

ISPF/VSAM UTILITY

**Edit/copy/define VSAM
files from TSO/ISPF**



ISPF/VSAM UTILITY

```
96/01/25 ----- ISPF/VSAM DATASET UTILITY V2.1 ----- 14:00
OPTION ===>

E - EDIT          AK - DEFINE KSDS   AL - DEFINE ALIAS
B - BROWSE        AR - DEFINE RRDS   R - RENAME
EC - EDIT w/copycode AE - DEFINE ESDS   C - COPY
BC - BROWSE w/copycode AA - DEFINE AIX   D - DELETE
BF - BROWSE full screen SC - SHOW copycode

BLANK - DATASET/OBJECT INFORMATION
T - TUTORIAL

Name of Dataset/Object to be Processed:
Object Name  ===> YOUR.DATASET.NAME
Volume Serial ===>                               (for uncataloged nonvsam files)
New Name     ===>

COPY CODE DSN ===> USER.SOURCE
MEMBER       ===> COPY4

To Save Allocation Parameters ===> OFF           (on or off)
SAVE PDS NAME ===> USER.SOURCE
SAVE PDS MEMBER ==>
```

Product Overview

ISPF/VSAM UTILITY provides direct editing or browsing of VSAM or NON-VSAM files as well as on-line access to IDCAMS functions normally done in batch. It was designed primarily for applications and systems programmers. ISPF/VSAM UTILITY runs in an ISPF environment on MVS. Installation is simple and takes less than 1 hour.

ISPF/VSAM UTILITY's Edit functions eliminate the need to write one time file "FIX-IT" programs to change datasets. Test datasets can be created and/or changed without running batch jobs. Problems with production datasets can be quickly located and repaired.

Edit is available in two formats. The first format provides a character and hex display of the record. The second format uses COBOL copycode to provide a "COBOL" view of the data. This includes access to copycode members stored in CA-Librarian if you have their optional LAM (Library Access Method). In addition to these Browse provides an additional third format that is full screen and has the "look and feel" of ISPF Browse.

VSAM datasets may also be defined online using panels. KSDS, ESDS, RRDS and Alternate indexes may be defined. The allocation parameters can be obtained by "MODELING" after an existing dataset or simply filling out the panel. The allocation parameters can be saved in a user defined PDS for later recall.

Datasets can then be loaded using the dataset COPY function from virtually any type of dataset, or by using the EDIT function.

Existing dataset statistics and allocation parameters can be displayed in an easily readable format. VSAM and NON-VSAM datasets can be COPIED, DELETED and RENAMED.

ISPF/VSAM UTILITY executes as a panel driven dialog under ISPF. It can be installed to be invoked from the ISPF Primary Option Menu (sample below) or as an option from a sub-menu such as the Utilities menu.

```
----- ISPF/PDF PRIMARY OPTION MENU VERSION n -----
OPTION =====> V
0 ISPF PARMS      - Specify terminal and user parameters   USERID - $$MAC
1 BROWSE         - Display source data or output listings  PROC   - TSOPROC
2 EDIT           - Create or change source data         PF KEYS - 24
3 UTILITIES      - Perform utility functions           TERMINAL - 3278
4 FOREGROUND     - Invoke language processors or SCRIPT  TIME   - 11:25
5 BATCH          - Submit job for language processing    JULIAN  - 96.025
6 COMMAND        - Enter TSO command or clist          DATE   - 96/01/25
7 DIALOG TEST    - Perform dialog testing
8 IM UTILITIES   - Perform library management utility functions
C CHANGES       - Display summary of changes for this release
V VSAM UTILITY   - VSAM file utility
T TUTORIAL       - Display information about ISPF/PDF
X EXIT           - Terminate ISPF using log and list defaults

Enter the END command to terminate ISPF
```

ISPF/VSAM UTILITY

EDIT and Browse VSAM and NON-VSAM Datasets

The first screen to appear is the
ISPF/VSAM UTILITY
primary menu.

```
96/01/25 ----- ISPF/VSAM DATASET UTILITY V2.1 ----- 14:00
OPTION  ==>>

E - EDIT                AK - DEFINE KSDS      AL - DEFINE ALIAS
B - BROWSE              AR - DEFINE RRDS      R - RENAME
EC - EDIT w/copycode   AE - DEFINE ESDS      C - COPY
BC - BROWSE w/copycode AA - DEFINE AIX  D - DELETE
BF - BROWSE full screen SC - SHOW copycode

BLANK - DATASET/OBJECT INFORMATION
T - TUTORIAL

Name of Dataset/Object to be Processed:
Object Name  ==>>
Volume Serial ==>>          (for uncataloged nonvsam files)
New Name     ==>>

COPY CODE DSN  ==>>  USER.SOURCE
MEMBER        ==>>  COPY4

To Save Allocation Parameters ==>>  OFF  (on or off)
SAVE PDS NAME ==>>  USER.SOURCE
SAVE PDS MEMBER ==>>
```

