



**Quick Reference**  
**Release 3.60**

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# FileKit 3.60 Quick Reference

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Information in this document details general features and functionality of the **CBL Product Suite 3.60** component, **FileKit**.

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The following publications for CBL Product Suite and its component products are available in Adobe Acrobat PDF format at CBL web page [www.cbl.com/documentation.php](http://www.cbl.com/documentation.php):

- CBL Product Suite Customisation Guide
- SELCOPY User Manual
- CBLVCAT User Manual
- FileKit Reference and User Guide
- FileKit Text Editor Manual
- FileKit Data Editor (SDE) Manual
- FileKit REPORT Utility
- FileKit SMF Utilities
- FileKit Quick Reference
- FileKit Training Manual

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The following generic terms are used throughout this document to indicate all available versions and releases of IBM mainframe operating systems:

**MVS** - z/OS, OS/390, MVS/ESA, MVS/XA, MVS/SP, OS.

**VSE** - z/VSE, VSE/ESA, VSE/SP, DOS.

**CMS** - z/VM, VM/ESA, VM/XA, VM/SP.

**All** - All MVS, VSE and CMS operating systems.

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## Introduction

---

The Quick Reference summarises FileKit commands, options and default Function Key settings which are arranged by application feature. It is intended for application developers and administrators who use FileKit release 3.60.

Information in this document was extracted from the following release 3.60 publications:

- FileKit Reference and User Guide
- FileKit Text Editor Manual
- FileKit Data Editor (SDE) Manual

## Reading Syntax Diagrams

Syntax diagrams are used throughout CBL Product Suite documents to define primary command syntax and obey a standard format as defined in "*Command Reference Syntax Conventions*" in the "*FileKit Text Editor*" and "*FileKit Data Editor (SDE)*" manuals.

# Menu Panels

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FileKit functions and utilities may be launched via the panel option menus.

---

## Primary Options (=)

---

| Opt | Title            | Description  |
|-----|------------------|--|
| 0   | Settings         | Set FileKit options.   |
| 1   | Text Edit        | Edit/View text.  |
| 2   | Data Edit        | Edit/Browse structured data and large data objects.              |
| 3   | <b>Lists</b>     | List Volumes, Files, ENQs, DB2 objects.                          |
| 4   | Home             | Home command centre.   |
| 5   | Copy/Reformat    | Copy file data with optional copybook reformat.                  |
| 6   | Search/Update    | Search, update, copy and/or reformat file data.                  |
| 7   | Compare          | Compare files and PDS/PDSE libraries.                            |
| 8   | <b>Utilities</b> | General utilities  |
| 9   | Structure        | Create structures for structured data browse/edit.               |
| 10  | Filter           | Create filters for structured data browse/edit record selection. |
| 11  | Print/Report     | Print Dataset or create a Report                                 |
| 12  | <b>DB2</b>       | Work with DB2. (Browse, edit, list tables etc.)                  |
| 13  | SMF              | Work with DB2. (Browse, edit, list tables etc.)                  |
| 14  | Test Data        | Generate Random or Sequenced Test Data                           |
| T   | Training         | Work with MVS System Management Facilities data                  |
| WL  | Window List      | Display active windows, select to switch focus                   |
| X   | Exit             | Exit FileKit   |

---

## Lists (=3)

---

| Opt | Title        | Command     | Description                                  |
|-----|--------------|-------------|--|
| 1   | Volumes      | <b>LVOL</b> | List DASD Volumes                            |
| 2   | VTOC         | <b>LV</b>   | List VTOC files                              |
| 3   | Extents      | <b>LX</b>   | List VTOC Extents                            |
| 4   | Dslist       |             | Data Set List Utility                        |
| 5   | Catalog      | <b>LC</b>   | List Cataloged datasets (catalog detail)     |
| 6   | Dataset      | <b>LD</b>   | List Dataset details (catalog & VTOC detail) |
| 7   | Library      | <b>LL</b>   | List PDS/PDSE Library members                |
| 8   | Allocated    | <b>LA</b>   | List Allocated files (DD names)              |
| 9   | Enqueues     | <b>LQ</b>   | List Resource Enqueues                       |
| 10  | Job Enqueues | <b>LJQ</b>  | List Job Enqueues                            |
| 11  | Associations | <b>LAS</b>  | List File Associations                       |
| 12  | HFS          | <b>LP</b>   | List HFS Paths                               |
| 13  | DB2          | <b>LDxx</b> | List DB2 objects                             |
| 14  | StorGrps     | <b>LSG</b>  | List SMS Storage Groups                      |
| 15  | StorGrp Vols | <b>LSGV</b> | List SMS Storage Group Volumes               |

---

**Utilities (=8)**


---

| <b>Opt</b> | <b>Title</b>       | <b>Command</b> | <b>Description</b>                                 |
|------------|--------------------|----------------|--|
| 1          | SELCOPY/debug      | <b>SELC</b>    | SELCOPY/batch language interactive debug           |
| 2          | CBLVCAT            | <b>VCAT</b>    | Catalog/VTOC report online excution                |
| 3          | IDCAMS             | <b>AMS</b>     | Execute IDCAMS commands interactively              |
| 4          | Catalog ALIAS      | <b>AMSA</b>    | AMSA - Define new Catalog Alias                    |
| 5          | Library ALIAS      | <b>ALI</b>     | Create new PDS/PDSE library member Alias           |
| 6          | IEBCOPY            | <b>IEBC</b>    | Execute IEBCOPY interactively                      |
| 7          | Favourites         | <b>FAV</b>     | Favourite Datasets/Commands                        |
| 8          | System             | <b>SY</b>      | Display System Information                         |
| 9          | Search             | <b>FS</b>      | Basic PDS/PDSE Library string search               |
| 10         | Find Lib Member(s) | <b>LLX</b>     | Search for member(s) across multiple libraries     |
| 11         | Compare Files      | <b>COMPF</b>   | Compare Files                                      |
| 12         | Compare Libraries  | <b>COMPL</b>   | Compare Libraries                                  |
| 13         | Calendar           | <b>CAL</b>     | Basic Calendar                                     |
| 14         | Calculator         | <b>CALC</b>    | REXX expression calculator                         |
| 15         | Alloc/Define       |                | Create new VSAM or Sequential datasets             |
| 16         | XML-Gen            | <b>XML</b>     | Produce eXtensible Markup Language from Data File  |
| 17         | CSV-Gen            | <b>CSV</b>     | Produce Comma Separated Variables from a Data File |
| 18         | JSON-Gen           | <b>JSON</b>    | Produce JavaScript Object Notation from Data File  |
| 19         | Merge Datasets     | <b>MERGE</b>   | Merge a number datasets sorted by a key field      |
| 20         | Orphan Members     | <b>GENORPH</b> | List/Delete PDSE v2 Orphaned Member Generations    |

---

**DB2 Primary Options (=12)**


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| <b>Opt</b> | <b>Title</b> | <b>Description</b>                           |
|------------|--------------|--|
| 0          | Settings     | Set DB2 options                              |
| 1          | DB2          | Execute DB2 Commands                         |
| 2          | SQL          | Execute SQL Commands                         |
| 3          | Edit         | Edit Tables and Views                        |
| 4          | Browse       | Browse Tables and Views                      |
| 5          | Create       | Create DB2 Objects                           |
| 6          | Drop         | Drop DB2 Objects                             |
| 7          | List         | List DB2 Objects                             |
| 8          | Audit        | Audit Trail functions                        |
| 9          | Compare      | Compare DB2 Tables                           |
| 10         | Rename       | Rename DB2 Tables and Indexes                |
| 11         | Structure    | Create/Edit a DB2 Table SDO                  |
| 12         | Utilities    | DB2 utility job generarion                   |
| 13         | Report       | Create a Report from a DB2 Table or from SQL |
| T          | Training     | Setup DB2 Training Material                  |

# Text Editor

---

Supporting most commands and features provided by both CMS XEDIT and the ISPF Editor, the FileKit text editor (CBL) allows the user to perform standard editing tasks on unformatted data.

Note that the **Data Editor** should be used for edit of VSAM data sets or where a data set is too large to be loaded entirely into available storage.

The text editor supports two, inter-changeable command environment interfaces as follow:

1. XEDIT - The FileKit text editor environment based on XEDIT. (Default for z/VM CMS and z/VSE)
2. ISPF - The FileKit text editor environment based on ISPF Edit. (Default for z/OS)

The currently active text edit interface may be changed using the **SET INTERFACE** option.

The complete set of supported text editor commands are available in both interfaces and, where the names of primary and prefix area (line) commands do not conflict between the 2 interface environments, those commands operate identically regardless of which interface is currently active. However, certain commands that exist in both interfaces (e.g. CHANGE) operate differently depending on which interface is currently active.

To execute the form of a primary command defined by the interface which is not currently active, specify "EC" (ECOMMAND) or "IC" (ICOMMAND) before the command verb, to explicitly nominate the interface (XEDIT or ISPF respectively) to be used to interpret the command.

---

## Text Edit Startup

---

By default, FileKit opens a text edit environment on startup. Any of the following may be used to open a text edit view of records belonging to a sequential, VSAM, GDG dataset, HFS file or PDS/PDSE library member:

1. For existing files only, open the Text Edit Entry Panel, select the required action (Edit, View or Browse) and enter values for the Name, Member and/or Volume fields as appropriate. This panel may be opened as follows:
  1. Primary command: **OPEN**
  2. Primary Option Menu, option 1. Text Edit. (=1)
  3. From the main menu bar, select File --> Open...
2. For new or existing files, execute primary commands: **EDIT** or **VIEW**  
**Note:** To execute and Text Editor primary command from a Data Editor view, prefix it with "TE". (e.g. TE EDIT.)

---

## Text Edit Function Key Defaults

---

|     |          |     |             |
|-----|----------|-----|-------------|
| F1  | HELP     | F13 | SOS LINEADD |
| F2  | SPLIT    | F14 | SOS LINEDEL |
| F3  | END      | F15 | DUPLICATE   |
| F4  | WINDOW   | F16 | ACTION      |
| F5  | RFIND    | F17 | MARK BOX    |
| F6  | RCHANGE  | F18 | MARK LINE   |
| F7  | UP       | F19 | SPLTJOIN    |
| F8  | DOWN     | F20 | BOX         |
| F9  | SWAP     | F21 | SWAP LIST   |
| F10 | LEFT     | F22 | UNDO        |
| F11 | RIGHT    | F23 | REDO        |
| F12 | CRETRIEV | F24 | RESET BLOCK |

## Text Edit Prefix Area (Line) Commands

|  |   |
|--|---|
| <code>.name</code>   | Set a line pointer (line name).   |
| <code>/</code>   | Make this line the current line.  |
| <code>[[n] ([n]</code>                                       | Column shift a line or block of lines n columns to the left. Characters shifted past the current BOUNDS setting are deleted.  |
| <code>][n] ])[n]</code>                                      | Column shift a line or block of lines n columns to the right. Characters shifted past the current BOUNDS setting are deleted.   |
| <code>&lt;[n] &lt;&lt;[n]</code>                             | Data shift a line or block of lines n columns to the left while attempting to prevent loss of data.   |
| <code>&gt;[n] &gt;&gt;[n]</code>                             | Data shift a line or block of lines n columns to the right while attempting to prevent loss of data.  |
| <code>A AK</code>  | <b>Interface ISPF:</b> Make this line the target for a move or copy (move or copy lines After this line). AK is an intermediate line target, allowing for additional line targets to follow for the same copied or moved block of lines.        |
| <code>A[n]</code>  | <b>Interface XEDIT:</b> Insert (Add) a blank line or a block of n blank lines.  |
| <code>B BK</code>  | Make this line the target for a move or copy (move or copy lines Before this line). BK is an intermediate line target, allowing for additional line targets to follow for the same copied or moved block of lines.                              |
| <code>BOUNDS</code><br><code>BOU</code><br><code>BNDs</code> | Display the boundary definition line.   |
| <code>C[n] CC</code>   | Mark a line or a block of lines for copying. Lines may be copied or cut to the clipboard (using the CUT command) or copied to another position within the same edited data using prefix commands, A or B.                                       |
| <code>COLs</code>  | Displays a column identification line.  |
| <code>D[n] DD</code>   | Delete a line or a block of lines.  |
| <code>F[n]</code>  | <b>Interface ISPF:</b> Show the first n records of an excluded record group.  |
| <code>F</code>   | <b>Interface XEDIT:</b> Make this line the target for a move or copy (move or copy lines Following this line).  |
| <code>HEX</code>   | Opens a hex dump view of the line.  |
| <code>I[n]</code>  | Insert a new blank line or a block of n new blank lines.  |
| <code>L[n]</code>  | Show the last n records of an excluded record group.  |
| <code>LC[n] LCC LCLC</code>                                  | Mark a line or a block of lines for lower casing.   |
| <code>M[n] MM</code>   | Mark a line or a block of lines for move. Lines may be moved to the clipboard (using the CUT command) or moved to another position within the same edited data using prefix commands, A or B.   |
| <code>MB</code>  | Mark a corner of a box block at the cursor column position.   |
| <code>ML</code>  | Mark a limit of a line block.   |
| <code>O[n] OK[n] OO</code><br><code>OOK</code>               | Mark a line or a block of lines to be the target of a move or copy (overlay this line or block of lines.) OK and OOK are intermediate line targets, allowing for additional line targets to follow for the same copied or moved block of lines. |
| <code>P</code>   | Make this line the target for a move or copy (move or copy lines Previous to this line).  |
| <code>R[n] RR(n)</code><br><code>"[n] ""[n]</code>           | Repeat (duplicate) a line or a block of lines n times.  |
| <code>S[n]</code>  | Show a number of excluded lines.  |
| <code>SJ</code>  | Split a line at the focus column if non-blank characters follow, otherwise join the line that follows to the focus column.  |
| <code>T</code>   | Tag a single line.  |
| <code>TF[n]</code>   | Text flow the current line and following lines up to the next blank line, wrapping text at the specified column, n, or at the display width.  |
| <code>TS[n]</code>   | Text split the current line at the cursor position inserting, n blank lines between the split text. (Default 1 blank line.)   |
| <code>UC[n] UCC UCUC</code>                                  | Mark a line or a block of lines for upper casing.   |
| <code>X[n] XX</code>   | Mark a line or a block of lines for exclusion from the display.   |



## Text Edit Primary Commands

The following table identifies Text Editor primary commands and their task category. Note that the command summary is organised by task category.

| Command   | Category        | Command     | Category        |
|-----------|-----------------|-------------|-----------------|
| ADD       | Data Alteration | LINE        | Data Alteration |
| ALL       | Data Filtering  | LINE AFTER  | Data Alteration |
| ALLOCATE  | Miscellaneous   | LINE BEFORE | Data Alteration |
| AUTOSAVE  | Miscellaneous   | LOCATE      | Data Navigation |
| BACKWARD  | Data Navigation | LOWERCASE   | Data Alteration |
| BOTTOM    | Data Navigation | MACRO       | Miscellaneous   |
| BOUNDS    | Display Format  | MARK        | Data Alteration |
| BOX       | Data Alteration | MORE        | Data Filtering  |
| BROWSE    | Display Format  | MOVE        | Data Alteration |
| CANCEL    | Miscellaneous   | NFIND       | Data Navigation |
| CAPPEND   | Data Alteration | NFINDUP     | Data Navigation |
| CAPS      | Data Alteration | NOND        | Display Format  |
| CDELETE   | Data Alteration | ONLY        | Data Filtering  |
| CHANGE    | Data Alteration | OPEN        | Miscellaneous   |
| CINSERT   | Data Alteration | OPTIONS     | Miscellaneous   |
| CLOCATE   | Data Navigation | OVERLAY     | Data Alteration |
| COMPARE   | Miscellaneous   | OVERLAYBOX  | Data Alteration |
| COPY      | Data Alteration | PASTE       | Data Alteration |
| COUNT     | Miscellaneous   | QUIT        | Miscellaneous   |
| COVERLAY  | Data Alteration | QUIT        | Miscellaneous   |
| CREATE    | Miscellaneous   | RCHANGE     | Data Alteration |
| CREPLACE  | Data Alteration | REDO        | Data Alteration |
| CUT       | Data Alteration | REPLACE     | Data Alteration |
| DELETE    | Data Alteration | RESET       | Display Format  |
| DOWN      | Data Navigation | RFIND       | Data Navigation |
| DSN       | Miscellaneous   | RIGHT       | Data Navigation |
| DUPLICATE | Data Alteration | RUNSLC      | Miscellaneous   |
| ECOMMAND  | Miscellaneous   | RUNSELCOPY  | Miscellaneous   |
| END       | Miscellaneous   | SAVE        | Miscellaneous   |
| EQU       | Miscellaneous   | SSAVE       | Miscellaneous   |
| EXCLUDE   | Data Filtering  | SETPT       | Display Format  |
| FFILE     | Miscellaneous   | SHIFT       | Data Alteration |
| FILE      | Miscellaneous   | SORT        | Data Alteration |
| FILLBOX   | Data Alteration | SPLIT       | Data Alteration |
| FIND      | Data Navigation | SPLTJOIN    | Data Alteration |
| FINDUP    | Data Navigation | SUBMIT      | Miscellaneous   |
| FLIP      | Data Filtering  | SDATA       | Miscellaneous   |
| FORWARD   | Data Navigation | SYSEDT      | Display Format  |
| FREE      | Miscellaneous   | TAG         | Display Format  |
| GEN       | Miscellaneous   | TFIND       | Data Navigation |
| GENCOMP   | Miscellaneous   | TFLOW       | Data Alteration |
| GENORPH   | Miscellaneous   | TOP         | Data Navigation |
| GET       | Miscellaneous   | TSO         | Miscellaneous   |
| GO        | Data Alteration | TSPLIT      | Data Alteration |
| HEX       | Display Format  | UNDO        | Data Alteration |
| HIDE      | Display Format  | UP          | Data Navigation |
| ICOMMAND  | Display Format  | UPPERCASE   | Data Alteration |
| IMMEDIATE | Miscellaneous   | VIEW        | Display Format  |
| INPUT     | Miscellaneous   | VIGNORE     | Miscellaneous   |
| JOIN      | Data Alteration | VRESPECT    | Miscellaneous   |
| LABEL     | Data Alteration | WINDOW      | Display Format  |
| LEFT      | Data Navigation | WW          | Display Format  |
| LESS      | Data Filtering  |             |                 |

## Text Edit Format Display Commands

The following CBL primary commands change how data is presented in an CBL text edit view. Note that these commands do not alter data.

### BOUNDS :

Set the left and right column boundaries between which certain search, sort and shift operations will operate.

```

>>---+- BOUnDs ----+-----+-----+-----+-----+-----><
      |           |           |           |           |           |
      +- BNDs ----+     +- left_col -+-----+----- right_col -+--+
                                   |           |           |
                                   +- * -----+     +- * -----+

```

### BROWSE :

For **VSE** and **CMS** systems, **BROWSE** is a synonym for **VIEW**.  
For **z/OS**, performs Data Editor BROWSE to display pages of text without having to load the entire dataset.

```

>>-- Browse -- fileid ---| SDE BROWSE Opts |-----><

```

### GO :

Switch edit type and/or display of records.

```

>>-- GO -----+--- Browse --+-----+-----+-----><
      |           |           |           |           |           |
      +- Edit ----+           |           |           |           |
      +- SE -----+           |           |           |           |
      +- SU -----+           |           |           |           |
      +- View ----+           |           |           |           |

```

### HEX :

Displays the contents of the current text editor window as character or as both character and hexadecimal.

```

>>-- HEX -----+--- ON -----+-----+-----+-----><
      |           |           |           |           |           |
      +- Off ----+           |           |           |           |

```

### HIDE :

Hide all shadow lines. (Equivalent to **SET SHADOW OFF**.)

### NOND :

Executes **SET COLOUR NONDISPLAY** option to toggle the display of underscores on printable text in lines of data which include unprintable characters.

### RESET :

**Interface ISPF:** Reset attributes of lines in the current text edit view and all other text edit views that display the same data. Line attributes include pending line commands, excluded line status, text highlighting, display options and prefix area flags.

```

>>-- RESet +-----+-----+-----+-----+-----+-----+>
      |           |           |           |           |           |
      +- BLock + +- CHange + +- COmmand + +- Error + + EXcluded +
                                       + X -----+
                                   +- .ZFIRST -- .ZLAST +
      >-----+-----+-----+-----+-----+-----+><
      |           |           |           |           |           |
      +- Find + +- Hide + +- Label + +- Special + +- .name1 -+-----+
                                       |           |           |
                                       +- .name2 +

```

**Interface XEDIT:** Reset (unmark) the currently marked block or text highlighted as a result of a CLOCATE or LOCATE command.

```

>>-- RESet +-----+-----+-----+-----+-----><
      |           |           |           |           |           |
      +- THighlight -----+

```

**SETPT :**

Assign labels to lines within a file based on the presence of "." (dot) prefixed words in line data found between the specified column boundary limits.

```

+--- 70 ---+ +--- 132 ---+
|           |           |
>>-- SETPT  +-----+-----+-----+-----+-----><
|           |           |           |           |
+-- start_col --+ -- end_col --+ -- Q --+
|               |               |           |
+-- V --+

```

**SYSEdit :**

For CMS and z/OS ISPF environments only, opens the system text editor (XEDIT or ISPF Edit) to edit the specified (or current) dataset.

```

>>-- SYSEdit +-----+-----+-----+-----+-----><
|           |           |           |           |
+-- fileid --+

```

**TAG :**

Set the line tag flag on and so highlight lines matching the specified *line-target*.

```

>>-- TAG +-----+-----+-----+-----+-----><
|       |           |           |           |
+-- line-target --+

```

**VIEW :**

Equivalent to EDIT except that data is edited as read-only (i.e. no exclusive SYSEdit ENQ).

```

>>+- View +-----+-----+-----+-----+-----><
|         | |           |           |           |           |
+- Browse + +- fileid +-----+-----+-----+-----+
|                                             |
|                                             +-- ( +- PROFILE macroname +-+-----+
|                                             | |           | |           |
|                                             +- NOPROfile -----+ +-| HFS Opts |+-

```

**HFS Opts:**

```

+--- STD -----+
|               |
+- EOL -----+-----+-----+-----+
|               |           |           |           |
|               +--- CR -----+
|               +--- LF -----+
|               +--- NL -----+
|               +--- CRLF -----+
|               +--- LF CR -----+
|               +--- CR NL -----+
|               +--- string -----+
|                                     +- LRECL lrecl +-
|-----+-----+-----+-----+-----+
+- RECFM ---- F -----+

```

**WINDOW :**

Perform window focusing, positioning and sizing operations on the current edit (document) view or MDI parent (frame) window.

```

+-----+ + (plus) -----+
|                                             |
>>-- Window -----+-----+-----><
|                                             |
+-----+ - (minus) -----+
|                                             |
+-----+ NEXTwindow -----+
|                                             |
+-----+ PREVwindow -----+
|                                             |
+-----+ CAScade -----+
|                                             |
|                                     +--- HOr -----+
|                                     |                 |
+-----+ TILE -----+-----+-----+
|                                     |                 |
|                                     +--- Vert -----+
|                                             |
+-----+ ARRANGEicons -----+
|                                             |
+-----+ NEWwindow -----+
|                                             |
+-----+ HEX -----+
|                                             |
|                                     +--- DOCument ---+
|                                     |                 |
+-----+ CLOse -----+-----+-----+
|                                     |                 |
|                                     +--- FRAmE -----+
|                                     +--- FILE -----+
|                                             |
+-----+ MENUmode -----+-----+-----+
|                                     |                 |
|                                     +--- DOCument ---+
|                                     +--- FRAmE -----+
|                                     +--- FILE -----+
|                                     +--- Edit -----+
|                                     +--- ACTions ----+
|                                     +--- OPTions ----+
|                                     +--- WINDow ----+
|                                     +--- Help -----+
|                                     |                 |
|                                     +--- DOCument ---+
|                                     |                 |
+-----+ RESTore -----+-----+-----+
|                                     |                 |
+--- MINImise ---+ +--- FRAmE -----+
+--- MINimize ---+
|
+--- MAXImise ---+
+--- MAXimize ---+

```

**WW :**

Open a new text editor view of data in the focus view (WINDOW NEW) and optionally execute a primary command.

```

>>-- WW -----+-----+-----><
|                                     |
+-----+ command -----+

```

## Text Edit Data Navigation Commands

The following CBL primary commands cause the display of data to be scrolled.

