

Natural Business Services

Natural Construct Help Text

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This document applies to Natural Business Services Version 8.2.2 and all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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Preface

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This documentation describes how to access and use the Help Text subsystem provided with Natural Construct. Its purpose is to help documenters create and maintain online help for the applications generated with Natural Construct. It was written for documenters (or programmers) responsible for creating or maintaining online help.



Note: You do not need a background in Natural programming to use the Help Text subsystem.

This documentation is organized under the following headings:

Getting Started	Contains the basic information you need to use the Help Text subsystem and create your help members.
Using the Help Text Subsystem	Describes the fields and functions of the Help Text main menu, as well as the structure of the Help Text subsystem.
Editing Help Text	Describes the features of the Help Text editor.
Help Text Utilities	Describes the help text utilities supplied for all supported platforms.
Appendix A: Glossary of Terms	Contains a glossary of terms used throughout this documentation.



Note: The illustrations in this documentation are from a Natural/Adabas environment. Differences in commands or field names for other users are described where they occur.

Conventions

Mainframe and Linux Platform Differences

The majority of the information in this documentation applies to all supported platforms. When differences in operation exist for different platforms, the following methods are used to explain them:

- When a description applies to only one supported platform, the platform is indicated in parentheses. For example: (mainframe) or (Linux).
- When a minor difference exists, it is explained within parentheses. For example: Enter CSTG at the Next prompt (in the Direct command box on Linux).
- When a more significant difference exists, a note explains the difference.
- When major differences exist, separate sections or chapters are devoted to specific platforms. The platform names are displayed in the section or chapter headings. For example: *Natural Construct for Mainframe* or *Natural Construct (Mainframe)*.

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Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
Monospace font	Identifies service names and locations in the format <i>folder.subfolder.service</i> , APIs, Java classes, methods, properties.
<i>Italic</i>	Identifies: Variables for which you must supply values specific to your own situation or environment. New terms the first time they occur in the text. References to other documentation sources.
Monospace font	Identifies: Text you must type in. Messages displayed by the system. Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the symbol.
[]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

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Data Protection

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Getting Started

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This section describes Natural Construct and the features and functions of the Help Text subsystem. It includes a detailed overview of the procedure to create help text for your applications.

About Natural Construct

Natural Construct is a functionally rich productivity and standardization tool. Using Natural Construct, application developers can enhance their Natural environment and speed up the design and implementation of their Natural applications.

This section introduces Natural Construct and describes:

- How to access the Natural Construct subsystems
- How to use direct commands
- The PF-key functions
- The standard menu codes
- How to use online help
- How modules are saved and stored

The following topics are covered:

- [Description of Natural Construct](#)
- [Access Natural Construct](#)
- [Access the Main Menu](#)
- [Use Direct Commands](#)
- [Use Natural Construct PF-Keys](#)
- [Standard Menu Codes](#)
- [Panel-Level Help](#)
- [Field-Level Help](#)

Description of Natural Construct

Written for Software AG's Natural/Predict environment, Natural Construct assists developers in achieving higher productivity goals than are obtainable using Natural and Predict alone. At the same time, Natural Construct helps to standardize and control the quality of the application development process.

Natural Construct can be used by a variety of users on a number of platforms. It consists of the following subsystems:

Subsystem	Description
Help Text	Used by the documenter or developer to create and maintain help text at the panel (map) and/or field level.
Administration	Used by the administrator to define and maintain the models Natural Construct uses to generate programs. For information, see <i>Natural Construct Administration and Modeling</i> .
Generation	Used by the developer to generate development modules, including: <ul style="list-style-type: none"> ■ Natural modules ■ Predict program descriptions ■ code blocks ■ JCL text (mainframe) For information, see <i>Natural Construct Generation</i> .

Access Natural Construct

This section describes how to access the Natural Construct Help subsystem.



Notes:

1. If you are the Natural Construct administrator, this procedure differs slightly. Refer to the second procedure in this section for instructions.
2. Always terminate Natural Construct by pressing the quit PF-key or entering a period (.) in the input field on the Help Text main menu. This method ensures proper cleanup of the environment.

Developers and Documenters

> To access the Help Text subsystem

- 1 Type "ncsth" at the Next prompt.
- 2 Press Enter.



Note: To access the Help Text subsystem in this way, your user ID must be set up to access the Natural Construct SYSLIBS library. If necessary, have your system administrator set up your user ID correctly.

Natural Construct Administrators

➤ To access the Help Text subsystem

- 1 Type "csth" at the Next prompt.
- 2 Press Enter.

Access the Main Menu

Each of the three subsystems (Help Text, Generation, and Administration) has its own main menu, which is displayed when you access the subsystem. However, as this documentation addresses the needs of Natural Construct documenters, the Help Text main menu is the only Natural Construct main menu referred to.



Note: For a description of this menu, see [Structure of the Help Text Subsystem](#).

Use Direct Commands

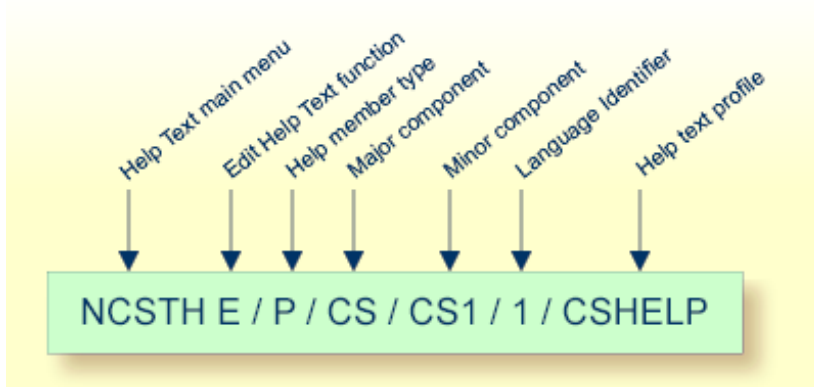
You can move around within the Help Text subsystem by entering codes on menus, pressing PF-keys, or issuing direct commands. Direct commands allow you to go directly to any function or menu within the subsystem — without using intervening menus. They are useful for experienced users who know the menu structure, the valid menu codes, and the required parameters at each menu level. The following example shows the direct command line:

Command _____

When specifying direct commands, the following conventions apply:

- You can string together as many commands as you like. If one of the codes specified is not valid on a menu, Natural Construct displays that menu so you can enter a valid code.
- To indicate a new menu or level, leave a space between function codes.
- To indicate parameters that are at the same level, separate them with a slash (/).

The following diagram illustrates a sample direct command:



This command accesses the Help Text main menu (NCSTH), the Edit Help text function (E) on the main menu, the Type (P), Major (CS), and Minor (CS1) components, as well as the Language component (1) and help profile (CSHELP) for a sample help member.



Note: The help profile is only required when creating a new help member.

When a direct command is entered on the command line for a menu, Natural Construct first determines whether the code is a valid option on that menu. If no code matches the first code in the command, Natural Construct checks the main menu for a match.



Note: You can also issue a direct command at the Natural Next prompt (Direct command box for Linux). While you are in the SYSCST library, for example, you can enter "CSTH E/P/CS/CS1/1/CSHELP" to perform the sample command above.

Use Natural Construct PF-Keys

Throughout the Natural Construct system, certain PF-keys have standard functions (pressing the PF1 key accesses online help, for example). The PF-key lines, which are located at the bottom of most panels, display the PF-key functions for that panel.



Notes:

1. PF-keys 13 to 24 are equivalent to PF-keys 1 to 12, respectively; however, only PF1 to PF12 are displayed.
2. Your Natural Construct administrator can change the function and/or description associated with each key. Within this documentation, the default values are used.

The standard PF-keys and functions are:

PF-Key	Name	Function
PF1	help	<p>Displays help for a particular panel or field.</p> <ul style="list-style-type: none"> ■ When the cursor is in a field followed by an asterisk (*), displays a window from which you can select a valid value for the field. For information, see Field-Level Help. ■ When the cursor is in a field not followed by an asterisk (*), displays help information for that field. For information, see Panel-Level Help. ■ When the cursor is anywhere on the panel except a field, displays help for the entire panel. <p>Note: An asterisk is the default help indicator for Natural Construct. The help indicator for your organization may be different.</p>
PF2	retrn	Displays the previous panel. Pressing PF2 is equivalent to entering a period (.) in the <code>Function</code> field on a menu.
PF3	quit	Terminates the Natural Construct session. In most cases, a confirmation window is displayed when you press PF3. Press PF3 again to complete the termination process.
PF7	bkwrđ	Scrolls backward (up) through data.
PF8	frwrđ	Scrolls forward (down) through data.
PF10	left	Displays the panel to the left of the current panel. If you are currently on the first panel in a series of panels, pressing PF10 displays the last panel in the series.
PF11	right	Displays the panel to the right of the current panel. If you are currently on the last panel in a series of panels, pressing PF11 displays the first panel in the series.
PF12	main	Displays the Natural Construct Help Text main menu.

Standard Menu Codes

The following menu codes are available on each menu throughout the Natural Construct system:

Code	Function	Description
.	Return	Typing a period (.) and pressing Enter terminates the current program and returns you to the previous menu. It is equivalent to pressing PF2 (retrn).
?	Help	Typing a question mark (?) and pressing Enter displays help for that panel. It is equivalent to pressing PF1 (help).

Panel-Level Help

While you are using Natural Construct, you can display help information about the current panel by moving the cursor anywhere on the panel (except an input field) and pressing PF1 (help).

If your cursor is not on an input field when you request help, Natural Construct displays the passive panel-level help containing an explanation of the functionality of that screen, as well as the hotlinks to a model overview and descriptions of all input fields and PF-keys.



Note: If the cursor is in an input field when you request help, Natural Construct displays help information for that field. For more information, see [Field-Level Help](#).

The following example shows the first help window for the Help Text main menu:

```

Panel Help
Help Text Main Menu

This menu lists the available help text functions, as well as the
code you enter to invoke each function. In addition to the Function
field, other input fields are also provided. These additional input
fields are required for some of the functions listed.

You use the functions available through this menu to create and
maintain help text for your generated modules. All Construct-
generated modules contain the code required to access the help text.

Field Help
<<Function>>
<<Type>>
<<Major>>
<<Minor>>
<<Language>>
Page ... : 1 / 2
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11
frwr help  retrn quit                    bkwr frwr
Help for: P/CS/CSHMNM0/1

```

Within this window, you can perform the following tasks:

Task	Description
Scroll forward through the pages of help text.	Do one of the following: <ul style="list-style-type: none"> ■ Enter a page number in the Page field ■ Press PF8 (frwr) ■ Press Enter

Task	Description
Scroll backward through the pages of help text.	Do one of the following: <ul style="list-style-type: none"> ■ Enter a page number in the Page field ■ Press PF7 (bkwrđ)
Return to the main help window.	Do one of the following: <ul style="list-style-type: none"> ■ Press PF2 (retrn) ■ Press PF3 (quit)
Display help about how to use the online help facility.	Press PF1 (help) in any help window.
Display information about a particular field or PF-key.	Move the cursor to the hotlink (indicated by the <<>> brackets) and press Enter. A window is displayed, containing help information about the selected topic.

The following example shows the help window for the `Function` field:

```

Field Help
Function

Type the code for the function you want to invoke. The codes and
functions are:
E      <<Edit Help Text>>
T      <<Test Help Text>>
S      <<Save Help Text>>
L      <<List Help Text>>
P      <<Purge Help Text>>
C      <<Clear Edit Buffer>>
H      <<Print Saved Help Text>>
M      <<Maintain Default Profiles>>
.      <<Help>>
?      <<Return>>

Page ... : 1 / 1
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF1
frwrđ help  retrn quit                bkwrđ frwrđ
Help for: F/#CODE/CSHMNM0/1

```

➤ To display information about each function

- 1 Move the cursor to the function name.
- 2 Press Enter.

For example, if you move the cursor to <<Edit Help Text>> and press Enter, information about the Edit Help Text function is displayed.

Field-Level Help

Natural Construct has the following two types of field-level help:

- [Passive](#)
- [Active](#)

Passive

Passive field-level help displays a description of a field on a panel. Passive help eliminates unnecessary screen navigation and takes users directly to the information they need. This eliminates much of the unnecessary reading and search effort required to traverse several screens before help information is located. In addition, since one help text member is referenced, the same information is always displayed for the same screen prompt.

Active

Active field-level help displays a selection window containing the valid values for a field. If active help is available, the field is followed by an asterisk (*).

» To display help for a field followed by an *

- 1 Move the cursor to the field.
- 2 Press PF1 (help).

Or:

Type a question mark (?) in the first-character position of the field and press Enter.

The active help window for that field is displayed. For example, the following window is displayed when you request help for the `Type` field:

```

CSHLTYPE          Natural Construct          CSHTYPE0
Aug 17             Select Type Component      1 of 1

                D File - DB field
                F Program - field
                P System - program
                O Other
Type ..... _
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---
      help  retrn quit

```

➤ **To select a value from an active help window**

- 1 Type the appropriate code in the `Type` field.



Tip: You can also move the cursor to the line containing the code.

- 2 Press Enter.

You are returned to the original panel and the selected value is displayed in the field for which you requested help.



Tip: You can display help about how to use the online help facility by pressing PF1 (help) in any help window.

Create Help Text

This section provides an overview of the procedure to create passive help for your generated applications. The steps in this procedure are:

- [Enable Help in Your Application](#)
- [Create the Help Members](#)
- [Add Hotlinks](#)
- [Provide Multilingual Support](#)
- [Use Message Numbers](#)

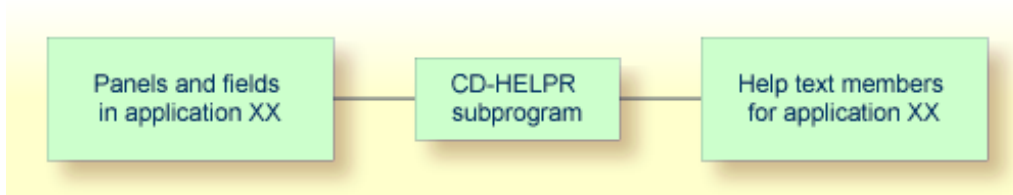


Note: Active help is set up by the application developer, not the documenter. For information, see [Field-Level Help](#).


