

Working with the Natural Report Manager

This section describes Natural Report Manager. Each screen available in Natural Report Manager is described. The sections **Navigating Within Natural Report Manager** and **Navigating Between the Layout Editor Screens** tell you how to navigate between the main screens.

This section covers the following topics:

- What is Natural Report Manager?
- When is a Default Layout Generated?
- Invoking Natural Report Manager
- Issuing Commands
- Navigating Within Natural Report Manager
- Natural Report Manager PFKeys
- The Layout Overview Screen
- The Layout Editor Screens
- The Layout Editor Editor Area
- The Display Layout Element Screen
- The Layout Field List Screen
- The Extended Field Editing Window
- The Array Editing Window

- Layout Settings
 - Testing Layouts
 - Elements
-

What is Natural Report Manager?

Natural Report Manager is a tool which is available within Super Natural for editing the layout of reports.

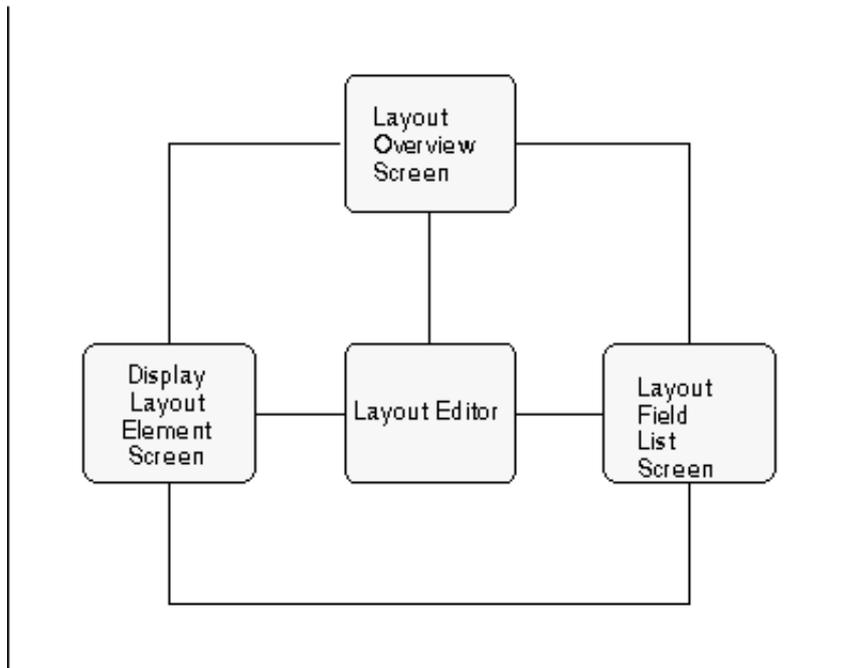
You can create and edit the following layout elements:

- Preface
- Title
- Header
- List
- Groups
- Appendix
- Footer

Natural Report Manager generates a default layout for every Super Naturalreport. The type and number of layout elements generated by default depend on the entries you have made on the Worksheet and on the transaction mode. For example, when you define control breaks, a layout element of the type group is generated for each one and when you are using reporting mode Destination WORKFILE, only a title is generated. If you change the transaction modes of a transaction which already has a layout, the elements not relevant to the new mode can only be displayed not edited.

A standard Title element is supplied with Super Natural which contains the system variables TIMX,DATX,PROGRAM and PAGE-NUMBERbut your administrator may change this.

Natural Report Manager is structured as shown in the following diagram:



When is a Default Layout Generated?

When you invoke Natural Report Manager from within a report, a default layout is automatically generated.

The default layout for reporting transactions always contains the layout element Title and can contain other elements according to the current transaction mode.

If you delete default layout elements, they are generated again when you next invoke Natural Report Manager with the following exceptions:

-

The Title element is not regenerated unless it is the only default layout element.

-

If you delete either the Header element or the List element (not both) from a default layout containing both, the element is not regenerated.

Note:

Deleted default layout elements are also regenerated when you save or run the transaction.

Entries made in the Layout Editor override those made in the Sequence column in the Worksheet. When you return to the Worksheet, you can not use the Sequence column until you delete the elements list and header. Fields which have been used in the Layout Editor are marked with an "L".

If you add a transaction without invoking Natural Report Manager, a default layout is still generated but not until you save or run the transaction. The Sequence column of the Worksheet is not effected if you do not invoke Natural Report Manager.

Invoking Natural Report Manager

You can invoke Natural Report Manager from any point within a transaction you are creating or modifying.

To invoke Natural Report Manager:

- Issue the LAYOUT command.

The Layout Overview screen appears.

Note:

Your administrator may change your user profile so that the Layout Editor takes the place of the Layout Overview screen in the diagram. The Layout Editor is then the first screen to appear when you invoke Natural Report Manager.

Issuing Commands

There are three ways of issuing commands in Natural Report Manager.

Using the Command Line

You can enter commands directly in the command line.

To issue a command directly:

1. Type the command in the command line.
2. Press Enter.

Using the Command Line and the Cursor Position

In the Layout Overview screen, the Layout Editor split-screen with information sections and the Layout Editor editor area you can issue commands using the command line and cursor position.

To issue a command using the command line and cursor position:

1. Type the command in the command line.
2. Position the cursor in the layout element box or section you want the command to act on.
3. Press Enter.