### BACKWARD :

Scroll the view of the data within the edit view up one page towards the top of the data. (Equivalent to the **UP DATA**.)

### BOTTOM :

**Interface ISPF:** Display the last page of data. (Equivalent to the **DOWN MAX**.)

**Interface XEDIT:** Display the last line of data in the file.

### CLOCATE :

Locate and then position the focus column at a *column-target*.

```
>>-- CLocate  ---+-----+----->><
                |               |
                +- column-target -+
```

### DOWN :

**Interface ISPF:** Scroll the view of the data within the edit view down towards the last record.

```
>>- DOwn  ---+-----+----->><
                |               |
                +-- Cursor  -----+
                +-- CSR    -----+
                +-- Data   -----+
                +-- Half   -----+
                +-- Max    -----+
                +-- Page   -----+
                +-- n_lines -----+
```

**Interface XEDIT:** Position the focus line one or more lines below the current focus line.

```
>>+--- Down  ---+-----+----->><
                |               |
                +- 1 -----+
                +--- Next ---+   +- nlines ---+
```

### FIND :

**Interface ISPF:** Search data in the current text editor view for the specified character string.

```
>>--- Find --- string ---+-----+----->
                |               |
                +- NEXT  ---+   +- CHARS ---+
                |               |
                +- ALL  ---+   +- PREFIX ---+   +- EX  ---+
                |               |
                +- FIRST ---+   +- SUFFIX ---+   +- NX  ---+
                |               |
                +- LAST  ---+   +- WORD  ---+   +- X   ---+
                |               |
                +- PREV  ---+
                |               |
                +- .ZFIRST -- .ZLAST --+
                |               |
                +-----+----->><
                |               |
                +- pos1 ---+-----+   +- .name1 ---+-----+
                |               |               |               |
                +- pos2 ---+   +- .name2 ---+
```

**Interface XEDIT:** Find the first line with line number greater than that of the focus line and contains the specified string in column 1. This line becomes the new focus line.

```
>>---- Find  ---+-----+----->><
                |               |
                +- string ---+
```

**FINDUP :**

Find the first line with a line number lower than that of the focus line and contains the specified string in column 1. This line becomes the new focus line.

```
>>--++-- FINDUP  --+-----+-----+-----+-----+-----><
      |           |           |           |           |
      +-- FUp  -----+   +- string -+
      |           |           |           |           |
```

**FORWARD :**

Scroll the view of the data within the edit view down one page towards the bottom of the data. (Equivalent to the **DOWN DATA**.)

**LABEL :**

Primarily used for ISPF Edit macro compatibility, LABEL may also be executed as primary command to set a line label at a specific line in the text edit view.

```
>>-- LABEL --+--- line_num --+----- = --- .label_2 -----+-----+-----><
      |           |           |           |           |
      +-- .label_1 --+           +----- level --+
      |           |           |           |           |
```

**LEFT :**

**Interface ISPF:** Scroll the view of the data within the edit view left towards the first column of the record data.

```
>>- LEFT  ---+-----+-----+-----+-----+-----><
      |           |           |           |           |
      +-- Cursor -----+
      +-- CSR -----+
      +-- Data -----+
      +-- Half -----+
      +-- Max -----+
      +-- Page -----+
      +-- n_lines -----+
      |           |           |           |           |
```

**Interface XEDIT:** Position the focus column one or more columns to the left of the current focus column.

```
>>-- LEft  ---+-----+-----+-----+-----+-----><
      |           |           |           |           |
      +-- 1 -----+
      +-- ncol ----+
      +-- HALF ----+
      |           |           |           |           |
```

**LOCATE :**

**Interface ISPF:** Scroll the view up or down to the first line that satisfies the specific or generic record location criteria.

```
>>-- Locate --+--- line_num -----+-----+-----+-----><
      |           |           |           |           |
      +-- .label -----+-----+-----+-----+
      |           |           |           |           |
      | +-- NEXT --+           +-- .ZFIRST -- .ZLAST --+ |
      | |           |           |           |           | |
      +-----+-----+ Change -----+-----+-----+
      |           |           |           |           |
      +-- FIRST --+ +-- Command --+ +-- .name1 -- .name1 --+
      |           |           |           |           |
      +-- LAST --+ +-- ERror ----+
      |           |           |           |           |
      +-- PREV --+ +-- EXcluded --+
      |           |           |           |           |
      +-- Label ----+
      |           |           |           |           |
```

**Interface XEDIT:** Starting at the focus line of text, search for the first line that matches the specified *line-target* or satisfies the condition defined by regular expression *regexp*, and make it the new focus line.

```
>>--++-----+-----+-----+-----+-----><
      |           |           |           |           |
      +-- Locate --+ +----- line-target -----+-----+-----+
      |           |           |           |           |
      | + + + |           |           |           |
      | | | | |           |           |           |
      +-----+-----+ R /regexp/ -----+
      |           |           |           |           |
      +-- - - -+
      |           |           |           |           |
```

**NFIND :**

Find the first line with line number greater than that of the focus line and does **not** contain the specified string in column 1. This line becomes the new focus line.

```
>>----- NFIND -----+-----+-----><
                        |         |
                        +- string -+
```

**NFINDUP :**

Find the first line with line number lower than that of the focus line and does **not** contain the specified string in column 1. This line becomes the new focus line.

```
>>---+- NFINDUP -+-----+-----><
      |         |         |         |
      +- NFUP  ---+   +- string -+
```

**RFIND :**

Repeat the search performed by the ISPF format FIND, CHANGE or EXCLUDE command executed last.

**RIGHT :**

**Interface ISPF:** Scroll the view of the data within the edit view right towards the last column of the record data.

```
>>- RIGHT -+-----+-----><
          |         |
          +-- Cursor -----+
          +-- CSR -----+
          +-- Data -----+
          +-- Half -----+
          +-- Max -----+
          +-- Page -----+
          +-- n_lines -----+
```

**Interface XEDIT:** Position the focus column one or more columns to the right of the current focus column.

```
>>-- Right -+-----+-----><
          |         |
          +- 1 -----+
          +- ncol ----+
          +- HALF ----+
```

**TFIND :**

Locate the first line, starting at the focus line, to contain the specified *line-target* in the 1st position of the current ZONE (BOUNDS) and make this line the new focus line.

```
>>----- TFIND -----+-----+-----><
                        |         |
                        +- line-target -+
```

**TOP :**

Display the first page of data. (Equivalent to the UP MAX.)

**UP :**

**Interface ISPF:** Scroll the view of the data within the edit view up towards the first record.

```
>>- UP -----+-----+-----><
          |         |
          +-- Cursor -----+
          +-- CSR -----+
          +-- Data -----+
          +-- Half -----+
          +-- Max -----+
          +-- Page -----+
          +-- n_lines -----+
```

**Interface XEDIT:** Position the focus line one or more lines above the current focus line.

```
>>----- Up -----+-----+-----><
          |         |
          +- 1 -----+
          +- nlines ---+
```

## Text Edit Data Filtering Commands

The following CBL primary commands are used to temporarily remove display of data records or to redisplay records in the CBL view. Note that these command do not alter data.

### ALL :

Display only those lines that satisfy a condition defined by *line-target* search criteria.

```
>>-- ALL ---+-----+-----><
      |           |
      +- line-target -+
```

### EXCLUDE :

Exclude from the all text edit views of the same data, records that satisfy a search for a specified search string.

```
>>--+- EXclude ---+--- string ----->
      |           |
      +- X -----+
                                     +- NEXT ---+ +- CHARS ---+
                                     |           |           |
      +- ALL ---+ +- PREFIX ---+
      +- FIRST ---+ +- SUFFIX ---+
      +- LAST ---+ +- WORD ---+
      +- PREV ---+
                                     +- .ZFIRST -- .ZLAST --+
      |           |           |
      +- pos1 ---+---+ .name1 ---+-----+
      |           |           |
      +- pos2 ---+---+ .name2 ---+-----+><
```

### FLIP :

Flip the status of excluded and non-excluded lines of text in the current text edit view and all other text edit views that display the same data.

```
>>-- FLIP -----+-----+-----><
      |           |
      +--- .ZFIRST --- .ZLAST ---+
      |           |
      +--- .name1 ---+-----+
      |           |
      +- .name2 ---+-----+
```

### LESS :

Exclude or un-tag visible lines that satisfy the *line-target* search criteria. Lines that are already excluded or are not tagged remain unchanged.

```
>>-- LESS ---+-----+--- line-target -----><
      |           |
      +--- TAG ---+
```

### MORE :

Make visible excluded lines or tag visible lines that satisfy the *line-target* search criteria. Lines that are already visible or are tagged remain unchanged.

```
>>-- MORE ---+-----+--- line-target -----><
      |           |
      +--- TAG ---+
```



**ONLY :**

Uses an ISPF format FIND specification to display only those lines which match the specification and exclude all lines that do not.

```
>>--- Only -----><
      |
      +---| Find Spec |--+

Find Spec:

      +- CHARs --+
      |
      |- string -+-----+-----+-----+-----+-----|
      |          | |          | |          | |          | |
      +- PREFIX -+ +- pos1 -+-----+ +- .name1 -+-----+
      |          | |          | |          | |          | |
      +- SUFFIX -+          +- pos2 -+          +- .name2 -+
      |          |
      +- WORD  ---+
```



**CHANGE :**

**Interface ISPF:** Search lines of text for matching occurrences of the specified character string *string1* and replace it with *string2*.

```

                                     +- .ZFIRST --- .ZLAST --+
                                     |                         |
>>--+- Change -+- string1 -- string2 -+-----+-----+----->
      |         |         |         |         |         |         |
      +- CHG ----+         +- .name1 ---- .name2 --+
                                     |                         |
      +- NEXT ---+ +- CHARS ---+
      |         |         |         |         |         |         |
>-----+-----+-----+-----+-----+-----><
      |         |         |         |         |         |         |
      +- ALL ---+ +- PREFIX -+ +- EX -+ +- pos1 -----+
      |         |         |         |         |         |         |
      +- FIRST -+ +- SUFFIX -+ +- NX -+ +- pos2 ---+
      |         |         |         |         |         |         |
      +- LAST ---+ +- WORD ---+ +- X ---+
      |         |         |         |         |         |         |
      +- PREV ---+
  
```

**Interface XEDIT:** Change occurrences of *string1* to *string2* on the focus line and on lines up to, but not including, the line containing the first match for *group-target*.

```

>>-- Change --+---- /string1/string2/ --+-----+----->
      |         |         |         |         |         |         |
      +--- R /regexp/string2/ ----+
                                     |                         |
>-----+-----+-----+-----+-----><
      |         |         |         |         |         |         |
      +- group-target --+-----+-----+-----+
      |         |         |         |         |         |         |
      +--- max_in_line --+-----+-----+
      |         |         |         |         |         |         |
      +--- first_in_line --+
  
```

**CINSERT :**

Insert a text string into the focus line starting at the focus column. Existing text in, or to the right of the focus column will be shifted to the right for the length of the inserted text string.

```

>>-- CInsert --+-----+-----><
      |         |         |         |         |         |         |
      +- string -+
  
```

**COPY :**

**Interface ISPF:** Copy records from *fileid*, an existing sequential or VSAM data set, PDS/PDSE library member or HFS path, into the current text edit view.

```

>>-- COpy --+-----+-----+-----+----->
      |         |         |         |         |         |         |
      +- fileid --+ +- AFTER ---+ .name -+
      |         |         |         |         |         |         |
      +- BEFORE -+
                                     |                         |
>-----+-----+-----+-----+-----><
      |         |         |         |         |         |         |
      |         |         |         |         |         |         |
      +-----+ start_line +-----+-----+
      |         |         |         |         |         |         |
      +- FROM -+ +- end_line -+
  
```

**Interface XEDIT:** Copy text from a *group-target* area to the line following the *line-target*. Where BLOCK is specified as the *group-target*, a marked block may be copied to file data in other text edit views, otherwise copying text is restricted to lines within the same edited file.

```

>>-- COpy -- group-target --+-----+-----><
      |         |         |         |         |         |         |
      +- line-target -+
  
```

**COVERLAY :**

Overlay text in the focus line with the specified text string starting at the focus column.

```

>>-- COverlay --- string -----><
  
```

**CREPLACE :**

Replace text in the focus line with the specified text string starting at the focus column.

```

>>-- CReplace --- string -----><
  
```

**CUT :**

Cut and save to the clipboard, lines or boxes marked using MARK primary command or lines selected using M/MM or C/CC line commands.

```

+-- Copy -----+ +-- REPlace --+ +-- ALL -----+
|               | |               | |               |
>>-- CUT -----+-----+-----+-----+-----><
|               | |               | |               |
+-- Move -----+ +-- APPend ---+ +-- X -----+
|               | |               | |               |
|               | |               | |               |
+-- NX-----+

```

**DELETE :**

**Interface ISPF:** Delete lines of text from the current text edit view and all other text edit views that display the same data.

```

+-- ALL --+ +-- .ZFIRST ----- .ZLAST --+
|         | |         |         |         |
>>-- DElete --+-----+-----+-----+-----+-----><
|         | |         |         |         |
+-- .name1 --+-----+-----+-----+-----+-----+
|         | |         |         |         |
+-- line1 --+ +-- .name2 --+ +-- EX --+
|         | |         |         |         |
|         | |         |         |         |
+-- line2 --+ +-- NX --+
|         | |         |         |         |
+-- Block -----+

```

**Interface XEDIT:** Delete one or more lines from the edited file starting at the focus line.

```

+----- 1 -----+
|                 |
>>-- DElete -----+-----+-----+-----+-----><
|                 |
+-- group-target --+

```

**DUPLICATE :**

From the file in the current edit view, duplicate, one or more times, one or more lines identified by *group-target* starting at the focus line.

```

+-- 1 -----+ +----- 1 -----+
|             | |             |
>>-- DUPLICATE -----+-----+-----+-----+-----><
|             | |             |
+-- ntimes --+ +-- group-target --+

```

**FILLBOX :**

Fill a marked block with the single character *char* or insert a >1 character text string *string* in every line of the marked block beginning at the leftmost column of the block.

```

>>-- FILLbox -----+-----+-----+-----+-----><
|                 |
+-- char -----+
|                 |
+-- string --+

```

**GET :**

Copy records from *fileid*, an existing sequential or VSAM data set, PDS/PDSE library member or HFS path, into the current text edit view following the focus line.

```

+-- 1 -----+ * -----+
|             | |             |
>>-- GET ---- fileid -----+-----+-----+-----+-----><
|             | |             |
|             | |             |
+-- start_line --+-----+-----+-----+-----+
|             | |             |
+-- n_lines --+

```

**INPUT :**

Insert a new line containing *string* following the focus line.

```

>>-- Input -----+-----+-----+-----+-----><
|                 |
+-- Insert --+ +-- string --+

```

**JOIN :**

Join text from the line below the focus line to the focus line itself starting at the focus column. Text at, and to the right of, the focus column is overlaid.

```
>>-- Join -----><
      |           |
      +-- Aligned --+
```

**LINE :**

Primarily used for ISPF Edit macro compatibility, LINE may also be executed as primary command to replace text in a specified text edit line.

```
>>-- LINE ---+--- line_num ---+----- = --- data -----><
      |           |
      +-- .label ----+
```

**LINE\_AFTER :**

Primarily used for ISPF Edit macro compatibility, LINE\_AFTER may also be executed as primary command to insert a line of text following a specified line in the edited data.

```
>>-- LINE_AFTER ---+--- line_num ---+----- = ---+-----+--- data -----><
      |           |
      +-- .label ----+
                                     +- DATALINE -+
                                     |           |
```

**LINE\_BEFORE :**

Primarily used for ISPF Edit macro compatibility, LINE\_BEFORE may also be executed as primary command to insert a line of text before a specified line in the edited data.

```
>>-- LINE_BEFORE ---+--- line_num ---+----- = ---+-----+--- data -----><
      |           |
      +-- .label ----+
                                     +- DATALINE -+
                                     |           |
```

**LOWERCASE :**

Lower case all alpha characters in the *group-target* area.

```
>>-- LOWercase -----+-----><
      |           |
      +- group-target -+
```

**MARK :**

Mark the boundaries of a line or box. MARK LINE marks the focus line as one edge of a line block and MARK BOX marks the focus column in the focus line as one corner of a box block. Marked blocks are used as *group-target* arguments to commands such as CHANGE, COPY, DUPLICATE, DELETE, FILLBOX, etc.

```
>>-- MARK ---+--- Line -----><
      |           |
      +-- Box ----+
```

**MOVE :**

**Interface ISPF:** Move all records from *fileid*, an existing sequential or VSAM data set, PDS/PDSE library member or HFS path, into the current text edit view.

```
>>-- MOVE ----->
      |           | |           |
      +- fileid + +- AFTER ---+--- .name -+
      |           |
      +- BEFORE +
```

**Interface XEDIT:** Move text from a *group-target* area to the line following the *line-target*. Where BLOCK is specified as the *group-target*, a marked block may be moved to file data in other text edit views, otherwise moving text is restricted to lines within the same edited file

```
>>-- Move -- group-target ---+-----+-----><
      |           |           |
      +- line-target -+
```

**OVERLAY :**

Overlay text in the focus line with the specified text string starting at column 1. The text string begins immediately after the single separating blank that follows the OVERLAY command verb.

```
>>-- Overlay --- string -----><
```

**OVERLAYBOX :**

Overlay text on and, if necessary, below the focus line with text from a marked line block or box block.

**PASTE :**

Move or copy lines from the clipboard into the current text or data edit view.

```

+-- Keep -----+
|               |
>>-- PASTE -----><
|               |
+-- Delete ----+

```

**RCHANGE :**

Repeat the find and replace performed by the last CHANGE command.

**REDO :**

Re-apply one level of change made to the current file that was previous undone by an UNDO command.

**REPLACE :**

**Interface ISPF:** Replace the contents of *fileid*, an existing sequential or VSAM data set, PDS/PDSE library member or HFS path, with records from the current text edit view.

```

>>-- REPlace -----><
|               |
+-- fileid -----+
|               |
+-- .name1 ---- .name2 -----+

```

**Interface XEDIT:** Replace the focus line with the specified text string. The text string begins immediately after the single separating blank that follows the REPLACE command verb.

```

>>-- Replace -----><
|               |
+-- string ----+

```

**SHIFT :**

Shift text to the LEFT or RIGHT by the specified number of columns. Text is moved on the focus line and on lines up to, but not including, the line containing the first match for *group-target*.

```

+-- 1 -----+ +----- 1 -----+
|           | |           |
>>-- SHift --+-- Left -----><
|           | |           |
+-- Right --+ + n_cols --+ +-- group-target --+

```

**SORT :**

**Interface ISPF:** Sort lines of text based on the contents of one or more key fields.

```

+ .ZFIRST + + .ZLAST +
|         | |         |
>>-- SORT +-----><
|         | |         |
+ .name1 -+ + .name2 + +- EX -+ | +-----+ |
|         | |         | +- X -+ | |         | |
|         | |         | +- NX -+ | +--- | Sort Field | -+
|         | |         |
+-- Block -----+

```

**Sort Field:**

```

+-- Ascending --+
|               |
|-----+-----+ start_col -----+
|               |
+-- Descending -+
|               |
+-- end_col ----+

```

**Interface XEDIT:** Sort lines in the target area specified by *group-target* in ascending or descending order.

```

>>-- SORT - group-target -----><
| +-----+ |
| | +- Ascending -+ |
| v | |         | |
+-----+-----+ coll -----+
|               | |         | |
+-- Descending + +-- col2 -+

```

**SPLIT :**

**Interface ISPF:** Enter split-screen mode. For z/OS ISPF only, SPLIT and its operands are passed to ISPF to split the screen horizontally.

```
>>-- SPLIT ----+-----+-----><
          |           |
          +- | ISPF SWAP Operands | -+
```

**Interface XEDIT:** Split the focus line into two lines starting at the focus column. Text at, and to the right of, the focus column is moved to column 1 of a new line following the focus line.

```
>>-- Split -+-----+-----><
          |           |
          +-+ Aligned --+
```

**SPLTJOIN :**

SPLTJOIN (or SJoin) performs a SPLIT ALIGNED or JOIN ALIGNED on the focus line.

**TFLOW :**

Flow text in the focus line and all text lines that follow until the End of File indicator or a line containing only blank characters between the boundary (zone) columns is encountered.

```
>>-- TFlow ----+-----+-----><
          |           |
          +-+ col_num --+
```

**TSPLIT :**

Split the focus line at the focus column and insert a number of blank lines between the split text.

```
          +-+ 1 -----+
          |           |
>>-- TSplit -+-----+-----><
          |           |
          +-+ n_lines --+
```

**UNDO :**

Undo one level of changes made to the file data in the current edit view.

**UPPERCASE :**

Upper case all alpha characters in the *group-target* area.

```
>>-- UPPERcase ----+-----+-----><
          |           |
          +- group-target -+
```

## Text Edit Miscellaneous Commands

The following miscellaneous CBL e primary commands relate to file management and saving changes and closing a text edit view.

### ALLOCATE :

Allocate or free datasets or start the **Allocate Non-VSAM panel**.

```
>>-- ALLOCate  +-----+-----+-----+----->><
              |         |         |         |
              +- -Cat --+   +--- allocparms ---+
              +- -FREE -+
              |         |         |         |
```

### AUTOSAVE :

Set the autosave mode which contols the action taken when END is executed an alterations exist in the file data within the current edit view.

```
>>-- AUTOSAVE  +-----+-----+-----+----->><
              |         |         |         |
              +- ON  -----+
              |         |         |         |
              +- PROMPT ---+
              +- OFF  -----+
              |         |         |         |
              +- NOPROMPT -+
              |         |         |         |
```

### CANCEL :

**Interface ISPF:** Cancel all edit views of the same file data without saving any alterations made since the last time the file was saved, or else opened for edit.