Enable Help in Your Application

This step is preformed during the set up of your application in Natural Construct; it is the responsibility of the application developer.

To enable passive help for a panel or field, the help parameter for the panel or field must be defined with CD-HELPR. CD-HELPR is a subprogram that acts as a link between the application and the help member. When a user selects help on a panel or field, the application uses CD-HELPR to locate and display the correct help member. For example:




To set up passive help, the Help parameter for a panel (map) or the HE parameter for a field must be defined with 'CD-HELPR', =. When a user requests help, the CD-HELPR subprogram determines which help member to display based on the internal name of the panel or field.

 **Note:** Help parameters should be set up by someone who is familiar with the Natural programming language and with Natural Construct. For more information, see [Enable Passive Help](#).

Fields that require active help do not use CD-HELPR; instead, the developer inserts the name of the active help module in the HE parameter of the field. In most cases, the active help module is generated using the Browse-Helpr or Browse-Select-Helpr model.

Create the Help Members

This step is performed by the person responsible for setting up and writing the help text. This can be either the application developer or a documenter. This step requires no programming knowledge.

 **Note:** This section provides an overview of the tasks to create help members, while the remaining chapters in this documentation provide more detailed information.

To create a help member:

- [Step 1: Set Up the Help Member](#)
- [Step 2: Write the Help Information](#)

Step 1: Set Up the Help Member

Use the Help Text main menu to set up a help member for each panel and field that requires passive help.

➤ To set up a help member

- 1 Type "E" in the `Function` field on the Help Text main menu.
- 2 Type the Type component in the `Type` field.
- 3 Type the Major and Minor components in their respective fields.
- 4 Type the code for the language in which the help member will be set up in the `Language` field.
- 5 Type the name of the default profile you are using in the `Profile` field.

6 Press Enter.

The Help Text editor is displayed.



Note: For information about the Help Text editor, see [Editing Help Text](#).

When setting up a help member, the first three components of the help member name (Type, Major, and Minor) must be consistent with CD-HELPR's internal logic. When help is requested on a panel or field, CD-HELPR determines the help member to display based on the internal name of the panel or field.

For example, assume the internal name of the `Profile` field is `+Profile-Name`. Based on CD-HELPR's internal logic, Natural Construct attempts to display a help member with the following component names when help is requested for the field:

```
F/+ /Profile-Name
```

where `F` is the Type, `+` is the Major, and `Profile-Name` is the Minor component. To set up passive help for the `Profile` field, create a help member with the same three component names.



Tip: To create multilingual help members, specify a different Language component on the Help Text main menu and provide help text in that language. At runtime, the help member corresponding to the selected language will be displayed when a user requests help. For more information, see [Provide Multilingual Support](#).

Determine Help Member Names

If your Natural Construct-generated application is enabled for passive help, you can determine the valid help member name (Type, Major, and Minor components) for a panel or field by placing your cursor on the panel or field and pressing PF1 (Help). The name of the help member is displayed. For example:

```
+-----+
| Help ID.....: P/CS/CD-HELP          |
| No Help text has been entered for the requested object. |
+-----+
```



Note: If a help member has already been set up for the panel or field, the corresponding help window is displayed and the member name is shown at the bottom of the window.



Tip: You can also determine valid help member names if you understand CD-HELPR's internal logic. For information, see [Enable Passive Help](#).

Step 2: Write the Help Information

Once the help member has been set up with the correct component names, you can write the content of your help in the Help Text editor. When writing this help information, specify the first and second level headings and the hotlink name at the top of the editor window.



Note: You can either use the `Header 1`, `Header 2`, and `Hotlink` names or use message numbers, which are linked to text strings in the Natural SYSERR utility. At runtime, the message number is replaced with its associated text.

> To write the help information

- 1 Type the first-level heading in `Header 1`.

The headings identify the help topic and are displayed at the top of the help text window.

- 2 Type the second-level heading in `Header 2`.

Second-level headings are also displayed in various selection windows and help documenters identify an existing help member for editing.

- 3 Type the hotlink name in `Hotlink`.

This name identifies this help topic whenever the hotlink is used in a help window.

- 4 Type the help information on the lines provided.



Notes:

1. For information about creating hotlinks for help members, see [Add Hotlinks](#).
2. For information about using the Help Text editor, see [Editing Help Text](#).
3. For information about multilingual support, see [Provide Multilingual Support](#).
4. For information about message numbers, see [Use Message Numbers](#).

Add Hotlinks

Hotlinks (hyperlinks) identify additional help available in help text windows. They provide the user with a means of moving (navigating) through help text. For example, the help displayed for a panel may have a hotlink set up for each field on the panel. To access help for a field, the user moves the cursor to the hotlink and presses Enter. A window containing the additional help is displayed.

When a user selects a hotlink, the corresponding help text member is displayed, similar to hypertext. For example, if a help text member for a panel description has the embedded hotlink, `<<Header 1>>`, the help member for the `Header 1` field is displayed when a user selects the area between the angle brackets.

Hotlinks allow you to reuse help members, therefore eliminating the need to maintain multiple help text definitions. For example, assume you have a standard definition for the `Function` field and this field is displayed on many panels throughout your application. Instead of adding a definition for the `Function` field to each panel-level help member, you can add a hotlink to the help member containing the `Function` field definition. And because the `Function` field is referenced throughout your application, any modifications to the field definition are instantly updated.

A hotlink is displayed in a help window as a bolded word or phrase enclosed within double angle brackets (`<< >>`). The following example shows the first help window for the Help Text main menu:

```
Panel Help
Help Text Main Menu

This menu lists the available help text functions, as well as the
code you enter to invoke each function. In addition to the Function
field, other input fields are also provided. These additional input
fields are required for some of the functions listed.

You use the functions available through this menu to create and
maintain help text for your generated modules. All Construct-
generated modules contain the code required to access the help text.

Field Description
<<Function>>
<<Type>>
<<Major>>
<<Minor>>
<<Language>>
Page ... : 1 / 2
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11
frwr help  retrn quit          bkwr frwr
Help for: P/CS/CSHMNM0/1
```

The hotlinks available from this window are:

- Function
- Type
- Major
- Minor
- Language

Hotlink entries consist of a Type, Major, and Minor component name separated with a slash (/) delimiter. In the following example, a hotlink to the `Function` field help member (`<<f/#code/cshmm0>>`) is shown in the help member for the Help Text main menu:


```

Header 1 . *1132.1                                     Profile
Header 2 . *0304.1                                     NCSTHELP
Hotlink .. *1132.1
>
> + ABS X X-Y _ S 23   L 1
TOP ....+....1....+....2....+....3....+....4....+....5....+....6....+... AD
> This menu lists the available help text functions, as well as the <
| code you enter to invoke each function. In addition to the Function |
| field, other input fields are also provided. These additional input |
| fields are required for some of the functions listed.                |
|
| You use the functions available through this menu to create and      |
| maintain help text for your generated modules. All Construct-       |
| generated modules contain the code required to access the help text. |
|
| *0210.1
| <<f/#code/cshmmn0>>

```

When the help window is accessed, the hotlink is displayed as follows:

```

Panel Help
Help Text Main Menu

This menu lists the available help text functions, as well as the
code you enter to invoke each function. In addition to the Function
field, other input fields are also provided. These additional input
fields are required for some of the functions listed.

You use the functions available through this menu to create and
maintain help text for your generated modules. All Construct-
generated modules contain the code required to access the help text.

Field Description
<<Function>>

```

The following information is derived for this window:

- The first heading is derived from the Header 1 field for the help member for the Help Text main menu (p/cs/cshmmn0/1)
- The second heading is derived from the Header 2 field for the help member for the Help Text main menu
- The column description is derived from a text string SYSERR (message number *0210.1)
- The name displayed between the hotlink identifiers is derived from the Hotlink field for the help member for the Function field (f/#code/cshmmn0)

➤ To add a hotlink

- 1 Access a help member in the Help Text editor.

For information about accessing the editor, see [Access the Help Text Editor](#).

- 2 At the location within the help text where you want to place the hotlink, type the first three component names (Type/Major/Minor) of the help member within double angle brackets (<< >>).

For example:

```
<<F/+ /Profile-Name>>
```



Tip: Place hotlinks on a separate line with no other text. Otherwise, the hotlink may be truncated and all information may not be visible within the window.

- 3 Save the help member.

To the user viewing the hotlink from a help window, it is displayed as follows:

```
<<Help Profile>>
```

The hotlink name in this example (Help Profile) is derived from the `Hotlink` field in the help text member for the `Profile` field.



Note: For more information, see [Fields in the Help Text Editor](#).

Provide Multilingual Support

Natural Construct provides enhanced support for multilingual applications and application help text. This support includes:

- [Language-Independent Help Members](#)
- [Language-Independent Headings and Hotlinks](#)

Language-Independent Help Members

You can use the Help Text editor to set up translations for help members in each supported language. When help is requested, the help information for the appropriate language is displayed.

For example, assume you are setting up help for the Help Text main menu and your application supports three languages: English (Language 1), German (Language 2), and French (Language 3).

➤ To set up language-independent help members

- 1 Create three help members with the same component names except for the Language component.

For example:

- p/cs/cshmn0/1
- p/cs/cshmn0/2
- p/cs/cshmn0/3



Note: For more information, see [Editing Help Text](#).

2 Provide help information for each help member in the appropriate language.

When help is requested for the Help Text main menu, the system displays the p/cs/cshmn0 help member for the current language (for example, p/cs/cshmn0/1).



Note: If a help member for the current language does not exist, the English language help member is displayed by default.

Language-Independent Headings and Hotlinks

You can use message numbers to set up translations for heading and hotlink names in each supported language. Message numbers are linked to text strings in the Natural SYSERR utility, such as heading names, panel names, field names, etc. When creating multilingual help text, use message numbers in place of the actual names. At runtime, each message number is replaced with its associated text. The application user does not see the message numbers; the user only sees the text.

For example, assume your application supports three languages: English, German, and French. Each heading or hotlink message number will have three corresponding text strings — one in each language. Based on the system language currently being used, the correct heading or name will be displayed when the user requests help. Because you can use the same message numbers in your help and in your application, panel and field names are kept consistent throughout your application and application help.



Notes:

1. To translate help text at runtime, you must set up separate help members for each supported language. For information, see [Language-Independent Help Members](#).
2. For information about message numbers, see [Use Message Numbers](#).

Use Message Numbers

This section describes how to enable message numbers for use in your help text and how to insert a message number into a help text member. The following topics are covered:

- [Enable Message Numbers](#)
- [Insert a Message Number into a Help Member](#)
- [Use Substitution Values](#)

Enable Message Numbers

➤ To enable message numbers for use in your help text

- 1 Use the Natural SYSERR utility to set up the appropriate text and message numbers.

For information about the SYSERR utility, see the Natural Utilities documentation.

- 2 Use the Maintain Default Profiles function to set up the help profile attached to the help member.

To set up the help profile, specify the name of the library in which your message numbers are stored in the `Message Library` field on the Maintain Default Profiles panel. For information, see [Maintain Default Profiles Function](#).

Insert a Message Number into a Help Member

You can insert message numbers in the `Header 1` and `Header 2` fields, in the `Hotlink` field, and in the body of the help text.



Tip: When placing message numbers within the body of help text, place each number (or series of numbers) on a separate line with no other text. Otherwise, help text may be truncated and all information may not be visible in the help window.

➤ To insert a message number into a help member

- 1 Access a help member in the Help Text editor.

For information about accessing the editor, see [Access the Help Text Editor](#).

- 2 This step differs, based on whether you are inserting a message number into a field or into the body of your help text:
 - To insert a message number into the `Header 1`, `Header 2`, or `Hotlink` field, place the cursor over one of the fields and press Enter. Pressing Enter removes the protection on the fields so that you can type a value.



Note: If you do not enter a value in the `Hotlink` field, the value in the `Heading 2` field is used. We recommend that your second heading and hotlink names be identical and that they identify the topic for which the help member applies, such as a panel or field name.

- To insert a message number into the body of your help text, place the cursor on an empty line containing no additional text. For example, on a line where the message number will be used to represent a subheading.

3 Type the message number in the following format:

```
*NNNN.A
```

where:

*	Is a variable that is replaced by the library name defined in your help profile at runtime.
NNNN	Is the message number in the message file.
.A	Is the sequential position of text within the message number (each message number can contain up to 15 separate text positions).

For example, the help member for the Help Text main menu specifies `*1132.1` in the `Header 2` field. When the user requests help on the Help Text main menu, the help text for the CSTLDA library (by default), message number 1132, and position 1 is displayed as the second heading in the help window (in this case, Help Text Main Menu).



Note: When specifying text positions within message numbers, the values 1–9 represent the first nine text positions and the values A to F represent text positions 10–15. For example, `*1132.A` represents the 10th position of text within message number 1132. If the message number contains one text position only, we recommend that you still use the `.1` notation (for example, `*NNNN.1`). This will ensure that the correct text will be displayed if positions are added to the message number in the future.

4 Save the help member.

For information, see [Save Help Text Function](#).

Use Substitution Values

You can use a message number in conjunction with up to three substitution values. At runtime, substitution value(s) are displayed with the message text. A substitution value can either be a text string or another message number.

For example, assume you have two message numbers: *8910.1 (which represents the text "Due Date Field") and *9002.1 (which represents the text "Help"). You can insert the following entry in the Header 2 field for the help member for the Due Date field:

```
Header 2: *9002.1,*8910.1
```

In this example, the *9002.1 message number is set up to have substitution values placed before the text string "Help". Therefore, the second heading will be displayed as "Due Date Field" at runtime.

