

SYSRPC - Service Directory Maintenance

The SYSRPC utility provides functions used to maintain service directories in order to connect the client's calling program to a subprogram on a server. The service information is stored in the subprogram NATCLTGS and the XML-formatted file SERVDIRX (Natural text member).

The items of the service directory are node, server, library and subprogram. The hierarchical structure of these items is displayed as a tree view in the navigator of the SYSRPC utility window (see also Tree Navigation in Basic Functionality). The highest node level (root node) of the tree is Service Directory and the lowest Service.

For further information on how to apply the service directory function, refer to Specifying RPC Server Addresses as described in Operating a Natural RPC Environment in the Natural RPC documentation.

This section provides information on the node items of the Service Directory tree and the LOGON option.

The following topics are covered below:

- Tree Nodes
 - Example of Service Directory
 - LOGON Option
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Tree Nodes

Below is a description of the Service Directory tree nodes. Each tree node is identified by a different icon.

For a definition of the node names mentioned, see Definition of Terms in the overview page of the Natural RPC documentation.

To manipulate the tree nodes, use the commands and functions provided with the menu bar, the toolbar and the context menu as described in Basic Functionality.

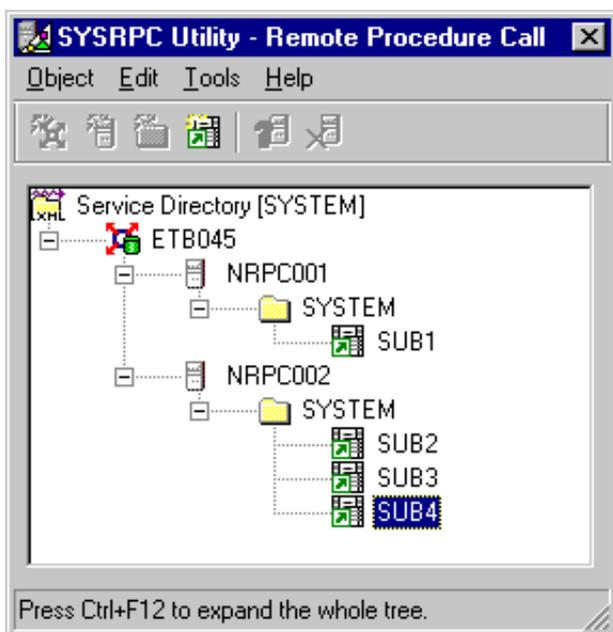
Icon	Tree Node	Explanation
	Service Directory root	<p>The service directory root node indicates the name of the library from which the service directory was read: Service Directory [<i>library-name</i>].</p> <p>For example: If you invoked the SYSRPC utility from the library SYSTEM, the root reads "Service Directory [SYSTEM]".</p> <p>For an explanation of other root node names that may occur, see Root Node Names below.</p>
	Node	<p>The name of the node to which the remote CALLNAT is sent.</p> <p>Depending on the setting of the LOGON option, different icons are displayed for Node:</p> <p> LOGON = No</p> <p> LOGON = Yes</p> <p>See also LOGON Option below.</p>
	Server	<p>The name of the server on which the CALLNAT is to be executed.</p> <p>Depending on the setting of the LOGON option, different icons are displayed for Server:</p> <p> LOGON = No</p> <p> LOGON = Yes</p> <p>See also LOGON Option below.</p>
	Library	The name of the library to which your client application is currently logged on. SYSTEM is also allowed.
	Service (Subprogram)	The name of the remote subprogram to be accessed from the client.

Root Node Names

Below are the names of root nodes that may occur if the subprograms or files which are required by the Service Directory Maintenance function are missing, an explanation of what is missing, and instructions on changing the root node to Service Directory [*library-name*].

Node Name	Reason	Resolution
Service Directory from NATCLTGS [library-name]	The file SERVDIRX is missing. This is indicated by the icon  .	From the Options menu choose Save As or, modify any of the tree node items and choose Save. SERVDIRX is generated into the Text directory and the name of the root node changes.
Example Service Directory	The subprogram NATCLTGS and the file SERVDIRX are missing.	From the Options menu choose Save As or, modify any of the tree node items and choose Save. NATCLTGS and SERVDIRX are generated into the Subprograms and Text directory respectively and the name of the root node changes.
An empty tree	NATCLTGS, SERVDIRX and the DEF-GS example data (subprogram delivered in the Natural system library SYSRPC) are missing.	<ol style="list-style-type: none"> 1. Create at least one new item for Node and Server. 2. Save the modifications. NATCLTGS and SERVDIRX are generated into the Subprograms and Text directory respectively.

Example of Service Directory



In the Example Directory above, two servers are defined for one node. Both servers are connected to the same node: ETB045. The remote CALLNAT to Subprogram SUB1 is executed on Server NRPC001, whereas Subprograms SUB2, SUB3 and SUB4 are executed on Server NRPC002.

The server names specified here must be identical to the server names used in the Natural parameter module of the server tasks (parameter SRVNAME: see Profile Parameters in the Natural Parameter Reference documentation). Analogously, the node name in the service directory must be identical to the node name specified for the server tasks

(parameter SRVNODE: see Profile Parameters in the Natural Parameter Reference documentation).

The Service Directory tree provides a maximum of 500 lines for input.

LOGON Option

If the LOGON option is set, the client initiates a Natural logon to the server with the library name of the current library on the client, regardless of the library specified in the Service Directory.

After the remote CALLNAT has been executed (successfully or not), the server library is reset to its previous state. For more information, see Using the Logon Feature in the Natural RPC documentation.

The LOGON can be set on server or node level and applies to all definitions made on a hierarchically lower level. For example, if the LOGON option has been set for a certain server, it applies to all associated library and subprogram definitions.

To set a LOGON

- In the Service Directory tree, right-click the name of a Node or Server and select LOGON Option.
- Choose Yes to initiate the client's logon to the server.
(The default is No.)

If the logon has been initiated successfully for the Node selected, the icon indicating a node changes from  to .

If the logon has been initiated successfully for the Server selected, the icon indicating a server changes from  to .