If E (Edit) or B (BROWSE) is selected on the primary menu, the following screen is displayed. One record per screen is shown. While in Edit mode modifications can be made in character or hexadecimal by simply overtyping and pressing ENTER. Complete scrolling functions are included. Record selection can also be done by overtyping the key with a full or partial key and pressing ENTER. A find command is provided. In edit mode, records can be deleted or added using pre-existing records. Also in edit mode a change command allows finding and replacing a specified character string anywhere within a file.

```
ISPF/VSAM UTIL - EDIT ----- KSDS DS: T154SCM.KSDS -----
COMMAND ==>>                                REC CNT> 0001  SCROLL> 0952
WAB120398457
ECCFFFFFFFFF
612120398457

LRECL          WAB120398457WIDGET ATTACHMENT BRACKET          ..:.....
2000          ECCFFFFFFFFFECCCE4CEECCDCDE4CDDCCE4444402700001          START
              6121203984576947530133138455302913253000000EA90054          1
              -----1-----2-----3-----4-----5
RKP KEYLN    i.|.....)  ..#.  ACE DISCOUNT WIDGETS
0            12  8240000A0954444FF724444CCC4CCECDEDE4ECCCEEE4444444
              93F0001E1ED0000FFB60000135049236453069475320000000
              -----1-----2-----3-----4-----5
              ..g.FRANKS HIGH QUALITY WIDGETS          ...WIDGET SU
              4440080CDCDE4CCCC4DECDCDE4ECCCEEE444003BECCCE4EE
              00000766915220897808413938069475320000003D694753024
              -----1-----2-----3-----4-----5
PERMARKET          ...BOBS WIDGETS
              DCDDCDDCE444444444444020CDCE4ECCCEEE444444444444          END
              75941925300000000000001B0262206947532000000000000          200
              -----1-----2-----3-----4-----5
U(UP) D(DOWN) R(RIGHT) L(LEFT) T(TOP) B(BOTTOM) A(ADD) DEL(DELETE) F(FIND)
```

EDIT and Browse with Copycode

EC (Edit with Copycode) or BC (Browse with Copycode) provides a panel similar to the following. The TYP field contains a code describing the USAGE of the field (ie; TYP 3 corresponds to a USAGE of COMP-3).

If you use copycode with multiple 01 levels, ISPF/VSAM Utility can present you with the 01 level matching the record you are currently in Browse or Edit on.

```
ISPF/VSAM UTIL - EDIT -- KSDS DS: T154SCM.KSDS -----
COMMAND ===> REC CNT> 0001 SCROLL> 0001
WAB120398457
ECCFFFFFFFFF
612120398457

LEVEL/NAME          LENGTH  TYP  DATA
01 INVENTORY-RECORD
05 INVENTORY-KEY          12  X   WAB120398457
05 INVENTORY-NAME        30  X   WIDGET ATTACHMENT BRACKET
05 INVENTORY-WAREHOUSE-DATA
07 INVENTORY-COUNT          7  9   3045897
07 INVENTORY-BACK-ORDER    4  9   1300
07 INVENTORY-ADD-DATE      5  3   89234
07 INVENTORY-BIN-NUMBER   10  9   7214308957
05 INVENTORY-FINANCIAL-DATA
07 INVENTORY-COST          7  9   79525.76
07 INVENTORY-CURRENT-DISCOUNT 7  9   -340.10
05 INVENTORY-DISTRIBUTOR-DATA
   SUBSCRIPT          1

POSITION:          1
U(UP) D(DOWN) R(RIGHT) L(LEFT) T(TOP) B(BOTTOM) A(ADD) DEL(DELETE) F(FIND)
```

In this format, each field defined by the COBOL Copycode is presented with the picture clauses applied to the data. Invalid data (ie; nonnumeric data in a numeric field) would be flagged. To change a field, simply overtype it and press ENTER. **ISPF/VSAM UTILITY** will ensure correct data representation.

When editing or browsing with copycode a FC (Find Copycode) command can be used to perform a find on a dataname in the copycode. The record is redisplayed based on the dataname. F(Find) is used to find actual data values.

With both formats (hexadecimal or Copycode) you can find records directly by entering the desired key value in the key field. ALL commands can be set up as PF keys without changing PF key functions outside of **ISPF/VSAM UTILITY**. With **ISPF/VSAM UTILITY** there is no record length restriction.