To use substitution values with message numbers:

- [Step 1: Set Up Message Numbers With Place Holders](#)
- [Step 2: Insert Message Numbers With Substitution Values](#)

Step 1: Set Up Message Numbers With Place Holders

➤ To set up message numbers with place holders

- 1 Access the SYSERR utility.

To access SYSERR, enter "SYSERR" at the Next prompt (mainframe) or in the Direct command box (Linux). For information about this utility, see the Natural Utilities documentation.

- 2 Display the message number.

- To set up a new message number, select "AD" (Add new messages).
- To set up an existing message number, select "MO" (Modify messages).

- 3 In the text segment within the message number you are setting up, type the place holder characters in the following format:

```
:1::2::3:XXX
```

where:

:1::2::3:	Are place holders for up to three substitution values that can be used with the message text.
XXX	Is the text within the message number.



Note: To limit the number of substitution values to one or two, type :1:XXX or :1::2:XXX, respectively.

For example, to set up the *9002.1 message number (representing the message text "Help") so it can be used with up to three substitution values, specify the following:

```
:1::2::3:Help
```

In this example, substitution values are placed before the message text.



Note: To have substitution values placed after the message text, type the place holders after the text (for example, Help:1::2::3:).

- 4 Save your changes.

For information, see [Save Help Text Function](#).

Step 2: Insert Message Numbers With Substitution Values

> To insert message numbers with substitution values

- 1 Complete steps 1 and 2 in the procedure for inserting message numbers into a help member.

For information, see [Insert a Message Number into a Help Member](#).

- 2 Type the message number and substitution values in the following format:

```
*NNNN.X, ZZZZ, ZZZZ, ZZZZ
```

where:

*NNNN.X	Is a message number set up for use with up to three substitution values.
ZZZZ	Is each substitution value — either a text block or a message number.

For example, to display "Due Date Field Help" as the second heading, insert the *9002.1 (Help) message number with the substitution value *8910.1 (Due Date Field) into the Header 2 field as follows:

```
Header 2: *9002.1,*8910.1
```

At runtime, the message text is displayed as "Due Date Field Help".

3

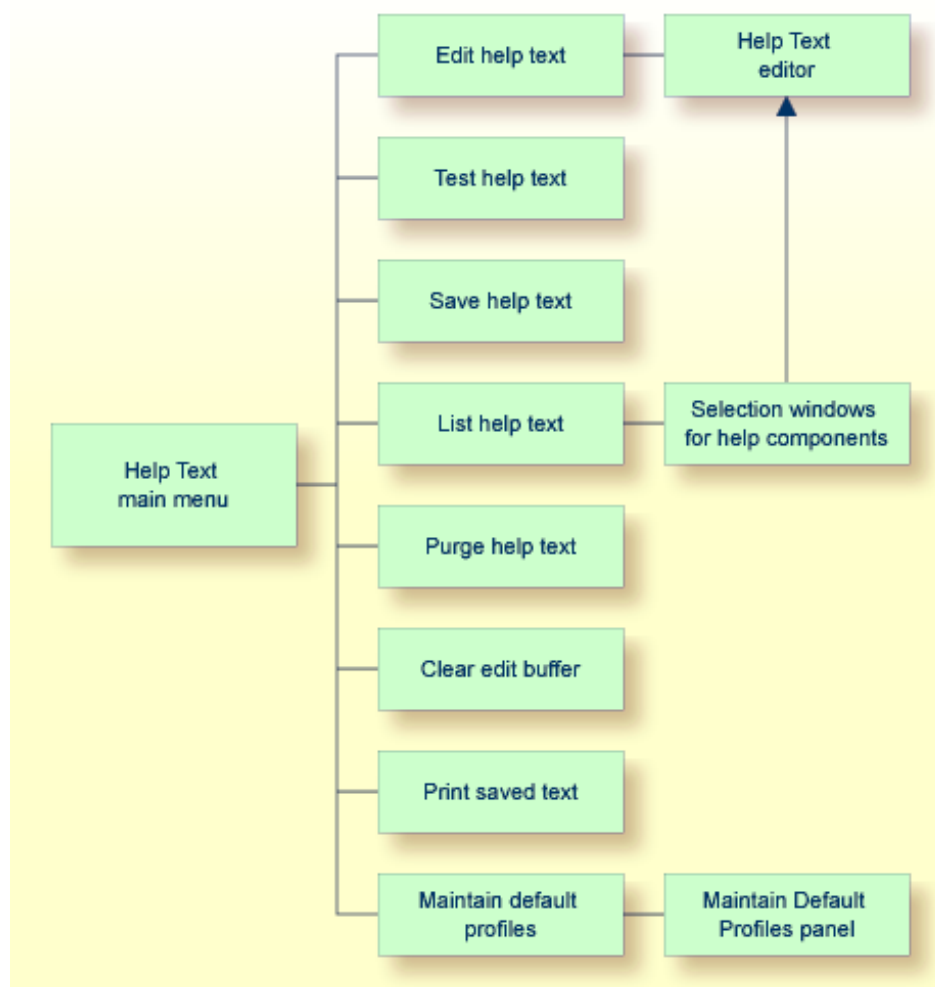
Using the Help Text Subsystem

■ Structure of the Help Text Subsystem	28
■ Features and Functions of the Help Text Main Menu	29

This section describes how to use the Help Text subsystem to create help text for your applications.

Structure of the Help Text Subsystem

The following diagram illustrates the structure of the Help Text subsystem and the functions available on the Help Text main menu:



Features and Functions of the Help Text Main Menu

The Help Text main menu is displayed when you invoke the Help Text subsystem. For example:

```

CSHMAIN          N a t u r a l   C o n s t r u c t          CSHMNMO
Aug 17              Help Text Main Menu                    1 of 1

                Functions
                -----
                E  Edit Help Text
                T  Test Help Text
                S  Save Help Text
                L  List Help Text
                P  Purge Help Text
                C  Clear Edit Buffer
                H  Print Saved Help Text
                M  Maintain Default Profiles
                ?  Help
                .  Return
                -----

Function ..... _
Type ..... P *
Major .....
Minor .....
Language ..... 1_   Profile ..... NCSTHELP_
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      help  retrn quit                                     lang

```



Notes:

1. For information about accessing the Help Text subsystem, see [Access Natural Construct](#).
2. For information about the Help and Return functions, see [Standard Menu Codes](#).

The fields on the Help Text main menu are:

Field	Description
Function	Code corresponding to the function you want to perform. For example, type "E" to edit a help member.
Type	Code corresponding to the Type component for the help text. Valid Type components are: <ul style="list-style-type: none"> ■ D Help for a database field (Minor component) within a file (Major component) ■ F Help for a field within a program

Field	Description
	<p>■ P</p> <p>Help for a program or map</p> <p>■ O</p> <p>Miscellaneous help (the Major and Minor components may have any value; for example, any procedure or glossary type help text)</p>
Major	<p>Major component for the help text you want to create, view, or modify. Along with the Minor and Type components, the Major component uniquely identifies a help member so that it can be located and displayed when help is requested.</p> <p>For example, to set up passive help for the #CUSTOMER-NUM field on a panel (using Natural Construct naming conventions), enter the following values:</p> <pre>Type F * Major #_____ Minor CUSTOMER-NUM_____</pre> <p>When a user requests help in the Customer Number field, the program retrieves the help text using the Type/Major/Minor component names.</p>
Minor	Minor component for the help text you want to create, view, or modify. Along with the Major and Type components, the Minor component uniquely identifies a help member so that it can be located and displayed when help is requested.
Language	<p>Code corresponding to the language in which the help member will be created. For example, for an English help member, type "1", for German, type "2", for French, type "3", etc. The help member corresponding to the current language is displayed when a user requests help.</p> <p>Note:</p> <ol style="list-style-type: none"> 1. If a help member for the current language does not exist, the English member is displayed by default. 2. To view a list of available language codes for selection, press PF12 (lang). 3. For information about multilingual support, see Provide Multilingual Support.
Profile	Name of the default help profile (for example, NCSTHELP). Help profiles define the size and placement of help windows. For information, see Maintain Default Profiles Function .

➤ To access a function on the Help Text main menu

- 1 Type the appropriate code in the Function field.
- 2 Type the Type, Major, Minor, and Language components for a help member.
- 3 Optionally, type the profile name for the help member.
- 4 Press Enter.

This section covers the following topics:

- [Edit Help Text Function](#)
- [Test Help Text Function](#)
- [Save Help Text Function](#)
- [List Help Text Function](#)
- [Purge Help Text Function](#)
- [Clear Edit Buffer Function](#)
- [Print Saved Help Text Function](#)
- [Maintain Default Profiles Function](#)

Edit Help Text Function

This function on the Help Text main menu invokes the Help Text editor, where you can create new help members or edit existing ones.

➤ To create or edit a help member

- 1 Type "E" in the `Function` field.
- 2 Type the Type component in the `Type` field.
- 3 Type the Major and Minor components in their respective fields.

To select from a list of Major and Minor components, use the List function (see [List Help Text Function](#)).

- 4 Type the code for the language in which the help member will be set up in the `Language` field.

To select from a list of language codes, use the List function.

- 5 Type the name of the default profile you are using in the `Profile` field.

To select from a list of default profiles, remove the value from the `Profile` field and press Enter. The Select Profile window is displayed. This window is described in [List Help Text Function](#).

- 6 Press Enter.

The Help Text editor is displayed.



Notes:

1. Any changes or additions performed in the editor are placed in the edit buffer until they are saved or cleared.
2. You can replace or modify the profile settings for the help member in this editor. These changes are saved for the current help member only. For information, see [Change the Current Help Profile](#).

3. For more information about creating or editing a help member, see [Use the Help Text Editor](#).

Test Help Text Function

This function on the Help Text main menu displays the help member currently in the edit buffer as it will appear to a user. Use this function to:

- Review the layout of your help window
- Test any hotlinks
- Ensure the correct message numbers have been used

> To test the current help member

- 1 Type "T" in the `Function` field.
- 2 Type the `Type`, `Major`, `Minor`, and `Language` components in their respective fields.
- 3 Press Enter.

The help member is displayed. For example:

```
Maint Help
Standard Parameters

The Standard Parameters panel allows for the specification of
parameters which are not generator definition specific, but
pertain to all programs or class of programs.
For model details see: <<Maint>>

Field Description
<<Module>>
<<System>>
<<Global data area>>
<<With block>>
<<Title>>
<<Description>>
<<First header>>
<<Second header>>
<<Command>>
Page ... 1 / 2
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11
frwr help  retrn quit                                bkwr frwr
```



Tip: You can also test the current help member by entering "Test" on the command line of the Help Text editor.

If there is more than one page of help text, you can navigate through the pages as follows:

Action	Method
Display the next page.	Press PF8 (frwr) or Enter.
Display the previous page.	Press PF7 (bkwr).
Display a page that is one or more pages before or after the current page.	Type the page number in the Page field and press Enter.
Return to the Help Text main menu.	Press PF2 (retrn).

**Notes:**

1. The help text is formatted based on the profile set up for the help member. To set up a different profile, see [Change the Current Help Profile](#).
2. For information about creating hotlinks for help members, see [Add Hotlinks](#).
3. For information about using message numbers, see [Use Message Numbers](#).

Save Help Text Function

This function on the Help Text main menu saves the help text currently in the edit buffer to the help text file.

> To save the current help member

- 1 Type "S" in the `Function` field.
- 2 Ensure that the Type, Major, Minor, Language, and Profile values are correct.
- 3 Press Enter.

A message is displayed confirming that you saved (or replaced) the help text.



Tip: You can also save a help member by entering "SAVEH" on the command line of the Help Text editor.

List Help Text Function

This function on the Help Text main menu lists existing help text components for selection.

> To list the current help text components

- 1 Type "L" in the `Function` field.
- 2 Press Enter.

A window is displayed for each blank field or field containing a non-valid value on the Help Text main menu. When all the fields are blank or contain non-valid values, one selection window is displayed for each of the following fields:

- Type
- Major
- Minor
- Language
- Default profile

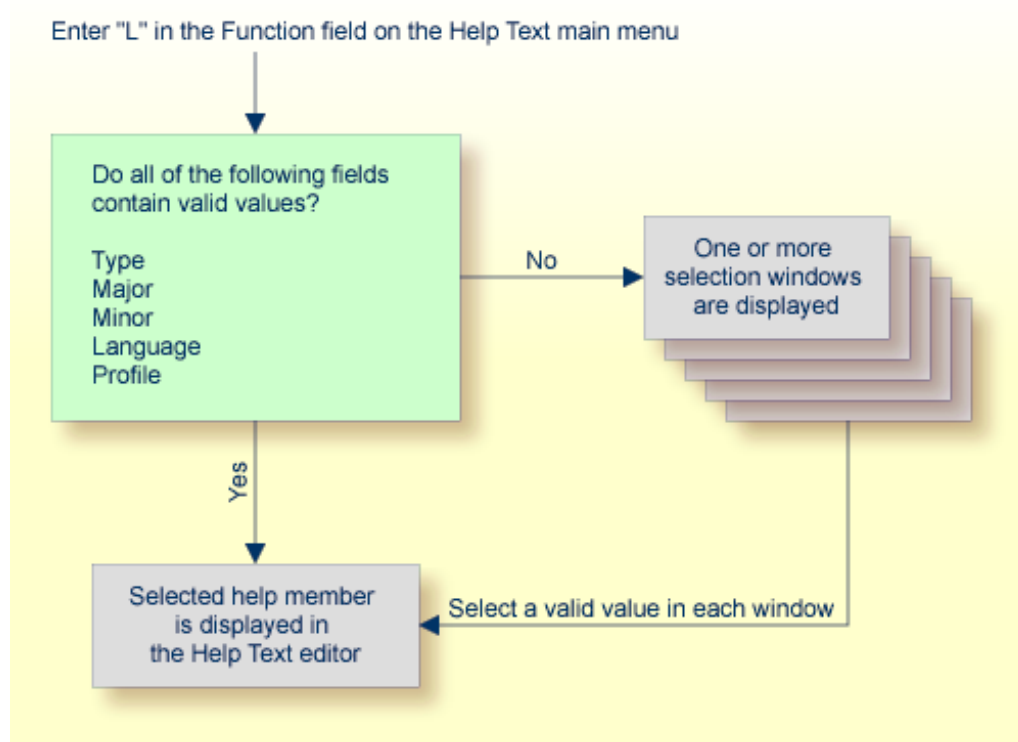
3 Select the appropriate component in each selection window.

