

Natural Environment Related System Variables

The following Natural system variables are covered:

- *DEVICE
- *GROUP
- *HARDCOPY
- *INIT-USER
- *LANGUAGE
- *NATVERS
- *NET-USER
- *PARM-USER
- *PATCH-LEVEL
- *PID
- *SCREEN-IO
- *SERVER-TYPE
- *UI
- *USER
- *USER-NAME

Content modifiable:

In the following text, this indicates whether in a Natural program you can assign another value to the system variable, that is, overwrite its content as generated by Natural.

*DEVICE

Format/length: A8

Content modifiable: No

This system variable contains the device type/mode from which Natural has been invoked. It may contain one of the following values:

Value	Description
BATCH	Batch mode.
COLOR	3279 compatibility. 3278 screen device (device with extended attribute support).
VIDEO	3270 screen device, PC screen device, DEC VT terminal or any type of UNIX terminal.
TTY	Teletype or other start/stop device.
PC	Usage of Natural Connection has been activated (by profile parameter PC=ON or terminal command %+).
BTX	BTX device.
SPOOL	3270 printer device.
ASYNCH	Asynchronous session.

*GROUP

Format/length: A8

Content modifiable: No

This system variable is applicable under Natural Security only. It contains the ID via which a user is logged on to a protected library, that is, the ID via which the user is linked to the library. This may be either the ID of the group via which the user is linked or the user's own ID (if he or she is linked directly).

*GROUP will be blank

- in the case of a logon to an unprotected library (where no link is used),
- if Natural Security is not active.

*HARDCOPY

Format/length: A8

Content modifiable: Yes

This system variable contains the name of the hardcopy device which will be used when the terminal command %H is used.

*INIT-USER

Format/length: A8

Content modifiable: No

This system variable contains the user ID of the user.

*INIT-USER under UNIX and Windows

*INIT-USER contains the value of the profile parameter USER in the parameter file used.

If no value is specified for the USER parameter, *INIT-USER contains the user ID used to log in to UNIX, or under Windows the ID you were requested to enter when starting Natural (default value: "SAGPC").

*INIT-USER under UTM

*INIT-USER contains the user ID defined for the UTM application; if no user IDs are defined for the UTM application, *INIT-USER is identical to *INIT-ID.

*INIT-USER under TIAM

The value of *INIT-USER is determined by the parameter USERID in macro NATTIAM: If USERID=USER or NO (default), it contains the BS2000/OSD job name specified with the LOGON command; if no BS2000/OSD job name has been specified, *INIT-USER contains the same as with USERID=SYSTEM (or YES), that is, the BS2000/OSD user ID.

***INIT-USER in batch mode on mainframe computers**

*INIT-USER contains name of the job under which the Natural session is running.

***INIT-USER in batch mode under OS/390**

The value of *INIT-USER is determined by the parameter USERID in the Natural/OS/390 batch interface (macro NTOS): If USERID=YES, the value will be taken from the security access control block (ACEE) of the security package (for example, RACF or ACF2) being used. If no security package is used, the value will be taken from the USER parameter in the job card. If no USER parameter is specified, the value will be same as with USERID=NO, that is, the name of the job under which the Natural session is running.

***LANGUAGE**

Format/length: I1

Content modifiable: Yes

This system variable contains the language indicator (language code). This language indicator is used for edit masks of date fields, Natural error messages and user error messages as used in the statements INPUT and REINPUT.

A one-character code is assigned to each language code; this one-character code is used to replace all "&" in names of language-specific objects (for example, maps, dialogs, help routines, subprograms).

You can specify up to 60 different language codes. The codes are listed below.

The system variable *LANGUAGE is set by the Natural profile parameter ULANG which determines the language to be used for date edit masks, system messages, user messages, help texts, help routines and multi-lingual maps.

On mainframes, the compiler always uses only the current value of *LANGUAGE to determine the map name. During runtime, Natural for mainframes tries to read the map with the current *LANGUAGE setting first. If not found, then it tries to find the map with the default language.

Under Windows and UNIX, Natural does not differentiate without between compile time and run time. It always tries to read the map with the current value of *LANGUAGE first and if not found, it then tries to find the map with the default language.

For details on how to use language codes, see also Designing User Interfaces in the Natural Programming Guide.

Language Code Assignments

The following languages are assigned to the individual language codes (the right-hand column shows the corresponding one-character codes to be used in names of language-specific maps etc.):

- Left-to-Right Single-Byte Languages with Latin Lower Case
- Left-to-Right Single-Byte Languages without Latin Lower Case
- Bi-directional Single-Byte Languages without Latin Lower Case
- User-Assigned Languages
- Multiple-Byte Languages
- Double-Byte Languages

Left-to-Right Single-Byte Languages with Latin Lower Case

Code	Language	Code in Map Names
1	English	1
2	German	2
3	French	3
4	Spanish	4
5	Italian	5
6	Dutch	6
7	Turkish	7
8	Danish	8
9	Norwegian	9
10	Albanian	A
11	Portuguese	B
12	Chinese Latin (Taiwan)	C
13	Czech	D
14	Slovak	E
15	Finnish	F
16	Hungarian	G
17	Icelandic	H
18	Korean	I
19	Polish	J
20	Romanian	K
21	Swedish	L
22	Croatian	M
23	Catalan	N
24	Basque	O
25	Afrikaans	P

