

Novell NetWare® 6.5

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February 28, 2005

REMOTE SERVER MANAGEMENT
ADMINISTRATION GUIDE



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NetWare 6.5 Remote Server Management Administration Guide
[February 28, 2005](#)

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About This Guide

This guide includes information about understanding, setting up, and managing the Remote Console utility (RConsoleJ).

RConsoleJ lets you use a network workstation to control and manage a remote NetWare[®] server. You can lock servers in a safe place, remove keyboards and monitors, and then start a remote control session from a workstation whenever you need to access a server's console.

This guide contains the following sections:

- ♦ [Chapter 1, “Overview,” on page 9](#)
- ♦ [Chapter 2, “What’s New,” on page 11](#)
- ♦ [Chapter 3, “Setting Up RConsoleJ,” on page 13](#)
- ♦ [Chapter 4, “Managing NetWare Servers Remotely,” on page 21](#)

Documentation Updates

For the most recent version of the *Remote Server Management Administration Guide*, see the [NetWare 6.5 Documentation Web site \(http://www.novell.com/documentation/nw65/sman_enu/data/hw63v9ob.html\)](http://www.novell.com/documentation/nw65/sman_enu/data/hw63v9ob.html).

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In this documentation, a greater-than symbol (>) is used to separate actions within a step and items within a cross-reference path.

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When a single pathname can be written with a backslash for some platforms or a forward slash for other platforms, the pathname is presented with a backslash. Users of platforms that require a forward slash, such as Linux* and UNIX*, should use forward slashes as required by your software.

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1

Overview

NetWare® 6.5 provides Java*-based remote console utility (RConsoleJ) that lets you control a NetWare server from a workstation and perform the following tasks:

- ◆ Use console commands as you would at the server console
- ◆ Use NLM™ programs as you would at the server console (for example, edit.nlm to edit files)
- ◆ Send console commands in the server's native language from the RConsoleJ Client using Buffer Input.
- ◆ Control the server from another server using RConsoleJ
- ◆ Upgrade a NetWare server (text-based UI only)
- ◆ Use Secure Socket Layer (SSL) based secure session

RConsoleJ Components

Before setting up RConsoleJ, you should understand the RConsoleJ components. The following RConsoleJ components interact with each other to help you remotely control a NetWare server:

- ◆ [RConsoleJ Client \(page 9\)](#)
- ◆ [RConsoleJ Agent \(page 9\)](#)
- ◆ [RConsoleJ Proxy Agent \(page 10\)](#)

RConsoleJ Client

The RConsoleJ Client is a Java-based utility running on a Java-enabled workstation or NetWare server. From the RConsoleJ Client you can remotely control and monitor all NetWare console operations.

RConsoleJ Agent

The RConsoleJ Agent (rconag6.nlm) is a utility running on the target NetWare server. The target NetWare server can be connected over IP, IPX™, or IP/IPX running the RConsoleJ Agent. The RConsoleJ Agent services all RConsoleJ Client requests.

The RConsoleJ Agent advertises its services using Service Location Protocol (SLP) on NetWare 5.x and later.(make change to nw65 book)

RConsoleJ Proxy Agent

The RConsoleJ Proxy Agent (rconprxy.nlm) is a utility running on a NetWare server (supported only on NetWare 5.x and later). It routes all IP packets to IPX and vice versa.

The RConsoleJ Proxy Agent advertises its services using Service Location Protocol (SLP).

IMPORTANT: If the target NetWare server uses only IPX, the NetWare server (loaded with the RConsoleJ Proxy Agent) must have both IP and IPX stacks installed.

2

What's New

This section includes the features that were updated in the Remote Server Management for NetWare® since its release in NetWare 6.0:

- ◆ You can send lengthy console commands to the server using the new Buffer Input utility. You can also send commands in the server's native language using Buffer Input.

See [“Sending Console Commands in the Server's Native Language” on page 21](#).

- ◆ It supports SSL-based secure session using the Secure IP connection option.

See [“Initiating a Secured IP Connection” on page 16](#).