Full Screen Browse

Also available is the full screen browse of a VSAM or NON-VSAM file. It has the look and feel of ISPF's full screen browse for sequential datasets.

```
BROWSE - YOUR.DATASET.NAME ----- COLS 001 080
COMMAND ==> SCROLL ==> PAGE
KSDS KEYPOS:2 KEYLEN: 10
..005234432...Widget attachment bracket      87..RAIL    ...53783993.....
..005345075...Yellow dog politicians muzzle  74..TRUCK  ...89333399.....
..006234449...sheet metal screws            44..COMMON ...23409092.....
..006543409...Extension cord - 20FT         22..FOB    ...21353044.....
..006543413...Extension cord - 30FT         22..FOB    ...21353044.....
..006543415...Extension cord - 35FT         22..FOB    ...21353044.....
..008497666...Antifreeze Tester             19..TRUCK  ...24978883.....
..009543419...Link chain - 10FT             22..FOB    ...42353541.....
..009543421...Link chain - 50FT             22..FOB    ...42353541.....
..009543423...Link chain - 100FT           22..FOB    ...42353541.....
..009543425...Link chain -500FT            22..FOB    ...42353541.....
..010554425...Steel dolly - 23IN.           62..FOB    ...73786923.....
..010554427...Steel dolly - 19IN.           62..FOB    ...73786923.....
..010554435...Plastic dolly - 24IN.         62..FOB    ...73786923.....
..010554437...Plastic dolly - 23IN.         62..FOB    ...73786923.....
..010554445...Stainless steel dolly - 20IN. 62..COMMON ...73786923.....
..010554447...Stainless steel dolly - 25IN. 62..COMMON ...73786923.....
```

This Browse format provides you with a means of seeing multiple records per screen. You can also view the records in hex mode. All of the normal ISPF browse commands are available. For instance, all variations of the FIND command can be used - find in a location, find a hex value, etc.

Swapping To/From Full Screen Browse

If you find a record you want to modify, simply pressing a PFkey will take you into EDIT on the file positioned at the record you were browsing. While in an Edit session you can swap to full screen browse with the same PFkey.

Allocate VSAM Datasets

A sample AK (Allocate/Define KSDS) screen is shown below. The AR (Allocate/Define RRDS), AE (Allocate/Define ESDS) and AA, (Allocate/Define/Build alternate index) screens are similar. By using the Model field, the parameters of an existing dataset can be used when creating a new one. The values associated with the Model dataset will automatically be filled in. Modeled values can be overtyped to modify. Parameters can be saved in a PDS for future allocations using "Save Allocation Parameters" on main menu). Previously saved allocation parameters can be recalled by entering the member name in "SAVE PDS MEMBER".

```
96/01/25 ----- ISPF/VSAM UTILITY ALLOCATE KSDS -----
COMMAND ==>
Cluster ==> your.dataset.name
Data ==> your.dataset.name.data
Index ==> your.dataset.name.index
Model ==>
Member ==> (parm save member name)

Data Volser ==> SYS1PK Index Volser ==> SYS1PK
Avg Rec Size ==> 250 Max Rec Size ==> 250
Data CI Size ==> 2048
Index CI Size ==> 4096
Freespace%CI/CA ==> 0 / 0
Share Options ==> 2 / 3
Imbed ==> NO
Replicate ==> YES

Key Offset ==> 0
Key Length ==> 22

Space Units ==> CYL (TRK,CYL or REC)
Primary Alloc ==> 5 Secondary Alloc ==> 1
```

```
96/01/25 ----- ISPF/VSAM UTILITY ALLOCATE ADDITIONAL PARAMETERS -----
COMMAND ==>

SPACE OUT THE PARAMETERS YOU WANT TO DEFAULT
 Bufferspace ==> 5000 0-16776704
 Destagewait ==> YES YES for Destaging
 Erase ==> YES YES for Erase upon Delete
 Exceptionexit ==> EXPTEX Name of user written exit
 Ordered ==> YES YES for Ordered Volumes
 Reuse ==> YES YES for Reusable dataset
 Spanned ==> YES YES for span CI boundaries
 Stage ==> BIND STAGE, BIND or CYLF
 To(date) ==> YYDDD
 For(days) ==> 0 - 9999
 Writecheck ==> YES YES for write check
 Owner ==> Owner-id or cluster
```

A second dataset allocation screen (optional) can also be used to complete the allocation.

