



This is the tutorial for the base feature of IBM File Manager for z/OS®, one of the IBM zSeries® Problem Determination tools.

- **How to select records with a copybook template**
 - How to create a copybook template
 - How to save a copybook template
 - How to change a copybook template
- **How to customize how the data is displayed**
 - How to turn off, re-order, and hold fields
- **How to copy data**
 - How to copy a data set
- **How to print data**
 - How to print a data set



In this section – how to copy data – you will learn how to use the File Manager online panels to copy data.

Option 3 displays the utilities entry panel



```
Process  Options  Help
-----
File Manager          Primary Option Menu
Command ==> 3
-----
0 Settings      Set processing options      User ID . : TSS12
1 View          View data                    System ID : STLABF6
2 Edit          Edit data                    Appl ID  . : FMN
3 Utilities      Perform utility functions    Version . : 10.1.0
4 Tapes         Tape specific functions     Terminal. : 3278A
5 Disk/VSAM     Disk track and VSAM CI functions  Screen.  . : 1
6 OAM           Work with OAM objects        Date.    . : 2010/05/20
7 Templates     Template and copybook utilities  Time.    . : 04:50
8 HFS           Access Hierarchical File System
9 WebSphere MQ  List, view and edit MQ data
X Exit          Terminate File Manager

F1=Help      F2=Split      F3=Exit      F4=CRetriev  F7=Backward  F8
F9=Swap      F10=Actions   F12=Cancel

Enter
```

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From the File Manager main menu, Option 3 is Utilities. Type 3 on the command line, and press Enter.

Option 3 displays the copy data panel



```
Process  Options  Help
-----
File Manager          Utility Functions
Command ==> 3
-----
0 DBCS          Set DBCS data format for print
1 Create        Create data
2 Print         Print data
3 Copy          Copy data
4 Dslist        Catalog services
5 VTOC          Work with VTOC
6 Find/Change   Search for and change data
7 AFP           Browse AFP data
8 Storage       Browse user storage
9 Printdsn      Browse File Manager print data set
10 Loadlib      Load module utility functions
11 Compare      Compare data
12 Audit trail  Print audit trail report
13 Copybook     View and Print
14 WebSphere MQ List WebSphere MQ managers and queues

F1=Help      F2=Split      F3=Exit      F4=CRetrieved F7=Backward F8=
F9=Swap      F10=Actions   F12=Cancel

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```

From the File Manager utility functions, Option 3 is copy. Type 3 on the command line, and press Enter.

The copy utility panel is displayed



```
Process  Options  Help
-----
File Manager                      Copy Utility
Command ==> [ ]

From Partitioned, Sequential or VSAM Data Set, or HFS file:
Data set/path name . . . ADLAB.CUST1
Member . . . . . (Blank or pattern for member list)
Volume serial . . . . . (If not cataloged)
Start key . . . . . key or slot
Skip count . . . . . 0 Include Repeat skip
Copy count . . . . . ALL number of records to be copied

From Copybook or Template:
Data set name . . . . .
Member . . . . . (Blank or pattern for member list)

Processing Options:
Copybook/template Enter "/" to select option
 2 1. Above          - Batch execution          - Advanced member selection
  2. None           - Use proc          - Skip member name list
  3. Create dynamic - Ignore length mismatch - REXX member selection: P
  - Edit template   - JCL Source format  - Directory integrity
  - Type (1,2,S)    - Export mode        - Report PDS record counts

F1=Help   F2=Split  F3=Exit   F4=Expand  F7=Backward  F8=Forward
F9=Swap   F10=Actions F12=Cancel

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```

Here is the copy panel. Notice some of the options that you have here. If you are copying a keyed VSAM file, you can give it a beginning key in the Start key field. Or for any type of input file, if you specify a number in the Skip count field, it will bypass records at the beginning of the file before it starts copying. The Copy count field controls the total number of records to be copied. By default, all of the records will be copied. In this example a copybook or template is not given, although you can use a template to select records. If you plan to copy all of the records, there is no reason to use a template. If you are not familiar with templates, you should learn about them by taking the “how to select records with a copybook template” sections of this tutorial.