**Interface XEDIT:** Issue the QUIT command for *every* text edit view for all files opened by the edit editor.

### COMPARE :

**Interface ISPF:** ISPF Edit COMPARE command is as yet unsupported by the FileKit text editor.

**Interface XEDIT:** Compare lines of text in two files that are displayed in existing edit views within the current CBL e edit environment.

```
>>-- COMPare -- fileid1 --- fileid2 ----->><
```

### COUNT :

Count occurrences of *string* on the focus line and on lines up to, but not including, the line containing the first match for *group-target*.

```
>>-- COUnt -- /string/ +----- 1 -----+>><
                    |         |         |         |
                    +- group-target -+
                    |         |         |         |
```

### CREATE :

Create *fileid*, a sequential or VSAM data set, PDS/PDSE library member or HFS path, with records from the current text edit view.

```
>>-- CREate -----+-----+-----+----->><
                    |         |         |         |
                    +- fileid -----+
                    |         |         |         |
                    +- .name1 ---- .name2 -----+
                    |         |         |         |
```

### DSN :

Display a menu of utility functions or perform Browse, Edit, Delete, Rename for a file referenced by the fileid on which the cursor is positioned within the text edit view.

```
>>-- DSN -----+-----+-----+----->><
                    |         |         |         |
                    +- B -----+
                    +- K -----+
                    +- R -----+
                    +- X -----+
                    |         |         |         |
```



**ECOMMAND :**

Execute the XEDIT interface version of a command (as opposed to the ISPF interface version).

```
>>-- ECommand -- command -----><
```

**EQU :**

Set, Unset or List text editor environment variables.

```
>>--- EQU ---+-----+-----+----->>
      |
      +- varname ---+-----+-----+
                |
                +- value ---+
                |
                +- = -----+
```

**END :**

Close the current text editor view.

**FFILE :**

As for FILE except that save will be successful even if *fileid* is an existing file.

```
>>-- FFile ---+-----+-----><
      |
      +-- fileid --+
```

**FILE :**

Save the file data in the current edit view to disk as *fileid* and, if successful, exit the edit view and place focus on the previous window.

```
>>-- FILE ---+-----+-----><
      |
      +-- fileid --+
```

**FREE :**

Unallocate a ddname or override the disposition or output class of an allocated data set.

```
>>-- FREE -- freeparms -----><
```

**GEN :**

Perform utility operations based on the library DSN, member name or generation number of the member generation in the current Text Editor or Data Editor view.

```
>>-- GEN ---+-----+-----+----->
      |
      +- *-1 -----+      +- View -----+
      |
      +- 0 -----+      +- Browse ---+
      +- -nnn ---+      +- Compare---+
      +- *-nnn ---+      +- Edit      |
                          +- List -----+
                          +- Orphan ---+
                          +- Recover -+
                          +- Sde -----+
                          +- Upd -----+
                          +- View -----+
                          +- ? -----+
```

**GENCOMP :**

Compare the currently displayed member generation with another (earlier or later) generation of the same member.

```
>>-- GENComp ---+-----+-----+----->
      |
      +- COMPGen ---+ +-- *-1 -----+ +-- CONTEXT 10 -----+
      |
      +- 0 -----+ +-- compare-options -+
      +- -nnn ---+
      +- *-nnn ---+
```

**GENORPH :**

List or delete orphaned member generations.

```

      +- List ----+
      |             |
>>-- GENOrph  ---+-----+-----+-----+-----+-----+----->
      |             |             |             |             |             |
      +- Delete --+ |             |             |             |             |
                    +- libdsn ---+-----+-----+-----+-----+-----+
                    |             |             |             |             |
                    |             v             |             |             |
                    +- ( +- mbr-mask +- ) ---+
                    |             |             |             |             |
>-----+-----+-----+-----+-----+-----+-----><
      |             |             |             |             |             |
      +- DATEHI( timestamp ) ---+
      +- DATEHI( nnn Days ) ----+
      +- DATEHI( nnn Months ) -+
      +- DATEHI( nnn Years ) ---+
  
```

**ICOMMAND :**

Execute the ISPF interface version of a command (as opposed to the XEDIT interface version).

```
>>-- ICommand -- command -----><
```

**IMMEDIATE :**

Execute text edit REXX macro syntax from a command line.

```
>>-- IMMEDIATE -- macrodef -----><
```

**MACRO :**

Execute the REXX language macro specified by *macroname*. Any *text* specified following the macroname is passed to the macro as an argument.

```
>>-- MACRO -- macroname -----><
              |             |
              +- text ----+
  
```

**OPEN :**

For z/OS, open the Text Edit Entry panel or, for CMS and VSE, open the Open dialog window.

```
>>-- OPEN -----><
      |             |
      +- filter ----+
  
```

**OPTIONS :**

List all Text Editor options and their current settings, either in a message window or as executable SET commands in a text edit view.

```

      +- ALL -----+
      |             |
>>-- OPTions ---+-----+-----+-----+-----+-----+-----><
      |             |             |             |             |             |
      +- Edit -----+
  
```

**QUIT :**

Close the current text edit view. If the edit view of a file's data is the last one to be closed for that file, then any unsaved alterations are discarded.

**QUIT :**

Close the current text edit view. If the edit view of a file's data is the last one to be closed for that file, then the user will be prompted to save any unsaved alterations.

**RUNSLC :**

Execute the program SLC using control statements in the focus edit view as the SYSIN input. SYSPRINT output is captured and displayed in another temporary edit view.

**RUNSELCOPY :**

Execute the program SELCOPY using control statements in the focus edit view as the SYSIN input. SYSPRINT output is captured and displayed in another temporary edit view.

**SAVE :**

Save the current edited file to disk with an associated fileid.

```
>>-- SAVE -----><
      |             |
      +- fileid ----+
  
```

**SDATA :**

Execute a Data Editor primary command.

```
>>-- SData -- sde_command -----><
```

**SSAVE :**

As for SAVE except that save will be successful even if *fileid* is an existing file.

```
>>-- SSave --+-----+-----><
           |         |
           +-- fileid --+
```

**SUBMIT :**

Submit the specified batch job *fileid* to the MVS or VSE batch system. The file should contain a valid Job Card and Job Control. If *fileid* is not specified, the file in the current text edit view is submitted.

```
>>-- SUBmit --+-----+-----><
           |         |
           +-- fileid --+
```

**TSO :**

For z/OS, execute a TSO primary command. For CMS, execute a CMS primary command.

```
>>--+ TSO -----+--- command -----><
    |         |
    +- SYScommand -+
    +- CMS -----+
    +- DOS -----+
```

**VIGNORE :**

Execute a primary command without translating environment variable names (delimited by % symbols) to their assigned values.

```
>>-- VIGNore ---- command -----><
```

**VRESPECT :**

Execute a primary command so that any variable names (delimited by % symbols) specified in the command are translated to their assigned values.

```
>>-- VRespect --- command -----><
```

## Text Edit Options

|                           |   |
|---------------------------|---|
| <b>ACTION</b>             | Obtain information relating to command string text processed by the Action facility.                  |
| <b>ACTIONCOMMENT</b>      | Define character string representing start of a comment for the Action facility.                      |
| <b>ACTIONCURSOR</b>       | Controls interpretation by the Action utility of the first underscore (cursor positioning) character. |
| <b>ACTIONDELIM</b>        | Controls interpretation by the Action utility of or-symbol (delimiter) characters.                    |
| <b>ALT</b>                | Set or obtain alteration count for the current text edit view.  |
| <b>ARBCHAR</b>            | Manage use of arbitrary (wildcard) characters in line/column-target specifications.                   |
| <b>AUTOSAVE</b>           | Control action on closing the edit view when unsaved alterations exist.                               |
| <b>BEEP</b>               | Control beep when text edit error message returned.   |
| <b>BLOCK</b>              | Reports attributes of the currently marked block.   |
| <b>CASE</b>               | Control interpretation of character case in line/column-target specifications.                        |
| <b>CHANGE</b>             | For macro processing only, obtain information about the last CHANGE command issued.                   |
| <b>CLIPBOARD</b>          | Obtain the status of clipboard data.  |
| <b>CMDDDEF</b>            | Control use of trailing numerics in macro names.  |
| <b>CMDLINE</b>            | Control location of the command prompt in a text edit view.   |
| <b>COLOUR / COLOR</b>     | Manage colour settings for text edit display of highlighted fields.                                   |
| <b>COLUMN</b>             | For macro processing only, obtain the column number of the focus column.                              |
| <b>COUNT</b>              | For macro processing only, obtain information about the last COUNT command issued.                    |
| <b>CURLINE</b>            | For macro processing only, obtain information about the focus and current lines.                      |
| <b>CURSOR</b>             | For macro processing only, obtain the location of the cursor.   |
| <b>DEFPROFILE</b>         | Control the name of the Text Editor profile macro.  |
| <b>DIALOG</b>             | For macro processing only, obtain information returned from a DIALOG command.                         |
| <b>DISPLAY</b>            | Manage display of lines via their assigned selection level.   |
| <b>DSN</b>                | Set or obtain the DSN assigned to the text being edited in the current text edit view.                |
| <b>DSORG</b>              | Set or obtain the data set organisation of the dataset in the current edit view.                      |
| <b>ENVVARS</b>            | Control use of Text Editor environment variables.   |
| <b>EOLIN</b>              | Control the input End-of-Line characters used for COPY or GET of an HFS file.                         |
| <b>EOLOUT</b>             | Control the output End-of-Line characters used for SAVE of an HFS file.                               |
| <b>FIDCHANGED</b>         | Control the file name changed indicator flag setting.   |
| <b>FILEID</b>             | Set or obtain the complete fileid assigned text in the current text edit view.                        |
| <b>FLSCREEN</b>           | Obtain the line numbers of the first and last lines in in the current display area.                   |
| <b>FMODE</b>              | Set or obtain the file mode portion of the name assigned text in the current text edit view.          |
| <b>FNAME</b>              | Set or obtain the file name portion of the name assigned text in the current text edit view.          |
| <b>FPATH</b>              | Set or obtain the HFS file path assigned text in the current text edit view.                          |
| <b>FTYPE</b>              | Set or obtain the file type portion of the name assigned text in the current text edit view.          |
| <b>GENSAVE</b>            | Set the default action on save of a member in a library in which member generations exist.            |
| <b>HCOLOR / HCOLOUR</b>   | Control colours used by synatx highlighting.  |
| <b>HEXSTRING</b>          | Control support for hex strings in Text Editor primary commands.                                      |
| <b>HILITE / HIGHLIGHT</b> | Control syntax highlighting in Text Editor views.   |
| <b>HSCROLLCURSOR</b>      | Controls automatic horizontal scrolling of the display following CLOCATE.                             |
| <b>IMPMACRO</b>           | Controls whether a search will occur for a macro member name if a primary command is not recognised.  |
| <b>INIFILE</b>            | Obtain the FileKit System and User INI dataset names.   |
| <b>INIVAR</b>             | Obtain all variables set in bothe the FileKit System and User INI datasets.                           |
| <b>INSTANCE</b>           | Specifies whether a number of instances of the Text Editor frame window may be started.               |
| <b>INTERFACE</b>          | Control the default edit interface (ISPF of XEDIT).   |
| <b>ISPFMODE</b>           | In ISPF only, controls whether or not screen management is handled by ISPF.                           |
| <b>KEY</b>                | For undefined KSDS datasets, alter the KSDS key position and length.                                  |
| <b>LASTMSG</b>            | Obtain the last message diplayed by the Text Editor.  |
| <b>LCOLOR / LCOLOUR</b>   | Assign colours to lines containing specific text strings.   |
| <b>LENGTH</b>             | Obtain the length of the focus line of text.  |
| <b>LINE</b>               | Obtain the line number of the focus line of text.   |
| <b>LINEFLAG</b>           | Controls flag bits set for a target group of lines.   |
| <b>LINEND</b>             | Controls use and specification of the Text Editor command delimiter character.                        |
| <b>LISTFILEACTION</b>     | Controls the default action on pressing <Enter> on a list window entry.                               |
| <b>LOADWARNING</b>        | Size threshold multiple at which load of a dataset is paused and a warning message displayed.         |
| <b>LRECL</b>              | Set or obtain the defined LRECL for the dataset in the current edit view.                             |
| <b>LSCREEN</b>            | Obtain the size and location of the focusr Text Editor view.  |
| <b>MACRO</b>              | Display the name and contents of all macros loaded in storage by DEFINE.                              |
| <b>MACROPATH</b>          | Set or obtain the list of library names that comprise the macro search path.                          |
| <b>MBR</b>                | Synonym for FNAME.  |
| <b>MSGLINE</b>            | Set or obtain message line definitions and their location within the display area.                    |
| <b>MSGMODE</b>            | Controls whether or not messages are displayed and if long messages wrap onto multiple message lines. |
| <b>NBWINDOW</b>           | Obtain the number of active Text Editer window views.   |
| <b>OPSYS</b>              | Obtain information about the operating system.  |

|                         |   |
|-------------------------|---|
| <b>PFKEY</b>            | Set or obtain PFKey definitions for Text Editor views.  |
| <b>POINT</b>            | Set or obtain named line label definitions.   |
| <b>PREFIX</b>           | Control display, location and width of the Text Editor numbered prefix area.                        |
| <b>PSCOPE</b>           | Include/exclude excluded lines in the scope of lines processed by edit prefix area (line) commands. |
| <b>RANGE</b>            | Restrict edit to a range of lines within the current edit view.                                     |
| <b>RECFM</b>            | Set or obtain the RECFM of the dataset in the current edit view.                                    |
| <b>REDO</b>             | Synonym for option UNDO.  |
| <b>RESERVED</b>         | Define reserved lines in the text edit view.  |
| <b>RING</b>             | Obtain information about each file being edited with the Text Editor.                               |
| <b>SAVEOPTIONS</b>      | Maintain updates made to text editor options across FileKit sessions.                               |
| <b>SCALE</b>            | Manage display of the Text Editor scale line.   |
| <b>SCOLOUR / SCOLOR</b> | Character string colour assignment within the edited text.  |
| <b>SCOPE</b>            | Include/exclude excluded lines in the scope of lines processed by edit primary commands.            |
| <b>SCREEN</b>           | Obtain dimensions of the physical 3270 display.   |
| <b>SELECT</b>           | Manage selection level assigned to the lines within a group-target area.                            |
| <b>SHADOW</b>           | Control display of shadow lines which represent groups of excluded lines.                           |
| <b>SIZE</b>             | Obtain number of lines belonging to file in the current edit view.                                  |
| <b>SIZEWARNING</b>      | Size threshold above which a file size warning is displayed before attempting load.                 |
| <b>STAY</b>             | Control focus line update following LOCATE, CLOCATE, CHANGE, SORT and SET SELECT.                   |
| <b>STREAM</b>           | Control column-target search streaming across subsequent edit lines.                                |
| <b>SYNONYM</b>          | Display, manage and define text edit command synonyms.  |
| <b>THIGHLIGHT</b>       | Control target highlighting for LOCATE/CLOCATE.   |
| <b>UNDO</b>             | Obtain information relating to the undo chain of updates.   |
| <b>UNDOING</b>          | Control UNDO/REDO activation, maximum undo levels and available storage.                            |
| <b>USERNAME</b>         | Obtain current user's logon user id.  |
| <b>VARBLANK</b>         | Single blank interpretation in line-targets and column-targets.                                     |
| <b>VERSION</b>          | Obtain Text Editor version information.   |
| <b>VIEW</b>             | Text display format as character or hexadecimal.  |
| <b>WINNAME</b>          | Text edit document and frame window naming.   |
| <b>WINPOS</b>           | Text edit document and frame window positioning.  |
| <b>WINSIZE</b>          | Text edit document and frame window sizing.   |
| <b>WRAP</b>             | Control line-target search wrapping from the last to first line of edited text.                     |
| <b>ZONE</b>             | Zone (boundary) columns.  |

# Data Editor (SDE)

---

The FileKit Data Editor supports the Structured Data Environment (SDE).

SDE allows users to display and process datasets using a pre-defined SDE structure (optionally generated from COBOL, PL1 and/or Assembler language source copybooks) which formats the record data into individual fields. Similarly, SDE allows display and process of DB2 table rows formatted by the defined table column definitions.

---

## Data Edit Startup

---

An SDE Edit or Browse view of a (non-segmented or segmented record) sequential, VSAM, HFS file or PDS/PDSE library member may be opened using any of the following methods:

1. Using the Structured Data Editor dialog panel, entering values for the INPUT fileid field and, to format the record data, one of the USING fields. This panel may be opened as follows:

1. Primary command: **SDE**
2. Primary Option Menu, option 2. Data Edit. (=2)
3. From the main menu bar, select File --> Structured Edit...

2. Directly using Data Editor primary commands: **EDIT** or **BROWSE**

**Note:** To execute a Data Editor primary command from a non-SDE view, prefix with "SD". e.g. SD EDIT.)

A Data Editor edit or browse view of DB2 table rows may be opened using any of the following methods:

1. Using the DB2 Edit Object or Browse Object dialog panel (option 3. Edit or option 4. Browse on the DB2 Primary Option Menu) enter values for the DB2 Object fields and other optional fields relating to filtering, comping, etc. The DB2 Primary Option Menu may be opened as follows:

1. Primary command: **DB2**
2. Primary Option Menu, option 12. DB2.
3. From the main menu bar, select File --> DB2...

2. Directly using Data Editor primary commands: **EDIT DB2** or **BROWSE DB2**

---

## Data Edit Function Key Defaults

---

|     |          |     |                |
|-----|----------|-----|----------------|
| F1  | HELP     | F13 | INSERT         |
| F2  | SPLIT    | F14 | DELETE         |
| F3  | END      | F15 | DUPLICATE      |
| F4  | WINDOW   | F16 | MACRO SDEUTIL  |
| F5  | RFIND    | F17 | MACRO SDEZOOMW |
| F6  | RCHANGE  | F18 |                |
| F7  | UP       | F19 |                |
| F8  | DOWN     | F20 |                |
| F9  | SWAP     | F21 | SWAP LIST      |
| F10 | LEFT     | F22 | UNDO           |
| F11 | RIGHT    | F23 | REDO           |
| F12 | CRETRIEV | F24 |                |

## Data Edit Prefix Area (Line) Commands

|   |   |
|---|---|
| <code>.name</code>                                  | Set a line pointer (line name).   |
| <code>colour</code>                                 | Set a line colour for all records/segments that have the same record-type as this line. Options are (BL)UE, (G)REEN, (P)INK, RED, (T)URQ, (W)HITE and (Y)ELLOW.   |
| <code>([n] (([n]</code>                             | For unformatted record display only, column shift a line or block of lines <i>n</i> columns to the left. Characters shifted past the current BOUNDS setting are truncated.  |
| <code>) [n] )) [n]</code>                           | For unformatted record display only, column shift a line or block of lines <i>n</i> columns to the right. Characters shifted past the current BOUNDS setting are truncated.   |
| <code>A</code>                                      | Make this line the target for a move or copy (move or copy lines After this line).  |
| <code>B</code>                                      | Make this line the target for a move or copy (move or copy lines Before this line).   |
| <code>C[n] CC</code>                                | Mark a line or a block of lines for copying. Lines may be copied or cut to the clipboard (using the CUT command) or copied to another position within the same edited data using prefix commands, A or B.   |
| <code>D[n] DD</code>                                | Delete a line or a block of lines.  |
| <code>E</code>                                      | Applicable to edit of DB2 tables, E is used to display an SQL error panel describing the SQLCODE returned from the last attempt to save the row.<br><br>Refer to the <b>ERROR</b> primary command, which has the same effect as this prefix command, for a description of the SQL error panel.                  |
| <code>F[n]</code>                                   | Show the first <i>n</i> records of an excluded record group.  |
| <code>FMT</code>                                    | Display the record or record segment in <b>single record</b> , formatted view. Prefix commands FMT and MAP are synonyms.  |
| <code>HEX or HEXD</code>                            | Display the record or record segment in <b>HEXDUMP</b> format.  |
| <code>I[n]</code>                                   | Insert a new line or a block of <i>n</i> new lines of the default record type.  |
| <code>ID[n] IDD</code>                              | Remap (IDENTIFY) a line or a block of lines.  |
| <code>L[n]</code>                                   | Show the last <i>n</i> records of an excluded record group.   |
| <code>M[n] MM</code>                                | Mark a line or a block of lines for move. Lines may be moved to the clipboard (using the CUT command) or moved to another position within the same edited data using prefix commands, A or B.   |
| <code>MAP</code>                                    | Display the record or record segment in single record, formatted view. Prefix commands FMT and MAP are synonyms.  |
| <code>R[n] RR[n]</code><br><code>"[n]" "[n]"</code> | Replicate (duplicate) a line or a block of lines <i>n</i> times.  |
| <code>RE</code>                                     | Applicable to edit and browse of DB2 tables, RE is used to list, edit or browse tables related to the current table.<br><br>This command is equivalent to issuing the <b>REDIT</b> primary command with no parameters, with the row on which the prefix command is entered being the focus row for the command. |
| <code>SEL</code>                                    | Open the <b>SDE SELECT Columns Panel</b> to apply column selection, column sequencing and/or column width definitions to the record-type definition mapping the focus line.   |
| <code>STP</code>                                    | Applicable to edit of <b>Segmented Records</b> only. Force a secondary segment to be a primary (base) segment so splitting the record into two. No action is taken if the segment is already a primary segment type.  |
| <code>STS</code>                                    | Applicable to edit of Segmented Records only. Force a primary segment to be a secondary segment so joining the record with the record before. No action is taken if the segment is already a secondary segment type.  |
| <code>V</code>                                      | Display only records that are of the same record type as this line.   |
| <code>V+</code>                                     | Add to the display records that are of the same record type as this line.   |
| <code>V-</code>                                     | Remove from the display records that are of the same record type as this line.  |
| <code>X[n] XX</code>                                | Mark a line or a block of lines for exclusion from the display.   |
| <code>Z</code>                                      | Switch to a zoomed (single record view) display of the record occupying this line.  |

## Data Edit Primary Commands

The Data Editor supports browse and edit of the following data formats:

1. Standard file records.
2. Segmented file records.
3. DB2 table rows.

The following table identifies primary commands, the data format to which they apply and the task category. Note that the command summary is organised by task category.

