

# ON ERROR

## Structured Mode Syntax

```

ON ERROR
  statement ...
END-ERROR

```

## Reporting Mode Syntax

```

ON ERROR { statement ...
          DO statement ... DOEND }

```

This chapter covers the following topics:

- Function
- Restriction
- Syntax Description
- ON ERROR Processing within Subroutines
- System Variables \*ERROR-NR and \*ERROR-LINE
- Example

For an explanation of the symbols used in the syntax diagram, see *Syntax Symbols*.

Related Statements: DECIDE FOR | DECIDE ON | IF | IF SELECTION

Belongs to Function Group: *Processing of Logical Conditions*

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## Function

The ON ERROR statement is used to intercept execution time errors which would otherwise result in a Natural error message, followed by termination of Natural program execution, and a return to command input mode.

When the ON ERROR statement block is entered for execution, the normal flow of program execution has been interrupted and cannot be resumed except for error 3145 (record requested in hold), in which case a RETRY statement will cause processing to be resumed exactly where it was suspended.

This statement is non-procedural (that is, its execution depends on an event, not on where in a program it is located).

## Restriction

Only one ON ERROR statement is permitted in a Natural object.

## Syntax Description

<i>statement...</i>	<p><b>Defining the ON ERROR Processing:</b></p> <p>To define the processing that shall take place when an ON ERROR condition has been encountered, you can specify one or multiple statements.</p> <p><b>Exiting from an ON ERROR Block:</b></p> <p>An ON ERROR block may be exited by using a FETCH, STOP, TERMINATE, RETRY or ESCAPE ROUTINE statement. If the block is not exited using one of these statements, standard error message processing is performed and program execution is terminated.</p>
<b>END-ERROR</b>	The Natural reserved word END-ERROR must be used to end an ON ERROR statement block.

## ON ERROR Processing within Subroutines

When a subroutine structure is built by using CALLNAT, PERFORM or FETCH RETURN, each module may contain an ON ERROR statement.

When an error occurs, Natural will automatically trace back the subroutine structure and select the first ON ERROR statement encountered in a subroutine for execution. If no ON ERROR statement is found in any module on any level, standard error message processing is performed and program execution is terminated.

## System Variables \*ERROR-NR and \*ERROR-LINE

The following Natural system variables can be used in conjunction with the ON ERROR statement (as shown in the Example below):

<b>*ERROR-NR</b>	Contains the number of the error detected by Natural.
<b>*ERROR-LINE</b>	Contains the line number of the statement which caused the error.

## Example

```
** Example 'ONEEX1': ON ERROR
**
**
```

**CAUTION: Executing this example will modify the database records!**

```
*****
```

```
DEFINE DATA LOCAL
1 EMPLOY-VIEW VIEW OF EMPLOYEES
  2 NAME
```

```
2 CITY
*
1 #NAME (A20)
1 #CITY (A20)
END-DEFINE
*
REPEAT
  INPUT 'ENTER NAME:' #NAME
  IF #NAME = ' '
    STOP
  END-IF
  FIND EMPLOY-VIEW WITH NAME = #NAME
  INPUT (AD=M) 'ENTER NEW VALUES:' ///
    'NAME:' NAME /
    'CITY:' CITY

  UPDATE
  END TRANSACTION
  /*
  ON ERROR
  IF *ERROR-NR = 3009
    WRITE 'LAST TRANSACTION NOT SUCCESSFUL'
      / 'HIT ENTER TO RESTART PROGRAM'
    FETCH 'ONEEX1'
  END-IF
  WRITE 'ERROR' *ERROR-NR 'OCCURRED IN PROGRAM' *PROGRAM
    'AT LINE' *ERROR-LINE
  FETCH 'MENU'
  END-ERROR
  /*
  END-FIND
END-REPEAT
END
```