

Editors - General Information

This section gives an overview of which Natural objects are edited with which Natural editor. In addition, it contains information on split-screen mode and the editor profile.

You invoke a Natural editor with the system command `EDIT` as described in the *System Commands* documentation and in *Creating and Editing an Object* in the *Using Natural* documentation. For the names to be used when editing or saving an object, see *Object Naming Conventions* in the *Using Natural* documentation.

Which editor is invoked depends on the type of object you wish to edit:

- Programs, subprograms, subroutines, help routines, classes, copycode and text objects are created and edited in the program editor.
- Global data areas, local data areas and parameter data areas are created and edited in the data area editor.
- Maps and help maps are created and edited in the map editor.
- Predict descriptions are edited in the Predict description editor (see the *Predict* documentation).

An online help system is provided with each editor.

Tutorials which introduce you to the main features of the editors are provided in *First Steps* and in the *Map Editor Tutorial*.

In addition to the Natural editors, the Software AG Editor is used by several Natural utilities and other Software AG products (for further information, see *Installing the Software AG Editor* in the *Installation* documentation and the section *Software AG Editor*). If you wish to use the Software AG Editor as an alternative to the Natural program editor, Natural ISPF must be installed.

This section covers the following topics:

- Split-Screen Mode
 - Editor Profile
-

Split-Screen Mode

You can use all three Natural editors in split-screen mode: you can use one half of the screen for editing an object and at the same time have another Natural object displayed in the other half. Split-screen mode can be used to display a view (DDM; Data Definition Module), a data area, a Predict program description or a Natural program in the lower half of the screen. In addition, you can include items shown in the display section of the screen into the editing section that is, into the object you are currently editing.

Example:

The following figure shows the program editor in split-screen mode with the source code of a program in the editing section (upper half) and a local data area in the display section (lower half):

```

>                                     > + Program      SAGDEMO  Lib SAGTEST

Top  .....1.....2.....3.....4.....5.....6.....7.
0010 DEFINE DATA LOCAL USING L-INVOIC
0020          LOCAL USING L-INV-LN
0030 END-DEFINE
0040 *
0050 READ INVOICE-VIEW BY INVOICE-NO FROM 1
0060 *
0070   FIND INVOICE-LINE-VIEW WITH INVOICE-NO = INVOICE-NO (0050)
0080   DELETE
0090   END-FINE
0100 *
      .....1.....2.....3.....4.....5..... S 16   L 1
Split All      Local      L-INVOIC  Library SAGTEST
0010 V 1 INVOICE-VIEW          INVOICE
0020  2 CUST-NO                N      8
0030  2 INVOICE-NO            N      8
0040  2 DATE                  A      8
0050  2 AMOUNT                N 9.2
0000
0000
0000
0000
    
```

Split-Screen Commands

The following commands can be used to display and position an object in split-screen mode when using the program editor or the data area editor. For instructions on displaying objects in split-screen mode with the map editor, see *Selecting Data Definitions* in the *Map Editor* documentation.

All commands begin with an S or with SPLIT to indicate split screen mode. The SPLIT command is a cursor-sensitive command as described in the section *Program Editor*.

In the following table, an underlined text portion represents an acceptable command abbreviation.

Command	Function
<u>S</u> PLIT ++	Position to bottom of object.
<u>S</u> PLIT B	
<u>S</u> PLIT --	Position to top of object.
<u>S</u> PLIT T	
<u>S</u> PLIT +	Position one page forwards.
<u>S</u> PLIT +P	
<u>S</u> PLIT -	Position one page backwards.
<u>S</u> PLIT -P	

Command	Function
<u>S</u> PLIT + <i>nnn</i>	Position <i>nnn</i> lines forwards (only valid for program editor).
<u>S</u> PLIT - <i>nnn</i>	Position <i>nnn</i> lines backwards (only valid for program editor).
<u>S</u> PLIT . or <u>S</u> PLIT <u>E</u> ND	Terminate split-screen mode.
<u>S</u> PLIT <u>D</u> ATA <i>name</i> [<i>library</i>]	Display data area (global, local, parameter).
<u>S</u> PLIT <u>D</u> ESCRIPTION <i>pgm-name</i> [<i>library</i>]	Display program description (if available) from the Predict Data Dictionary (valid for program and data area editor only).
<u>S</u> PLIT <u>F</u> UNCTION <i>name</i> [<i>library</i>]	Display the subroutine <i>name</i> , where <i>name</i> is the name of the subroutine as used in the DEFINE SUBROUTINE statement (not the name of the object containing the subroutine). This command is only available in the program editor.
<u>S</u> PLIT <u>P</u> ROGRAM <i>name</i> [<i>library</i>]	Display program, subprogram, subroutine, help routine, copycode, text, map, class, Natural command processor, recording, adapter, dialog, function or resource.
<u>S</u> PLIT <u>S</u> CAN [<i>value</i>]	Scan for a <i>value</i> . Each line containing the value is marked with a greater than (>) sign. To further scan for the same value, enter S SC only.
<u>S</u> PLIT <u>V</u> IEW <i>name</i> [<u>S</u> HORT]	Display view (DDM, as defined in Predict or SYSDDM). If SHORT is specified, the DDM is listed in short form (that is, only the Adabas short names and corresponding Natural field names are displayed) without any field header or field edit mask information.