| Command     | Category        | Record Edit | Segment Edit | DB2 Edit |
|-------------|-----------------|-------------|--------------|----------|
| ALL         | Data Filtering  | X           | X            | X        |
| ARRC        | Display Format  | X           | X            |          |
| ARRX        | Display Format  | X           | X            |          |
| AVERAGE     | Miscellaneous   | X           | X            | X        |
| ASCII       | Display Format  | X           | X            | X        |
| BOTTOM      | Data Navigation | X           | X            | X        |
| BOUNDS      | Miscellaneous   | X           | X            |          |
| BROWSE      | Display Format  | X           | X            | X        |
| CANCEL      | Miscellaneous   | X           | X            | X        |
| CAPS        | Data Alteration | X           | X            | X        |
| CCOLOUR     | Display Format  | X           | X            | X        |
| CHANGE      | Data Alteration | X           | X            | X        |
| CHAR        | Display Format  | X           | X            |          |
| COLWIDTH    | Display Format  | X           | X            | X        |
| COPY        | Data Alteration | X           | X            |          |
| CREATE      | Miscellaneous   | X           | X            |          |
| CSVGEN      | Miscellaneous   | X           | X            | X        |
| CUT         | Data Alteration | X           | X            | X        |
| DELETE      | Data Alteration | X           | X            | X        |
| DOWN        | Data Navigation | X           | X            | X        |
| DROP, DDROP | Miscellaneous   | X           | X            |          |
| DUPLICATE   | Data Alteration | X           | X            | X        |
| EDIT        | Display Format  | X           | X            | X        |
| END         | Miscellaneous   | X           | X            | X        |
| ENUMS       | Miscellaneous   | X           | X            |          |
| ERROR       | Miscellaneous   |             |              | X        |
| EXCLUDE     | Data Filtering  | X           | X            | X        |
| FILE        | Miscellaneous   | X           | X            | X        |
| FILEIO      | Miscellaneous   | X           | X            | X        |
| FIND        | Data Navigation | X           | X            | X        |
| FLIP        | Data Filtering  | X           | X            | X        |
| FMT         | Display Format  | X           | X            | X        |
| FORMAT      | Display Format  | X           | X            | X        |
| GETXML      | Miscellaneous   |             |              | X        |
| GO          | Display Format  | X           | X            |          |
| GROUP       | Display Format  | X           | X            | X        |
| GRPC        | Display Format  | X           | X            |          |
| GRPX        | Display Format  | X           | X            |          |
| HEX         | Display Format  | X           | X            | X        |
| HEXDUMP     | Display Format  | X           | X            |          |
| HIDE        | Data Filtering  | X           | X            | X        |
| IDENTIFY    | Display Format  | X           | X            |          |
| INFORMATION | Miscellaneous   | X           | X            | X        |
| INSERT      | Data Alteration | X           | X            | X        |
| JSONGEN     | Miscellaneous   | X           | X            | X        |
| LAYOUT      | Miscellaneous   | X           | X            | X        |
| LEFT        | Data Navigation | X           | X            | X        |
| LENGTH      | Data Alteration | X           | X            | X        |
| LESS        | Data Filtering  | X           | X            | X        |
| LIST SDO    | Miscellaneous   | X           | X            | X        |
| LOCATE      | Data Navigation | X           | X            | X        |
| OPTIONS     | Miscellaneous   | X           | X            | X        |
| MAP         | Display Format  | X           | X            | X        |
| MAPPING     | Display Format  | X           | X            | X        |



| Command       | Category        | Record Edit | Segment Edit | DB2 Edit |
|---------------|-----------------|-------------|--------------|----------|
| MARK          | Data Alteration | X           | X            | X        |
| MAXIMUM       | Miscellaneous   | X           | X            | X        |
| MINIMUM       | Miscellaneous   | X           | X            | X        |
| MORE          | Data Filtering  | X           | X            | X        |
| NEXT          | Data Navigation | X           | X            | X        |
| NOND          | Display Format  | X           | X            | X        |
| OFFSET        | Display Format  | X           | X            | X        |
| ONLY          | Data Filtering  | X           | X            | X        |
| PASTE         | Data Alteration | X           | X            | X        |
| PERMANENT     | Miscellaneous   | X           | X            | X        |
| PREFIX        | Display Format  | X           | X            | X        |
| PREVIOUS      | Data Navigation | X           | X            | X        |
| PRINT         | Miscellaneous   | X           | X            | X        |
| PUTXML        | Miscellaneous   |             |              | X        |
| QUIT          | Miscellaneous   | X           | X            | X        |
| QUERY         | Miscellaneous   | X           | X            | X        |
| RCHANGE       | Data Alteration | X           | X            | X        |
| RCOLOUR       | Display Format  | X           | X            | X        |
| RECINFO       | Display Format  | X           | X            | X        |
| RECLENGTH     | Display Format  | X           | X            | X        |
| REDIT         | Display Format  |             |              | X        |
| REDO          | Data Alteration | X           | X            | X        |
| REPLACE       | Miscellaneous   | X           | X            |          |
| REPLACELINE   | Data Alteration | X           | X            | X        |
| RESET         | Display Format  | X           | X            | X        |
| RFIND         | Data Navigation | X           | X            | X        |
| RIGHT         | Data Navigation | X           | X            | X        |
| SAVE          | Miscellaneous   | X           | X            | X        |
| SAVEAS        | Miscellaneous   | X           | X            |          |
| SAVESTRUCTURE | Miscellaneous   | X           | X            |          |
| SEGTYPE       | Data Alteration |             | X            |          |
| SELECT        | Data Filtering  | X           | X            | X        |
| SET           | Miscellaneous   | X           | X            | X        |
| SHIFT         | Data Alteration | X           | X            |          |
| SHOW          | Display Format  | X           | X            |          |
| SORT          | Data Alteration | X           |              |          |
| SORTINDEX     | Display Format  |             |              | X        |
| SUM           | Miscellaneous   | X           | X            | X        |
| TEDIT         | Miscellaneous   | X           | X            | X        |
| TEMPORARY     | Miscellaneous   | X           | X            | X        |
| TOP           | Data Navigation | X           | X            | X        |
| TOTALS        | Miscellaneous   | X           | X            | X        |
| TSO           | Miscellaneous   | X           | X            | X        |
| TYPE          | Display Format  | X           | X            | X        |
| UNDO          | Data Alteration | X           | X            | X        |
| UNFMT         | Display Format  | X           | X            |          |
| UNMAP         | Display Format  | X           | X            |          |
| UNNAMED       | Display Format  | X           | X            | X        |
| UP            | Data Navigation | X           | X            | X        |
| USE           | Display Format  | X           | X            |          |
| VFMT          | Display Format  | X           | X            | X        |
| VIEW          | Display Format  | X           | X            |          |
| WHERE         | Data Filtering  | X           | X            | X        |
| WINDOW        | Display Format  | X           | X            | X        |
| WW            | Display Format  | X           | X            | X        |
| XMLBROWSE     | Miscellaneous   |             |              | X        |
| XMLEDIT       | Miscellaneous   |             |              | X        |
| XMLGEN        | Miscellaneous   | X           | X            | X        |
| XMLIMPORT     | Miscellaneous   | X           | X            | X        |
| XMLLENGTH     | Miscellaneous   |             |              | X        |
| XMLVIEW       | Miscellaneous   |             |              | X        |
| XREF          | Miscellaneous   | X           | X            |          |
| XREFLIB       | Miscellaneous   | X           | X            |          |
| ZEROS         | Display Format  | X           | X            | X        |
| ZOOM          | Display Format  | X           | X            | X        |

## Data Edit Format Display Commands

The following SDE primary commands change how data is presented in an SDE browse or edit view. Note that these commands do not alter data.

### ASCII :

SET option which causes data in all character (AN) fields to be interpreted in ASCII format.

```
>>+-----+ ASCii -----+ ON ---+-----+<<
    |           |           |           |
+- SET -----+           +-- OFF ---+
```

### ARRC :

Display a single dimension array (OCCURS) of one byte character fields (PIC X) with number of elements determined by a separate binary integer field (DEPENDING), as a single variable length character (XVARCHAR) field.

```
>>-- ARRC -----+-----+----->
           |           |
           +-- field_col --+

>+-----+-----+-----+-----+<<
|         +- FOR -----+ record_type -----+
+- RECOrd +-          +- IN +-----+ struct_name -+
           |           |           |
           +- STRUCTure +-          +
```

### ARRX :

Redisplay a single dimension array, which has been displayed as a variable length character field (ARRC), as a number of individual, single character fields.

```
>>-- ARRX -----+-----+----->
           |           |
           +-- field_col --+

>+-----+-----+-----+-----+<<
|         +- FOR -----+ record_type -----+
+- RECOrd +-          +- IN +-----+ struct_name -+
           |           |           |
           +- STRUCTure +-          +
```

### BROWSE :

Browse a data set, HFS file or DB2 result table with or without use of a structure which formats the data records/table rows.

```
>>-- Browse ---+-----+-----+-----+-----+ SDE Opts |+->
           |         |         |         |         |
           +-----+ hfs_fileid ---+ HFS Opts |---+
           |         |         |         |         |
           +- DB2 ---+-----+-----+-----+ DB2 Opts |+-+
           |         |         |         |         |
           +- (ssn) -+

           +- PROFile SDEPROF -----+
           |         |         |         |         |
>-----+-----+-----+-----+>
           |         |         |         |         |
           +- PROFile macro_name -----+
           |         |         |         |         |
           +- NOPROFile -----+

>-----+-----+-----+-----+<<
           |         |         |         |         |
           +-----+-----+-----+-----+
           +- INItcmd - ( -+- sd_command -+- ) -+
```

**CCOLOUR :**

Apply preferred colouring to individual record fields assigned specific record-types, based on record mapping criteria.

```

+- TEMPorary +-
|
>>+-----+-----+ CCOLOUR +-+ field_col +-+ | Colour Spec | +-----+>
|
+- PERManent +-
|
|
| OFF -----+
+- OFF -----+

>+-----+-----+><
|
+- FOR +-----+ record_type +-----+>
|
+ RECOrd +
|
| IN +-----+ struct_name +
|
+ STRUCture +

```

**Colour Spec**

```

+- NONE -----+
|
|-----+ Blue -----+ +-----+ WHEN expression -----+|
|
+- Red -----+ +- BLInk -----+
+- Pink -----+ +- REVvideo ---+
+- Green -----+ +- Uscore ----+
+- Turquoise +-
+- Yellow -----+
+- White -----+
+- Default ----+

```

**CHAR :**

Display records or record segments in multi-record, unformatted character view.

**COLWIDTH :**

Controls the number of characters currently displayed (column width) in a specified column field of the specified record-type mapping.

```

>>+-----+-----+ COLwidth --- field_col --- width ----->
|
+- SET -----+

>+-----+-----+><
|
+- FOR +-----+ record_type +-----+>
|
+- RECOrd +-
|
| IN +-----+ struct_name +
|
+- STRUCture +

```

**EDIT :**

Edit a data set, HFS file or DB2 result table with or without use of a structure which formats the data records/table rows.

```

>>-- Edit +-----+ fileid +-----+ | SDE Opts | +----->
|
+-----+ hfs_fileid ---| HFS Opts | +-----+
|
+- DB2 +-----+ +-----+ table_name +-----+ | DB2 Opts | +-----+
|
| (ssn) +- +--- view_name ---+
|
+- PROFile SDEPROF -----+
|
>-----+-----+>
|
+- PROFile macro_name -----+
|
+- NOPROFile -----+

>+-----+-----+><
|
|
|
+- INItcmd - ( +- sd_command +- ) +-

```

**FORMAT :**

Format the display of records or record segments without performing record-type remap.

```

>>-- FORmat --+--- Character -----+><
|
+--- Hex -----+
|
+--- Single -----+
+--- Sngl -----+
|
+--- Tabl -----+

```

**GO :**

Switch edit type and/or display of records or record segments.

```
>>-- GO -----+-- SE -----+-----><
      |         |         |
      +-- SU -----+
      |         |
      +-- Browse -----+
      |         |
      +-- Edit -----+
      |         |
      +-- View -----+
```

**GROUP :**

Applicable to single-record view only, option SET GROUP controls whether or not each occurrence of a group item is displayed. Group items correspond to structure, union and root array field names.

```
>>+-----+-- Group -----+-- ON ---+-----><
      |         |         |         |
      +- SET -----+         +- OFF --+
```

**GRPC :**

Display a group (structure) field, defined within a specified record type mapping, as a fixed length character field.

```
>>-- GRPC -----+----->
      |         |
      +-- field_col --+

>+-----+-----+-----><
|
+- FOR +-+-----+- record_type +-+-----+
      |         |         |         |
      +- RECOrd +         +- IN +-----+ struct_name -+
                          |         |
                          +- STRUCTure +
```

**GRPX :**

Redisplays a group (structure) field, which has been displayed as a fixed length character field (GRPC), as a formatted group of its component fields.

```
>>-- GRPX -----+----->
      |         |
      +-- field_col --+

>+-----+-----+-----><
|
+- FOR +-+-----+- record_type +-+-----+
      |         |         |         |
      +- RECOrd +         +- IN +-----+ struct_name -+
                          |         |
                          +- STRUCTure +
```

**HEX :**

Sets the hexadecimal display format on or off.

```
>>-- HEX ---+-- ON ---+-----><
      |         |
      +-- OFF ----+
```

**HEXDUMP :**

Display the focus record or record segment in single record, unformatted hex dump view.

```
>>-- HEXDump ---+-----+-----><
      |         |
      +-- New ----+
```

**IDENTIFY :**

Remap changed records or record segments in the current SDE edit view.

```
>>-- IDentify -----+-----+-----><
      |         |         |         |
      +- n_lines -----+         +- EX -+
      |         |         |         |
      +- ALL -----+         +- X --+
      +- * -----+         |         |
      |         |         |         +- NX -+
      +- .name1 -----+-----+
                          |         |
                          +-- .name2 ----+
```

**MAP or FMT :**

Display records or record segments in single record, formatted view.

**MAPPING :**

SET option which controls whether formatted data is displayed in its mapped or unmapped format.

```
>>+-----+--- MAPPING -----+--- ON ---+-----+<<
|   SET   |   |   |   |   |   |   |   |
+-- SET ---+   |   |   |   |   |   |   |
      |   |   |   |   |   |   |   |
      +-- OFF ---+
```

**NOND :**

Toggles display of underscores that identify printable characters within records containing unprintable characters.

**OFFSET :**

SET option which controls the format of the field offset for SDE EDIT and BROWSE window views in mapped single record view (MAP) when **SHOW OFFSET** is in effect.

```
>>+-----+--- OFFSet --+---+--- Columns--+-----+<<
|   SET   |   |   |   |   |   |   |   |
+-- SET ---+ +-- OFST ---+ +--- Position--+
      |   |   |   |   |   |   |   |
      +--- Hex | X ---+
      |   |   |   |   |   |   |   |
      +--- Relative -+
      |   |   |   |   |   |   |   |
      +--- Offset ---+
```

**PREFIX :**

SET option which defines whether or not the prefix area is displayed, is displayed on the left or right of the SDE view and the its width (number of columns). For segmented records, also determines whether the prefix area contains the physical record numbers or the segment numbers within the file.

```
>>+-----+--- PREFIX ---+--- ON ---+---+---+---+---+---+<<
|   SET   |   |   |   |   |   |   |   |
+-- SET --+   |   |   |   |   |   |   |
      |   |   |   |   |   |   |   |
      + Left --+ +--- 6 ---+ + LOGical --+
      |   |   |   |   |   |   |   |
      +-- Off --+ + Right -+ + n_bytes -+ + Physical -+
      |   |   |   |   |   |   |   |
```

**RCOLOUR :**

Apply preferred colouring to records assigned specific record-types, based on record mapping criteria.

```
>>-- RCOlour -- record_type --+-----+<>
      |   |   |   |   |   |   |   |
      +-- IN --+-----+--- struct_name --+
      |   |   |   |   |   |   |   |
      +--- STRUcture ---+
      |   |   |   |   |   |   |   |
      +- NONE -----+
      |   |   |   |   |   |   |   |
      >+---+--- Blue -----+-----+--- WHEN expression -----+<<
      |   |   |   |   |   |   |   |
      |+- Red -----+ +-- BLInk -----+
      |   |   |   |   |   |   |   |
      |+- Pink -----+ +-- REVvideo ---+
      |   |   |   |   |   |   |   |
      |+- Green -----+ +-- Uscore -----+
      |   |   |   |   |   |   |   |
      |+- Turquoise --+
      |   |   |   |   |   |   |   |
      |+- Yellow -----+
      |   |   |   |   |   |   |   |
      |+- White -----+
      |   |   |   |   |   |   |   |
      |+- Default ----+
      |   |   |   |   |   |   |   |
      +-- OFF -----+
```

**RECINFO :**

SET option which controls which of the standard record information columns, if any, are to be displayed for records in the current SDE window view.

```
>>+-----+--- RECInfo --+--- ON ---+---+---+---+---+---+<<
|   SET   |   |   |   |   |   |   |   |
+-- SET ---+ +-- OFF --+   |   |   |   |   |   |   |
      |   |   |   |   |   |   |   |
      +--- ALL ---+
      |   |   |   |   |   |   |   |
      +-- Flags ---+
      |   |   |   |   |   |   |   |
      +-- NOFlags --+
      |   |   |   |   |   |   |   |
      +--- DECimal -----+
      |   |   |   |   |   |   |   |
      >+-----+-----+-----+-----+-----+<<
      |   |   |   |   |   |   |   |
      |+- Length ----+ +-- Id ----+ +-- SQLCode ----+ +--- HEXadecimal ---+
      |   |   |   |   |   |   |   |
      |+- NOLength -+ +-- NOId -+ +-- NOSQLCode -+
      |   |   |   |   |   |   |   |
```

**RECLENGTH :**

RECLENGTH controls the display of the Record Information Length column.

```
>>-- RECLength -----+-----+-----+----->>
      |
      +--- ON -----+
      |
      +--- OFF -----+
      |
```

**REDIT :**

Applies only to browse and edit of DB2 tables and is used to list, edit or browse tables that are related to the DB2 table in the focus SDE view.

```
>>-- REdit -----+-----+-----+----->>
      |
      +--- PAREnt -----+--- referential_constraint ---+
      |
      +---+ DEPEndent -+---+
      |
      +--- CHILd -----+
      |
```

**RESET :**

Reset individual flags set for records or record segments in the current SDE BROWSE or EDIT view.

```
>>-- RESet -----+-----+-----+-----+----->>
      |
      +--- CHange -+ +--- COMmand -+ +--- Duplicates -+
      |
      +--- All -+
      |
      +--- X -----+
      |
      +--- ERror -+ +--- EXcluded -+ +--- Find -+
      |
      +-----+-----+-----+-----+-----+-----+----->>
      |
      +--- HIDE -+ +--- Label -+
      |
```

**SHOW :**

Controls display of various information for records or record segments in a single or multi record, formatted view.

```
>>-- Show -----+--- Level -----+-----+----->>
      |
      +--- Number ----+
      +--- Format ----+
      +--- Offset ----+
      +--- Picture --+
      +--- Type -----+
      |
```

**SORTINDEX :**

For DB2 table edit only, used to sort in-storage table rows by key columns/expressions identified by a DB2 Index that has been defined on the table.

```
>>-- SORTIndex -----+-----+-----+-----+----->>
      |
      +--- .ZFIRST -+ +--- .ZLAST -+
      |
      +--- .name1 ---+ +--- .name2 -+ +--- index_name -+
      |
      +--- Prime -----+
      |
```

**TYPE :**

SET option which controls display of the field data type, location and length display for SDE views in either mapped table view (VFMT) or mapped single record view (MAP).

```
>>+-----+--- TYPe ---+--- ON -----+-----+----->>
      |
      +--- SET -----+
      |
      +--- OFF -----+
      +--- Default ---+
      +--- FORMat ----+
      +--- FMT -----+
      +--- OFFSet ----+
      +--- PICTure --+
      |
```

**UNFMT or UNMAP :**

Display records or record segments in single record, unformatted character view.

**UNNAMED :**

SET option which controls whether unnamed fields appear in the display. Note that COBOL **FILLER** fields are treated as unnamed.

```
>>+-----+--- UNNAMED ---+--- ON -----+-----+----->>
      |
      +--- SET -----+
      |
      +--- OFF ----+
      |
```



**WW :**

Open a new SDE view of data in the focus view (WINDOW NEW) and optionally execute an SDE primary command.

```
>>-- WW -----+-----+-----><
      |           |
      +----- command -----+
```

**ZEROS :**

SET option which causes values in all numeric fields to be prefixed by zeros up to the width of the field display.

```
>>+-----+-- Zeros -----+-- ON ---+-----><
   |           |           |           |
   +- SET -----+           +-- OFF ---+
```

**ZOOM :**

Switches the display format between single and multi record view.

```
>>-- ZOOM -----+-----+-----><
      |           |
      +-- In -----+
      |           |
      +-- Out -----+
```



---

## Data Edit Data Navigation Commands

---

The following SDE primary commands cause the display of data to be scrolled.

### BOTTOM :

Display the last page of data. (Equivalent to the DOWN MAX.)

### DOWN :

Scroll the view of the data within the SDE view down towards the bottom of the data.

```
>>- DOwn -----><
|                                     |
+-- Cursor -----+
+-- CSR -----+
+-- Data -----+
+-- Half -----+
+-- Max -----+
+-- Page -----+
+-- n_lines -----+
```

### FIND :

Search data in the current Data Editor edit or browse view for the specified character string or numeric value.

```
>>- Find ----->
|      |          |      |          |      |          |      |          |
|      |          |      |          |      |          |      |          |
+-- EQ --+      +-- NEXT --+ +-- CHARs ---+
| Find --+-----+ string --+-----+-----+
+ / ----+ + op --+          |      |          |      |          |
|      |          |      |          |      |          |      |          |
|      |          |      |          |      |          |      |          |
+-- VALID -----+ +-- FIRST --+ +-- Suffix --+ +-- NX --+
+-- INVALID -----+ +-- LAST --+ +-- WORD ---+ +-- X --+
|      |          |      |          |      |          |      |          |
+-- PREV --+
|      |          |      |          |      |          |      |          |
+-- #ALL -----+ +-- .ZFIRST ---+ .ZLAST --+
|      |          |      |          |      |          |      |          |
>-----><
|      |          |      |          |      |          |      |          |
+-- pos1 -----+ +-- .name1 -----+
|      |          |      |          |      |          |      |          |
|      |          |      |          |      |          |      |          |
+-- pos2 ---+          |      |          |      |          |      |          |
|      |          |      |          |      |          |      |          |
+-----+-----+
|      |          |      |          |      |          |      |          |
|      |          |      |          |      |          |      |          |
+-----+-----+
|      |          |      |          |      |          |      |          |
|      |          |      |          |      |          |      |          |
+-----+-----+
v
+-- ( ---+ field_col -----+ ) --+
|      |          |      |          |      |          |      |          |
+-- field_col1:field_col2 -----+
```

### LEFT :

In multi record view, scroll left the display of records or record segments assigned the default record type. In single record view, display the non-suppressed, non-excluded data record, record segment or DB2 row that precedes the one currently displayed. For segmented records, LEFT scrolls to the previous segment regardless of the record to which it belongs.

```
>>- Left -----><
|                                     |
+-- Cursor -----+
+-- CSR -----+
+-- Data -----+
+-- Half -----+
+-- Max -----+
+-- Page -----+
+-- n_cols -----+
```

### LOCATE :

Locate and scroll to a data record or segment or the formatted record column field that matches the specified criteria.

```
+-- Locate ---+
|      |          |
>>-+-----+-----+ Record Locate Options |-----><
|      |          |
+--+ Formatted Column Locate Options |--+
```

**Record Locate Options:**

```

>-----+-----+.name-----+----->
|   |   |   |   |   |   |   |   |   |   |
| +- : ++ (1) +- RECOrd --+
|   |   |   |   |   |   |   |   |   |   |
| +-----+-----+ record_num -----+
|   |   |   |   |   |   |   |   |   |   |
|         (1) +- KEY ----+
|   |   |   |   |   |   |   |   |   |   |
| : -----+-----+ key_string -----+
|   |   |   |   |   |   |   |   |   |   |
|         (1)
| : -----+-----+ RBA -----+ byte_offset -----+
| +-----+---+ (plus) ---+-----+ relative_line -----+
|   |   |   |   |   |   |   |   |   |   |
| +- - (minus) --+
|   |   |   |   |   |   |   |   |   |   |
|                 +- NEXT --+
| +-----+-----+ expression -----+
| +- line_flag -----+
|                 +- ALL ----+ +- EX --+
|                 +- FIRST --+ +- NX --+
|                 +- LAST --+ +- X --+
|                 +- PREV --+

```

**Formatted Column Locate Options:**

```

>-----+-----+-----+-----+-----+----->
|   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |
| +- field_ref -----+
|                 +- NEXT --+
|                 +- FIRST --+
|                 +- LAST --+
|                 +- PREV --+

```

**NEXT :**

When used in an SDE BROWSE/EDIT view of segmented records, NEXT scrolls to a segment that follows the current segment, making it the new current segment. For non-segmented record BROWSE/EDIT, every record is considered to be a primary (base) segment with no secondary segments.