For more information on SSL, see the [SSL documentation \(http://home.netscape.com/eng/ssl3/draft302.txt\)](http://home.netscape.com/eng/ssl3/draft302.txt).

- ◆ It supports Unsecure IP connection for backward compatibility with NetWare 5 and NetWare 6.

See [“Initiating an Unsecure IP Connection” on page 17](#).

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Setting Up RConsoleJ

This section contains the following sections:

- ♦ [“Loading Agents at Startup” on page 13](#)
- ♦ [“Loading the RConsoleJ Agent” on page 14](#)
- ♦ [“Running the RConsoleJ Client” on page 14](#)
- ♦ [“Loading the RConsoleJ Proxy Agent on a Proxy Server” on page 15](#)
- ♦ [“Initiating Remote Sessions Using RConsoleJ” on page 15](#)

Loading Agents at Startup

You can load either the RConsoleJ Agent or the RConsoleJ Proxy Agent when you start the server.

- ♦ [“Loading the RConsoleJ Agent at Startup” on page 13](#)
- ♦ [“Loading the RConsoleJ Proxy Agent at Startup” on page 14](#)

Loading the RConsoleJ Agent at Startup

You can load RConsoleJ Agent (rconag6.nlm) at startup using either of the following methods.

Using Encrypted Password (Recommended)

- 1 Create or change the ldrconag.ncf script file.
 - 1a At the System Console prompt, enter `rconag6 encrypt`.
 - 1b On the RConsoleJ Agent server screen, enter the password and port numbers when prompted.
 - 1c When prompted to save the displayed command to the `sys:system/ldrconag.ncf` file, type `y` and then press any key.
- 2 Prepare the autoexec.ncf file to run the ldrconag.ncf script file at startup.
 - 2a Comment out the following line:

```
load rconag6 user_defined_password_here 2034 16800 2036
```
 - 2b Add the following line:

```
ldrconag
```

Using Plain Text Password

Add the following line to the autoexec.ncf file:

```
load rconag6 user_defined_password 2034 16800 2036
```

Loading the RConsoleJ Proxy Agent at Startup

To load the RConsoleJ Proxy Agent (rconprxy.nlm) at the startup, enter the following line in the autoexec.ncf file:

```
load rconprxy 2035
```

Loading the RConsoleJ Agent

If you didn't load the RconsoleJ Agent when you started the server, you can use this procedure to do it.

- 1 At the System Console prompt, enter

```
RCONAG6
```

- 2 Enter the password you want network administrators to use when accessing the target NetWare server using RConsoleJ.

- 3 Enter the TCP port number.

The default value is 2034.

If the server communicates using IPX only, enter **-1** to disable TCP listening.

To enable listening over a dynamically assigned port, enter **0**.

- 4 Enter the SPX™ port number on which RCONAG6 will listen for a proxy server.

The default is 16800.

If the server communicates using IP only, enter **-1** to disable SPX listening.

To enable listening over a dynamically assigned port, enter **0**.

NOTE: /DEV/TCP and /DEV/TCPSSL will fail if you are using a pure IPX server.

To enable RconsoleJ across the firewall, keep the following ports open: 2034, 2035, and 2036.

- 5 Enter the TCP port number for the secure session.

The default is 2036.

Ensure the Key Material Object named SSL CertificateDNS has been created.

NOTE: The Secure connection is available only on IP and not on IPX.

Running the RConsoleJ Client

You can run the RConsoleJ from a workstation or from a NetWare® server to connect to and manage a different server.

- ♦ [“Running the RConsoleJ Client from a Workstation” on page 14](#)
- ♦ [“Running the RConsoleJ Client on a NetWare Server” on page 15](#)

Running the RConsoleJ Client from a Workstation

You can run the RConsoleJ Client on a workstation using either of the following methods:

- ♦ From a Windows* 2000/XP workstation, ensure you have a drive mapped to the root of volume sys: on the NetWare server. From the Windows desktop, browse to *ConsoleOne_installation_directory\1.2* and run rconj.exe.

- ◆ In ConsoleOne[®], right-click the NetWare Server object that you want to remotely control and click Remote Console, or click the NetWare Server object and then from the Tools menu select Remote Console.

