that all five have a middle initial of C.

The selection criteria tested whether the global field &SAVESTATE was equal to CA. It did not test that the EMP-STATE field in the selected record matches CA.

Figure 335. Vertical Formatted Browse. Displaying Selected Records

```
File-AID - Browse - USERID9.FASAMP.EMPLOYEE -----
COMMAND ==> FIND NE 'CA' /EMP-STATE           SCROLL ==> CSR
EMP-NUMBER EMP-LAST-NAME   EMP-FIRST-NAME  EMP-MID-INIT FILLER  EMP-TITLE
5/AN        15/AN          10/AN          1/AN      2/AN      30/AN
(1-5)       (6-20)         (21-30)        (31-31)   (32-33)   (34-49)
1----- 2----- 3----- 4----- 5----- 6-----
***** TOP OF DATA *****-CAPS OFF-*
----- 2 RECORD(S) NOT SELECTED
00200    JACKSON        JOSEPH        C          ORATOR
----- 2 RECORD(S) NOT SELECTED
18034    SCHNEIDER      ELLEN         C          NURSE
----- 4 RECORD(S) NOT SELECTED
31000    SAVAGE         JONATHON      C          ELECTRICIAN
----- 15 RECORD(S) NOT SELECTED
65111    BARNETT        JUDITH        C          AUTHOR
----- 14 RECORD(S) NOT SELECTED
90035    FOSTER         STEPHEN      C          SONGWRITER
----- 8 RECORD(S) NOT SELECTED
***** BOTTOM OF DATA *****-CAPS OFF-*
+-----+
| XVJER223 ER223- Records read = 50, selected = 5, error records skipped = 0 |
+-----+
```

Steps:

1. Type FIND NE 'CA' /EMP-STATE in the COMMAND field.
2. Press Enter.

Verifying Selection Based on Conditions Set in Previous Records

When the panel display shows the EMP-STATE field, you can see that the selected records also include states other than CA because the selection was based on conditions (&SAVESTATE equal to CA) set in previous records.

Figure 336. Vertical Formatted Browse. Displaying EMP-STATE field.

```
File-AID - Browse - USERID9.FASAMP.EMPLOYEE ----- 'NY' FOUND
COMMAND ===> END                                     SCROLL ===> CSR
FILLER    EMP-CITY      EMP-STATE FILLER    EMP-POSTAL-CODE EMP-CONTACT-NAME
1/AN      15/AN        2/AN      2/AN      5/NUM      25/AN
(127-127) (128-142) (143-144) (145-146) (147-151) (152-169)
24----- 25----- 27----- 28----- 29----- 31-----
*****TOP OF DATA*****-CAPS OFF-*-----2 RECORD(S) NOT SELECTED
CANOGA PARK   CA          94106 ANGELA
-----2 RECORD(S) NOT SELECTED
SAN DIEGO     CA          96126 MARY WILSON
-----4 RECORD(S) NOT SELECTED
MODESTO       CA          94126 LOOKE DOVER
-----15 RECORD(S) NOT SELECTED
NEW YORK      NY          10644 ANGELA
-----14 RECORD(S) NOT SELECTED
DALLAS        TX          40867 NONE
-----8 RECORD(S) NOT SELECTED
*****BOTTOM OF DATA*****-CAPS OFF-*
```

Steps:

1. Enter the END command (press PF3) until the File-AID Primary Option Menu is displayed.

Automating Layout Usage with XREF

File-AID provides a special function, option 7 XREF, for automating the selection and usage of record layouts for files with different record types. These files have different records that are described by more than one record layout. File-AID determines the record layout to use for each different record type *by the value in one or more data fields in each record*. These data fields are typically referred to as *record type* fields.

With the XREF function, you can create a permanent member of a PDS that contains the *rules* for selecting a record layout. The rules are based on the data conditions found in each record being processed by any of the following File-AID functions:

- Browse - formatted display mode and FPRINT command
- Edit - formatted display mode and FPRINT command
- Print - formatted data record printing
- Selection - formatted selection criteria specification
- Reformat - source layout and record selection
- Compare - formatted field comparison and differences reporting.

XREF layouts are compiled when needed by the function.

In addition to defining layout member selection rules for multi-record type files, the XREF function can also be used to describe the rules for selecting layouts for a file with records that require different layouts to define each of several possible segments of one record. The procedure for defining *segmented* record XREF members is discussed in [Segmented Record File Layout Automation](#).

The XREF function uses the actual record layouts themselves to define the rules for selecting a layout when the formatted display of a data record is requested in any File-AID function. Using a formatted display of a record layout as a template, you establish layout selection rules by entering data value(s) in the *record type* field(s).

Optionally, you can specify layout selection conditions with unformatted criteria. XREF layout selection criteria specification is similar to defining record selection criteria in other functions of File-AID (for example, Selection and Search/Update).

Accessing the XREF Function (Option 7)

The XREF function is located on the File-AID Primary Option Menu as option 7.

Steps:

1. From the File-AID Primary Option Menu, select option 7.
2. Press Enter. File-AID displays the Record Layout Cross Reference screen as illustrated in [Figure 337](#).

Creating a New XREF Member

In this chapter you create a new member, ORDERXRF, in your sample XREF dataset (**FASAMP.XREF**). The new ORDERXRF member is used to describe the layout selection rules for the sample order file

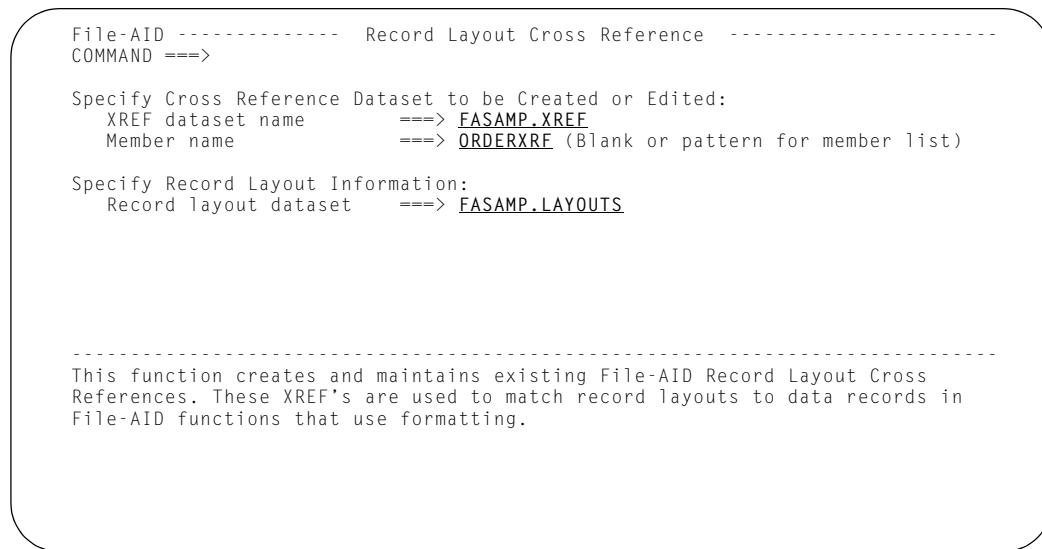
(FASAMP.ORDRFILE). The file contains four types of records, each of which is described by a different record layout. Two data fields are used to identify each record type as shown in [Table 2](#):

Table 2. FASAMP.ORDRFILE Records

Layout Member	01 Level Name	Field 1 ORDER-TYPE	Field 2 CONTRACT-INDICATOR
ORDERPO	ORDER-LINE-DATA-PO	PO	(not applicable)
ORDERSC	ORDER-LINE-DATA-SC	SC	(not applicable)
ORDERWO	OUTSIDE-VENDOR-WORK-ORDER	WO	OV
ORDERWO	INTERNAL-WORK-ORDER	WO	IN

Notice that two of the layouts are stored in the same member (ORDERWO) of the sample layouts library (FASAMP.LAYOUTS). You are shown how to identify each of the two structures independently.

Figure 337. Record Layout Cross Reference (XREF) Function Entry Screen



Steps:

- Type FASAMP.XREF in the XREF Dataset name field under the Specify Cross Reference Dataset information section.

If you want to create a new XREF dataset, the attributes are:

DSORG=PO, RECFM=VB, LRECL=300, BLKSIZE=x (x = 304 or more)

You may store XREF members and permanent selection criteria members in the same dataset. Any entry you make here is reflected on all File-AID screens where an XREF dataset is permitted.

- Type ORDERXRF in the Member name field.

You are creating a new member, ORDERXRF. You can enter the name of an existing member. You can also leave the field blank or specify a pattern to display a list of existing XREF members from which you can select. The member you identify here is reflected on all File-AID screens where an XREF member is permitted.

- Type FASAMP.LAYOUTS in the Record layout dataset field.

This is the name of the library containing the record layouts you reference during XREF creation and XREF usage. The last referenced layout library entered on any File-AID screen is shown as a default. Any entry you make here is reflected on all File-AID screens where a record layout library is referenced.

4. Press Enter. File-AID displays the Define XREF screen as illustrated in [Figure 338](#).

Defining the XREF

The Define XREF screen ([Figure 338](#)) is where you specify which source layout library members are to be used for formatting the data records of your file.

The scrollable area in the lower half of the screen is where you enter line commands and member names (or patterns).



You must use the line command S (Select Formatted) or SU (Select Unformatted) to access the selection rules definition screen for each member you enter.

Figure 338. Define XREF Screen. Requesting a Pattern Member List.

File-AID ----- Define XREF - ORDERXRF ----- ROW 1 TO 12 OF 15
COMMAND ===> SCROLL ==> PAGE
XR105-Valid line CMDS: C/M, B/A, I, R, D, EX, S, SF, SU, DEF, BAS, SEG
Member list description ==> _____
Long ==> _____
Description ==> _____
Generated filler length ==> 0 (0 to suppress filler)
Cmd Member Beginning Data-Name Description Status
----- ----- ----- ----- -----
S ORD* _____ _____ _____ _____ _____

The optional Beginning Data-Name field is provided for cases when the referenced source layout library member contains multiple 01-level data structures, or is a source language program (COBOL or PL/I) containing an embedded data structure that you want to use for formatting your data records.

File-AID examines the source code for the data-name and extracts the data structure at the level of the data-name specified, stopping when an equal or lower level data structure or other non-data declarative source statement is encountered.

If you do not specify a value in the Beginning Data-Name field for a source member with multiple 01-level data structures, File-AID displays a list of structures from which you can select.

Whenever File-AID is unable to clearly determine the structure to use (for example the layout member is a source program), the Source Statement Selection screen is displayed to capture the starting and ending data names or line numbers of the source statements which define the data structure you want to use.

The EX (Extract) layout line command is provided to give you direct access to the Source Statement Selection screen to enable source data structure extraction from within a program when starting-data-name or line-number is not adequate for isolating the data structure to use for formatting.

Use the Description field to document your comments to help you identify each of the layout usage conditions you define for each layout member.

Fields at the top half of the screen capture information about this XREF to help with future identification. One of these fields is the Generated filler length field, which can be used to request that File-AID automatically generate a *filler* field before each of the layouts when presenting formatted data displays.

Defining Layout Selection Rules Using Formatted Criteria

In this example, there are four layouts corresponding to the four different record types found in the ORDRFILE.

You now define the rules for the "PO" record type to be formatted by the layout member **ORDERPO**.

The S (Select Formatted) line command requests formatted criteria definition which uses the layout to help you enter a test for the record type field.

Steps:

1. Type **S** in the Cmd column on the first line of the scrollable member entry area.
2. Type **ORD*** in the Member name column.

A full member name is expected in this field. If you specify an * (asterisk), File-AID displays a list of all members of the layout library. If you leave the member name blank or specify a pattern, File-AID presents the PDS Processing Options (PPO) screen to help you filter the list of members. In this example you specify a pattern (**ORD***). The pattern is carried over to the "Member mask" field of the PPO screen.

3. Press Enter. File-AID displays the PDS Processing Options screen as illustrated in [Figure 339](#) on page 336.

More About the Define XREF Screen

- You can use the following primary commands on the XREF Define screen:

END	End Define XREF, validate entries, and SAVE the XREF member in the XREF dataset.
CANCEL	Abort Define XREF; do not SAVE member.
SAVE	Save the current XREF member; remain on the Define XREF screen.
VIEW	Display all entries for this XREF member in a scrollable, readable, browse screen.

- The S (Select Formatted, alias SF) or the SU (Select Unformatted) line command is required for all member entries. A full member name or a pattern is required in the Member field.
- Editing line commands are provided to help you to build complex XREF members. The editing line commands include:
 - A (After)
 - B (Before)
 - C (Copy a line to A or B marker)
 - D (Delete line)
 - I (Insert)
 - M (Move)
 - R (Repeat)

- There are three types of layout members. The layout member type is identified by its status as displayed in the Status column. The status of a layout member is established in one of two ways. Either File-AID defines the status (the default) or you can explicitly set the status of a layout member (invoke the BAS or SEG line command) during XREF definition. There are three status types and commands, including:

BAS (Status BASE). A BASE layout defines the beginning of the record and at least one condition has been specified with the Formatted (S) or Unformatted (SU) commands.

SEG (Status SEGMENT). A SEGMENT layout defines a segment of the record following the last displayed BASE or SEGMENT. At least one condition (typically at a position relative to the end of the last displayed BASE or SEGMENT) has been specified with the Formatted (S) or Unformatted (SU) commands.

DEF (Status DEFAULT-BASE). A DEFAULT-BASE layout defines the beginning of the record when no other BASE record conditions can be matched. No conditions are allowed for a DEFAULT-BASE. DEF is not allowed if status is BASE or SEGMENT, you must use the S or SU line commands and delete all conditions to make a layout a DEFAULT-BASE.

Note: Only one layout member may be designated as a DEFAULT-BASE. The DEFAULT-BASE must be the last (or only) base layout in the XREF.

- Description fields are optional and provided to assist with layout identification.

Using the PPO Member Filters

Whenever you use the Define XREF S or SF (Select Formatted), or SU (Select Unformatted) line commands, and leave the Member name column blank or use a pattern, File-AID displays a PDS Processing Options screen as shown in [Figure 339](#).

Any pattern you specified is automatically carried forward and placed in the "Member name mask" field. You may specify additional filters (for example, Last modified userid), or just press Enter to get a list of all members whose names match your pattern.

Figure 339. PDS Processing Options - Member Name Mask ORD*. Filtering the Layout Members.

```
File-AID ----- PDS Processing Options -----
COMMAND ==>

Layout Dataset: USERID9.FASAMP.LAYOUTS

Specify Member Selection Options (Blank for All Members)
Member name mask      ==> ORD*
Member name range      ==>          to ==>
Last modified userid    ==>          to ==>
Creation date           ==>          to ==>       (YY/MM/DD)
Modification date        ==>          to ==>       (YY/MM/DD)

Use ENTER to continue, END to return to dataset specification screen
```

Step:

1. Press Enter. File-AID displays the RECORD LAYOUT FILE MEMBER LIST screen, showing all members starting with ORD as illustrated in [Figure 340](#) on page 337.

More About PDS Processing Options For Layout Member List

- Use a member name of * (asterisk) on the Define XREF screen to list all members and to bypass the PPO screen. Note that if your record layout dataset contains a large number of members it may take some time to generate the member list.

Selecting a Layout Member from a Member List

File-AID displays the list of matching members as shown in [Figure 339](#) on page 336. Use the S line command to the left of the member you want, in this case, member ORDERPO.

Figure 340. Record Layout Member List Screen. Selecting a Layout Member.

```
File-AID Member Select - USERID9.FASAMP.LAYOUTS ----- ROW 1 TO 3 OF 3
COMMAND ===> SCROLL ===> CSR
S NAME VV.MM CREATED CHANGED SIZE INIT MOD ID
S ORDERPO
ORDERSC
ORDERWO
***** END OF SELECTION CRITERIA *****
```

Steps:

1. Type **S** in the input area just left of member name ORDERPO.
2. Press Enter. File-AID displays the Formatted XREF Definition screen showing the ORDERPO member layout, as illustrated in [Figure 341](#) on page 338.

Defining the Formatted XREF Criteria

The selected ORDERPO layout is displayed in formatted mode. As described earlier, the ORDERPO layout defines all records with ORDER-TYPE equal to "PO".

Figure 341. Formatted XREF Definition - ORDERPO - ORDER-LINE-DATA-PO

```
File-AID --- Formatted XREF Definition ----- LAYOUTS HAVE BEEN LOADED
COMMAND ==> SCROLL ==> CSR
CRITERIA NUMBER: 1 OF 1 ORDER-LINE-DATA-PO LAYOUT LENGTH: 184
---- FIELD NUMBER/NAME ----- COLUMNS- RO -----+---1-----+---2-----+---3-----+
***** TOP OF DATA *****
1 RECORD-LENGTH 0
2 ORDER-NO 2
3 ORDER-LINE-KEY SYNC 8
4 LINE-NUMBER 8
5 ORDER-TYPE 10
6 LINE-STATUS 12
7 PART-NO 19
8 DESCRIPTION 25
9 UNIT-OF-MEASURE 55
10 PURCHASE-ORDER-INFO SYNC 57
  11 PO-CODE 57
  12 PO-NUMBER 61
  13 PO-COMPANY 73
  14 PO-VENDOR-NUMBER 103
  15 PO-VENDOR-CODE 108
16 FILLER 113
17 ORDER-QUANTITIES SYNC 143
  18 QTY-ORDERED 143
  19 QTY-BACKORDERED 146
```

Showing Field Offsets with the SHOW OFFSET Command

Before you specify the condition, notice that all standard File-AID formatted mode commands are available including the SHOW and DISPLAY commands. You now use the SHOW OFFSET command to set the display to show the offset of each field so that you can see the location of the ORDER-TYPE field.

