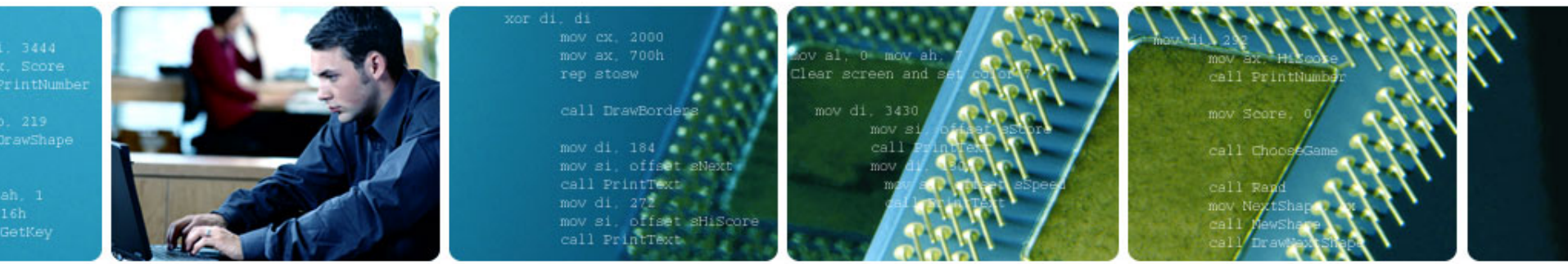
z/OS Basic Information Center: Introduction to ISPF

Unit 2: Editing with ISPF
Module 3: Editing Modes

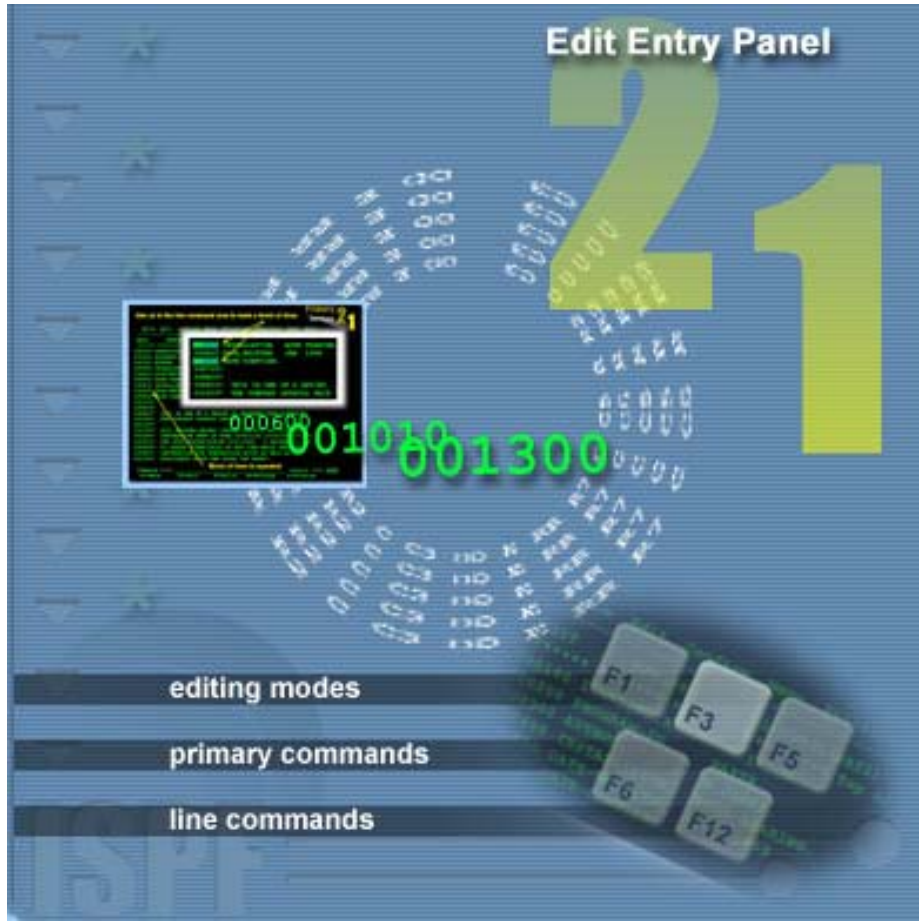


Editing Modes – Setting Editing Modes

ISPF has a number of different editing modes that will help you fine tune your editing environment. The modes we explore here include:

- AUTOSAVE
- CAPS
- HEX
- NULLS
- PACK
- RECOVERY
- STATS

The commands presented in the rest of this module concern editing modes which may be set in the ISPF editor. To activate or deactivate each mode, type the command followed by ON or OFF, respectively.



