

Basic SYSRPC Functions

This section provides instructions for starting and terminating the SYSRPC utility and describes the main features and functions provided by the utility.

- Invoking SYSRPC
 - Terminating SYSRPC
 - Service Directory Tree
 - Menu Bar
 - Toolbar
 - Context Menu
-

Invoking SYSRPC

▶ To invoke the SYSRPC utility

1. From the library workspace in the Natural Studio tree view, select a library.
2. From the **Tools** menu, choose **Configuration Tools** and **Remote Procedure Call**.

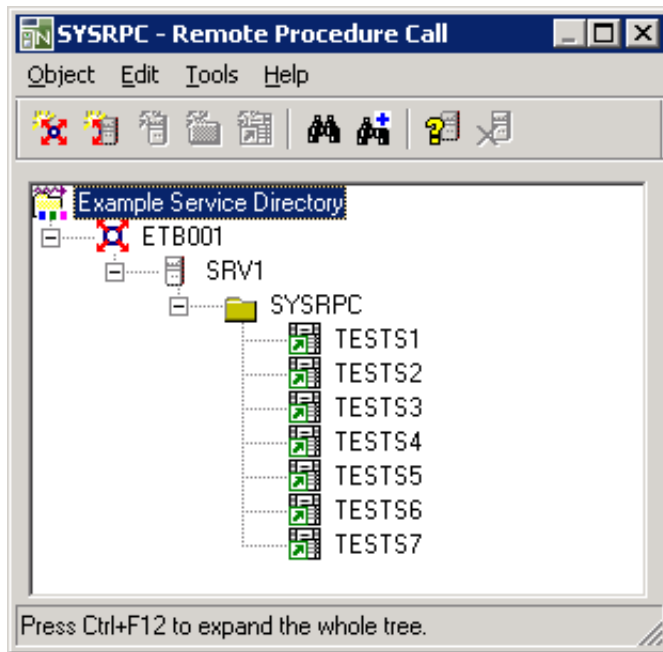
Or:

In the Command line, enter the following command:

```
SYSRPC
```

The **SYSRPC - Remote Procedure Call** window appears and displays the service directory tree view for the library specified. This is indicated in the name of the directory root node: **Service Directory [library-name]**.

When you invoke SYSRPC for the first time for a library, as shown in the example below, the tree view contains example (dummy) data. The name of the service directory root node is **Example Service Directory** which will change to **Service Directory [library-name]** when you use the **Save** or **Save As** function (see *Menu Bar* below), regardless of any tree view modifications. For a list of possible root names, see *Root Node Names* in the section *Service Directory Maintenance*.



The menus and toolbar buttons in the **SYSRPC - Remote Procedure Call** window provide all functions required to maintain a service directory, generate stub subprograms (interface objects) and execute server commands.

Terminating SYSRPC

▶ To terminate the SYSRPC utility

- In the **SYSRPC - Remote Procedure Call** window, from the **Object** menu, choose **Exit**.

Or:

Choose ALT+F4.

Or:

Choose the standard Windows close function.



If a window appears with a message saying that subprogram NATCLTGS is missing (needed at runtime), choose **Yes** to confirm the generation of NATCLTGS, or choose **No** to cancel the operation.


Service Directory Tree

The tree view in the **SYSRPC - Remote Procedure Call** window displays all items (tree nodes) required for service directory maintenance. For explanations of the tree nodes, see *Tree Nodes in Service Directory Maintenance*. For explanations of the tree node hierarchy, see *Service Directory Concept in Service Directory Maintenance*.

Do not confuse a tree node of the service directory with the node to which an RPC connection is established (see *Natural RPC Terminology* in the *Natural Remote Procedure Call* documentation).

You can manipulate the tree nodes by using the functions provided with the menu bar, the toolbar and the context menu described below.

You can expand or collapse tree nodes by choosing the toggle  (expand) or the toggle  (collapse) in front of a tree node. Alternatively, you can choose the ARROW keys. Double-click on an expandable tree node to display all subordinate items.

 **To expand all nodes of a tree**



- In the **SYSRPC - Remote Procedure Call** window, select the root node and choose **Expand Tree** from the context menu.

Or:

Choose CTRL+F12.










Menu Bar

The menus, menu items and equivalent shortcut keys (if available) provided to execute SYSRPC functions are described in the following section.

Menu	Menu Item and Shortcut	Explanation
Tools	Ping CTRL+F9	Sends an internal message to verify server connections described in the section <i>Server Command Execution</i> . Corresponding toolbar button: 
	Terminate Server	Sends an internal message to terminate server connections as described in the section <i>Server Command Execution</i> .
	Terminate EntireX Broker Service	Requests termination of an EntireX Broker service as described in the section <i>Server Command Execution</i> . Corresponding toolbar button: 
	Single Stub Generation CTRL+F8	Generates single stub subprograms (interface objects) as described in <i>Generating Single Stubs with Parameter Specification</i> in the section <i>Stub Generation</i> .
	Stub Mass Calculation CTRL+F5	Performs calculations for size requirements of RPC calls as described in the section <i>Calculating Size Requirements</i> .
	Stub Mass Generation CTRL+F6	Generates single or multiple stub subprograms (interface objects) online or batch as described in <i>Using the Stub Mass Generation Function</i> in the section <i>Stub Generation</i> .
	Stub Generation from IDL CTRL+F7	Generates stub subprograms (interface objects) or parameter data areas (PDAs) from IDL files as described in <i>Generating Stubs or PDAs from IDL Files</i> in the section <i>Stub Generation</i> .
Help		Displays SYSRPC help text: SYSRPC Utility - Overview Server Command Execution (Ping, Terminate) Expiration Time Logon Option Transport Protocol Location Transparency Service Directory Tree Generating Single Stubs with Parameter Specification Generating Multiple Stubs Generating Stubs or PDAs from IDL Files Calculating Size Requirements

Toolbar

The toolbar buttons that provide quick access to frequently used SYSRPC functions are described in the following section.

Toolbar Button	Function
	Adds a new tree node item. See also the corresponding menu: Edit > New Item > Node .
	Adds a new logical service (EntireX) item. See also the corresponding menu: Edit > New Item > Logical Service (EntireX) .
	Adds a new RPC server item. See also the corresponding menu: Edit > New Item > RPC Server .
	Adds a new library item. See also the corresponding menu: Edit > New Item > Library .
	Adds a new service (subprogram) item. See also the corresponding menu: Edit > New Item > Service (Subprogram) .
	Finds a character string. See also the corresponding menu: Edit > Find .
	Finds the next character string. See also the corresponding menu Edit > Find Next .
	Pings RPC servers. See also the corresponding menu: Edit > Ping .
	Terminates an EntireX Broker service. See also the corresponding menu: Edit > Terminate EntireX Broker Service .

Context Menu

The context menu provides alternative ways of executing the commands and functions provided by the menus and the toolbar in the **SYSRPC - Remote Procedure Call** window.

In addition, the context menu provides the following:

- the command **Expand Tree** (described earlier in *Service Directory Tree*),
- the **Logon Option** (see *Service Directory Maintenance*) and
- the option to specify the **Transport Protocol** (see *Service Directory Maintenance*).