Using the Cursor Position and a PF Key

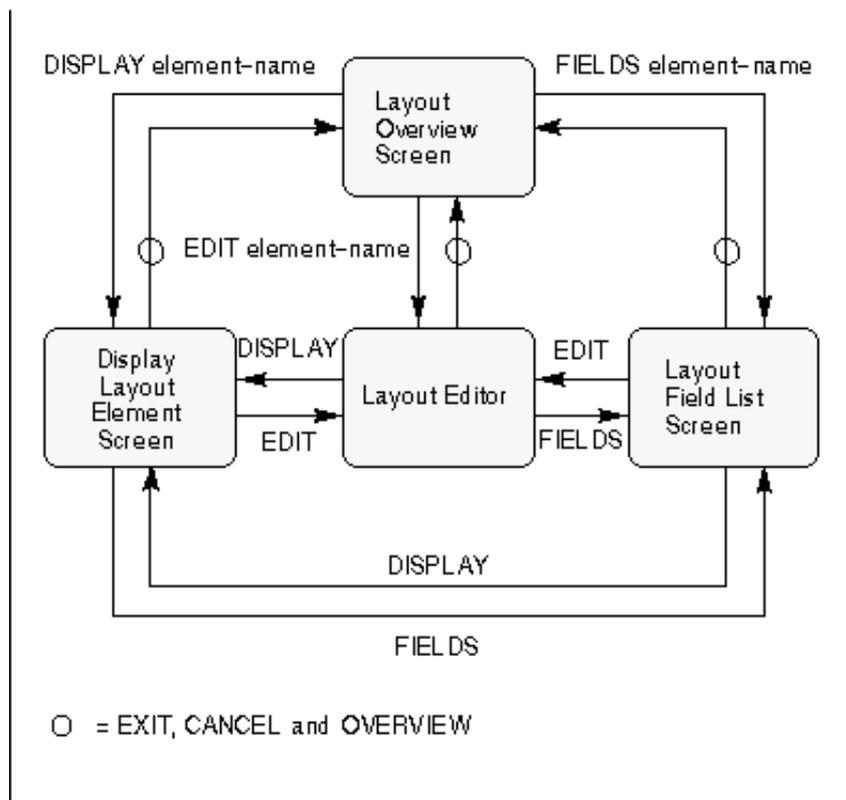
In the Layout Overview screen, the Layout Editor split-screen with information sections and the Layout Editor editor area you can issue commands using the cursor position and a PF key.

To issue a command using the cursor position and a PF key:

1. Position the cursor in the layout element box or section you want the command to act on.
2. Press the relevant PF key.

Navigating Within Natural Report Manager

The following diagram shows the commands needed for navigation within Natural Report Manager:



The OVERVIEW Command

The OVERVIEW command invokes the Layout Overview screen from the Display Layout Element screen, Layout Editor and Layout Field List screens.

The EXIT and CANCEL Commands

The EXIT and CANCEL commands function as described in the section PFkeys in the section Using Super Natural. However, you should note the following:

If you issue the CANCEL command from the Layout Overview screen, you leave Natural Report Manager and return to Super Natural. The layout is returned to the version which existed before you invoked Natural Report Manager and you lose any changes made since.

If you issue the EXIT command from the Layout Overview screen, you leave Natural Report Manager and return to Super Natural. When you keep, save or run the transaction, the current version of the layout is kept or saved.

The DISPLAY, EDIT and FIELDS Commands

The DISPLAY, EDIT and FIELDS commands invoke the Display Layout Element screen, Layout Editor and Layout Field List screens respectively for the layout element you specify or for the layout element you are working with.

With an Element Name

If you want to work with a layout element, you can issue the DISPLAY, EDIT and FIELDS commands with an element name.

To process a layout element:

- Issue one of the following commands from the Display Layout Element screen, Layout Editor or Layout Field Listscreen:
 - DISPLAY element-name
 - EDIT element-name
 - FIELDS element-name

With No Element Name

Once you are working with a layout element, the commands DISPLAY, EDIT and FIELDS act upon it until otherwise specified.

The ALL Keyword

The ALL keyword allows you to process all the elements of a layout together.

To process all the elements of a layout together:

- Issue one of the following commands:
 - DISPLAY ALL
 - EDIT ALL
 - FIELDS ALL

Note:

You can not issue the FIELDS ALL and EDIT ALL commands if one or more layout elements are protected.

When you have all elements in the editor area, all elements are affected by the line and field commands you then issue.

The Asterisk (*) List Function

The Asterisk List function provides you with a list of elements available with a certain command.

To invoke a selection list of elements, which you can display, edit or see the field list for:

- Issue one of the following commands:
 - DISPLAY *
 - EDIT *
 - FIELDS *

Natural Report Manager PF Keys

The following table shows the default PF key allocation in Natural Report Manager. These PF key allocations are additional to the standard allocations described in the section **Using Super Natural** earlier in this documentation.

PF Key	Allocation	Section Documented
PF2	SETTINGS	Layout Settings
PF4	FIELDS	Navigating Within Natural Report Manager
PF5	EDIT	Navigating Within Natural Report Manager
PF13	TEST	Testing Layouts
PF14	DISPLAY	Navigating Within Natural Report Manager
PF16	SECTION	The Layout Editor Screens
PF17	SHOW	The Layout Editor Screens
PF18	FULL	The Layout Editor Screens

The Layout Overview Screen

The Layout Overview screen shows which elements are already present in the layout.

If an element is outlined with a dotted line, you may not edit it.

In the example below, the element types for a simple report are present.

```

12:34          *** NATURAL REPORT MANAGER ***          07.Dec.1992
NRMPAGE          - Layout Overview -                      Monday

+-----+
I              Title              I
+-----+
+-----+
I              Header             I
I                                  I
+-----+
+-----+
I              List               I
I                                  I
I                                  I
I                                  I
I                                  I
I                                  I
I                                  I
I                                  I
+-----+

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Set  Exit  Field Edit  Flip                               Tech          Canc

```

Invoking the Field List for, Displaying and Editing Elements

▶ To display, edit or invoke the field list for an element:

- Issue a direct command as described in the section **Navigating** in Natural Report Manager.

Deleting Elements

▶ To delete a layout element:

- Issue the `DELETEelement-name` command.