Figure 342. Display Offset Information - SHOW OFFSET

```
File-AID --- Formatted XREF Definition -----
COMMAND ==> SHOW_OFFSET
CRITERIA NUMBER: 1 OF 1 ORDER-LINE-DATA-PO
---- FIELD NUMBER/NAME ----- COLUMNS- RO -----+---1-----+---2-----+---3-----+
***** TOP OF DATA *****
1 RECORD-LENGTH 1
```

Steps:

1. If COLUMNS already appears in the center portion of the screen, you may skip these steps.
2. Type **SHOW OFFSET** in the COMMAND field.
3. Press Enter. File-AID redisplays the Formatted XREF Definition screen showing the offsets of each field, as illustrated in [Figure 343](#) on page 339.

Defining the Formatted Layout Selection Condition

Field number 5, the ORDER-TYPE field, is located in column 11 of each data record. When the ORDER-TYPE field in a data record is equal to "PO" this ORDERPO member is to be used to format the data.

Steps:

1. Type END in the COMMAND field.
2. Type EQ (equal) in the RO column to the right of the ORDER-TYPE field.
3. Type PO in the data value area to the right of the RO column for the ORDER-TYPE field.
4. Press Enter. File-AID captures your condition and returns to the Define XREF screen, as illustrated in [Figure 344](#) on page 340.

Figure 343. Formatted XREF Definition. Specifying the Selection Condition.

```

File-AID --- Formatted XREF Definition ----- COLUMNS 00001 00149
COMMAND ===> END                               SCROLL ===> PAGE
CRITERIA NUMBER: 1 OF 1 ORDER-LINE-DATA-PO      LAYOUT LENGTH: 184
---- FIELD NUMBER/NAME ----- COLUMNS- RO -----+---1-----+---2-----+---3-----+
*****TOP OF DATA*****                         *****
1 RECORD-LENGTH          1
2 ORDER-NO               3
3 ORDER-LINE-KEY SYNC   9
4 LINE-NUMBER           9
5 ORDER-TYPE            11    EQ PO
6 LINE-STATUS            13
7 PART-NO               20
8 DESCRIPTION            26
9 UNIT-OF-MEASURE        56
10 PURCHASE-ORDER-INFO SYNC 58
  11 PO-CODE              58
  12 PO-NUMBER            62
  13 PO-COMPANY           74
  14 PO-VENDOR-NUMBER     104
  15 PO-VENDOR-CODE       109
16 FILLER                114
17 ORDER-QUANTITIES SYNC 144
  18 QTY-ORDERED          144
  19 QTY-BACKORDERED      147

```

More About the Formatted XREF Definition Screen

- Valid RO operators include: BT, EQ, GE, GT, LE, LT, MX, NB, NE, NO.
- The following codes are **not allowed** when defining an XREF: CO and NC.
- You can specify multiple fields; the field tests are ANDed together.
- Use the INSERT or REPEAT command to enter alternate conditions (*sets*) for selecting a layout. Each CRITERIA *set* is ORed to all others. A record matching any CRITERIA *set* causes the current layout to be selected for formatting data.
- Use DELETE to remove a condition. Removing the last criteria condition makes this layout a DEFAULT-BASE.

Defining Unformatted XREF Criteria

Upon return from the Formatted XREF Definition to the Define XREF screen (see [Figure 344](#)), notice that the full member name, ORDERPO, has been filled in by File-AID on line 1, along with the 01 level structure name ORDER-LINE-DATA-PO, and a status indicator of BASE.

As described earlier, the ORDERSC layout defines all records with ORDER-TYPE equal to "SC". Since you now know that the ORDER-TYPE field is located at position 11, you use the SU line command to invoke Unformatted XREF criteria to define the condition for using the ORDERSC layout.

Figure 344. Define XREF Screen (SU Command). Selecting Unformatted Criteria.

File-AID ----- Define XREF - ORDERXRF ----- ROW 1 TO 12 OF 15
COMMAND ===> SCROLL ===> PAGE

Member list description ===> _____

Long ===> _____
Description ===> _____

Generated filler length ===> 0 (0 to suppress filler)

Cmd	Member	Beginning Data-Name	Description	Status
SU	ORDERPO	ORDER-LINE-DATA-PO	_____	BASE
---	---	---	---	---
---	---	---	---	---
---	---	---	---	---
---	---	---	---	---
---	---	---	---	---
---	---	---	---	---
---	---	---	---	---
---	---	---	---	---
---	---	---	---	---

Steps:

1. Type **SU** in the Cmd column on the second line of the scrollable member entry area.
2. Type **ORDERSC** in the Member name column on the second line.
3. Press Enter. File-AID displays the Unformatted XREF Definition screen, as illustrated in [Figure 345](#) on page 341.

Defining the Unformatted Layout Selection Condition

As illustrated in [Figure 343](#) on page 339, the ORDER-TYPE field is located in column 11 of each data record. When the ORDER-TYPE field is equal to "SC", the ORDERSC member is to be used to format the data.

Figure 345. Unformatted XREF Definition Screen. Specifying the Layout Selection Condition.

File-AID ----- Unformatted XREF Definition LAYOUTS HAVE BEEN LOADED
 COMMAND ==> END SCROLL ==> PAGE

Use END to continue, CANCEL to return to main screen.

Record Layout Member: ORDERSC
 Beginning Data Name: ORDER-LINE-DATA-SC

Cmd	/OR	Position	Length	RO	Data	Value
---	---	11	---	EQ	SC	
---	AND	---	---	EQ		
---	AND	---	---	EQ		
---	AND	---	---	EQ		
---	AND	---	---	EQ		
---	AND	---	---	EQ		
---	AND	---	---	EQ		
---	AND	---	---	EQ		
---	AND	---	---	EQ		
---	AND	---	---	EQ		
---	AND	---	---	EQ		
---	AND	---	---	EQ		
---	AND	---	---	EQ		
---	AND	---	---	EQ		

Steps:

1. Type END on the COMMAND line.
2. Type 11 in the Position column on the first input line.
3. Type EQ (equal) in the RO column on the first input line.
4. Type SC in the data value column to the right of the EQ on the first input line.
5. Press Enter. File-AID captures your condition and returns to the Define XREF screen, as illustrated in [Figure 346](#) on page 343.

More About Unformatted XREF Definition

- Valid RO operators include: BT, EQ, GE, GT, LE, LT, MX, NB, NE, and NO.
- The following codes are **not allowed** when defining an XREF: CO and NC.
- The value you specify in the Position field can be a relative position by using one of the following Position values:

- *n (asterisk "n") where n represents a byte of data relative to data record byte 1. The *n notation is used for SEG (segment) type layouts when the determination of the presence of a segment is based on a data field in the base portion of the record rather than the segment itself.
- n (minus "n") where n represents a byte of data relative to the end of the *currently displayed* layout. The -n notation is used for SEG (segment) type layouts when the determination of the presence and format of the next segment of record data is based on a data field in the currently displayed segment (or base) portion of the record rather than the next segment itself.

***n** (asterisk "n") where *n* represents a byte of data relative to data record byte 1. The **n* notation is used for SEG (segment) type layouts when the determination of the presence of a segment is based on a data field in the base portion of the record rather than the segment itself.

+n (plus *n*) where *n* represents a byte of data *beyond the end of the currently displayed layout*. The +*n* notation is implied when no special character (+, -, *) precedes a Position value for SEGMENT status layouts. With +*n* or *n* alone, the determination of the presence and format of the next segment of record data is *based on a data field in the next segment itself*.

- Valid line commands include:

- A (After)
 - B (Before)
 - C (Copy a line to A or B marker)
 - D (Delete line)
 - I (Insert)
 - M (Move)
 - R (Repeat).

- Use the CANCEL command to stop unformatted XREF criteria processing and return to the Define XREF entry screen.

Defining Formatted XREF Criteria Using Beginning Data-Name

Upon return from the Unformatted XREF Definition to the Define XREF screen (see [Figure 346](#)), notice that the status indicator, BASE, has been filled in by File-AID on line 2 for member ORDERSC.

Figure 346. Define XREF Screen. Selecting Multiple Layouts Member ORDERWO.

The screenshot shows the 'Define XREF - ORDERXRF' screen. At the top, it says 'File-AID ----- Define XREF - ORDERXRF ----- ROW 1 TO 12 OF 15 SCROLL ===> PAGE'. Below that, there are input fields for 'Member list description ===>' and 'Long Description ===>'. A note says 'Generated filler length ===> 0 (0 to suppress filler)'. The main area is a table with columns: Cmd, Member, Beginning Data-Name, Description, and Status. The table contains three rows:

Cmd	Member	Beginning Data-Name	Description	Status
---	ORDERPO	ORDER-LINE-DATA-PO	-----	BASE
---	ORDERSC	ORDER-LINE-DATA-SC	-----	BASE
S	ORDERWO	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----

Accessing the List of Available Layouts Screen

If the source member contains multiple 01-level structures and you do not specify a value in the Beginning Data-Name field, the LIST OF AVAILABLE LAYOUTS screen is displayed as shown in [Figure 347](#) on page 344.

Steps:

1. Type S in the Cmd column on the third line of the scrollable member entry area.
2. Type ORDERWO in the Member name column on the third line.
3. Press Enter.

Selecting a Layout Structure from an Available Layouts List

As described earlier, the ORDERWO layout member contains two 01 level structures:

- OUTSIDE-VENDOR-WORK-ORDER
- INTERNAL-WORK-ORDER

The OUTSIDE-VENDOR-WORK-ORDER layout is used when the ORDER-TYPE is "WO" and the CONTRACT-INDICATOR is "OV".

The INTERNAL-VENDOR-WORK-ORDER layout is used when the ORDER-TYPE is "WO" and the CONTRACT-INDICATOR is "IN".

Since both of these structures exist within the same source layout member, you can use the Beginning Data-Name field to specify which structure to use for each set of rules. You may either type in the data-name or leave the data-name field blank when you use either of the criteria access line commands: S or SU.

Use the S line command to the left of the 01-level structure you want, in this case, OUTSIDE-VENDOR-WORK-ORDER.

Figure 347. List of Available Layouts Screen. Selecting an 01-Level Structure.

File-AID ---- LIST OF AVAILABLE RECORD LAYOUTS -----				ROW 1 TO 2 OF 2
COMMAND ==>				SCROLL ==> CSR
S	Nbr	Member name	01-level Name	Status
	1	ORDERWO	INTERNAL-WORK-ORDER	
<u>S</u>	2	ORDERWO	OUTSIDE-VENDOR-WORK-ORDER	
***** END OF SELECTION CRITERIA *****				

Steps:

1. Type **S** in the S column just left of member number 2, member name ORDERWO with an 01-level Name of OUTSIDE-VENDOR-WORK-ORDER.
2. Press Enter. File-AID displays the Formatted XREF Definition screen showing the ORDERWO member's structure for OUTSIDE-VENDOR-WORK-ORDER layout, as illustrated in [Figure 348](#) on page 345.

Defining the Formatted Layout Selection - Compound Condition

When the **ORDER-TYPE** field is equal to "WO" and the **CONTRACT-INDICATOR** field is equal to "OV", the **OUTSIDE-VENDOR-WORK-ORDER** structure contained in the **ORDERWO** layout library member is selected to format the data.

Figure 348. Formatted XREF Definition. Specifying a Compound Condition.

```

File-AID --- Formatted XREF Definition -----
COMMAND ==> END                                     SCROLL ==> PAGE
SCO10- Valid commands are: INSERT, DELETE, REPEAT, VIEW, SAVE, CANCEL, PROFILE
----- FIELD NUMBER/NAME ----- COLUMNS RO -----+---1---+---2---+---3---+
***** TOP OF DATA *****
1 RECORD-LENGTH           1
2 ORDER-NO                3
3 ORDER-LINE-KEY SYNC     9
4 LINE-NUMBER              9
5 ORDER-TYPE               11   EQ_WO
6 LINE-STATUS              13
7 PART-NO                  20
8 DESCRIPTION                26
9 CONTRACT-INDICATOR       56   EQ_OV
10 UNIT-OF-MEASURE         58
11 VENDOR-INFO SYNC        60
12 VENDOR-NUMBER           60
13 VENDOR-NAME              65
14 VENDOR-AREA-CODE        85
15 VENDOR-TELEPHONE         88
16 VENDOR-START-DATE        95
17 VENDOR-COMPLETE-DATE      101
18 FILLER                   107

```

Steps:

1. Type **END** in the COMMAND field.
2. Type **EQ** (equal) in the RO column to the right of the **ORDER-TYPE** field.
3. Type **WO** in the data value area to the right of the RO column for the **ORDER-TYPE** field.
4. Type **EQ** (equal) in the RO column to the right of the **CONTRACT-INDICATOR** field.
5. Type **OV** in the data value column to the right of the RO column for the **CONTRACT-INDICATOR** field.
- Multiple tests within one criteria are ANDed together.
6. Press Enter. File-AID captures your condition and returns to the Define XREF screen, as illustrated in [Figure 349](#) on page 346.

Setting a Default Base Layout

Upon return from the Formatted XREF Definition screen to the Define XREF screen (see [Figure 349](#)), notice that File-AID has entered the member name on line 3, along with the 01-level structure name **OUTSIDE-VENDOR-WORK-ORDER**, and a status indicator of BASE.

When no conditions are specified for a layout, File-AID assigns a status of **DEFAULT-BASE** to that layout and uses the default layout whenever it encounters a data record that does not match any of the XREF criteria specified. In this example, use the structure **INTERNAL-WORK-ORDER** in the **ORDERWO** source member as a default layout.

Figure 349. Define XREF Screen. Specifying the Default-Base Layout.

The screenshot shows the Define XREF screen for ORDERXRF. The command is set to ORDERXRF. The member list description is blank. The long description is also blank. The generated filler length is set to 0. The table below lists four members: ORDERPO, ORDERSC, ORDERWO, and ORDERWO. The fourth row for ORDERWO has 'INTERNAL-WORK-ORDER' in the Beginning Data-Name column and 'BASE' in the Status column. The table has a header row and five data rows.

Cmd	Member	Beginning Data-Name	Description	Status
---	ORDERPO	ORDER-LINE-DATA-PO	-----	BASE
---	ORDERSC	ORDER-LINE-DATA-SC	-----	BASE
---	ORDERWO	OUTSIDE-VENDOR-WORK-ORDER	-----	BASE
---	ORDERWO	INTERNAL-WORK-ORDER	-----	

Steps:

1. Leave the Cmd column blank.
2. Type **ORDERWO** in the Member Name column on the fourth line.
3. Type **INTERNAL-WORK-ORDER** in the Beginning Data-Name column.
4. Press Enter. File-AID redisplays the Define XREF screen with the fourth line marked with a status of **DEFAULT-BASE** as illustrated in [Figure 350](#) on page 347.

More About Default Layouts

- The **DEFAULT-BASE** must be the last **BASE** in the XREF.
- Only one layout may be marked as a **DEFAULT-BASE**.
- A **DEFAULT-BASE** may be followed by any number of **SEGMENT** layouts.
- There is no way to specify a *default SEGMENT* other than to set up a condition in the last **SEGMENT** of a group of **SEGMENTS** that is likely to be true (for example, **FIELDX NE CPWR**).
- The beginning data name can be abbreviated as long as the partial name is unique or matches the first structure starting with the name specified. For example, **INTERNAL-W** is valid in this case.

Saving the New XREF Member

Your XREF for the ORDRFILE is now complete. Use the END command or PF key (default PF3) to exit from the Define XREF screen and to save your XREF criteria member.

Figure 350. Define XREF Screen. Entering Description and Saving XREF Definition.

Steps:

1. Type **END** in the COMMAND field.
 2. Type **XREF FOR ORDER FILE** in the Member list description field.
 3. Press Enter. File-AID saves your new member **ORDERXRF** in the sample dataset **FASAMP.XREF** and returns to the Record Layout Cross Reference screen, as illustrated in [Figure 351](#) on page 348.

Exiting XREF and Returning to Main Menu

Notice that the message, CRITERIA MEMBER SAVED, is displayed to confirm that your XREF member has been created.

Use the END command to exit from the XREF function and to return to the File-AID Primary Option Menu.

Figure 351. Record Layout Cross Reference. Saving the XREF Member and Exiting XREF Using the END Command.

```
File-AID ----- Record Layout Cross Referenc XREF ORDERXRF added
COMMAND ==> END

Specify Cross Reference Dataset to be Created or Edited:
  XREF dataset name    ==> FASAMP.XREF
  Member name          ==> ORDERXRF (Blank or pattern for member list)

Specify Record Layout Information:
  Record layout dataset ==> FASAMP.LAYOUTS

-----
This function creates and maintains existing File-AID Record Layout Cross References. These XREF's are used to match record layouts to data records in File-AID functions that use formatting.
```

Steps:

1. Type END in the COMMAND field.
2. Press Enter. File-AID returns to the Primary Option Menu screen, as illustrated in [Figure 353](#) on page 350.

More About XREF Members

- Use function 5.2 Print XREF to print an XREF member. When you print an XREF, you can request a print of all referenced record layouts.

Using the XREF Member - Record Layout Usage

XREF members are most often used when browsing, editing, or printing a multi-record type data file. XREF members contain the criteria for selecting the correct record layout for formatting each data record. On the entry screen of the Browse and Edit functions, as well as many other File-AID functions and utilities, there are specific fields for you to specify layout usage and the layout dataset name as shown in the following partial Browse screen:

Figure 352. Record Layout Usage Section of Function Entry Screens in File-AID

```
Specify Record Layout and XREF Information:  
Record layout usage      ==> X      (S = Single; X = XREF; N = None)  
Record layout dataset    ==> FASAMP.LAYOUTS  
Member                   ==>          (Blank or pattern for member list)  
XREF dataset             ==> FASAMP.XREF  
Member                   ==> ORDERXRF   (Blank or pattern for member list)
```

Use the Record layout usage field to indicate whether you are using a single record layout (S), an XREF (X), or no layouts (N) to format your data records.

The last XREF dataset and member name referenced in the XREF utility is automatically transferred to all File-AID screens that contain an XREF dataset name field.

If you specify Record layout usage X (use XREF), you must enter the valid record layout dataset name that contains the source layout members referenced in the XREF dataset member. The Record layout member name field is not used and may be left blank when using an XREF.

