# **Object Specification - Natural Library Objects**

This section describes the options provided on the object-specification screens for processing Natural library objects. Natural library objects are programming objects and user-defined error messages.

For descriptions of keywords and valid input values, see also *select-clause* in the section *Direct Commands*.

This section covers the following topics:

- Natural Library Objects
- Natural Library Object Details
- Natural Library Object Properties
- Natural Library Object Exceptions
- Natural Library Object Exception Properties

#### **Natural Library Objects**

The screen Unload/Load/Scan Natural Library Objects provides the following fields and PF keys:

Field	PF Key	Explanation
DBID/FNR		Only applies to the unload function.
		The database ID (DBID) and file number (FNR) of the system file where the Natural libraries are stored. If no values (or 0) are specified, the current FUSER or FNAT system file is used.
Select DBID/FNR	PF5	Only applies to the unload function.
	(advanced-user mode only)	Displays a selection list of system files available.
Password/Cipher		Only applies to the unload function.
		The password and cipher code for the Adabas file where the Natural libraries are stored.
Library		The name of a library or a range of names: see <i>Name</i> in <i>Name</i> , <i>Date and Time Specification</i> .
Select library	PF4	Displays a selection list of all libraries available. See also <i>Select Library</i> .
Object name		The name of a Natural programming object or a range of names: see <i>Name</i> .
		Only evaluated if the field <b>Natural programming objects</b> (default setting) is selected on the screen <b>Natural Library Objects, Details</b> . See also <i>Natural Library Object Details</i> .
Select objects		Only applies to the unload function in advanced-user mode.
		If no library range is specified, a selection list of all Natural objects available is displayed (see also <i>Select Objects</i> ).
Error number from/to		A valid range (1 - 9999) of user-defined error messages delimited by the first and the last message number.
		Only evaluated if the field <b>Error messages</b> (default setting) is selected on the screen <b>Natural Library Objects</b> , <b>Details</b> (see also <i>Natural Library Object Details</i> ).
Details	PF6	Invokes the screen <b>Natural Library Objects</b> , <b>Details</b> where you can enter more detailed object specifications. See <i>Natural Library Object Details</i> .
Settings	PF7	Only applies to functions executed in advanced-user mode.
		Invokes the <b>Unload/Load/Scan Settings</b> screen where you can specify option and parameter settings: see <i>Settings</i> .

## **Natural Library Object Details**

The screen **Unload/Load/Scan Natural Library Objects**, **Details** is used to specify further selection criteria for Natural library objects.

For descriptions of keywords and valid input values, see also *select-clause* in the section *Direct Commands*.

The screen **Unload/Load/Scan Natural Library Objects, Details** provides the following fields and PF keys:

Field	PF Key	Explanation
Library		The name of a library or a range of names: see <i>Name</i> in <i>Name</i> , <i>Date and Time Specification</i> .
		Ranges are not allowed if the <b>Use Predict set</b> option is selected.
Select	PF4	Displays a selection list of all libraries available. See also <i>Select Library</i> .
(Library)		
DBID/FNR		See <b>DBID/FNR</b> in <i>Natural Library Objects</i> above.
Passw./Ciph.		Only applies to the unload function.
		The password and cipher code of the Adabas file where the Natural libraries are stored.
Object Types:		Natural programming objects.
Natural programming objects		
Object Types:		User-defined error messages.
Error messages		
Object name		See <b>Object name</b> in <i>Natural Library Objects</i> above.

Field	PF Key	Explanation
Use Predict set		Only applies to the unload and find functions and if Predict is installed.
		This option is used to read the names of the objects to be processed from a retained set. A retained set is created with the save set option of the LIST XREF command.
		If the <b>Use Predict set</b> option is selected, the following applies:
		• The <b>Object name</b> field must contain asterisk (*) indicating all objects. This is the default setting.
		• The <b>Library</b> field must contain the name of a single library. Name ranges are not allowed.
		• The <b>Set number</b> field must be filled.
		For detailed information on Predict sets, refer to the <i>Predict</i> documentation.
Set number		Only applies if <b>Use Predict set</b> is selected.
		A one- or two-digit number that identifies the retained set to be used.
Set library		Only applies if <b>Use Predict set</b> is selected.
		The name of the library to be searched for a Predict set. If you do not specify a name, the library entered in the <b>Library</b> field is used by default.
Set user		Only applies if <b>Use Predict set</b> is selected.
		The ID of the user who created the retained set. If no ID is entered, the ID specified with the system variable *USER (see the <i>System Variables</i> documentation) is used.

Field	PF Key	Explanation	
Programming Object Options:		The kind of Natural programming object:	
S/C-Kind		S Source objects only.	
		C Cataloged objects only.	
		A or * All source objects and/or cataloged objects. This is the default setting.	
		W All STOWed objects: source and cataloged objects with identical date and time.	
		B Both source and cataloged objects if both exist.	
		Note: W and B are valid for the unload function only. Though W and B can also be entered for the load or scan function, they are treated like A.	
Programming Object Options:		A Natural object-type code such as P for program. For a list of valid codes, see NATTYPE in the section <i>select-clause</i> .	
Natural types			
Select Natural types	PF6	Invokes a window where you can select one or more types of Natural object.	
Properties	PF7	Invokes an extra screen where you can specify additional properties of Natural programming objects: see <i>Natural Library Object Properties</i> .	
Error Messages: Error number from/to		A range of user-defined error messages as entered in the <b>Error number from/to</b> fields (see <i>Natural Library Objects</i> above).	
Error Messages:  Language codes		Up to 8 valid language codes (for example, code 1 for English) of the specified error messages.	
Language codes		An asterisk (*) selects all language codes.	