Running the RConsoleJ Client on a NetWare Server

You can run the RConsoleJ Client on a NetWare server using any of the following methods:

- ◆ In ConsoleOne, right-click the NetWare Server object that you want to remotely control and click Remote Console, or click the NetWare Server object and then from the Tools option click Remote Console.
- ◆ At the System Console prompt, enter `rconj.ncf`.
- ◆ At the server GUI, click Novell > Programs > RConsoleJ.

Loading the RConsoleJ Proxy Agent on a Proxy Server

When the NetWare server is running the RConsoleJ Proxy Agent, the RConsoleJ Client can communicate through it with the target NetWare server that uses only IPX™ to communicate.

If you didn't load the RconsoleJ Proxy Agent when you started the server, you can use this procedure to load it.

- 1** Make sure an IP/IPX stack is loaded.
- 2** At the System Console prompt, enter the following command:
`rconprxy`
- 3** Enter the TCP port number where RCONPRXY will listen for RConsoleJ.
The default is 2035.
To enable listening over a dynamically assigned port, enter 0.

Initiating Remote Sessions Using RConsoleJ

The information in this section can help you initiate remote sessions using RConsoleJ in the following scenarios:

- ◆ [“Scenario 1: An IP Client Controlling an IP or IP/IPX NetWare Server” on page 15](#)
- ◆ [“Scenario 2: An IP Client Controlling an IPX NetWare Server” on page 17](#)

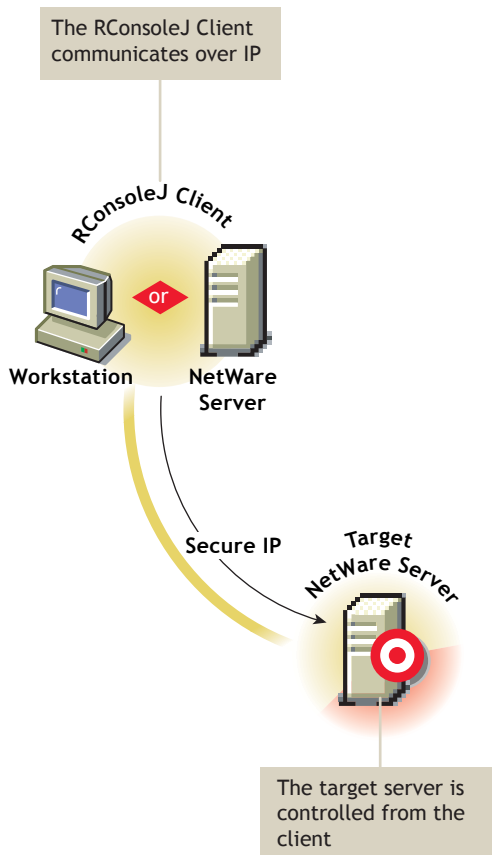
Scenario 1: An IP Client Controlling an IP or IP/IPX NetWare Server

Prerequisites

- [“Loading the RConsoleJ Agent” on page 14](#)
- [“Running the RConsoleJ Client” on page 14](#)

Initiating a Secured IP Connection

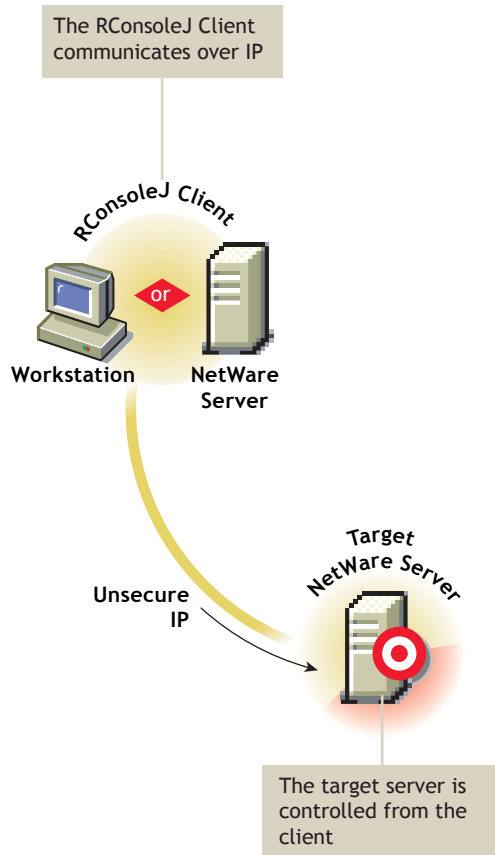
The RConsoleJ Client communicates directly with the RConsoleJ Agent using TCP/IP.