**Segmented Record Edit:**

```

>> Next +-----+-----+-----+-----+-----+----->>
|   |   |   |   |   |   |   |   |   |   |
| +- Segment ----+ +- 1 ----+ +- * -----+
|   |   |   |   |   |   |   |   |   |   |
| +- Base -----+ +- n_seg --+ +- record_type --+
|   |   |   |   |   |   |   |   |   |   |
|                   |       |       |
|                   +- / -----+
|                   +- \ -----+
|                   +- ? -----+
|   |   |   |   |   |   |   |   |   |   |
|                 +- 1 ----+
| +- Unmapped ---+-----+
|   |   |   |   |   |   |   |   |   |   |
|                   +- n_seg --+

```

**Non-Segmented Record Edit:**

```

>> Next +-----+-----+-----+-----+-----+----->>
|   |   |   |   |   |   |   |   |   |   |
| +- Base -----+ +- 1 ----+ +- * -----+
|   |   |   |   |   |   |   |   |   |   |
|                   |       |       |
|                   +- / -----+
|                   +- \ -----+
|   |   |   |   |   |   |   |   |   |   |
|                 +- 1 ----+
| +- Unmapped ---+-----+
|   |   |   |   |   |   |   |   |   |   |
|                   +- n_seg --+

```

**PREVIOUS :**

When used in an SDE BROWSE/EDIT view of segmented records, PREVIOUS (or PREV) scrolls to a segment that occurs before the current segment, making it the new current segment. For non-segmented record BROWSE/EDIT, every record is considered to be a primary (base) segment with no secondary segments.

**Segmented Record Edit:**

```

      +-- Segment  --+ +-- 1  ----+ +-- *  -----+
>>- Previous  +-----+-----+-----+-----+-----><
      |           |           |           |           |
      +-- Base  ----+ +-- n_seg -+ +-- record_type -+
      |           |           |           |           |
      |           |           |           |           |
      |           |           |           |           |
      |           |           |           |           |
      +----- Unmapped -----+-----+-----+
      |           |           |           |           |
      |           |           |           |           |
      +-- n_seg  -+
  
```

**Non-Segmented Record Edit:**

```

      +-- Base  ----+ +-- 1  ----+ +-- *  -----+
>>- Previous  +-----+-----+-----+-----+-----><
      |           |           |           |           |
      |           |           |           |           |
      |           |           |           |           |
      |           |           |           |           |
      |           |           |           |           |
      +----- Unmapped -----+-----+-----+
      |           |           |           |           |
      |           |           |           |           |
      +-- n_seg  -+
  
```

**RFIND :**

Repeat the search performed by the last FIND command.

**RIGHT :**

In multi record view, scroll right the display of records or record segments assigned the default record type. In single record view, display the non-suppressed, non-excluded data record, record segment or DB2 row that follows the one currently displayed. For segmented records, RIGHT scrolls to the next segment regardless of the record to which it belongs.

```

>>- Right-----+-----+-----+-----+-----><
      |           |           |           |           |
      +-- Cursor  -----+
      +-- CSR    -----+
      +-- Data   -----+
      +-- Half   -----+
      +-- Max    -----+
      +-- Page   -----+
      +-- n_cols -----+
  
```

**TOP :**

Display the first page of data. (Equivalent to UP MAX.)

**UP :**

Scroll the view of the data within the SDE view up towards the top of the data.

```

>>- UP -----+-----+-----+-----+-----><
      |           |           |           |           |
      +-- Cursor  -----+
      +-- CSR    -----+
      +-- Data   -----+
      +-- Half   -----+
      +-- Max    -----+
      +-- Page   -----+
      +-- n_lines -----+
  
```

## Data Edit Data Filtering Commands

The following SDE primary commands are used to temporarily remove display of data or to redisplay data in the SDE view. Note that these command do not alter data.

### EXCLUDE :

Exclude from the current SDE Edit/Browse multi record view, those data records, record segments or DB2 table rows that satisfy a search for a specified character string or numeric value.

```

      +- EQ +-          +- NEXT ---+ +- CHARS ---+
      | | | | | | | | | | | | | | | | | | | | | |
>>+- EXclude ---+ +- string ---+ +- -----+ +- -----+
      | | | | | | | | | | | | | | | | | | | | | |
      +- X -----+ +- op +-          +- ALL ---+ +- PREFIX +-
      | | | | | | | | | | | | | | | | | | | | | |
      +- VALID -----+ +- FIRST +-      +- SUFFIX +-
      | | | | | | | | | | | | | | | | | | | | | |
      +- INVALID -----+ +- LAST ---+ +- WORD ---+
      | | | | | | | | | | | | | | | | | | | | | |
      +- PREV ---+
      | | | | | | | | | | | | | | | | | | | | | |
      +- #ALL -----+ +- .ZFIRST ---+ .ZLAST +-
      | | | | | | | | | | | | | | | | | | | | | |
>+-----+-----+-----+-----+-----+-----+-----+-----+<
      | | | | | | | | | | | | | | | | | | | | | |
      +- pos1 ---+ +- .name1 ---+
      | | | | | | | | | | | | | | | | | | | | | |
      +- pos2 ---+ +- .name2 ---+
      | | | | | | | | | | | | | | | | | | | | | |
      +------+-----+-----+-----+-----+-----+-----+-----+
      | | | | | | | | | | | | | | | | | | | | | |
      +- , ---+
      | | | | | | | | | | | | | | | | | | | | | |
      +- ( ---+ field_col -----+ ) ---+
      | | | | | | | | | | | | | | | | | | | | | |
      +- field_col1:field_col2 ---+

```

### FLIP :

Supported for in-storage edit only, flips the display of DB2 table rows and records or record segments assigned the default record type so that excluded lines become visible and vice versa.

### HIDE :

Hide all shadow lines. (Equivalent to SET SHADOW OFF ALL.)

### LESS :

Exclude any visible records that are of the default record type and either satisfy the specified SDE *expression* or have the specified edit line flag enabled. Those that are already excluded remain excluded.

```

>>--- LESS ---+ expression -----+-----+-----+-----+-----+-----+-----+-----+<
      | | | | | | | | | | | | | | | | | | | | | |
      +- line_flag -----+

```

### MORE :

Make visible any excluded DB2 table rows, records or record segments that are of the default record type and either satisfy the specified SDE *expression* or have the specified edit line flag enabled. Those that are already visible remain visible.

```

>>--- MORE ---+ expression -----+-----+-----+-----+-----+-----+-----+-----+<
      | | | | | | | | | | | | | | | | | | | | | |
      +- line_flag -----+

```

**ONLY :**

Displays all DB2 table rows, records or record segments assigned the default record type that satisfy the specified search character string or numeric value. Those that do **not** satisfy the search string are excluded.

```

      +- EQ +-
      |      |
>>--- Only ---+-----+ string +-----+-----+-----+----->
      |      |      |      |      |      |
      |      +- op +-      |      +- PREFIX +-      +- EX +-
      |      |      |      |      |      |      |      |
      +- VALID -----+      +- SUFFIX +-      +- NX +-
      +- INVALID -----+      +- WORD ---+      +- X ---+

      +- #ALL -----+      +- .ZFIRST --- .ZLAST -+
      |-----+-----+-----+-----+-----+-----+
>-----+-----+-----+-----+-----+-----+-----><
      +- pos1 -----+-----+-----+      +- .name1 -----+
      |      |      |      |      |      |      |      |
      |      +- pos2 ---+      |      |      |      |      +- .name2 ---+
      |      |      |      |      |      |      |
      +-----+-----+-----+-----+
      |      |      |      |
      |      +- , ---+
      |      |      |
      v
      +- ( --- field_col ----- ) +-
      |      |
      +- field_col1:field_col2 ---+
    
```

**SELECT :**

For records or record segments of a particular record-type, identifies the field columns in the order in which they are to be displayed in the current SDE view.

```

      +- , -----+
      |      |
      v
>>--- SElect ---+-----+-----+-----+----->
      |      |
      |      +- * -----+
      |      |
      +- field_col -----+
      |      |
      +- Hold +-

      +-----+-----+-----+-----+-----+-----+
>-----+-----+-----+-----+-----+-----+-----><
      |      |      |      |
      +- FROM record_type ---+      +- IN struct_name ---+
    
```

**WHERE :**

Display only those records (data set records, record segments or DB2 table rows) that satisfy the specified SDE expression or edit line flag criteria. Those that do **not** satisfy the criteria are excluded.

```

      +- 1 -----+
      |      |
>>---+ Where ---+-----+-----+-----+-----><
      |      |
      +- ALL ---+      +- expression ---+
      |      |
      +- line_flag ---+
    
```

---

## Data Edit Data Alteration Commands

---

The following SDE primary commands are used to change data in SDE Edit views and are invalid for SDE Browse.

**CAPS :**

SET option which controls whether upper casing of alpha characters will occur for all data within fields that are changed.

```
>>+-----+ CAPS  ON  +-----><
  |         |      |      |
  +- SET  -+      +- OFF -+
  |         |      |      |
```

**CHANGE :**

Search data in the current date edit view for the specified character string or numeric value (*string1*) and replace it with *string2*.

```
>>--- Change  +- EQ +-
              |   |
              +- op -+
              |   |
              +- VALID -----+
              +- INVALID -----+
              |   |
              +- NEXT  +- CHARS ---+
              |   |   |
              +- ALL  +- PREFIX -+ +- EX  +-
              +- FIRST +- SUFFIX -+ +- NX  +-
              +- LAST  +- WORD  ---+ +- X  ---+
              +- PREV  +-
              |   |
              +- #ALL -----+ +- .ZFIRST ----- .ZLAST -+
              +------+-----+-----+
              +- pos1 -----+ +- .name1 -----+
              |   |         |   |         |
              +- pos2 ---+   +- .name2 ---+
              |   |         |   |         |
              +-----+-----+-----+
              |   |         |   |         |
              +- , ---+
              |   |         |   |         |
              +- ( ---+ field_col -----+ ) +-
              |   |         |   |         |
              +- field_col1:field_col2 -+
              |   |
              +- DATA ---+
              +------+-----+-----+
              |   |
              +- TEXT ---+
              |   |
```

**COPY :**

Copy lines from an existing sequential or VSAM data set, PDS/PDSE library member or HFS file into the focus SDE Edit view.

```
>>> COPY -- fileid +- FROM -- 1 -----+ +- TO -- * -----+
                  |   |   |   |   |   |   |   |   |   |   |
                  + FROM +   + TO -+
                  |   |   |   |   |   |   |   |   |   |
                  +- start_line -+ +- end_line -+
                  |   |         |   |         |
                  |   |         |   |         |
                  +- * -----+
                  +- FOR -----+
                  |   |         |   |         |
                  +- n_lines ---+
                  |   |
                  +- AFTER---+
                  |   |
                  +------+-----+-----+
                  |   |         |   |         |
                  +- BEFORE -+ +- .name -+
                  |   |
```

**CUT :**

Cut and save to the clipboard, lines or boxes marked using MARK primary command or lines selected using M/MM or C/CC line commands.

```

      +--- Copy ---+ +--- REPlace --+ +--- NX -----+
      |              |               |             |
>>-- CUT -----+-----+-----+-----+-----+-----><
      |              |               |             |
      +--- Move ---+ +--- APPend ---+

```

**DELETE :**

Delete data records (records, record segments or DB2 table rows) and/or excluded record groups.

```

      +--- 1 -----+          +- .ZCSR ---+ +- .ZLAST ---+
      |              |         |           | |           |
>>-- DELEte -----+-----+-----+-----+-----+-----><
      |              |         |           | |           |
      +- n_lines --+ +- EX --+ +- .name1 ---+ +- .name2 ---+
      |              |         |           | |           |
      +- ALL -----+ +- NX --+
                               |
                               +- X ---+

```

**DUPLICATE :**

Duplicate the focus line (record, record segment or DB2 table row) a specified number of times.

```

      +--- 1 -----+
      |              |
>>-- DUPLicate -----+-----+-----+-----+-----+-----><
      |              |
      +- n_lines --+

```

**INSERT :**

Insert one or more new records (records, record segments or DB2 table rows) following the focus line, optionally providing explicit values to be inserted into specified fields.

```

>>-- Insert -----+-----+-----+-----+-----+----->
      |              |           |         |           |
      +- record_type --+         +- , -----+         |
                               |         v         |         |
                               +- (-- field_col --- ) --+
      |
      |              |           |         |           |
      +- , -----+         +- n_lines --+
      |         |         |         |         |
      +- Values(-- field_value ---) --+

```

**LENGTH :**

SET option which controls the record length of the record occupying the focus line.

```

>>+-----+-----+ LENGTH ----- n_bytes -----+-----+-----><
|              |
+- SET -----+

```

**MARK :**

Mark the boundaries of a line or box for subsequent CUT to the clipboard.

```

>>-- MARK ---+--- Line -----+-----+-----+-----+-----><
|              |
+--- Box ----+

```

**PASTE :**

Move or copy lines from the clipboard into an SDE edit view.

```

      +--- Keep -----+
      |              |
>>-- PASTE -----+-----+-----+-----+-----+-----><
      |              |
      +--- Delete ---+

```

**RCHANGE :**

Repeat the find and replace performed by the last CHANGE command.

**REDO :**

Re-apply one level of change made to the current file that was previous undone by an UNDO command.

REPLACELINE :

Replace data in fields within the record (record, record segment or DB2 table row) occupying the focus line.

```

                                 +- , -----+
                                 v |
  >>-- REPLACELINE --+-----+-----+-----+ Values(- field_value -+-) -><
                           |          |          |
                           +- , -----+          |
                           v |          |          |
                           +- (- field_col -+-) -+

```

SEGTYPE :

Applicable to full or auxiliary edit of segmented records only, SEGTYPE is used to change the type (primary or secondary) of the focus segment.

```

  >>-- SEGtype -----+-- Secondary -----+-----><
                           |          |          |
                           +- Primary -----+
                           +- Base -----+

```

SHIFT :

Supported for unformatted record view only, SHIFT moves record data within the left and right bounds columns, left or right without altering relative spacing.

```

  >>-- SHIfT +- Left +- n_bytes +-+-----+-----+-----+-----+-----+-----+-----+
                            |          |          |          |          |          |          |
                            +- Right+-          +- BOUNds +- left_col - right_col -+
                                         |          |          |
                                         +- BNDs ----+

         +--- 1 ----+                               +- .ZCSR --+ +- .ZLAST +-
  >-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
         +- n_lines +-          +- EX +-          +- .name1 +-          +- .name2 +-
         +- ALL ----+          +- NX +-
                                         +- X ----+

```

SORT :

Sort in-storage data records or DB2 table rows within the current data edit view, or sort records of an edited KSDS data set that has never been loaded.

```

                                 +- .ZFIRST +- +- .ZLAST +- +-----+ , -----+
                                 v |          |          |          |
  >>-- SORT -----+-----+-----+-----+ | Sort Field Spec | -----+-----+-----+
                             +- .name1 +- +- .name2 +-
                             +- KEY -----+

```

Sort Field Spec:

```

|+- field_col -----+-----+-----+-----+-----+-----+-----+-----+
|                                                                    +- Ascending ---+
|                                                                    +- Descending +-
|          |          |          |          |          |          |
|          +- Character ---+          |          |          |          |
+- field_pos -- field_length ---+-----+-----+-----+-----+-----+
|          |          |          |          |          |          |
|          +- Fixed -----+
|          +- PD -----+
|          +- DECimal ----+
|          +- PACKed ----+
|          |          |          |          |          |
|          +- ZD -----+
|          +- Zoned -----+
|          |          |          |          |          |
|          +- HFP -----+
|          |          |          |          |          |
|          +- BFP -----+
|          |          |          |          |          |
|          +- DFP -----+

```

UNDO :

Undo one level of changes made to the current file/DB2 table.



## Data Edit Miscellaneous Commands

The following miscellaneous SDE primary commands relate to environment options, saving changes and ending an SDE edit session.

### AVERAGE (AVG) :

**AVERAGE** will display or extract the average value of values belonging to columns in unformatted records or, if formatting is applied, records of a specific record type.

```

+-----+-----+-----+-----+
v
>>--+- Average -+-+ field_col -----+-----+-----+
|         |         |         |         |
+- AVG -+-+-----+         +- Character -+-+
|         |         |         |         |
+- field_pos , field_length -- , +-----+-----+
|         |         |         |         |
+- Fixed ----+
+- Binary ----+
|         |         |         |         |
+- PD -----+
+- DECimal ---+
+- PACKed ----+
|         |         |         |         |
+- ZD -----+
+- Zoned ----+
|         |         |         |         |
+- HFP -----+
|         |         |         |         |
+- BFP -----+
|         |         |         |         |
+- DFP -----+
|         |         |         |         |
+- .ZFIRST -- .ZLAST -+-+
>--+- Where -- expression -+-+ +-----+-----+-----+-----+
|         |         |         |         |         |         |
+- NX -----+         +- .name1 -+-+-----+-----+ +- DIgits int +-+
|         |         |         |         |         |         |
+- NOTEXcluded --+         +- .name2 -+-+
|         |         |         |         |         |         |
+-----+-----+-----+-----+
|         |         |         |         |         |         |
+- EXcluded ----+
+- X -----+
|         |         |         |         |         |         |
+- ALL -----+
|         |         |         |         |         |         |
+-----+-----+-----+-----+-----+-----+
>--+-+-----+-----+-----+-----+-----+-----+
|         |         |         |         |         |         |
+- REcOrd -+-+-----+-----+ record_type --+ +- STEM stemvar +-+
|         |         |         |         |         |         |
+- FOR +-+         +- TYPE +-+

```

### BOUNDS (BNDS) :

**BOUNDS** defines the leftmost and rightmost columns between which the **CHANGE**, **EXCLUDE**, **FIND**, **ONLY** and **SHIFT** commands will operate.

```

>>+-----+-----+-----+-----+-----+-----+-----+
|         |         |         |         |         |         |
+- SET -+-+-----+-----+ BNDS -+-+ +- left_col -- right_col +-+

```

### CANCEL :

Close **all** SDE window views for data displayed in the current SDE view. Any unsaved changes to the data will be discarded.

### CREATE :

Create a new sequential or VSAM data set, PDS/PDSE library member or HFS file, containing a group of lines extracted from the current SDE edit or browse view.

```

>>-- CREate -----+-----+-----+-----+-----+-----+-----+
|         |         |         |         |         |         |
+- fileid -+-+         +- .name1 -- .name2 ---+

```

### CSVGEN :

Open the **SDE CSV Generation Panel** or execute FileKit command **CSVGEN** to generate comma separated variable output for the formatted contents of the focus data edit or browse view.

**DROP, DDROP :**

Drop from storage a Structure Definition Object (**SDO**) containing record-type definitions used to map records within an SDE file edit or browse view.

```
>>- DROP --- struct_name -----><
>>- DDROP -- struct_name -----><
```

**END or QUIT :**

Close an SDE edit or browse view.

**ENUMS :**

Open a FileKit List window to display the enum definitions for the focus field, or for each record type in the specified structure definition object (SDO).

```
>>--+-- ENUMs -----+-----><
|          |          |          |
+-- ENUML ----+ +-- struct_name ----+
+-- LENums ----+
+-- LSEnums --+
```

**ERROR :**

For DB2 table edit only, display the SQL error panel describing the non-zero SQLCODE returned from the last attempt to save the focus row.

```
>>--+-- ERRor -----+-----><
+-- SQLerror --+
```

**FILE :**

Save changes and close **all** SDE views for data displayed in the current SDE view.

**FILEIO :**

For use in Data Editor REXX macros, FILEIO is used to perform file input/output on a data sets, library members, HFS/ZFS files and DB2 tables, with unformatted or formatted records.

```
>>--+-- FILEIO +----- filename ----- | Open/Close_Operations | -----><
|          |          |          | Input_Operations | -----+
+-- FIO ----+          |          | Output_Operations | -----+
|          |          |          | Selection_Operations | -----+
|          |          |          | Test_Data_Operations | -----+
|          |          |          | Options | -----+
|          |          |          | Miscellaneous_Operations | -+
```

**GETXML :**

Applicable to DB2 base tables only, GETXML copies an XML document from an XML column within a specific DB2 table row to a data set, library member or HFS/ZFS file.

```
>>-- GETXML --- INTO --+-----+----- fileid ----->
+-- FILE --+

>----- FROM --+-----+----- table_name -----+-----+----- column_name -->
+-- TABLE --+          +-- COLUMN --+

>-----+-----+----- DOCid +-----+----- document_id ----->
|          |          |          |          |
+-- WHERE --+          +-- = --+          |
|          |          |          |          |
+-- WHERE ( where_clause ) -----+

>-----+-----+-----+-----+-----><
|          |          |          |          |
+-- DB2 --+-----+----- ssn -----+ +-- AUDit --+
|          |          |          |          |
+-- SSN --+ +-- (ssn) --+
```

**INFORMATION :**

Display the appropriate **Data Sets Information** panel or report output for the specified dataset/DB2 table, or the dataset/DB2 table in the focus data edit view.

```
>>-- INFORMATION -----+-----><
|          |          |          |
+-----+-----+----- fileid -----+
|          |          |          |
+-- DB2 --+-----+----- table_name -----+
|          |          |          |
+-- (ssn) --+
```

**JSONGEN :**

Open the **SDE JSON Generation Panel** or execute FileKit command **JSONGEN** to generate JSON output for the contents of the focus SDE data edit or browse display.

