

# IV

## Remote Management

Novell® ZENworks® for Servers (ZfS) Remote Management gives you the ability to manage remote servers from the management console. You can use ZfS to remotely manage NetWare® 4.2/5.x/6 or Windows\* NT\*/2000 servers.

The Remote Management Agent is installed on each NetWare and Windows server that you want to remotely manage. NetWare 5.1 or 6 provides a Java\*-based remote console utility that lets you use a network server manage a remote NetWare server.

Remote Management can save you and your organization time and money. For example, you or your organization's help desk can analyze and remotely fix server problems without having to visit the server, which reduces problem resolution times and increases productivity.

This documentation contains following sections:

- ♦ [Chapter 31, “Remote Management for NetWare Servers,” on page 861](#)
- ♦ [Chapter 32, “Remote Management for Windows NT/2000 Servers,” on page 867](#)
- ♦ [Chapter I, “Documentation Updates,” on page 885](#)



# 31

## Remote Management for NetWare Servers

The Java\* -based remote console utility (RConsoleJ) for Novell® ZENWorks for Servers (ZfS) lets you control a NetWare® server 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)
- ♦ Control the server from another server that is using RConsoleJ
- ♦ Upgrade a NetWare server (text-based UI only)

This section contains the following topics:

- ♦ [“Introduction” on page 861](#)
- ♦ [“Deploying” on page 862](#)

### Introduction

ZfS RConsoleJ has the following components. These components interact with each other during the remote control session of a NetWare server:

- ♦ [“RConsoleJ Client” on page 861](#)
- ♦ [“RConsoleJ Agent” on page 861](#)
- ♦ [“RConsoleJ Proxy Agent” on page 861](#)

### RConsoleJ Client

The RConsoleJ Client is a Java-based utility running on the workstation. 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 the Service Location Protocol (SLP) on a NetWare 5.x and up box.

### RConsoleJ Proxy Agent

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

The RConsoleJ Proxy Agent advertises its services using the 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.

## Deploying

Before you install RConsoleJ, ensure that all the installation prerequisites for Remote Control are met.

- ◆ “Setting Up RConsoleJ” on page 862
- ◆ “Initiating RConsoleJ” on page 863
- ◆ “Setting Up Security for RConsoleJ” on page 866

## Setting Up RConsoleJ

To set up RConsoleJ, complete the following sections:

- ◆ “Loading the RConsoleJ Agent” on page 862
- ◆ “Running the RConsoleJ Client” on page 862
- ◆ “Loading the RConsoleJ Proxy Agent on a Proxy Server” on page 863

### Loading the RConsoleJ Agent

**1** At the server 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, you need to keep the following ports open: 2034, 2035, and 2036.

### Running the RConsoleJ Client

To run the RConsoleJ Client on a server,

**1** From ConsoleOne®, select the target NetWare server object.

**2** Click the Tools menu > Remote Management > NetWare.

The Novell RConsoleJ dialog box is displayed.

## Loading the RConsoleJ Proxy Agent on a Proxy Server

The NetWare server loaded with RConsoleJ Proxy Agent should have an IP/IPX stack loaded.

- 1 At the server console prompt, enter the following command:

```
RCNPRXY
```

- 2 Enter the TCP port number on which RCNPRXY will listen for RConsoleJ.

The default is 2035.

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

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.

## Initiating RConsoleJ

This section will help you initiate RConsoleJ in the following scenarios:

- ◆ “Scenario 1: An IP Client Controlling an IP NetWare Server” on page 863
- ◆ “Scenario 2: An IP Client Controlling an IPX NetWare Server” on page 864

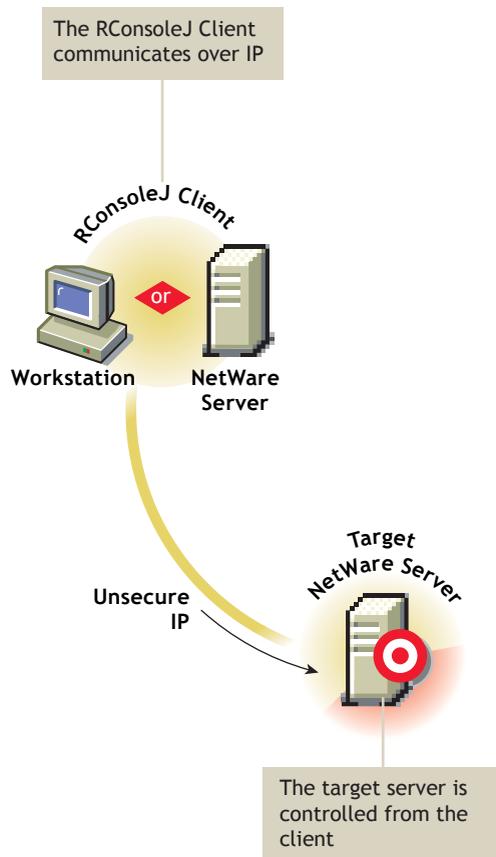
### Scenario 1: An IP Client Controlling an IP NetWare Server

#### Prerequisites

- ◆ “Loading the RConsoleJ Agent” on page 862
- ◆ “Running the RConsoleJ Client” on page 862

#### Starting an IP Connection

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



To start an IP connection:

When you run the RConJ client from ConsoleOne, the Novell RConsoleJ dialog box will be displayed with the Netware Server IP address. To run the RConsoleJ client, see [“Running the RConsoleJ Client” on page 862](#).

- 1** Enter the password specified during loading the RConsoleJ Agent.
- 2** Enter the port number.  
The default is 2034.
- 3** Click Connect.