After selecting the components, the help member is displayed in the editor.



Note: If you enter a non-valid value in any field, the selection values in the corresponding window are displayed in alphanumeric order beginning with the next valid value. For example, if you enter "N" and it is not a valid value, the list will begin with values that begin with the letter N.

The following diagram illustrates the process the List function follows:



The selection windows are:

- Select Type Component Window
- Select Major Component Window
- Select Minor Component Window

- [Select Language Component Window](#)
- [Select Profile Window](#)

Select Type Component Window

```

CSHLTYPE          Natural Construct          CSHTYPE0
Aug 17             Select Type Component      1 of 1

      D File - DB field
      F Program - field
      P System - program
      O Other

Type ... _
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---
      help  retrn quit
Enter selection

```

This window displays the valid Type components. These are:

Type Component	Description
D	Help for a database field (Minor component) within a file (Major component).
F	Help for a field within a program.
P	Help for a program or map.
O	Miscellaneous help (the Major and Minor components may have any value; for example, any procedure or glossary type help text).

➤ To select a Type component

- 1 Type the appropriate code in the Type field.



Tip: You can also move the cursor to the line containing the Type component.

- 2 Press Enter.

Select Major Component Window

```
CSHLMAJR                      Natural Construct                      CSHLMJR0
Aug 17                        Select Major Component                  1 of 1

Type P
-----
CN
CP
CS
CT
CU
CUFMPDA
CUMNPDA
CUOMPDA
CUSCPDA

                                End of Data

Major .....
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF
      help  retrn                                bkwrđ frwrđ
Position cursor or enter screen value to select
```

This window displays the Major components associated with the selected Type component. Press PF8 (frwrđ) to scroll forward through the list; press PF7 (bkwrđ) to scroll backward through the list.

> To select a Major component

- 1 Type the appropriate value in the Major field.



Tip: You can also move the cursor to the line containing the Major component.

- 2 Press Enter.

Select Minor Component Window

```

CSHLMINR                                Natural Construct                                CSHLMIR0
Aug 17                                Select Minor Component                                1 of 1

Type P / Major CU
-----
CU--DWM0                                Window Help
CU--DYM0                                Dynamic Attributes Help
CUBAMAO                                Batch Help
CUBAMBO                                Batch Help
CUBAMCO                                Batch Help
CUBAMD10                                Batch Help
CUBAMD20                                Batch Help
CUBAMD30                                Batch Help
CUBAMEO                                Batch Help
CUBOKMAO                                BROWSE-OBJECT-KEY-PDA Help
CUBOMAO                                BROWSE-OBJECT-SUBP Help
Minor .....
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF
      help retrn                                bkwrđ frwrđ
Position cursor or enter screen value to select

```

This window displays the Minor components associated with the selected Type/Major component. Press PF8 (frwrđ) to scroll forward through the list; press PF7 (bkwrđ) to scroll backward through the list.

➤ **To select a Minor component**

- 1 Type the appropriate value in the Minor field.



Tip: You can also move the cursor to the line containing the Minor component.

- 2 Press Enter.

Select Language Component Window

```
CSHLLANG              Natural Construct              CSHLLAN0
Aug 17                Select Language Component      1 of 1

Type P / Major CU / Minor CUBOMA0
-----
1 English              Standard Parameters
                        End of Data

Language ..... _
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF
      help  retrn                      bkwrđ frwrđ
Position cursor or enter screen value to select
```

This window displays the selected help member in all defined languages (in this example, only English is defined). Press PF8 (frwrđ) to scroll forward through the list; press PF7 (bkwrđ) to scroll backward through the list.

> To select a Language component

- 1 Type the appropriate code in the `Language` field.



Tip: You can also move the cursor to the line containing the `Language` component.

- 2 Press Enter.

Select Profile Window

CSHPLIST	Natural Construct	CSHPLST0
Aug 17	Select Profile	1 of 1
Profile	Description	

ACTION	** Automatically created during batch load **	
CSUSEREX	Natural Construct user exit sample profile	
SYSCSTDE	** Automatically created during batch load **	
NCSTHELP	Default CST451 help text profile	
PREDICT	Default Predict extended description profile	
Profile name	
Enter-PF1---	PF2---	PF3---
PF4---	PF5---	PF6---
PF7---	PF8---	PF9---
PF10---	PF11---	PF12---
help retrn	bkwrđ frwrđ	
Position cursor or enter screen value to select		

This window displays the valid help profiles. Press PF8 (frwrđ) to scroll forward through the list; press PF7 (bkwrđ) to scroll backward through the list.

➤ To select a profile

- 1 Type the name of the help profile in the `Profile name` field.



Tip: You can also move the cursor to the line containing the help profile name.

- 2 Press Enter.

The selected help member is read into the edit buffer and the Help Text editor is displayed. For a description of this editor, see [Editing Help Text](#).

Purge Help Text Function

This function on the Help Text main menu purges a help member from the help text file. The help text does not have to be read into the edit buffer before the purge.

➤ To purge a help member

- 1 Type "P" in the `Function` field.
- 2 Type the Type component in the `Type` field.
- 3 Type the Major component in the `Major` field.
- 4 Type the Minor component in the `Minor` field.
- 5 Type the Language component in the `Language` field.
- 6 Press Enter.

The message "Help text exists, Press enter to confirm purge" is displayed.

- 7 Press Enter again to confirm the purge.



Note: To cancel the purge, enter a blank or another code in the `Function` field.

Clear Edit Buffer Function

This function on the Help Text main menu clears the help text from the edit buffer. In addition, all values except the language code and the profile name are cleared from the Help Text main menu.



Note: This function only clears the edit buffer; it does not delete the saved help text.

> To clear the edit buffer

- 1 Type "C" in the `Function` field.
- 2 Press Enter.

If the contents of the editor were saved, the message "Edit buffer successfully cleared" is displayed.



Note: If the contents of the editor were not saved, the message "Current Help Text NOT Saved. Press Enter to Confirm CLEAR" is displayed. You can then use the Save Help Text function to save the help member or press Enter to clear the buffer without saving the help member.

Print Saved Help Text Function

This function on the Help Text main menu prints a hardcopy (paper copy) of the help text currently in the edit buffer. To use the Print Saved Help Text function, the following conditions apply:

Platform	Condition
Mainframe	Your machine must be capable of printing from Natural. For more information, see the Natural documentation.
Linux	Device LPT1 (in your NATPARM module) must be associated with a hardcopy printer. Contact your Systems personnel.

> To print a hardcopy of the help text

- 1 Type "H" in the `Function` field.
- 2 Type the Type component in the `Type` field.

- 3 Type the Major component in the `Major` field.
- 4 Type the Minor component in the `Minor` field.
- 5 Type the Language component in the `Language` field.
- 6 Press Enter.

The headers, date, and time are printed at the top of each page. The document name (a unique identifier of the help text in the order Type/Major/Minor/Language) and page number are printed at the bottom of each page. Natural Construct fits as many help text pages on each hardcopy page as there is room.



Note: Batch hardcopy of help text is also available. For information, see [*CSHHCOPY Hardcopy Utility*](#).

Maintain Default Profiles Function

This function on the Help Text main menu maintains the help profiles used for help text. These profiles determine the size and placement of the help windows that use them.

➤ To view, create, or modify profiles

- 1 Type "M" in the `Function` field.
- 2 Type the name of the profile in the `Profile` field.
- 3 Press Enter.

The Maintain Default Profiles panel is displayed, showing the profile specified in the `Profile` field. For example:

```

CSHPFM                      N a t u r a l   C o n s t r u c t          CSHPFM0
Aug 17                      Maintain Default Profiles                  1 of 1

Action ..... A,B,C,D,M,N,P,R
Profile ..... SYSTEM__
Description ..... DEFAULT USER HELP PROFILE._____
Lines per page ..... 15_
Message Library ..... CSTLDA__
Window Settings
Top left ..... Line .....
                  Column .....
                  %W setting ...
Size ..... Width ..... 80_
                  Height .....
                  Frame ..... X
Dynamic Attributes
Hotlink Begin ..... <<__
Hotlink End ..... >>__
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      help  retrn quit  test                                     main

```

You can use this panel to perform the following tasks:

Task	Procedure
Add a help profile.	Type "A" in Action and specify the values for the new profile.
Display the profile names in alphanumeric order.	Type "B" in Action as follows: <ul style="list-style-type: none"> ■ To view all profiles, type "B" in Action, blank out the value in Profile, and press Enter. The display begins with the first profile in the file. ■ To view a particular profile, type its name in Profile before performing the browse action.
Clear the settings for the current profile from the panel.	Type "C" in Action.
Display the settings for the profile specified in Profile.	Type "D" in Action.
Modify the settings for the profile specified in Profile.	Type "M" in Action and modify the values for the profile. <p>Note: Changing the settings for a help profile does not affect help members previously saved using the profile. To modify the profile for previously saved members, you must select each member for editing and use the HPROF command.</p>
Display the settings for the next profile in the file.	Type "N" in Action.

Task	Procedure
Purge (delete) the profile specified in <code>Profile</code> .	Type "P" in <code>Action</code> . Note: If the profile has been saved with a help member, the profile remains as the default profile for the help member. To modify the profile, you must select the member for editing and use the <code>HPROF</code> command.
Recall the settings for the last profile purged from the file.	Type "R" in <code>Action</code> . Note: This action only works when performed immediately following the Purge action. After the profile is recalled, you can re-add it using the Add action.
Change the name of the current profile.	Type over the name displayed in <code>Profile</code> with a new name.
Change the description for the current profile.	Type over the information displayed in <code>Description</code> with a new description.
Change the number of lines available for help text.	Type over the number displayed in <code>Lines per page</code> . The default number of lines on each page of help text is 15. In addition to the lines that make up the body of the help member, each help window contains up to two header lines, an input line (that displays the <code>Page</code> fields), and two PF-key lines.
Use a different library to store message numbers and text for the current help member.	Type over the name displayed in <code>Message library</code> . Natural Construct uses this name to locate the library in which message numbers and their associated text are stored. This field is required if you are using message numbers in the <code>Header 1</code> , <code>Header 2</code> , and <code>Hotlink</code> fields, as well as in the body of the help member. This field defaults to the <code>CSTLDA</code> library, which contains messages for Natural Construct help members. You can create a custom message library to store help members for your generated applications.
Modify the window settings.	Type over or specify the following window settings: ■ Window position The window position is determined by the top left corner of the help window or by one of the <code>%W</code> commands. Specify one of the following options: ■ Top left Type the number of lines from the top of the panel to the upper edge of the window in <code>Line</code> and type the number of columns from the left side of the panel to the left edge of the window in <code>Column</code> . The top left corner of the window is defined by these values. For example, if you type "5" in <code>Line</code> and "10" in <code>Column</code> , the top left corner of the window will begin 5 lines from the top and 10 columns from the left. ■ <code>%W</code> setting

Task	Procedure
	<p>Type one of the %W commands in %W setting. For example, to use the %WB command (to size the help window to the actual size of your screen), type "B".</p> <p>Note: If you specify a value for %W setting, you cannot specify a value for the Line and Column fields.</p> <ul style="list-style-type: none"> ■ Window size <p>The size of the window is determined by the width and height values:</p> <ul style="list-style-type: none"> ■ Type the width of the help window in Width. The recommended width is 80 characters. ■ Type the height of the help window in Height. <p>Note: If you leave this field blank, the height is determined automatically when the help text is displayed based on the number of lines specified in this field and the number of headings specified for the help member.</p> <ul style="list-style-type: none"> ■ Window frame <p>By default, Frame is marked and the help window will be displayed with a frame (border). To display the window without a frame, remove the "X" in Frame.</p>
Test the window settings.	Press PF4 (test). For information, see Test the Help Window .
Change the dynamic attribute characters.	<p>Type over or specify the following dynamic attribute values. The character(s) must be unique:</p> <ul style="list-style-type: none"> ■ Character(s) that indicates the beginning of a hotlink in Hotlink begin. The default characters are double left angle brackets (<<). ■ Character(s) that indicates the end of a hotlink in Hotlink end. The default characters are double right angle brackets (>>).

- 4 Press PF2 to return to the Help Text editor.



Notes:

1. You cannot change the profile for a help member once it is created. You can, however, override the profile settings for an individual help member on the Maintain Current Editor Profile panel. For information, see [Change the Current Help Profile](#).
2. For information about using the Help Text editor, see [Editing Help Text](#).
3. For information about using message numbers in your help text, see [Use Message Numbers](#).
4. For information about the %W commands, refer to *Window Processing* in the Natural Command Reference documentation.

5. For information about dynamic attributes, see [Text Area](#).
6. For information about hotlinks, see [Add Hotlinks](#).

Test the Help Window

You can test the help window to see how the headings will appear and to ensure the size and position of the help window are appropriate. The dimensions specified on the Maintain Default Profiles panel are used in the test.



Tip: You can test a help window before performing the Add or Modify action for a profile.

> To test the help window

- 1 Press PF4 (test).

A window is displayed. For example:

```
Specify headings for test window
HD 1
HD 2
```

- 2 Type the heading(s) for the test window (required to calculate the height of the window).

For example, if your help member has two headings, type a value in each of the heading fields. For example:

```
Specify headings for test window
HD 1          N a t u r a l   C o n s t r u c t
HD 2 - TEST WINDOW SETTINGS -
```

- 3 Press Enter.