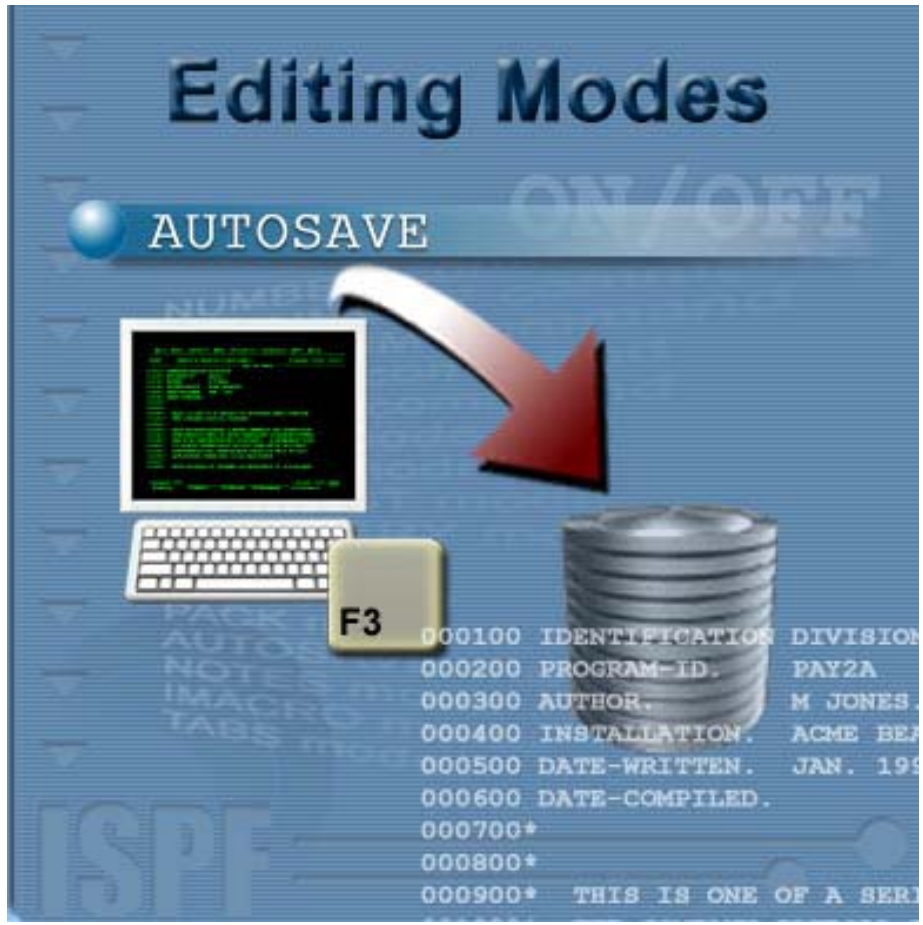
Editing Modes – Objectives

Upon completion of this module, you should be able to:

- Use editing modes to customize your editing environment
- Turn various editing modes on and off