In the data area editor, with DATA, PROGRAM and VIEW, an asterisk (*) can be used for *name* to display a list of all available objects. If the asterisk (*) is preceded by one or more characters, only those objects whose names begin with these characters are displayed.

A *library* can be specified with the program editor only. Under Natural Security, a library cannot be specified.

Editor Profile

The Natural program editor and data area editor provide an editor profile, which determines the settings to be in effect during the edit session, such as the standard assignment of PF and PA keys. You can define your own editor profile settings according to your preferences.

This section covers the following topics:

- Invoking the Editor Profile
- Editor Profile Screen
- Additional Options
- Editor Defaults
- General Defaults
- Color Definitions
- Direct Commands
- Exit Profile Maintenance

Invoking the Editor Profile

▶ To invoke your current editor profile

- In the command line of the program editor or data area editor, enter the following:

`PROFILE`

An **Editor Profile** screen similar to the example below appears:

```

10:36:42                ***** NATURAL EDITORS *****                2007-09-27
                        - Editor Profile -

Profile Name .. SAG_____

PF and PA Keys
PF1 ... --_____ PF2 ... -H_____ PF3 ... -_____
PF4 ... ++_____ PF5 ... +H_____ PF6 ... +_____
PF7 ... SCAN_____ PF8 ... _____ PF9 ... _____
PF10 .. SC=_____ PF11 .. *CURSOR_____ PF12 .. CANCEL_____
PF13 .. _____ PF14 .. _____ PF15 .. _____
PF16 .. _____ PF17 .. _____ PF18 .. _____
PF19 .. _____ PF20 .. _____ PF21 .. _____
PF22 .. _____ PF23 .. _____ PF24 .. _____
PA1 ... _____ PA2 ... _____ PA3 ... _____

Automatic Functions
Auto Renumber .. Y   Auto Save Numbers .. 10_   Source Save into .. EDITWORK

Additional Options .. N

Command ===>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help       Exit  AddOp Save  Flip                               Del  Canc

```

The screen displays your own editor profile if an individual profile exists for your user ID as described for the field **Profile Name**. If such a profile does not exist, the default profile SYSTEM is displayed instead. The SYSTEM profile is read from the user exit routine USR0070P (see the *Operations* documentation).

To invoke a specific editor profile

- In the command line of the program editor or data area editor, enter the following:

```
PROFILE profile-name
```

where *profile-name* denotes a valid user ID or SYSTEM.

When you are in an edit session and enter the PROFILE command together with your own user ID as profile name, your profile is always invoked directly from the database; any modifications made during the current session, but not yet saved on the database, will not apply. Therefore, to invoke your current session profile, enter the PROFILE command only.

Caution:

Profile modifications made during the current session are lost when you enter the system command LOGON.

Editor Profile Screen

This section describes the items contained on the **Editor Profile** screen.

Item	Explanation
Profile Name	<p>The name of the editor profile. Your own editor profile is displayed. If such a profile does not exist, you can modify the default profile to suit your own requirements. To do so, overwrite the profile name <code>SYSTEM</code> with your user ID and save the renamed profile on the database.</p> <p>If you overwrite the name of your profile with any other valid profile name (that is, any other valid user ID) and press ENTER, the profile of the corresponding user is invoked. Only one profile can be established per user ID, and any modifications made to another user's profile are only valid for the current session; they cannot be saved on the database.</p> <p>You can, however, overwrite the profile name of another user's profile with your own user ID and then save the renamed profile on the database.</p>
PF and PA Keys	<p>The commands assigned to the PF and PA keys are displayed. Any Natural editor or system command can be assigned. Combinations of commands (separated by a comma) are also possible.</p>
Auto Renumber	<p>Y indicates that the source code in the program editor is to be renumbered automatically if any of the following occurs:</p> <ul style="list-style-type: none"> ● A CATALOG, CHECK, RUN, SAVE or STOW command is issued. ● A . I line command is issued and no line number is available for the line to be inserted. <p>Note: See also <i>Renumbering of Source-Code Line Number References</i> in the <i>Programming Guide</i>.</p>
Auto Save Numbers	<p>If a numeric value is entered, a copy of the current source is saved automatically into the source object specified in the Source Save into field after the specified number of modifications have taken place. Modification means each time that the source has been changed as a result of information entered on the screen.</p> <p>Auto Save Numbers applies to the map editor, too.</p>
Source Save into	<p>The name of the source object into which a copy of the source is to be saved automatically in the current library. The default name <code>EDITWORK</code> can be modified. The specified source object is overwritten each time the number of changes specified in the Auto Save Numbers field has been exceeded.</p>
Additional Options	See below.