The ALL Parameter

The ALL parameter allows you to delete all the elements of a layout at once.

▶ To delete all the elements of a layout at once:

- Issue the `DELETEALL` command.

The Confirm Multiple Delete window appears where you can select between confirming each deletion, deleting without confirmation or cancelling the deletion.

Note:

The `DELETE ALL` command is not available if an element in the layout is protected.

The Asterisk (*) ListFunction

The Asterisk List function provides you with a list of the elements available with a certain command.

▶ To invoke a selection list of elements which you can delete:

- Issue the DELETE * command.

Creating Elements

▶ To create a new layout element:

- Issue the EDIT*element-name* command.

The Select Function Window

The Select Function window displays a selection list of the functions available from the Layout Overview screen.

▶ To invoke the Select Function window:

1. Position the cursor in the layout element you want to process.
2. Press Enter.

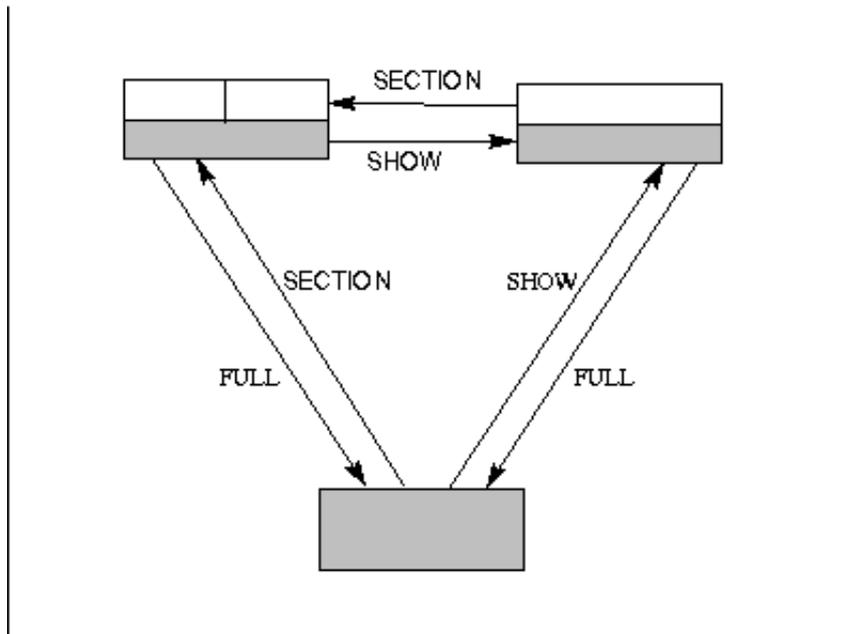
The Layout Editor Screens

There are three ways of displaying the Layout Editor.

- Editor area with information sections
- Editor area with show area
- Editor area with full screen

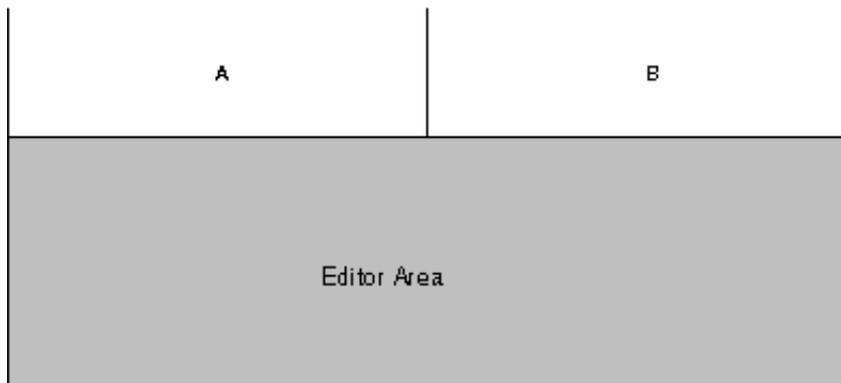
Navigating Between the Layout Editor Screens

The following diagram shows the commands you need to navigate within the Layout Editor:



Editor Area with Information Sections

When you invoke the Layout Editor from the Layout Overview screen for the first time, it consists of three sections as shown in the diagram below:

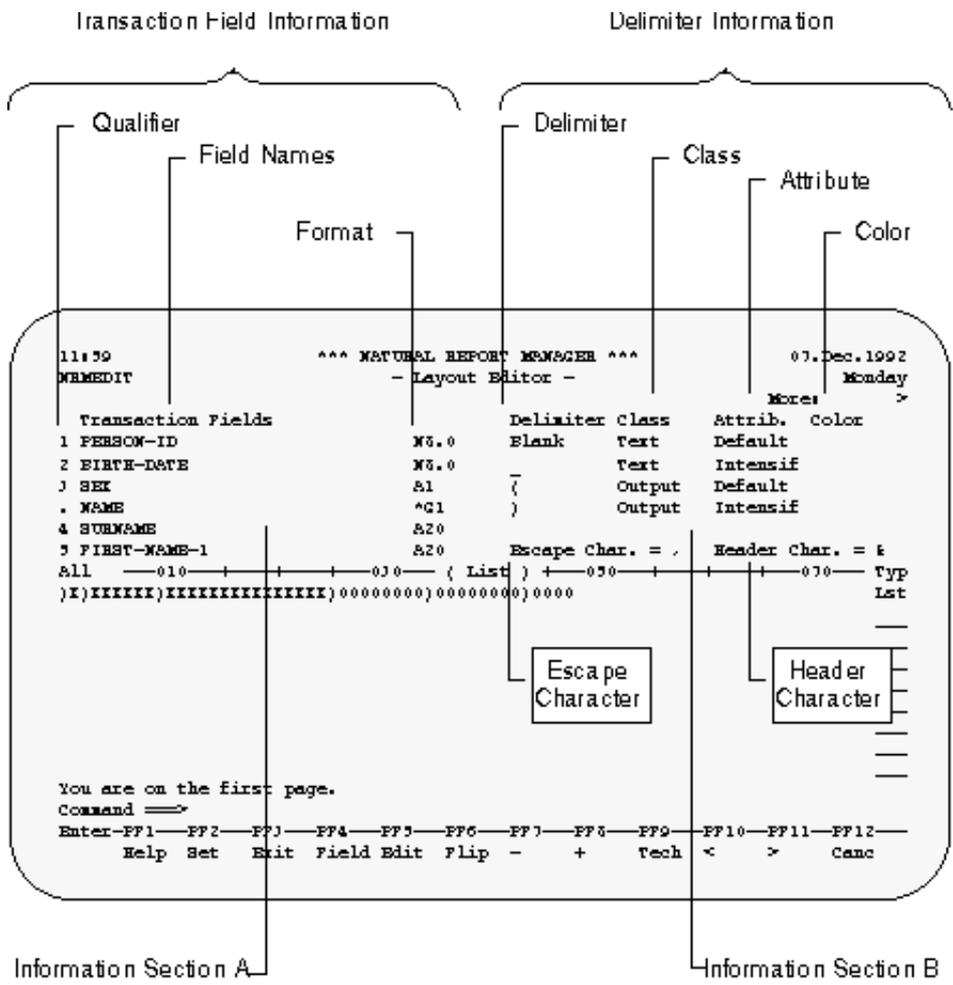


Section A and section B display information about the transaction fields and field delimiters you can use. You can decide which information you want to be displayed in which information section. The editor area is where you edit layout elements and is described later in this section.

▶ To invoke the editor area with information sections:

- Issue the SECTION command from within the Layout Editor.

A screen similar to the following appears:



Transaction Field Information

Transaction field information lists the fields in the file or files you chose when creating the transaction. Transaction field information also lists any system variables and user fields used in the transaction.

Qualifier

Every field which you can use in the Layout Editor has a qualifier (number). Fields which you cannot use, for example group fields and phonetic descriptors are marked with a period (.).

Note:

You can not use superdescriptors, subdescriptors or phonetic descriptors in the Layout Editor if you are using a DL/1 file.

Field Format

The format of each field is shown to the right of the transaction field list. You can shift the field format information further to the right until it is no longer visible. This is useful, if for example, the field names are truncated.

▶ To shift the field format information to the right:

1. Position the cursor in the section displaying transaction field information.

2. Issue the > orRIGHTcommand until the information becomes invisible.

 **To shift the field format information to the left:**

1. Position the cursor in the section displaying transaction field information.
2. Issue the < orLEFTcommand until the information becomes visible.

Delimiter Information

Delimiter information lists the field delimiters available. Field delimiters are symbols which represent a combination of field class, field attributes and field color. You use field delimiters to determine what kind of fields are used and how they are displayed.

The delimiter information contains four columns:

Column	Description
Delimiter	The character which indicates a certain delimiter.
Class	There are two classes of field: text fields and output fields. You enter the content of text fields in the Layout Editor. The contents of output fields are supplied dynamically when the transaction is run.
Attrib.	The field attributes govern the type of text used when a field is displayed eg., blinking (for screen output only), intensified.
Color	Field color is indicated here.

You can create your own field delimiter definitions or modify existing ones. For further information, see **Layout Settings** in **Working with Natural Report Manager**.

Escape Character

The escape character for field and line commands is part of the delimiter information and is displayed next to the header character.

Header Character

The header character is part of the delimiter information and is displayed next to the escape character. You use the header character to generate the header text defined in Super Natural for a field.

When a header layout element is first created, the header texts defined for the fields used in the editor are generated and underlined. If no header text is defined, the field name is generated. However, when you position subsequent fields in the Layout Editor, header text is not automatically generated. You can either type in a header as text or use the header character to generate it.

 **To generate header text for a field:**

1. Type in the header character and qualifier for the field.

You can additionally use a text delimiter between header character and qualifier.

2. Press Enter.

The header text defined for the field in Super Natural is generated. No underline is generated.

You can use the header character to generate header text in any layout element.

Changing the Information in Sections A and B

You can choose whether you want to display transaction field and delimiter information in section A or in section B.

If you have long lists of transaction fields or of delimiters, it can be useful to use both A and B to display different parts of the same list.

▶ To change the information in section A or B:

- Issue the `section-name information-type` command

where *section-name* is *A* or *B* and *information-type* is *TRANSACTION* or *DELIMITER* as shown below:

```
{ A } { TRANSACTION }
{ B } { DELIMITER }
```

Paging in Section A and Section B

▶ To page in section A or section B:

- Enter the `section-name paging-command` command where *section-name* is *A* or *B* and *paging-command* is one of the Super Natural paging commands or one of those listed below:

Command	Description
+ n	Pages forward n lines
- n	Pages backwards n lines
LINE n	Pages to the line number specified
SCAN fieldname	Pages to the field named (only for the section displaying transaction fields)

```
{ A } paging-command
{ B }
```

You can also issue the paging commands by positioning the cursor in the section you want to page in and using a PF key.

Editor Area with Show Area

Instead of the sections A and B, you can display a layout element in the top half of the Layout Editor as shown in the following diagram:

Note:

You can copy or move a range of lines by entering the relevant line command in the first line and in the last line.

Apart from using the `..Rand..M` commands, you can not edit the element displayed in the show area.

You can use the Super Natural Shift functions, Paging functions or one of the commands listed below for positioning within the layout element displayed in the show area:

Command Description

>>	Positions to far right of layout
<<	Positions to far left of layout

Displaying Another Layout Element**▶ To display another layout element:**

- Issue the `SHOW $element-name$` command.