Note the copy utility panel is displayed and has more information than can fit on the screen. F8 will scroll to display the remaining panel information. Press F8.

Results from pressing F8



```
Process  Options  Help
-----
File Manager                               Copy Utility
Command ==> █                               More: -
Data set/path name . . . ADLAB.CUST1
Member . . . . . _____ (Blank or pattern for member list)
Volume serial . . . . . _____ (If not cataloged)
Start key . . . . . _____ key or slot
Skip count . . . . . 0 Include _____ Repeat skip _____
Copy count . . . . . ALL number of records to be copied
From Copybook or Template:
Data set name . . . . . _____
Member . . . . . _____ (Blank or pattern for member list)
Processing Options:
Copybook/template Enter "/" to select option
 2 1. Above          _ Batch execution          _ Advanced member selection
   2. None          _ Use proc _____      _ Skip member name list
   3. Create dynamic _ Ignore length mismatch _ REXX member selection: P
_ Edit template    _ JCL Source format    _ Directory integrity
_ Type (1.2.S)     _ Export mode           _ Report PDS record counts
                                   _ Binary mode, reclen
F1=Help   F2=Split   F3=Exit   F4=Expand   F7=Backward F8=
F9=Swap   F10=Actions F12=Cancel
Enter
```

Enter the name of the input file in the **Data set/path name** field and press enter.

Specify the name of the output data set



```
Process  Options  Help
-----
Copy from TSS12.ADLAB.CUST1
Command ==> _____

To Partitioned, Sequential or VSAM Data Set, or HFS file:
Data set/path name . ADLAB.CUST1.COPY +
Member name (or mask) . _____ (Blank or pattern for member list)
Volume serial . . . . . _____ (If not cataloged)

Processing Options:
Disposition
  1. Old or Reuse
  2. Mod
Stats Option
  - 1. Off
    2. Force
Execution "/" options
  - Replace members
  - Binary mode, reclen _____
ISPF Packing
  4 1. Asis
    2. Pack
    3. Unpack
    4. None
    5. Skip

F1=Help    F2=Split    F3=Exit    F4=Expand    F7=Backward  F8=
F9=Swap    F10=Actions F12=Cancel

Enter
```

Next, File Manager displays this panel, where you can give it the name of the output file. Type in the name of the file to receive the output in the **Data set/path name** field. In most cases, you might want to change the disposition to 1 (for Old). Old means that existing records are all deleted, and the output file will only have the newly copied records. However, if you specify number 2 (for Mod) in the disposition field, the copied records will be appended to the end of the file. Enter to continue.

Output file is modeled from input file



```
Process  Options  Help
-----
Allocate TSS12.ADLAB.CUST1.COPY
Command ==>

New Data Set Organization:
Select option      Instructions
 6 1. KSDS          The above data set does not exist.
 2. ESDS          To define or allocate a new data set select a data
 3. RRDS          set organization and press ENTER or press PF3/EXIT
 4. VRRDS         or PF12/CANCEL to return without allocation.
 5. LDS
 6. Non VSAM

                For a new data set, enter a data set name
                below to copy existing allocation attributes.

Existing Data Set:
Like data set . . . . . 'TSS12.ADLAB.CUST1'
Volume serial . . . . .

F1=Help      F2=Split    F3=Exit     F4=CRetrieve F7=Backward F8=
F9=Swap      F10=Actions F12=Cancel

Enter
```

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In this example the output file name that was specified does not exist. If the file did exist, the copy would have been done immediately. Since it does not, File Manager will walk you through the allocation of the new file. This panel is displayed, which prompts you to specify the output file type. Here is a tip - it is very easy to create a new file modeled after the input file. Just accept all of the defaults, and the output file will be created with the same attributes as the input file. Also notice that you have a choice of the output file formats. Be aware that you can copy between different file types. For example, you can copy from a VSAM file to a sequential file, or vice versa.