Additional Options

If you mark **Additional Options** on the **Editor Profile** screen with a Y or press PF4, a window will be displayed from which you can select the following options:

- Editor Defaults
- General Defaults
- Color Definitions

A plus (+) sign in front of an option indicates that some values have already been set in the corresponding window or via an appropriate editor command.

To select an option, you mark it with a Y.

For each option selected, a corresponding window will be displayed. The individual items of each window are explained below.

Editor Defaults

Option	Explanation
Escape Character for Line Command	The escape character which must precede each line command; the default escape character is a period (.).
Empty Line Suppression	<p>This option applies when inserting lines into the source of an object (except text objects) by using the line command <code>. I</code> as described in <i>Program Editor</i> and <i>Data Area Editor</i>. Possible option settings:</p> <p>Y Any lines left blank are removed from the source as soon as you press ENTER. This is the default setting.</p> <p>N Any lines left blank are <i>not</i> removed from the source when you press ENTER.</p>
Empty Line Suppression for Text	<p>This option applies when inserting lines into the source of a text object by using the line command <code>. I</code> as described in <i>Program Editor</i>. Possible option settings:</p> <p>Y Any lines left blank are removed from the source as soon as you press ENTER.</p> <p>N Any lines left blank are <i>not</i> removed from the source when you press ENTER. This is the default setting.</p>

Option	Explanation
Source Size Information	<p>Y The actual size of the object being edited and the remaining space available is displayed in the bottom information line of the editor screen. In addition, in the program editor, the programming mode (reporting or structured) is displayed in the top information line of the editor screen.</p> <p>N No such information is displayed.</p>
Source Status Message	<p>Y Program editor: A transaction message is displayed in the top information line each time the source is modified, checked, saved, cataloged or stowed. In addition, an asterisk (*) is displayed in the editor command line if the source contains unsaved modifications. For details, see Modification Indicator in the <i>Program Editor</i> documentation.</p> <p> Data area editor: An asterisk (*) is displayed in the top information line if the source contains unsaved modifications. For details, see Modification Indicator in the <i>Data Area Editor</i> documentation.</p> <p>N No transaction message and/or asterisk (*) is displayed.</p>
Absolute Mode for SCAN/CHANGE	<p>Y Corresponds to the editor command SET ABS ON.</p> <p>N Corresponds to the editor command SET ABS OFF.</p> <p> See <i>Editor Commands</i> in the sections <i>Program Editor</i> and <i>Data Area Editor</i>.</p>

Option	Explanation
Range Mode for SCAN/CHANGE	<p>Y Corresponds to the editor command SET RANGE ON.</p> <p>N Corresponds to the editor command SET RANGE OFF.</p> <p>See <i>Editor Commands</i> in the section <i>Program Editor</i>.</p>
Direction Indicator	Indicates the direction (+ or -) in which several editor commands are to work (see also <i>Editor Command Line</i> in the sections <i>Program Editor</i> and <i>Data Area Editor</i>).

General Defaults

Option	Explanation
Editing in Lower Case	<p>Y Lower-case characters in the source code are <i>not</i> automatically converted to upper case.</p> <p>N Lower-case characters in the source code are automatically converted to upper case. Automatic conversion is in effect by default.</p> <p>Caution: Do <i>not</i> use the terminal commands %L or %U within the editor.</p>
Dynamic Conversion of Lower Case	<p>This option is relevant only if the above option is set to Y.</p> <p>Y All lower-case characters in the source code are automatically converted to upper case - except text strings that are enclosed in apostrophes and comments: these remain as you enter them (see also the section <i>Program Editor</i>).</p> <p>N Any source code remains as you enter it.</p>
Position of Message Line	Indicates the position of the message line; possible values are TOP, BOT, <i>nn</i> and <i>-nn</i> .