The Test Window Settings window is displayed as users will see it. For example:

```

                                N a t u r a l   C o n s t r u c t
                                - TEST WINDOW SETTINGS -

Help text line                  1
Help text line                  2
Help text line                  3
Help text line                  4
Help text line                  5
Help text line                  6
Help text line                  7
Help text line                  8
Help text line                  9
Help text line                 10
Help text line                 11
Help text line                 12
Help text line                 13
Help text line                 14
Help text line                 15
PAGE:  1 of  1
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF1
      retrn                                bkwrđ frwrđ
Help for T/Major/Minor/Language

```

- 4 Press Enter again to return to the Maintain Default Profiles panel.

You can either keep the window settings as they are or modify them as desired and test the window again.

4

Editing Help Text

■ Access the Help Text Editor	48
■ Use the Help Text Editor	49
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■ Enable Passive Help	67

This section describes the various features of the Help Text editor, as well as how to use the editor to create or edit your help text.

Access the Help Text Editor

» To create or edit a help member

- 1 Type "E" in the `Function` field.
- 2 Type the `Type` component in the `Type` field.
- 3 Type the Major and Minor components in their respective fields.

To select from a list of Major and Minor components, use the [List Help Text Function](#).

- 4 Type the code for the language in which the help member will be set up in the `Language` field.

To select from a list of language codes, use the [List function](#).

- 5 Type the name of the default profile you are using in the `Profile` field.

To select from a list of default profiles, remove the value from the `Profile` field and press Enter. The Select Profile window is displayed. This window is described in [List Help Text Function](#).

- 6 Press Enter.

The Help Text editor is displayed.

The following example shows the Help Text editor when creating a new help member:

```
Header 1 .                                     Profile
Header 2 .                                     SYSTEM
Hotlink .
>
> + ABS X X-Y _ S 0      L 0
  ....+....1....+....2....+....3....+....4....+....5....+....6....+... AD
>
|
|
|
|
F/#/CSHMPP/1 does not exist; new member started
```

The following example shows the editor when editing a new help member:

```

Header 1 . *0224.1                                     Profile
Header 2 . *0222.1                                     NCSTHEL
Hotlink .
>
TOP .....1.....2.....3.....4.....5.....6.....+... AD
> You use this editor to create new help text members or modify
| existing help text members.
|
| Note: Before creating a new member, clear the editor by entering
| CLEAR on the command line.
|
| Tip: To create a help text member that is similar to an existing
| member, you can read the similar member into the editor and
| use it as a starting point for the new member. You can also
| use the .IH line command to insert text from another member.
|
| The Header 1, Header 2, and Hotlink fields are protected; to access
| these fields:
| 1 Move the cursor over one of these field names
| 2 Press Enter (the cursor moves to the Header 1 field)
> *0210.1
| <<f/+header1>>
| <<f/+header2>>
P/CS/CSHEDIT0/1 read successfully

```



Note: For more information, see [Use the Help Text Editor](#).

Use the Help Text Editor

This section describes how to use the Help Text editor. The following topics are covered:

- [Fields in the Help Text Editor](#)
- [Features of the Help Text Editor](#)
- [Order of Command Execution](#)
- [Edit Commands](#)
- [Line Commands](#)
- [Modify Current PF-Key Profile \(Mainframe\)](#)

■ Recover Edits (Mainframe)

Fields in the Help Text Editor

The following example shows the Help Text editor when creating a new help member:

```
Header 1 .                                     Profile
Header 2 .                                     SYSTEM
Hotlink .
>
> + ABS X X-Y _ S 0      L 0
  ...+...1...+...2...+...3...+...4...+...5...+...6...+... AD
>
|
|
|
|
F/##/CSHMPP/1 does not exist; new member started
```

The first three fields (Header 1, Header 2, and Hotlink) are protected. To enter a value, move the cursor to any of these fields and press Enter.

The fields in the Help Text editor are:

Field	Description
Header 1	<p>First heading for the help window. This heading is centered at the top of the window and intensified (bolded).</p> <p>You can either type the header name or use message numbers. Message numbers are linked to text strings. At runtime, the message number is replaced with its associated text.</p> <p>If you are using message numbers, ensure that the library containing your messages is specified on the Maintain Default Profiles panel. The system uses this value to locate and retrieve message text.</p> <p>Use the following format for message numbers:</p> <div>*NNNN.A</div> <p>where:</p> <ul style="list-style-type: none">■ * is a variable that is replaced by the library name defined in your help profile at runtime■ NNNN is the message number in the message file■ .A is the sequential position of text within the message number (each message number can contain up to 15 separate text positions)

Field	Description
Header 2	<p>Second heading for the help window. This heading is centered below the first heading and intensified.</p> <p>You can either type the second heading or use message numbers. The second header should be descriptive, as this value is used as the description for the help member in several selection windows.</p>
Hotlink	<p>Name that identifies this help member when it appears as a hotlink in a help window. You can either type a value in this field or use message numbers.</p> <p>Note: If you do not enter a value in this field, the hotlink name defaults to the Header 2 field value. If both fields are blank, the hotlink name defaults to the Header 1 field value.</p>
Profile	<p>Name of the help profile (for example, NCSTHELP) for the current help member. The profile name is displayed below the Profile field heading.</p> <p>You can modify the help profile for the current help member through the Maintain Current Profile panel. To access this panel, either enter HPROF on the command line or place your cursor on the profile name and press Enter.</p>
> (command line)	Command line; enter edit commands on this line. The command line is located below the Hotlink field and is identified by an angle bracket (>).
+ or - (direction indicators)	<p>Indicate a forward (top-to-bottom) or backward (bottom-to-top) direction. This field is displayed to the left of the ABS field. By default, a plus sign (+), meaning forward, is displayed in this field. To indicate a backward direction, enter a minus sign (-) in this field.</p> <p>The MOVE, COPY, and INSERT line commands use the direction indicator to determine whether to place lines before or after the line command.</p> <p>Some edit commands also use the direction indicator. For example, the ADD edit command with a + indicator adds lines after the line command and with a - indicator adds lines before the line command. The SCAN edit command uses this indicator to determine the scan direction.</p>
ABS (Absolute)	Used in conjunction with the SCAN and CHANGE edit commands. If this field is selected, Natural Construct scans for or changes all occurrences of the specified characters, including those embedded within words. If you enter a blank in this field, the system scans for or changes the specified characters only if they are a separate entity (delimited by blanks or special characters). By default, this field is selected.
X-Y	If this field is marked, SCAN and CHANGE edit commands are confined to the text within the X-Y delimiter range. Text outside the X-Y range is not affected.
S	Total number of text lines in the help member.
L	Number of the first line of text displayed in the editor (in relation to the entire help member). For example, if you scroll down so that the fifth line of text is displayed at the top of the text window, 5 is displayed in this field.

**Notes:**

1. For information about multilingual support, see [Provide Multilingual Support](#).

2. For information about message numbers, see [Use Message Numbers](#).
3. For information about the message library, see [Maintain Default Profiles Function](#).
4. For information about creating hotlinks for help members, see [Add Hotlinks](#).
5. For information about line commands, see [Line Commands](#).
6. For information about edit commands, see [Edit Commands](#).
7. For information about modifying the profile for a previously saved help member, see [Change the Current Help Profile](#).

Features of the Help Text Editor

This section describes the features of the Help Text editor. The following topics are covered:

- [Ruler](#)
- [Left Column](#)
- [Text Area](#)
- [AD Column](#)

Ruler

The ruler is located above the text area in the Help Text editor. The columns (character widths) are marked; each number on the ruler represents 10 columns. For example:

```
Header 1 .                                     Profile
Header 2 .                                     NCSTHELP
Hotlink  .
>
> + ABS X X-Y _ S 26   L 1
TOP ....+....1....+....2....+....3....+....4....+... V ...+....6....+... AD
> Help text is displayed when...                <
```

The arrow (V) pointing downward delimits the end of the line. Any text that extends beyond the delimiter is not displayed in the help window. The position of the arrow is determined by the value in the Width field for the specified help profile.

When text is displayed in the text area, one of the following values may be displayed to the left of the ruler:

Value	Description
All	Indicates that all of the help member is displayed.
Top	Indicates that the beginning (top) of the help member is displayed.
Bot	Indicates that the end (bottom) of the help member is displayed.



Notes:

1. For information about the current help profile, see [Change the Current Help Profile](#).
2. For information about scrolling through text, see [Scroll in the Text Area](#).

Left Column

The display-only column to the left of the text area displays values applied to individual lines. For example:

```
Header 1 .
Header 2 .
Hotlink .
>
> + ABS X X-Y _ S 26 L 1
TOP ....+....1....+....2....+....3....+....4....+... V ...+....6....+... AD
> Help text is displayed when...
X |
|
|
Y |
|
|
```

These values are used in conjunction with edit and line commands (described in [Edit Commands](#) and [Line Commands](#)).

The left column may contain any of the following values:

Value	Description
.X	Marks a line or the beginning of a block of text on which to perform an action. After you enter this command, the system inserts an X in the column next to the line.
.Y	Marks a line or the end of a block of text on which to perform an action. After you enter this command, the system inserts a Y in the column next to the line.
.L	Indicates that there is more text than can be displayed on a line. This occurs when you join two lines of text using the .J line command and the resulting line is too long to fit in the text area. You cannot modify the line until you use the .S command to split the line.

Text Area

The body of the Help Text editor contains the text area, which has borders on the left and right. For example:

```
Header 1 . *0224.1                                     Profile
Header 2 . *0222.1                                     NCSTHEL
Hotlink ..
>
> + ABS X X-Y _ S 71   L 1
TOP ....+....1....+....2....+....3....+....4....+....5....+....6....+... AD
> Use this editor to create new help text members or modify existing <
| help text members.
|
| Note: Before creating a new member, clear the editor by entering
| CLEAR on the command line.
|
| Tip: To create a help text member that is similar to an existing
| member, you can read the similar member into the editor and
| use it as a starting point for the new member. You can also
| use the .IH line command to insert text from another member.
|
| The Header 1, Header 2, and Hotlink fields are protected; to access
| these fields:
| 1 Move the cursor over one of these field names
| 2 Press Enter (the cursor moves to the Header 1 field)
> *0210.1                                             <
| <<f/+/header1>>
| <<f/+/header2>>
P/CS/CSHEDIT0/1 read successfully
```

Scroll in the Text Area

If the help member cannot be displayed in its entirety, you can scroll through the text area using any of the following methods:

Method	Action
Scroll forward or backward <i>nnnn</i> lines.	Enter "+ <i>nnnn</i> " or "- <i>nnnn</i> " on the command line.
Scroll forward or backward half a panel.	Enter "+H" or "-H" on the command line.
Scroll forward or backward one panel.	Enter "+P" or "-P" on the command line.
Scroll forward one panel (when the text has not changed).	Press Enter.
Scroll forward to the end of the help member.	Enter "BOT", "B", or "++" on the command line.
Make the line on which the .N line command is entered scroll to the top of the current panel.	Enter "POINT" on the command line.
Scroll backward to the top of the panel.	Enter "TOP", "T", or "-" on the command line.
Scroll to the line marked X or Y.	Enter "X" or "Y" on the command line.
Scroll to line 10(<i>n</i>).	Enter " <i>n</i> " on the command line.

Features of the Text Area

The text area has the following features:

Feature	Description
Left/right borders	Left/right perimeter of the text area. Borders are columns one character wide to the left and right of the area in which you can type text. When you use the Tab key to move the cursor in the text area, the cursor moves to the first character position in which you can type text. Press the Tab key again and the cursor moves to the Attribute column. Press it again and it moves to the first position on the next line in which you can type text.
Page markers	<p>Arrows (> and <) displayed within the borders indicate the first line of each new page. The number of lines on a page of help text is determined by the help profile.</p> <p>To force a new page, type "P" in the Attribute column.</p> <p>Note: If you force a page break, the page markers do not immediately reflect the new page break position.</p>
Text intensifiers	<p>Dynamic attribute characters that identify text for bolding. When a user displays help, text marked with intensifiers appears as bolded text. To intensify a block of text on a single line, place a left angle bracket (<) at the beginning of the text block and a right angle bracket (>) at the end of the block. The intensifier characters cannot be seen when the help text is displayed; they are replaced with blank spaces. For example, if you enter the following text in the editor:</p> <pre>You may<intensify any phrase>you want</pre> <p>The text "intensify any phrase" is displayed in bold.</p> <p>To use a default intensify character within the text in your help window, do one of the following:</p> <ul style="list-style-type: none"> ■ Change the default intensify character in your current help profile. ■ Type the default intensify character in the AD column on the line where you want to use the intensify character as text. This returns both characters to their regular keyboard symbol for a single line.
Hotlink identifiers	Dynamic attribute characters that identify hotlinks in your help member and indicate that a hotlink is available in a help window.



Notes:

1. For information about changing the help profile, see [Change the Current Help Profile](#).
2. For information about using hotlinks, see [Add Hotlinks](#).

AD Column

The column to the right of the text area is the attribute (AD) column. You can type attribute codes in this column that apply to the line they mark. You can use the attribute codes together, in any order, and type them in upper or lower case.

The following table lists the attribute codes:

Code	Description
I	<p>Character that intensifies a line of text. For example:</p> <div>Intensify this line. I</div> <p>You can use this character in conjunction with dynamic attribute characters. In this case, the "I" reverses the effect of the dynamic attribute intensification characters; the text between the single angle brackets (< >) is not intensified, while the text outside the brackets is intensified.</p> <p>You can also use the "I" to reverse the intensification of a hotlink displayed in the help window so that the hotlink is not bolded and all remaining text is bolded.</p>
P	<p>Character that forces a page break at the line it marks. That line begins a new page when the help text is displayed.</p>
Text intensification characters (< >)	<p>Characters that allow you to use the intensification characters as regular text on the adjacent line. To use the intensification characters as regular text, type either of these characters in the AD column.</p>

Order of Command Execution

The Help Text editor executes commands in the following order:

1. Modifications to text.
2. Line commands.

Line commands are entered in the text area of the editor and are preceded by a period (.). For information, see [Line Commands](#).

