

Variable Maintenance

With the Variable Maintenance function, you can display and modify variables within the Natural Debugger if a program was interrupted.

For the interrupted object, the variable function displays user-defined variables, global variables and the database-related system variables *COUNTER, *ISN and *NUMBER, together with their formats, lengths and contents.

Below is information on:

- Display Variable
 - Modify Variable
-

Display Variable

To display all user-defined and global variables and the database-related system variables

- On the Debug Main Menu or in the Debug Window, enter Function Code **V**.
Or enter the direct command `DISPLAY VARIABLE` or `MODIFY VARIABLE` without specifying a variable. The Display Variables summary screen appears with a list of all variables defined for the interrupted program. Long values may be displayed truncated on the screen. For arrays, only the contents of the first occurrence is displayed.
- To display a variable value in its entirety:
Select the desired variable by marking it with the line command **DI**.
The Display Variable screen for the individual variable appears with all relevant specifications.
- To display all occurrences of an array:
Select the desired variable by marking it with the line command **DI**.
 - Use PF7 (-) and PF8 (+) to page between the individual occurrences or
 - Enter the direct command `DIS VAR variable(*)` to display all occurrences.

On the Display Variables (summary) or the Display Variable (individual) screen, you can toggle between alphanumeric and hexadecimal representation of the variable contents by using PF10 (Alpha) and PF11 (Hex).

To display a selection of variables

- Enter the direct command `DISPLAY VARIABLE variable,variable,...`
The Display Variables summary screen appears with a list of the variables specified.

To display system variables (except database-related variables)

- Enter the direct command `SYSVARS`.
The System Variables screen appears with a list of all system variables.

For variables of the type Handle, the name of the class of the instance that the Handle refers to is displayed in alphanumeric representation. If the class name is not available, the Globally Unique ID (GUID) is displayed instead. If the class was defined within Natural, the class name or GUID is suffixed with "(NAT)".

The contents of properties of an instance of a class cannot be displayed within the Natural Debugger.

Modify Variable

Not applicable to system variables.

With this function, you can change the value of user-defined and global variables and the database-related system variables.

To modify the contents of a variable from the Modify Variable screen

- Invoke the Modify Variable screen by marking the variable with the line command **MO**.
Or, on the Display Variable screen, choose PF5.
- On the Modify Variable screen, in the field Contents, change the value of the variable.
The new contents must be valid for the format of the modified variable since the format of a variable cannot be modified within the Natural Debugger.
On the Modify Variable screen, you can toggle between alphanumeric and hexadecimal representation of the variable value using PF10 (Alpha) and PF11 (Hex).

To modify the contents of a variable via direct command

- Enter the direct command `MODIFY VARIABLE variable = new value`
(see also the syntax of **MODIFY** in Command Summary and Syntax).
A message appears that confirms modification of the variable value.