## Scenario 2: An IP Client Controlling an IPX NetWare Server

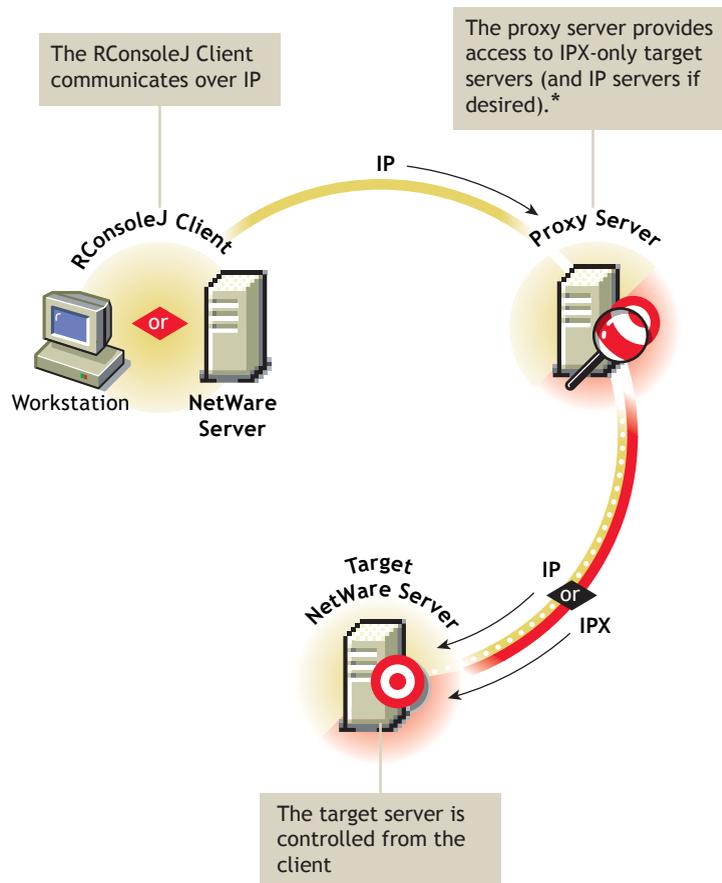
### Prerequisites

- ◆ [“Loading the RConsoleJ Agent” on page 862](#)
- ◆ [“Running the RConsoleJ Client” on page 862](#)
- ◆ [“Loading the RConsoleJ Proxy Agent on a Proxy Server” on page 863](#)

### Starting an IPX Connection

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

To start an IPX connection:

When you run the RConsoleJ client from ConsoleOne, the Novell RConsoleJ dialog box will be displayed with the Netware Server IP address. To run the RConsoleJ client, see [“Running the RConsoleJ Client” on page 862](#).

- 1** From the Connect type drop-down list, select Connect through Proxy. Select SPX to get the IPX address and select TCP to get the IP address.
- 2** The default port will be selected when you make the above change.  
The default is 16800 for IPX address and 2034 for IP address.
- 3** Enter the IP address of the proxy server, or click the Remote Servers icon and then select a proxy server from the list.
- 4** Enter the port number specified during loading the RConsoleJ Proxy Agent.  
The RConsoleJ Client communicates with the RConsoleJ Proxy Agent on this port.  
The default is 2035.
- 5** Click Connect.

## Setting Up Security for RConsoleJ

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

To change the agent password for a remotely managed NetWare server:

- 1** At the NetWare Console prompt, enter **unload rconag6** to unload RCONAG6.NLM.
- 2** Enter **load 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 **y** when prompted to save the following command line in the LDRCONAG.NCF file.

For Netware 4.x and 5.x:

```
LOAD RCONAG6 - E <encrypted password> <TCP port number> <SPX port number>
```

For Netware 6.x:

```
LOAD RCONAG6 - E <encrypted password> <TCP port number> <SPX port number> <Secure port number>
```

If you enter **n**, the LDRCONAG.NCF file will not be updated. The new password will be 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.

The new password will be in effect when the agent is loaded from the LDRCONAG script file.

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## Remote Management for Windows NT/2000 Servers

Novell® ZENworks® for Servers (ZfS) Remote Management allows you to remotely view, control, and manage Windows\* NT\*/2000 servers from your computer.

This chapter contains the following topics:

- ♦ “Remote Management Terminology” on page 867
- ♦ “Understanding Remote Management for Windows NT/2000 Servers” on page 867
- ♦ “Setting Up Security for Remote Management” on page 869
- ♦ “Managing Remote Windows NT/2000 Servers” on page 872

### Remote Management Terminology

The following brief glossary provides basic definitions of Remote Management terms:

**Managed server:** A NetWare® 4.2/5.x/6 or Windows NT/2000 server that you want to remotely view, control, or manage. To remotely view or control a server, you must install the ZfS 3 Remote Management Agent on it. If you want a secure Remote Management session, you must install the ZfS 3 Subscriber component on the managed server.

**Management console:** A Windows workstation or server running Novell ConsoleOne® with the ZfS 3 Remote Management ConsoleOne snap-ins installed. The management console provides the interface where you manage and administer your network.

**Management server:** A server with Novell eDirectory™ and the ZfS 3 Distributor components. The eDirectory and Distributor components must be installed only if you want a secure Remote Management session. Your management server can be a managed server or another server.