**LAYOUT :**

Display the record structure **layout list window** detailing all record-types in the specified (or current) structure file (SDE structure (SDO), COBOL/PL1 copy book or COBOL/PL1 ADATA file).

```
>>-- LAYout ----->
|
|-----+--- sfile_fileid -----+
|
| +- SDO ---+
|
|+-- COBo1 +---- copybook_library(member_name) +--+
|
| +- PL1 ---+
|
|-----+--- AData -----+ adata_fileid -----+
|
|
| +- NOEXPand +-+   +- NUMwidth 5 -----+
|
|-----+-----+-----+----->
|
| +- EXPand ---+   +- NUMwidth fwidth ---+
|
```

**LIST SDO :**

Display the **Structure Definition Members** list window containing details of each SDE structure (SDO) library member selected by the nominated PDS/PDSE library and member masks.

```
>>----- LIst SDO ----->
|
|      +- user.**.SDO ---+
|
|-----+----->
|
|      +- library_mask ---+
|
```

**MAXIMUM (MAX) :**

MAXIMUM will display or extract the maximum value belonging to columns in unformatted records or, if formatting is applied, records of a specific record type.

```
>>-- MAXimum ----->
|
| v
| field_col -----+----->
|
|
|
|
|      +- CHaracter ---+
|
|+- field_pos , field_length -- , -----+
|
|
|      +- Fixed -----+
|      +- Binary -----+
|      +- PD -----+
|      +- DECimal -----+
|      +- PACKed -----+
|      +- ZD -----+
|      +- Zoned -----+
|      +- HFP -----+
|      +- BFP -----+
|      +- DFP -----+
|
|
|      +- .ZFIRST -- .ZLAST -+
|
|+-- Where --- expression ----->
|
|      +- .name1 -----+
|      +- .name2 -+
|
|
|      +- EXcluded -----+
|      +- X -----+
|      +- ALL -----+
|
|-----+-----+-----+----->
|
|      +- RECOord -----+ record_type +-+ +- STEM stemvar +-+
|
|      +- FOR -+           +- TYPE -+
|
```







**TEDIT :**

Direct a command to the SDE text edit Environment.

```
>>-- TEdit -- cble_command -----><
```

**TEMPORARY :**

Execute **SELECT** or **COLWIDTH** data edit primary commands to temporarily set column selection, ordering and display width in the current Data Editor view (the default action). The associated SDO structure is not updated.

```
>>-- TEMPorary --+- SELECT_command -----+><
|
| +- COLWIDTH_command ---+
|
```

**TOTALS :**

TOTALS performs all the aggregate operations ( **AVERAGE**, **MAXIMUM**, **MINIMUM** and **SUM** ) for specific columns within unformatted records or, if formatting is applied, within records of a specific record type.

```
>>-- TOTals -----+><
|
| v
|-----+-----+
| field_col -----+
|
|-----+-----+
| field_pos , field_length -- , -----+
|
|-----+-----+
|                                     +- Character ---+
|                                     |
|                                     +- Fixed -----+
|                                     +- Binary -----+
|                                     |
|                                     +- PD -----+
|                                     +- DECimal ----+
|                                     +- PACKed -----+
|                                     |
|                                     +- ZD -----+
|                                     +- Zoned -----+
|                                     |
|                                     +- HFP -----+
|                                     |
|                                     +- BFP -----+
|                                     |
|                                     +- DFP -----+
|
|-----+-----+
|                                     +- .ZFIRST -- .ZLAST -+
|                                     |
|-----+-----+
| >--+- Where -- expression -+-+-----+-----+><
|                                     |
|                                     +- .name1 -+-+-----+-----+
|                                     |
|                                     +- .name2 -+-+
|
|-----+-----+
|                                     +- NX -----+
|                                     +- NOTEXcluded --+
|                                     |
|-----+-----+
|                                     +- EXcluded -----+
|                                     +- X -----+
|                                     +- ALL -----+
|
|-----+-----+
|                                     +- STEM stemvar -+
|-----+-----+
| RECOrd +------+-----+ record_type --+ +- STEM stemvar -+
| FOR +- TYPE -+
|
```

**TSO :**

For z/OS, execute a TSO primary command. For CMS, execute a CMS primary command.

```
>>--+- TSO -----+----- command -----><
|
| +- SYScommand -+
| +- CMS -----+
| +- DOS -----+
|
```

**XMLBROWSE :**

Applicable to DB2 table edit only. XMLBROWSE opens a new **data editor** view in order to display the XML document text located within a specific row and XML column of the current DB2 data editor view.

```
>>--+- XMLBrowse -+-+-----+-----+><
|
| +- XMLBrws ---+ +- row_number ---+ +- #column_ref ---+
|                                     |
|                                     +- #column_ref -----+
|                                     |
|                                     +- row_number ---+
|
```

**XMLEDIT :**

Applicable to DB2 table edit only. XMLEDIT opens a new **text editor** view in order to edit and update XML document text located within a specific row and XML column of the current DB2 data editor view.

```
>>-- XMLEdit --+-----+-----+-----+-----><
|             |             |             |
+-- row_number ---+   +-- #column_ref --+
|             |             |             |
+-- #column_ref ---+-----+-----+-----+
|             |             |             |
+-- row_number ---+-----+-----+-----+><
```

**XMLGEN :**

Open the **SDE XML Generation Panel** or execute FileKit command **XMLGEN** to generate extensible markup language (XML) output for the formatted contents of the focus data edit or browse view.

**XMLIMPORT :**

Reads the Extensible Markup Language (XML) dataset *XmlFile* and converts it into a "Tree" formatted structured dataset *StructuredFile* which may be mapped using the supplied mapping structure "<SystemHLQ>.SZZSDIST.SDO(TREE)".

```
>>--- XMLIMPort ---- XmlFile ---- StructuredFile -----><
```

**XMLLENGTH :**

Applicable to DB2 table edit and browse only. XMLLENGTH displays the length of text belonging to an XML document located within a specific row and XML column of the current DB2 data editor view.

```
>>-- XMLLength --+-----+-----+-----+-----><
|             |             |             |
+-- row_number ---+   +-- #column_ref --+
|             |             |             |
+-- #column_ref ---+-----+-----+-----+
|             |             |             |
+-- row_number ---+-----+-----+-----+><
```

**XMLVIEW :**

Applicable to DB2 table edit only. XMLVIEW opens a new **text editor** view in order to edit and update XML document text located within a specific row and XML column of the current DB2 data editor view.

```
>>-- XMLView --+-----+-----+-----+-----><
|             |             |             |
+-- row_number ---+   +-- #column_ref --+
|             |             |             |
+-- #column_ref ---+-----+-----+-----+
|             |             |             |
+-- row_number ---+-----+-----+-----+><
```

**XREF :**

Product migration tool used to generate a FileKit structure (SDO) from an XREF file (sequential data set or PDS/PDSE member).

```
>>-- XREF --+-----+-----+-----+-----><
|             |             |             |
+-- xref_file  +-----+-----+-----+
|             |             |             |
|             |             |             |
|             |             |             |
+-- sdo_file   +-----+-----+-----+
|             |             |             |
|             |             |             |
+-- Batch -----+   +-- max_rc --+><
```

**XREFLIB :**

Product migration tool that executes **XREF** against each selected member of an XREF PDS or PDSE library, creating a batch job which converts a number of XREF library members to FileKit structures (SDO).

```
>>-- XREFLIB -- xref_library+-----+-----+-----+-----><
|             |             |             |
|             |             |             |
|             |             |             |
|             |             |             |
+----- , -----+
|             |             |             |
+ ( -- member_mask -- ) ----><
```



## Data Edit Options

|                         |   |
|-------------------------|---|
| <b>ABBREVIATION</b>     | Controls use of abbreviated field name reference.   |
| <b>ALT</b>              | Set or obtain alteration count for the current data edit view.  |
| <b>ARRAYALL</b>         | Controls display of all array available element fields.   |
| <b>ARRAYASCHARACTER</b> | Controls display of all single byte array elements as variable character.                             |
| <b>ASCII</b>            | Controls whether character fields are interpreted as being ASCII.                                     |
| <b>AUTOSAVE</b>         | Control action on closing the edit view when unsaved alterations exist.                               |
| <b>AUTOSTRUCTURE</b>    | Manages data file to structure associations.  |
| <b>AUXDSNPREFIX</b>     | Identifies the auxiliary dataset name prefix qualifiers.  |
| <b>AUXDATACLASS</b>     | Identifies the auxiliary dataset SMS data class name.   |
| <b>AUXMGMTCLASS</b>     | Identifies the auxiliary dataset SMS management class name.   |
| <b>AUXSTORCLASS</b>     | Identifies the auxiliary dataset SMS storage class name.  |
| <b>AUXUNIT</b>          | Identifies the auxiliary dataset DASD unit.   |
| <b>BOUNDS</b>           | Sets or obtains the boundary columns.   |
| <b>CAPS</b>             | Sets or obtains the automatic upper casing of character data.   |
| <b>CCSID</b>            | Controls the CCSID used for XMLGEN batch execution.   |
| <b>CLIPBOARD</b>        | Obtain the status of clipboard data.  |
| <b>COLATTRIBUTES</b>    | Controls display of DB2 table column attributes in single row view.                                   |
| <b>COLOR / COLOUR</b>   | Manage colour settings for data edit display of highlighted fields.                                   |
| <b>COLWIDTH</b>         | Controls the display width of individual columns.   |
| <b>COLWIDTHAUTO</b>     | Controls the display width of variable length columns.  |
| <b>COMMIT</b>           | Controls the event that causes a DB2 COMMIT to occur.   |
| <b>COMPILER</b>         | Nominates the location and name of the COBOL, PL1 or HLASM compiler module.                           |
| <b>COMPILERDDSIZE</b>   | Defines the dynamically allocated sizes of required compiler datasets.                                |
| <b>COPYBOOKPROC</b>     | Controls how COBOL and PL1 copybooks are to be processed.   |
| <b>DESCRIPTION</b>      | Sets or obtains the description associated with a FileKit SDO structure.                              |
| <b>DFPSCALE</b>         | Controls the display format of decimal floating-point type fields.                                    |
| <b>DRECTYPE</b>         | Sets or obtains the default record-type in the focus Data Editor view.                                |
| <b>DSN</b>              | Set or obtain the DSN assigned to the text being edited in the current data edit view.                |
| <b>DSORG</b>            | Set or obtain the data set organisation of the dataset in the current edit view.                      |
| <b>EDITPRIMEKEY</b>     | Controls the ability to make changes to values in the DB2 primary key columns.                        |
| <b>EOLIN</b>            | Control the input End-of-Line characters used for COPY or GET of an HFS file.                         |
| <b>EOLOUT</b>           | Control the output End-of-Line characters used for SAVE of an HFS file.                               |
| <b>FIELD</b>            | Obtain information about each selected field in the focus record.                                     |
| <b>FILEID</b>           | Set or obtain the complete fileid assigned to text in the current data edit view.                     |
| <b>FMODE</b>            | Set or obtain the file mode portion of the name assigned text in the current data edit view.          |
| <b>FOCUS</b>            | Obtain information about the focus field.   |
| <b>FORMAT</b>           | Control the format of data displayed in the Data Editor view.   |
| <b>FNAME</b>            | Set or obtain the file name portion of the name assigned text in the current data edit view.          |
| <b>FPATH</b>            | Set or obtain the HFS file path assigned text in the current data edit view.                          |
| <b>FTYPE</b>            | Set or obtain the file type portion of the name assigned text in the current data edit view.          |
| <b>FVALUE</b>           | Obtain the value for each specified field belonging to the focus record-type.                         |
| <b>GROUP</b>            | Control display of GROUP field items in single-record view.   |
| <b>GROUPASCHARACTER</b> | Controls display of GROUP fields as one single character field.                                       |
| <b>IDSCOPE</b>          | Nominates the record flag set in order to be included in an IDENTIFY command remap operation.         |
| <b>IDWARNING</b>        | Controls display of the ID flag when data identifying record mapping selection criteria is altered.   |
| <b>KEY</b>              | For undefined KSDS datasets, alter the KSDS key position and length.                                  |
| <b>LASTMSG</b>          | Obtain the last message displayed by the Data Editor.   |
| <b>LENGTH</b>           | Set or obtain the length of the focus line of data.   |
| <b>LEVEL</b>            | Controls display of hierarchical field levels in single-record view.                                  |
| <b>LOADWARNING</b>      | Size threshold multiple at which load of a dataset is paused and a warning message displayed.         |
| <b>LRECL</b>            | Set or obtain the defined LRECL for the dataset in the current edit view.                             |
| <b>MACROPATH</b>        | Set or obtain the list of library names that comprise the macro search path.                          |
| <b>MAPPING</b>          | Controls whether formatted data is displayed in mapped or unmapped format.                            |
| <b>MAXCOBOLRC</b>       | Sets or obtains the maximum acceptable return code expected from the COBOL compiler.                  |
| <b>MAXHLASMRC</b>       | Sets or obtains the maximum acceptable return code expected from the Assembler program.               |
| <b>MAXPL1RC</b>         | Sets or obtains the maximum acceptable return code expected from the PL1 compiler.                    |
| <b>MAXSTOR</b>          | Imposes a maximum region of storage on the edit of any dataset by the Data Editor.                    |
| <b>MBR</b>              | Synonym for FNAME.  |
| <b>MSGLINE</b>          | Set or obtain message line definitions and their location within the display area.                    |
| <b>MSGMODE</b>          | Controls whether or not messages are displayed and if long messages wrap onto multiple message lines. |
| <b>MULTIPOINT</b>       | Controls whether multiple labels may be assigned to the same line.                                    |
| <b>NULLCHAR</b>         | Identifies the input and output characters used to represent a NULL value in a DB2 column.            |
| <b>NULLIFBLANK</b>      | Controls whether a blanking a DB2 field sets it to NULL.  |
| <b>OFFSET</b>           | Controls display of the field offset values in single-record view.                                    |

|                      |  |
|----------------------|--|
| <b>PAD</b>           | Specifies the pad character used when a record length is increased.                                      |
| <b>PAGEDEPTH</b>     | Specifies the default page depth for PRINT.  |
| <b>PAGEWIDTH</b>     | Specifies the default page width for PRINT.  |
| <b>PFKEY</b>         | Set or obtain PFKey definitions for Data Editor views.   |
| <b>POINT</b>         | Set or obtain named line label definitions.  |
| <b>PREFIX</b>        | Control display, location and width of the Data Editor numbered prefix area.                             |
| <b>QSEPARATOR</b>    | Controls the separator character used in qualified field name references.                                |
| <b>RECFM</b>         | Set or obtain the RECFM of the dataset in the current edit view.   |
| <b>RECINFO</b>       | Manages display of record information in multi-record view.  |
| <b>RECTYPES</b>      | Obtain the names of all record-type definitions in the current SDO.                                      |
| <b>REFERENCE</b>     | Control display of the field reference numbers.  |
| <b>REGION</b>        | Obtain information relating to available storage region size.  |
| <b>RESERVED</b>      | Define reserved lines in the data edit view.   |
| <b>RESERVEDLEVEL</b> | Identifies the options level (File or Global) at which option RESERVED will take affect.                 |
| <b>RTSCOPE</b>       | Indicates whether or not FIND, CHANGE, EXCLUDE and ONLY operations apply to records of all record-types. |
| <b>SAVEOPTIONS</b>   | Maintain updates made to data editor options across FileKit sessions.                                    |
| <b>SCALE</b>         | Manage display of the Data Editor scale lines.   |
| <b>SESSION</b>       | Obtain general information about the current Data Editor view.   |
| <b>SHADOW</b>        | Control display of shadow lines which represent groups of excluded or suppressed lines.                  |
| <b>SIZE</b>          | Obtain number of records/rows loaded in the current edit view.   |
| <b>STRUCTURE</b>     | Manage the data file to structure associations table entries.  |
| <b>TITLE</b>         | Sets or obtains the title associated with a FileKit SDO structure.                                       |
| <b>TYPE</b>          | Controls display of the field data type, location and length.  |
| <b>UNDOING</b>       | Control UNDO/REDO activation, maximum undo levels and available storage.                                 |
| <b>UNNAMED</b>       | Controls display of unnamed fields.  |
| <b>USEOFFSET</b>     | Applies an offset to data mapped by the focus record-type.   |
| <b>USERNAME</b>      | Obtain current user's logon user id.   |
| <b>USING</b>         | Obtain information relating to the current mapping structure.  |
| <b>VALUE</b>         | Obtain the value of each selected field in the focus record.   |
| <b>VENDCHAR</b>      | Specifies the input and output characters used to denote end of data in a DB2 VARCHAR field.             |
| <b>VERSION</b>       | Obtain Data Editor version information.  |
| <b>VIEW</b>          | Control the record-type mappings displayed in the current view.  |
| <b>VSHOWEND</b>      | Controls display the output VENDCHAR character for DB2 VARCHAR field values.                             |
| <b>VSTRIP</b>        | Controls whether trailing blanks are stripped from DB2 VARCHAR field values.                             |
| <b>WINNAME</b>       | Data edit document and frame window naming.  |
| <b>WINPOS</b>        | Data edit document and frame window positioning.   |
| <b>WINSIZE</b>       | Data edit document and frame window sizing.  |
| <b>WRAP</b>          | Control LOCATE search wrapping from the last to first line of edited text.                               |
| <b>ZEROS</b>         | Controls display of leading zeroes on numeric field values.  |

# Lists

---

FileKit List windows are used to display lists of objects. e.g. Data sets, library members, enqueued resources, allocated DDnames, DB2 objects, etc.

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## List Startup

---

List windows are used throughout FileKit. Specific utility list windows may be opened using any of the following methods:

1. Primary commands: **LA LAS LC LD LJQ LL LP LQ LSG LSGV LV LVOL LX**
  2. Primary Option Menu, option 3. List. (=3)
  3. From the main menu bar, select Utilities --> List.
- 

## List Window Function Key Defaults

---

|     |          |     |             |
|-----|----------|-----|-------------|
| F1  | HELP     | F13 |             |
| F2  | SPLIT    | F14 |             |
| F3  | CLOSE    | F15 |             |
| F4  | WINDOW   | F16 | SHOWPOPMENU |
| F5  | RFIND    | F17 | ZOOMLIST    |
| F6  |          | F18 |             |
| F7  | UP       | F19 |             |
| F8  | DOWN     | F20 |             |
| F9  | SWAP     | F21 | SWAP LIST   |
| F10 | LEFT     | F22 |             |
| F11 | RIGHT    | F23 |             |
| F12 | CRETRIEV | F24 |             |

## List Window Prefix Area (Line) Commands

|           |  |
|-----------|--|
| <b>A</b>  | Open the <b>Create Library Alias</b> dialog window for Library Lists or the <b>Define Catalog ALIAS</b> for all other file lists.  |
| <b>AP</b> | Open the DB2 <b>Print Audit Report</b> panel for this entry, using the entry name as the Audit DSN field entry.  |
| <b>AS</b> | Open an <b>Associations</b> list window for the entry.   |
| <b>B</b>  | Open the <b>Structured Data Editor</b> to to perform SDATA <b>BROWSE</b> on the entry.   |
| <b>C</b>  | Open the <b>File Copy</b> dialog panel to copy the entry.  |
| <b>CF</b> | Open the <b>Compare Files Panel</b> for this entry, using the entry name as the New File field entry.  |
| <b>CL</b> | Open the <b>Compare Libraries Panel</b> for this entry, using the entry name as the New DSN field entry.   |
| <b>D</b>  | Delete the entry. User will be prompted to verify the deletion.  |
| <b>E</b>  | Open the <b>CBLe text editor</b> to edit the entry.  |
| <b>EU</b> | Open the <b>SDE structured data editor</b> to edit the entry in update mode only.  |
| <b>EX</b> | Execute the library member entry. (Invokes the TSO command, EXECUTE, using the entry name as input.<br>Supported in MVS TSO or ISPF environments only.   |
| <b>F</b>  | Open the <b>FSU - File Search/Update Window</b> to perform an advanced search and optionally update the contents of the entry.<br>Supported for MVS SELCOPY licensees only on all types of data set.   |
| <b>FO</b> | Open an SDE view to display (browse) the entry as output from the <b>FSU - File Search/Update Window</b> .<br>Supported for MVS SELCOPY licensees only.  |
| <b>FS</b> | Open the <b>File Search</b> window to search the contents of the entry.<br>Supported for MVS PDS/PDSE, CMS fileid, VSE LIBR sub-library and member entries only.   |
| <b>I</b>  | Display detailed information for the entry. For file or DB2 object lists, opens a <b>Data Set Information</b> panel. For Volume lists, opens the DASD Volume Statistics window.  |
| <b>IC</b> | Open the <b>Execute IEBCOPY</b> panel for this entry, using the entry name as the PDSIn field entry.   |
| <b>ID</b> | Open an IDCAMS Command window and issue an IDCAMS LISTCAT for the entry.   |
| <b>J</b>  | Submit the library member entry to batch. Executes the CBL CLI SUBMIT command using the entry name as input. (A CBL frame window must be active for this operation to succeed.)<br>Supported in MVS and VSE environments only.   |
| <b>K</b>  | Delete (Kill) the entry without prompting for verification.  |
| <b>L</b>  | Open a <b>Dataset List</b> window for the entry.<br>Supported for Execute CBLVLCAT windows only.<br>For <b>VSE LIBR Library member</b> list windows only, lock the LIBR member.  |
| <b>M</b>  | Open a <b>Library List</b> window for the entry.<br>Supported for MVS PDS/PDSE, VSE LIBR library and sub-library entries only.   |
| <b>Q</b>  | List dataset enqueues (major name SYSDSN) for the entry.<br>Supported for MVS only.  |
| <b>R</b>  | Rename the entry.  |
| <b>SD</b> | Open the <b>SDE BROWSE/EDIT Dialog Window</b> to edit or browse the entry's data within a Structured Data Environment <b>window view</b> .<br>Supported for z/OS SELCOPY licensees only.   |
| <b>T</b>  | Issue a <b>LISTVCAT</b> operation against the entry with parameters <b>TUNE</b> and <b>DEFINE</b> .<br>For <b>DASD List</b> windows only, open the <b>VTOC list</b> window for the volume entry.   |
| <b>U</b>  | Unallocate the MVS DD name or UNLOCK the VSE LIBR member entry.<br>Entries may only be unallocated or unlocked by the user that originally allocated or locked it.   |
| <b>UT</b> | Opens the general file utilities menu to perform tasks as follow. Note that, where command syntax is generated in a text edit window, it is in a format that may be executed using the ACTION key (i.e. position the cursor on the command and press the ACTION key to execute it. The default ACTION key is F16 (Shift-F4). <ol style="list-style-type: none"> <li>1. Open a text edit view containing the EDIT command for the selected file entry.</li> <li>2. Open a text edit view containing an ALLOC DISP=SHR command for the selected file entry.</li> <li>3. Exit the utilities menu.</li> <li>4. Open a text edit view containing an EQU command for the selected file entry.</li> <li>5. Open the Allocate non-VSAM dialog using the selected file entry as a model.</li> <li>6. Open the Allocated Datasets List window filtering on the selected file entry DSN.</li> </ol> |

7. Open a text edit view containing an MVS JCL DD statement (DISP=SHR) for the selected file entry.
8. Open a text edit view containing a SELCOPY batch job to read and print records from the selected file entry.
9. Open a text edit view containing only SELCOPY control statements to read and print records from the selected file entry. (Use as SYSIN to SELCOPY program. Run in foreground using RUNSELC.)

|             |   |
|-------------|---|
| <b>V</b>    | Open the <b>CBL</b> text editor to View (edit read/only) the entry.   |
| <b>VC</b>   | Open an <b>Execute CBLVCAT</b> window and issue a <b>LISTVCAT</b> and/or <b>LISTVTOC</b> operation (as appropriate) for the entry.  |
| <b>Z</b>    | Perform a compress of an MVS PDS library to reclaim disk space occupied by replaced (back-level) members. This action performs an IEBCOPY to itself. No action is taken for PDSE entries, however, the IEBCOPY dialog is opened with an error message if executed against any non-PDS(E) entry. Supported in MVS environments only. |
| <b>/</b>    | Open a drop down menu containing valid prefix command functions for the list window entry. Position the cursor on the required function and hit <Enter> to action the command. Assigned to Function Key F16 (Shift-F4) by default.  |
| <b>?</b>    | Same as "/"   |
| <b>&gt;</b> | Open a new window containing a zoomed vertical display of the entry's fields. Particularly useful for list windows that have a large number of displayed columns. Assigned to Function Key F17 (Shift-F5) by default.   |

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## List Window Primary Commands

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List Window commands are categorised as follows:

1. List Utility Startup.
2. List Window Commands.

---

## List Utility Startup Commands

---

The following primary commands may be issued from any FileKit window and are used to start individual List Utility windows.