File Manager will use the input file as a model, so no changes will be typed on these allocation panels. Leave the file type option as a 6 (for non-VSAM) and press enter.

Attributes are based on input file



```
Process  Options  Help
-----
Allocate TSS12.ADLAB.CUST1.COPY
Command ==> █

More:  +
Specify a model data set, volume, SMS class names, or leave blank for defaults:
Like data set . . 'TSS12.ADLAB.CUST1'
Volume serial . . _____ (Blank for system default volume)
Device type . . . _____ (Generic unit or device address)
Data class . . . _____ (Leave blank for default)
Storage class . . MEDIUM _____ (Leave blank for default)
Management class _____ (Leave blank for default)

Space Requirements:
Space unit . . . CYLS _____ BLKS, TRKS, CYLS, KB, or MB
Primary units . . 1 _____ quantity of above units
Secondary units . 1 _____ quantity of above units
Directory blocks 0 _____ leave blank for SMS default
Record format . . VB _____ if new format: U,F,V, or D, with B,S,A,M
Record length . . 600 _____
Block size . . . 27998 _____ physical output block size
Data set type . . _____ LIBRARY, PDS, BASIC, EXTR, EXTP or LARGE

F1=Help      F2=Split    F3=Exit      F4=CRetriev  F7=Backward  F8=
F9=Swap      F10=Action  F12=Cancel

Enter
```

And now a panel is displayed, where you can specify the attributes of the output file. Notice that File Manager used the file attributes of the input file as a model to fill in these options automatically. For this example, those are the correct attributes, so leave them unchanged. Press enter.

The file copy completed



```
Process  Options  Help
-----
File Manager                               Copy Utility
Command ==>
100 record(s) successfully copied
From Partitioned, Sequential or VSAM Data Set, or HFS file:
Data set/path name . . . ADLAB.CUST1 +
Member . . . . . (Blank or pattern for member list)
Volume serial . . . . . (If not cataloged)
Start key . . . . . key or slot
Skip count . . . . . 0 Include Repeat skip
Copy count . . . . . ALL number of records to be copied
From Copybook or Template:
Data set name . . . . . adlab.template
Member . . . . . cust1000 (Blank or pattern for member list)
Processing Options:
Copybook/template Enter "/" to select option
 1 1. Above Batch execution Advanced member selection
 2. None Use proc Skip member name list
 3. Create dynamic Ignore length mismatch REXX member selection: P
Edit template JCL Source format Directory integrity
Type (1,2,S) Export mode Report PDS record counts
F1=Help F2=Split F3=Exit F4=Expand F7=Backward F8=Forward
F9=Swap F10=Actions F12=Cancel
Enter
```

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The new output file was allocated, and the copy operation was performed. That was a simple example of copying a sequential file using the online panels.

Now change the processing option copybook/template to a 1 and use your adlab.tamplate(cust1000) template member. Press enter.

Specify the name of the output data set



```
Process  Options  Help
-----
Copy from TSS12.ADLAB.CUST1
Command ==> _____

To Partitioned, Sequential or VSAM Data Set, or HFS file:
Data set/path name . . . ADLAB.CUST1.COPY.cust1000
Member name (or mask) . . . (Blank or pattern for member list)
Volume serial . . . . . (If not cataloged)

To Copybook/Template From: TSS12.ADLAB.TEMPLATE(CUST1000)
Data set name . . . . .
Member . . . . . (Blank or pattern for member list)

Processing Options:
Copybook/template usage  Disposition  Enter "/" to select option
 2 1. Above              2 1. Old or Reuse  _ Replace members
   2. None                2. Mod           _ Edit template mapping
 3. Create dynamic       Stats Option     _ Edit template source
ISPF Packing             - 1. Off        _ Binary mode, reclen ____
 4 1. Asis                2. Force
   2. Pack

F1=Help    F2=Split    F3=Exit    F4=Expand    F7=Backward  F8=
F9=Swap    F10=Actions F12=Cancel

Enter
```

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Change the name of the 'to' data set and press enter.