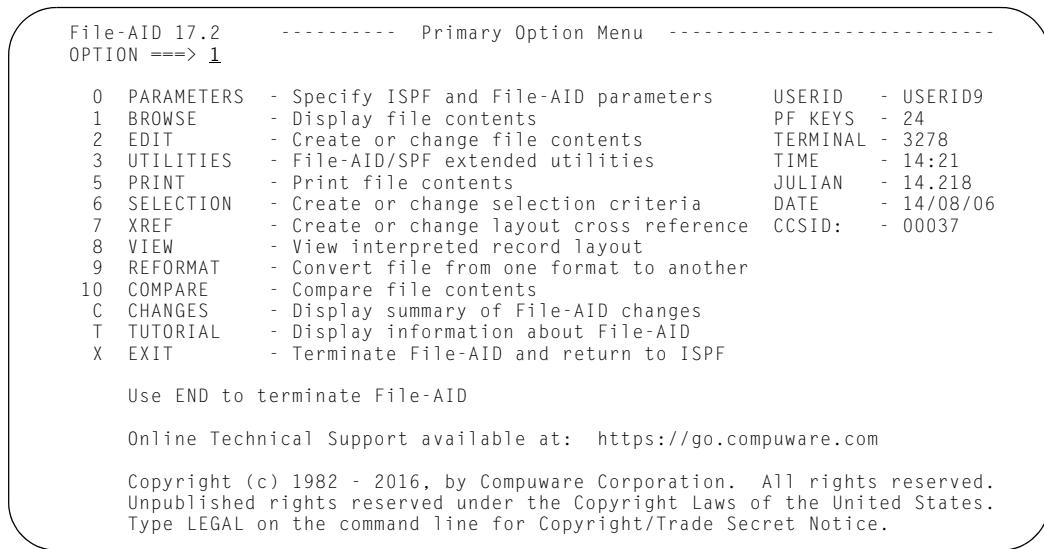
Browsing Formatted Data Records with an XREF

You now start a Browse session and specify layout usage X to use the new XREF you created earlier in this chapter.

Steps:

1. Type 1 in the OPTION field.
2. Press Enter. File-AID displays the Browse - Dataset Specification screen, as illustrated in [Figure 354](#) on page 351.

Figure 353. File-AID Primary Option Menu. Starting a Browse Session (Select Option 1).



Requesting the XREF Usage

As mentioned earlier, the Record layout usage field controls the XREF usage. Here you request a formatted display of the **ORDRFILE** using your new XREF.

Figure 354. Browse - Dataset Specification Screen. Using the XREF for Browsing a Data File.

```

File-AID ----- Browse - Dataset Specification -----
COMMAND ==>

Browse Mode      ==> F          (F=Formatted; C=Char; V=Vertical)

Specify Browse Information:
Dataset name or zFS path ==> FASAMP.ORDRFILE
Member           ==>          (Blank or pattern for member list)
Volume serial    ==>          (If dataset is not cataloged)

Specify Record Layout and XREF Information:
Record layout usage ==> X          (S = Single; X = XREF; N = None)
Record layout dataset ==> FASAMP.LAYOUTS
Member           ==>          (Blank or pattern for member list)
XREF dataset     ==> FASAMP.XREF
Member           ==> ORDERXRF    (Blank or pattern for member list)

Specify Selection Criteria Information:      (E = Existing; T = Temporary;
Selection criteria usage ==> N          M = Modify; Q = Quick; N = None)
Selection dataset name ==> FASAMP.SELCRIT
Member name       ==> INVSEL      (Blank or pattern for member list)

```

Steps:

1. Type F (formatted) in the Browse Mode field.
2. Type **FASAMP.ORDRFILE** in the Browse dataset field.
3. Type X in the Record layout usage field.



Vertical format (VFMT command or Browse mode V) is not allowed when using an XREF.

4. Type **FASAMP.LAYOUTS** in the Record layout dataset field.
5. Blank out the record layout Member field.
6. Verify the XREF dataset is **FASAMP.XREF**.
7. Verify the XREF member is **ORDERXRF**.



If you did not complete the steps described earlier in this chapter to build a new XREF member, you may use a sample member name, **ORDRFILE**, for your XREF member name.

8. Make sure that the value of the Selection criteria usage field is N.
9. Press Enter. File-AID displays the first record of the **ORDRFILE** file, which is formatted with the **ORDER-LINE-DATA-PO** layout. The XREF selected this layout because the the data value in the **ORDER-TYPE** field for record 1 is PO. This record is shown in [Figure 355](#) on page 352.

Scrolling with the FWD Command

Each time you move to a new record when you are in formatted mode, File-AID examines the XREF logic to determine which layout to use to format the data.

Figure 355. Scrolling to the Next Formatted Record. Triggering the XREF Logic.

```

FILE-AID - BROWSE - USERID9.FASAMP.ORDRFILE ----- COL 1 152
COMMAND ===> FWD                               SCROLL ===> PAGE
RECORD: 1           ORDER-LINE-DATA-PO          LENGTH: 184
---- FIELD NUMBER/NAME ----- COLUMNS- 1-----2-----3-----4
1 RECORD-LENGTH      1     184
2 ORDER-NO          3     AA2222
3 ORDER-LINE-KEY SYNC 9
4 LINE-NUMBER       9     01
5 ORDER-TYPE        11    PO
6 LINE-STATUS        13    OPEN
7 PART-NO           20    C7477A
8 DESCRIPTION         26    BLACK COAXIAL CABLE
9 UNIT-OF-MEASURE   56    EA
10 PURCHASE-ORDER-INFO SYNC 58
    11 PO-CODE        58    WXWW
    12 PO-NUMBER      62    AA2222-22
    13 PO-COMPANY     74    ZENITH WIRE
    14 PO-VENDOR-NUMBER 104   2224
    15 PO-VENDOR-CODE 109   34552
16 FILLER           114
17 ORDER-QUANTITIES SYNC 144
    18 QTY-ORDERED    144   12
    19 QTY-BACKORDERED 147   1
Enter CHAR for character mode, VFMT for vertical format mode

```

Step:

- Type **FWD** in the COMMAND field of the formatted screen and press Enter.

Or,

Press PF11 (RIGHT, FWD). (PF11 is assigned to the RIGHT command by default.) File-AID displays the next record, record 2, of the **ORDRFILE** file formatted with the **INTERNAL-WORK-ORDER** layout, because the data value in the ORDER-TYPE field is WO, but the CONTRACT-INDICATOR is not OV. Record number 2 is illustrated in [Figure 356](#) on page 353.

More about Scrolling Methods and XREF Usage

- Some of the methods for moving to a new record in formatted mode include using the following commands:

RIGHT (alias FWD)	Moves to the next record in the file.
LEFT (alias BACK)	Moves to the previous record in the file.
FIND	Moves to the record matching your search condition.
Note: If you use the FIND /field-name or FIND /field-number syntax when you have an XREF, only those record types that match the XREF conditions for the current layout are searched for matching data.	
CHANGE (Edit)	Works the same as the FIND command.
KEY (Keyed files only)	Relocates to a specific record using the key fields to specify the desired key value.
LR	Locates a record by record number.

- The FPRINT *n* command automatically invokes XREF logic for each subsequent record printed.

- XREF logic is also triggered whenever a record is selected for formatted mode from the CHARACTER mode.
- You may manually select a different layout from among all layouts referenced in the XREF by issuing the USE command.

Printing Your Data Records with XREF

When the FPRINT command is used to print formatted data records, your XREF logic is examined to determine which layout to use for each record printed.

XREF logic is also checked when you use an XREF in the Print Data File function (option 5.1). In this example you produce a formatted print report of record 2 and all following records using the FPRINT ALL command.

Figure 356. Print Request Using the FPRINT ALL Command. Printing a Formatted Record With XREF Logic.

```

FILE-AID - BROWSE - USERID9.FASAMP.ORDRFILE ----- COL 1 99
COMMAND ===> FPRINT ALL                               SCROLL ===> PAGE
RECORD:      2           INTERNAL-WORK-ORDER          LENGTH:   160
----- FIELD NUMBER/NAME ----- COLUMNS-----1-----2-----3-----4
1 RECORD-LENGTH          1       160
2 ORDER-NO              3       AA2222
3 ORDER-LINE-KEY SYNC    9
4 LINE-NUMBER            9       03
5 ORDER-TYPE             11      WO
6 LINE-STATUS             13      OPEN
7 PART-NO                20      C7777L
8 DESCRIPTION             26      XTRA XXXX COAXIAL CABLE
9 CONTRACT-INDICATOR     56      IN
10 UNIT-OF-MEASURE        58      EA
11 WORK-ORDER-INFO SYNC   60
12 WO-NUMBER              60      AA-256
13 WO-STATION             66      SST
14 WO-PLANT                72      NW22
15 WO-ORDER-DATE          76      880901
16 WO-START-DATE          82      880902
17 WO-COMPLETE-DATE        88
18 WORK-ORDER-QUANTITIES SYNC 94
19 QTY-TO-MAKE             94      12
                                Enter CHAR for character mode, VFMT for vertical format mode

```

Steps:

1. Type FPRINT ALL in the COMMAND field of the formatted screen.
2. Press Enter. File-AID displays the Print Parameters screen as illustrated in [Figure 357](#) on page 354.

Routing Your FPRINT

Fill in the Print Parameters screen to route your Formatted record printouts to Sysout or a dataset.

After reviewing the FPRINT output, you are done with this example.

Figure 357. Print Parameters Screen. Specifying Print Parameters to Route FPRINT Output.

```
File-AID ----- Print Parameters -----
COMMAND ==>

Number of lines/page      ==> 55      (0 = Suppress page headings)
Sysout class              ==> X
Number of copies           ==> 1

Enter One of the Following Optional Destinations:

Destination printer       ==>          (Local or remote printer)
- - - OR - - -
External JES Node ID     ==>          (Predefined JES Node and symbolic ID
Target VM/TSO ident       ==>          of intended receiver of output)
- - - OR - - -
Sysout writer name        ==>          (Installation assigned output writer)
- - - OR - - -
Print dataset name         ==>          (DSORG=PS; RECFM=VBA; LRECL=187)
Disposition                ==> OLD      (NEW, SHR, MOD, OLD)
Volume serial               ==>

Use ENTER to continue, END to cancel
```

Steps:

1. Type a valid Sysout "hold" class in the Sysout class field.
2. Press Enter.
3. Use standard output browsing facilities to review your FPRINT report.
4. Exit File-AID by entering the RETURN command.

Using File-AID/Batch

File-AID/Batch is a data manipulation program that consolidates the functions of many standard IBM utilities. Rather than learn JCL and the control syntax of several different utilities, you can use one tool, File-AID/Batch, to perform the following tasks:

- Process data on tape or in very large, multi-volume disk files.
- Selectively edit, copy, reformat, total, compare, and print records contained in any standard MVS file type.
- Define a file processing task that may be run multiple times.
- Perform many functions of the following utilities: IEBGENER, IDCAMS (REPRO), IEBPTPCH, IEHMOVE, IEBCOPY, IEBDG, IEHPROGM, IEBUPDATE.
- Generate DASD reports of VTOC information.
- Copy records or portions of records from one dataset type to another, including copying of PDS members based on ISPF statistics.
- Selectively print data records using record layouts, enabling you to tailor the format of the output to meet your specific data requirements.
- Change record format by reformatting any type of dataset (that is, enlarge data fields, add new data fields).
- Process datasets selectively to view or update information.
- Recognize logical JCL continuations for JCL changes and search conditions.
- Accumulate totals to verify reports.
- Read all VSAM and sequential datasets forward or backward.
- Reformat multiple record type files in one pass.
- Create a complete subset of related files for testing.
- Check control statement syntax online and execute actions in the foreground with File-AID's Interactive utility (option 3.8).
- Generate the JCL required to submit a File-AID/Batch job or any other non File-AID batch utility with File-AID's Batch Submit utility (option 3.9).

Specifying Your Batch Processing Request

File-AID/Batch actions are directed by a simple control language. Action requests consist of the following:

- Dataset identification label
- Name of the function
- Set of optional selection, action, and control parameters.

You can include multiple control statements in one execution of File-AID/Batch to perform several actions on the same file or as many as 99 different files if needed.

Example Control Statement

```
$DD01 COPY IN=100,IF=(1,EQ,C'A'),DUMP=0 COPY AND PRINT A RECS
```

Dataset Identifier

\$\$DD01

Function Name

COPY

Selection, Action, and Control Parameters

IN=100,IF=(1,EQ,C'A'),DUMP=0

Comments

COPY AND PRINT A RECS

Dataset Identifier

The first element on a File-AID/Batch control statement is the dataset identifier. This identifier connects an input dataset DD to a function that you want to perform. The dataset identifier begins in location 1 of the control statement as follows:

\$\$DDxx

where *xx* is a number from 01 to 99 that corresponds to a matching //DDxx DD JCL statement. The *xx* is also used to match the optional //DDxxO DD (output dataset) JCL statement.

Function Name

Functions identify the action you want to perform on the input dataset. Most functions can be abbreviated to save keystrokes. Some functions accept modifiers (ALL, MEM, BACK) that expand or modify the processing of a function.

See the *File-AID/MVS Batch Reference Manual* for a complete description of any of the following functions:

Table 3. File-AID/Batch Functions

Function	Description
APRINT	Prints the audit trail file in formatted, character, or hexadecimal format.
COMPARE	Compares the contents of two files.
COPY	Copies data selectively or non-selectively.
DROP	Eliminates unwanted records from a dataset while copying it.
DUMP	Prints datasets in vertical hexadecimal format.
FPRINT	Prints one or more records in formatted mode.
LIST	Prints alphanumeric data.
LMODDR	Lists directory entry(ies) of member(s).
LMODMAPA	Lists modules (maps CSECTs) in address order.
LMODMAPN	Lists modules (maps CSECTs) in name order.

Table 3. File-AID/Batch Functions

Function	Description
PRINT	Prints alphanumeric data and labels each record with its record number and RBA.
REFORMAT	Reformats data as it is being copied.
RLPRINT	Prints a COBOL or PL/I record layout displaying the field level, field name, format, field number, start location, end location, and field length.
SCPRINT	Prints the dataset containing selection criteria created from File-AID online functions.
SPACE	Moves the current record pointer through the input file.
TALLY	Allows selection parameters to be combined with ACCUM parameters to provide audit-type totals for files.
UPDATE	Alters records on a file.
USER	Performs a copy function that provides greater control over the writing of output records and datasets.
VPRINT	Prints records in a vertically formatted report using the specified COBOL or PL/I record layout.
VTOCDSN	Displays VTOC summary information and dataset names in alphabetical sequence based on the specified parameters.
VTOCINFO	Displays volume information based on the specified parameters.
VTOCMAP	Displays volume information and datasets in address location sequence based on the specified parameters.
XMLGEN	The XMLGEN function creates XML documents from existing files using COBOL or PL/I layout fields as the tag names.
XRRPRINT	Prints record layout cross reference (XREF) dataset.

Selection, Action, and Control Parameters

Parameters are code words that control or limit processing actions. Parameters define how to select and manipulate records. They are discussed in the Interactive utility online tutorial (press PF1 for HELP) and in the *File-AID/MVS Batch Reference Manual*.

Parameters are described in [Table 4](#), grouped according to type.

Table 4. File-AID/Batch Parameters

Parameter Type	Description
SELECTION	Specifies the processing of records based on their contents. AND, ELSE, IF, IFNOT, ORIF, ORIFNOT.
ACTION	Indicates movement or change of data. DFLT_WRITE, EDIT, EDITALL, MOVE, READNEXT, REPL, REPLALL, TYPRUN, WRITE.
CONTROL	Defines basic environment conditions during execution. ABEND, AMODE, CCSID, CEM, CHANGED, CHARSET, COPTNS, CPLRO, CREATED, DSNAME, ERRS, EXPAND, EXPAND_OCCURS, FEOV, FIELDS, FILLER, FORM, INVALID, INVALIDCHAR, IOEXIT, KEY, LANGTYPE, LAYOUT, LINKDATE, LPI, MAP, MAXENT, MAXOUT, MBRNAME, MEMBER, MEMBERS, NEWMEM, NEWMEMS, PADCHAR, PANSTAT, PDSSTAT, PRESERVE, PRTRCS, RBA, RDW, REFOUT, RLM, RMODE, RRN, SHOW, STOP, UNIT, USERID, VOLSER, VOLSTAT, ZERO.
LIMIT	Places record count limits on the datasets being processed. DROP, IN, OUT, SELECT.
PRINT	Provides a hardcopy report of records being processed. ACCUM, DUMP, FPRINT, LIST, PRINT, RLPRINT, VPRINT.

Executing the File-AID Batch Utility Interactively (Option 3.8)

File-AID/Batch utility can be executed in any of the following ways:

- Code JCL and submit a job for background batch execution.
- Call from a program as a subroutine.
- Invoke the optional CLIST, FABATCH, to interactively execute at your TSO terminal.
- Use online File-AID, Interactive utility (option 3.8).

In this example you practice using the Interactive utility (option 3.8) to perform some Batch functions. This utility is used to support File-AID/Batch control statement coding and testing and online execution, including:

- Verifying the logic of a batch job before it is submitted.
- Performing functions and using logic not available through other utilities.
- Using most of the functions and parameters of File-AID/Batch (except USER).
- Entering control cards interactively.
- Viewing results and output at the terminal.
- Accessing File-AID/Batch online tutorials.

The Interactive utility is located on File-AID's Extended Utilities menu (option 3) as utility number 8.

Step:

1. From the File-AID Primary Option Menu (not shown here), select File-AID option 3.8 to access the Interactive Utility entry screen ([Figure 358](#) on page 359).

Defining Datasets to Process

The Interactive Utility entry screen (see [Figure 358](#) on page 359) captures your:

- Input Dataset Name
- TO Dataset for Copy Functions
- Optional Control Dataset
- File-AID Run Options.

Performing the Totaling Function

The function TALLY is used to perform intelligent totalling of record fields. The ACCUM parameter specifies the location, description, type and size of each total to be reported. The ACCUM parameter is valid with most File-AID/Batch functions (for example, COPY, UPDATE, and PRINT) to provide the capability to report totals at the same time as performing other actions.

