Red Hat Network

User Reference Guide 3.0

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Introduction

Welcome to the *Red Hat Network User Reference Guide 3.0*.

The *Red Hat Network User Reference Guide* will guide you through registering your system for Red Hat Network and using its many features. Depending on which version of Red Hat Linux you have installed, the Red Hat Network Registration Client and the Red Hat Update Agent might be different than the ones described in this manual as new features are added. All version of this manual are available in HTML and PDF formats at http://www.redhat.com/support/manuals/. Once you use Red Hat Network to update these applications, you can use the latest version of this manual.

This version of the manual covers version 2.7.0 of the Red Hat Update Agent and version 1.5.0 of the Red Hat Network Registration Client.

For a more detailed, technical overview of Red Hat Network, please refer to the *Red Hat Network Technical Paper* available at http://www.redhat.com/products/network/.

Document Conventions

When you read this manual, you will see that certain words are represented in different fonts, typefaces, sizes and weights. This highlighting is systematic; different words are represented in the same style to indicate their inclusion in a specific category. The types of words that are represented this way include the following:

`command`

Linux commands (and other operating system commands, when used) are represented this way. This style should indicate to you that you can type in the word or phrase on the command line and press [Enter] to invoke a command. Sometimes a command contains words that would be displayed in a different style on their own (e.g., filenames). In these cases, they are considered to be part of the command, so the entire phrase will be displayed as a command. For example:

Use the `cat testfile` command to view the contents of a file, named `testfile`, in the current working directory.

`filename`

Filenames, directory names, paths and RPM package names are represented this way. This style should indicate that a particular file or directory exists by that name on your Red Hat Linux system. Examples:

The `.bashrc` file in your home directory contains bash shell definitions and aliases for your own use.

The `/etc/fstab` file contains information about different system devices and filesystems.

The `/usr/share/doc` directory contains documentation for various programs.

Install the `webalizer` RPM if you want to use a Web server log file analysis program.

application

This style should indicate to you that the program named is an end-user application (as opposed to system software). For example:

Use Netscape Navigator to browse the Web.

[key]

A key on the keyboard is shown in this style. For example:

To use [Tab] completion, type in a character and then press the [Tab] key. Your terminal will display the list of files in the directory that start with that letter.

[key]-[combination]

A combination of keystrokes is represented in this way. For example:

The [Ctrl]-[Alt]-[Backspace] key combination will restart the X Window System.

text found on a GUI interface

A title, word or phrase found on a GUI interface screen or window will be shown in this style. When you see text shown in this style, it is being used to identify a particular GUI screen or an element on a GUI screen (e.g., text associated with a checkbox or field). Examples:

On the GNOME **Control Center** screen, you can customize your GNOME window manager.

Select the **Require Password** checkbox if you would like your screensaver to require a password before stopping.

top level of a menu on a GUI screen or window

When you see a word in this style, it indicates that the word is the top level of a pulldown menu. If you click on the word on the GUI screen, the rest of the menu should appear. For example:

Under **Settings** on a GNOME terminal, you will see the following menu items: **Preferences**, **Reset Terminal**, **Reset and Clear**, and **Color selector**.

If you need to type in a sequence of commands from a GUI menu, they will be shown like the following example:

Click on **Programs**=>**Applications**=>**Emacs** to start the Emacs text editor.

button on a GUI screen or window

This style indicates that the text will be found on a clickable button on a GUI screen. For example:

Click on the **Back** button to return to the Web page you last viewed.

`computer output`

When you see text in this style, it indicates text displayed by the computer on the command line. You will see responses to commands you typed in, error messages and interactive prompts for your input during scripts or programs shown this way. For example:

Use the `ls` to display the contents of a directory:

```
$ ls
Desktop                 axhome           logs          paulwesterberg.gif
Mail                    backupfiles      mail          reports
```

The output returned in response to the command (in this case, the contents of the directory) is shown in this style.