Output file is modeled from input file



```
Process  Options  Help
-----
Allocate TSS12.ADLAB.CUST1.COPY.CUST1000
Command ==>

New Data Set Organization:
Select option      Instructions
 6 1. KSDS          The above data set does not exist.
   2. ESDS          To define or allocate a new data set select a data
   3. RRDS          set organization and press ENTER or press PF3/EXIT
   4. VRRDS         or PF12/CANCEL to return without allocation.
   5. LDS
   6. Non VSAM

                          For a new data set, enter a data set name
                          below to copy existing allocation attributes.

Existing Data Set:
Like data set . . . . . 'TSS12.ADLAB.CUST1'
Volume serial . . . . .

F1=Help    F2=Split    F3=Exit    F4=CRetriev  F7=Backward  F8=
F9=Swap    F10=Actions  F12=Cancel

Enter
```

Take the default settings to model the input file. Enter.

Attributes are based on input file



```
Process  Options  Help
-----
Allocate TSS12.ADLAB.CUST1.COPY.CUST1000
Command ==> _____ More: +
Specify a model data set, volume, SMS class names, or leave blank for defaults:
Like data set . . 'TSS12.ADLAB.CUST1'
Volume serial . . _____ (Blank for system default volume)
Device type . . . _____ (Generic unit or device address)
Data class . . . _____ (Leave blank for default)
Storage class . . MEDIUM _____ (Leave blank for default)
Management class _____ (Leave blank for default)

Space Requirements:
Space unit . . . CYLS BLKS, TRKS, CYLS, KB, or MB
Primary units . . 1 quantity of above units
Secondary units . 1 quantity of above units
Directory blocks 0 leave blank for SMS default
Record format . . VB if new format: U,F,V, or D, with B,S,A,M
Record length . . 600
Block size . . . 27998 physical output block size
Data set type . . _____ LIBRARY, PDS, BASIC, EXTR, EXTP or LARGE

F1=Help F2=Split F3=Exit F4=CRetriev F7=Backward F8=
F9=Swap F10=Actions F12=Cancel
```

Enter

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Take the default settings to use the file attributes of the input file, and press Enter.

The file copy completed



```
Process  Options  Help
-----
File Manager                               Copy Utility
Command ==>
19 record(s) copied: 0 truncated: 0 fields truncated
From Partitioned, Sequential or VSAM Data Set, or HFS file:
Data set/path name . . . ADLAB.CUST1 +
Member . . . . .          (Blank or pattern for member list)
Volume serial . . . . .   (If not cataloged)
Start key . . . . .      key or slot
Skip count . . . . . 0   Include      Repeat skip
Copy count . . . . . ALL number of records to be copied
From Copybook or Template:
Data set name . . . . . ADLAB.TEMPLATE
Member . . . . . CUST1000 (Blank or pattern for member list)
Processing Options:
Copybook/template  Enter "/" to select option
 1 1. Above         _ Batch execution         _ Advanced member selection
 2. None           _ Use proc          _ Skip member name list
 3. Create dynamic _ Ignore length mismatch _ REXX member selection: P
_ Edit template   _ JCL Source format   _ Directory inte
_ Type (1,2,S)    _ Export mode         _ Report PDS rec
F1=Help          F2=Split             F3=Exit            F4=Expand          F7=Backward
F9=Swap          F10=Actions          F12=Cancel
```

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The copy completed and only records meeting the selection criteria in the template were processed. F3 twice.