Use the 3.8 Interactive utility to produce a report showing the total quantity of non-backordered inventory items in one of two warehouses in the inventory file.

Figure 358. 3.8 Interactive Utility: Running File-AID/Batch Online

```
File-AID ----- Interactive Utility -----
COMMAND ==>

Input Dataset Information:
Dataset name      ==> FASAMP.INVFILE
Volume serial     ==>          (If not cataloged)
Password          ==>          (If password protected)

"TO" Dataset Information for Copy Functions:
Dataset name      ==>
Volume serial     ==>          (If not cataloged)
Disposition       ==> OLD    (MOD or OLD)
Password          ==>          (If password protected)

Optional Control Dataset Information:
Dataset name      ==>
Volume serial     ==>          (If not cataloged)

File-AID Run Options:
Allow File-AID prompting ==> Y      (Y = Yes; N = No)
Include record information ==> N      (Y = Yes; N = No)
Replace like named members ==> Y      (Y = Yes, N = No)
Use ENTER to begin interactive mode; END key to cancel function
```

Steps:

1. Type **FASAMP.INVFILE** in the Dataset name field.
2. Press Enter. File-AID/Batch starts as a foreground task, and a Control Statement Entry screen is displayed ([Figure 359](#) on page 360).

More About the Interactive Utility Screen

- If you specified the name of a dataset in the "Dataset name" field in the "Optional Control Dataset Information" section, File-AID uses the control statements in the specified dataset to complete your request. The results of execution are immediately shown on the Control Statement screen. You are not prompted for control statements.

Entering Control Statements

To perform a function, type the control statement on the screen followed by ",GO" (comma GO) and press Enter. File-AID executes the statement and immediately displays any results on the screen. Enter the END command to exit.

Because this is a foreground process, no tutorial information is available for the Control Statement screen. Also, ISPF facilities such as PF keys and scrolling are disabled.

As in ISPF, three asterisks (****) indicate additional information is awaiting display. Press Enter to display this information.

You selectively (IF) total (ACCUM) the quantity field in the sample inventory file *hlq.FASAMP.INVFILE*. You use the TALLY function to process the dataset. If the warehouse status (location 69) is equal to "AVAIL", total the quantity on hand (packed field at location 75).

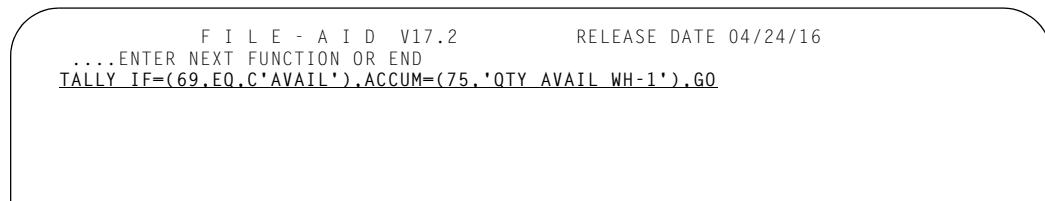
Steps:

1. Type the control statement:

```
TALLY IF=(69,EQ,C'AVAIL'),ACCUM=(75,'QTY AVAIL WH-1'),GO
```

2. Press Enter. File-AID reads the records of the input dataset, tests each record for the condition specified in the control statement, and displays the results as shown in [Figure 360](#) on page 361.

Figure 359. Interactive Utility. Requesting a TALLY on the Foreground Control Statements Screen.



The screenshot shows a terminal window with the following text:

```
F I L E - A I D V17.2          RELEASE DATE 04/24/16
....ENTER NEXT FUNCTION OR END
TALLY IF=(69,EQ,C'AVAIL'),ACCUM=(75,'QTY AVAIL WH-1'),GO
```

More About Control Statement Entry

- Notice that the dataset identifier \$\$DD01 portion of the control statement is not required with the Interactive utility.
- If you use the optional Control Statement Dataset to supply control statements to the Interactive utility, the dataset identifier must be specified as \$\$DD01.
- For non-packed data, use the ACCUM syntax:

```
ACCUM=(location,length,data-type,description)
```

Valid data-types are C for display numeric (maximum length 15) and B for binary (maximum length 4). Type BS is also provided to indicate binary *signed* data for lengths 1, 2, and 3.

- When processing a variable length sequential file in File-AID/Batch, location 1 references the 4-byte record descriptor word (RDW). Location 5 references the first byte of data in the record. Use the parameter RDW=3 to bypass the RDW and have location 1 reference the first byte of data. In this example, you notice that the RDW parameter is not used. The locations are four (4) bytes larger than the offset of the STATUS and QUANTITY fields shown when using formatted browse to view this file with a record layout (see [Figure 308](#) on page 299).
- Use the PA1 or ATTN keys to abort processing of your request.

Exiting Interactive Execution

Results of your request are displayed immediately at your terminal as shown in [Figure 360](#).

When the ...ENTER NEXT FUNCTION OR END prompt is displayed, you may specify another function to act on the same file, or enter the END command to exit and return to the Interactive Utility screen.

Steps:

1. Type END.
2. Press Enter. The three asterisk (***) prompt is displayed. Press Enter again to display the Interactive Utility screen ([Figure 358](#) on page 359). Note the message, **FUNCTION COMPLETED**, in the top right corner of the screen.

Figure 360. Foreground Control Statements Screen - TALLY Results

```
F I L E - A I D V17.2.0           RELEASE DATE 04/24/16
....ENTER NEXT FUNCTION OR END
TALLY IF=(69,EQ,C'AVAIL'),ACCUm=(75,'QTY AVAIL WH-1'),GO
SYS00009 DSN=USERID9.FASAMP,INVFILE OPENED AS PS,
          RECFM=VB,LRECL=517,BLKSIZE=5170,VOL=PRD900
ABOVE FUNCTION ENDED ON NORMAL EOD
RECORDS/READ-41

      QTY AVAIL WH-1-----14512

....ENTER NEXT FUNCTION OR END
```

Submitting File-AID/Batch JCL

JCL for File-AID/Batch is very simple to specify. After you have created the JCL once, you can use the same JCL as a model for subsequent runs just by changing control statements and dataset names.

You can use one of the many File-AID functions which support batch submit to generate File-AID/Batch JCL including:

- 3.3 Copy
- 3.6 Search/Update
- 5.x Print
- 9 Reformat
- 10 Compare

You can copy and tailor one of the many samples of File-AID/Batch JCL provided for you in your sample JCL file (FASAMP.JCL). The following FASAMP.JCL members are good examples of File-AID/Batch:

- BATVTOC - Batch VTOC examples
- COPY - Sample selective COPY
- DROP - Sample DROP function of dropping bad records
- DUMP - Sample hex report of 5 records
- JCLCNVRT - Sample USER function to insert a SYSUDUMP DD in JCL
- LIST - Sample print of JCL member of PDS
- PRINT - Sample print of variable file
- SKELETON - Sample of all possible File-AID/Batch JCL statements
- SPACE - Sample SPACE function to skip to desired record
- TALLY - Sample TALLY function on INVFILE
- UPDATE - Sample UPDATE conditional logic IF-REPL
- USER - Sample USER function to create 3 files from 1 input file

Other ways to generate batch JCL including typing in the JCL using ISPF Edit or using File-AID option 3.9 (Batch Submit).

Examples of Customer Uses of File-AID/Batch

This section describes a few of examples of the many uses for File-AID/Batch.

If you do not specify any control statements (SYSIN DD DUMMY), File-AID/Batch automatically copies all records in DD01 to DD01O. Notice how quickly that File-AID performs a VSAM copy.

Applying Mass Changes to a JCL Library

File-AID lets you make mass changes to a JCL library in batch and online modes.

You need to update the JCL for 15,000 jobs because you upgraded from 3350 to 3380 disk drives. You want to change the UNIT and SPACE parameters to avoid overallocation with the larger disk drives.

```
//JOBNAME   JOB      (REST OF JOB CARD)
//STEP1      EXEC    PGM=FILEAID
//STEPLIB    DD      (REQUIRED ONLY IF FILEAID IS NOT ON THE LINK LIST)
//SYSPRINT   DD      SYSOUT=*
//DD01       DD      DSN=OLD.JCL.LIB,DISP=OLD
//DD01O      DD      DSN=NEW.JCL.LIB,DISP=OLD
//SYSIN      DD      *
$$DD01      COPYALL  MEMBERS=ALL,FORM=JCL,  CONTROL PARAMETERS COMMENT
                  EDIT=(3,0,C'UNIT=DISK,UNIT=SYSDA,UNIT=3350',C'UNIT=3380'),
                  REPL=(3,0,C'SPACE=(CYL',C'SPACE=(TRK')
```

The following *JCL considerations* apply to this example:

- A SYSPRINT DD statement is used for all hardcopy output, control card analysis, and log of actions taken.
- Statement DD01 defines the input dataset.
- Statement DD01O defines the output dataset.
- SYSIN DD statement specifies control statements.
- Control statements use the \$\$DD01 dataset identifier to identify the file(s) to be acted on (DD01 and DD01O).

The following *control statement considerations* apply to this example:

- The COPYALL function directs File-AID/Batch to copy all records from the input file (DD01) to the output file (DD01O).
- The MEMBERS=ALL parameter directs File-AID/Batch to include all input PDS members.
- The FORM=JCL parameter tells File-AID/Batch that the data being processed is JCL. File-AID/Batch interprets JOB, EXEC, and DD statements and handles continuations and syntax correctly.
- The EDIT parameter directs a search of each JCL statement beginning in position 3 (after the //). It searches all characters until the end of the JCL statement is found (length 0) and looks for any of the three strings:
 - UNIT=DISK
 - UNIT=SYSDA
 - UNIT=3350
- If any of the three strings are found, File-AID/Batch changes the string to UNIT=3380 and adjusts the JCL if needed.
- The REPL (replace) parameter is also applied to each JCL statement as it is copied. The REPL parameter tells File-AID/Batch to search for the string SPACE=(CYL, then change the string to SPACE=(TRK. When changing JCL, the EDIT parameter is preferred over the REPL parameter unless the data that is searched for and the replacement data are the same length.

You can continue File-AID/Batch control statements as needed by placing a comma at the end of a parameter and continuing after column 1 and before column 26 of the next line. Comments may be entered on any control statement after one space following a parameter. You can also code them on a control card by placing an asterisk (*) in location 1.

Copying From One Input File to Create Multiple Output Files

A large company collects file selection requests through the week and creates File-AID/Batch control cards on the weekend. This example illustrates how you can make a single pass through a master file (in this case 34 reels of tape) to create two extract output files that contain different subsets of data.

File-AID/Batch lets you create up to 99 output files. While the COPY function copies records to a single target file, the USER function can copy records to multiple target files. Use the WRITE parameter with the USER function to indicate the DDNAME to which you want to write a record.

```
//STEP1      EXEC   PGM=FILEAID
//STEPLIB    DD      (REQUIRED ONLY IF FILEAID IS NOT ON THE LINK LIST)
//SYSPRINT   DD      SYSOUT=*
//DD01       DD      DSN=MASTER.FILE.REELS34,DISP=OLD
//SELECT1    DD      DSN=SELECT1.FILE,DISP=OLD
//SELECT2    DD      DSN=SELECT2.FILE,DISP=OLD
//SYSIN      DD      *
$DD01       USER   IF=(27,EQ,X'15'),
                  WRITE=SELECT1,
                  IF=(14,EQ,C'20,21,22'), IF 14 EQUAL 20 OR 21 OR 22,
                  WRITE=SELECT2
```

Scanning and Printing Data in a Load Library

XYZ Corporation changed its name. The following control statement determines which programs must be changed to reflect the new company name.

```
$DD01      PRINT   IF=(1,0,C'XYZ CORP'),MOVE=(1,9,+0)
```

File-AID scans the production load library for XYZ CORP. Because a MOVE parameter is used with a PRINT function, File-AID interprets PRINT as a request to print only the data that is moved, regardless of the length of the input record. Therefore, only the member name and XYZ CORP are printed. Code PARM=TSO on the EXEC statement to eliminate needless page skipping for each member.



File-AID can also update load module libraries with the UPDATE function and the REPL parameter.

Segmented Record File Layout Automation

In [Automating Layout Usage with XREF](#), you learned about the XREF function (option 7) and how to create an XREF member for automating the selection and usage of record layouts for files with different record types. In this chapter, you learn how to set up an XREF for formatting data records when two or more layouts are needed to describe all of the fields in one record. Files containing *segmented records* are often found in older application systems such as insurance, government, utilities, and banking.

How to Identify Segments in a Segmented Record File

A file with segmented records looks something like this:

RECORD	DATA CONTENTS
1	+-----+] BASE-LAYOUT] 01 SEGMENT-01] 02 SEGMENT-02] 03 SEGMENT-03] +-----+
2	+-----+] BASE-LAYOUT] 01 SEGMENT-01] 03 SEGMENT-03] +-----+
3	+-----+] BASE-LAYOUT] 01 SEGMENT-01] 02 SEGMENT-02] +-----+
4	+-----+] BASE-LAYOUT] 01 SEGMENT-01] +-----+
5	+-----+] BASE-LAYOUT] 02 SEGMENT-02] +-----+
6	+-----+] BASE-LAYOUT] 03 SEGMENT-03] +-----+
7	+-----+] BASE-LAYOUT] 02 SEGMENT-02] 04 SEGMENT-04] +-----+
8	+-----+] BASE-LAYOUT] 03 SEGMENT-03] 03 SEGMENT-03] 01 SEGMENT-01] +-----+

In a typical segmented record file, each segment of a record is defined by a unique data structure or record layout. There are also data field(s) in the file that identify the presence of each segment. This data field is referred to as a *segment identifier*. Sometimes segment identifiers are located in the beginning, or base, portion of each record.

Often, segment identifiers are found within each segment, as a self-identifying field. In still other instances, segments may be *chained* by having a segment identifier at the end of one segment which identifies the next segment. Regardless of which of these methods applies to your segmented record file, File-AID provides a way for you to define an XREF to automate the selection of a layout as you view each record segment when using Browse or Edit or in other File-AID functions including:

- Browse - formatted display mode: NEXT and FPRINT command
- Edit - formatted display mode: NEXT and FPRINT command
- Print - formatted data record printing

- Selection - formatted selection criteria specification
- Reformat - source record selection
- Compare - formatted field comparison and differences reporting.

Specifying XREF Layout Status

When defining an XREF for segmented files, each layout is defined as either a BASE or a SEGMENT. A BASE layout defines the first portion of each data record. The BASE is then followed by one or more SEGMENT layouts to form a group. Multiple groups (BASE followed by one or more SEGMENTS) are supported where each BASE has a unique data condition.

During XREF definition, the SEG line command is used to mark a layout as a SEGMENT.

Understanding the XREF Logic Processing Technique

When browsing or editing a segmented record file using the segmented XREF definition, File-AID examines each record to be formatted and attempts to determine which BASE layout to use for displaying the first part of the record. An information line at the end of the BASE layout indicates additional data in the record like:

```
*** END OF LAYOUT - DATA EXCEEDS LAYOUT BY 107 BYTES ***
```

Using the NEXT Command to See the Next Segment

When additional data remains to be formatted beyond the end of the BASE, you use the primary command NEXT (available only in formatted mode) to trigger the XREF logic to determine the layout to use to format the next portion of record data. Each SEGMENT layout in the XREF is then examined and tested against the current position in the data record to determine which layout to select to format the next segment of record data.

Using the PREV Command to See the Previous Segment

After a NEXT has positioned you to a new segment, you can use the PREV command to return to the previous segment (or BASE). You may go backwards until you have returned to the base layout.

Using the TOP Command to Return to the BASE Segment

If the record contains additional segments, invoke the NEXT command repeatedly to trigger the XREF logic to determine each subsequent layout until there is no more data to format in the record. The TOP primary command redisplays the beginning of the file (positioning the file at the BASE segment). Whenever you move to a new record in the formatted mode (scrolling using the RIGHT command, for example), formatting begins with the BASE segment at byte 1.

Editing Commands for Segmented Records

When editing a segmented record, you can use the primary commands ADD and REMOVE to insert or delete segments in the current record.

Manual Layout Selection

At any time when using an XREF, you can issue the USE command to see a list of all referenced layouts. You can select and use a layout from the list to format the data from any starting point in the record. Refer to the *File-AID/MVS Reference Summary* for syntax of the NEXT, TOP, ADD, REMOVE, PREV, and USE commands.

Review the Sample Segmented Record XREF

In this chapter you review the sample XREF member, **SEGFILE**, in your sample XREF dataset, **FASAMP.XREF**. The **SEGFILE** member is already set up to format the sample file **FASAMP.SEGFILE**. It contains a BASE and several potential segments. Each segment is identified by a segment type indicator field located at the second data byte within each segment. [Table 5](#) summarizes the **SEGFILE** XREF definition:

Table 5. SEGFILE XREF Definition

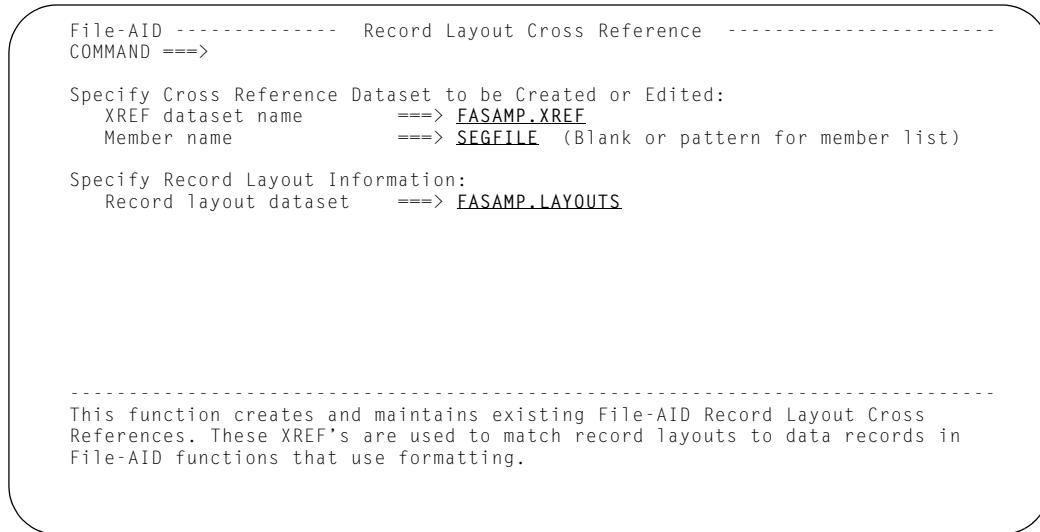
Layout Member	01 Level Name	Status	Record-Type Field - Value
SEGRECS	INS-BASE-FILE	BASE	(always used)
SEGRECS	CLI-BOAT-DATA	SEGMENT	BOAT-RECORD-TYPE-01
SEGRECS	CLI-BUSINESS-DATA	SEGMENT	BUSINESS-RECORD-TYPE-02
SEGRECS	CLI-CAR-DATA	SEGMENT	CAR-RECORD-TYPE-03
SEGRECS	CLI-HOME-DATA	SEGMENT	HOME-RECORD-TYPE-04
SEGRECS	CLI-LIFE-DATA	SEGMENT	LIFE-RECORD-TYP-05

Notice that all of the layouts are stored in the same member (**SEGRECS**) of the sample layouts library (**FASAMP.LAYOUTS**).