Option	Explanation
Cursor Position in Command Line	<p>Y Indicates that the cursor is positioned in the edit command line after the source has been modified and you pressed ENTER.</p>
Stay on Current Screen	<p>Determines whether the current screen stays when you press ENTER.</p> <p>Y Corresponds to the editor command SET STAY ON.</p> <p>N Corresponds to the editor command SET STAY OFF.</p> <p>See <i>Editor Commands</i> in the sections <i>Program Editor</i> and <i>Data Area Editor</i>.</p>
Prompt Window for Exit Function	<p>Y When you enter the EXIT command in the editor command line, a confirmation window is displayed (see also <i>Exit Function</i> in the sections <i>Program Editor</i> and <i>Data Area Editor</i>).</p>
ISPF Editor as Program Editor	<p>Y Natural ISPF (if installed) is invoked instead of the Natural program editor.</p>
Leave Editor with Unlock	<p>Y Unlocks source code when leaving the editor.</p> <p>N Leaves the editor (default setting).</p> <p>C Unlocks source code and clears the source work area when leaving the editor.</p> <p>For more information on locking, see the section <i>Locking of Source Objects</i>.</p>

Color Definitions

If you mark **Color Definitions** with a Y in the **ADDITIONAL OPTIONS** window, a window similar to the example below appears:

```

+-----COLOUR DEFINITIONS-----+
!                                     !
! Edit Work Area                      Split Screen Area                !
!   Command Line ..... NE           Label Indicator .... NE           !
!   Label Indicator ..... NE         Line Numbers ..... NE           !
!   Line Numbers ..... NE           Editor Lines ..... NE           !
!   Editor Lines ..... NE           Scan Line ..... NE             !
!   Scan and Error Line.. NE         Information Text ... NE         !
!   Information Text .... NE         Information Value .. NE        !
!   Information Value ... NE         Information Line .... NE       !
!                                     !
+-----+

```

In this window you can specify the colors in which the various parts of the edit-work and split-screen area of your program or data area editor are to be displayed.

To get a list of the colors available, you enter the question mark (?) help character in any of the input fields or press PF1 (Help).

Apart from the **Command Line** and **Information Line** and the corresponding **Information Text** and **Information Value**, the following individual parts can be assigned a specific color:

Item	Description
Label Indicator	Leftmost column of the editor screen; used, for example, to label a source code line on which a certain command has been performed (for example, the .X and .Y line commands).
Line Numbers	Column of the source code line numbers (program editor only).
Editor Lines	Lines of source code currently in the edit-work and/or split-screen area.
Scan and Error Line	All lines marked with an S (or a greater than (>) sign in split-screen mode) as a result of a scan operation, any line where an error was detected (marked with an E and applicable in edit-work area of program editor only) and the error message line itself.

Direct Commands

The following direct commands can be used instead of the corresponding PF keys. Direct commands have to be entered in the command line at the bottom of the editor profile screen.

Command	Description
CANCEL	This command (or PF12) cancels the current function and returns you to the screen from which it was invoked. Any modifications made to the profile have no effect for the current session.
DELETE	This command (or PF11) deletes the current profile from the database. Before the profile is deleted, however, a confirmation window pops up, in which you can either type the name of the profile and press ENTER to confirm the deletion of the profile, or press ENTER only to exit the function.
EXIT	This command (or PF3) invokes the exit function prompt window, regardless of whether the corresponding editor default parameter (see <i>General Defaults</i>) is set or not.
FLIP	This command (or PF6 and PF18) is used to switch between the two PF-key lines.
REFRESH	This command (or PF13) displays the profile parameters currently valid for the session, which means that any modifications made so far, but not yet saved, are overwritten.
SAVE	This command (or PF5) saves all currently valid profile parameters both for the current session and on the database. However, it does <i>not</i> leave the current function.

Exit Profile Maintenance

After modifying the parameter settings of the current editor profile, you can close a profile maintenance window or leave the **Editor Profile** screen by using one of the following methods:

- Press ENTER.

The maintenance window currently open is closed. If no window is open, you return to the command prompt of the program editor or data area editor respectively.

Any modifications are saved for the current editor profile as described for **Exit without Saving** below.

- Or:
Press PF3 (Exit) or enter EXIT in the command line of the **Editor Profile** screen (if no maintenance window is open).

The **EXIT Function** window opens where you can select one of the following three options. Select one of them by either positioning the cursor or entering any character.

Function	Explanation
Save and Exit	<p>Returns you to the screen from where the current profile maintenance function was invoked and saves any modifications made to the current editor profile. Modifications are saved both for the current session and on the database.</p> <p>If you are working with another user's editor profile, however, modifications made to that profile cannot be saved on the database. They are valid for the current session only; a corresponding message is returned.</p>
Exit without Saving	<p>Returns you to the screen from where the current profile maintenance function was invoked. Any modifications made to the current editor profile are only valid for the current session; they are <i>not</i> saved on the database.</p> <p>Exit without Saving corresponds to pressing ENTER.</p>
Resume Function	<p>Closes the prompt window and returns you to the current profile maintenance function.</p>