Option 1 displays the view entry panel



```
Process  Options  Help
-----
File Manager          Primary Option Menu
Command ==> 1
-----
0 Settings      Set processing options      User ID . : TSS12
1 View          View data                    System ID : STLABF6
2 Edit          Edit data                    Appl ID  . : FMN
3 Utilities     Perform utility functions   Version . : 10.1.0
4 Tapes        Tape specific functions     Terminal. : 3278A
5 Disk/VSAM    Disk track and VSAM CI functions Screen.  . : 1
6 OAM          Work with OAM objects       Date.   . : 2010/05/19
7 Templates    Template and copybook utilities Time.   . : 03:15
8 HFS          Access Hierarchical File System
9 WebSphere MQ List, view and edit MQ data
X Exit         Terminate File Manager

F1=Help      F2=Split    F3=Exit     F4=CRetriev F7=Backward F8
F9=Swap      F10=Actions F12=Cancel

Enter
```

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From the File Manager main menu, Option 1 is View. Type 1 on the command line, and press Enter.

The view entry panel is displayed



```
Process  Options  Help
-----
File Manager                      View Entry Panel
Command ==> _____

Input Partitioned, Sequential or VSAM Data Set, or HFS file:
Data set/path name ADLAB.CUST1.** +
Member . . . . . _____ (Blank or pattern for member list)
Volume serial . . _____ (If not cataloged)
Start position . . _____ +
Record limit . . . _____ Record sampling _

Copybook or Template:
Data set name . . ADLAB.COPYLIB
Member . . . . . CUST1 (Blank or pattern for member list)

Processing Options:
Copybook/template  Start position type  Enter "/" to select option
1 1. Above          - 1. Key                - Edit template _ Type (1,2,S)
  2. Previous        - 2. RBA                - Include only selected records
  3. None            - 3. Record number     - Binary mode, reclen 80
  4. Create dynamic

F1=Help    F2=Split    F3=Exit    F4=Expand    F7=Backward  F8=
F9=Swap    F10=Left   F11=Right  F12=Cancel

Enter
```

The view entry panel is displayed. Change the qualified data set name to include two asterisks which will display a list of files. Enter.

Select a data set from the list



```
Process  Options  Help
File Manager          Data Set Selection          Row 00001 of 00006
Command ==>          Scroll CSR
Data Set Selection for TSS12.ADLAB.CUST1.**
Data Set Name          Type  Volume Created
TSS12.ADLAB.CUST1.**  *    *          *
TSS12.ADLAB.CUST1    NVSAM STF2A6 2010.113
S TSS12.ADLAB.CUST1.COPY    NVSAM SMS01E 2010.140
TSS12.ADLAB.CUST1.COPY.CUST1000  NVSAM SMS00B 2010.140
- TSS12.ADLAB.CUST1.KSDS    KSDS          2010.113
- TSS12.ADLAB.CUST1.KSDS.DATA  DATA SMS015 2010.113
- TSS12.ADLAB.CUST1.KSDS.INDEX  INDEX SMS015 2010.113
**** End of data ****

F1=Help  F2=Split  F3=Exit  F4=CRetriev  F5=RFind  F7=
F8=Forward  F9=Swap  F10=Left  F11=Right  F12=Cancel  Enter
```

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There are six files displayed. Note the two new files are included in the list.

To the left of the adlab.cust1.copy file, type an “s” in the prefix field and press enter.