3. Edit commands.

Edit commands are entered on the command line. For information, see [Edit Commands](#).

Edit Commands

Edit commands are entered on the command line in the Help Text editor. These commands allow you to perform a variety of functions while remaining in the editor. For some edit commands, you must specify the Type, Major, Minor, and Language components. This combination of components uniquely identifies a help member.

The following table describes the edit commands. The Shortcut column indicates the minimum characters required to execute the command (not all commands have a shortcut). Any part of a command within brace brackets ({ }) is optional.

Command	Shortcut	Description
ADD	A	Adds nine blank lines to the end of the help member. After you finish typing text in the text area and pressing Enter, any unused lines are removed.
CHANGE	CH	<p>Scans for text in the edit buffer and replaces it. The syntax is:</p> <pre>CHANGE 'scanvalue'replacevalue'</pre> <p>Any special character may be used as a delimiter, provided the same character is not used within the command and it is not an X-Y delimiter.</p> <p>Note: The CHANGE command performs changes to the entire edit buffer.</p>
CLEAR	C	Clears the contents of the edit buffer. Any unsaved modifications are lost.
DX		Deletes the line marked X.
DY		Deletes the line marked Y.
DX-Y		Deletes the line marked X, the line marked Y, and all lines between the X-Y delimiters.
END	E	Ends the current edit session and displays the Help Text main menu.
EX		Deletes all lines before the X delimiter.
EY		Deletes all lines after the Y delimiter.
EX-Y		Deletes all the lines before the X delimiter and after the Y delimiter.
HPROF	HP	Invokes the Maintain Current Editor Profile panel.
LET		<p>Restores lines to their previous state, should you inadvertently change them. You must issue this command before pressing Enter.</p> <p>Note: The LET command is similar to the .L line command, but it applies to the entire help member.</p>

Command	Shortcut	Description
LISTH {type{major{minor{language}}}}	LH	Displays the help text components for selection. After you select a help member, it is read into the editor. Caution: If a help member is currently displayed, it will be cleared and any unsaved changes will be lost.
POINT		Scrolls the selected line to the top of the editor. Select a line by entering .N at the beginning of the line in the editor.
PROFILE		For mainframe users, invokes a panel on which you can modify PF-key settings and autosave specifications for the duration of the edit session.
PURGEH {type{major{minor{language}}}}	PH	Purges the specified help member. After entering this command, you are prompted to confirm the purge. Do one of the following: ■ To confirm the purge, press Enter. ■ To cancel the purge, type any value on the command line and press Enter.
QUIT	Q	Ends the current edit session and displays the Help Text main menu. Modifications to the help member are not saved.
READH {type{major{minor{language}}}}		Reads the specified help member into the editor. If the Type, Major, Minor, and Language components are not specified, they default to the last values used.
REPLACEH {type{major{minor{language}}}}	RH	Replaces the specified help member with the contents of the editor. If the Type, Major, Minor, and Language components are not specified, they default to the last values used. Note: This command replaces the help member without displaying a confirmation window.
RESET	RES	Clears the X-Y delimiters.
SAVEH {type {major{minor {language}}}}		Saves the specified help member. If the Type, Major, Minor, and Language components are not specified, they default to the last values used. Help members must be saved with a valid profile name. ■ If the specified help member already exists and has a different profile name, confirm the save by pressing Enter. ■ If the profile name is blank or the specified profile does not exist, the Select Help Profile window is displayed.
SCAN	SC	Scans for data in the text area as follows: ■ SCAN 'scanvalue'

Command	Shortcut	Description
		<p>Scans for text within the delimiters (' ').</p> <p>Note: Delimiters must be used when the scan value begins with a non-alphanumeric character.</p> <p>■ SCAN scan value</p> <p>Scans for the entire text value after the keyword SCAN, including spaces.</p> <p>The direction indicator affects the scan as follows:</p> <ul style="list-style-type: none"> ■ If the direction indicator is forward (+), the scan begins on the first line displayed at the top of the panel and continues to the end of text. ■ If the direction indicator is backward (-), the scan begins on the last line on the panel and continues to the beginning of text. <p>You can use the X-Y delimiters to limit the range of the scan and select a range of text. To use X-Y delimiters, mark the X-Y field at the top of the Help Text editor.</p>
SHIFT	SH	<p>Shifts the text between the X-Y delimiters as follows:</p> <p>■ SHIFT +nn</p> <p>Shifts the text to the right nn spaces.</p> <p>■ SHIFT -nn</p> <p>Shifts the text to the left nn spaces.</p> <p>The default value is +3.</p>
TEST		<p>Displays the help member as it will appear in a help window. The TEST command is similar to the Test function on the Help Text main menu.</p>



Notes:

1. For information about changing the current help profile, see [Change the Current Help Profile](#)
2. For information about the help text components, see [List Help Text Function](#).
3. For information about modifying the profile, see [Modify Current PF-Key Profile \(Mainframe\)](#).
4. For information about using X-Y delimiters, see [Fields in the Help Text Editor](#).
5. For information about the Test function, see [Test Help Text Function](#).
6. For information about modifying the profile for a previously saved help member, see [Change the Current Help Profile](#).

Line Commands

Line commands are entered in the text area of the Help Text editor and are used to modify text that is currently in the edit buffer. These commands allow you to copy, move, and delete the lines of text. Line commands must:

- Be typed in the text area
- Begin with a period (.)
- Start in the first column of a line (use the Tab key to place the cursor in the first column of a line)

> To execute a line command

- 1 Press Enter.



Note: Except for .L, you must press Enter before executing a line command. Pressing Enter updates text changes to the edit buffer.

- 2 Type the line command.

- 3 Press Enter.

- If the direction indicator is forward (+), copied, inserted, or moved text is placed below the line on which the command was entered.
- If the direction indicator is backward (-), copied, inserted, or moved text is placed above the line on which the command was entered.

The following table describes the line commands:


Command	Description
.C(<i>nn</i>)	Copies the same line <i>nn</i> times. The default is 1 time.
.CX(<i>nn</i>)	Copies the line marked X <i>nn</i> times. The default is 1 time.
.CY(<i>nn</i>)	Copies the line marked Y <i>nn</i> times. The default is 1 time.
.CX-Y(<i>nn</i>)	Copies the block marked X-Y <i>nn</i> times. The default is 1 time.
.D(<i>nn</i>)	Deletes <i>nn</i> lines. The default is 1 line.
.I(<i>nn</i>) or >	Inserts <i>nn</i> lines. The default is 9 lines.
.IH(<i>type, major, minor, language</i>)	Inserts the specified help member in the editor, beginning on the line following the one on which the command is entered. Use upper case for the component names.
.J	Joins the next line of text to the end of the current line.

Command	Description
.L	<p>Restores the line to its previous state. To restore a line, you must issue the command before pressing Enter.</p> <p>Note: The .L command is similar to the LET edit command, but it applies to one line only.</p>
.MX	<p>Moves the line marked X as follows:</p> <ul style="list-style-type: none"> ■ If the direction indicator is +, moves the line marked X to the line following the one on which .MX is entered. ■ If the direction indicator is -, moves the line marked X to the line above the one on which .MX is entered.
.MY	<p>Moves the line marked Y as follows:</p> <ul style="list-style-type: none"> ■ If the direction indicator is +, moves the line marked Y to the line following the one on which .MY is entered. ■ If the direction indicator is -, moves the line marked Y to the line above the one on which .MY is entered.
.MX-Y	<p>Moves the block of text between the X-Y markers as follows:</p> <ul style="list-style-type: none"> ■ If the direction indicator is +, moves the block to the line following the one on which .MX-Y is entered. ■ If the indicator is -, moves the block to the line above the one on which .MX-Y is entered.
.N	<p>Scrolls the current line to the top of the panel. This command is used with the POINT edit command. The line marked with .N will be scrolled to the top of the panel when the POINT edit command is issued.</p> <p>Tip: For a quicker alternative to this scrolling method, use the .P command.</p>
.P	Scrolls the current line to the top of the panel.
.S	<p>Splits the current line at the cursor position. To split the line:</p> <ol style="list-style-type: none"> 1. Type ".S" at the beginning of the line you want to split. 2. Move the cursor to the position on the line where the split is to occur. 3. Press Enter.
.W(nn)	Inserts <i>nn</i> blank lines in the editor. The default is 9 lines. Any unused lines are deleted.
.X	<p>Marks a single line or the beginning of a block of text. To delimit a text block:</p> <ol style="list-style-type: none"> 1. Type ".X" at the beginning of the first line you want to copy, insert, or move. 2. Type ".Y" at the beginning of the last line you want to copy, insert, or move. <p>You can mark two or more lines of text using the X-Y markers.</p>

Command	Description
	3. Type the line command. 4. Press Enter. To clear the X-Y delimiters: 1. Type "RESET" on the editor command line. 2. Press Enter.
.Y	Marks a single line or the end of a block of text. Note: For more information, see the .X line command.

Modify Current PF-Key Profile (Mainframe)

You can modify the PF-key profile for your current edit session. The changes do not affect your edit profile outside of Natural Construct.

 **Note:** The PF-key settings used by the Natural Construct editors are determined in the same manner as those used by other Natural editors. If you have a profile that corresponds to your user ID, Natural Construct automatically uses these defaults.

➤ To modify the PF-key profile for the current session

- 1 Type "PROFILE" on the command line in the Help Text editor.
- 2 Press Enter.

The Maintain Current PF-Key Profile panel is displayed. For example:

```
CS-PROF      Natural Construct      CS-PRFM0
Aug 22      Maintain Current PF-Key Profile      1 of 1

PF1 = - PF2 = T PF3 = B
PF4 = -H PF5 = +H PF6 = +P
PF7 = N PF8 = PF9 = Q
PF10= PF11= PF12=
PF13= PF14= PF15=
PF16= PF17= PF18=
PF19= PF20= PF21=
PF22= PF23= PF24=
PA1 = PA2 = SCAN PA3 =

Auto save numbers ..... In member ..... EDITWORK
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11-
help retn
Changes DO NOT affect your edit profile outside Construct
```

You can use this panel to perform the following tasks for the current edit session:

Task	Procedure
Change the value assigned to an existing PF-key.	Type the new value over the current value for the key.
Define a value for a new PF-key.	Type the value in the field corresponding to the new PF-key.
Specify the number of updates to allow before your work is automatically saved.	Type the number of updates in <code>Auto save numbers</code> . If this field is blank, Natural Construct does not automatically save work. Note: For information on recovering your work, see Recover Edits (Mainframe) .
Provide the name of the recovery member in which your work saved.	Type over the default name displayed in <code>In member</code> . If you lose your code or forget to save it, you can restore from the last automatic save. By default, EDITWORK is displayed in this field. Tip: Save your work using a unique recovery member name, such as your user ID, so that your work is not overwritten by another user using the same recovery member name in the same library.

- 3 Modify the profile settings.
- 4 Press PF2 to return to the Help Text editor.

Your changes apply for the current edit session only.

Recover Edits (Mainframe)

If you specify a number in the `Auto save numbers` field on the Maintain Current PF-Key Profile panel, the editor automatically saves work in the edit buffer after the specified number of updates. If you lose your code or forget to save it, you can restore from the last automatic save.



Note: If the `Auto save numbers` field is blank, no automatic saving occurs.

➤ To restore code from the last save

- 1 Invoke the Help Text editor.
- 2 Read your recovery member into the edit buffer (EDITWORK, by default).
- 3 Re-type the Header 1, Header 2, and Hotlink values in the appropriate fields.

These values are not saved in the recovery member.



Note: For information about these fields, see [Fields in the Help Text Editor](#).

- 4 Save the recovered code.

Change the Current Help Profile

You can override the default help profile settings for the current help member. Changes are saved with the current help member only and override any settings specified on the default help profile for the member.

➤ To change the help profile for the current help member

- 1 Type "HPROF" on the command line in the Help Text editor.
- 2 Press Enter.

The Maintain Current Editor Profile panel is displayed. For example:

```
CSHPROF          N a t u r a l   C o n s t r u c t          CSHPROF0
Aug 22           Maintain Current Editor Profile           1 of 1

Profile ..... NCSTHELP
New profile ..... *
Description ..... Default CST341 Help Text profile
Lines per page ..... _15
Message library ..... CSTLDA__
Window Settings
Top left ..... Line ..... _1
                  Column..... _3
                  %W setting ....
Size ..... Width ..... _80
                  Height ..... 
                  Frame ..... X

Dynamic Attributes
Hotlink begin ..... <<__
Hotlink end ..... >>__
Intensify ..... <
Default return ..... >

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
help  retrn
```

You can use this panel to perform the following tasks for the current help profile:

Task	Procedure
Change the name of the help profile used for the current help member.	Type the name of the profile in <code>New profile</code> . The name of the default help profile for the current help member is displayed in <code>Profile</code> (NCSTHELP in this example).
Change the number of lines available for help text.	Type over the number displayed in <code>Lines per page</code> . The default number of lines on each page of help text is 15. In addition to the lines that make up the body of the help member, each help window contains up to two header lines, an input line (that displays the <code>Page</code> fields), and two PF-key lines.
Use a different library to store message numbers and text for the current help member.	<p>Type over the name displayed in <code>Message library</code>. Natural Construct uses this name to locate the library in which message numbers and their associated text are stored. This field is required if you are using message numbers in the <code>Header 1</code>, <code>Header 2</code>, and <code>Hotlink</code> fields, as well as in the body of the help member.</p> <p>This field defaults to the CSTLDA library, which contains messages for Natural Construct help members. You can create a custom message library to store help members for your generated applications.</p>
Modify the window settings.	<p>Type over or specify the following window settings:</p> <ul style="list-style-type: none"> ■ Window position <p>The window position is determined by the top left corner of the help window or by one of the <code>%W</code> commands. Specify one of the following options:</p> <ul style="list-style-type: none"> ■ Top left <p>Type the number of lines from the top of the panel to the upper edge of the window in <code>Line</code> and type the number of columns from the left side of the panel to the left edge of the window in <code>Column</code>. The top left corner of the window is defined by these values. For example, if you type "5" in <code>Line</code> and "10" in <code>Column</code>, the top left corner of the window will begin 5 lines from the top and 10 columns from the left.</p> ■ %W setting <p>Type one of the <code>%W</code> commands in <code>%W</code> setting. For example, to use the <code>%WB</code> command (to size the help window to the actual size of your screen), type "B".</p> <p>Note: If you specify a value for <code>%W</code> setting, you cannot specify a value for the <code>Line</code> and <code>Column</code> fields.</p> ■ Window size <p>The size of the window is determined by the width and height values:</p> <ul style="list-style-type: none"> ■ Type the width of the help window in <code>Width</code>. The recommended width is 80 characters. ■ Type the height of the help window in <code>Height</code>.