- 1** In the RConsoleJ Connection dialog box, select Secure IP.
- 2** Enter the IP address of the target NetWare server, or click the Remote Servers icon and then select the target NetWare server from the list.
- 3** Enter the password provided during loading of the RConsoleJ Agent on the target server.
- 4** Enter the port number.
The default is 2036.
- 5** Click Connect.
- 6** To ensure server authentication, read the Untrusted Certificate Verification server certificate issued by the target server and click OK to accept.

Initiating an Unsecure IP Connection

The RConsoleJ Client communicates directly with the RConsoleJ Agent using TCP/IP.



- 1** In the RConsoleJ Connection dialog box, select Unsecure IP.
- 2** Select Connect Directly as the unsecure connection option.
- 3** Enter the IP address of the target NetWare server, or click the Remote Servers icon and then select the target NetWare server from the list.
- 4** Enter the password provided during loading the RConsoleJ Agent.
- 5** Enter the port number.
The default is 2034.
- 6** Click Connect.

Scenario 2: An IP Client Controlling an IPX NetWare Server

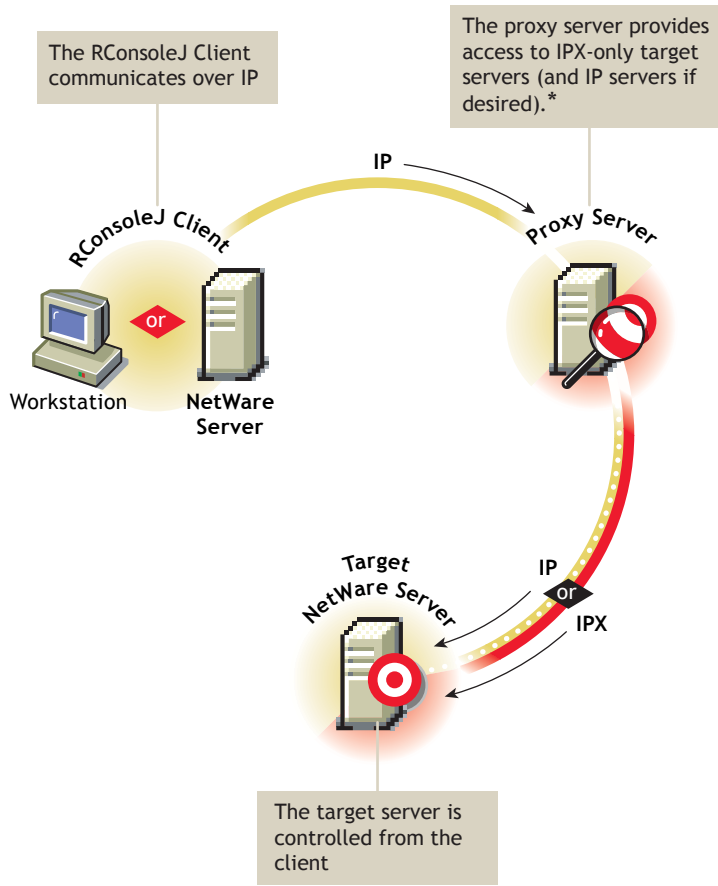
Prerequisites

- “Loading the RConsoleJ Agent” on page 14
- “Running the RConsoleJ Client” on page 14
- “Loading the RConsoleJ Proxy Agent on a Proxy Server” on page 15

Initiating an IPX Connection

The RConsoleJ Client communicates with the RConsoleJ Agent through RConsoleJ Proxy Agent because the target NetWare server is based purely on IPX.