Editor Area Full-Screen

You can also choose to display the editor area only as shown in the diagram below:

**▶ To invoke the editor area only:**

- Issue the `FULL` command from within the Layout Editor.

A screen similar to the following appears:

Line Position Information

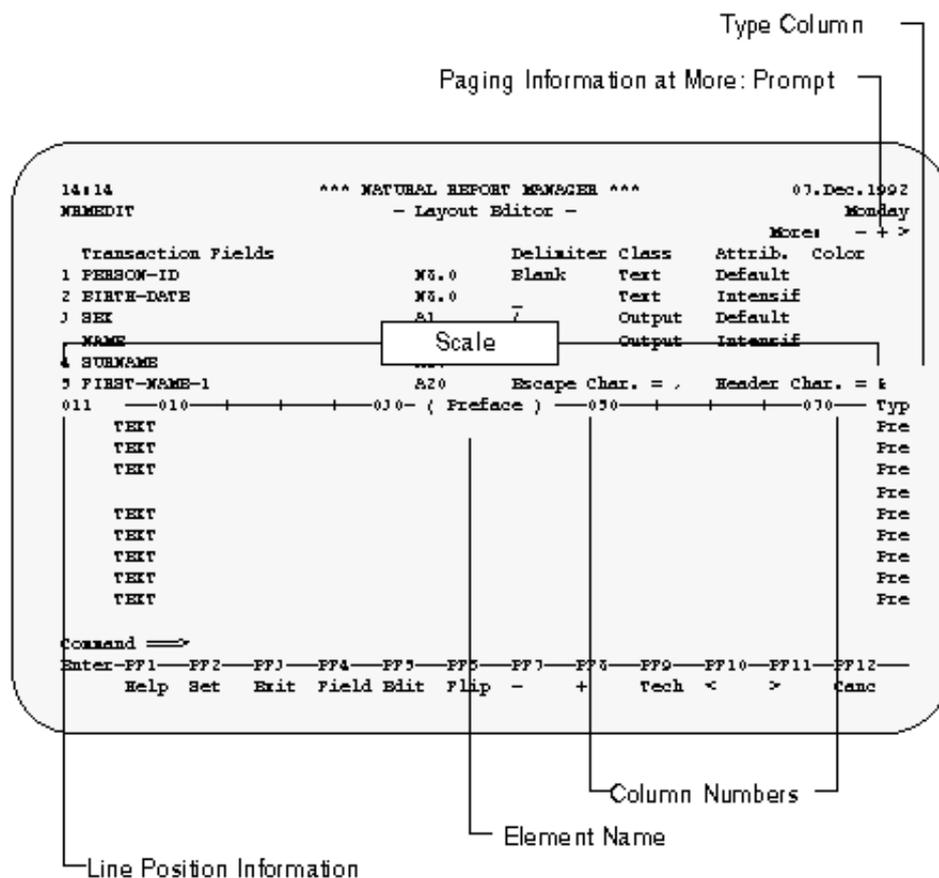
Line position information shows the number of the first line you can see in the editor area. The information ALL (when you can see the whole element), TOP and BOTTOM appear as appropriate.

Element Name

The scale displays the name of the element you are editing or the text All Elements'.

Column Numbers

The scale also shows which columns are displayed. The columns are identified by a three-figure number at intervals of 20 columns. The column itself is underneath the second figure of the number.



The Type Column

The Type (Typ) column contains a three-letter abbreviation showing the layout element type of each line used in the editor area. Blank lines in an element are also marked.

▶ To move the Type column to the other side of the screen:

- Issue the TYPE command.

Paging Information

The paging information shown after the More: prompt always refers to the editor area when the editor area is displayed.

Positioning Transaction Fields in a Layout Element

Each transaction field qualifier must be preceded by a delimiter of the class OUTPUT.

For further information on delimiters, see Delimiter Information.

To position a transaction field in a layout element:

1. Position the cursor one position to the left of the column in which you want the field to be displayed.
2. Type in a field delimiter of class OUTPUT.
3. Type the field qualifier (number allocated to the field in the information section) after the field delimiter.
4. Press Enter.

For right-justified fields of numeric (N), integer (I) or packed numeric (P) format, the figure nine (9) appears to represent the full length of the field. For example, if you choose a field of the format N12, twelve 9's appear. For left-justified fields of numeric (N), integer (I) or packed numeric (P) format, the figure zero (0) appears to represent the full length of the field. For example, if you choose a field of the format N12, twelve 0's appear. For fields of alphanumeric (A), floating (F), Date (D), time (T) or binary (B) format, the letter X appears to represent the full length of the field. For example, if you choose a field of the format A12, twelve X's appear. Fields of any type with an edit mask are represented by the letter M.

To alter the position of transaction fields already present in a layout element:

- Use the field commands and line commands described later in this section.

Positioning Text Constants in a Layout Element

A text constant is piece of text which always appears in a layout element. You can enter text constants directly into the editor area.

Each text constant must be preceded by a delimiter of the class TEXT.

Note:

The default delimiter for text constants is blank ().

To alter the position of text constants already present in a layout element:

- Use the field commands and line commands described later in this section.

The first column of the editor area is only for delimiters or commands. You may not position text constants in it.

Line Commands

Line commands influence the editor lines and are structured as follows:

```
escape-character escape-character line-command-character
```

The escape character of a line command is entered in the first position of an editor line. You may only enter escape characters or delimiters in this position.

When all elements are in the editor area, all elements are effected by the line and field commands you issue.

Escape Character

The first two characters of each line command are the escape character. The default escape character is a period (.). The escape character defined for you is shown in the Delimiter information which you can invoke in one of the information sections of the split-screen Layout Editor.

Line Command Character

You can use some line command characters in combination with a repetition factor or with a marker.

