SYSMAIN Error Messages

All SYSMAIN functions can be performed on error messages. Only authorized users can modify Natural system error messages if Natural Security is installed.

In environments in which different FNAT and FUSER files are used, error messages are stored in the files according to the type of error: Natural system error messages are stored in the FNAT file; user error messages are stored in the FUSER file of the corresponding library.

This section covers the following topics:

- Error Message Menus
- Language Parameter Considerations
- Renumber an Error Message
- Processing Status
- Direct Commands for Error Messages
- Error Messages in Batch Mode

Error Message Menus

The subfunction menu displayed depends on the function selected. The COPY subfunction menu is shown as the example in this documentation; however, menus for other functions are similar in format.

```
 18:43:21              ***** NATURAL SYSMAIN UTILITY *****           1999-11-18
 User SAG                  - Copy Error Message Texts -         Library SYSMAIN


                     Code  Function

                       A   Copy Short and/or Extended Texts
                       E   Copy only Extended Texts
                       S   Copy only Short Texts
                       ?   Help
                       .   Exit

           Code ...... A        Selection List ............ Y

  Error    No. From .. ____     No. To .. ____
  Source   Library ... ________ Lang. ... *________ DBID .. 10___ FNR .. 50___
  Target   Library ... ________ Lang. ... *________ DBID .. 10___ FNR .. 60___
  Options  Replace ... N



Command ===>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit  Copy  Del   Find  List  Move  Ren   Fsec        Fnat
```

Note:
For the processing of Natural system error messages, a library name must not be specified.
If the source or target library name contains a question mark (?), an asterisk (*), a greater than (>) or less than (<) sign, a selection list is displayed with libraries containing error messages (except if the FIND function was used).

The functions listed on the menus for error messages have the following meanings:

Function	Explanation
A	Process Short and/or Extended Texts Process any error message which exists in short and/or extended form.
E	Process only Extended Texts Process any error message which exists in extended form. Only extended error messages with corresponding short error messages are processed. **Note:** An extended error message cannot be transferred to a target environment if there is no corresponding short error message in the target environment.
S	Process only Short Texts Process any error message which exists in short form.

If selective processing has been selected, a selection list is displayed. If there are more error messages in a library than can be displayed on a single screen, the additional messages can be displayed by pressing ENTER.

Select specific error messages for processing by entering the desired option in column **C** (code) to the left of the error number. A question mark (?) in this column invokes a window listing the options available for the specific function. These options make it possible to perform additional functions before actively processing the object.

The options which can be entered on an error message selection list have the following meanings:

Option	Explanation
A	Process Extended and Short Text Process all error message types listed in the corresponding Type column, which means, short (S), extended (E) or short and extended (S/E) messages.
E	Process only Extended Error Text Process only the extended form of the error message. If there is no corresponding short error message in the target environment, the extended error message cannot be processed completely. If E is specified for a message which exists only as a short message, an error is returned.
S	Process only Short Error Text Process only the short form of the error message.
L	List Extended and Short Text Review an error message before processing it. The short and/or extended text is displayed, depending on the subfunction previously specified. The default language corresponds to the codes or values in the Source Language parameter or, if no match is found, to the setting of the system variable *LANGUAGE.

Language Parameter Considerations

Attention must be given to the setting of the Source and Target Language parameters. These have three possible "logical" settings:

1. If an asterisk (*) is specified, all languages are treated as one unit. All languages are processed.
   For example, if the source error message exists only in languages 1, 2 and 3, and for the target error message only languages 1, 4 and 6 are defined, after a COPY function, the resulting target message exists only in languages 1, 2 and 3.
2. If the language parameters are specified as individual codes, each occurrence of language in the parameter is processed individually.
   For example, if the source error message contains languages 1, 2 and 3, and the parameter is set to123, and if the target error message contains languages 1, 4 and 6, and the parameter is also set to123, after a COPY function, the resulting target error message contains languages 1, 2, 3, 4 and 6, but only the English target error message is overwritten by the English text of the source error message.
3. If a single language code is specified for the source error message, and multiple language codes are specified for the target error message, the resulting target error message is in the language specified for the source upon completion of the COPY function.
   For example if the source error message contains language 1 and the target error message contains languages 23456, the resulting error message is in language 1 for all the specified languages. This allows the use of the *LANGUAGE parameter.

Renumber an Error Message

Error messages can be moved from one library to another, or the languages for each error message can be copied, moved or replaced with the MOVE and COPY functions. In addition, it is possible to renumber a single error message or renumber a range of error messages. This can be done with the RENAME function.

When specifying the ranges, the number of error messages specified by the range "From - To" range of the Source Library must be equal in number to the "From - To" range of the Target Library. In addition, if renumbering error messages within a single library, there must be no overlapping in the New Number range.