The RConsoleJ Proxy Agent is loaded on a NetWare server (proxy server) that has both IP and IPX stacks loaded. The RConsoleJ Proxy Agent receives all the IP requests from the RConsoleJ Client, converts them to IPX requests, and then sends them to the RConsoleJ Agent and vice-versa.



*If the target server uses IPX, the proxy server must have both IP and IPX stacks loaded.

- 1** In the RConsoleJ Connection dialog box, select Unsecure IP.
- 2** Select Connect Via Proxy as the unsecure connection option.
- 3** From the Connect Type drop-down list, select Connect through Proxy.
- 4** Type the IP/IPX address of the target NetWare server, or select SPX™ to get the IPX address and TCP to get the IP address.
- 5** Make sure the appropriate default port is selected after specifying the IPX or IP address.
The default is 16800 for IPX and 2034 for IP.
- 6** Specify the IP address of the proxy server, or click the Remote Servers icon and then select a proxy server from the list.
- 7** Type the port number that was specified during the loading of the RConsoleJ Proxy Agent.

The RConsoleJ Client communicates with the RConsoleJ Proxy Agent on this port.

The default is 2035.

- 8** Click Connect.

4

Managing NetWare Servers Remotely

After RConsoleJ establishes connections with the NetWare[®] server, you can view and manage the target NetWare server from your desktop or remote server.

The following sections explain the tasks you can perform to effectively manage a remote NetWare Server.

- ◆ “Sending Console Commands in the Server’s Native Language” on page 21
- ◆ “Synchronizing RConsoleJ Client and Target NetWare Screens” on page 22
- ◆ “Changing the Password of the RConsoleJ Agent” on page 22

Sending Console Commands in the Server’s Native Language

You can send console commands in the server’s native language from the RConsoleJ Client using Buffer Input as shown in the following graphic. The buffer stores a list of ten history commands.



To send console commands:

- 1 From the Novell[®] RConsoleJ Client window, enter the command that you want to run at the target server in the Buffer Input field.
- 2 Click Send.

Synchronizing RConsoleJ Client and Target NetWare Screens

You can synchronize the screen displayed on the target NetWare server and the screen displayed on the RConsoleJ Client with each other. Switching the screen in the RConsoleJ Client switches the screen at the target server console and vice versa.

To synchronize the screens, from the Novell RConsoleJ window, click Sync.

To switch the screen on the server console to the currently activated screen on the RConsoleJ Client, click Activate.

Changing the Password of the RConsoleJ Agent

You can change the agent password to ensure that RConsoleJ sessions are secure.

To change the agent password for a remotely managed NetWare server, doing the following at the System Console prompt:

- 1** Enter `unload rconag6`.
- 2** Enter `rconag6 encrypt`.
- 3** Enter a new password.
- 4** Enter the TCP port number.
The default is 2034.
- 5** Enter the SPX port number.
The default is 16800.
- 6** Enter the TCP port number for the secure session.
The default is 2036
- 7** When prompted to write the displayed load command to the `ldrconag.ncf` file, type **y** and then press any key.

If you type **y**, the `ldrconag.ncf` file is updated and the new password will be in effect when the agent is loaded from the command in the `ldrconag.ncf` script file after you reboot the server.

If you type **n**, the `ldrconag.ncf` file is not updated. The new password is valid only for the current session. At a later time, if you load RCONAG6 from the `ldrconag.ncf` file later, the previously saved password will be used.

A Documentation Updates

The following updates were made to this guide for NetWare® 6.5 Support Pack 3:

Location	Change
Chapter 3, "Setting Up RConsoleJ," on page 13	Changed document title to distinguish the utility for running on NetWare only, updated the "About This Guide" and "Overview" information to match current style guidelines, and added introductory paragraphs to several sections.
"Managing NetWare Servers Remotely" on page 21	Added Changing the Password of the RConsoleJ Agent procedures.
Overall document	Updated the information About This Guide and Overview to match current style guidelines and added introductory paragraphs to several sections.