Editing Modes – AUTOSAVE Mode

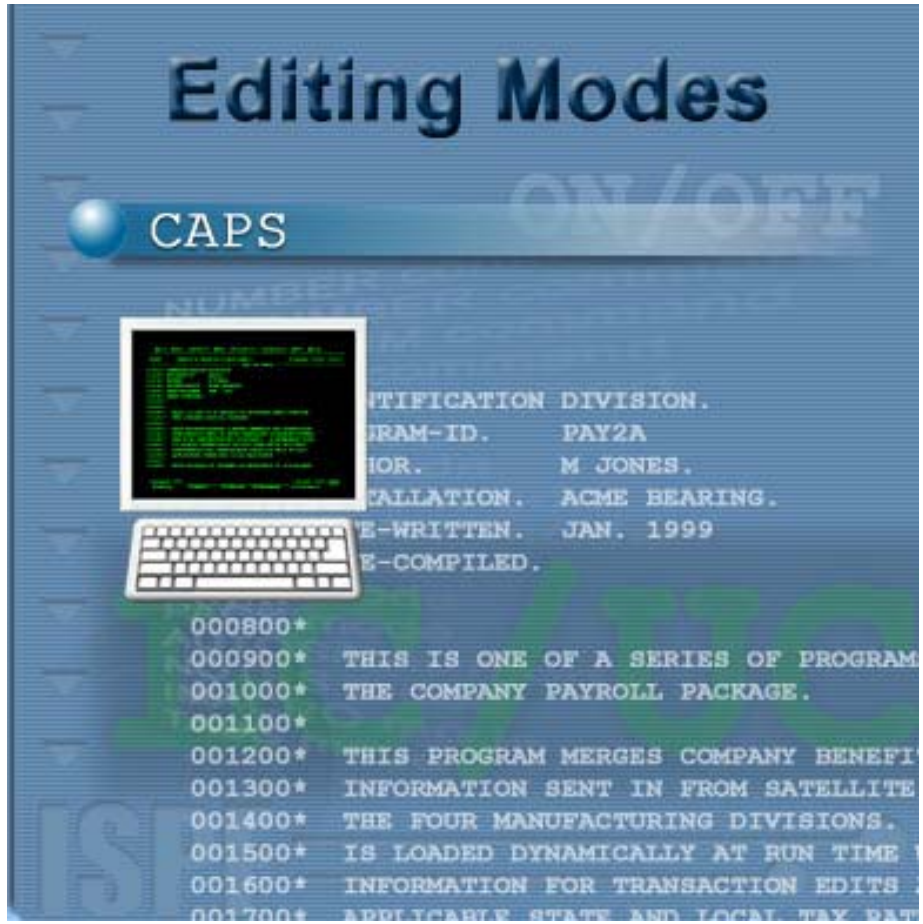
AUTOSAVE controls whether your changes to the data are saved automatically when you enter END to end an editing session.



Editing Modes – CAPS Mode

CAPS mode forces all characters typed to automatically appear in uppercase. With this mode turned off, no automatic conversion is applied. CAPS mode is quite useful for COBOL programs and other types of program source code which are generally all entered in uppercase characters.

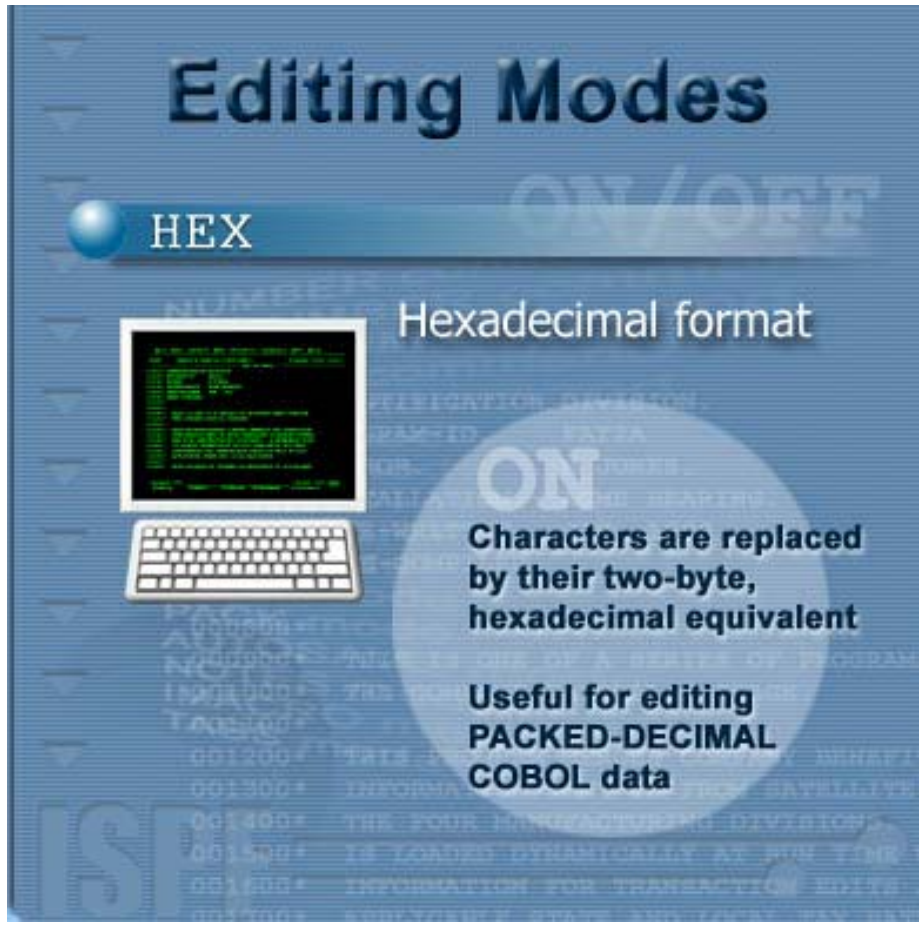
The editor automatically sets CAPS mode on if it detects that a member you select to edit contains no lowercase characters. It also sets CAPS mode off if it detects lowercase characters in the member.