**LA :** Open an **Allocated Datasets List** window and optionally list all MVS DD names or VSE file labels currently allocated to your job.

```
>>--+ LA -----+-----+-----+-----+-----+-----+-----+-----+-----+-----<<
      |           |           |           |           |           |           |           |           |
      +- LISTALLOC -+ +--- dname ---+
      |           |           |           |           |           |           |           |           |
```

**LAS :** Open an **Associations List** window and optionally select cataloged entries for which associated objects will be displayed.

```
>>--+ LAS -----+-----+-----+-----+-----+-----+-----+-----+-----+-----<<
      |           |           |           |           |           |           |           |           |
      +- LASSOC -----+ +- entry -----+-----+-----+-----+-----+-----+-----+
      |           |           |           |           |           |           |           |           |
      +- LISTASSOC -----+           +- catalog -----+-----+-----+-----+-----+-----+
      |           |           |           |           |           |           |           |           |
      +- LISTASSOCIATIONS --+           +- types --+
      |           |           |           |           |           |           |           |           |
```

**LC :** For CMS, opens a **File List** window in place of the Catalog List or Dataset List window, and displays information about files residing on accessed mini-disks.

For MVS and VSE, open a **Catalog List** window and optionally list basic information about entries in the catalog.

Open an MVS Cataloged Entries List Window:

```
>>--+- LC -----+-----+-----+-----+----->>
| LISTCAT -----+ | entry -----+-----+-----+-----|
| FL -----+ | catalog -----+-----+-----+-----|
| FILELIST -----+ | types --+
+-----+-----+-----+-----+----->>
```

Open a CMS File List Window:

```
>>--+- LC -----+-----+-----+-----+----->>
| LISTCAT -----+ | entry -----+-----+-----+-----|
| FL -----+
| FILELIST -----+
| LD -----+
| LISTDATASET --+
+-----+-----+-----+-----+----->>
```

Open a VSE Catalog List Window:

```
>>--+- LC -----+-----+-----+-----+----->>
| LISTCAT -----+ | catalog -----+-----+-----+-----|
| FL -----+ | entry -----+-----+-----+-----|
| FILELIST -----+ | types --+
+-----+-----+-----+-----+----->>
```

**LD :** For CMS only, the LD is a synonym for LC and is unsupported for VSE.  
For MVS, LD opens a **Dataset List** window and optionally list entries in the catalog together with additional detail obtained from VTOC entries.

```
>>--+- LD -----+-----+-----+-----+----->>
| LISTDATASET --+ | entry -----+-----+-----+-----|
| | catalog -----+-----+-----+-----|
| | types --+
+-----+-----+-----+-----+----->>
```

**LJQ :** Open a **Job Enqueue List** window containing outstanding MVS enqueues held by a given job.

```
>>--+- LJQ -----+-----+-----+-----+----->>
| LISTJOBENQ --+ | jobname --+
+-----+-----+-----+-----+----->>
```

**LL :** Open a **Library List** window and optionally list the members of an MVS PDS/PDSE, VSE LIBR library or CMS minidisk.

```
>>--+- LL -----+-----+-----+-----+----->>
| LISTLIBRARY --+ | library --+
| LM -----+
| LISTMEMBERS --+
+-----+-----+-----+-----+----->>
```

**LP :** Open an **HFS Path List** window to list information about entries that match the specified HFS path.

```
>>--+- LP -----+-----+-----+-----+----->>
| LISTPATH -----+ | -C --+ | -S --+ | hfs_path --+
| LISTP -----+
| LPATH -----+
+-----+-----+-----+-----+----->>
```

**LQ :** Open an **Enqueue List** window and optionally list outstanding MVS enqueues by major name and minor name (queue name and resource name).

```
>>--+ LQ -----+-----+-----+-----><
      |          |          |          |
      +- LISTENQ -+  +- queueName -+-----+
                                   |
                                   +-- resourcename --+
```

**LSG :** Open an **SMS Storage Group** list window and optionally specify a storage group name mask.

```
>>--+ LSG -----+-----+-----+-----><
      |          |          |          |
      +- LISTSTORAGEGROUPS -+  +- SGName ---+
```

**LSGV :** Open an **SMS Storage Group Volumes** list window and optionally specify storage group name and volume id mask. The list displays volumes belonging to an SMS pool storage group.

```
>>--+ LSGV -----+-----+-----+-----><
      |          |          |          |
      +- LISTSTORAGEGROUPVOLVS -+  +--- SGName -+-----+
                                   |
                                   +-- volmask --+
```

**LV :** Open a **VTOC File List** window and optionally list, by data set name, entries contained in a DASD volume's Volume Table of Contents (VTOC).

```
>>--+ LV -----+-----+-----+-----><
      |          |          |          |
      +- LISTVTOC -+  +--- volume ---+-----+
                                   |
                                   +-- filter --+
```

**LVOL :** Open a **DASD Volumes List** window and optionally display the attributes of selected DASD volumes defined to your system.

```
>>--+ LVOL -----+-----+-----+-----><
      |          |          |          |
      +- LISTVOL -+  +--- volume ---+
```

**LX :** Open a **VTOC Extent List** window and optionally list, by physical extent, the entries contained in a DASD volume's Volume Table of Contents (VTOC).

```
>>--+ LX -----+-----+-----+-----><
      |          |          |          |
      +- LISTEXTENTS -+  +--- volume ---+
```

---

## List Window Commands

---

The following primary commands are specific to List windows.

**EXCLUDE :** Exclude display of a list entry that contains a match for the specified search *string anywhere* within the field occupying the first column of the display.

```
>>--+ EXclude ---+--- string -----+-----+-----><
      |          |          |          |
      +- X -----+          |          |
                                   +- NEXT ---+
                                   |
                                   +- ALL ---+
                                   +- FIRST --+
                                   +- LAST ---+
                                   +- PREV ---+
```

**FIND :**

Scroll the display to the **next** list entry to contain *string anywhere* within the text occupying the first column of the display.

```
>>-- Find ----- string -----><
```

**FLIP :**

FLIP will reverse the status of excluded and non-excluded lines in the list window so that excluded line entries are displayed and non-excluded line entries are excluded.

```
>>-- FLIP -----><
```

**HIDE :**

HIDE will hide all shadow lines that represent groups of one or more excluded line entries in the list window.

```
>>-- HIDE -----><
```

**LOCATE :**

Scroll the display to the **next** list entry to begin with *string* or the next entry immediately preceding *string*.

```
>>-- Locate ----- string -----><
```

**MEMBER :**

Exclude all list entries for data sets that are not libraries or do not contain at least one member whose name matches the specified member mask.

```
>>-- MEMBER --- member_mask -----><
```

**ONLY :**

Exclude all list line entries and then **include** entries that contain a character match for the specified search string **anywhere** within the field occupying the first column of the display.

```
>>---- Only ----- string -----><
                                     +- NEXT ---+
                                     |             |
                                     +-----+
                                     +- ALL ---+
                                     +- FIRST --+
                                     +- LAST  --+
                                     +- PREV  --+
```

**RESET :**

Reset display of list entry lines.

```
>>-- RESet -----><
                                     +- EXcluded ---+
                                     +- X -----+
                                     |             |
                                     +-----+
                                     +- Hide -----+
```

**RFIND :**

Following a successful FIND operation, RFIND (assigned to Function Key F5 by default) may be used to repeat the search for the remaining list entries.

**S :**

Supported for **Library Lists** only, S *member* will perform the default list operation (default Edit) on the specified library member.

```
>>-- S ----- member -----><
```

**SELECT :**

Identify field columns for display and the order in which they appear.

```
>>-- SElect -----><
                                     +----- ALL -----+
                                     |             |
                                     +-----+
                                     | +----- , -----+ | | +--- , ---+ |
                                     | v             | | | | |
                                     +---+ columnname +---+ +-----+ * ---+
                                     |             |
                                     +-----+
                                     +-| WHERE Command |-+ +-| SORT Command |-+
```



**SHADOW :**

Control display of shadow lines that represent groups of consecutive, excluded entry lines in the list window.

```

      +-- ON ---+
      |         |
>>-- SHADow ---+-----+-----><
      |         |
      +-- OFF ---+
    
```

**SORT :**

Modify the order in which the rows are displayed in the list. Alternativley, place the cursor on the column header of the column used to sort the entries and press <Enter>.

```

      +-----+ , +-----+
      |         | + A -+ |
      |         | +-----+
>>--++-- SORT ---+-----+----->
      |         | column_name |         |
      +-- ORDER BY -+         +-- D -+
>-----+-----+-----><
      |         |         |         |
      +--| SELECT Command |-+ +-- | WHERE Command |-+
    
```

**SRCHFOR :**

Executes the **File, Search & Update** utility to perform an unformatted text search for the specified search string in all files identified by non-excluded entries in the list.

```

      +- CHARS ---+
      |         |
>>-- SRCHFOR --- search_string ---+-----+-----+ pos1 ---+-----+-----><
      |         |         |         |         |
      +-- PREFIX -+         |         |         |
      +-- SUFFIX -+         +-- pos2 ---+
      +-- WORD  ---+
    
```

**WHERE :**

Restrict (filter) the rows displayed in the list.

```

      +-----+ AND ---+-----+
      |         |         |         |
      |         | +-- OR ---+         |
      |         | v         |         |
>>-- Where ---+-----+-----+-----+ Filter_Expr |-----+----->
      |         |         |         |         |         |
      +-- NOT ---+ +-- ( ---+         |         |         |
      |         |         |         |         |         |
      +-----+-----+-----+-----+><
      +--| SELECT Command |-+ +-- | SORT Command |-+
    
```

**Filter\_Expr:**

```

>-----+-----+ list_col ---+-----+-----+ <op> --- value ---+-----+----->
  |         |         |         |         |         |
  +- ( -+         |         |         |         |         |
      +-- ~ ---+
      +-- ? ---+
      +-- \ ---+
      +- NOT -+
    
```

# Home Command Centre

---

The user's personal **HOME** command centre text file is allocated the first time a user starts FileKit and is a central reservoir of useful primary commands that may be entered at any FileKit or TSO command prompt.

When edited using the FileKit text editor, commands entered in the file may be executed from within the file text using the **ACTION** key (assigned to F16 by default). i.e. To execute a command, simply position the cursor on the first line of the command syntax and press F16 (Shift-F4).

It is intended that the user maintain this file and insert and save additional commands and comments relating to commonly performed tasks. e.g. TSO RACF commands, SMP/E SYSMOD application, etc.

Note that most FileKit utility panels allow the user to generate CMX (primary command) output, suitable for execution using the ACTION key, which may be copied and saved to the user's Home file.

---

## Home Command Centre Startup

---

The user's Home command centre file may be opened with the text editor using any of the following shortcut methods:

1. Primary command: **HOME**
2. Primary Option Menu, option 4. Home. (=4)

## Home Centre Command Syntax

The ACTION facility, used to execute commands entered or saved in any text edited data, interprets special characters in the focus line as follows:

- The less than symbol (" $<$ " - X'4C'), if found within the first 4 characters of the focus line, indicates that the string of text on which the cursor is positioned is to be executed as a command immediately upon pressing the ACTION key. Characters in front of the " $<$ " are ignored. e.g.

```
/*< SUBMIT XYZJCL
```

- The greater than symbol (" $>$ " - X'6E') operates as for less than (" $<$ ") except that the command string is to be placed at the text edit command prompt when the ACTION key is pressed. i.e. The command string will not be immediately passed to the command processor. This is the default if neither " $<$ " nor " $>$ " is found in the first four characters of the focus line.
- Controlled by a Text-Edit setting (which is off by default), the OR symbol ("|" - X'4F') may be used to delimit the end of one command string and, either the beginning of a new command string or, comment text. i.e. it marks the limits of command string on which the cursor is positioned.

Note: If "|" is a character within the command string, "|" should be inserted at the start of the focus line following " $<$ " or " $>$ ".

- The backslash symbol ("\ - X'E0'), if the last non-blank character of the focus line, is interpreted as the continuation character and indicates that the command string continues at column 1 of the next line of text. The continuation character may be repeated over any number of consecutive lines allowing extra long command strings and cosmetic spacing. e.g.

```
<ALLOC REUSE F(OUTDD) NEW DSN('CBL.TEST.OUTPUT') \
      SPACE(1,1) CYL UNIT(3390) VOL('DATT0B') \
      RECFM(F,B) LRECL(80) BLKSIZE(0)

<SUBMIT CBL.SAMPLE.JCL(SSJOB01) \
;EDIT CBL.SYSPRINT``(SSJOB01) \
;EDIT CBL.TEST.OUTPUT
```

Note: In the above example, ';' (semi-colon) is the command separator character.

- The reverse apostrophe symbol ("'" - X'79') is treated as a null character and all occurrences are removed from the command string when the ACTION key is pressed. Its purpose is to allow cosmetic alignment of text in command strings. e.g.

```
<LL ADCD.Z111.PARMLIB(BPX*) | List local copies of PARMLLIB members.
<LL SYS1.````PARMLIB(BPX*) | List master copies of PARMLLIB members.
```

- Controlled by a Text-Edit setting (which is off by default), the first occurrence of an underscore symbol ("\_" - X'6D') may be treated as a null which gets removed from the command string when the ACTION key is pressed. Its purpose is to define the location within the command string at which the cursor is to be positioned when placed at the command prompt.

```
>SELCOPY CBL.SELCOPY.SYSIN(SSTEST_01) | Position the cursor on the "0".
```

Note: If the first occurrence of "\_" in the focus command text is **not** to be removed as it constitutes part of the command string, then an extra "\_" must be inserted before it.

# SELCOPY Debug

---

SELCOPY Debug may be used to debug SELCOPY batch procedures. The debugger opens in a separate CBL text edit MDI frame (parent) window and is ended on closing the SYSIN or SYSPRINT debug window edit views.

---

## SELCOPY Debug Startup

---

SELCOPY Debug may be opened using any of the following methods:

1. Primary command: **SELCOPY**
2. Primary Option Menu, option 8. Utilities, then, from the Utilities Menu, option 1. SELCOPY/debug. (=8.1)
3. From the main menu bar, select File --> SELCOPY Debug/Dev...

---

## SELCOPY Debug Function Key Defaults

---

SELCOPY Debug windows are a mixture of list windows, text edit views, storage dump windows and the Watch window. The List windows have the same Function Key defaults as documented [above](#).

Default Function Keys for the SYSIN text edit view are as follows, but may be switched to standard text edit values by selecting "Edit Keys" from the SELCOPY Debug Popup menu opened using function key F16 (Shift-F4) .

|     |          |     |             |
|-----|----------|-----|-------------|
| F1  | HELP     | F13 | STEPOVER    |
| F2  | SPLIT    | F14 | STEPINTO    |
| F3  | END      | F15 | GO          |
| F4  | WINDOW   | F16 | SDBPOPOP    |
| F5  | RFIND    | F17 | MARK BOX    |
| F6  | RCHANGE  | F18 | MARK LINE   |
| F7  | UP       | F19 | BREAKPOINT  |
| F8  | DOWN     | F20 | BOX         |
| F9  | SWAP     | F21 | SWAP LIST   |
| F10 | LEFT     | F22 | UNDO        |
| F11 | RIGHT    | F23 | REDO        |
| F12 | CRETRIEV | F24 | RESET BLOCK |

Storage dump windows have the following default Function Keys:

|     |          |     |               |
|-----|----------|-----|---------------|
| F1  | HELP     | F13 |               |
| F2  | SPLIT    | F14 |               |
| F3  | CLOSE    | F15 | END           |
| F4  | WINDOW   | F16 | SHOWPOPOPMENU |
| F5  | RFIND    | F17 |               |
| F6  |          | F18 |               |
| F7  | UP       | F19 |               |
| F8  | DOWN     | F20 |               |
| F9  | SWAP     | F21 | SWAP LIST     |
| F10 | LEFT     | F22 |               |
| F11 | RIGHT    | F23 |               |
| F12 | CRETRIEV | F24 |               |

The Watch list window has the following default Function Keys:

|     |          |     |           |
|-----|----------|-----|-----------|
| F1  | HELP     | F13 | STEPOVER  |
| F2  | SPLIT    | F14 | STEPINTO  |
| F3  | END      | F15 | GO        |
| F4  | WINDOW   | F16 | POSWIN    |
| F5  | RFIND    | F17 | DELETE    |
| F6  | RCHANGE  | F18 | INSERT    |
| F7  | UP       | F19 | SCALE     |
| F8  | DOWN     | F20 | SPACE     |
| F9  | SWAP     | F21 | SWAP LIST |
| F10 | LEFT     | F22 | UNDO      |
| F11 | RIGHT    | F23 | REDO      |
| F12 | CRETRIEV | F24 |           |

## SELCOPY Debug Primary Commands

### BREAKPOINT :

By default, BREAKPOINT is assigned to Function Key F19 (Shift-F7).

Set or unset a permanent BReak point at the focus statement in the **SYISIN window**. If a break point is set at a particular control statement, then processing will be paused on the next attempt to execute that statement.

```

                +- TOGgle ---+   +- Cursor -----+
                |           |           |           |
>>---+- BReakpoint ---+-----+-----+-----+<<
    |   +- BRK -----+   +- ON -----+   +- line ---+-----+
    |   +- OFF -----+   +- Clear ----+   +- column ---+
    |   +- Clear ----+
    |   +- OFF -----+   +- ALL ---+-----+
    |   +- Clear ----+   +- * ----+
    |   +- SUSPENDALL -----+
    |   +- RESUMEALL -----+

```

### EOJ :

Force SELCOPY to immediately execute a "GOTO EOJ" operation and so close all opened files.

### GO :

By default, GO is assigned to Function Key F15 (Shift-F3).

Continue processing of the control statements from the current break point.

### LIST OPERATIONS :

LIST OPERATIONS will display the SELCOPY Debug Operations List window which provides statistical analysis information for each executable SELCOPY statement.

### RERUN or RR :

Re-Run the job from the beginning. No further statements will be executed from the existing job run.

### STEPINTO or SI:

By default, STEPINTO is assigned to Function Key F14 (Shift-F2). Step (execute then pause) through the SELCOPY control statements logically one at a time, including statements in executed sub-routines.

### STEPOVER or SO:

By default, STEPOVER is assigned to Function Key F13 (Shift-F1). Step (execute then pause) through the SELCOPY control statements logically one at a time. Statements in sub-routines are executed but are not included in the stepped statements.

### TRACK :

Track the value of a valid SELCOPY POS expression as a position in storage. The single byte, addressed by the POS expression, is highlighted in all open storage windows in which the position is displayed.

```

>>-- TRack -- expr ---+-----+-----+-----+<<
    |                   |           |           |
    |                   |   colour ---+
    |                   |           |
    |                   |   +---- OFF -----+

```

**WATCH :**

WATCH may be used to open the **Debug Watch List** window and add variable or feild entries whose values are to be watched.

```

>>-- Watch +-----+-----+-----+-----+-----+-----+-----+-----+-----+
|         |         |         |         |         |         |         |         |         |
+-----+ : +-----+ varmask -----+
|         |         |         |         |         |         |         |         |         |
+- name -+         | SLC Field Definition |         |
|         |         |         |         |         |         |         |         |         |
+- Position pos_expr -- | Data Type | +-
    
```

**WCOMMAND :**

WCOMMAND direct a command string to a Watch list window for immediate execution.

```

>>--+- WCommand --+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|         |         |         |         |         |         |         |         |         |
+- WCMD -----+ +- name -- : +-
    
```

The Watch list window supports its own set of sub-commands and options. A synopsis of the Watch sub-commands follows:

|                  |  |
|------------------|--|
| <b>BOTTOM</b>    | Display the last page of list data.  |
| <b>CLOSE</b>     | Close the Watch List window.   |
| <b>DELETE</b>    | Delete (remove) the focus entry from the list.   |
| <b>DOWN</b>      | Scroll the view of the entries down towards the bottom of the list.  |
| <b>INSERT</b>    | Insert a new variable, field definition or space entry following the focus entry in the Watch list.                                |
| <b>DOWN</b>      | Scroll the view of the Value column text belonging to an individual Watch list entry left towards the first character of the text. |
| <b>POSITION</b>  | Insert or replace a new field entry in the Watch list following the focus entry.   |
| <b>POSWINDOW</b> | Opens a SELCOPY Debug <b>POS expression</b> storage window for the focus watch list entry.   |
| <b>RESET</b>     | Reset individual flags that heve set on for entries in the Watch list.   |
| <b>RIGHT</b>     | Scroll the view of the Value column text belonging to an individual Watch list entry towards the last character of the text.       |
| <b>SPACE</b>     | Insert a blank line in the Watch list following the focus list entry.  |
| <b>TOP</b>       | Display the first page of list data.   |
| <b>UP</b>        | Scroll the view of the entries up towards the top of the list.   |
| <b>VARIABLE</b>  | Insert a new variable entry in the Watch list following the focus entry.   |
| <b>WORKAREA</b>  | Inserts a special variable entry for the work area buffer following the focus list entry.  |

**WINDOW :**

Open and place focus on the nominated window type.

```

>>-- Window --+---- @ -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|         |         |         |         |         |         |         |         |         |
+---- AT -----+
|         |         |         |         |         |         |         |         |         |
+---- Ctl -----+
+---- Equates ----+
+---- List -----+
+---- PCB -----+
+---- POS expr ----+
+---- SQL -----+
+---- Workarea ----+
+---- WTO -----+
+---- TRace -----+
    
```

---

## SELCOPY Debug Options

---

|                                |   |
|--------------------------------|---|
| <b>BREAKIN</b>                 | Set the maximum number of times that any single control statement operation can be executed before the SELCOPY Debug <b>loop break-in</b> is activated. |
| <b>COLOUR, COLOR</b>           | Watch List option to set watch list display area attribute highlighting.  |
| <b>COLUMN</b>                  | Watch List option to set decimal or hex display of the Watch list "Col" column value.   |
| <b>DATATYPE</b>                | Watch List option to set display of the "DataType" column.  |
| <b>DEBUGCOLOUR, DEBUGCOLOR</b> | Set the colour display of areas within the SELCOPY Debug SYSIN input control statement window.  |
| <b>HEX</b>                     | Watch List option to control hex display of the "Value" column contents.  |
| <b>PREFIX</b>                  | Watch List option to control display of the watch list prefix area.   |
| <b>SCALE</b>                   | Watch List option to control display of a counting scale line above the character or hex type value in the focus entry's "Value" column.                |
| <b>SHADOW</b>                  | Watch List option to control display of a shadow line in place of one or more consecutive Watch list entries that have been excluded from the display.  |

# File Copy Utility (FCOPY)

---

File Copy (FCOPY) is an advanced copy utility supporting copy and optional remap of records between 2 files of potentially different data set organisation and geometry (RECFM, LRECL, BLKSIZE).