Examples:

The following examples are valid:

REN ERROR *1* **THRU** *100* **AS** *101* **THRU** *200* **IN** *CLAIMS*

REN ERROR *101* **THRU** *200* **AS** *1* **THRU** *100* **IN** *CLAIMS*

The following examples are invalid, because the number ranges are overlapping:

REN ERROR *1* **THRU** *100* **AS** *51* **THRU** *150* **IN** *CLAIMS*

REN ERROR *101* **THRU** *200* **AS** *51* **THRU** *150* **IN** *CLAIMS*

When large ranges of error messages are being processed, the processing of error messages may require significant resources. In such cases, batch-mode processing may be preferable.

Processing Status

After the individual error messages have been selected on the selection list, they are processed by SYSMAIN and an appropriate message is displayed in the message column.

Option L

If the **L** option was selected, the message returned upon completion of processing is Listed.

An object can be processed again using the **A**, **E** or **S** options after the **L** option processing has been completed.

Options A, E and S

If the **A**, **E** or **S** options were selected, the messages returned upon completion of normal processing are Copied, Moved, Renamed or Deleted, depending on the function selected.

Other messages which may be returned are:

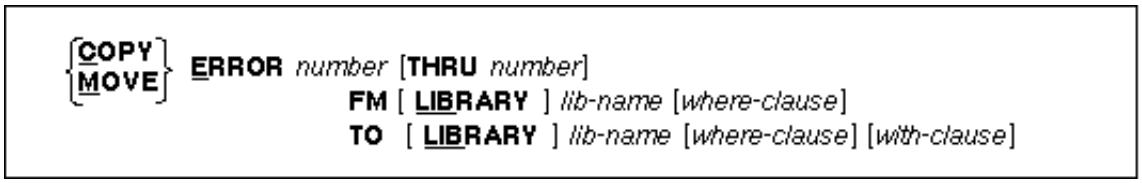
Message	**Explanation**
Replaced	The replace option was set to **Y** and the target error message was deleted before the COPY, MOVE or RENAME function was completed.
Not Replaced	The replace option was set to **N** and an error message with the same error number already exists in the target environment; function not completed.
Exit: *nnn*	A user exit routine was active and a non-zero return code was returned by the exit (*nnn* = the return code); function not completed. See also User Exits.
No Short Err	An extended error message was selected for further processing, but the target error message number has no corresponding short error message; function not completed.
Not Found	An error in the update logic occurred during processing and the requested error message could not be found. This implies that the message was deleted during interim between selection and update.
Ext Exists	The function required a short error message to be deleted, which would have resulted in an extended error message with no corresponding short message; function not completed.
Updated	The text in the specified language did not previously exist for the error number selected, and SYSMAIN has updated the error number with the new language. An error message existed and has now been updated with a new language text.
No Lang 1	Only one language (**E** or **1**) is available for Natural System extended error message text. An attempt has been made to copy extended error message text, and language **E** or **1** has not been included in the LANGUAGE parameter; function not completed.

Direct Commands for Error Messages

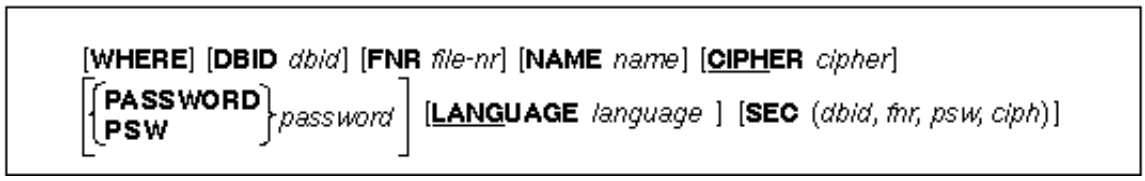
The direct command syntax for processing error messages is shown in this section. (Since the *where-clause* and *with-clause* syntax are identical for each command, they are only shown once with the COPY and MOVE command syntax below.)

For Natural system error messages, Natural-SYSTEM or Natural-SYS has to be specified as library name.

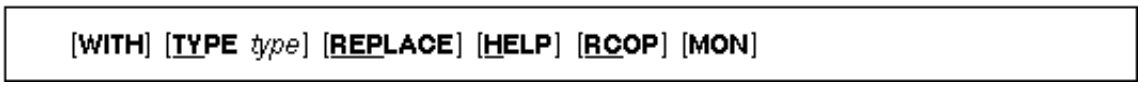
COPY and MOVE Direct Command Syntax



where-clause



with-clause



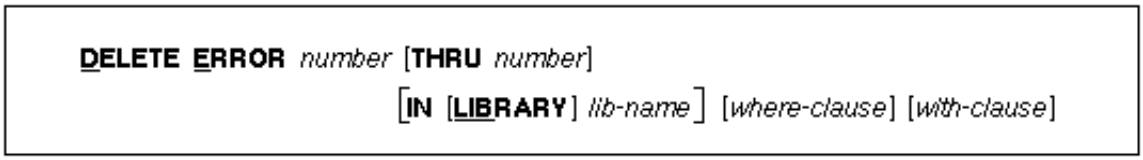
Note:
Commas must be used as separators between the values following the SEC keyword; or if a value is missing. For example: SEC (10,,secret,2a). If the Natural session parameter ID has been set to a comma, use a slash (/) sign as the separator between values.