Editing Modes – HEX Mode

With HEX Mode on, all characters are displayed in hexadecimal format. The editor replaces each actual character with its two-byte hexadecimal equivalent. You can change any character by changing its two-byte code.

The two-byte code is equivalent to PACKED-DECIMAL in COBOL. Therefore, you can use HEX mode to create or modify such data.

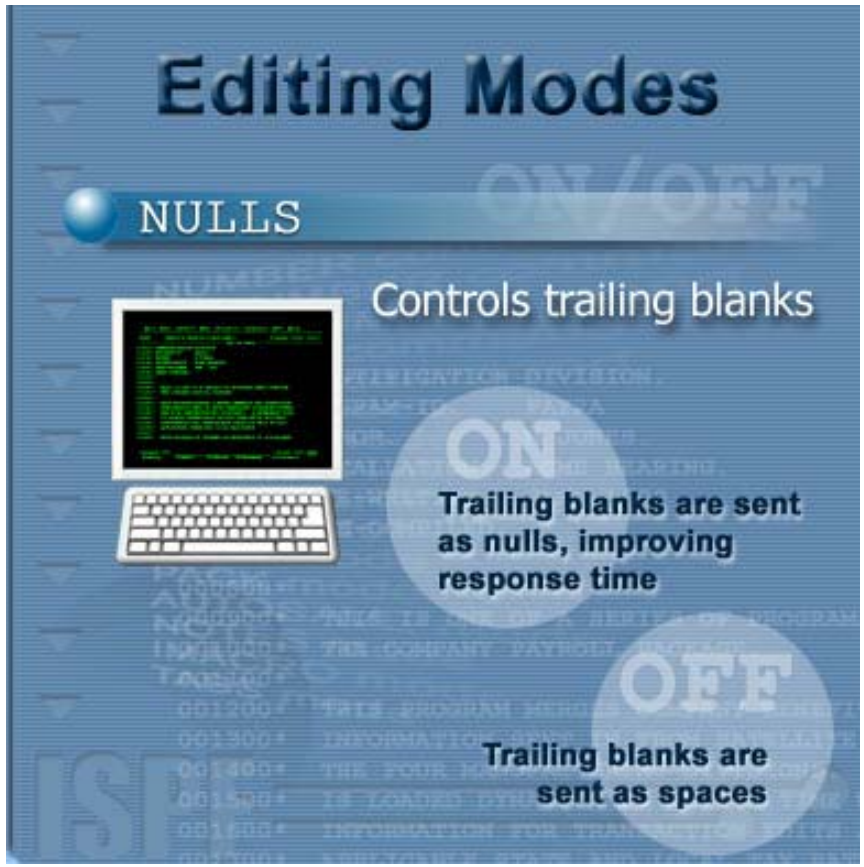


Editing Modes – NULLS Mode

NULLS mode controls how trailing blanks are sent to the terminal screen. The NULLS command has three modes:

- NULLS ON STD (default) - any field containing trailing blanks is written as one blank followed by nulls.
- NULLS ON ALL - all trailing blanks and any all-blank fields are written as nulls.
- NULLS OFF – new lines are created full of blanks

The NULLS mode you use is a matter of personal choice and the preferred editing style.