Features include:

- Use of structures to remap fields in source records to fields of the same name in destination records. Structures may be specified as an SDE structure, COBOL or PL1 copybook or a COBOL or PL1 ADATA file.
- Specification of a start record and/or a number of records to be copied so defining a subset of records to be copied/remapped.
- Append to or overwrite records in an existing target data set.
- Choose a pad character to be used to pad short records that are copied to longer fixed format records (e.g. copying an ESDS to RECFM=F; RECFM=V to RRDS or RECFM=F LRECL=80 to RECFM=F LRECL=100). Default pad character is blank (X'40).

File Copy supports copy of multiple PDS/PDSE library members to another new or existing library (Library Copy). This type of copy/remap is performed if the source file is a PDS/PDSE library, specified with or without a member mask, and the target file is a PDS/PDSE library with no member name specified. Note that a target PDS/PDSE library DSN with no member name is valid only for library copy.

---

## File Copy Utility Startup

---

The File Copy Utility panel may be opened using any of the following methods:

1. Primary command: **FCOPY**
2. Primary Option Menu, option 5. Copy/Reformat. (=5)
3. From the main menu bar, select Utilities --> File Copy...

---

## File Copy

---

Copy a sequential, VSAM, PDS/PDSE member or HFS file to another file of same or different data set organisation. Alternatively, copy PDS/PDSE members that match a member name mask to another library or a single data set.

Optionally, specify start record and number of records for copy.

### Required Panel fields:

```
Copy From DSN/Member>  
Copy To DSN/Member>
```

### Primary Command Parameters:

```
FCOPY      from_fileid      to_fileid
```

### Primary Command Examples:

```
FCOPY  A03.XDATA.D12365.KSDS  NBJ1.XDATA.ESDS  STARTKEY=X'05920000'  FOR 100  
FCOPY  OEM.SELC310.SZZSSAM2 (ZZSDATSA)  NBJ1.SDOTEST.DATA  
FCOPY  OEM.SELC310.SZZSSAM1 (ZZS*)      OEM.SELC310.INSTALL.JCL
```



---

## File Copy & Remap

---

Supported for formatted data only, this feature is identical to Remap operation of the File Search, Update & Copy Utility except that no change of record field data is performed.

**Required Panel fields:**

```
Copy From DSN/Member>
USING DSN/Member (From)>
Copy To DSN/Member>
USING DSN/Member (To)>
```

**Primary Command Parameters:**

```
FCOPY  from_fileid USING {SDO|COBOL|PL1|ADATA} structure \
      to_fileid  USING {SDO|COBOL|PL1|ADATA} structure
```

**Primary Command Example:**

```
FCOPY  A01.SAMPDATA          USING SDO  OEM.SELCSDO (XXSAMP) \
      A01.SAMPDATA.REMAP     USING SDO  OEM.SELCSDO (XXSAMR)
```

# File Search, Update, Copy & Remap Utility (FSU)

---

Features of the File Search/Update/Copy/Remap utility include:

- Search and optionally update multiple HFS paths or multiple sequential, PDS/PDSE, GDG and/or VSAM data sets.
- Restrict PDS/PDSE library search and/or update to only members with names that match a member name mask.
- Search and optionally update uncataloged data sets by volume id(s).
- Specify the start record for both search and update operations.
- Restrict the number of records read for search and/or update.
- Restrict the search and/or update operation to a specific area of the file records.
- Apply a **structure** (copybook) overlay to map **input** file records and optionally restrict search/update to all or specific fields in records assigned to specific record types. This is known as a **Formatted File Search/Update**.
- For both **Unformatted** and **Formatted** input file records, optionally specify an output file to which **all** input records will be copied regardless of whether record data has been changed. This is known as **Unformatted/Formatted File Copy**.
- For **Formatted File Search/Update**, optionally specify an output file **and** output structure (copybook) to remap input record fields (i.e. alter field data type, re-order and/or delete fields) whether or not record data is changed. This is known as a **Formatted File Remap**.
- Update unformatted or formatted character data using different length search and update CHANGE strings.
- Control use of blank padding or blank absorption when character search and update CHANGE strings are of different length. Note that the CHANGE operation will fail if the length of the updated record is greater than the file's maximum record length.

Following File Search/Update/Copy/Remap execution, report output is generated in a structured format suitable for presentation to the user in an SDE window view. To generate this report output and in order to perform advanced record selection and field compare, functions and features provided by the structured data environment (SDE) are used. Therefore, the File Search/Update/Copy/Remap utility is only available to users who have a licensed version of SELCOPY installed and operational on their system.

During execution, a progress window is displayed which allows the user to interrupt processing at any point using the Attention key.

---

## File Search, Update, Copy & Remap Utility Startup

---

The File Search, Update, Copy & Remap Utility panel may be opened using any of the following methods:

1. Primary command: **FSU**
2. Primary Option Menu, option 6. Search/Update. (=6)
3. From the main menu bar, select Utilities --> File Search/Update/Remap...

---

## FSU Utility Output Report Function Key Defaults

---

The File Search, Update, Copy & Remap Utility output report consists of formatted data records with an accompanying structure. If run interactively, the report is displayed in a Structured Data Editor window view and is updated as the utility executes.

|     |          |     |                |
|-----|----------|-----|----------------|
| F1  | HELP     | F13 | INSERT         |
| F2  | SPLIT    | F14 | DELETE         |
| F3  | END      | F15 | DUPLICATE      |
| F4  | WINDOW   | F16 | MACRO SDEUTIL  |
| F5  | RFIND    | F17 | MACRO SDEZOOMW |
| F6  | FSUEDIT  | F18 |                |
| F7  | UP       | F19 |                |
| F8  | DOWN     | F20 |                |
| F9  | SWAP     | F21 | SWAP LIST      |
| F10 | LEFT     | F22 | UNDO           |
| F11 | RIGHT    | F23 | REDO           |
| F12 | CRETRIEV | F24 |                |

---

## File Search

---

Search for strings/values in data sets that match one or more specified fileid masks.

**Required Panel fields:**

```
INPUT Fileid/Volume/DSN/Member Mask:
FIND: | Filter WHERE:
```

**Primary Command Parameters:**

```
FSU INPUT(fileid_mask...) WHERE SDE_expression \
                               FIND( SDE_find_command(s) )
```

**Primary Command Examples:**

```
FSU INPUT( US01.*.COPY(XY%%) ) FIND( C'OCCURS' 12 71)
FSU INPUT( AX01.SOURCE.**.PL1 ) \
                               FIND( ('PIC' PREFIX) AND ( (C'K') OR (C'E') ) )

FSU INPUT( OEM.**.JCL) WHERE WORD(#1,2) = 'EXEC' \
                               FIND( (C'REGION=') OR (C'PARM=') )
```

---

## File Search, Change & Update

---

Perform one or more change operation on selected records and update (replace) the original record. FIND and WHEN search criteria identify records for selection. By default, all records are selected.

**Required Panel fields:**

```
INPUT Fileid/Volume/DSN/Member Mask:
CHANGE:
```

**Primary Command Parameters:**

```
FSU INPUT(fileid_mask...) CHANGE( SDE_change_command(s) )
```

**Primary Command Examples:**

```
FSU INPUT( NBJ1.JCL(SS*) ) CHANGE(C'PGM=IEWL' C'PGM=HEWL')
FSU INPUT(NBJ1.JCL(*PLI*)) FIND('PARM=') \
                               CHANGE(C'LIST,' C'LIST,XREF,' TEXT)

FSU INPUT( US01.*.COPY(XY%%) ) FIND( C'OCCURS' 12 71) \
                               CHANGE(C'TO 10' C'TO 20')
```

---

## File Search, Change & Copy

---

Perform one or more change operation on selected records and copy both changed and unchanged records to a different data set. The original (source) data is unchanged. FIND and WHEN search criteria identify records for selection. By default, all records are selected.

If output fileid is a PDS/PDSE library, selected input library members are copied to the output library with member names unchanged.

**Required Panel fields:**

```
INPUT Fileid/Volume/DSN/Member Mask:
CHANGE:
OUTPUT Fileid:
```

**Primary Command Parameters:**

```
FSU INPUT(fileid_mask...) CHANGE( SDE_change_command(s) ) OUTPUT fileid
```

**Primary Command Examples:**

```
FSU INPUT(NBJ1.JCL(SS*)) CHANGE(C'PGM=IEWL' C'PGM=HEWL') \
                               OUTPUT NBJ1.HEWL.JCL

FSU INPUT( X139.D12053.LOG ) CHANGE(C'ERR077' C'###077') \
                               OUTPUT NBJ1.D12053.LOGCOPY
```

---

## File Search, Change, Update & Copy Formatted Records

---

For each of the above operations, the processing can be further refined if record data has a standard format as defined by a COBOL or PL1 copybook, or a FileKit SDO.

Using formatted data processing enables use of specific field references and data type interpretation on the FIND, WHERE and CHANGE parameters.

### Required Panel fields:

```
INPUT Fileid/Volume/DSN/Member Mask:
USING SDO|COBOL|PL1|ADATA Copybook:
VIEW (RTO) Record-type:
```

### Primary Command Parameters:

```
FSU INPUT(fileid_mask...) USING {SDO|COBOL|PL1|ADATA} structure \
                                       VIEW record_type
```

### Primary Command Example:

```
FSU INPUT(A01.SAMPDATA) USING SDO OEM.SELCSDO(XXSAMP) \
   VIEW XX_ADDR FIND(GT 20 (#5))
```

---

## File Search, Change, & Remap

---

Supported for formatted data only, optionally perform one or more change operations on selected fields within selected records, then copy both changed and unchanged records to a different data set using another structure to re-order, omit and/or include record fields.

Fields in record types belonging to the input files correspond to fields of the same name defined in record types of the same name in the output structure. Fields and record types that are unreferenced in the output structure are lost, whereas new fields in the output structure are generated.

### Required Panel fields:

```
INPUT Fileid/Volume/DSN/Member Mask:
USING SDO|COBOL|PL1|ADATA Copybook:
OUTPUT Fileid:
USING SDO|COBOL|PL1|ADATA Copybook: (Output)
```

### Primary Command Parameters:

```
FSU INPUT(fileid_mask...) USING [SDO|COBOL|PL1|ADATA] structure \
   OUTPUT(fileid) USING [SDO|COBOL|PL1|ADATA] structure
```

### Primary Command Example:

```
FSU INPUT(A01.SAMPDATA) USING SDO OEM.SELCSDO(XXSAMP) \
   VIEW XX_ADDR CHANGE( 17.5 20.0 (XX_VAT) ) \
   OUTPUT(A01.SAMPDATA.REMAP) USING SDO OEM.SELCSDO(XXSAMR)
```

# File Compare Utility (COMPFILE)

---

The Compare Files utility (COMPFILE) provides a set of both basic and extended features that allow the user to compare records in **NEW** and **OLD** versions of a file.

Basic features include:

- Specify the start record.
- Restrict the number of records compared.
- Restrict the number of differences to be reported.
- Restrict the comparison to a specific area of the file records.
- Strip trailing characters prior to record compare.

Extended features include:

- All basic feature options but with separate specifications for the NEW and OLD files where sensible.
- Apply a **structure** (copybook) overlay to map records, and optionally restrict the comparison to specified record-types and/or named fields. This is known as a **formatted compare**.
- Control how re-synchronisation of record pairs should occur following detection of an inserted or deleted record.
- For formatted or unformatted compare, specify **key** segments (at the record-type level) that allow the utility to identify **synchronised pairs** of records.
- Formatted compare supports application of different structures to the NEW and OLD files, with comparison restricted to only those fields that exist in both structures. This allows comparison of NEW and OLD file records where corresponding fields are at different locations within the records and maybe of different data-type or length.
- Formatted **Hierarchical** compare of data sets where records exhibit a hierarchy based on key fields within the record data.

Following Compare Files execution, report output is generated in a structured format suitable for presentation to the user in an SDE window view. To generate this report output and in order to perform advanced record selection and field compare, COMPFILE utilises functions and features provided by the structured data environment (SDE). Therefore, the COMPFILE utility is only available to users who have a licensed version of SELCOPY installed and operational on their system.

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## File Compare Utility Startup

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The File Compare Utility comprises a number of consecutive panel views whose display depends upon options selected within the current panel view when <Enter> is pressed. The initial "Basic Option" Compare Files utility panel view may be opened using any of the following methods:

1. Primary command: **COMPFILE**
2. Primary Option Menu, option 7. Compare. (=7)
3. From the main menu bar, select Utilities --> Compare Files...

---

## File Compare Output Report Function Key Defaults

---

The File Compare Utility output report consists of formatted data records with an accompanying structure. The File Compare output and its SDO structure are written to report data sets and, if run interactively, displayed in a Structured Data Editor window view on completion of the run.

|     |          |     |               |
|-----|----------|-----|---------------|
| F1  | HELP     | F13 | INSERT        |
| F2  | SPLIT    | F14 | DELETE        |
| F3  | END      | F15 | DUPLICATE     |
| F4  | WINDOW   | F16 | MACRO CFUTIL  |
| F5  | RFIND    | F17 | MACRO CFZOOMW |
| F6  | CFEDIT   | F18 |               |
| F7  | UP       | F19 |               |
| F8  | DOWN     | F20 |               |
| F9  | SWAP     | F21 | SWAP LIST     |
| F10 | LEFT     | F22 | UNDO          |
| F11 | RIGHT    | F23 | REDO          |
| F12 | CRETRIEV | F24 |               |

---

## Basic 1-to-1 Compare

---

Compare an older version of a file with a newer version in which record data may have changed but records have not been inserted or deleted.

Optionally, the comparison may be limited to a range of records, nominated by Start> and For> fields; and a range of columns, nominated by Pos> and Length> fields.

A 1-to-1 compare of record pairs (one from each file) is performed so that, where a mismatch exists, no attempt is made to re-synchronise either of the records with records occurring later in the opposite file.

### Required Panel fields:

```
New File/Volume/Member>
Old File/Volume/Member>
Sync> 1-to-1
```

### Primary Command Parameters:

```
COMPFILE  new_fileid  old_fileid  SYNC 1TO1
```

### Primary Command Example:

```
COMPFILE  OEM.SELC310.FILEKIT.SITE.CBLE (PROFILE)  \
OEM.SELC310.SZZSDIST.CBLE (PROFILE)              \
SYNC 1TO1
```

---

## Basic Read-Ahead Compare

---

Read-Ahead synchronisation is suitable where the new and old files are predominantly comprised of equal records, although some may have been updated, inserted and/or deleted.

If the current pair of records do not match, then records are read sequentially from one or both files in order to identify a matching pair with one of the current records. Record compare then proceeds from the new matching pair.

### Required Panel fields:

```
New File/Volume/Member>
Old File/Volume/Member>
Sync> Read-Ahead
```

### Primary Command Parameters:

```
COMPFILE  new_fileid  old_fileid  SYNC READAHEAD
```

### Primary Command Example:

```
COMPFILE  A01JQE.D2012365.CONT21.TAB  \
A01JQE.D2012365.CONT21.TAB.BKUP      \
SYNC READAHEAD (100 1)
```

---

## Extended Compare

---

Extended unformatted compare allows specification of the same options as basic unformatted compare but with potentially different values for each of the two files in the compare operation. In addition to this, extended unformatted compare allows specification of the following:

- Record synchronisation techniques **Sorted Keyed** and **Unsorted Keyed** which involves specification of key segments.
- For read-ahead record synchronisation, non-default values for limit and matching record count. Also the option to allow synchronisation on blank records.
- The option to perform case-insensitive compare.
- Report output options to exclude display of changed, inserted and/or deleted records. Also allows specification of a non-default report file DSN.
- Output file DSNs into which to copy records flagged as being matched, changed, inserted and/or deleted. A separate data set name may be specified for NEW and OLD file records that are attributed these flags.

### Required Panel fields:

```
Use Extended Options
New File DSN/Path/Volume/Member>
Old File DSN/Path/Volume/Member>
```

**Primary Command Parameters:**

```
COMPFILE  new_fileid  old_fileid  newfile_opts  oldfile_opts
```

**Primary Command Example:**

```
COMPFILE  ZRCJ04.D2012199.T111522.XDUMP  \
          ZRCJ04.D2012187.T162327.XDUMP  \
          NSTARTCOL 5  NSTARTREC 11      \
          OSTARTCOL 1  OSTARTREC 1      \
          SYNC READAHEAD ( 50 5 )
```

## Unsorted Keyed Compare

Key synchronisation is suitable where record pairs, containing potentially mismatching data, are considered to be synchronised when the data in specified areas of the records (key segments) matches.

Unsorted key synchronisation employs read-ahead synchronisation to synchronise record pairs matching only on the defined key segment areas as opposed to the entire record. Skipped records are flagged as being record inserts or deletions as appropriate.

Having synchronised on a record pair, the record pair is compared with any mismatch reported as a change to the record data.

**Required Panel fields:**

```
Use Extended Options
New File DSN/Path/Volume/Member>
Old File DSN/Path/Volume/Member>
Synchronisation: Keyed (Unsorted)
Option 1. Specify Key fields (Position/Length)
```

**Primary Command Parameters:**

```
COMPFILE  new_fileid  old_fileid  \
          SYNC UNSORTED  KEY (length new_pos old_pos)  \
          READAHEAD (ralimit ramatch)
```

**Primary Command Example:**

```
COMPFILE  NIG72X.ENTP.COPY (HIPX27B)  \
          NIG72X.DEVP.COPY (HIPX27B)  \
          SYNC UNSORTED KEY (4 8 8)    \
          READAHEAD (80 5)
```

## Sorted Keyed Compare

Where keyed records are sorted by the synchronisation key in ascending order, sorted key synchronisation should be used. Sorted key synchronisation will perform a read ahead from the file record containing the lower key segment data in order to achieve record synchronisation.

As for unsorted key synchronisation, skipped records are flagged as being record inserts or deletions as appropriate and having synchronised on a record pair, the record pair is compared with any mismatch reported as a change to the record data.

**Required Panel fields:**

```
Use Extended Options
New File DSN/Path/Volume/Member>
Old File DSN/Path/Volume/Member>
Synchronisation: Keyed (Sorted)
Option 1. Specify Key fields (Position/Length)
```

**Primary Command Parameters:**

```
COMPFILE  new_fileid  old_fileid  \
          SYNC KEY (length new_pos old_pos)
```

**Primary Command Example:**

```
COMPFILE  CBL.XSI.MBLST.KSDS  \
          CBL.XSX.ABLST.KSDS  \
          SYNC KEY (10 1 21)
```

## Formatted Compare

All compare operations and record synchronisation techniques may apply equally to files for which records are formatted by record-type into discrete fields by an associated structure (SDO, COBOL/PL1 Copybook).

On selection of Formatted compare, panels prompt for a structure fileid as well as presenting the user with additional panels that allow restricted compare of records based on assigned record-type and named fields within those records.

If Sorted or Unsorted Key synchronisation is selected, then key segments may be defined either by absolute position and length (as described above) or by one or more named fields.

### Required Panel fields:

```
Use Extended Options
Option 2. Formatted
New File DSN/Path/Volume/Member>
Structure/Copybook overlay DSN/Path/Volume/Member>
Old File DSN/Path/Volume/Member>
```

### Primary Command Parameters:

```
COMPFILE  new_fileid USING [SDO|COBOL|PL1|ADATA] structure  \
          old_fileid                                       \
          VIEW record_type, ...                             \
          SELECT field, ... FROM record_type1...           \
          SELECT field, ... FROM record_type2...
```

### Primary Command Example:

```
COMPFILE  NBJ.Y2012.WIDG.ORDERDB USING COBOL  NBJ.MST.COBCOPY(WIDG061) \
          NBJ.Y2011.WIDG.ORDERDB                                       \
          VIEW REC#INV, REC#PAY, REC#NOTES                             \
          SELECT  XID, XINVNO, XIDATE, X#ITEMS      FROM REC#INV        \
          SELECT  P#CUSTID, PAUTH, PCNAME          FROM REC#PAY
```

## Hierarchical Compare

Hierarchical compare is suitable where a hierarchy exists between formatted records or record segments of different record types in the same file. e.g. A file may be arranged in a hierarchy of record segments detailing ORDER, ORDER\_ITEM and ITEM\_PART so that ORDER base record segments are followed by a number of ORDER\_ITEM record segments followed by a number of ITEM\_PART record segments.

The record hierarchy is maintained by synchronisation key segments defined to at least one of the assigned record-types.

This record-type synchronisation key hierarchy is established by the order in which synchronisation keys are specified for each record-type. The first record type to be defined a synchronisation key is attributed the highest level (level-1) entry in the hierarchy, the next key definition is attributed the level-2 entry, etc. Record types with no defined synchronisation key are equally attributed the lowest level entry in the synchronisation key hierarchy.

The defining feature of hierarchical compare key synchronisation processing, is that input of records from the NEW and/or OLD files stops when a keyed record is read which is rated higher in the synchronisation key hierarchy than the record being synchronised in the current record pair.

### Required Panel fields:

```
Use Extended Options
Option 2. Formatted
New File DSN/Path/Volume/Member>
Structure/Copybook overlay DSN/Path/Volume/Member>
Old File DSN/Path/Volume/Member>
Synchronisation: Keyed (Sorted) | Keyed (Unsorted)
Option 2. Select Key Columns by Name
```

### Primary Command Parameters:

```
COMPFILE  new_fileid USING [SDO|COBOL|PL1|ADATA] structure  \
          old_fileid                                       \
          SYNC UNSORTED  KEY field, ... FROM record_type1... \
          KEY field, ... FROM record_type2...               \
          READAHEAD(ralimit ramatch)                       \
          \
COMPFILE  new_fileid USING [SDO|COBOL|PL1|ADATA] structure  \
          old_fileid                                       \
          SYNC          KEY field, ... FROM record_type1... \
          KEY field, ... FROM record_type2...
```

### Primary Command Example:

```
COMPFILE  A01.D2012199.XORD.KSDS USING COBOL  A01.FILEKIT.SDO(XXORD) \
          A01.D2012199.XORD.BKUP.KSDS                               \
          SYNC KEY XORDID      FROM ORDER                          \
          KEY MODEL,TYPE      FROM ORDER_ITEM                      \
          KEY PARTREF         FROM ITEM_PART
```