

SYSRPC - Service Directory Maintenance

Only applicable to Natural RPC Version 3.1.

The Service Directory Maintenance function is used to maintain a service directory in order to connect the client's calling program to a subprogram on a server. The service information is stored in the subprogram NATCLTGS.

Attention:

NATCLTGS is stored in the library SYSRPC. We strongly recommend that you move the generated subprogram NATCLTGS to the application library (or one of its STEPLIBs) used by the server.

For further information on how to apply the Service Directory Maintenance function refer to Specifying RPC Server Addresses as described in Operating a Natural RPC Environment in the Natural RPC documentation.

This section covers the following topics:

- Invoking Service Directory Maintenance
 - Fields
 - Commands and PF Keys
-

Invoking Service Directory Maintenance

Attention:

The Service Directory Maintenance function invokes the Natural editor. As a result, data stored in the source work area may be lost when invoking Service Directory Maintenance. A corresponding message will warn you not to delete any existing entries unintentionally: choose PF12 to cancel the function or choose ENTER to confirm the action and clear the source work area.

 **To invoke the Service Directory Maintenance function**

1. In the Code field of the Client Maintenance screen, enter **SM**.
A window appears saying "Existing service definitions found" (does not appear if the Service Directory is empty).
2. In the Code field, enter **A** (default) to append a new definition,
Or enter **I** to ignore existing services (all existing service definitions will be deleted).
The Service Directory screen, similar to the one below, is displayed:

```

10:56:08          *** NATURAL Remote Procedure Call ***          2001-03-09
                    Service Directory                               SYSRPC

      NODE          SERVER          LIBRARY          PROGRAM          LOGON
1      ETB045_____          _____          _____          _____          -
2      _____          NRPC001_          _____          _____          -
3      _____          _____          SYSTEM_____          _____          -
4      _____          _____          _____          SUB1_____          -
5      _____          NRPC002_          _____          _____          -
6      _____          _____          SYSTEM_____          _____          -
7      _____          _____          _____          SUB2_____          -
8      _____          _____          _____          SUB3_____          -
9      _____          _____          _____          SUB4_____          -
10     _____          _____          _____          _____          -
11     _____          _____          _____          _____          -
12     _____          _____          _____          _____          -
13     _____          _____          _____          _____          -
14     _____          _____          _____          _____          -
15     _____          _____          _____          _____          -
16     _____          _____          _____          _____          -

-----
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit      -H      +H      -P      +P      TOP      BOT      Canc

```

The Service Directory Maintenance has a hierarchical structure with a cascading list to assign subordinate to superior fields. The highest hierarchical level is node and the lowest program. You cannot enter node, server, library and program in the same line. If you do so, a corresponding error message occurs. You need to enter the value of a subordinate field in the lines below the superior field. You can assign several servers to a node, several libraries to a server and several programs to a library.

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

On the Service Directory screen 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: see the parameter SRVNAME in NTRPC Macro 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: see the parameter SRVNODE in NTRPC Macro in the Natural Parameter Reference documentation.

Fields

The Service Directory screen contains the following input fields (one entry per line):

Field	Description
NODE	The name of the node to which the remote CALLNAT is sent. See also Definition of Terms in the Natural RPC documentation.
SERVER	The name of the server on which the CALLNAT is to be executed. See also Definition of Terms in the Natural RPC documentation.
LIBRARY	The name of the library on which your client application is running. SYSTEM is also allowed.
PROGRAM	The name of the remote subprogram to be accessed from the client.
LOGON	<p>Initiates a Natural logon to the server.</p> <p>This is possible on server or node level and applies to all definitions made on a hierarchically lower level.</p> <p>For example, if the LOGON option has been set for a certain server, it applies to all associated library and subprogram definitions.</p> <p>Possible values are:</p> <p>Y If set to Y (Yes), 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.</p> <p>N If set to N (No) or, if no value is entered, no logon is initiated.</p> <p>blank</p> <p>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.</p> <p>See also Server Command Execution.</p>

Commands and PF Keys

Below is information on:

- Line Commands
- Direct Commands and PF Keys

Line Commands

The line commands available to edit the Service Directory screen are listed below.

Enter a line command at the beginning of a line, that is, overwrite the sequential number and press ENTER.

See also To copy or move a block of lines below and the direct command RESET.

Line Command	Function
A	Copies/moves the block of line marked with CC or MM (see below) below the line in which the command was entered.
CC	Delimits a block of lines to be copied.
D	Deletes the line marked.
DD	Delimits and deletes a block of lines. Delimit a block of lines by entering the command in the first and the last line of the block and press ENTER to execute the command.
I	Inserts five empty lines below the line in which the command was entered.
MM	Delimits a block of lines to be moved.
P	Copies/moves the block of lines marked with CC or MM above the line in which the command was entered.

To copy or move a block of lines

1. At the beginning of the line where the block starts, enter CC or MM.
2. At the beginning of the line where the block ends, enter CC or MM.
3. Press ENTER.
The line commands disappear, the sequence numbers are displayed again and the block has been marked.
4. Go to the beginning of the line where you want to place the block and enter A (after) to copy or move the block **below** this line.
Or enter P (prior) to copy or move the block **above** this line.
Note that you can only execute A or P on lines with at least one field filled.
5. Press ENTER.

Direct Commands and PF Keys

The following direct commands and PF keys are available in the Service Directory screen:

Direct Command	PF Key	Function
RESET		Resets the marks set with the line commands CC, MM and DD as described in Line Commands above. Note that you must first remove the erroneous line command(s) entered.
	PF1	Help. Invokes the editor online help for the Service Directory
	PF3	Prompts you to save modifications and exit the Service Directory screen.
	PF12	Cancel. Exits the Service Directory screen without saving any modification.
+P	PF8	Scrolls one page forward/backward.
-P	PF7	
+H	PF6	Scrolls half a page forward/backward.
-H	PF5	
TOP	PF9	Scrolls to the beginning of the list.
BOT	PF10	Scrolls to the end of the list.