Task	Procedure
	<p>Note: If you leave this field blank, the height is determined automatically when the help text is displayed based on the number of lines specified in this field and the number of headings specified for the help member.</p> <ul style="list-style-type: none"> ■ Window frame <p>By default, <code>Frame</code> is marked and the help window will be displayed with a frame (border). To display the window without a frame, remove the "X" in <code>Frame</code>.</p>
Change the dynamic attribute characters.	<p>Type over or specify the following dynamic attribute values. The character(s) must be unique:</p> <ul style="list-style-type: none"> ■ Character(s) that indicates the beginning of a hotlink in <code>Hotlink begin</code>. The default characters are double left angle brackets (<<). ■ Character(s) that indicates the end of a hotlink in <code>Hotlink end</code>. The default characters are double right angle brackets (>>). ■ Character that identifies the beginning of intensified text in <code>Intensify</code>. All text between this character and the character specified in the <code>Default return</code> field is intensified. You can use these attributes for one or more characters on a single line. ■ Character that identifies the end of intensified text in <code>Default return</code>. Text after this character uses the default settings. <p>Note: The <code>Intensify</code> and <code>Default return</code> fields default to the values specified for the global intensification characters on the Natural Construct Control record. To change the global values, see your Natural Construct administrator.</p>

- 3 Modify the profile settings.
- 4 Press PF2 to return to the Help Text editor.

Your changes apply to the help profile settings for the current help member.



Notes:

1. You cannot create or modify a default help profile on this panel. To add or modify a default profile, see [Maintain Default Profiles Function](#).
2. For information about the %W commands, refer to *Window Processing* in the Natural Command Reference documentation.
3. For information about dynamic attributes, see [Text Area](#).
4. For information about hotlinks, see [Add Hotlinks](#).

Enable Passive Help

The CD-HELPR module provides passive help for generated modules at the panel (map) level and at the field level. If CD-HELPR is enabled, a user can place the cursor on a panel or field, select help, and display a window containing help information for the panel or field. CD-HELPR acts as a link between a panel or field and its corresponding help member. When a user requests help on a panel or field, the panel or field name is passed to CD-HELPR, which determines which help member to display.



Note: If necessary, you can override CD-HELPR's internal logic and specify the help member directly (for information, see [Override the Internal Logic for CD-HELPR](#)).

To enable passive help, the Help parameter for a panel (map) or the HE parameter for a field must be defined with 'CD-HELPR',=. For example:

18:45:34	Define Map Settings for MAP	2013-10-21
Delimiters	Format	Context
-----	-----	-----
Cls Att CD Del	Page Size 44	Device Check _____
T D BLANK	Line Size 133	WRITE Statement _
T I ?	Column Shift ... 0 (0/1)	INPUT Statement X
A D _	Layout CSCMODM1	Help 'CD-HELPR',=_____
A I)	dynamic N (Y/N)	as field default N (Y/N)
A N ^	Zero Print N (Y/N)	
M D &	Case Default ... LC (UC/LC)	
M I :	Manual Skip N (Y/N)	Automatic Rule Rank 1
O D +	Decimal Char	Profile Name RDNSS
O I (Standard Keys .. Y (Y/N)	
	Justification .. L (L/R)	Filler Characters
	Print Mode _	-----
	Control Var _____	Optional, Partial _
		Required, Partial _
		Optional, Complete ... _
		Required, Complete ... _
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---		
Help	Exit	Let

➤ To enable passive help using CD-HELPR's internal logic

- 1 Type the following entry in the HE (Help) field for the panel or field definition:

```
'CD-HELPR',=
```

When the user requests help, the panel or field name is passed to CD-HELPR, which determines the help member to display.

2 Create a help member for each panel and field that is to have passive help.

For information, see [Create Help Text](#).

When typing the first three component names, adhere to the following naming guidelines so CD-HELPR can locate and display the correct help member:

- If the name passed to CD-HELPR contains a period (.), the name is assumed to be that of a database field. The Type component is "D", the Major component is the value preceding the period (file name), and the Minor component is the value following the period (field name). Ensure that database fields are fully qualified.
- If a help member cannot be found, CD-HELPR checks for a # or + character in the first position following the period. If neither character is found, the name is assumed to be a global or local variable. The Type component is "F", Major component is the first character (either # or +), and Minor component is the remaining characters following the period.
- If a help member still cannot be found, CD-HELPR assumes that the name is a database field and attempts to find a Predict extended description. The Type component is "D", Major component is the value preceding the period, and Minor component is the value following the period. If a Predict description exists, it is displayed. For information, see *Predict Field Description Help for Objects in Natural Construct Generation*.
- If the name begins with a # or + character, the name is assumed to be that of a global or local variable. The Type component is "F", Major component is the first character of the passed name (either # or +), and Minor component is the remaining characters.
- If the name is 8 characters or less, the name is assumed to be that of a map or program. The Type component is "P", the first two characters of the name are assumed to represent a system name and are the Major component, and the entire passed name is the Minor component.



Note: This method can only be used if program names are unique across your installation.

- If the name passed to CD-HELPR is none of the above, no help member is displayed.

The following table shows examples of which help member CD-HELPR will display based on the name of the panel or field:

Panel or Field Name	Type Component	Major Component	Minor Component
EMPLOYEES.SEX	D	EMPLOYEES	SEX
#ACTION	F	#	ACTION
+PERSONNEL-ID	F	+	PERSONNEL-ID
GLMAIN	P	GL	GLMAIN
DIRECT-COMMAND	Invalid		
MAINMAP	P	MA	MAINMAP
SYSCSTDE MAINMENU	Invalid		

Override the Internal Logic for CD-HELPR

In some cases, you may want to override CD-HELPR's internal logic and specify which help member is displayed for a particular panel or field. For example, suppose you have two programs containing a Customer Number field with identical properties. Because the fields are identical, you want the same help member to be displayed for both fields. However, the field name in one program is #CUSTOMER-NUM and in the other is #CUSTOMER-NUMBER. The system will attempt to locate a unique help member for each field. To solve this problem, you can override CD-HELPR's internal logic and specify which help member is displayed when help is requested. For example:

- When help is requested for the #CUSTOMER-NUM field, CD-HELPR displays the F/#/CUSTOMER-NUM help member.
- When help is requested for the #CUSTOMER-NUMBER field, override CD-HELPR and display the F/#/CUSTOMER-NUM help member.

➤ To override CD-HELPR's internal logic

- 1 Type the following entry in the HE (Help) field on the panel or field definition:

```
'CD-HELPR',#HPARM
```

where #HPARM is a program variable.

- 2 Set up #HPARM as a non-display protected field on the map with a format of A65.



Tip: To set up #HPARM so that it occupies only one field, use AL=1.

- 3 Initialize the #HPARM variable so it is formatted as follows:

```
F#...(blanks to 32nd position).CUSTOMER-NUM...(blanks to 65th position)
```

You must add blanks when initializing #HPARM, otherwise CD-HELPR cannot locate the help member. When a user requests help for the #CUSTOMER-NUMBER field, the #HPARM variable is passed to CD-HELPR (F/#/CUSTOMER-NUM).

If necessary, you can set up additional variables to override CD-HELPR. To perform an additional override, complete steps 1 to 3, replacing #HPARM with a unique variable name.

5

Help Text Utilities

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This section describes the help text utilities supplied with Natural Construct for all supported platforms.

Introduction

To invoke a help text utility, enter its name at the Next prompt (Direct Command box for Linux). The specification window for that utility is displayed. For example, the following window is displayed when you enter "CSHUNLD":

```
13-10-21          *** N A T U R A L   C O N S T R U C T ***          10:53:50
                   - BATCH HELP TEXT UNLOAD UTILITY -

Source Type.....: ____ ('.'=Terminate)
          Major....: _____
          Minor....: _____
          Language.: ____
Target Type.....: _
          Major....: _____
```

 **Note:** When a description refers to "your print file", it refers to either print file 1 (mainframe) or device LPT1 (Linux).

CSHHCOPY Hardcopy Utility

The CSHHCOPY utility prints a hardcopy of the help text members, regardless of which teleprocessing monitor you are using. All output is routed to your print file.

The following example shows the CSHHCOPY utility window:

```
***** N A T U R A L   C O N S T R U C T *****
                   - BATCH HELP HARDCOPY UTILITY -

TYPE:    MAJOR:                                MINOR:

LANGUAGE:
```

CSHHCOPY accepts up to 25 help member input combinations in the form:

```
Type, Major, Minor, Language
```

As you enter each combination, it is automatically displayed in the window.

The following table shows examples of input values:

Values Entered	Results
Type: *	Routes all help members to your print file.
Type: P	Routes all help members with a Type component of "P".
Type: P* Major: GL-SYSTEM	Routes all help members with a Type component beginning with "P" and a Major component of "GL-SYSTEM".
Type: P Major: GL*	Routes all help members with a Type component of "P" and a Major component beginning with "GL".
Type: P Major: GL* Minor: ONLINE*	Routes all help members with a Type component of "P", a Major component beginning with "GL", and a Minor component beginning with "ONLINE".
Type: P Major: GL* Minor: ONLINE* Language: 1	Routes all help members with a Type component of "P", a Major component beginning with "GL", a Minor component beginning with "ONLINE", and a Language component of "1". Tip: You can also enter "P,GL*,ONLINE*,1" on the command line.
Type: . (period)	Terminates the CSHHCOPY utility.

CSHUNLD Unload Utility

The CSHUNLD utility unloads selected help members from the help text file to work file 1. A report of the unloaded help members is routed to your print file.

The following example shows the CSHUNLD utility window:

```

13-10-21          *** N A T U R A L   C O N S T R U C T ***          10:56:33
                  - BATCH HELP TEXT UNLOAD UTILITY -

Source Type.....: ____ ('.'=Terminate)
      Major.....: _____
      Minor.....: _____
      Language.: ____
Target Type.....: _
      Major.....: _____

```

CSHUNLD unloads an unlimited number of help text members in up to 25 input combinations in the form:

```
Source Type, Major, Minor, Language, Target Type, Major
```

As you enter each input combination, it is automatically displayed in the window.

The following table shows examples of input values:

Values Entered	Results
Source Type: *	Unloads all help members from the help text file to work file 1 (using the same names).
Source Type: P Major: GL-SYSTEM	Unloads all help members with a Type component of "P" and a Major component of "GL-SYSTEM" (using the same names).
Source Type: P Major: GL-SYSTEM Minor: ONLINE*	Unloads all help members with a Type component of "P", a Major component of "GL-SYSTEM", and a Minor component beginning with "ONLINE" (using the same names).
Source Type: P Major: GL-SYSTEM Minor: ONLINE* Language: 1	Unloads all help members with a Type component of "P", a Major component of "GL-SYSTEM", a Minor component beginning with "ONLINE", and a Language component of "1" (using the same names).
Source Type: P Major: GL-SYSTEM Target Type: F Major: GL	Selects all help members with a Type component of "P" and a Major component of "GL-SYSTEM", renames the members as Type component "F" and Major component "GL", and unloads the renamed members. Tip: You can also enter "P,GL-SYSTEM, , ,F,GL" on the command line.
Source Type: . (period)	Terminates the CSHUNLD utility.

CSHLOAD Load Utility

The CSHLOAD utility loads selected help members from work file 1 to the help text file. A report of the loaded members is written to your print file.