`prompt`

A prompt, which is a computer's way of signifying that it is ready for you to input something, will be shown in this style. Examples:

```
$
```

```
#
```

```
[stephen@maturin stephen]$
```

```
leopard login:
```

`user input`

Text that the user has to type, either on the command line, or into a text box on a GUI screen, is displayed in this style. In the following example, **`text`** is displayed in this style:

To boot your system into the text based installation program, you will need to type in the **`text`** command at the `boot:` prompt.

Another example, with the word **`root`** displayed as something the user needs to type in:

If you need to log in as root when you first log into your system, and you are using the graphical login screen, at the `Login` prompt, type **`root`**. At the `Password` prompt, type in the root password.

glossary entry

A word that appears in the glossary will be shown in the body of the document in this style. For example:

The lpd **daemon** handles printing requests.

In this case, the style of the word **daemon** should indicate to you that a definition of the term is available in the glossary.

Additionally, we use several different strategies to draw your attention to certain pieces of information. In order of how critical the information is to your system, these items will be marked as a note, a caution or a warning. For example:

Note

Remember that Linux is case sensitive. In other words, a rose is not a ROSE is not a rOsE.

Do not do routine tasks as root — use a regular user account unless you need to use the root account to administer your system.

If you choose not to partition manually, a server installation will remove all existing partitions on all installed hard drives. Do not choose this installation class unless you are sure you have no data you need to save.

More to Come

The *Red Hat Network User Reference Guide* is constantly expanding as new Red Hat Network features and service plans are launched.

Send in Your Feedback

If you would like to make suggestions about the *Red Hat Network User Reference Guide*, please mention this guide's identifier:

RHNurg(EN)-3.0-Print-RHI (2001-08-12T12:19-0400)

You can send mail to:

rhn-feedback@redhat.com

1 What is Red Hat Network?

Have you ever read about a new version of a software package and wanted to install it but could not find it?

Have you ever tried to find an RPM through an Internet search engine or an RPM Repository and been linked to a site that you have never heard of?

Have you ever tried to find an RPM but instead you are only able to find the source files that you have to compile yourself?

Have you ever spent hours or even days visiting different websites to see if you have the latest packages installed on your system, only to have to do it again in a few months?

Those days are over with Red Hat Network (RHN). RHN provides the solution to all your system software management needs.

Red Hat Network is an Internet solution for managing a Red Hat Linux system or a network of Red Hat Linux systems. All Security Alerts, Bug Fix Alerts, and Enhancement Alerts (collective known as Errata Alerts) can be downloaded directly from Red Hat. You can even have updates automatically delivered directly to your system as soon as they are released.

The three main components of Red Hat Network are as follows:

- The Red Hat Network Registration Client
- The Red Hat Network user interface
- Red Hat Network Daemon

The Red Hat Network Registration Client allows you to create a unique RHN user name and password and probes the hardware and software on your system to create a System Profile. The System Profile is sent to RHN and RHN returns a unique System ID to your system (see Chapter 2, *Red Hat Network Registration Client* for further information).

You can use either of the two Red Hat Network user interfaces:

- Software Manager Web interface available at http://rhn.redhat.com
- The Red Hat Update Agent

Both the Web interface and the Red Hat Update Agent allow you to view all Errata Alerts included in the Red Hat Errata list. Only packages relevant to your system are shown. Red Hat Network can also be configured to verify packages once downloaded, ignore update notifications for certain packages, and view package details before downloading them.

The Red Hat Network Daemon (rhnsd) runs in the background as a service and probes the Red Hat Network for notifications and updates at set time intervals (see Chapter 6, *Red Hat Network Daemon* for further information).

Many Red Hat Network terms are used throughout this manual. As you read the *Red Hat Network User Reference Guide*, refer to the *Glossary* as necessary for explanation of common terms.

1.1 Software Manager

The first subscription service offered through Red Hat Network is Software Manager. Additional service offerings will be available in the near future. Registering a system with Red Hat Network is free as well as one subscription to Software Manager. Additional subscription to Software Manager can be purchased at http://rhn.redhat.com/purchase_info.pxt.

