

## Introducing Remote Tools

Remote Shell, Remote Exec, Remote Copy (via RSH), and Remote Copy (via REXEC) are Windows-based versions of UNIX commands.

You can use these tools to execute commands and copy files to and from remote machines. The Remote Tools application provides access to remote machines without the necessity of first logging on via a terminal emulation application.

The Remote Tools are four separate commands:

- [RSH](#)
- [REXEC](#)
- [RCP via RSH](#)
- [RCP via REXEC](#)

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### Related Topics

[Copying Files To and From Remote Machines](#)

[Executing Remote Commands](#)

## Executing Remote Commands

You can execute remote commands using the [RSH](#) tab or the [REXEC](#) tab:

- Run RSH to execute a command on a remote machine using your user name.
- Run REXEC to execute a command on a remote machine using a user name and a password other than your registered values.

### To use RSH and REXEC:

1. In the Remote Tools dialog box, click the RSH tab or the REXEC tab.
2. In the Host Name box, type the name or IP address of the remote host to which you want to connect. You can select a previous host from the drop-down list.
3. If you are running REXEC, type the user name of your server account and the password in the respective boxes.

OR

If you are running RSH, type the user name of your server account in the Remote User box and your local user name in the Local User box.

4. In the Command box, type the command you want to execute, including any options and/or arguments. You can select a previous command from the drop-down list.
5. Click Execute.

To stop a command in progress, click Stop.

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### Related Topics

[REXEC Dialog Box](#)

[RSH Dialog Box](#)

## Copying Files To and From Remote Machines

You can copy files using the [RCP via RSH](#) tab or the [RCP via REXEC](#) tab:

- Run RCP via RSH to copy files from a remote machine using your user name and password.
- Run RCP via REXEC to copy files from a remote machine using a user name and a password other than your registered values.

**Warning!** When you copy a file from the remote server to the local PC, if the file already exists on the local PC, the software prompts you to confirm that you want to overwrite the file. If you confirm, and an error occurs during copying, the local file is deleted. Rename the file before copying to avoid losing data.

### To use RCP via RSH and RCP via REXEC:

1. In the Remote Tools dialog box, click the RCP via RSH tab or the RCP via REXEC tab.
2. In the Remote Host box, type the name or IP address of the remote host to which you want to connect. You can select a previous host from the drop-down list.
3. If you are running RCP via RSH, type the user name of your server account in the Remote User box and your local user name in the Local User box.

OR

If you are running the RCP via REXEC, type the user name of your server account and the password in the respective boxes.

4. In the Remote File box, type the full path of the source file, or use Browse to search for the location you want.
5. In the Local File box, type the full path of the file's destination, or use Browse to search for the location you want.
6. Click Copy to Remote to copy a local file to the remote server.

OR

Click Copy from Remote to copy a remote file to your local PC.

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### **Related Topics**

[RCP Via REXEC Dialog Box](#)

[RCP Via RSH Dialog Box](#)

## Running Remote Tools from the Command Line

You can use rsh to execute a single command on the remote host. Use the following syntax:

```
rsh host [-l login] [-na] [command]
```

Information returned by the command is displayed. For example, enter the sequence shown below using the ls command to display the files in your home directory on a UNIX server with the name bigboy.

```
C:\home>rsh bigboy ls
file1.doc
file2.txt
file3.com
C:\home>_
```

If the command argument is present, it is executed on the host machine with input and output going to the client PC. If the command argument is absent, a remote login is performed to the host using the terminal emulator program. If the command contains a redirection symbol (>, <, or |), then the symbol must be enclosed in double quotes.

## About Authorization

For command execution, the remote user must have an `.rhosts` file containing the PC's Internet name and the username for accessing the account. `hclnfsd` must be running on the remote host. Since the PC does not logically have usernames associated with it, the following algorithm determines the PC username:

1. If the host argument is specified as the drive letter (for example, `K:`) of a connected system, the username associated with the drive is used.
2. If the host is an IP address or name, all network drives are searched for connections to that host. If more than one username is found connected to the host, you will be prompted to choose one.
3. If none of the connected drives is connected to the host, and you have previously executed an `nfs register` command, the username and password are validated on the default `hclnfsd` server. If successful, the registered username is used.
4. If none of the above methods finds a valid username, "guest" is used.

## Options

- a When rsh is invoked for remote login, the carriage return key will send a <CR> instead of a <LF>.
- e Normally, rsh provides line-by-line echoed input. The exception is when a remote login is performed. -e will switch to character-by-character non-echoed input.
- n Does not accept input from the keyboard during a remote shell command.
- l The argument following the -l specifies the remote username to use. Normally, the local determined username is used as the remote username.

**Note:** When a command executes on the remote system, the input device that the command sees is not a terminal but a pipe. Some UNIX commands such as mail and ftp behave differently when executed with input from a pipe rather than a terminal.

## General Accessibility

Hummingbird products are accessible to all users. Wherever possible, our software adheres to Microsoft Windows interface standards and contains a comprehensive set of accessibility features.

**Access Keys** All menus have associated access keys (mnemonics) that let you use the keyboard, rather than a mouse, to navigate the user interface (UI). These access keys appear as underlined letters in the names of most UI items. (If this is not the case, press Alt to reveal them.) To open any menu, press Alt and then press the key that corresponds with the underlined letter in the menu name. For example, to access the File menu in any Hummingbird application, press Alt+F.