Editing Modes – NULLS Mode Considerations

Blank characters (X'40') and null characters (X'00') both appear as blanks. When you use the I (insert) line command, the data entry area appears as blanks for NULLS OFF and as nulls for NULLS ON STD and NULLS ON ALL.

With NULLS mode off, you cannot insert text in the middle of a line unless you first erase trailing blanks using the Erase-EOF key.

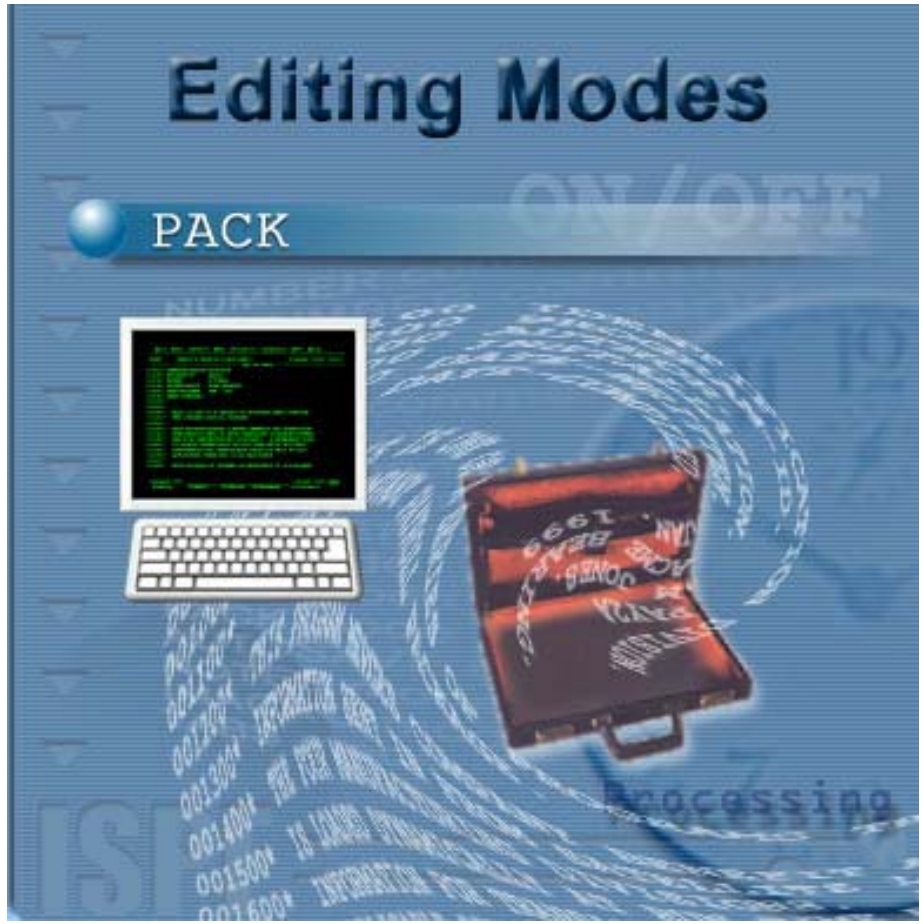
Either NULLS mode on command allows you to insert text because the lines are nit filled with spaces. You use the space bar to move the cursor across a line when you are entering new text.

Trailing nulls simplify use of the Ins (insert) key on the IBM 3270 keyboard. You can use this key to insert characters on a line if the line contains trailing nulls. If a file contains lines with many trailing blanks, turning NULLS mode on will improve response time.

Editing Modes – PACK Mode

PACK mode controls whether ISPF packs (compresses) the data when you save it.