The data set is displayed



```
Process  Options  Help
View      TSS12.ADLAB.CUST1.COPY                               Top of 96
Command ==> |_____ Scroll CSR
                                     Record AT TOP           Format TABL
CUST-ID NAME          ACCT-BALANCE  ORDERS-YTD  ADDR
#3      #4              #5              #6 #7
AN 1:5  AN 6:17        PD 23:5        BI 28:2  AN 30:20
<--->  <---+---1---+>  <---+---1>    <---+>  <---+---1---+--->
***** **** Top of data ****
000001 01001  Lynn, Amanda           610.05           10 89 Clay Springs Rd
000002 02200  Graham, Anne                 67.68            9 119 North Lake Road
000003 02202  Moritz, Margaret            1234.56           5 1512 Pine Bluff
000004 03003  Prentice, Anne                0.00              7 33 Renshaw
000005 03390  Stout, Doug                   74.00             3 649 Brown Street
000006 05570  Parker, Ford                 233.27            12 3039 Manning St.
000007 06101  Early, Brighton             311.08            10 9662 Summit Road
000008 06106  Lander, Annette              489.84             7 6127 Cedar Street
000009 06900  Bacon, Chris P.             1001.01            0 1134 Rosetta
000010 07008  Houston, Roger               296.97            10 4411 Northside Pkway
000011 07044  Schauer, April                88.83              7 7331 Gulf Shore Dr.
000012 07077  Mann, Mr. E.                 621.05             1 24 Valentine Rd
F1=Help  F2=Zoom  F3=Exit  F4=CRetriev  F5=RFind  F6=RC
F7=Up    F8=Down  F9=Swap  F10=Left   F11=Right F12=Ca
```

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The data set is displayed. F3.

Select a data set from the list



```
Process  Options  Help
File Manager          Data Set Selection          Row 00001 of 00006
Command ==>          Scroll CSR
Data Set Selection for TSS12.ADLAB.CUST1.**
Data Set Name          Type  Volume  Created
TSS12.ADLAB.CUST1.**  *    *      *
- TSS12.ADLAB.CUST1   NVSAM STF2A6 2010.113
- TSS12.ADLAB.CUST1.COPY NVSAM SMS01E 2010.140
- TSS12.ADLAB.CUST1.COPY.CUST1000 NVSAM SMS00B 2010.140
- TSS12.ADLAB.CUST1.KSDS KSDS          2010.113
- TSS12.ADLAB.CUST1.KSDS.DATA DATA SMS015 2010.113
- TSS12.ADLAB.CUST1.KSDS.INDEX INDEX SMS015 2010.113
**** End of data ****

F1=Help  F2=Split  F3=Exit  F4=CRetriev  F5=RFind  F7=
F8=Forward  F9=Swap  F10=Left  F11=Right  F12=Cancel  Enter
```

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The list of data set is again displayed. This time, select the cust1.copy.cust1000. enter.

The data set is displayed



Process Options Help

View TSS12.ADLAB.CUST1.COPY.CUST100 + Top of 19
 Command ==> | Scroll CSR

Record AT TOP Format TABL

CUST-ID	NAME	ACCT-BALANCE	ORDERS-YTD	ADDR
#3	#4	#5	#6	#7
AN 1:5	AN 6:17	PD 23:5	BI 28:2	AN 30:20
<--->	<---+---1---+>	<---+---1>	<---+>	<---+---1---+--->
***** **** Top of data ****				
000001	02202 Major, Art	1234.56	5	1512 Pine Bluff
000002	06900 Bacon, Chris P.	1001.01	0	1134 Rosetta
000003	30005 Wynn, Betty-May	8000.08	7	9005 Murphy Road
000004	39900 Dewitt, Howdy	15000.50	1	4111 Northside PkWay
000005	40045 Wood, Holly	25000.02	7	90210 Mt. Lee Rd
000006	40909 Burr, Tim	7766.55	0	4111 Northside PkWay
000007	41060 Maugham, Collier	6655.44	3	1000 Atrium Way
000008	43004 Coates, Levon	1000.01	20	229 Riverside Drive
000009	45400 Underhill, Doug	11223.34	4	2929 N. Central Ave
000010	46050 Wright, Candace B.	9876.54	4	3100 Smoketree Ct
000011	46400 Waters, I. C.	1234.56	4	296 104th
000012	46500 Kahn, Ruby	22000.11	0	4700 S. Sy

F1=Help F2=Zoom F3=Exit F4=CRetriev F5=RFind F6=Find
 F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Ca

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The data set is displayed.

Press F3 twice to return the primary option menu.

That is the end of this section, which described how to copy data.

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