**Remote operator:** A user who can remotely view, control, and manage servers.

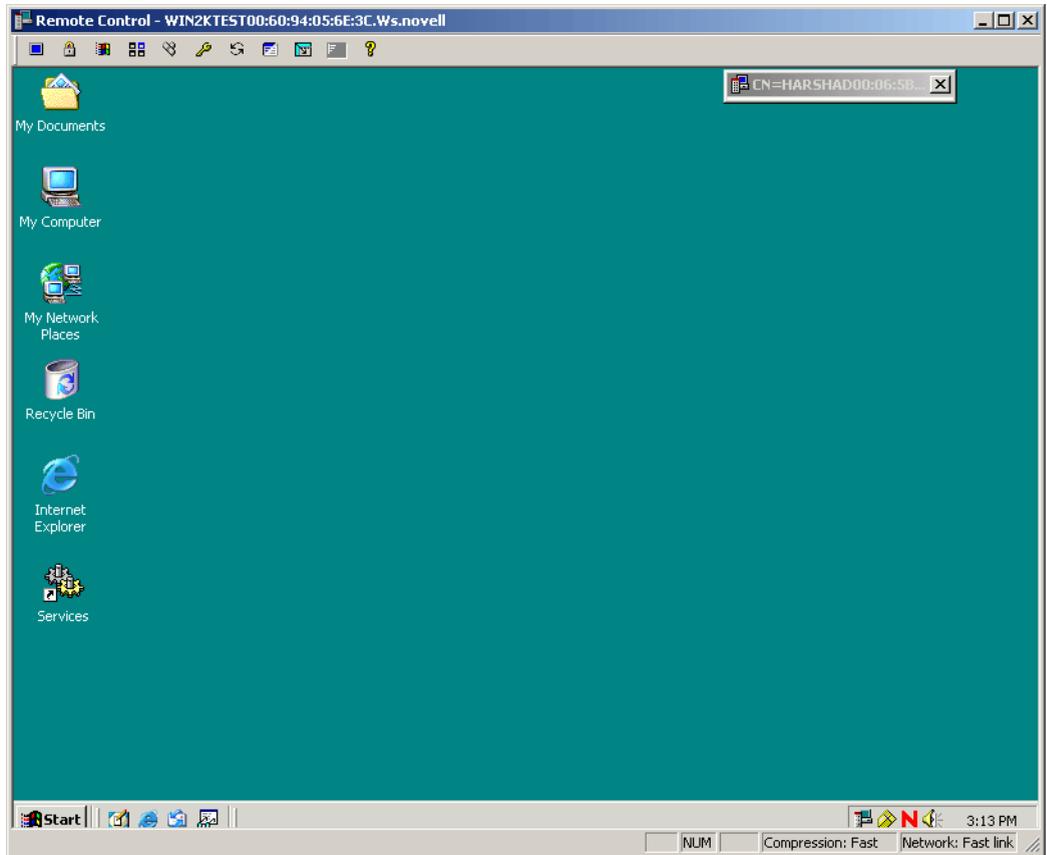
**Administrator:** A person who has the rights to install Remote Management. All administrators are remote operators but all remote operators are not administrators.

**Viewing window:** A representation of the managed server desktop. It is displayed on the management console when the remote operator initiates a Remote Management session.

### Understanding Remote Management for Windows NT/2000 Servers

The following illustration depicts the functionality of the ZfS 3 Remote Management, which is explained below:





To ensure that the Remote Management session is secure, the user at the managed server can change the agent password. If the user at the managed server sets a new password for the agent, the password set by the administrator during the Remote Management installation will be ineffective. It is very essential that the user at the managed server must communicate the new password to the remote operator each time it is changed. For more details on how to set up a new agent password or change the existing agent password, see [“Setting Up the Agent Password at the Managed Server” on page 872](#).

## Setting Up Security for Remote Management

The following sections provide information about setting up security for the Remote Management sessions:

- ◆ [“Configuring the Remote Management Policies” on page 869](#)
- ◆ [“Setting Up the Agent Password at the Managed Server” on page 872](#)

## Configuring the Remote Management Policies

To configure the Remote Management policies, you must perform the following tasks:

- ◆ [“Creating the Policy Packages” on page 870](#)
- ◆ [“Creating and Configuring the TED Objects” on page 870](#)
- ◆ [“Configuring the Server Remote Management Policy” on page 871](#)
- ◆ [“Configuring the Distribution Object for Remote Management” on page 871](#)

- ◆ [“Configuring the Distributor and the Subscriber Objects” on page 872](#)

## Creating the Policy Packages

ZfS 3 requires policy packages in the eDirectory tree that can hold the server policies. You can later configure and enable the server policies.

Policy packages are eDirectory objects that contain collections of policies grouped according to the object types. You should create an Organizational Unit (OU) for holding the policy packages. Consider the following when determining where to place this OU:

- ◆ Whether you have partitions in your tree
- ◆ The 256-character limit in eDirectory for the full distinguished name
- ◆ How you will use the Search policy to locate the policy package

If you install ZENworks for Desktops (ZfD) to your tree, you may want to keep the ZfS and ZfD policies in separate containers, such as ZfS\_Policies and ZfD\_Policies.

For ZfS 3 Remote Management, create two containers, one for Tiered Electronic Distribution (TED) objects and the other for the Remote Management policy package.

To create a container:

- 1** In ConsoleOne, right-click the container where you want the container for the policy packages placed.
- 2** Click New > Object > Organizational Unit > OK.
- 3** Name the container, for example, ZfS\_Policies > click OK.

**IMPORTANT:** If you have partitions that are accessed across a WAN, make sure that the Policy Package objects are in the same partition as the Server object so that the Policy/Package Agents will load. Also make sure that the Search policy does not require searching outside the partition where the Server object exists.

For Remote Management, you must create the Distributed Server package. The Distributed Server package is required to distribute the Remote Management policies among the managed servers for enforcement.

To create the Distributed Server package:

- 1** Right-click the policy package’s container > click New > click Policy Package.  
The Policy Package Wizard is displayed.
- 2** From the Policy Packages list, select Distributed Server Package > click Next.
- 3** Enter a name for the Distributed Server Package > click Next > click Finish.