Field	PF Key	Explanation
Error Messages:		The kind of error message text:
S/L-Kind		
		S Short text.
		L Long text.
		A Short and/or long text. This is the default.
		B Short and long texts if both exist (unload function only).
Exceptions	PF8	Invokes an extra screen where you can specify exceptions to the selection of Natural programming objects: see <i>Natural Library Object Exceptions</i> .

### **Natural Library Object Properties**

The screen **Unload/Load/Scan Library Objects, Properties** is used to specify properties for the Natural library objects selected for processing.

For descriptions of keywords and valid input values, see also *select-clause* in the section *Direct Commands*.

The screen Unload/Load/Scan Library Objects, Properties provides the following fields:

Field	Explanation	
User ID	The ID of the user who saved or cataloged a Natural programming object. Specify a single user ID or a range of user IDs: see <i>Name</i> in <i>Name</i> , <i>Date and Time Specification</i> .	
Programming mode	The programming mode of the Natural programming objects:	
	R Reporting mode only.	
	S Structured mode only.	
	A No mode check performed. This is the default setting.	
Natural version	The Natural version of the Natural programming objects.	
	Valid version format: <i>VRS</i> where <i>V</i> is the 1-digit version, <i>R</i> the 1-digit release, and <i>S</i> the 2-digit system maintenance level.	
	You can also specify a range of versions: see <i>Name</i> .	

Field	Explanation
Object Date:	Selects all objects, regardless of their date.
Select all objects (no date check)	
Object Date:  Select objects modified between/and	Selects all objects with a save or catalog date and/or time within the range specified in these fields by entering a precise start date and/or time and/or an end date and/or time.
	For valid input values, see <i>Date</i> and <i>Time</i> in <i>Name</i> , <i>Date and Time Specification</i> . Special dates allowed are: TODAY, YESTERDAY, MONTH and YEAR.
Object Date: Select objects modified on	Selects all objects with a save or catalog date and/or time that fits the date/time specified in these fields by entering a precise date and/or time.
	For valid input values, see <i>Date</i> and <i>Time</i> . Special dates allowed are: TODAY and YESTERDAY.
Object Size:	Selects all objects, regardless of their size.
Select all objects (no size check)	
Object Size:	Selects all objects with a size within the range specified in these
Select objects with size between/and	fields by entering a start size and/or an end size.
Object Size: Select objects with size	Selects all objects with a size that fits the size specified in this field.

#### **Natural Library Object Exceptions**

The screen **Unload/Load/Scan Library Objects**, **Exceptions** is used to specify exceptions to the selection of Natural library objects.

All objects that match the selection criteria specified in *Natural Library Objects*, *Natural Library Object Details* and *Natural Library Object Properties* are checked against the specifications made on the screen **Unload/Load/Scan Library Objects**, **Exceptions**. Objects that match *all* specifications defined as exceptions, are exempted from processing.

For descriptions of keywords and valid input values, see also *select-clause* in the section *Direct Commands*.

The screen **Unload/Load/Scan Library Objects, Exceptions** is basically identical to the screen **Unload/Load/Scan Natural Library Objects, Details**. See the relevant section for explanations of the fields, commands and alternative PF keys listed in the table below. The field **Add/change properties for selection** is used to specify additional properties for Natural programming object exceptions: see *Natural Library Object Exception Properties*.

Field	PF Key
Library	PF4
Select	
(Library)	
Object Types:	
Natural programming objects Error messages	
Object name	
S/C-Kind	
Natural types	
Select Natural types	PF6
Properties	PF7
Error number	
S/L-Kind	
Languages	

#### **Natural Library Object Exception Properties**

The screen **Unload/Load/Scan Library Objects, Exceptions** is used to specify exceptions to the properties of the Natural library objects selected for processing.

The screen provides the following fields:

Field	Explanation
User ID	See User ID in Natural Library Object Properties.
Programming mode	See <b>Programming mode</b> in <i>Natural Library Object Properties</i> .
Natural version	See Natural version in Natural Library Object Properties.
Object Date:	Performs no date check. Objects are processed, regardless of their date.
Ignore object date	
Object Date:  Exclude objects modified between/and	Exempts from processing all objects with a save or catalog date and/or time within the range specified in these fields by entering a precise start date and/or time and/or an end date and/or time.
	For valid input values, see <i>Date</i> and <i>Time</i> in <i>Name</i> , <i>Date and Time Specification</i> . Special dates allowed are: TODAY, YESTERDAY, MONTH and YEAR.
Object Date:  Exclude objects modified on	Exempts from processing all objects with a save or catalog date and/or time that fits the date/time specified in these fields by entering a precise date and/or time.
	For valid input values, see <i>Date</i> and <i>Time</i> . Special dates allowed are: TODAY and YESTERDAY.
Object Size:	Performs no size check. Objects are processed, regardless of their size.
Ignore object size	then size.
Object Size:	Exempts from processing all objects with a size within the range specified in these fields by entering a start size and/or an
Exclude objects with size between/and	end size.
Object Size:	Exempts from processing all objects with a size that fits the size specified in this field.
Exclude objects with size	