Viewing an Existing XREF Member

You access the XREF function and select sample XREF member SEGFILE.

Figure 361. Record Layout Cross Reference (XREF) Function Entry Screen



Steps:

1. From the File-AID Primary Option Menu (not shown here), select option 7 (XREF).
2. Press Enter. File-AID displays the Record Layout Cross Reference screen as illustrated in [Figure 361](#).
3. Type FASAMP.XREF in the XREF dataset name field under the Specify Cross Reference Dataset information section.
4. Type SEGFILE in the Member name field
5. Type FASAMP.LAYOUTS in the Record layout dataset field.
6. Press Enter. File-AID displays the Define XREF screen as illustrated in [Figure 362](#) on page 369.

Using the VIEW Command

The Define XREF screen ([Figure 362](#)) shows the entries already established for formatting the segmented record file FASAMP.SEGFILE. Notice the status of BASE for the first layout (INS-BASE-FILE) and a status of SEGMENT for all other layout usages.

In order to see all of the conditions that have been specified for all layout references, you can use the primary command, VIEW, to see a list of the XREF control statements for this XREF member.

Figure 362. Define XREF Screen (VIEW Command)

```
File-AID ----- Define XREF - SEGFILE ----- ROW 1 TO 6 OF 6
COMMAND ==> VIEW SCROLL ==> PAGE
XR105-Valid line CMDS: C/M, B/A, I, R, D, EX, S, SF, SU, DEF, BAS, SEG
Member list description ==> SEGFILE XREF

Long ==> FILE CONTAINS INS-BASE FOLLOWED BY ANY NUMBER OF ADDITIONAL
Description ==> TRAILER SEGMENTS IN ANY ORDER - BOAT CAR BUSINESS ETC.

Generated filler length ==> 0 (0 to suppress filler)

Cmd Member Beginning Data-Name/Line Number Description Status
----- -----
____ SEGRECS INS-BASE-FILE BASE
____ SEGRECS CLI-BOAT-DATA SEGMENT
____ SEGRECS CLI-BUSINESS-DATA SEGMENT
____ SEGRECS CLI-CAR-DATA SEGMENT
____ SEGRECS CLI-HOME-DATA SEGMENT
____ SEGRECS CLI-LIFE-DATA SEGMENT
***** END OF SELECTION CRITERIA *****
```

Steps:

1. Type **VIEW** in the COMMAND field.
2. Press Enter. File-AID displays the View Criteria screen as illustrated in [Figure 363](#) on page 370.

Browsing the XREF View Criteria

XREF criteria are stored internally in keyword form. The View Criteria screen lets you examine the internal format. You can scroll up and down to see all specified conditions.

Figure 363. XREF Function - View Criteria Screen

```

File-AID ----- View Criteria ----- ROW 1 TO 20 OF 60
COMMAND ===> SCROLL ===> PAGE
Use END to exit View Display

***** TOP OF CRITERIA *****
DEFINE BLOCKS=XREF,
DESCRIPTION =SEGFILE XREF,
DESCRIPTION1=FILE CONTAINS INS-BASE FOLLOWED BY ANY NUMBER OF ADDITIONAL,
DESCRIPTION2=TRAILER SEGMENTS IN ANY ORDER - BOAT CAR BUSINESS ETC.,
XREF_DSNAME=FASAMP.XREF,
XREF_MBRNAME=SEGFILE,
LAYOUT_DSNAME=XXXXXXX.FASAMP.LAYOUTS
SELECT SET=1,LAYOUT=INS-BASE-FILE,
LAYOUT_MBRNAME=SEGRECS,
LAYOUT_TYPE=BASE
IF
FIELD_NAME=CLI-NUMBER,
POSITION=1,LENGTH=5,OPERATOR=NE,
TYPE=T,VALUE=XXXX

```

Steps:

1. Use the scroll PF keys (PF8 DOWN, PF7 UP) to review the criteria for the **SEGFILE** member.
2. Notice that the POSITION value for each SEGMENT is 2 meaning the 2nd byte of data at the beginning of each segment.
3. Use the **END** command *THREE TIMES* to return to the File-AID Primary Option Menu.

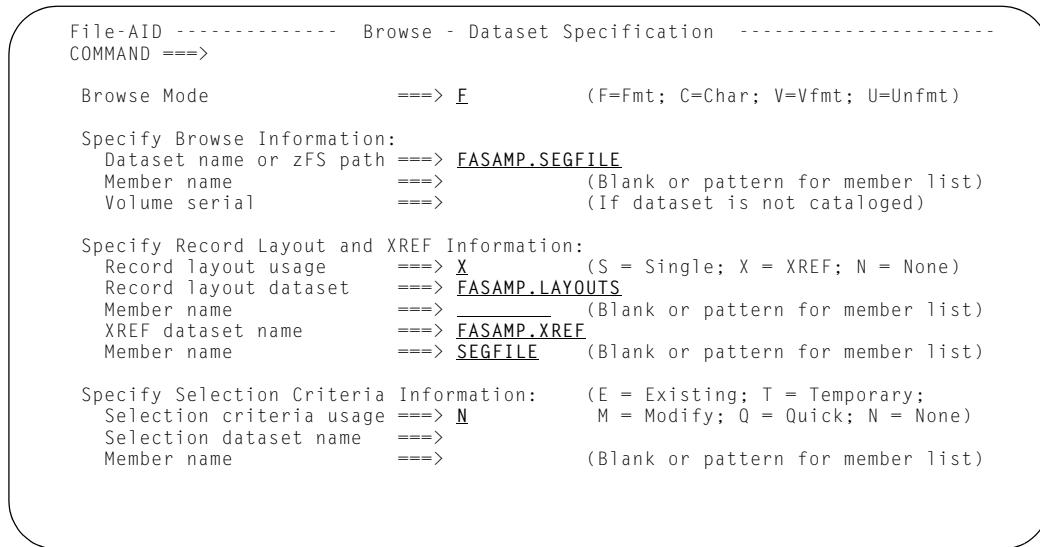
More About Segment Definitions

- If the presence of a segment is indicated by a field in the base, the XREF must use Unformatted criteria and a Location of **n* (asterisk "n") where *n* is the actual data byte in the record where the segment presence indicator is located. This notation only supports 0 or 1 occurrence of the segment. The order of SEGMENTS in the XREF determines the order of formatting segments of this type.

Using the XREF to Browse a Segmented Record File

You now use the SEGFILE member of your XREF dataset to browse the SEGFILE segmented record data file using different layouts for each segment of a record.

Figure 364. Using the XREF for Browsing a Data File With Segmented Records



Steps:

1. Type 1 in the OPTION field of the Primary Option Menu (not shown).
2. Press Enter. File-AID displays the Browse - Dataset Specification screen, as illustrated in [Figure 364](#).
3. Type F (Formatted) in the Browse Mode field.
4. Type FASAMP.SEGFILE in the Browse dataset field.
5. Type X in the Record layout usage field.
6. Type FASAMP.LAYOUTS in the Record layout dataset field.
7. Blank out the record layout member field.
8. You do not need to specify the record layout member when you are using an XREF, because the record layout member is already defined in the XREF dataset.
9. Verify the XREF dataset is FASAMP.XREF.
10. Verify the XREF member is SEGFILE.
11. Make sure the value in the Selection criteria usage field is N.
12. Press Enter.

Viewing the Next Segment Using the NEXT Command

File-AID displays the first record of the SEGFILE formatted with the INS-BASE-FILE (BASE) layout. File-AID displays an information line at the end of the layout, DATA EXCEEDS LAYOUT, indicating that additional segment(s) are present as illustrated in [Figure 365](#).

To view the segment following the current segment (in this case, the base segment), issue the NEXT command.

Figure 365. Browsing the Segmented File - FASAMP.SEGFILE

```
FILE-AID - BROWSE - USERID9.FASAMP.SEGFILE ----- INVALID COMMAND
COMMAND ==> NEXT                                     SCROLL ==> PAGE
RECORD: 1                                         INS-BASE-FILE          LENGTH: 231
----- FIELD NUMBER/NAME ----- COLUMNS-----1-----2-----3-----4
1 CLI-NUMBER           1      09876
2 FILLER                6
3 CLI-FIRST-NAME        7      GEORGE
4 CLI-MID-INIT          17     C
5 CLI-LAST-NAME         18     SCOTT
6 CLI-OCCUPATION        33     ACTOR
7 CLI-SMOKER             53     N
8 CLI-PHONE-NUMBER      54     9005680284
9 CLI-ADDRESS SYNC       64
10 CLI-STREET            64     54 MOVIE RD
11 CLI-CITY              79     LOS ANGELES
12 CLI-STATE             94     CA
13 CLI-ZIP-CODE          96     510807054
14 FILLER                105
***** END OF LAYOUT - DATA EXCEEDS LAYOUT BY 107 BYTES *****
```

Steps:

1. Type NEXT in the COMMAND field.
2. Press Enter.

Understanding NEXT Command Processing

When the NEXT command is issued, File-AID examines the criteria stored in the XREF member and tries to find a matching SEGMENT.

As shown in [Figure 366](#) on page 373, the next segment of record data for record 1 of the SEGFILE is defined by the CLI-BOAT-DATA layout.

Notice that the "record type field", BOAT-RECORD-TYPE-01, contains a value of "01". This is the condition specified in the XREF that is used to determine that the layout for this segment is in fact the CLI-BOAT-DATA layout. The second data byte of each segment contains the "segment identifier" used to determine which layout to select for this portion of the record.

Notice that the column offset of the CLI-BOAT-DATA layout has the first field (FILLER) starting at location 125. When formatting segmented records it is a good idea to set up your formatted display to SHOW OFFSET and OFFSET COLUMN so that you can be sure of where in the record you are currently positioned. In this example, the CLI-BOAT-DATA segment is the second and **last** segment of data in this record as indicated by the information line at the end of the layout:

```
*** BOTTOM OF DATA ***
```

Figure 366. NEXT Command Results. Displaying the CLI-BOAT-DATA Segment.

```
FILE-AID - BROWSE - USERID9.FASAMP.SEGFILE ----- COL 125 231
COMMAND ==> SCROLL ==> PAGE
RECORD: 1           CLI-BOAT-DATA             LENGTH: 231
----- FIELD NUMBER/NAME ----- COLUMNS- -----+-----1-----+-----2-----+-----3-----+-----4
1 FILLER           125
2 BOAT-RECORD-TYPE-01 126    01
3 BOAT-DATE-INSURED 128    071973
4 BOAT-REGISTER-NO  134    91380
5 BOAT-INSURED-AMT  139    75000.00
6 BOAT-DOCK-NO     143    300
7 BOAT-MARINA-NAME 146    BLUE WATERS
8 BOAT-NAME        176
9 FILLER           196
***** BOTTOM OF DATA *****
```

1. If you wish to return to the previously viewed segment, use the PREV command.
2. Another way to issue the NEXT command is to assign the command NEXT to a PF key. Use the KEYS primary command to access your PF key settings to review or change your PF key command defaults.



Jumping to Another Record with the LR (Locate Record) Command

You now move to record 13 by using the command: LR 13. Record 13 is a record that contains many segments and gives you a better idea of the functioning of the NEXT command and the logic defined in the XREF.

Figure 367. Move to record 13 - LR 13 Command

```
FILE-AID - BROWSE - USERID9.FASAMP.SEGFILE -----
COMMAND ==> LR 13
RECORD: 1           CLI-BOAT-DATA
---- FIELD NUMBER/NAME ----- COLUMNS- -----+-----1-----+
1 FILLER           125
2 BOAT-RECORD-TYPE-01   126    01
3 BOAT-DATE-INSURED   128    071973
```

Steps:

1. Type **LR 13** in the COMMAND field.
2. Press Enter.

Result of LR 13

File-AID displays the BASE (layout INS-BASE-FILE) for record 13, as illustrated in [Figure 368](#).

Notice that the information line at the end of the layout, **DATA EXCEEDS LAYOUT**, indicates that 555 bytes of additional segment data still remains to be formatted.

Figure 368. Browsing Record 13 (BASE Segment)

```
FILE-AID - BROWSE - USERID9.FASAMP.SEGFILE ----- COL 1 124
COMMAND ==>                               SCROLL ==> PAGE
RECORD: 13          INS-BASE-FILE          LENGTH: 679
---- FIELD NUMBER/NAME ----- COLUMNS- -----+-----1-----+-----2-----+-----3-----+-----4
1 CLI-NUMBER       1    67890
2 FILLER           6
3 CLI-FIRST-NAME   7    THOMAS
4 CLI-MID-INIT    17   L
5 CLI-LAST-NAME   18   PAINE
6 CLI-OCCUPATION  33   WRITER
7 CLI-SMOKER      53   N
8 CLI-PHONE-NUMBER 54   4159803458
9 CLI-ADDRESS SYNC 64
10 CLI-STREET     64   17 PEN LANE
11 CLI-CITY        79   TALAHASSEE
12 CLI-STATE      94   FL
13 CLI-ZIP-CODE   96   80973
14 FILLER         105
***** END OF LAYOUT - DATA EXCEEDS LAYOUT BY 555 BYTES *****
```

Keeping a Command On the Command Line with & (Ampersand)

Most File-AID commands are cleared from the command line after processing. However, if you precede a command with an & (ampersand), the command remains on the command line.

In this example, you enter the &NEXT command to leave the command &NEXT on the command line so that you only need to press Enter to view each subsequent segment.

Figure 369. Using & (ampersand) to Retain Command. The &NEXT Command.

```
FILE-AID - BROWSE - USERID9.FASAMP.SEGFILE -----
COMMAND ==> &NEXT
RECORD: 13 INS-BASE-FILE
---- FIELD NUMBER/NAME ----- COLUMNS-----1-----+
1 CLI-NUMBER 1 67890
```

Steps:

1. Type &NEXT in the COMMAND field.
2. Press Enter.

Continue Reviewing Segments in Record 13

File-AID automatically displays the correct layout (CLI-BOAT-DATA) for the next segment of record 13 as illustrated in [Figure 370](#).

The &NEXT command remains on the command line so that you need only press Enter to continue to examine segments in record 13. The information line (END OF LAYOUT) now shows that 448 bytes of record data follow the current segment.

Step:

1. Press Enter.

Figure 370. Browsing Record 13. CLI-BOAT-DATA Segment.

```
FILE-AID - BROWSE - USERID9.FASAMP.SEGFILE ----- COL 125 231
COMMAND ==> &NEXT SCROLL ==> PAGE
RECORD: 13 CLI-BOAT-DATA LENGTH: 679
---- FIELD NUMBER/NAME ----- COLUMNS-----1-----+-----2-----+-----3-----+-----4
1 FILLER 125
2 BOAT-RECORD-TYPE-01 126 01
3 BOAT-DATE-INSURED 128 021194
4 BOAT-REGISTER-N0 134 70392
5 BOAT-INSURED-AMT 139 6000.00
6 BOAT-DOCK-NO 143 999
7 BOAT-MARINA-NAME 146 THOMAS MARINA
8 BOAT-NAME 176 ALMANAC
9 FILLER 196
***** END OF LAYOUT - DATA EXCEEDS LAYOUT BY 448 BYTES *****
```

Continue Reviewing Segments

File-AID automatically displays the correct layout (CLI-BUSINESS-DATA) for the next segment of record data for record number 13 as illustrated in [Figure 371](#).

As before, since &NEXT remains on the COMMAND line, just press Enter to continue your review of segments. If you wish to return to the previously viewed segment, use the PREV command.

Figure 371. Browsing Record 13. CLI-BUSINESS-DATA Segment.

```
FILE-AID - BROWSE - USERID9.FASAMP.SEGFILE ----- COL 232 356
COMMAND ==> &NEXT                               SCROLL ==> PAGE
RECORD: 13                                     CLI-BUSINESS-DATA      LENGTH: 679
----- FIELD NUMBER/NAME ----- COLUMNS- -----+----1----+----2----+----3----+----4
1 FILLER           232
2 BUSINESS-RECORD-TYPE-02          233    02
3 BUS-DATE-INSURED            235    021194
4 BUS-NAME              241    WRITERS CAMP
5 BUS-INSURED-AMT            271    3000.00
6 BUS-ADDRESS             277    32 BOOK STREET
7 BUS-PHONE-NUMBER          307    4159809852
8 FILLER           317
***** END OF LAYOUT - DATA EXCEEDS LAYOUT BY 323 BYTES *****
```

Step:

1. Press Enter.



If you wish to return to the previously viewed segment, use the PREV command.

Continue Reviewing Segments

File-AID automatically displays the correct layout (CLI-CAR-DATA) for the next segment of record data for record number 13 as illustrated in [Figure 372](#).