## Creating and Configuring the TED Objects

For ZfS 3 Remote Management, you must create and configure the following TED objects:

- ◆ TED Distribution
- ◆ TED Channel

To create and configure the TED objects, see [“Tiered Electronic Distribution” on page 371](#).

## Configuring the Server Remote Management Policy

The Server Remote Management policy defines the behavior of the Remote Management Agent. This policy is distributed to the specified Windows managed servers using the TED, which helps the remote operator to associate the Remote Management policy to a group of Windows managed servers from the management console.

To configure the Server Remote Management policy:

- 1** In ConsoleOne, right-click the Distribute Server Package object > click Properties.
- 2** Click the Policies tab > select the Windows sub-option.
- 3** Select the check box under the Enabled column for the Server Remote Management Policy.
- 4** Click the Properties button > the Remote Management tab.
- 5** Click the General tab.
- 6** Click Display Remote Management Agent Icon To Users for Remote Control and Remote View sessions.
- 7** Click the Remote Control tab > select the options that you want to use. Your choices are:
  - ◆ Prompt User for Permission to Remote Control
  - ◆ Give User Audible Signal when Remote Controlled
  - ◆ Give User Visible Signal when Remote Controlled
  - ◆ Allow Blanking User's Screen
  - ◆ Allow Locking User's Keyboard and Mouse
- 8** Click the Remote View tab > select the options that you want to use. Your choices are:
  - ◆ Prompt User for Permission to Remote View
  - ◆ Give User Audible Signal when Remote Viewed
  - ◆ Give User Visible Signal when Remote Viewed
- 9** Click Apply > Close.
- 10** Right-click the Server Remote Management policy > select Edit Schedule.
- 11** Modify the schedule > click Apply > click Close.
- 12** To associate the Server Remote Management policy with a managed server, click the Distribution tab.
- 13** Click Add > browse for and select the Distribution object > click OK.
- 14** Click Apply > click Close.

## Configuring the Distribution Object for Remote Management

You must configure the Distribution object for distributing the Remote Management policies.

To configure the Distribution object:

- 1** In ConsoleOne, right-click the Distribution object > click Properties.
- 2** Click the Type tab.
- 3** Select Policy Package from the Select Type drop-down list.

- 4** Click Add > select the Distributed Server package that has the Server Remote Management policy.
- 5** Click the Schedule tab.
- 6** Modify the schedule > click Apply > click Close.

## Configuring the Distributor and the Subscriber Objects

To configure the Distributor and the Subscriber objects, see [“Tiered Electronic Distribution” on page 371](#).

If the managed servers are residing on a different eDirectory tree or the Windows NT server does not have the eDirectory installed, you must create and configure an External Subscriber object for sending Distributions to Subscribers residing on managed servers in other trees. For more information on External Subscribers, see [“Tiered Electronic Distribution” on page 371](#).

## Setting Up the Agent Password at the Managed Server

The user at the managed server can change the password of the Remote Management Agent to make sure that the Remote Management sessions are secure.

To change the agent password:

- 1** Right-click the Remote Management Agent icon from the system tray of the Windows NT/2000 managed server.
- 2** Click Security > click Set Password.  
Use a password of ten or fewer alphanumeric characters. The password is case sensitive and cannot be blank.

The new password must be communicated to the remote operator each time it is changed.

## Managing Remote Windows NT/2000 Servers

The following sections provide information that will help you effectively manage Remote Management sessions on Windows NT/2000 servers:

- ◆ [“Initiating Remote Management Sessions” on page 872](#)
- ◆ [“Managing a Remote View Session” on page 874](#)
- ◆ [“Managing a Remote Control Session” on page 876](#)
- ◆ [“Viewing the Audit Log for Remote Management Sessions” on page 883](#)
- ◆ [“Improving the Remote Management Performance” on page 883](#)
- ◆ [“Unloading and Reloading the Remote Management Agent” on page 884](#)

## Initiating Remote Management Sessions

You have several options for initiating a Remote Management session from ConsoleOne. They include the following:

- ◆ [“Initiating the Remote Management Session from within ConsoleOne” on page 873](#)
- ◆ [“Initiating Remote Management Sessions from the eDirectory/NDS Namespace” on page 873](#)

- ♦ [“Initiating Remote Management Sessions from the Atlas Namespace” on page 874](#)

### Initiating the Remote Management Session from within ConsoleOne

- 1** In ConsoleOne, click Tools > Remote Management > Windows.
- 2** In the Remote Management dialog box, enter the IP address or the DNS name of the managed server.
- 3** Enter the agent password.
- 4** Select the Remote Management operation that you want to initiate with the managed server.
- 5** Click OK.

### Initiating Remote Management Sessions from the eDirectory/NDS Namespace

You can start a Remote Management session from the eDirectory (NDS) namespace (in ConsoleOne) using one of the following methods:

- 1** In ConsoleOne, click Tools > Remote Management > Windows.
- 2** In the Remote Management dialog box, enter the IP address or the DNS name of the managed server.
- 3** Enter the agent password.
- 4** Select the Remote Management operation that you want to initiate with the managed server.
- 5** Click OK.

You can also use the following procedure:

- 1** In ConsoleOne, select a managed server.
- 2** Click Tools > Remote Management > Windows.
- 3** In the Remote Management dialog box, select the IP address of the managed server from the Agent drop-down list.

The IP address of the selected managed server will be automatically populated to the Agent drop-down list.

- 4** Enter the agent password.
- 5** Select the Remote Management operation that you want to initiate with the managed server.
- 6** Click OK.

