Rules and Naming Conventions

This section describes Natural-specific rules and naming conventions.

- Object Naming Conventions

- Library Naming Conventions

- Naming Conventions for User-Defined Variables

Object Naming Conventions

This section describes the naming conventions that apply when saving and/or cataloging a Natural object in a Natural system file.

The name of a Natural object can be 1 to 8 characters (listed in the following table) where the *first* character must be one of the following:

- an upper-case alphabetical character

- a number sign (#)

- a plus sign (+)

If the first character is a number sign (#) or a plus sign (+), the name must consist of at least one additional character.

Exception:

The name of a Natural DDM can be 1 to 32 characters (listed in the following table) where the *first* character must be an upper-case alphabetical character.

The name of a Natural object can consist of the following characters:

Character	ISO Character Name	Remark
A - Z	Latin capital letter A - Z	Upper-case alphabetical character
0 - 9	Digit zero - digit nine	Numeric character
-	Hyphen-minus	Hyphen
_	Low line	Underscore
/	Solidus	Slash
@	Commercial at	
$	Dollar sign	
&	Ampersand	Only allowed in language codes See also *Defining the Language of a Natural Object* in the *Programming Guide*.
#	Number sign	Hash sign
+	Plus sign	Only allowed as the first character

Library Naming Conventions

This section describes the naming conventions that apply to a Natural library.

The name (ID) of a library can be 1 to 8 characters and must *not* start with "SYS". The prefix "SYS" is reserved for Natural system libraries.

A library name must start with an upper-case alphabetical character. Any other alphabetical character must also be upper case. A library name must *not* contain any blank characters.

A library name can consist of the following characters:

Character	ISO Character Name	Remark
A - Z	Latin capital letter A - Z	Upper-case alphabetical character
0 - 9	Digit zero - digit nine	Numeric character
-	Hyphen-minus	Hyphen
_	Low line	Underscore Not allowed as the last character

Naming Conventions for User-Defined Variables

This section describes the naming conventions that apply to a user-defined variable:

- Length of Variable Names

- Limitations of Variable Names

- Characters Allowed in Variable Names

- First Character of Variable Names

- Case of Characters in Variable Names

For further information on user-defined variables, refer to the section *User-Defined Variables* in the *Programming Guide*.

Length of Variable Names

The name of a user-defined variable can be 1 to 32 characters long.

You can use variable names of over 32 characters (for example, in complex applications where longer meaningful variable names enhance the readability of programs); however, only the first 32 characters are significant and must therefore be unique, the remaining characters will be ignored by Natural.

Limitations of Variable Names

The name of a user-defined variable must *not* be a Natural reserved keyword.

Within one Natural program, you must *not* use the same name for a user-defined variable and a database field, because this might lead to referencing errors (see *Qualifying Data Structures* in the *Programming Guide*).

Characters Allowed in Variable Names

The name of a user-defined variable can consist of the following characters:

Character	ISO Character Name	Remark
A - Z	Latin capital and/or small letter A - Z	Upper-case and/or lower-case alphabetical character Lower-case *not* allowed as the first character
0 - 9	Digit zero - digit nine	Numeric character
-	Hyphen-minus	Hyphen
_	Low line	Underscore
/	Solidus	Slash
@	Commercial at	
$	Dollar sign	
&	Ampersand	
#	Number sign	Hash sign
+	Plus sign	Only allowed as the first character

First Character of Variable Names

The first character of the name must be one of the following:

Character	ISO Character Name	Remark
A - Z	Latin capital letter A - Z	Upper-case alphabetical character
&	Ampersand	
#	Number sign	Hash sign
+	Plus sign	

If the first character is a number sign (#), a plus sign (+) or an ampersand (&), the name must consist of at least one additional character.

Variables in a global data area (GDA) with a plus sign (+) as the first character must be defined at Level 1; see also *Global Data Area* in the *Programming Guide*. Other levels are only used in a redefinition.

A plus sign (+) as the first character of a name is only allowed for application-independent variables (AIVs) and variables in a global data area (GDA).

Names of AIVs must begin with a plus sign (+); see also *Defining Application-Independent Variables* in the description of the DEFINE DATA statement in the *Statements* documentation.

An ampersand (&) as the first character of a name is used in conjunction with dynamic source program modification (see the RUN statement in the *Statements* documentation), and as a dynamically replaceable character when defining processing rules; see the relevant description in the *Map Editor* documentation.

Case of Characters in Variable Names

With Natural for Windows, UNIX and OpenVMS, lower-case characters entered as part of a variable name are internally converted to upper case.

Caution:
If you use lower-case characters as part of the variable name, variable names must be unique regardless of their case.