Figure 372. Browsing Record 13. CLI-CAR-DATA Segment.

```
FILE-AID - BROWSE - USERID9.FASAMP.SEGFILE ----- COL 357 499
COMMAND ==> &NEXT                               SCROLL ==> PAGE
RECORD: 13                                     CLI-CAR-DATA      LENGTH: 679
----- FIELD NUMBER/NAME ----- COLUMNS- -----+----1----+----2----+----3----+----4
1 FILLER           357
2 CAR-RECORD-TYPE-03          358    03
3 CAR-DATE-INSURED            360    021194
4 CAR-VEHICLE-NUMBER          366    2225439047
5 CAR-INSURED-AMT            376    100.00
6 CAR-MFG              380    FORD
7 CAR-STYLE             390    MODEL T
8 CAR-OWNER-NAME            420    THOMAS PAINE
9 FILLER           460
***** END OF LAYOUT - DATA EXCEEDS LAYOUT BY 180 BYTES *****
```

Step:

1. To view the next segment, press Enter.

Continue Reviewing Segments

File-AID displays the next segment of record data for record number 13. The next segment is the CLI-HOME-DATA segment as illustrated in [Figure 373](#).

Figure 373. Browsing Record 13. CLI-HOME-DATA Segment.

```

FILE-AID - BROWSE - USERID9.FASAMP.SEGFILE ----- COL 500 578
COMMAND ===> &NEXT                               SCROLL ===> PAGE
RECORD: 13                                     LENGTH: 679
---- FIELD NUMBER/NAME ----- COLUMNS- -----+-----1-----+-----2-----+-----3-----+-----4
1 FILLER           500
2 HOME-RECORD-TYPE-04      501    04
3 HOME-DATE-INSURED       503    021194
4 HOME-ADDRESS          509    0000000032
5 HOME-PROPERTY-AMT       519    14000.00
6 HOME-CONTENTS-AMT        524    3500.00
7 HOME-STYLE            529    COLONIAL
8 FILLER           539
***** END OF LAYOUT - DATA EXCEEDS LAYOUT BY 101 BYTES *****

```

Step:

1. To view the next segment, press Enter.

Viewing the Last Segment

File-AID displays the next segment of record data for record number 13. The next segment is the CLI-LIFE-DATA segment as illustrated in [Figure 374](#).

The information line at the bottom of the layout changes to read:

```
**** BOTTOM OF DATA ****
```

This indicates that the last byte of data has been formatted. If you try to use the NEXT command, you receive an error message like: **ALREADY AT LAST SEGMENT**.

The PREV command lets you back up to the segment preceding the currently displayed segment. The TOP command displays the *base* layout at data byte 1.

Figure 374. Browsing Record 13. CLI-LIFE-DATA Segment (BOTTOM OF DATA Label).

```

FILE-AID - BROWSE - USERID9.FASAMP.SEGFILE ----- COL 579 679
COMMAND ===>
RECORD: 13                                     SCROLL ===> PAGE
---- FIELD NUMBER/NAME ----- COLUMNS- -----+-----1-----+-----2-----+-----3-----+-----4
1 FILLER           579
2 LIFE-RECORD-TYP-05      580    05
3 LIFE-POLICY-NUMBER       582    325476
4 LIFE-DATE-INSURED       588    021194
5 LIFE-INSURED-NAME        594    THOMAS PAINÉ SR
6 LIFE-INSURED-AMT         634    40000.00
7 LIFE-BENE-NAME          640    MRS. PAINÉ
8 FILLER           670
***** BOTTOM OF DATA *****

```

Exiting File-AID with the RETURN Command

You may return to this example to browse the **FASAMP.SEGFILE** whenever you need to review the segmented XREF function. Try using Edit and the ADD and REMOVE commands to learn more about inserting and deleting segments of a segmented record.

Look at the data records in CHAR format and see if you can understand where each segment is in the data record as you scroll right and left and up and down.

This is the end of this chapter.

Use the RETURN command to exit File-AID.

Figure 375. Using RETURN to Exit File-AID

```
FILE-AID - BROWSE - USERID9.FASAMP.SEGFILE -----
COMMAND ==> RETURN
RECORD:    13          CLI-LIFE-DATA
---- FIELD NUMBER/NAME ----- COLUMNS- -----+-----1-----+
1 FILLER           579
2 LIFE-RECORD-TYP-05      580     05
```

Steps:

1. Type **RETURN** in the COMMAND field.
2. Press Enter.

Allocating and Editing Version 2 PDSE with Member Generation

File-AID supports allocating, browsing and editing Version 2 PDSEs. In this chapter, you learn how to:

- Allocate a Version 2 PDSE
- Copy data into a Version 2 PDSE member
- Edit a Version 2 PDSE member
- Select a previous generation member
- Save previous generation member as 0 generation
- Save previous generation member as same generation
- Limit list of generation members
- Copy a Version 2 PDSE with generation members

Only Browse, Edit, and Copy functions can access old generations of a Version 2 PDSE. All other File-AID functions access only the current member (0 generation).

Accessing the Dataset Utility (Option 3.2)

The Dataset utility is located on the File-AID Extended Utilities menu (option 3) as utility number 2.

Steps:

1. From the File-AID Primary Option Menu (not shown here), select option 3.2.
2. Press Enter. File-AID displays the Dataset Utility screen as illustrated in [Figure 376](#) on page 380.

Allocating a Version 2 PDSE with Member Generation

The Dataset Utility screen has two areas: the upper area displays the Dataset utility options, and the lower area is used to specify dataset and catalog names.



Option A includes allocating SMS datasets (formerly option M).
Use the VSAM utility (option 3.5) to allocate IAM files.

Figure 376. Dataset Utility Screen

```
File-AID ----- Dataset Utility -----
OPTION ==> A

A - Allocate SEQ/PDS dataset      D - Delete dataset or HFS file
B - Allocate BDAM dataset        R - Rename dataset or HFS file
C - Catalog dataset            U - Uncatalog dataset
S - Dataset information (short)   F - Free unused space
BLANK - Display dataset information G - Define generation data group

Specify Dataset or HFS Path Information:
Dataset or path    ==> FASAMP.PDSEV2
Volume serial      ==>           (If not cataloged)

Specify Model Dataset Information:
Dataset name       ==>

Specify Catalog to use if other than Default System Catalog:
Catalog name       ==>
Catalog password   ==>           (If catalog is password protected)

-----  
For dataset allocations only, the optional model dataset is used to  
prefill the allocation information on the allocation panel. This  
dataset is not mandatory for dataset allocations.
```

Steps:

1. Type an A in the OPTION field.
2. Type **FASAMP.PDSEV2** in the Dataset name field under the Specify Dataset or HFS Path Information section.
3. Press Enter. File-AID displays the [Allocate New Dataset Screen](#) as illustrated in [Figure 377](#) on page 381.

Allocating Version 2 PDSE Parameters

You can type over any of the fields to customize your Version 2 PDSE attributes. The last three fields, Dataset Name Type, Data Set Version, and Maximum Generations, need specific attention for allocating a Version 2 PDSE.

Figure 377. Allocate New Dataset Screen

File-AID ----- Allocate New Dataset -----	
COMMAND ==>	
Dataset name: USERID9.FASAMP.PDSEV2	
Management Class	==> (Blank for default)
Storage Class	==> (Blank for default)
Data Class	==> (Blank for default)
Volume serial	==> PRD921 (Blank for authorized default volume)
Generic unit	==> (Generic group name or unit)
Space units	==> CYLS (BLKS; TRKS; CYLS; KB; or MB)
Primary quantity	==> 6 (In above units)
Secondary quantity	==> 1 (In above units)
Directory quantity	==> 1 (Partitioned only)
Record format	==> VB
Record length	==> 6148
Block size	==> 30744
Multi Volume	==> N (Y, N or 2-59)
Expiration date	==> (YYYY/MM/DD or blank)
Dataset Name Type	==> L (Library, PDS, Large, or blank)
Data Set Version	==> 2 (For PDSE only)
Maximum Generations	==> 10 (For Version 2 PDSE only)

Steps:

1. Type **L** for Library type in the Dataset Name Type field.
2. Type **2** for a Version 2 PDSE in the Dataset Version field.
3. Type **10** in the Maximum Generations field to limit the maximum number of available generation members allowed to 10.
When the maximum is exceeded, the generations are rolled, dropping the lowest relative generation, in this example -10.



The number entered cannot exceed the MAXGEN_LIMIT set by the system administrator.

4. Press Enter. File-AID returns to the [Dataset Utility Screen](#) ([Figure 376](#) on page 380) and displays the DATASET ALLOCATED message.
5. Type **=3.3** in the OPTION field of the [Dataset Utility Screen](#) to jump to the [Copy Utility Screen](#) ([Figure 378](#) on page 382) to populate the new Version 2 PDSE.

Copying "FROM" EMPMAST "TO" PDSEV2

The last dataset you referenced in any File-AID function or utility is automatically displayed in the FROM dataset or path field. The TO dataset or path field retains the last dataset or path you specified in the Copy utility.

You must identify the FROM dataset and the TO dataset and whether or not you want to use selection criteria (Selection criteria usage field). You can choose to run your copy online at your terminal or in batch by specifying the processing option in the Process online or batch field.

In this example, specify N in the Selection criteria usage field to copy all records in the online copy process.

Figure 378. Copy Utility Screen

```

File-AID ----- Copy Utility -----
COMMAND ==>

Specify "FROM" Dataset or zFS Path Information:
Dataset or path ==> FASAMP.EMPMAST
Volume serial ==> (If not cataloged)

Specify "TO" Dataset or zFS Path Information:
Dataset or path ==> FASAMP.PDSEV2(MEMBER1)
Volume serial ==> (If not cataloged)
Disposition ==> OLD (OLD, MOD, NEW)

Specify Execution Information:
Process online or batch ==> O (O = Online; B = Batch)

Specify Selection Criteria Information: (E = Existing; T = Temporary;
Selection criteria usage ==> N M = Modify; Q = Quick; N = None)
Selection dataset name ==>
Member name ==> (Blank or pattern for member list)

```

Steps:

1. Type FASAMP.EMPMAST in the "FROM" Dataset or path field.
2. Type FASAMP.PDSEV2(MEMBER1) in the "TO" Dataset or path field. You must include the member name in parentheses.
3. Type OLD in the Disposition field.
4. Type an O in the Process online or batch field.

If you specify to run the copy in batch, File-AID displays the standard JCL Specification screen where you can define the batch processing options.

5. Type an N in the Selection criteria usage field.



Make sure you always check this field before you press Enter. The value last used remains set from session to session.

6. Press Enter. File-AID executes the copy process immediately and returns with a confirmation message, 1 MEMBERS COPIED.
7. Type =2 in the COMMAND field of the [Copy Utility Screen](#) to jump to the Edit - Dataset Specification to edit the new Version 2 PDSE.

Specifying the Dataset to Edit

Use the [Edit - Dataset Specification Screen \(Figure 379\)](#) to define your edit request, which consists of:

- Edit Mode
- Edit Dataset
- Audit trail usage
- Record Layout and XREF Information
- Selection Criteria Usage Information.

Figure 379. Edit - Dataset Specification Screen

The screenshot displays the 'Edit - Dataset Specification' screen. At the top, it says 'File-AID ----- Edit - Dataset Specification -----'. Below that, 'COMMAND ==>' is followed by 'C' with the note '(F=Fmt; C=Char; V=Vfmt; U=Unfmt)'. The screen is divided into sections:

- Edit Mode:** Set to 'C'.
- Specify Edit Information:**
 - Dataset name or zFS path ==> **FASAMP.PDSEV2**
 - Member name ==> **MEMBER1** (Blank or pattern for member list)
 - Volume serial ==> (If dataset is not cataloged)
 - Disposition ==> **OLD** (SHR or OLD)
 - Create audit trail ==> **N** (Y = Yes; N = No)
- Specify Record Layout and XREF Information:**
 - Record layout usage ==> **N** (S = Single; X = XREF; N = None)
 - Record layout dataset ==> **FASAMP.LAYOUTS**
 - Member name ==> **EMPLOYEE** (Blank or pattern for member list)
 - XREF dataset name ==>
 - Member name ==> (Blank or pattern for member list)
- Specify Selection Criteria Information:**
 - Selection criteria usage ==> **N** (E = Existing; T = Temporary; M = Modify; Q = Quick; N = None)
 - Selection criteria DSN ==>
 - Member ==> (Blank or pattern for member list)

Steps:

1. Type a **C** in the Edit Mode field.
2. Type **FASAMP.PDSEV2** in the Dataset name or zFS path field.
3. Type **MEMBER1** in the Member name field.
4. Type **OLD** in the Disposition field.
The value of **OLD** prevents other users from accessing the dataset while you are editing it.
5. Type an **N** in the Create audit trail field.
Note that the audit trail report only identifies the member name without generation information.
6. **Blank** out the I/O exit name field, if the I/O exit option has been installed at your site, otherwise skip this step.

This field must be blank in order to access Version 2 PDSE generation members.
7. Type an **N** in the Record layout usage field.
As Edit Mode C was specified a record layout is not needed.
8. Type an **N** in the Selection criteria usage field as all records should be loaded and you also want access to the Version 2 PDSE generation members.
9. Press Enter. If you specified your new PDSE, **FASAMP.PDSEV2**, File-AID displays the Edit screen as shown in [Figure 380](#) on page 384.

Editing Data In the Original Member

Since MEMBER1 was just populated with the COPY utility the edit screen displays all copied records. The note Editing REL GEN 0 of MAX GEN 10 (ABS GEN 0) informs you which generation member you are editing. In this case there are no other generation members other than the original (0).

All edit and browse primary and line commands are available for Version 2 PDSE members.

Steps:

1. Add an S to MARTIN in the first record displayed.

Figure 380. Character Edit - Original Member

File-AID - Edit - USERID9.FASAMP.PDSEV2(MEMBER1) ----- COLUMNS 000001 000072 COMMAND ==> SCROLL ==> PAGE			
***** *****TOP OF DATA *****-CAPS OFF-*			
==MSG> -NOTE- STATS DID NOT EXIST, BUT WILL BE GENERATED IF DATA IS SAVED			
==MSG> -NOTE- Editing REL GEN 0 of MAX GEN 10 (ABS GEN 0)			
000001 00090MARTINS	EDWARD	M AIRPLANE MANUFACTURER	427890125
000002 00100MULSTROM	ROBERTA	A HOLLYWOOD SEAMSTRESS	346573656
000003 00200JACKSON	JOSEPH	C ORATOR	275587177
000004 10000ANDREWS	GEORGE	ACTOR	576312032
000005 15000MURPHY	RONALD	L PAINTER	987654321
000006 18034SCHNEIDER	ELLEN	C NURSE	341559549
000007 21035JONES	GEORGE	B COUNTRY SINGER	463813456
000008 25100ROBERTS	WILLIAM	R POLITICIAN	879563325
000009 27007ALLEN	JOYCE	M AUTHOR	783458334
000010 30001RICHARDS	REX	W RODEO CLOWN	632764534
000011 31000SAVAGE	JONATHON	C ELECTRICIAN	348567992
000012 34010SMITH	JANET	AIRLINE ATTENDANT	557782984
000013 34011JACOBS	DIANA	DOCTOR	225368395
000014 36010SIMPSON	ALEX	CARTOONIST	123456789
000015 39310BARNETT	EDWARD	E SALESMAN	543789142
000016 39500WILLIAMS	EDITH	A DESIGNER	987654321
000017 41000RICHARDSON	MARJORIE	M PROGRAMMER ANALYST	346583656
000018 41400MOORE	THOMAS	M SYSTEMS ADMINISTRATOR	226373646

2. Press PF3 to save your change and exit the edit session. File-AID returns to the [Edit - Dataset Specification Screen \(Figure 379\)](#).

Displaying Generation Members

File-AID saved the changes to the new (current) relative generation 0/absolute generation 0 while the original member (before the change) became relative generation -1/absolute generation 1. In order to display generation members you need to display the member list first.

Steps:

- Blank out the Member name field in the [Edit - Dataset Specification Screen](#) (Figure 379).

Figure 381. Edit - Dataset Specification Screen

```
File-AID ----- Edit - Dataset Specification -----
COMMAND ==>

Edit Mode           ==> C          (F=Fmt; C=Char; V=Vfmt; U=Unfmt)

Specify Edit Information:
Dataset name or zFS path ==> FASAMP.PDSEV2
Member name          ==>          (Blank or pattern for member list)
Volume serial         ==>          (If dataset is not cataloged)
Disposition           ==> OLD        (SHR or OLD)
Create audit trail    ==> N          (Y = Yes; N = No)

Specify Record Layout and XREF Information:
Record layout usage   ==> N          (S = Single; X = XREF; N = None)
Record layout dataset ==> FASAMP.LAYOUTS
Member name            ==> EMPLOYEE (Blank or pattern for member list)
XREF dataset name     ==>
Member name            ==>          (Blank or pattern for member list)

Specify Selection Criteria Information:      (E = Existing; T = Temporary;
Selection criteria usage ==> N                  M = Modify; Q = Quick; N = None)
Selection criteria DSN   ==>
Member                 ==>          (Blank or pattern for member list)
```

- Press Enter. File-AID displays the [PDS Processing Options Screen](#) (Figure 382).

Figure 382. PDS Processing Options Screen

```
File-AID ----- PDS Processing Options -----
COMMAND ==>

Edit Dataset: USERID9.FASAMP.PDSEV2

Maximum number of generations to list      ==> 6          (0 = ALL)

Specify Member Selection Options (Blank for All Members)
Member name mask             ==>
Member name range            ==>          to ==>
Last modified userid         ==>          to ==>
Creation date                ==>          to ==>          (YY/MM/DD)
Modification date            ==>          to ==>          (YY/MM/DD)

Use ENTER to continue, END to return to dataset specification screen
```

3. Type 6 in the Maximum number of generations to list field.

The field “Maximum number of generations to list” is only displayed for Version 2 PDSE with **no selection criteria**. It defaults to the value specified in the Maximum Generations field of the [Allocate New Dataset Screen](#) ([Figure 377](#)), for our example it was 10.