With each Software Manager subscription, you receive:

- Errata Alerts — learn when Security Alerts, Bug Fix Alerts, and Enhancement Alerts are issued for all the systems in your network through the Software Manager interface
- Automatic email notifications — receive an email notification when an Errata Alert is issued for your system
- Scheduled Errata Updates — schedule delivery of Errata Updates with optional automatic installation
- Package installation — Schedule package installation on one or more systems with the click of a button.
- Red Hat Update Agent — use the Red Hat Update Agent to download the lastest software packages for your system with optional installation of packages

1.2 Automatic Notifications

During registration, you can configure Red Hat Network to send you email notifications of new and updated software packages. Automated notifications of the latest updates:

- Reduce the time and effort required by system administrators to stay on top of the Red Hat errata list
- Minimize security vulnerabilities in your network by providing the patches as soon as Red Hat releases them
- Filter out package updates not relevant to your network
- Provide a reliable method of managing multiple systems with similar configurations

1.3 Security, Quality Assurance, and Red Hat Network

Red Hat Network provides significant benefits to your network including security and quality assurance. All transactions made between you and Red Hat Network are encrypted, and all RPM packages are signed with Red Hat's GNU Privacy Guard (GPG) signature to ensure authenticity.

Red Hat Network incorporates the following security measures:

1. Your System Profile available at http://rhn.redhat.com is only accessible with the correct user name and password.
2. A Digital Certificate stored on the client system in the file `/etc/sysconfig/rhn/systemid` after registration is used to authenticate the system during each transaction between the client and Red Hat Network.
3. All notifications and information messages are signed by Red Hat with an electronic signature using GPG. The `rpm` utility can be used to verify the authenticity of the package before it is installed.
4. All transactions are encrypted using a Secure Sockets Layer (SSL) connection.
5. All packages are tested and verified by the Red Hat Quality Assurance Team before they are added to the Red Hat errata list and Red Hat Network.

1.4 Before You Begin

Red Hat Network is available for Red Hat Linux 6.2 and higher. For instructions on configuring Red Hat Linux 6.2 for Red Hat Network, refer to Chapter 7, *Using Red Hat Network with Red Hat Linux 6.2*.

By default, all the software packages you need to use Red Hat Network are installed with Red Hat Linux 7 and higher. However, if you chose not to install them during the installation process or performed an upgrade from Red Hat Linux 6.2 or lower, you might not have the Red Hat Network Registration Client or the Red Hat Update Agent installed. To verify that the Red Hat Network Registration Client is installed, type the following command:

```
rpm -q rhn_register
```

If the Red Hat Network Registration Client is installed, it will return something similar to

```
rhn_register-1.5.0-1
```

The version number might differ slightly if you have a newer version installed.

If you do not have Red Hat Network Registration Client installed, the command will return

```
package rhn_register is not installed
```

Perform this check for every package in Table 1–1, *Red Hat Network Packages*. If you do not want to use the graphical versions, you do not have to install the two packages ending in gnome.

Table 1–1 Red Hat Network Packages

Package Name	Description
rhn_register	Provides the Red Hat Network Registration Client program and the text mode interface
rhn_register-gnome	Provides the GNOME interface (graphical version) for the Red Hat Network Registration Client; runs if the X Window System is available
up2date	Provides the Red Hat Update Agent command line version and the Red Hat Network Daemon
up2date-gnome	Provides the GNOME interface (graphical version) for the Red Hat Update Agent; runs if the X Window System is available

If the packages are not installed, they can be found on the Red Hat Linux 7 or higher CD-ROM #1 in the RedHat/RPMS directory or downloaded from the Red Hat FTP site available at ftp://ftp.redhat.com (or from a Red Hat FTP mirror available at http://www.redhat.com/mirrors.html). Always check the Red Hat errata page, available at http://www.redhat.com/errata/, for package updates. If you install an older version of these packages, you can retreive the latest versions using Red Hat Network. The first time that you request the RPM Updates for your system, they will be included.

2 Red Hat Network Registration Client

Before you begin using Red Hat Network, you need to create a user name, password, and System Profile. The Red Hat Network Registration Client will walk you through this process.