(Blank)

Entering a blank at the end of each line command prevents the editor from trying to interpret any other information in the editor line as part of the line command.

Issuing Line Commands

To issue a line command:

1. Type the first escape character at the first position of an editor line.
2. Type the second escape character at the second position of the editor line.
3. Type the line command character immediately after the second escape character.
4. Type a blank.
5. Press Enter.

Do not leave a blank between the second escape character and the line command character.

The following is an example of a correctly-positioned line command:

Line Command	Description
..En	Invokes theLayout Field List screen for the current line and the n-1 lines below it. You can then perform extended field editing on the fields displayed.
..E*	Invokes theLayout Field List screen for the current line and all lines below it. You can then perform extended field editing on the fields displayed.For further information on extended field editing, see The Extended Field Editing Window.
..Fc	Fills the blank spaces of the current line with the character c.
..I	Inserts a single line below the current line.
..In	Inserts n lines below the current line.
..J	Joins the current line with the line below it.If you type two ..J commands and press , the range of lines delimited by the commands are joined.
..Jn	Joins the current line with the n-1 lines below it.
..J*	Joins the current line with all lines below it.If a join operation results in a line being too long, the characters which don't fit are written to the beginning of the next line.
..M	Moves the current line to the line below the line in which the cursor is positioned when you press .If two ..M commands are entered on the same screen, the block of lines delimited by the commands is moved below the line marked with the cursor.
..Mn	Moves the line and the n-1 lines below it to the line below the line in which the cursor is positioned when you press .
..M*	Moves the current line and all lines below it to the line below the line in which the cursor is positioned when you press . This command is only practical if the line marked with the cursor is above the current line.
..R	Repeats (copies) all the text constants in the current line and writes them to the line indicated by the cursor position. Transaction fields are not copied. If you copy a line which only contains transaction fields, the line is copied but it is blank. Two ..Rcommands entered on the same screen repeat the text constants within the block of lines delimited by the commands.
..Rn	Repeats (copies) all text constants on the current and the n-1 following lines to the cursor position. If the cursor is located in the current line, the same text is repeated ntimes.
..R*	Repeats (copies) all the text constants in the current line and the lines below to the cursor position. This command is only practical if the line marked with the cursor is above the current line.
..S	Splits the current line at the cursor position. The content of the current line after the cursor position is written into a new line which is created below the current line. If you type in two..S commands and press , the block of lines delimited by the commands is split at the cursor position. The part of the block after the cursor position is written into a new line which is created below the current line.
..Sn	Splits the current line and the n-1 lines below it at the cursor position.
..S*	Splits the current line and all the lines below it at the cursor position.

Field Commands

Field commands influence the field in which you enter them and are structured as follows:

```
escape-character field-command-character
```

You can apply field commands to a range of fields or constants. You can specify a range as follows:



With two or more of the same field commands on the same screen. The column range (horizontal range) and the line range (vertical range) are determined by the positions of the commands.



With the repetition factors "n" (where "n" is a number) or asterisk (*). With the repetition factor "n", the command is applied to the designated field and to the fields in the n-1 lines below it. The repetition factor asterisk (*), causes repetition until the bottom of the element is reached.

Field commands are entered in the first position of a field. The escape character of the field command is entered in the same position as the delimiter of the field.

When all elements are in the editor area, all elements are effected by the line and field commands you then issue.

Escape Character

The first character of each field command is the escape character. The default escape character is a period (.). The escape character defined for you is shown in the Delimiter information which you can invoke in one of the information sections of the split-screen Layout Editor.

Field Command Character

You can use some field command characters in combination with a repetition factor as described above.

(Blank)

Entering a blank at the end of each field command prevents the editor from trying to interpret any other information in the line as part of the field command.

Issuing Field commands

To issue a field command:

1. Type the escape character at the first position of a field (the same position as the field delimiter).
2. Type the field command character immediately after the escape character.
3. Type a blank.
4. Press Enter.

Do not leave a blank between the escape character and the field command character.

The following is an example of a correctly-positioned field command:

Field Command	Description
.A	Invokes the Array Editing window in which you can determine how multiple-value and periodic group fields are displayed. This command may be applied to a single field only and not to a range of fields. The resulting array is positioned with its left upper corner at the position where the .A command was entered. You can redefine an array by applying the .A command to one of its elements. For further information, see The Array Editing Window.
.C	Centers a field or range of fields between adjacent fields. To center a single field, enter .C in the field to be centered. To center a range of fields, enter .C in the first and last field to be centered, or enter .C in the first field and position the cursor to the last field to be centered. If an adjoining field or fields are not present, the column boundaries in effect for the layout definition are used instead.
.D	Deletes a field or range of fields. To delete a single field, enter .D in the field to be deleted. To delete a range of fields, enter the .D command in the first and last field to be deleted. The field range to be deleted may extend beyond a single line. If one array element is deleted, the entire array will be deleted.
.E	Invokes the Extended Field Editing window for a field. You may not apply this command to a range of fields. For further information, see The Extended Field Editing Window.
.J	Joins fields located on consecutive lines. The left boundary of the join operation corresponds to where the .J command is entered and the right boundary corresponds to the cursor position.
.M	Moves a field or range of fields. To move a single field, enter the .M command in the field to be moved and place the cursor at the target position. To move a range of fields, enter the .M command in the first and last field to be moved and place the cursor at the target position.
.R	Repeats (copies) a text constant or range of text constants. To copy a single text constant, enter the .R command in the text constant to be copied and place the cursor at the target position. To copy a range of text constants, enter the .R command in the first and last text constant to be copied and place the cursor at the target position. Text constants and ranges of text constants are repeated downwards and from left to right.
.S	Splits a line or a range of lines. Enter the .S command in the field at which splitting is to begin and place the cursor at the target position. The line is divided at the position where the .S command was entered. The right portion is then moved to the cursor position.
.T	Truncates (deletes) a line from the field in which you enter the .T command to the end. If this function is used to truncate (delete) an array element, the entire array is deleted.