4. Press Enter. File-AID displays the [Member Hits Screen](#) ([Figure 383](#)).

Figure 383. Member Hits Screen

File-AID Member Hits - USERID9.FASAMP.PDSEV2 ----- Row 1 to 1 of 1						
COMMAND ==> SCROLL ==> CSR						
S	NAME	VV.MM	CREATED	CHANGED	SIZE	INIT MOD ID
G	MEMBER1	01.00	14/08/06	14/08/06 14:19	50	50 0 USERID9
***** Bottom of data *****						

5. Type G in the S line command column next to MEMBER1.
The G line command is only valid for Version 2 PDSEs.
6. Press Enter. File-AID displays the [Generation List Screen](#) ([Figure 384](#)).

Figure 384. Generation List Screen

File-AID GENERATION LIST - USERID9.FASAMP.PDSEV2(MEMBER1) Row 1 to 2 of 2					
COMMAND ==> SCROLL ==> CSR					
MAXIMUM TO LIST:		6	AVAILABLE GENERATIONS:	1	
S	RELATIVE GENERATION	ABSOLUTE GENERATION	GENERATION CREATED	GENERATION CHANGED	USERID
-	-	-	-	-	-
S	0	0	Unavailable	14/08/06 14:19	USERID9
-	-1	1	Unavailable	14/08/06 14:10	USERID9
***** Bottom of data *****					

The 2 entries in the list are the original member, relative generation -1/absolute generation 1 (created in F.3.3) and the current member relative generation 0/absolute generation 0 (created by editing MEMBER1).

- 
1. The AVAILABLE GENERATIONS count does not include the current member (0) as this is not considered a generation.
 2. The GENERATION CREATED field displays as Unavailable until IBM APAR OA45450 is applied to your system.
 7. Type S in the S line command column next to relative generation -1/absolute generation 1 to edit the original generation member before it was edited.

Viewing Data of Relative Generation -1

In the [Generation List Screen \(Figure 384 on page 386\)](#) you selected relative generation -1/absolute generation 1. As you can see in [Figure 385](#), this is the data before "MARTIN" was edited to say "MARTINS".

Now the message Editing REL GEN -1 of MAX GEN 10 (ABS GEN 1) shows the Relative and Absolute generation number of the member generation selected.

Figure 385. Character Edit - Relative Generation -1

```

File-AID - Edit - USERID9.FASAMP.PDSEV2(MEMBER1) - 01.00 COLUMNS 000001 000072
COMMAND ==> END SCROLL ==> PAGE
***** ***** TOP OF DATA *****-CAPS OFF-*
==MSG> -NOTE- STATS MODE IS "ON"
==MSG> -NOTE- Editing REL GEN -1 of MAX GEN 10 (ABS GEN 1)
000001 00090MARTIN EDWARD M AIRPLANE MANUFACTURER 427890125
000002 00100MULSTROM ROBERTA A HOLLYWOOD SEAMSTRESS 346573656
000003 00200JACKSON JOSEPH C ORATOR 275587177
000004 10000ANDREWS GEORGE ACTOR 576312032
000005 15000MURPHY RONALD L PAINTER 987654321
000006 18034SCHNEIDER ELLEN C NURSE 341559549
000007 21035JONES GEORGE B COUNTRY SINGER 463813456
000008 25100ROBERTS WILLIAM R POLITICIAN 879563325
000009 27007ALLEN JOYCE M AUTHOR 783458334
000010 30001RICHARDS REX W RODEO CLOWN 632764534
000011 31000SAVAGE JONATHON C ELECTRICIAN 348567992
000012 34010SMITH JANET AIRLINE ATTENDANT 557782984
000013 34011JACOBS DIANA DOCTOR 225368395
000014 36010SIMPSON ALEX CARTOONIST 123456789
000015 39310BARNETT EDWARD E SALESMAN 543789142
000016 39500WILLIAMS EDITH A DESIGNER 987654321
000017 41000RICHARDSON MARJORIE M PROGRAMMER ANALYST 346583656
000018 41400MOORE THOMAS M SYSTEMS ADMINISTRATOR 226373646

```

Steps:

1. Review the displayed data to verify that it is the data before "MARTIN" was edited to say "MARTINS".
2. Type END in the COMMAND field without making any changes to the data.
3. Press Enter to quit the edit session and return to the [Generation List Screen \(Figure 386\)](#).

Figure 386. Generation List Screen

File-AID GENERATION LIST - USERID9.FASAMP.PDSEV2(MEMBER1)					Row 1 to 2 of 2
COMMAND ==>					SCROLL ==> CSR
MAXIMUM TO LIST:		6	AVAILABLE GENERATIONS:	1	
S	RELATIVE GENERATION	ABSOLUTE GENERATION	GENERATION CREATED	GENERATION CHANGED	USERID
	0	0	Unavailable	14/08/06 14:19	USERID9
	-1	1	Unavailable	14/08/06 14:10	USERID9
***** Bottom of data *****					

As no editing changes occurred, the list still shows the same 2 entries as before.

4. Type S in the S line command column next to relative generation 0/absolute generation 0 to edit the current generation member.

Editing Data of Current Member (Generation 0)

In the [Generation List Screen \(Figure 388 on page 388\)](#) you selected relative generation 0/absolute generation 0. As you can see in [Figure 387](#), this is the data after “MARTIN” was edited to say “MARTINS”.

Now the message Editing REL GEN 0 of MAX GEN 10 (ABS GEN 0) shows the Relative and Absolute generation number of the member generation selected.

Figure 387. Character Edit - Relative Generation 0

```

File-AID - Edit - USERID9.FASAMP.PDSEV2(MEMBER1) - 01.00 COLUMNS 000001 000072
COMMAND ==> END SCROLL ==> PAGE
***** *****TOP OF DATA*****-CAPS OFF-*
==MSG> -NOTE- STATS MODE IS "ON"
==MSG> -NOTE- Editing REL GEN 0 of MAX GEN 10 (ABS GEN 0)
000001 00090MARTINS THOMAS M AIRPLANE MANUFACTURER 427890125
000002 00100MULSTROM ROBERTA A HOLLYWOOD SEAMSTRESS 346573656
000003 00200JACKSON JOSEPH C ORATOR 275587177
000004 10000ANDREWS GEORGE ACTOR 576312032
000005 15000MURPHY RONALD L PAINTER 987654321
000006 18034SCHNEIDER ELLEN C NURSE 341559549
000007 21035JONES GEORGE B COUNTRY SINGER 463813456
000008 25100ROBERTS WILLIAM R POLITICIAN 879563325
000009 27007ALLEN JOYCE M AUTHOR 783458334
000010 30001RICHARDS REX W RODEO CLOWN 632764534
000011 31000SAVAGE JONATHON C ELECTRICIAN 348567992
000012 34010SMITH JANET AIRLINE ATTENDANT 557782984
000013 34011JACOBS DIANA DOCTOR 225368395
000014 36010SIMPSON ALEX CARTOONIST 123456789
000015 39310BARNETT EDWARD E SALESMAN 543789142
000016 39500WILLIAMS EDITH A DESIGNER 987654321
000017 41000RICHARDSON MARJORIE M PROGRAMMER ANALYST 346583656
000018 41400MOORE THOMAS M SYSTEMS ADMINISTRATOR 226373646

```

Steps:

1. Change EDWARD to THOMAS.
2. Type END in the COMMAND field.
3. Press Enter to exit the edit session, save your edit changes and return to the [Generation List Screen \(Figure 388\)](#).

Figure 388. Generation List Screen

```

File-AID GENERATION LIST - USERID9.FASAMP.PDSEV2(MEMBER1) Row 1 to 3 of 3
COMMAND ==> SCROLL ==> CSR
MAXIMUM TO LIST: 6 AVAILABLE GENERATIONS: 2
RELATIVE ABSOLUTE GENERATION CREATED GENERATION CHANGED USERID
S GENERATION GENERATION
-----
S 0 0 Unavailable 14/08/06 14:22 USERID9
-1 2 Unavailable 14/08/06 14:19 USERID9
-2 1 Unavailable 14/08/06 14:10 USERID9
***** Bottom of data *****

```

Now there are 3 entries in the list. The available generations count has been increased to 2. The original member is now relative generation -2/ absolute generation (1) does not change.

4. Type S in the S line command column next to relative generation 0/absolute generation 0 to edit the current generation member.

As you can see in [Figure 389](#), this is the data after “EDWARD” was edited to “THOMAS”.

Now the message Editing REL GEN 0 of MAX GEN 10 (ABS GEN 0) shows the Relative and Absolute generation number of the member generation selected.

Figure 389. Character Edit - Relative Generation 0

```

File-AID - Edit - USERID9.FASAMP.PDSEV2(MEMBER1) - 01.01 COLUMNS 000001 000072
COMMAND ===> END                                     SCROLL ===> PAGE
***** *****TOP OF DATA*****CAPS OFF-*  

==MSG> -NOTE-  STATS MODE IS "ON"  

==MSG> -NOTE-  Editing REL GEN 0 of MAX GEN 10 (ABS GEN 0)  

000001 0090MARTINS      THOMAS   M AIRPLANE MANUFACTURER    427890125  

000002 00100MULSTROM    ROBERTA   A HOLLYWOOD SEAMSTRESS   346573656  

000003 00200JACKSON5    JOSEPH    C ORATOR                275587177  

000004 10000ANDREWS     GEORGE    ACTOR                 576312032  

000005 15000MURPHY      RONALD    L PAINTER               987654321  

000006 18034SCHNEIDER   ELLEN     C NURSE                 341559549  

000007 21035JONES       GEORGE    B COUNTRY SINGER      463813456  

000008 25100ROBERTS     WILLIAM   R POLITICIAN            879563325  

000009 27007ALLEN       JOYCE     M AUTHOR                783458334  

000010 30001RICHARDS    REX       W RODEO CLOWN          632764534  

000011 31000SAVAGE      JONATHON   C ELECTRICIAN           348567992  

000012 34010SMITH       JANET     AIRLINE ATTENDANT    557782984  

000013 34011JACOBS     DIANA     DOCTOR                225368395  

000014 36010SIMPSON    ALEX      CARTOONIST            123456789  

000015 39310BARNETT    EDWARD    E SALESMAN              543789142  

000016 39500WILLIAMS    EDITH     A DESIGNER              987654321  

000017 41000RICHARDSON MARJORIE  M PROGRAMMER ANALYST  346583656  

000018 41400MOORE       THOMAS   M SYSTEMS ADMINISTRATOR 226373646

```

5. Change JACKSON to **JACKSON5**.
6. Type **END** in the COMMAND field.
7. Press Enter to exit the edit session, save your edit changes and return to the [Generation List Screen](#) ([Figure 390](#)).

Figure 390. Generation List Screen

File-AID GENERATION LIST - USERID9.FASAMP.PDSEV2(MEMBER1)					Row 1 to 4 of 4
					SCROLL ===> CSR
MAXIMUM TO LIST:		6	AVAILABLE GENERATIONS:	3	
S	RELATIVE GENERATION	ABSOLUTE GENERATION	GENERATION CREATED	GENERATION CHANGED	USERID
	0	0	Unavailable	14/08/06 14:25	USERID9
	-1	3	Unavailable	14/08/06 14:22	USERID9
S	-2	2	Unavailable	14/08/06 14:19	USERID9
	-3	1	Unavailable	14/08/06 14:10	USERID9

***** Bottom of data *****

Now there are 4 entries in the list. The current member (0) is the latest member with all the changes. The original member is now relative generation -3/ absolute generation (1) does not change.

8. Type **S** in the S line command column next to relative generation -2/absolute generation 2 to edit a previous generation member.

Editing Data of a Previous Generation Member

In the [Generation List Screen \(Figure 390 on page 389\)](#) you selected relative generation -2/absolute generation 2. As you can see in [Figure 391](#), this is the data after "MARTIN" was edited to say "MARTINS".

Now the message Editing REL GEN -2 of MAX GEN 10 (ABS GEN 2) shows the Relative and Absolute generation number of the member generation selected.

Figure 391. Character Edit - Relative Generation -2

File-AID - Edit - USERID9.FASAMP.PDSEV2(MEMBER1) - 01.02 COLUMNS 000001 000072 COMMAND ==> SAVE_SAMEGEN SCROLL ==> PAGE ***** ***** TOP OF DATA *****-CAPS OFF-*				
==MSG> -NOTE- STATS MODE IS "ON"				
==MSG> -NOTE- Editing REL GEN -2 of MAX GEN 10 (ABS GEN 2)				
000001 00090MARTINS	EDWARD	M	CAR MANUFACTURER	427890125
000002 00100MULSTROM	ROBERTA	A	HOLLYWOOD SEAMSTRESS	346573656
000003 00200JACKSON	JOSEPH	C	ORATOR	275587177
000004 10000ANDREWS	GEORGE		ACTOR	576312032
000005 15000MURPHY	RONALD	L	PAINTER	987654321
000006 18034SCHNEIDER	ELLEN	C	NURSE	341559549
000007 21035JONES	GEORGE	B	COUNTRY SINGER	463813456
000008 25100ROBERTS	WILLIAM	R	POLITICIAN	879563325
000009 27007ALLEN	JOYCE	M	AUTHOR	783458334
000010 30001RICHARDS	REX	W	RODEO CLOWN	632764534
000011 31000SAVAGE	JONATHON	C	ELECTRICIAN	348567992
000012 34010SMITH	JANET		AIRLINE ATTENDANT	557782984
000013 34011JACOBS	DIANA		DOCTOR	225368395
000014 36010SIMPSON	ALEX		CARTOONIST	123456789
000015 39310BARNETT	EDWARD	E	SALESMAN	543789142
000016 39500WILLIAMS	EDITH	A	DESIGNER	987654321
000017 41000RICHARDSON	MARJORIE	M	PROGRAMMER ANALYST	346583656
000018 41400MOORE	THOMAS	M	SYSTEMS ADMINISTRATOR	226373646

Steps:

1. Change AIRPLANE MANUFACTURER to CAR MANUFACTURER.
2. Type **SAVE SAMEGEN** in the COMMAND field.

The parameter SAMEGEN saves the changes back to the selected generation (-2) and does NOT create a new generation.



Every time you issue the **SAVE** command without SAMEGEN, File-AID creates a new generation.

3. Press Enter to save your edit changes which is confirmed with the message **DATASET SAVED**.
4. Press PF3 to exit the edit session and return to the [Generation List Screen \(Figure 392\)](#).

Figure 392. Generation List Screen

File-AID GENERATION LIST - USERID9.FASAMP.PDSEV2(MEMBER1)					Row 1 to 4 of 4
COMMAND ==>					SCROLL ==> CSR
MAXIMUM TO LIST:		6	AVAILABLE GENERATIONS:	3	
S	RELATIVE GENERATION	ABSOLUTE GENERATION	GENERATION CREATED	GENERATION CHANGED	USERID
-	0	0	Unavailable	14/08/06 14:25	USERID9
-1	3	3	Unavailable	14/08/06 14:22	USERID9
-2	2	2	Unavailable	14/08/06 14:35	USERID9
-3	1	1	Unavailable	14/08/06 14:10	USERID9
***** Bottom of data *****					

Now there are still only 4 entries in the list. The current member (0) is unchanged. Relative generation -2 was updated last but because SAVE SAMEGEN was used the changes were saved as -2 and the other generations were not rolled.

Reducing Number of Generations to List

The field “Maximum number of generations to list” is only displayed for Version 2 PDSE with **no selection criteria**. It always defaults to the value specified in the Maximum Generations field of the [Allocate New Dataset Screen \(Figure 377\)](#), for our example it was 10.

In order to change the display limit, you must return to the [Edit - Dataset Specification Screen \(Figure 379 on page 383\)](#).

1. From the [Generation List Screen \(Figure 392\)](#), press PF3 twice to return to the [Edit - Dataset Specification Screen](#).
2. Make sure the Member field is blank or contains a wildcard in order to bring up a member selection list.
3. Press Enter. File-AID displays the [PDS Processing Options Screen \(Figure 393 on page 391\)](#).

Figure 393. PDS Processing Options Screen

File-AID ----- PDS Processing Options -----		
COMMAND ==>		
Edit Dataset: USERID9.FASAMP.PDSEV2		
Maximum number of generations to list ==> 2 (0 = ALL)		
Specify Member Selection Options (Blank for All Members)		
Member name mask	==>	
Member name range	==>	to ==>
Last modified userid	==>	to ==>
Creation date	==>	to ==> (YY/MM/DD)
Modification date	==>	to ==> (YY/MM/DD)
Use ENTER to continue, END to return to dataset specification screen		

4. Type 2 in the Maximum number of generations to list field.

5. Press Enter. File-AID displays the [Member Hits Screen](#) ([Figure 394](#)).

Notice that the CHANGED field for MEMBER1 shows the last changed date for the current generation (0), not that of generation -2 which was actually changed last in our example.

Figure 394. Member Hits Screen

File-AID Member Hits - USERID9.FASAMP.PDSEV2 ----- Row 1 to 1 of 1						
COMMAND ==> SCROLL ==> CSR						
S	NAME	VV.MM	CREATED	CHANGED	SIZE	INIT MOD ID
G	MEMBER1	01.00	14/08/06	14/08/06 14:25	50	50 0 USERID9
***** Bottom of data *****						

6. Type G in the S line command column next to MEMBER1.
7. Press Enter. File-AID displays the “Generation List Screen” ([Figure 395](#)).

Figure 395. Generation List Screen - Limit 2

File-AID GENERATION LIST - USERID9.FASAMP.PDSEV2(MEMBER1)					Row 1 to 3 of 3
COMMAND ==> SCROLL ==> CSR					
MAXIMUM TO LIST:		2	AVAILABLE GENERATIONS:	3	
S	RELATIVE GENERATION	ABSOLUTE GENERATION	GENERATION CREATED	GENERATION CHANGED	USERID
-	-	-	-	-	-
0	0	0	Unavailable	14/08/06 14:25	USERID9
-1	3	3	Unavailable	14/08/06 14:22	USERID9
-2	2	2	Unavailable	14/08/06 14:35	USERID9
***** Bottom of data *****					

Although there are 3 available generations only 2 are displayed in order of the relative generation number.

8. Type S in the S line command column next to relative generation -2/absolute generation 2 to edit a previous generation member.