ISPF/VSAM UTILITY

Dataset information

If OPTION on the primary menu is left blank and Object Name filled in, then panels similar to the following DATASET INFORMATION panels will be displayed:

```
96/01/25----- DATASET INFORMATION ----- page 1 of 3
COMMAND ==>
CLUSTER: ZAPB.TMSTMC          CREATION:    93.145
DATA:  ZAPB.TMSTMC.DATA      EXPIRATION:  0.000
INDEX:  ZAPB.TMSTMC.INDEX    LAST UPDATE: 93.350
CATALOG: CATALOG.ICFUCAT.VMVSCAT ORGANIZATION: KSDS
-----D A T A ----- I N D E X -----
OWNER:
VOLUME SER/TYPE:          PRB007 / 3350          RORTMC
ALLOC PRIM/2nd:          TRK    198 / 72          TRK    3 / 1
REC LEN AVG/MAX:          250 / 250              N/A
KEYLEN/REL KEY POS/AIX RKP  51 / 0 / N/A        N/A
CI SIZE:                  512                    4096
FREESPACE CI/CA:          0% / 6%                N/A
SPLITS CI/CA              224 / 6                6 / 0
EXTENTS:                  2                      2
-----
RECS TOTAL:  4176          RECS ADDED:  5301          RECS RETRIEVE: 2472963
RECS UPDATED: 65298        RECS DELETED: 5198
-----
SHARE OPTION: 2,3          SPANNED:      NO          IMBED:      NO
SPEED:        YES          REUSE:        NO          REPLICATE:  NO
ERASE         NO          UPGRADE:     N/A         NONUNIQUE:  N/A
```

```
96/01/25 ----- DATASET INFORMATION----- page 2 of 3
COMMAND ==>
-----
Bufferspace   ==> 10240
Destagewait   ==> YES
Exceptionexit ==> EXPTEX
Ordered       ==> YES
Stage         ==> BIND
Writecheck    ==> YES
```

A third screen containing any objects that may be related to the original selected object, such as alternate indexes, is displayed when necessary.

```
96/01/25 ----- DATASET INFORMATION ----- Row 1 to 2 of 2
COMMAND ==>          CREATION:    93.145
OBJECTS RELATED TO KSDS CLUSTER: ZAPB.TMSTMC
-----
OBJECT TYPE          OBJECT NAME
-----
ALT INDEX            ZAPB.TMSTMC.VOLALT
PATH                 ZAPB.TMSTMC.PATH
```


Copy and Delete Datasets

The COPY (C) function allows for various VSAM and NON-VSAM capabilities. Besides allowing standard copying (VSAM to VSAM and NON-VSAM to NON-VSAM), it allows for copying VSAM to NON-VSAM and NON-VSAM to VSAM. Another convenient feature is the ability to copy PDS members to VSAM files. This would allow building test data in a PDS member and using this data to create a test VSAM file. Following is a sample copy screen. You can use the Number of Records to Copy, Number of Records to Skip, Replace like key Records, From and To Key options to selectively build test datasets from current production datasets.

```
96/01/25 -----ISPF/VSAM-UTIL DATASET COPY -----
COMMAND ==>

FROM Dataset name ==>  'YOUR.KSDS.DATASET'

TO   Dataset name ==>  'YOUR.OTHER.KSDS.DATASET'
     Volume ser   ==>  (nonvsam only)

For any Dataset:
  Number of Records to Copy   ==>
  Number of Records to Skip   ==>
  Replace like key Records?   ==> NO

For KSDS copies only:
  From Key   ==>
  To   Key   ==>

Press Enter to Copy                               Press End to Exit
```

Renaming can also be done for both VSAM and NON-VSAM files. Renames are done directly on the primary menu.

The DELETE (D) function can be used for VSAM and NON-VSAM files as well as PDS members. Following is a sample DELETE screen:

```
96/01/25 ----- DELETE DATASET / OBJECT ----- ROW 1 TO 3 OF 3
COMMAND ==>
PRESS END TO CANCEL OR ENTER TO CONFIRM DELETE
ABOUT TO DELETE: ZAPB.TMSTMC
ORGANIZATION: KSDS
VOLUME SER: DATA- ESAWRK                INDEX- ESAWRK
CATALOG: YOUR.USER.CATALOG
CREATION DATE: 94.018
EXPIRATION: 00.000
***** RELATED OBJECTS *****
OBJECT TYPE      OBJECT NAME
-----
DATA            ZAPB.TMSTMC.DATA
INDEX           ZAPB.TMSTMC.INDEX
ALTINDEX       ZAPB.TMSTMC.VOLALT
```

Installation takes less than an hour.

For a **FREE 30 DAY TRIAL**, send in the lease agreement or give us a call. **(417) 882-8012**