You can also use the following procedure:

- 1** In ConsoleOne, right-click a managed server.
- 2** Click Remote Management > Windows.
- 3** In the Remote Management dialog box, select the IP address of the managed server from the Agent drop-down list.

The IP address of the selected managed server will be automatically populated to the Agent drop-down list.

- 4** Enter the agent password.
- 5** Select the Remote Management operation that you want to initiate with the managed server.
- 6** Click OK.

## Initiating Remote Management Sessions from the Atlas Namespace

Before initiating a Remote Management session from the Atlas namespace (in ConsoleOne), make sure that the NetWare® Management Agent™ (NMA) is installed and the Discovery discovers the network topology.

To initiate the Remote Management session:

- 1** In ConsoleOne, right-click a managed server.
- 2** Click Actions > click Remote Control or Remote View.
- 3** Select the IP address and enter the agent password.

The IP address of the selected managed server will be automatically populated to the Agent drop-down list.

- 4** Click OK.

## Managing a Remote View Session

After you have initiated a Remote Management session and selected Remote View as the operation, you have several options to help you view the managed server.

- ◆ [“Controlling the Display of the Viewing Window” on page 874](#)
- ◆ [“Using the Viewing Window Accelerator Keys” on page 874](#)
- ◆ [“Defining a Custom Accelerator Key Sequence” on page 875](#)
- ◆ [“Stopping a Remote View Session from the Managed Server” on page 876](#)

## Controlling the Display of the Viewing Window

You can regulate the display of the Viewing window through using the control options.

To enable the control options:

- 1** Click the Remote Management Agent icon, located at the top left corner of the Viewing window.
- 2** Click Configure.
- 3** To enable the use of accelerator keys on the management console, select Enable Accelerator Keys.
- 4** To use the 16-color palette on the managed server during the Remote Management session, select 16 Color Mode.

Selecting 16 Color Mode will enhance the Remote Management performance.

- 5** To suppress the wallpaper displayed on the managed server’s desktop, select Hide Wallpaper.
- 6** To save the Control Parameter settings, click the Save on Exit check box.

The saved settings will be implemented in the next Remote View session.

- 7** Click OK.

## Using the Viewing Window Accelerator Keys

You can use accelerator keys to assign the shortcut keys to the control options and also to control the display of the Viewing window. Default accelerator key sequences are assigned to each accelerator key option. The Accelerator Keys dialog box displays the default key sequence in the

edit field of each accelerator key option. You can define a custom accelerator key sequence to change the default sequence. For more information, see [“Defining a Custom Accelerator Key Sequence” on page 875](#).

To enable the Accelerator Keys option:

- 1 Click the Remote Management Agent icon, located at the top left corner of the Viewing window.
- 2 Click Configure.
- 3 Select Accelerator Keys Enable.
- 4 Click OK.

To open the Accelerator Keys dialog box:

- 1 Click the Remote Management Agent icon, located at the top left corner of the Viewing window.
- 2 Click Accelerator Keys.

The following table explains the Accelerator Key options you can during the Remote View session:

Option	Default Keystroke	Description
Full Screen Toggle	Ctrl+Alt+M	Applicable only if the color resolution settings on the management console and managed server are similar.  Sizes the Viewing window to the size of your screen without window borders.
Refresh Screen	Ctrl+Alt+R	Refreshes the Viewing window.
Restart Viewer	Ctrl+Alt+T	Re-establishes the connection with the managed server.
Accelerator Keys Enable	Ctrl+Alt+H	Enables you to change the default accelerator key sequences.
Stop Viewing	Left-Shift+Esc	Closes the Viewing window.
Configure Dialog	Alt+M	Opens the Control Parameters dialog box.
Accelerator Keys Dialog	Alt+A	Opens the Accelerator Keys dialog box.

## Defining a Custom Accelerator Key Sequence

The default keystrokes assigned to the accelerator key options are displayed in the edit field to the right of each accelerator key option in the Accelerator Keys dialog box. You can change the accelerator key sequence and define a custom accelerator key sequence if you do not want to use the default keystroke.

To define a custom accelerator key sequence:

- 1 Click the Remote Management Agent icon, located at the top-left corner of the Viewing window.
- 2 Click Accelerator Keys.

- 3** Click the edit field of the accelerator key option where you want to define a custom accelerator key sequence.
- 4** Press the new accelerator key sequence.
- 5** Click OK.

**IMPORTANT:** The shift keys are left-right sensitive, and are indicated in the Control Options dialog box as Lshift and Rshift.

## Stopping a Remote View Session from the Managed Server

You can stop a Remote View session from the managed server using any of the following methods:

- ◆ Right-click the Remote Management Agent icon and click Terminate RC/RV Session.
- ◆ Close the Visible Signal window displayed on the top right corner of the managed server desktop.
- ◆ Press the keystroke that you have defined for the Stop Viewing option in the Accelerator Keys dialog box.

## Managing a Remote Control Session

After you have initiated a Remote Management session and selected Remote Control as the operation, you can control the managed server from the management console to provide user assistance and to help resolve server problems. With remote control connections, the remote operator can go beyond viewing the managed server to taking control of it.

You can effectively manage a Remote Control session by performing the following tasks with the Viewing window control options, the Viewing window toolbar buttons, and the Remote Management Agent icon options:

- ◆ [“Controlling the Display of the Viewing Window” on page 876](#)
- ◆ [“Using the Viewing Window Accelerator Keys” on page 877](#)
- ◆ [“Using the Toolbar Buttons on the Viewing Window” on page 878](#)
- ◆ [“Enabling the Wallpaper on the Managed Server” on page 880](#)
- ◆ [“Enhancing the Remote Control Performance Over a Fast Link or a Slow Link” on page 880](#)
- ◆ [“Using the Remote Management Agent Icon” on page 880](#)
- ◆ [“Obtaining Information About Remote Management Sessions” on page 881](#)
- ◆ [“Stopping a Remote Control Session from the Managed Server” on page 882](#)

## Controlling the Display of the Viewing Window

You can control the display of the managed server by using the Viewing window control options.