Changing Edit Mode

In the [Generation List Screen \(Figure 390 on page 389\)](#) you selected relative generation -2/absolute generation 2. As you can see in [Figure 391](#), this is the data after “AIRPLANE MANUFACTURER” was edited to say “CAR MANUFACTURER”.

The message `Editing REL GEN -2 of MAX GEN 10 (ABS GEN 2)` shows the Relative and Absolute generation number of the member generation selected.

All primary and line commands are available when editing a generations member, including changing the edit mode.

To view each record alongside its layout, invoke the formatted mode using the `FMT` primary command.

Another method is to use the `FMT` *line* command. The `S` (Select) line command is an alias for `FMT` line command.

Figure 396. Changing Edit Mode to Formatted

```

File-AID - Edit - USERID9.FASAMP.PDSEV2(MEMBER1) - 01.02 COLUMNS 000001 000072
COMMAND ==> FMT                                     SCROLL ==> PAGE
***** ***** ***** ***** ***** ***** ***** *****-CAPS OFF-*
==MSG> -NOTE-   STATS MODE IS "ON"
==MSG> -NOTE-   Editing REL GEN -2 of MAX GEN 10 (ABS GEN 2)
000001 00090MARTINS    EDWARD    M  CAR MANUFACTURER      427890125
000002 00100MULSTROM   ROBERTA   A  HOLLYWOOD SEAMSTRESS  346573656
000003 00200JACKSON   JOSEPH    C  ORATOR                275587177
000004 10000ANDREWS   GEORGE    ACTOR                576312032
000005 15000MURPHY    RONALD    L  PAINTER               987654321
000006 18034SCHNEIDER ELLEN     C  NURSE                341559549
000007 21035JONES     GEORGE    B  COUNTRY SINGER      463813456
000008 25100ROBERTS   WILLIAM   R  POLITICIAN            879563325
000009 27007ALLEN    JOYCE     M  AUTHOR                783458334
000010 30001RICHARDS   REX       W  RODEO CLOWN          632764534
000011 31000SAVAGE    JONATHON   C  ELECTRICIAN          348567992
000012 34010SMITH    JANET     AIRLINE ATTENDANT      557782984
000013 34011JACOBS   DIANA     DOCTOR                225368395
000014 36010SIMPSON   ALEX      CARTOONIST           123456789
000015 39310BARNETT   EDWARD    E  SALESMAN              543789142
000016 39500WILLIAMS  EDITH     A  DESIGNER              987654321
000017 41000RICHARDSON MARJORIE  M  PROGRAMMER ANALYST  346583656
000018 41400MOORE     THOMAS    M  SYSTEMS ADMINISTRATOR 226373646

```

Steps:

- Type `FMT` in the COMMAND field.
- Press Enter. If you didn't specify Record Layout information in the [Edit - Dataset Specification Screen \(Figure 379 on page 383\)](#), File-AID displays the [Record Layout Specification Screen \(Figure 397\)](#).

Figure 397. Record Layout Specification Screen

```

File-AID ----- Record Layout Specification ----- NO LAYOUT EXISTS
COMMAND ==>

Specify Record Layout and XREF Information:
Record layout usage ==> S          (S = Single; X = XREF)
Record layout dataset ==> FASAMP_LAYOUTS
Member name             ==> EMPLOYEE      (Blank or pattern for member list)

XREF dataset name      ==>
Member name             ==>                  (Blank or pattern for member list)

```

3. Type an **S** in the Record layout usage field to indicate that you are using a single layout member to describe your data records.
4. Type the dataset name **FASAMP.LAYOUTS** in the Record layout dataset field.
5. Type the member name **EMPLOYEE** in the layout Member name field.
6. Press Enter. File-AID redisplays the first record in the formatted display mode as illustrated in [Figure 398](#).

Figure 398. Edit - Formatted Display Mode - Overtype Values to Change Data

```
File-AID - Edit - USERID9.FASAMP.PDSEV2(MEMBER1) - 01.02 COLUMNS 000001 000101
COMMAND ===> VFMT
RECORD: 1 EMPLOYEE-MASTER-FILE LENGTH: 198
---- FIELD NUMBER/NAME ----- FORMAT: ---+---1---+---2---+---3---+---4
1 EMP-NUMBER 5/AN 00090
2 EMP-LAST-NAME 15/AN MARTINS
3 EMP-FIRST-NAME 10/AN EDWARD
4 EMP-MID-INIT 1/AN M
5 FILLER 2/AN
6 EMP-TITLE 30/AN CAR MANUFACTURER
7 EMP-PERSONAL-INFO 23/GRP
8 EMP-NATL-ID-NUMBER 9/NUM 427890125
9 FILLER 1/AN
10 EMP-DATE-OF-BIRTH 6/AN 101954
15 EMP-HIRE-DATE 6/AN 920101
16 EMP-MARITAL-STATUS 1/AN M
17 EMP-WITHOLD-INFO 15/GRP
18 EMP-LIFE-INS-WITHOLD-AMT 6/SNUM -3000.00
19 EMP-NATL-TAX-WITHOLD-PCT 3/PS -74.00
20 EMP-REGION-TAX-WITHOLD-PCT 3/PS 25.00
21 EMP-LOCAL-TAX-WITHOLD-PCT 3/PS 5.00
22 EMP-HOME-ADDRESS 50/GRP
```

7. Type **VFMT** in the COMMAND field.
8. Press Enter. File-AID redisplays the screen in vertical formatted mode with the column headings positioned at the top of the data display as illustrated in [Figure 399](#).

Figure 399. Edit- Vertical Formatted Mode

```
File-AID - Edit - USERID9.FASAMP.PDSEV2(MEMBER1) - 01.02 COLUMNS 000001 000033
COMMAND ===> UNFMT SCROLL ===> CSR
EMP-NUMBER EMP-LAST-NAME EMP-FIRST-NAME EMP-MID-INIT FILLER
5/AN 15/AN 10/AN 1/AN 2/AN
(1-5) (6-20) (21-30) (31-31) (32-33)
1-----2-----3-----4-----5-----
***** ***** ***** ***** ***** TOP OF DATA *****-CAPS OFF-*
==MSG> -NOTE- STATS MODE IS "ON"
==MSG> -NOTE- Editing REL GEN -2 of MAX GEN 10 (ABS GEN 2)
000001 00090 MARTINS EDWARD M
000002 00100 MULSTROM ROBERTA A
000003 00200 JACKSON JOSEPH C
000004 10000 ANDREWS GEORGE
000005 15000 MURPHY RONALD L
000006 18034 SCHNEIDER ELLEN C
000007 21035 JONES GEORGE B
000008 25100 ROBERTS WILLIAM R
000009 27007 ALLEN JOYCE M
000010 30001 RICHARDS REX W
000011 31000 SAVAGE JONATHON C
000012 34010 SMITH JANET
000013 34011 JACOBS DIANA
000014 36010 SIMPSON ALEX
000015 39310 BARNETT EDWARD E
```

9. Type **UNFMT** in the COMMAND field.

10. Press Enter. File-AID redisplays the screen in unformatted mode with the column headings positioned at the top of the data display as illustrated in [Figure 399](#).

Figure 400. Edit- Unformatted Mode

```
File-AID - Edit - USERID9.FASAMP.PDSEV2(MEMBER1) - 01.02  COLUMNS 000001 000198
COMMAND ===> =3.3
RECORD: 1
      1-----2-----3-----4-----5-----6-----7
      1 00090MARTINS    EDWARD      M  CAR MANUFACTURER        4278901
      71 25 101954920101M30000)   &   & 859 0'FARREL ST.          SAN FRANCISCO
      141   CA 12121BILL JONES           40855558974155556981
```

11. Enter the jump command **=3.3** to access the Copy Utility ([Figure 401](#) on page 396) where you create a copy of this Version 2 PDSE.

Defining Your Copy Request for a Version 2 PDSE

To copy a Version 2 PDSE with generation members, you must specify:

- the "TO" dataset with disposition NEW
- online processing option
- no selection Criteria

Figure 401. Copy Utility Entry Screen

```

File-AID ----- Copy Utility -----
COMMAND ==>

Specify "FROM" Dataset or zFS Path Information:
Dataset or path ==> 'USERID9.FASAMP.PDSEV2'
Volume serial    ==> (If not cataloged)

Specify "TO" Dataset or zFS Path Information:
Dataset or path ==> FASAMP.PDSEV2A
Volume serial    ==> (If not cataloged)
Disposition      ==> NEW          (OLD, MOD, NEW)

Specify Execution Information:
Process online or batch ==> O        (O = Online; B = Batch)

Specify Selection Criteria Information: (E = Existing; T = Temporary;
Selection criteria usage ==> N        M = Modify; Q = Quick; N = None)
Selection criteria dataset ==>
Member name       ==> (Blank or pattern for member list)

```

Steps:

1. Type **FASAMP.PDSEV2** in the "FROM" Dataset or path field. Most likely, it's already filled in from the Edit session.
2. Type **FASAMP.PDSEV2A** in the "TO" Dataset or path field.
3. Type **NEW** in the Disposition field.
4. Type an **O** in the Process online or batch field.
5. Type an **N** in the Selection criteria usage field.



Make sure you always check this field before you press Enter. The value last used remains set from session to session.

6. Press Enter. File-AID displays the [Allocate New Dataset Screen](#) as illustrated in [Figure 402](#) on page 397.

Allocating a New Version 2 PDSE

The allocation fields are filled in with the values of the “FROM” dataset. You can type over any of the fields to customize your Version 2 PDSE attributes. The last three fields, Dataset Name Type, Data Set Version, and Maximum Generations, need specific attention for allocating a Version 2 PDSE.

Figure 402. Allocate New Dataset Screen

```
File-AID ----- Allocate New Dataset -----
COMMAND ===>

Dataset name: USERID9.FASAMP.PDSEV2A

Management Class    ==>          (Blank for default)
Storage Class       ==>          (Blank for default)
Data Class          ==>          (Blank for default)
Volume serial        ==> PRD921   (Blank for authorized default volume)
Generic unit         ==>          (Generic group name or unit)
Space units          ==> CYLS     (BLKS; TRKS; CYLS; KB; or MB)
Primary quantity     ==> 6        (In above units)
Secondary quantity   ==> 1        (In above units)
Directory quantity   ==> 1        (Partitioned only)
Record format        ==> VB       (Blank for default)
Record length        ==> 6148    (Blank for default)
Block size           ==> 30744   (Blank for default)
Multi Volume         ==> N        (Y, N or 2-59)
Expiration date      ==>          (YYYY/MM/DD or blank)
Dataset Name Type    ==> LIBRARY (Library, PDS, Large, or blank)
Data Set Version     ==> 2        (For PDSE only)
Maximum Generations ==> 10      (For Version 2 PDSE only)
```

Steps:

1. Verify the prefilled values.
2. Press Enter. File-AID continues to the “PDS Processing Options Screen” ([Figure 403](#) on page 398).

Specifying PPO Options for Version 2 PDSE

The PDS Processing Options (PPO) screen (see [Figure 403](#)) lets you define a subset of members to be copied based on member name and/or ISPF statistics.

It also can be used to specify member renaming and other options for copied members.

Figure 403. Copy Utility - Version 2 PDSE to Version 2 PDSE Processing Options Screen

```

File-AID ----- PDS Processing Options -----
COMMAND ==>

FROM Dataset: USERID9.FASAMP.PDSEV2

Copy empty members      ==> N      (Y = Yes; N = No)

TO Dataset:  USERID9.FASAMP.PDSEV2A
Replace like-named members ==> Y      (Y = Yes; N = No)

Rename copied members mask ==>
Maximum generations to copy ==> 0
(blank=No generations, 0=ALL, n=Number to include)
Specify Member Selection Options (Blank for All Members)
Member name mask      ==>
Member name range      ==>      to ==>
Last modified userid    ==>      to ==>
Creation date          ==>      to ==>      (YY/MM/DD)
Modification date       ==>      to ==>      (YY/MM/DD)

Display member selection list ==> Y      (Y = Yes; N = No)

```

Steps:

1. Type N in the Copy empty members field.
2. Type Y in the Replace like-named members field.
3. Type 0 in the Maximum generations to copy field to copy all generations.
4. Type Y in the Display member selection list field.
5. Press Enter. File-AID displays the [Member S/X Screen](#) ([Figure 404](#)).

Figure 404. Member S/X Screen

```

File-AID Member S/X -- USERID9.FASAMP.PDSEV2 ----- Row 1 to 1 of 1
COMMAND ==>                               SCROLL ==> CSR
S NAME          VV.MM CREATED     CHANGED     SIZE INIT MOD ID
S MEMBER1        01.00 14/08/06 14/08/06 14:19   50   50   0 USERID9
***** Bottom of data *****


```

6. Type S in the S line command column next to MEMBER1.
 7. Press Enter. File-AID marks the selected MEMBER1 "SELECTED".
 8. Press PF3 to execute the copy.
- File-AID returns to the Copy Utility screen and displays the short message "4 MEMBERS COPIED".
9. Press PF1 to display the long message for the copy completion ([Figure 405](#) on page 399). Member1 and all its generation members (-1, -2, and -3) were copied successfully.

Figure 405. Copy Completed

```
File-AID ----- Copy Utility ----- 4 MEMBERS COPIED
COMMAND ==>

Specify "FROM" Dataset or zFS Path Information:
Dataset or path ==> 'USERID9.FASAMP.PDSEV2'
Volume serial ==> (If not cataloged)

Specify "TO" Dataset or zFS Path Information:
Dataset or path ==> FASAMP.PDSEV2A
Volume serial ==> (If not cataloged)
Disposition ==> NEW (OLD, MOD, NEW)

Specify Execution Information:
Process online or batch ==> 0 (O = Online; B = Batch)

Specify Selection Criteria Information: (E = Existing; T = Temporary;
Selection criteria usage ==> N M = Modify; Q = Quick; N = None)
Selection criteria dataset ==>
M [XVJFS472 FS472-4 members were read from USERID9.FASAMP.PDSEV2] list)
```

Steps:

1. Review the long message.
2. Press PF4 to return to the Primary Option Menu.

If you want to see a listing of the copied generation members, go to Browse or Edit, specify the copied dataset FASAMP.PDSEV2A and follow the instructions for [Displaying Generation Members](#) on page 385.

XFACOPY Sample Training Files

Listing of Sample Files

This section describes the sample training files provided with File-AID/MVS. [Table 6](#) lists the files that are created when executing the XFACOPY CLIST. See [Creating Your Training Files](#) on page 19 for instructions on creating your own set of FASAMP sample files by running the XFACOPY CLIST.

Table 6. XFACOPY Sample Training Files

Sample File	Description	
FASAMP.COBSRC.NEW	3 sample COBOL programs for Source Compare to be compared to FASAMP.COBSRC.OLD.	
FASAMP.COBSRC.OLD	3 sample COBOL programs for Source Compare to be compared to FASAMP.COBSRC.NEW.	
FASAMP.COMPARE	Sample Data file for Compare.	
FASAMP.EMPLOYEE	Sample employee data file.	
FASAMP.EMPLOYEE2	Sample employee data file with changes.	
FASAMP.EMPMAST	Sample employee data file.	
FASAMP.INVFILE	Sample inventory data file.	
FASAMP.INVFILE2	Sample inventory data file.	
FASAMP.JCL	Sample JCL file.	
FASAMP.JCL.NEW	3 sample JCL for JCL Compare to be compared to FASAMP.JCL.OLD.	
FASAMP.JCL.OLD	3 sample JCL for JCL Compare to be compared to FASAMP.JCL.NEW.	
FASAMP.LAYOUTS	Sample record layouts:	
	Member	Description
	COBOLPGM	Sample COBOL program with embedded record layout.
	EMPLOYEE	Good layout for EMPLOYEE master file (COBOL).
	EMPLOYEE2	Bad layout for EMPLOYEE master file (COBOL).
	FADB2	Record Layout for the File-AID for DB2 SMF record.
	FAIMS	Record Layout for the File-AID for IMS SMF record.
	FAMVS	Record Layout for the File-AID/MVS SMF record.
	INVFILE	Inventory file layout (COBOL).
	LMSBASE	Record Layout for the License Management System (LMS) SMF record.
	ORDERPO	Order file purchase order layout (COBOL).
	ORDERSC	Order file sub-contractor layout (COBOL).
	ORDERWO	Order file work order layout (COBOL).
	PLIEMP	Good layout for EMPLOYEE master file (PL/I).
	PLIEMP2	Bad layout for EMPLOYEE master file (PL/I).
	PLIINV	Inventory file layout (PL/I).
	PLIORDPO	Order file purchase order layout (PL/I).
	PLIORDSC	Order file sub-contractor layout (PL/I).
	PLIORDWO	Order file work order layout (PL/I).
	PLIPGM	Sample PL/I program with embedded record layout.
	PLISEGS	Segmented data file layout (PL/I).
	SEGRECS	Segmented data file layout (COBOL).
FASAMP.LINEAR.CI4K	Sample 4K Linear employee data file.	

Table 6. XFACOPY Sample Training Files

Sample File	Description	
FASAMP.LINEAR.CI8K	Sample 8K Linear employee data file.	
FASAMP.LOADLIB1	Sample Load Library for Load Library Compare to be compared to FASAMP.LOADLIB2.	
FASAMP.LOADLIB2	Sample Load Library for Load Library Compare to be compared to FASAMP.LOADLIB1.	
FASAMP.ORDRFILE	Order data file.	
FASAMP.PLISRC.NEW	3 sample PL/I programs for Source Compare to be compared to FASAMP.PLISRC.OLD.	
FASAMP.PLISRC.OLD	3 sample PL/I programs for Source Compare to be compared to FASAMP.PLISRC.NEW.	
FASAMP.RFMTDEF	Sample reformat definition file.	
FASAMP.SEGFILE	Segmented data file.	
FASAMP.SELCRIT	Sample selection criteria file.	
FASAMP.XREF	Sample XREFs:	
	Member	Description
	COBOLPGM ROI ORDRFILE SEGFILE	Select layout embedded in a COBOL program. LMS SMF record test data file XREF. Order test data file XREF. Segmented test data file XREF.