CSHLOAD accepts up to 25 help member input combinations and replace options in the form:

Type, Major, Minor, Language, Replace (Y/N)

The following table shows examples of input values:

Values Entered	Results
* , * , * , * , N	<p>Loads all help members from work file 1 to the help text file. If a member with the same name exists in the help text file, it is not replaced.</p> <p>This example indicates the following specifications:</p> <ul style="list-style-type: none"> ■ Type: * ■ Major: * ■ Minor: * ■ Language: * ■ Replace: N <p>Note: For the Major, Minor, Language, and Replace options above, blank or null values also indicate the specifications (for example, " , , , , ").</p>
P, GL* , * , * , Y	<p>Loads all help members with a Type component of P and Major component beginning with GL. If a member with the same name exists in the help text file, it is replaced with the one in work file 1.</p> <p>This example indicates the following specifications:</p> <ul style="list-style-type: none"> ■ Type: P ■ Major: GL* ■ Minor: * ■ Language: * ■ Replace: Y <p>Note: For the Minor and Language options above, blank or null values also indicate the specifications (for example, "P, GL* , , , Y").</p>
P, GL* , GLA* , * , Y	<p>Loads all help members with a Type component of P, a Major component beginning with GL, and a Minor component beginning with GLA. If a member with the same name exists in the help text file, it is replaced with the one in work file 1.</p> <p>This example indicates the following specifications:</p> <ul style="list-style-type: none"> ■ Type: P ■ Major: GL* ■ Minor: GLA* ■ Language: * ■ Replace: Y <p>Note: For the Language option above, blank or null values also indicate the specifications (for example, "P, GL* , GLA* , , Y").</p>

Values Entered	Results
P,GL*,GLA*,1,N	<p>Loads all help members with a Type component of P, Major component beginning with GL, Minor component beginning with GLA, and Language component of 1. If a member with the same name exists in the help text file, it is not replaced.</p> <p>This example indicates the following specifications:</p> <ul style="list-style-type: none"> ■ Type: P ■ Major: GL* ■ Minor: GLA* ■ Language: 1 ■ Replace: N <p>Note: For the Replace option above, blank or null values also indicate the specifications (for example, "P,GL*,GLA*,1, ").</p>
P,GL-SYSTEM,*,*,N	<p>Loads all help members with a Type component of P and Major component of GL-SYSTEM. If a member with the same name exists in the help text file, it is not replaced.</p> <p>This example indicates the following specifications:</p> <ul style="list-style-type: none"> ■ Type: P ■ Major: GL-SYSTEM ■ Minor: * ■ Language: * ■ Replace: N <p>Note: For the Minor, Language, and Replace options above, blank or null values also indicate the specifications (for example, "*,GL-SYSTEM, , , ").</p>
.(period)	<p>Terminates the CSHLOAD utility.</p> <p>Note: When running in batch mode, the CSHLOAD utility will terminate with RC=0 if an error occurs due to problems with the internal layout structure of work file 1. To terminate the batch Natural session with RC=99, add "Y" to the end of the last help member input combination (for example: "P,GL-SYSTEM,*,*,N,Y").</p>

CSHUSAVE Utility

The CSHUSAVE utility loads help text members from a user-defined work file to the help text file. You can use this utility to transfer help text from a pre-existing source, such as a PC text file, to the help text file.

The following example shows the CSHUSAVE utility window:

```

CSHUSAVE                      ***** Natural Construct *****                      CSHUSAV0
Oct 18                        Multiple Help Text Import                      1 of 1

Replace existing entry.....: _ (Y/N)

Default Parameters
      Profile.....: _____ *
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF1
      help  retrn

```

After pressing Enter in this window, a help window is displayed to select the location of the work file. For a description of this file, see [Work File 1 Layout](#).

The following table shows examples of input values:

Values Entered	Results
(none)	Loads all help text members in the selected work file to the help text file. Help members with the same names in the help text file are not replaced. Any help member in work file 1 that does not specify a help profile name, or specifies an invalid help profile name, is saved with the name SYSTEM (the default profile when none is specified).
Replace existing entry: Y	Loads all help text members in the selected work file to the help text file. Help members with the same names in the help text file are replaced with those in the work file.
Profile: MYPROF	Loads all help text members in the selected work file to the help text file. Any help member in work file 1 that does not specify a help profile name, or specifies an invalid help profile name, is saved with the name MYPROF.
. (period)	Terminates the CSHUSAVE utility.

Work File 1 Layout

There is no limit to the number of help text members contained in work file 1, but the length of each help text line should not exceed 68 characters. Any text beyond 68 characters will be truncated.

Each help member consists of keywords and directives, followed by the lines of help text. The following conventions apply to all keywords and directives:

- Must begin with a slash (/) character
- Must begin in the first column (column 1)
- Can be entered in upper case, lower case, or mixed case

Each help member in work file 1 must begin with `/key=` and contain the name of the help member in the following format:

```
/key=type component/major component/minor component/language code
```



Note: If you do not specify a language code, the default language is assumed.

In addition, the following optional keywords are also supported:

Keyword	Directive
/profile=	Name of the help profile to use when saving this help member. If you do not specify this keyword, the help member is saved using the help profile name specified for the profile parameter. Note: If you do not specify the profile parameter, the default help profile name is used (SYSTEM).
/header1=	First heading displayed when this help member is invoked.
/header2=	Second heading displayed when this help member is invoked.
/linktext=	Text displayed when this help member is referenced via a hotlink from another help member.
/intensify=	Character that identifies the beginning of intensified text. This parameter defaults to the value specified on the Natural Construct Control record.
/default=	Character that identifies the end of intensified text. This parameter defaults to the value specified on the Natural Construct Control record.
/pagebreak	Displays the line of text that follows this keyword on a new page.

Example of Work File 1 Layout

```
/key=P/GENERAL-LEDGER/GLMJ/1
/header1=General Ledger System
/header2=Journal Entry Help
/linktext=Journal Entry
This is a sample help member for the journal entry screen.
More sample help
/pagebreak
```

```

This line of help is forced onto a new page
/key=P/GENERAL-LEDGER/GLMA/1
/header1=General Ledger System
/header2=Account Maintenance Help
/linktext=Account Maintenance
/profile=SPECIAL
/intensify=<
/default=>
This is a sample help member for the account maintenance screen.
More sample help
etc.

```

Example of Batch Input

The following JCL invokes the CSHUSAVE utility in batch:

```

SYSIN DD *
LOGON SYSCST
CSHUSAVE
Y,MYPROF
/*

```

This example indicates that existing help members are replaced by any help members with the same name in work file 1 and that MYPROF is used as the default help profile name.

CSHUSAVN Utility

The CSHUSAVN utility saves the current contents of the source buffer to the Natural Construct help text file programmatically — without creating a work file. This utility uses the CSAUSAVN and CSASTD parameter data areas (PDAs).

The following example shows a program (CTESAVN) using the CSHUSAVN utility to save help text to the Natural Construct help text file:

```

*****
* Program   : CTESAVN
* System    : Natural-Construct
* Title     : Call help save subprogram
* Function  : This is an example of how CSHUSAVN can be called.
*****
DEFINE DATA
    LOCAL USING CSAUSAVN
    LOCAL USING CSASTD
END-DEFINE
DEFINE PRINTER(HELP=1) OUTPUT 'SOURCE'
FORMAT(HELP) LS=68 PS=0
PRINT(HELP) NOTITLE
    'This is sample help text that is written to the source area'
    'It normally comes from a database file or other external'

```

```
'source, or generated based on a high-level specification'
ASSIGN CSAUSAVN.#TYPE-COMPONENT = 'P' /* Program
ASSIGN CSAUSAVN.#MAJOR-COMPONENT = 'TEST-MAJOR'
ASSIGN CSAUSAVN.#MINOR-COMPONENT = 'TEST-MINOR'
ASSIGN CSAUSAVN.#LANGUAGE-CODE = *LANGUAGE
ASSIGN CSAUSAVN.#PROFILE-NAME = 'SYSTEM'
ASSIGN CSAUSAVN.#HEADER1 = 'Sample header 1'
ASSIGN CSAUSAVN.#HEADER2 = 'Sample header 2'
ASSIGN CSAUSAVN.#LINK-TEXT = 'Sample Link'
ASSIGN CSAUSAVN.#INTENSIFY = '<'
ASSIGN CSAUSAVN.#DEFAULT = '>'
ASSIGN CSAUSAVN.#REPLACE-OPTION = TRUE
CALLNAT 'CSHUSAVN' CSAUSAVN CSASTD
IF CSASTD.RETURN-CODE = ' ' THEN
  WRITE 'Help saved successfully'
END-IF
END
```

Move Data Across Platforms

This section describes how to transfer data across dissimilar platforms (between mainframe and Linux, for example). The following load and unload utilities read and write data from and to work file 1:

Utility	Described in
CSFLOAD	<i>Multiple Code Frame Import Utility in Natural Construct Administration and Modeling</i>
CSFUNLD	<i>Multiple Code Frame Export Utility in Natural Construct Administration and Modeling</i>
CSHLOAD	CSHLOAD Help Text Load Utility
CSHUNLD	CSHUNLD Help Text Unload Utility
CSHUSAVE	CSHUSAVE Utility
CSHUSAVN	CSHUSAVN Utility
CSMLOAD	<i>Natural Construct Generation</i>
CSMUNLD	

A work file written on one platform (such as mainframe) can be read by another platform (such as Linux) if the following conditions are met:

- The work file is an ASCII file.

➤ **To save the work file as an ASCII file on a mainframe platform**

- 1 Define work file 1 as a PC file.
- 2 Activate a PC connection.

3 Run the utility (translates from EBCDIC to ASCII).

➤ **To save the work file as an ASCII file on a Linux platform**

- Set the work file specification in your NATPARM to any extension other than SAG.
- When you transfer the work file between platforms, the appropriate translation must be done. For example, the file transfer method used to move a file from a PC to a Linux machine must correctly translate the PC's CR/LFs to CRs.

A

Appendix A: Glossary of Terms

The following terms are used throughout this documentation:

Term	Definition
Active help	Help that lists valid values for a field and allows the user to select one. When a user requests help on a field set up with active help, a list of available values is displayed for selection.
Component	<p>Portion of a help member name that uniquely identifies the member. Each help member is identified by a combination of Type, Major, Minor, and Language components. The first three component names link the help member to the panel or field from which it is invoked.</p> <p>For example, to create help text for the NCOSEL program (panel/map), assign "P" as the Type component, "NC" as the Major component, and "NCOSEL" as the Minor component. When a user presses PF1 (help) on the NCOSEL panel, the system displays the help member with the component names P/NC/NCOSEL.</p> <p>The Language component is specified at runtime. The help member with the Language component corresponding to that language is displayed when the user requests help. If there is no help member for the current language, the English version is displayed.</p>
Context-sensitive help	See <i>Passive help</i> .
Cursor-sensitive or cursor-sensitivity	To select using a cursor. For example, moving your cursor to a help profile name on the Select Help Profile panel and pressing Enter selects that help profile for further action.
Data area	Natural module in which data is stored. For example, a parameter data area stores parameters that are passed between subprograms; a global data area stores data that is used by all programs within an application.
Dynamic attribute characters	<p>Special characters used as delimiters to identify text for a special purpose. The two types of dynamic attribute characters are:</p> <ul style="list-style-type: none"> ■ Characters used to bold (intensify) text

Term	Definition
	<p>The default characters are single angle brackets (< >).</p> <ul style="list-style-type: none"> ■ Characters used to identify a hotlink <p>The default characters are double angle brackets (<< >>).</p>
Edit buffer	Information saved in memory. For example, when you edit a help member but do not save it, the contents of the help member will stay in the edit buffer until it is cleared.
Enter	Action of typing a value in a field and pressing the Enter key. To indicate that the user should type a value (and not press Enter immediately), the word "type" is used.
Enter key	Key that signals the computer to initiate an action (for example, you can press this key to add, display, or update information). This key is also referred to as the Return key.
Execute	Start a program, menu, panel, editor, utility, etc. Also referred to as display, invoke, or run.
Field	Area in a window or on a panel that either shows information (display field) or requires the user to enter information (input field).
Function	A process, such as the Clear Edit Buffer function on the Help Text main menu.
Help profile (current)	<p>Determines the following display attributes for a help window:</p> <ul style="list-style-type: none"> ■ number of lines per page ■ window settings ■ dynamic attribute characters ■ hotlink identifier characters <p>The current help profile is defined on the Maintain Current Editor Profile panel (accessed from the Help Text editor). The settings on this panel override those set up for the default help profile.</p>
Help profile (default)	<p>Determines the default size and position of a help window.</p> <p>The default help profile is defined on the Maintain Default Profiles panel (accessed from the Help Text main menu). You can override the default settings for an individual help window on the Maintain Current Editor Profile panel (see above).</p>
Help member	Block of help text identified by three components: Type, Major, and Minor. You can also set up translated versions of your help members for each supported language (identified by the Language component). For more information, see <i>Component</i> .
Hotlink	Link to a help member. Hotlinks appear as bolded text within the hotlink begin and end indicators (<< >>, by default) in a help window. Users can jump between help members by moving the cursor over the hotlink and pressing Enter.
Invoke	Start a program, menu, panel, editor, utility, etc. Also referred to as display, execute, or run.
Major component	See <i>Component</i> .

Term	Definition
Message number	<p>Number that identifies a string of text, such as a panel name, field name, application message, PF-key name, etc. Also referred to as a SYSERR reference number.</p> <p>Message numbers help synchronize screen text and help text, as well as reduce maintenance efforts. For example, the field name "Action" can appear on many of your application panels and in many help members. Instead of typing "Action" in each screen definition and help member where it is used, you can type a message number corresponding to the text "Action". If you change the field name later, you need only change the text for that message number to change all instances of "Action" to the new name.</p> <p>Message numbers also reduce translation efforts because you translate a message number in one location for each supported language.</p> <p>Note: To change or add message numbers, use the SYSERR utility.</p>
Member	See <i>Help member</i> .
Menu	Panel or program that displays the available functions (processes) and allows you to select one for use.
Minor component	See <i>Component</i> .
Object	Any entity that represents a business function and is used by Natural Construct.
Optional field	Field for which input is not required.
Page	One screen of information displayed in a help window. The length and number of text lines on a page are determined by the Help Display profile assigned to the help member.
Panel	Usually refers to a full screen of information, however, it can apply to partial screens of information as well.
Panel-sensitive help	See <i>Passive help</i> .
Passive help	Help that is specific to the panel or field on which the cursor is placed. When a user selects help on a panel or field for which passive help is available, help for that panel or field is displayed. Also referred to as context-sensitive help.
PF-key	Program function key. To perform the associated function, press that key. For example, pressing PF1 (help) displays help information.
Required field	Field for which input is required.
Return code	Code entered in the Function field on a menu to return to the previous panel. The return code on Natural Construct menus is a period (.)
Return key	See <i>Enter key</i> .
Runtime	Period of time during which an application is being used or is performing a function.
Scroll	Move forward (down), backward (up), left, or right through information displayed on a panel or in a window.
Terminate	End your Natural Construct session.
Type component	See <i>Component</i> .

Term	Definition
Window	Area on a screen that displays information and, typically, has visible boundaries. Windows are invoked from a panel and are generally smaller than the panel. They appear to be laid on top of the panel.