Overlapping

When executing a line or field command would result in fields being overwritten or the margins of the report being exceeded, an error message is displayed which indicates overlapping. The command is not executed.

The Display Layout Element Screen

The Display Layout Element screen displays a layout element or elements. You can display elements which you are not allowed to edit.

```

12:03          *** NATURAL REPORT MANAGER ***          07.Dec.1992
NRMSHOW          - Display Layout Element -          Monday
                                          More:      >
All   ---010---+-----+-----+---030--- ( List ) +---050---+-----+-----+---070--- Typ
)X)XXXXXX)XXXXXXXXXXXXXXXXXX)00000000)00000000)0000          Lst

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Set  Exit  Field Edit Flip -      +      Tech <      >      Canc

```

For information on the scale, see The Layout Editor Editor Area.

To display a layout element:

- Issue the DISPLAY *element-name* command from the Display Layout Element screen, Layout Editor or Layout Field List screen.

The element named is displayed in the Display Layout Element screen.

To display all layout elements:

- Issue the DISPLAY ALL command from the Display Layout Element screen, Layout Editor or Layout Field List screen.

All elements are displayed in the Display Layout Element screen.

The Layout Field List Screen

The Layout Field List screen lists the fields in the layout element specified.

```

12:00          *** NATURAL REPORT MANAGER ***          07.Dec.1992
NRMVARL          - Layout Field List -          Monday
                                          More: <

----- List -----
Cmd  Field Name (Truncated)          Format  Field Type
___  SAG-TOURS-E-PERSON.SKIPPER-SAILING-INSTRUCTOR___  A1     Primary
___  SAG-TOURS-E-PERSON.AREA-CODE_____  A6     Primary Array
___  SAG-TOURS-E-PERSON.PHONE-NUMBER_____  A15    Primary Array
___  SAG-TOURS-E-PERSON.PERSON-ID_____  N8     Primary
___  SAG-TOURS-E-PERSON.BIRTH-DATE_____  N8     Primary
___  YEAR-OF-BIRTH_____  N4     User
___  _____
___  _____
___  _____
___  _____
___  _____
___  _____
___  _____
___  _____
___  _____
___  _____

Available field commands: EDIT ARRAY DELETE

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Set   Exit       Edit Flip -   +   Tech <   >   Canc
    
```

You can perform the following commands on fields displayed in theLayout Field List screen by entering the command abbreviation in the command column:

Command Description

- DELETE The field is deleted from the layout.
- EDIT TheExtended Field Editing window appears.
- ARRAY TheArray Editing window appears.

The Extended Field Editing window and theArray Editing window are described later in this section.

The Extended Field Editing Window

You can use the Extended Field Editingwindow to edit fields individually. For example, you may want to have the field NAMEshown twice in a list, in pink at the top and in blue at the bottom.

 **To invoke the Extended Field Editing window:**

- Enter the field command .E in the first position of the field.

Or:

Enter ED in the command column next to the field in the Layout Field List screen.

Note:

You can also issue the EDIT command using the cursor position as described earlier in this section.

The following example shows the version of the Extended Field Editing window which appears for numeric fields:

Field	Description
Field Name	For information only. You can not change the field name
Field Type	For information only. The following information is displayed as appropriate: Primary field: contained in primary file Secondary field: contained in secondary file Lookup: n field is contained in the nth lookup file User: user fieldSystem: system variable Array: field is a multiple-value field or a periodic group
Identical Suppress	If you specify ON, identical values for the field are suppressed. If you specify OFF, identical values for the field are not suppressed. If you specify neither ON nor OFF, the setting specified in your transaction options is valid.
System Function (fields in Group only)	You can define a system function to be performed on the field. For further information on system functions, see Function (Func) Column in Working with the Worksheet . The OLDsystem function is only available in Natural Report Manager. This function displays the value of the field prior to a control break.
Format	For information only.
Output Length	You can change the length of the field for display purposes.
Attributes	You can change the field attributes. The following representation attributes are available: B: Blinking C: Italic/Cursive D: Normal (default) I: Intensified N: Not displayed (for passwords etc) U: Underlined V: Reverse video The following alignment attributes are available: Z: Numeric field right-justified with leading zeros L: Left-justified R: Right-justified
Numeric Sign ON (numeric fields only)	If you mark this field, negative values are preceded by a minus (-) sign.
Colors	You can change the field's color. The following colors are available: Neutral, Blue, Green, Red, Pink, Yellow, Turquoise
Zero Print ON (numeric fields only)	If you mark this field, zeros (0) are printed for fields which have that value. Otherwise, the field is left blank.
Edit Mask	You can enter an edit mask here. For further information on edit masks, see Edit Masks.
Dynamic Attribute (alphanumeric fields only)	You can determine the attributes of parts of an alphanumeric field according to its content as described below.

Dynamic Attributes

If you know that the contents of a field is always structured in a certain way, you may want to draw attention to part of the field by giving it different attributes.

 **To determine the attributes of parts of an alphanumeric field according to its content:**

1. Type the character after which you want the field attributes to change in the Dynamic Attributes field of the Extended Field Editing (2)window.

You can enter either a special character or the hexadecimal value for any other character. The field help will help you with the required notation.

This character will not be displayed in the report.

2. Type one of the following two-character abbreviations for color (optional if new dynamic attribute defined):

BL (Blue)

GR (Green)

NE (Neutral)

PI (Pink)

RE (Red)

TU (Turquoise)

YE (Yellow)

3. Type one of the following abbreviations for a dynamic attribute (optional if new color defined):

B Blinking

C Italic/Cursive

D Normal (default)

I Intensified

N Not displayed (for passwords etc)

U Underlined

V Reverse video

4. Type in a final special character.

The final special character is the character after which the dynamic field attributes revert to the original attributes.