To enable control options:

- 1** Click the Remote Management Agent icon, located at the top left corner of the Viewing window.
- 2** Click Configure.
- 3** Select the control options you want to enable for the remote session.

The following table explains the options you can use to control the display of the Viewing window.

Option	Description
Warn Before Screen Blanking	Informs the user at the management console before the managed server screen is blanked.
Enable Accelerator Keys	Enables the accelerator keys on the management console so that you can change the default accelerator key sequences during the remote session.
16 Color Mode	Forces the use of 16-color palette on the managed server during a Remote Management session. This enhances the Remote Management performance.  Use this option only if you are performing the Remote Management session over a slow WAN.
Hide Wallpaper	Suppresses any wallpaper displayed on the managed server. This option is enabled by default. If you want to display the wallpaper on the managed server during a Remote Control or Remote View session, disable this option.
System Key Pass	Passes Alt-key sequences on the management console to the remote Windows NT/2000 server.  During a Remote View session, the System Key Pass-Through option is not enabled.
Network Type	If the managed server resides over a LAN, selecting the Fast Links option will accelerate the Remote Management performance.  If the managed server is connected over a dial-up link, selecting the Slow Links option will accelerate the Remote Management performance.

- 4 To save the Control Parameter settings, click the Save on Exit check box.

The saved settings will be implemented in the next Remote Control session.

## Using the Viewing Window Accelerator Keys

You can use accelerator keys to assign shortcut keys to the control options and also to control the display of the Viewing window. Default accelerator key sequences are assigned to each accelerator key option. The Accelerator Keys dialog box displays the default key sequence in the edit field of each accelerator key option. You can define a custom accelerator key sequence to change the default sequence. For more information, see [“Defining a Custom Accelerator Key Sequence” on page 875](#).

To enable the Accelerator Keys option:

- 1 Click the Remote Management Agent icon, located at the top left corner of the Viewing window.
- 2 Click Configure.
- 3 Select Enable Accelerator Keys.

To open the Accelerator Keys dialog box:

- 1** Click the Remote Management Agent icon, located at the top left corner of the Viewing window.
- 2** Click Accelerator Keys.

The following table explains the Accelerator Key options you can use to control the display of the Viewing window:

Option	Default Keystroke	Description
Full Screen Toggle	Ctrl+Alt+M	Applicable only if the color resolution settings on the management console and managed server are similar.  Sizes the Viewing window to the size of your screen without window borders.
Refresh Screen	Ctrl+Alt+R	Refreshes the Viewing window.
Restart Viewer	Ctrl+Alt+T	Re-establishes the connection with the managed server.
Accelerator Keys Enable	Ctrl+Alt+A	Enables you to change the default accelerator key sequences.
Stop Viewing	Left-Shift+Esc	Closes the Viewing window.
Configure Dialog	Alt+M	Opens the Control Parameters dialog box.
Accelerator Keys Dialog	Alt+A	Opens the Accelerator Keys dialog box.
System Key Pass	Ctrl+Alt+S	Passes Alt-key sequences on the management console to the managed server.
Mouse/Keyboard Lock	Ctrl+L	Locks the keyboard and mouse controls at the managed server.  This option is available only if the Allow Locking User's Keyboard and Mouse option is enabled in the <b>Server Remote Management policy</b> .
Screen Blank	Ctrl+B	Blanks the screen at the managed server.  This option is available only if the Allow Blanking User's Screen option is enabled in the <b>Server Remote Management policy</b> .
Ctrl+Alt+Del	Ctrl+D	Restarts the Windows NT/2000 servers.
Start	Ctrl+S	Opens the taskbar with the Start button on Windows NT/2000 server.
Application Switcher	Ctrl+T	Switches applications on managed servers.

## Using the Toolbar Buttons on the Viewing Window

The following table describes the toolbar options in the Viewing window:

Button	Default Keystroke	Key Function
Screen Blanking 	Ctrl+L	<p>Displays only if the Allow Blanking User's Screen option is enabled in the security settings.</p> <p>Blanks the screen at the managed server. When the remote operator selects this option, the screen of the managed server will be blacked out and the operations performed by the remote operator on the managed server will not be visible to the user at the managed server.</p> <p>Not supported over certain display adapters. Refer to the ZfS 3 Readme located at the root of the <i>ZENworks for Servers 3</i> product CD for the list of display adapters that do not support this feature.</p>
Mouse and Keyboard Lock 	Ctrl+B	<p>Locks the keyboard and mouse controls at the managed server. When the remote operator selects this option, the user at the managed server will not be able to use the keyboard and mouse controls of the managed server.</p>
System Start 	Ctrl+S	<p>Sends the Ctrl+Esc keystroke to the managed server.</p> <p>Opens the taskbar with the Start button on Windows NT/2000 servers.</p>
Application Switcher 	Ctrl+T	<p>Sends the Alt-tab key sequences to the managed server.</p> <p>Switches applications on managed servers.</p> <p>To switch the applications,</p> <ol style="list-style-type: none"> <li>1. In the Viewing window, click the Application Switcher icon or press the Application Switcher shortcut key.</li> <li>2. To traverse to the application you want using the Application Switcher icon.</li> <li>3. To view the application, press Tab.</li> </ol>
System Key Pass Through 	Ctrl+Alt+S	<p>Sets the system key pass to On or Off.</p> <p>Passes Alt-key sequences on the management console to the managed server.</p> <p>Certain key sequences such as Ctrl+Esc, Alt+Tab, Ctrl+Alt+Del, and Alt+PrintScreen are not allowed even when the System Key Pass-Through is set to On. However, you can use the toolbar buttons on the Viewing window for the Ctrl+Esc, Alt+Tab, and Ctrl+Alt+Del keystrokes.</p>
CTRL+ALT+DEL 	Ctrl+D	<p>Sends the Ctrl+Alt+Del keystroke to the managed server.</p> <p>Displays the Security window on a Windows NT/2000 managed server.</p>

You can define a custom key sequence if you do not want to use the default key sequence. For more information, see [“Defining a Custom Accelerator Key Sequence” on page 875](#).

