

Server Command Execution

The SYSRPC utility provides the server execution commands ping and terminate. They are used to control active servers that have been defined in the service directory. The ping command sends an internal message to the server to verify a server connection. Terminate either sends an internal message to the server requesting termination of a single server task, or issues a command to EntireX Broker requesting termination of all server tasks associated with an EntireX Broker service.

The server execution commands reference the service directory in the library that is defined with the RPCSDIR profile parameter (see the *Parameter Reference* documentation). If RPCSDIR is not set (this is the default), the library where you are currently logged on is used. The name of the library is indicated in the root node of the service directory tree view.

In addition, when a ping or a terminate command is issued, the **Message Display** window appears that displays the following:

- Physical node and server names defined for a logical service, or
- Physical node names defined for logical nodes.

This section covers the following topics:

- Message Display Window
 - Pinging a Server
 - Terminating a Server
-

Message Display Window

The ping and terminate commands invoke the **Message Display** window. This window provides the columns **Message**, **Node** and **Server** that display the message returned from the server and the physical name of the node and the server selected (see the instructions below).

Physical names are also displayed for logical specifications: a logical node name is resolved into the physical node name and a logical service is resolved into the physical node and server name as defined in the service directory.

However, logical specifications will *not* be resolved if the following applies:

- **Logical service:**
The pinged or terminated logical service is not active, or the physical node(s) and server(s) defined for the logical service have not been defined in the Location Transparency directory of EntireX Broker. In this case, the **Message Display** window displays a corresponding message from the server, the term *LOCTRAN in the **Node** column and the logical service name (as defined in the service directory) in the **Server** column.
- **Logical node:**
The pinged or terminated logical node is not active, or the physical node defined for the logical node has not been defined in the Location Transparency directory of EntireX Broker. In this case, the **Message Display** window displays a corresponding message from the server and the entry

LOGBROKER= *node-name* (as defined in the service directory) in the **Node** column.

Pinging a Server

The following section provides instructions for pinging an RPC server by using menu functions.

For an alternative method of pinging an RPC server, see the Application Programming Interface USR2073N described in the *Natural Remote Procedure Call (RPC)* documentation.

To ping a server

- In the **Service Directory** tree view, select a server or a node and choose **Ping** from the context menu.

Or:

Choose CTRL+F9.

Or:

Choose the following toolbar button:



Selecting an EntireX Broker node will ping all servers that belong to this node.

The **Message Display** window appears and displays the physical names of the node(s) and server(s) and the message returned from the server(s).

If the pinged server(s) are active, the server(s) return the message:

Server V.R.S.PL on operating system

where *Server* denotes the type of server;

V.R.S.PL denotes the 1-digit version *V*, the 1-digit release *R*, the 1-digit system maintenance level *S*, and the 1- or 2-digit patch level *PL* of the server;

operating system denotes on which operating system the server runs.

Example message: Natural RPC Server 6.3.1.0 on WNT-x86.

Terminating a Server

The SYSRPC utility provides two commands to terminate a server: **Terminate Server** and **Terminate EntireX Broker Service**.

Terminate Server terminates a single server task by sending an internal message to the server. If a server is associated with multiple server tasks (including replicas on mainframe platforms), you can either terminate each server task separately by using **Terminate Server**, or terminate all server tasks in one go by using the **Terminate EntireX Broker Service** command.

Terminate EntireX Broker Service terminates all server tasks associated with an EntireX Broker service by calling EntireX Broker's Command and Information Services (ETBCIS; for details, see the EntireX documentation). The term *service* here summarizes all server tasks that run with the same server name on the same or on different platforms.

The following section provides instructions for terminating a single server task or an EntireX Broker service by using menu functions.

For alternative methods of terminating servers, see *Terminating a Natural RPC Server* and the Application Programming Interface USR2073N, and *Terminating the EntireX Broker Service* and the Application Programming Interface USR2075N described in the *Natural Remote Procedure Call (RPC)* documentation.

▶ To terminate a single server task

1. In the **Service Directory** tree view, select a server node and choose **Terminate Server** from the context menu.

The **Message Display** window appears with the name of the node and the server, and the message returned from the server.

If a server is terminated, the server returns the following message:

```
Terminating Server V.R.S.PL on operating system
```

where *Server* denotes the type of server;

V.R.S.PL denotes the 1-digit version *V*, the 1-digit release *R*, the 1-digit system maintenance level *S*, and the 1- or 2-digit patch level *PL* of the server;

operating system denotes on which operating system the server runs.

Example message: Terminating Natural RPC Server 6.3.1.0 on WNT-x86.

2. If the **Logon Option** is set in the service directory, logon data (user ID, password and library name) is sent to the server with the terminate command, as is usual for the CALLNAT. The **Security Token Data** window pops up and requests user ID and password if no Natural Security is installed on the client side and no logon data is set with the Application Programming Interface USR1071N for the current Natural session.

If LOGONRQ=ON (see also *Using Security* in the *Natural Remote Procedure Call (RPC)* documentation) has been set on the server side, logon data must be sent from the client with the terminate command.

If Natural Security is installed on the server, the logon data transferred must enable a logon to the Natural system library SYSRPC.

▶ To terminate an EntireX Broker service

1. In the **Service Directory** tree view, select a server node and choose **Terminate EntireX Broker Service** from the context menu.

Or:

Choose the following toolbar button:



The **SYSRPC - Terminating EntireX Broker Service** dialog box appears.

2. If required for the logon, enter the appropriate user ID and password for EntireX Broker.

If you want to terminate server tasks that are involved in a conversation, select the **Terminate immediately** check box to request immediate termination. If this check box is not selected (this is the default setting), all server tasks involved in a conversation remain operational.

If you do not want this dialog box to appear repeatedly during the current SYSRPC session, choose **Do not show this dialog again**.

3. Choose **OK** to terminate the EntireX Broker service.

The **Message Display** window appears, which displays the name of the node and the server and the number of server tasks terminated.