Examples:

COPY ERROR *1* **FROM** *ACCOUNTS* **TO** *ACCOUNTS1* **REP WITH TYPE** *A*
C ERROR *1* **THRU** *50* **FROM** *ACCT* **WHERE DBID** *1* **FNR** *10* **LANG** *123456*
TO *ACCT* **WHERE DBID** *5* **FNR** *26* **LANG** *23456* **WITH REP HELP**

MOVE ERR *200* **THRU** *10* **FM** *ACCT* **FNR** *10* **LANG** *123* **TO** *ACCT* **LANG** *1* **TYPE** *S*
M ERR *376* **TYPE** *E* **FM** *ACCT* **LANG** *E* **TO** *ACCT* **LANG** *FGSDI*

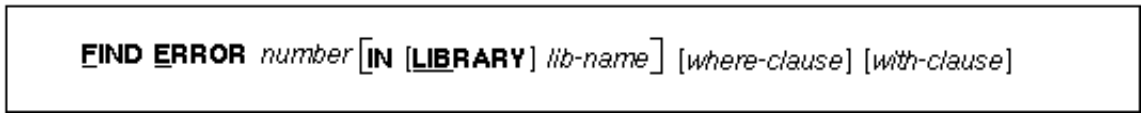
DELETE Direct Command Syntax



Examples:

DELETE ERROR *1* **THRU** *10* **IN LIBRARY** *ACCT*
WHERE DBID *1* **FNR** *2* **PSW** *GUESS* **CIPH** *137561* **WITH TYPE** *E* **MON HELP**
DEL ERR *100* **IN** *ACCT*

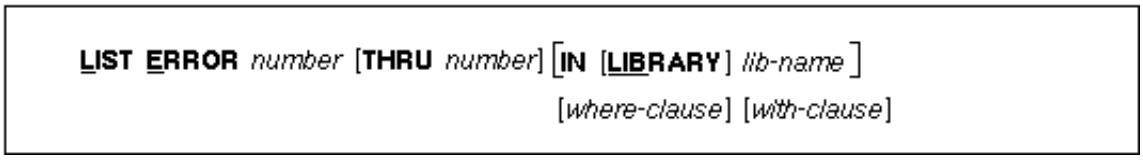
FIND Direct Command Syntax



Examples:

FIND ERR *4280* **IN** *A** **MON**
FIND ERROR *10* **IN LIB** *ACCT* **WHERE DBID** *1* **FNR** *3* **WITH TYPE** *E*

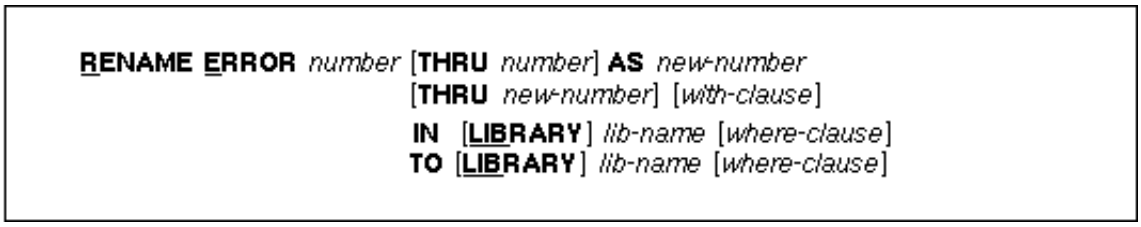
LIST Direct Command Syntax



Examples:

LIST ERR *1* **THRU** *10* **IN** *ACCT*
LIST ERROR *100* **THRU** *150* **IN LIB** *ACCT* **WHERE DBID** *12* **FNR** *5*

RENAME Direct Command Syntax



Examples:

RENAME ERROR *1* **THRU** *50* **AS** *11* **THRU** *60* **WITH TYPE** *A* **REP HELP MON RCOP**
IN LIBRARY *ACCT* **WHERE DBID** *1* **FNR** *2* **TO LIB** *ACCOUNT* **WHERE FNR** *3*
RENAME ERR *1* **AS** *101* **IN** *ACC*T

Error Messages in Batch Mode

Direct commands must be used to process error messages in batch mode.

A report is provided to show the status of error messages processed in batch mode.

Note:
By using Online Report Mode, you can obtain the SYSMAIN batch report online. If required, you can also obtain a hardcopy of the report using the **%H** option.