## Enabling the Wallpaper on the Managed Server

When the remote operator initiates a Remote Control session, any wallpaper displayed on the desktop of the managed server will be suppressed. This feature reduces the response time from the managed server for requests from the management console because less traffic is generated over the network while the wallpaper is suppressed.

You can configure the control parameter for this option to change the default settings and enable the display of the wallpaper on the managed server. When you terminate the Remote Control session, the suppressed wallpaper will be restored.

To enable the display of suppressed wallpaper on the managed server:

- 1 Click the Remote Management Agent icon, located at the top left corner > click Configure.
- 2 Deselect the Hide Wallpaper option.

## Enhancing the Remote Control Performance Over a Fast Link or a Slow Link

The Remote Control performance, especially over a slow link, has been enhanced through using improved compression.

The performance during a Remote Control session over a slow link or a fast link varies depending on the network traffic. For better response time, try one or more of the following strategies:

- ◆ Deselect the Hide Wallpaper option on the managed server in the Control Parameters dialog box.
- ◆ Assign color settings on the management console higher than the managed server or assign the same color settings for the management console and the managed server.
- ◆ Deselect the Enable Pointer Shadow option before starting the Remote Control or Remote View session.

To deselect Enable Pointer Shadow:

- 1 From the Windows desktop, click Start > Settings > Control Panel > double-click Mouse.
- 2 Click Pointers > deselect Enable Pointer Shadow.

## Using the Remote Management Agent Icon

You can manage a remote session from the managed server using the Remote Management Agent icon  options. By default, the Remote Management Agent icon will be displayed in the system tray of the Windows NT/2000 servers. This icon indicates that the Remote Management Agent is loaded on the managed server.

The user at the managed server can right-click the Remote Management Agent icon and choose from the following options:

Option	Description
Terminate Session	Disconnects and closes the remote session on the managed server and displays a message on the management console indicating that the remote session is closed.
Security	Allows the user at the managed server to set or clear the password for the server.

Option	Description
Information	<p>Displays information such as who is accessing the managed server for the remote session, security settings, and the protocol in use for the remote session.</p> <p>For details, see <a href="#">“Obtaining Information About Remote Management Sessions” on page 881</a>.</p> <p>You can right-click or double-click the Remote Management Agent icon to view the Information window.</p>
Help	Displays the Remote Management Agent help file.

## Setting Up a Password for the Managed Server

The user at the managed server can set an agent password. This password will override the password set by the administrator during the ZfS Remote Management installation.

To set the agent password:

- 1** From the managed server, right-click the Remote Management Agent icon.
- 2** Click Security > Set Password.

Use a password of ten or fewer alphanumeric characters. The password is case sensitive and cannot be blank.

After the completion of the Remote Management session, you can clear the agent password. If you clear the agent password, the remote operator cannot perform the Remote Management operations.

To clear the agent password:

- 1** On the managed server, right-click the Remote Management Agent icon.
- 2** Click Security > Clear Password.

## Obtaining Information About Remote Management Sessions

Using the Information window, the user at the managed server can view details about the session, such as who is accessing the managed server for a remote session, the security settings, and the protocol in use for the remote session.

To view information about remote sessions:

- 1** On the managed server, right-click the Remote Management Agent icon.
- 2** Click Information.
- 3** Click the General tab to view the general information and the Security tab to view the security information.

After you have opened the Information window, you can view different kinds of information about remote sessions on the managed server. See the following sections for details:

- ◆ [“Obtaining General Information” on page 882](#)
- ◆ [“Obtaining Security Information” on page 882](#)

## Obtaining General Information

The following table explains the general information you can obtain about Remote Management sessions from the Information window:

Parameter	Description
RM Operation	Lists the ongoing Remote Management sessions.
RM Information > Initiator	Displays the name of the remote operator.
RM Information > Protocol	Displays the protocol that the Remote Management Agent uses to communicate with the management console during a remote session.
RM Information > Optimization	Displays if the optimization driver is enabled or disabled for the Remote Management session. The Remote Management Agent performance will be optimized if the video card on the managed server is compatible with the performance enhancement driver that is installed during Remote Management Agent installation.

## Obtaining Security Information

The Security Information dialog box displays information based on the Remote Control and Remote View sessions.

Options	Description
Permission Required	Indicates if the remote operator should obtain permission from the user at the managed server each time the he wants to perform the remote management session on the managed server.
Audible Signal Required	Indicates if an audible signal should be sent to the managed server every time the remote operator accesses the managed server.
Beep Every	Indicates the time interval based on which the audible signal is periodically sent to the managed server.
Visual Signal Required	Indicates if a visible signal should be sent to the managed server every time the remote operator accesses the managed server.
Display Name Every	Indicates the time interval based on which the visual signal is periodically sent to the managed server.
Screen Blanking Allowed	Indicates if the remote operator is allowed to blank the managed server screen. Screen Blanking Allowed is applicable for Remote Control only.
Locking Control Allowed	Indicates if the remote operator is allowed to lock the keyboard and mouse controls of the managed server. Locking Control Allowed is applicable for Remote Control only.