Left-to-Right Single-Byte Languages without Latin Lower Case

Code	Language	Code in Map Names
26	Bulgarian	Q
27	Greek	R
28	Japanese (Katakana)	S
29	Russian	T
30	Serbian	U

Bi-directional Single-Byte Languages without Latin Lower Case

Code	Language	Code in Map Names
31	Arabic	V
32	Farsi (Iran)	W
33	Hebrew	X
34	Urdu (Pakistan)	Y
35	(reserved for future use)	Z
36	(reserved for future use)	a
37	(reserved for future use)	b
38	(reserved for future use)	c
39	(reserved for future use)	d
40	(reserved for future use)	e

User-Assigned Languages

Code	Language	Code in Map Names
41	(free for you to assign a language)	f
42	(free for you to assign a language)	g
43	(free for you to assign a language)	h
44	(free for you to assign a language)	i
45	(free for you to assign a language)	j
46	(free for you to assign a language)	k
47	(free for you to assign a language)	l
48	(free for you to assign a language)	m
49	(free for you to assign a language)	n
50	(free for you to assign a language)	o

Multiple-Byte Languages

Code	Language	Code in Map Names
51	Hindi	p
52	Malayan	q
53	Thai	r
54	(reserved for future use)	s
55	(reserved for future use)	t
56	(reserved for future use)	u

Double-Byte Languages

Code	Language	Code in Map Names
57	Chinese (People's Republic of China)	v
58	Chinese (Republic of China)	w
59	Japanese (Kanji)	x
60	Korean	y

*NATVERS

Format/length: A8

Content modifiable: No

This system variable contains the Natural version excluding the patch level information in the format *rr.vv.ss*, where *r*=release, *v*=version, *s*=system maintenance level (example: 04.01.01). The patch level information is contained in the variable *PATCH-LEVEL.

*NET-USER

Format/length: A253

Content modifiable: No

On UNIX and mainframe computers, the value of *NET-USER is identical to the one of *USER.

On Windows, the value of *NET-USER contains the complete user ID consisting of the domain name and the actual user ID.

The following considerations apply to a NaturalX server (Windows platforms only).

When a NaturalX server receives an authenticated request, the user ID of this request is passed to the server and placed into *NET-USER. (The DCOM function "CoQueryClientBlanket" is used for this purpose.)

After the NaturalX server has processed the request, *NET-USER is reset to the value it contained before the request.

A request which is not authenticated has no effect on *NET-USER.

*PARAM-USER

Format/length: A253

Content modifiable: No

This system variable contains the name of the parameter module currently in use (if *PARAM=name* has not been specified as a dynamic parameter, *PARAM-USER contains blanks).

*PATCH-LEVEL

Format/length: A8

Content modifiable: No

This system variable contains the current patch-level number as a string value. See also *NATVERS.

*PID

Format/length: A32

Content modifiable: No

This system variable contains the current process ID as a string value.

On mainframe computers, this system variable contains a unique session ID.

*SCREEN-IO

Format/length: L

Content modifiable: No

This system variable indicates whether a screen I/O is possible or not.

It can contain one of the following values:

TRUE	Screen I/O is possible.
FALSE	Screen I/O is not possible.

In an interactive Natural session, *SCREEN-IO is initialized with "TRUE".

If Natural was started as a DB2 Stored Procedures server (*SERVER-TYPE = DB2-SP) or as RPC server (*SERVER-TYPE = RPC) *SCREEN-IO is set to "FALSE".

If Natural was started on a Windows platform as DCOM server (*SERVER-TYPE = DCOM), *SCREEN-IO is set to "FALSE", while the server is executing a method called by COM/DCOM.

When *SCREEN-IO is set to "FALSE" and a statement which requires user interaction is executed, Natural issues error NAT0723.

*SERVER-TYPE

Format/length: A32

Content modifiable: No

This system variable indicates the server type Natural has been started as.

It can contain one of the following values:

DB2-SP	Natural DB2 Stored Procedures server.
DCOM	NaturalX DCOM server. Applies to Natural for Windows only.
DEVELOP	Natural development server.
RPC	Natural RPC server.

If Natural is not started as a server, *SERVER-TYPE is set to blanks.

Note:

*SERVER-TYPE refers to Natural as a whole, **not** to the Natural program currently being executed (which may run as a client program or as a server program within a server Natural).

*UI

Format/length: A16

Content modifiable: No

This system variable indicates the type of user interface being used:

CHARACTER	Character-oriented user interface.
GUI	Graphical user interface.

*USER

Format/length: A8

Content modifiable: No

This system variable contains the user ID as taken from the Natural Security logon.

If the profile parameter AUTO=ON (Automatic Logon) is set or if Natural Security is not active, the value of *USER is identical to that of *INIT-USER.

*USER-NAME

Format/length: A32

Content modifiable: No

If Natural Security is installed, this variable contains the name of the user who is currently logged on to Natural.

If Natural Security is not active, the default is "SYSTEM".