The ISPF editor sets PACK mode on if the data you are editing was previously saved in packed format. The editor sets PACK mode off if the data you are editing was previously saved without being compressed.

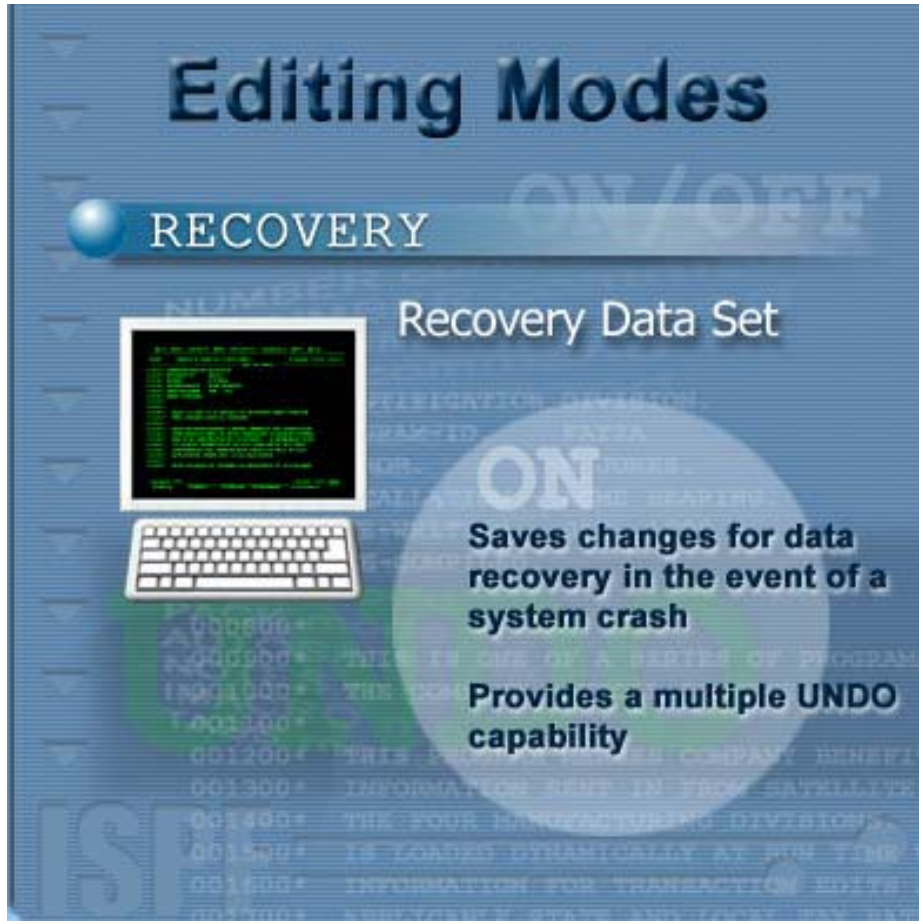


Editing Modes – RECOVERY Mode

With RECOVERY mode on, the ISPF editor maintains a record of all changes you make during an edit session. The editor saves the changes in a special file called the recovery data set.

If the system should crash during an edit session, ISPF leaves the recovery data set open. When you edit the member again, the editor will sense this and give you an opportunity to apply the changes again.

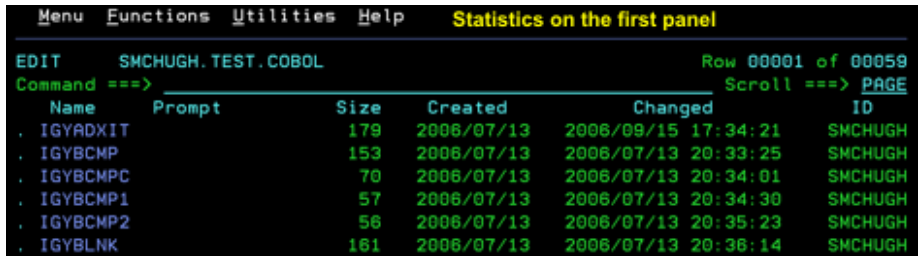
RECOVERY mode also provides an undo capability. You can choose for the UNDO command to run from data in storage rather than from the recovery data set by using the SETUNDO command.