## Stopping a Remote Control Session from the Managed Server

You can stop a Remote Control session from the managed server using any of the following methods:

- ◆ Right-click the Remote Management Agent icon and click Terminate RC/RV Session.

- ◆ Close the Visible Signal window displayed on the top right corner of the managed server desktop.
- ◆ Press the keystroke that you have defined for the Stop Viewing option in the Accelerator Keys dialog box.

## Viewing the Audit Log for Remote Management Sessions

ZfS records log information on a Windows NT/2000 managed server.

To view the audit log for Remote Management sessions:

- 1** Click Start > Programs > Administrative Tools > Event Viewer.
- 2** Click Log > Application.
- 3** Double-click the event associated with the source Remote Management Agent.

To view only the events pertinent to the Remote Management Agent, choose Remote Management Agent from the source drop-down list in the Filter dialog box.

## Improving the Remote Management Performance

The following instructions will help in improving the Remote Management performance:

- ◆ Set the managed server screen resolution to either 640x480 or 600x800.
- ◆ On Windows 2000, deselect the Enable Pointer Shadow option for optimal performance.  
To deselect Enable Pointer Shadow:
  - ◆ From the Windows desktop, click Start > Settings > Control Panel > double-click Mouse.
  - ◆ Click Pointers > deselect Enable Pointer Shadow.
- ◆ The speed of the management console depends upon the processing power of the client machine. We recommended that you to use single-processor client with a Pentium\* III, 500MHz (or later).
- ◆ At the managed server, use a plain background. Do not set a wallpaper pattern.
- ◆ If the Task manager is opened at the target machine, you can close it or minimize it.
- ◆ Make sure that the scrolling texts (such as the debug windows) and animations are not active on the managed server.
- ◆ Make sure to minimize or close the dialog boxes that are not in use.
- ◆ Use the Page Up and Page Down keys for scrolling through the contents.
- ◆ To perform any operations at the managed server, if possible, use the toolbar options instead of menu options.
- ◆ To maximize remote management visibility, set the management console screen resolution higher than the managed server resolution.
- ◆ If the optimization driver is disabled, set the color settings at managed server to 256 bit.
- ◆ To maximize the Remote Management performance over WAN, do the following at the managed server:
  - ◆ Set the color mode of the managed server to 16 color.
  - ◆ Select the Slow Link Option.

## Unloading and Reloading the Remote Management Agent

The following sections explain how you can use the Remote Management Agent during remote sessions:

- ◆ “Unloading the Remote Management Agent” on page 884
- ◆ “Reloading the Remote Management Agent” on page 884

### Unloading the Remote Management Agent

You can unload the Remote Management Agent during a remote session. When you unload the Remote Management Agent, the remote session stops. To start another remote session, you will need to reload the Remote Management Agent. For more information, see “Reloading the Remote Management Agent” on page 884.

To unload the Remote Management Agent from a Windows NT managed server:

- 1 From the Control Panel, double-click Services.
- 2 Click Novell ZFS Remote Management Agent > Stop.

To unload the Remote Management Agent from a Windows 2000 managed server:

- 1 From the Control Panel, double-click Administrative Tools.
- 2 Double-click Services.
- 3 Click Novell ZFS Remote Management Agent > Stop.

**IMPORTANT:** You will be able to stop the Remote Management Agent on Windows NT/2000 only if you have the rights to stop the service.

### Reloading the Remote Management Agent

During ZfS installation, the Remote Management Agent is installed on the managed server and started automatically when the managed server starts up. If you shut down the Remote Management Agent during a remote session, the remote session stops. To start another remote session, you need to reload the Remote Management Agent on the managed server.

To reload the Remote Management Agent on Windows NT:

- 1 From the Control Panel, double-click Services.
- 2 Click Novell ZFS Remote Management Agent > Start.

**IMPORTANT:** You will be able to load the Remote Management Agent on Windows NT only if you have the rights to start the Windows NT service.

To reload the Remote Management Agent on Windows 2000:

- 1 From the Control Panel, double-click Administrative Tools.
- 2 Double-click Services.
- 3 Click Novell ZFS Remote Management Agent > Start.

**IMPORTANT:** You will be able to load the Remote Management Agent on Windows 2000 only if you have the rights to start the service.



## Documentation Updates

This section contains information on documentation content changes that have been made in the *Administration* guide for Remote Management since the initial release of Novell® ZENworks® for Servers (ZfS) 3. This information will help you to keep current on updates to the documentation.

If you have purchased ZfS 3.0.2 and have not used or installed ZfS 3 or ZfS 3 SP1, you do not need to review this section.

All changes that are noted in this section were also made in the documentation. The documentation is provided on the Web in two formats: HTML and PDF. The HTML and PDF documentation are both kept up-to-date with the documentation changes listed in this section.

The documentation update information is grouped according to the date the documentation updates were published. Within a dated section, the changes are alphabetically listed by the names of the main table of contents sections for Remote Management.

If you need to know whether a copy of the PDF documentation you are using is the most recent, the PDF document contains the date it was published on the front title page or in the Legal Notices section immediately following the title page.

The documentation was updated on the following dates:

- ♦ “November 8, 2004” on page 885
- ♦ “May 17, 2002” on page 885

### November 8, 2004

Throughout the guide, graphics have been updated with font changes and newer icons. No notable content changes were made to any graphics.

### May 17, 2002

Changes were made to the following section:

- ♦ “Remote Management for Windows NT/2000 Servers” on page 885

### Remote Management for Windows NT/2000 Servers

The following change was made in this section:

Location	Change
"Remote Management Terminology" on page 867	Defined the term Viewing window.