Environments and Views in the Library Workspace

The library workspace is used to administer the Natural system files in the current environment in a hierarchical manner as a tree view. In Natural terms, a system file is a collection of Natural libraries and a Natural library is a collection of Natural objects and resources.

This chapter covers the following topics:

- Local Environment
- Remote Environment
- Logical View
- Flat View
- File View
- Icons for the Nodes
- Properties for the Nodes

Local Environment

All nodes below the node **Local Environment** belong to the local Windows environment which is normally your own PC. This node is available in all views described below. Example for the logical view:



When the local environment is active, the node name **Local Environment** is shown in bold, and the **Environment** text box of the command line contains the string "Local".

Using the Configuration Utility, alias names can be defined for the system files. When an alias name has been defined, it is shown for the corresponding node in the library workspace. See *System Files* (global configuration file) in the *Configuration Utility* documentation.

Remote Environment

A node for a remote environment can only be shown when you are using Natural Single Point of Development (SPoD) for remote development on a mainframe, UNIX, OpenVMS or Windows computer. See *Accessing a Remote Development Environment* in the *Remote Development Using SPoD* documentation for further information.

The node name is either a user-defined description, or (if a description has not been specified) the name of the server and the port number. This node is available in all views described below. Example for the logical view:



When the remote environment is active, the node name is shown in **bold**, and the **Environment** text box of the command line also contains the node name.

When the remote environment is currently not connected, the string "Disconnected" is shown to the right of the node name.

Alias names can also be shown for the system files in a remote UNIX, OpenVMS or Windows environment. The alias names are defined with the Configuration Utility which is available with Natural on these platforms.

Logical View

In the logical view, different nodes are provided for user libraries and system libraries. The objects in a library are grouped into different nodes, according to their Natural object types.



For example, all programs are shown in a group node called **Programs**. Thus, if you want to view the available programs in a library, you must expand the **Programs** node. This is not required in the flat view (see below).

For subroutines, functions, classes and DDMs, the long names can be shown in the logical view. The other views show the short names (max. 8 characters; see also *Object Naming Conventions*). For example, for a subroutine, the name that has been defined in the program is shown (which may exceed 8 characters). The flat view and file view show the name that has been defined when saving the subroutine.

Flat View

In the flat view, different group nodes are provided for system files containing user-written programs (FUSER) and system programs (FNAT).

The objects in a library are displayed without any grouping. The object type is always indicated by the icon next to an object. See *Object Nodes*.



File View

In the file view, the structure of the Natural environment is represented as available on the file system. A Natural system file is displayed as the path to the *Src* and *Gp* subdirectories.

The group node **Src** contains all Natural sources and the group node **Gp** contains all generated programs (Natural executables). Group nodes for other subdirectories (for example, **Res** for resources or **Err** for error codes) may also be available.

Note:

Generated programs are also referred to as "cataloged objects". They are created when objects are stowed or cataloged.



The object type is always indicated by the icon next to an object. See Object Nodes.

The Natural objects are displayed with the corresponding file extensions (for example, ".NGP" for "Natural Generated Program" or ".NSP" for "Natural Source Program"). For further information on the possible file extensions, see *System File Structure* in the *Operations* documentation.

In a remote environment, the name of each mapped remote database is shown with database ID and file number. Example:

⊡--______ IBM2 (7319) ⊡--_____ ADABAS V7 (180,54)

Icons for the Nodes

This section describes the icons that are used in the tree view windows and list view windows for the different types of nodes.

- Group Nodes
- Object Nodes

Group Nodes

The following icons are used for the different group nodes:

	Local environment.
L.	System file containing user libraries or system libraries. When working with SPoD in a remote environment, the system file also contains DDMs. See also <i>Library Types</i> .
	Inactive system file. See also Library Types.
	System file with an active filter. See Filtering Libraries and Objects for further information.
	Nodes for libraries or groups of Natural objects. The content of a group depends on the view (logical view, flat view or file view).
	Library with an active filter. See Filtering Libraries and Objects for further information.
2	Library with suppressed line numbers in the source code. See <i>Suppressing Line Numbers in the Source Code</i> for further information.
6	Library with an active filter and suppressed line numbers in the source code.
<u>_</u>	Remote environment.

Object Nodes

For a detailed description of each object type that is available with Natural, see *Object Types* in the *Programming Guide*.

The following icons are used for the different object types:

Ē	Program
2 °	Class (see also Class Builder Nodes in the Editors documentation)
	Subprogram
+	Function
	Subroutine
	Copycode
?	Helproutine
A	Text
	Dialog
	Map
	Adapter
×	Local data area (LDA)
×	Global data area (GDA)
an a a a a a a a a a a a a a a a a a a	Parameter data area (PDA)
₩	Data definition module (DDM)

Natural objects can consist of the Natural source, the Natural generated object (for example, a generated program or a generated local data area) or both. The difference is reflected in the icon. The above icons can also be shown as follows (example for a program):

- Without a green ball and not gray: only the source of the object is available.
- В With a green ball and not gray: source and generated object are available.
- With a green ball and gray: only a generated object is available and no source.

See Invoking Editors for information on how to create or open such an object. Or see the Editors documentation for detailed information on how to use the different editors.

Icons are also shown for resources. See Managing Resources for further information.

Properties for the Nodes

You can display the properties for each node shown in the library workspace or in a list view window. Different information is shown in the resulting Properties dialog box, depending on the selected item (see the examples below).



To display the properties for a node

- 1. Select the node for which you want to display the properties.
- 2. From the View menu, choose Properties.

Or: Invoke the context menu and choose Properties.

Or: Press ALT+ENTER.

The **Properties** dialog box appears.

Note:

You can also display the properties for the nodes in the application workspace. Other than the **Properties** dialog boxes that are shown for the nodes in the library workspace, the **Properties** dialog boxes that can be invoked for the application server and for an application provide more than one page. It is possible to enter information on the additional pages. See Managing Applications in the Remote Development Using SPoD documentation for further information.

Example for a Program

Properties		×
General		
-		
Object:	HELLO	
Library:	TUTORIAL	
Туре:	Program	
Mode:	Structured	
Source User ID:	NATURAL	
Source date:	26.10.2005, 11:48	
Source size:	104 bytes	
Catalog User ID:	NATURAL	
Catalog date:	26.10.2005, 15:07	
Catalog size:	330 bytes	
Encoding:	UTF-8	Change
		ОК

If available for the selected object type, the **Change** button is provided. When you choose this button, the **Encoding** dialog box appears in which you can select a different code page. See *Changing the Code Page of a Natural Object* for further information.

Example for a Library

Properties				
General				
Library:	NATURAL			
Database	30			
File number:	30			
Number of	6			
Source size:	9.86 KB(10,103 bytes)			
Catalog size:	11.88 KB(12,171 bytes)			
Resource size:	0 bytes			
Overall size:	21.75 KB (22,274 bytes)			
Suppress line numbers				
		OK		

When you display the properties for a library, the **Suppress line numbers** check box is available. When this check box is selected, new sources in this library will be saved without line numbers in the file system. The line numbers in existing sources will be suppressed the next time these sources are saved. See *Suppressing Line Numbers in the Source Code* for further information.