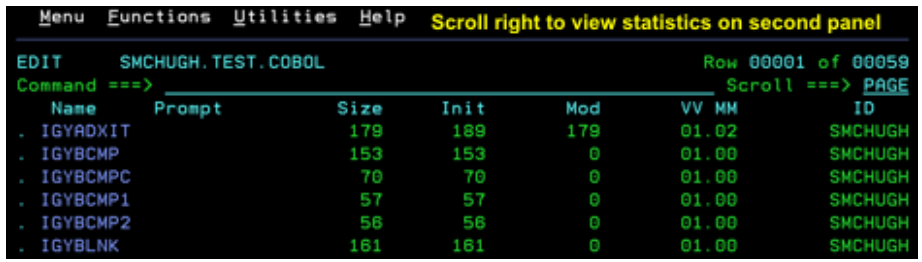


Editing Modes – STATS Mode – Frame 1

If STATS mode is on, ISPF creates and maintains statistics for partitioned data set members. When a member is retrieved for editing, the editor checks the STATS mode setting and also checks to see if the member has statistics. If the STATS mode is off and the member has statistics, the editor automatically sets STATS to on. If STATS is set to on and the member does not have statistics, ISPF displays a warning, but does not change the STATS setting.

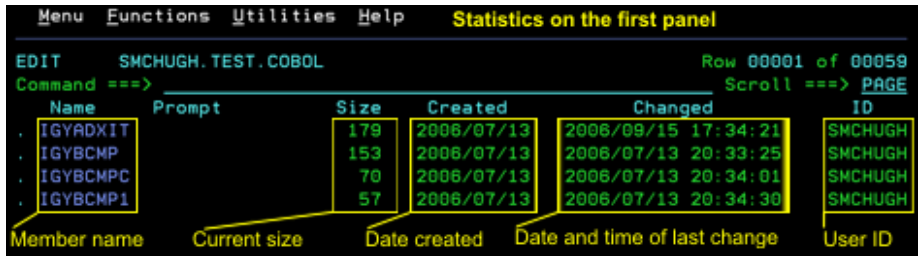
ISPF displays the statistics in the member selection list as shown here.





Editing Modes – STATS Mode – Frame 2

On the first statistics panel, ISPF displays the member name, the current size (number of lines) of the member, the date on which the member was first created, the date and time that the member was last updated, and the User ID of the last person to make changes to the file.

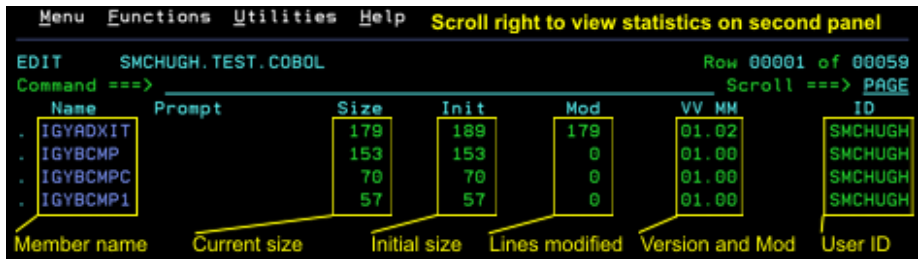


Editing Modes – STATS Mode – Frame 3

Scroll right to reveal the second part of the stats panel, which also displays the member name, current size of member, and User ID of the last person to change the member.

In addition, ISPF displays the initial size (number of lines) of the member, the number of lines that were changed the last time the member was updated, and the version and modification level number in the VV.MM format.

For a new data set member the default version and modification level numbers are 01 and 00, respectively. ISPF increments the modification level number by one whenever the member is changed. These numbers help you keep track of changes to the data set members. While you are editing a data set member, you can use the edit primary commands VERSION and LEVEL to change the version number and the modification level number, respectively.



Editing Modes – Summary

In this module, Editing Modes, you learned some of the editing modes that can help you fine-tune the way you want the editor to work, including:

- AUTOSAVE
- CAPS
- HEX
- NULLS
- PACK
- RECOVERY
- STATS