Example:

For example, if the field NAME is always structured as follows:

```
Mr .surname ,firstname
```

you could decide to have the surname displayed differently to the rest of the field. To have the surname displayed in red and blinking, you would enter the following in the Dynamic Attributes field:

```
'4BREB,
```

where '4B represents the special character period (.) in EBCDIC code. The special character period (.) is not displayed in the report.

Note:

You can also enter special characters directly.

The Array Editing Window

You can use the Array Editing window to determine how the occurrences of multiple-value fields and periodic groups are displayed.

Before you perform array processing, the following applies:

-

For fields numbered in the Sequencecolumn of the Worksheet, the number of occurrences defined in your user profile for multiple-value fields and periodic groups are displayed.

-

For fields not numbered in the Sequencecolumn of the Worksheet, only the first occurrence is displayed.

To invoke the Array Editing window:

- Enter the field command .A in the first position of the field in the Layout Editor.

Or:

Enter AR in the command column next to the field in the Layout Field List screen.

```

09:52          *** NATURAL REPORT MANAGER ***          1993-05-10
Layout LCRUISE1          - Layout Editor -          NRMARR
                                                    More: >
+-----Array Editing-----+
! Field Name          (Field Type: Primary Array ) !
!   SAG-TOURS-E-CRUISE.LANGUAGES          !
! Upper Bounds   Output   Occurrences   Starting from   Spacing   !
!   99__         Vertical__   1__         _____   0_ Lines   !
!   191__        Horizontal   1__         _____   1_ Columns  !
!   1__          _____   1__         _____   0           !
+-----+
)XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX )S000.00 )S00000000 AXX          Lst
    
```

The Array Editing window contains the following columns as well as showing field name and field type:

Column	Description
Upper Bounds	For information only. Displays the maximum number of occurrences which can be displayed.
Output	You can display the array vertically or horizontally.
Occurrences	You can change the number of occurrences to be displayed.
Starting From	You can change the number of the first occurrence to be displayed.
Line/Column Spacing	You can change the number of lines to be left between occurrences with horizontal output and the number of spaces to be left between occurrences with vertical output.

Layout Settings

To invoke the Layout Settings (General) window:

- Issue the SETTINGS command.

The Layout Settings (General) window appears. You can page forward to change newpage, format and delimiter settings as described below:

General

Setting	Description
Layout Name	Information only. The layout name is the same as the transaction name except for that it has the prefix for layouts.
Description	You can add or modify a description for the layout.
Profile Name	Information only. The ID of the user who created the layout.
Decimal Character	Information only.

Newpage

If you specify no condition, a new page is always started before or after an element type as defined. If you specify a condition, a new page is only started if the condition is fulfilled.

Setting	Description
Before	Mark this field next to an element type if you want it to start on a new page.
Condition	Enter the maximum number of lines of the element which can be displayed on one page before a new page is started. For example, if you enter 10, and there is only room for 8 lines of the element to be displayed on a page, the element is displayed starting on the next page.
After	Mark this field next to an element type if you want a page break to occur after it.
Condition	Enter the maximum number of lines which can be blank after the element.

Note:

If you are using a transaction generated in a previous version of Super Natural (Version 2.4 or below), the line numbers for existing page breaks are shown. You can change the line numbers or just mark Before and/or After as described above. Once you have deleted all the numbers, you cannot enter line numbers again.

Format

Setting	Description
Pagesize	You can change the number of lines which are to appear on a page. The page size must be within the range 12-250 lines.
Linesize	You can change the number of characters (columns) to appear in each line. The line size must be within the range 80-249 characters.
Zero Print ON	If you mark this field, zeros (0) are printed for fields which have that value. Otherwise, the field is left blank.
Left Justified	If you mark this field, numeric values are displayed starting at the left-hand side of the field.
Mark to apply changes only to new fields	If you mark this field, your changes are only be applied to fields you use in the Layout Editor subsequently.

Delimiter

Setting	Description
Class	The following classes are offered: Text Output Only
Attribute	The following attributes are offered: Italic/Cursive, Normal (default), Intensified, Not displayed (for passwords etc), Underlined, Reverse, video, Dynamic (not available)
Color	The following colors are offered: NE (Neutral), BL (Blue), GR (Green), RE (Red), PI (Pink), YE (Yellow), TU (Turquoise)
Delimiter	Use special characters as delimiters to represent the combinations of class, attribute and color you have specified.
Mark to apply changes new fields	If you mark this field, your changes are only applied only to fields you use in the Layout Editor subsequently.

Testing Layouts

When you test a layout, you are shown how the report data would be presented if you ran the transaction you are working on using Report Destination SCREEN, PRINTER, Con-Nect or EDITOR. The test report is filled with dummy data.

To test a layout:

- Issue the TEST command from within the Layout Editor.

The TEST command is allocated to PF12.

Elements

Element Length

The Layout Editor does not allow you to create a title as long as or longer than the page. If you are also using a header and footer, the Layout Editor makes sure that there is room for the report data.

Element Sort Order

The elements in the Layout Editor editor area are sorted (or not) according to the defaults set by the administrator. You can use the SORT command to sort the elements into the following order:

- Title
- Preface
- Header
-

Dynamic Values in Title Element

If you use dynamic input fields in the first 5 lines of your selection criteria, the current value of the field does not appear in the standard title when the transaction is run.

 **To display the current value of a dynamic input field in the title when the transaction is run:**

1. Edit the Title element.
2. Position the dynamic input field in the editor area as described in the section Positioning Transaction Fields in a Layout Element earlier in this section.

The current value of the dynamic input field is supplied in the title when the transaction is run.