Once you have opened a menu, you can access an item on the menu by pressing the underlined letter in the menu item name, or you can use the arrow keys to navigate the menu list.

**Keyboard Shortcuts** Some often-used menu options also have shortcut (accelerator) keys. The shortcut key for an item appears beside it on the menu.

**Directional Arrows** Use the directional arrows on the keyboard to navigate through menu items or to scroll vertically and horizontally. You can also use the directional arrows to navigate through multiple options. For example, if you have a series of radio buttons, you can use the arrow keys to navigate the possible selections.

**Tab Key Sequence** To navigate through a dialog box, press the Tab key. Selected items appear with a dotted border. You can also press Shift+Tab to go back to a previous selection within the dialog box.

**Spacebar** Press the Spacebar to select or clear check boxes, or to select buttons in a dialog box.

**Esc** Press the Esc key to close a dialog box without implementing any new settings.

**Enter** Press the Enter key to select the highlighted item or to close a dialog box and apply the new settings. You can also press the Enter key to close all About boxes.



**ToolTips** ToolTips appear for all functional icons. This feature lets users use Screen Reviewers to make interface information available through synthesized speech or through a refreshable Braille display.

## Microsoft Accessibility Options

Microsoft Windows environments contain accessibility options that let you change how you interact with the software. These options can add sound, increase the magnification, and create sticky keys.

### To enable/disable Accessibility options:

1. In Control Panel, double-click Accessibility Options.
2. In the Accessibility Options dialog box, select or clear the option check boxes on the various tabs as required, and click Apply.
3. Click OK.

If you installed the Microsoft Accessibility components for your Windows system, you can find additional accessibility tools under Accessibility on the Start menu.

## Technical Support

You can contact the Hummingbird Technical Support department Monday to Friday between 8:00 a.m. and 8:00 p.m. Eastern Time.

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E-mail:	<a href="mailto:support@hummingbird.com">support@hummingbird.com</a>	
FTP:	<a href="ftp.hummingbird.com">ftp.hummingbird.com</a>	
Web Support:	<a href="http://support.hummingbird.com/customer">support.hummingbird.com/customer</a>	
Web Site:	<a href="http://www.hummingbird.com">www.hummingbird.com</a>	

## REXEC Dialog Box

The Remote Execution dialog box opens when you click the [REXEC](#) tab.

**Host Name**—Specifies the name or IP address of the remote host to which you want to connect.

**Command**—Specifies which command you want to execute on the remote host. You can include any options and/or arguments you want.

**Username**—Specifies your user name.

**Password**—Specifies your password.

**Command Status**—Displays the status of the command execution.

**Execute/Stop**—Starts or ends the command on the remote host.

**Clear**—Clears the command status area.

**Close**—Terminates the program.

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### Related Topic

[Executing Remote Commands](#)

## RSH Dialog Box

The Remote Shell dialog box opens when you click the [RSH](#) tab.

**Note:** You must set the `rhosts` or `hosts.equiv` file to grant your machine host access.

**Host Name**—Specifies the name or IP address of the remote host to which you want to connect.

**Command**—Specifies which command you want to execute on the remote host. You can include any options and/or arguments you want.

**Local User**—Specifies your local user name.

**Remote User**—Specifies the user name of your server account.

**Command Status**—Displays the status of the command execution.

**Execute/Stop**—Starts or ends the command on the remote host.

**Clear**—Clears the command status area.

**Close**—Terminates the program.

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### Related Topic

[Executing Remote Commands](#)

## RCP Via REXEC Dialog Box

The Remote Copy via Rexec dialog box opens when you click the [RCP via REXEC](#) tab.

**Note:** You must set the `rhosts` or `hosts.equiv` file to grant your machine host access.

**Warning!** When you copy a file from the remote server to the local PC, if the file already exists on the local PC, the software prompts you to confirm that you want to overwrite the file. If you confirm and an error occurs during copying, the local file is deleted. Before copying, you should rename the file to avoid loss of data.

**Remote Host**—Specifies the name or IP address of the remote host to which you want to connect.

**Username**—Specifies your user name.

**Password**—Specifies your password.

**Remote File**—Specifies the name of the file on the remote host to which you want to transfer.

**Local File**—Specifies the name of the file on your PC that you want to transfer.

**Copy To Remote**—Copies the local file to the remote file.

**Copy From Remote**—Copies the remote file to the local file.

**Close**—Terminates the program.

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### Related Topic

[Copying Files To and From Remote Machines](#)

## RCP Via RSH Dialog Box

The Remote Copy via Rsh dialog box opens when you click [RCP via RSH](#) tab.

**Warning!** When you copy a file from the remote server to the local PC, if the file already exists on the local PC, the software prompts you to confirm that you want to overwrite the file. If you confirm and an error occurs during copying, the local file is deleted. Before copying, you should rename the file to avoid loss of data.

**Remote Host**—Specifies the name or IP address of the remote host to which you want to connect.

**Local User**—Specifies your local user name.

**Remote User**—Specifies the user name of your server account.

**Remote File**—Specifies the name of the file on the remote host to which you want to transfer.

**Local File**—Specifies the name of the file on your PC that you want to transfer.

**Copy To Remote**—Copies the local file to the remote host.

**Copy From Remote**—Copies the remote file to the local machine.

**Close**—Terminates the program.

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### Related Topic

[Copying Files To and From Remote Machines](#)