2.1 Configuring the Red Hat Network Registration Client

WARNING

Most users do not need to configure the Red Hat Network Registration Client before registering their systems. Do not attempt to use this option unless you are required to.

To start the configuration tool, use the command:

```
rhn_register --configure
```

You will be presented with a list of options and their current values:

```
0.  enableProxyAuth    No
1.  noSSLServerURL     http://www.rhns.redhat.com/XMLRPC
2.  enableProxy        No
3.  httpProxy
4.  proxyUser
5.  serverURL          https://www.rhns.redhat.com/XMLRPC
6.  proxyPassword
7.  debug              No

Enter number of item to edit <return to exit, q to quit without saving>:
```

Enter the number of the item that you want to modify, and enter a new value for the option. When you finish changing your configuration, press [Enter] to save your changes and exit. Press [q] and then [Enter] to quit without saving your changes.

The most common options configured are numbers 1 and 2 to enable a proxy server. To enable a proxy server, change the value for `enableProxy` to **`Yes`** and the value of `httpProxy` to the name of the proxy server and port number in the format HOST:PORT. For example, to use the proxy server squid.mysite.org on port 3128, you would change the value to **`squid.mysite.org:3128`**.

If you require a proxy username and password, change the values of numbers 0, 4, and 6. Set `enableProxyAuth` to **`Yes`** to enable username/password authentication for the proxy. Set `proxyUser` and `proxyPassword` to the appropriate username and password for the proxy.

2.2 Starting the Red Hat Network Registration Client

You must be root to register a system with RHN. If you start the Red Hat Network Registration Client as a standard user, you will be prompted to enter the root password before proceeding. To start the Red Hat Network Registration Client in Red Hat Linux 6.2 or higher, use one of the following methods:

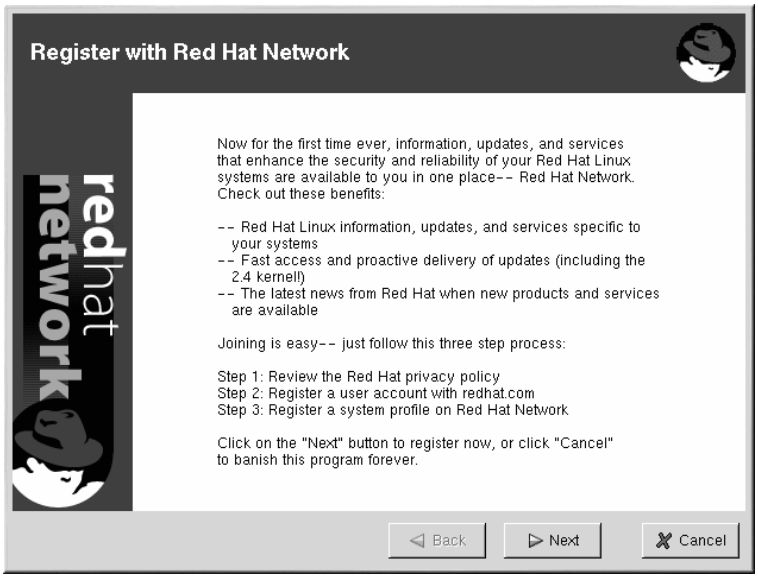
1. On the GNOME desktop, go to the **Main Menu Button** (on the Panel) => **Programs** => **System** => **Red Hat Network**
2. On the KDE desktop, go to the **Main Menu Button** (on the Panel) => **Red Hat** => **System** => **Red Hat Network**
3. Type the command `rhn_register` at a shell prompt (for example an xterm or gnome-terminal)
4. If you are not running the X Window System, type the command `rhn_register` at a virtual console or remote terminal. Please refer to Section 2.7, *Text Mode RHN Registration Client* for further details.

You must use Python 1.5.2-24 or later with Secure Sockets Layer (SSL) support. If not, the information you transfer will not be encrypted. If you have an earlier version of Python, you will see the message shown in Figure 2–1, *Use Python 1.5.2-24 or later*. To determine the version of Python on your system, use the command `rpm -q python`. It is strongly recommended you use Python 1.5.2-24 or later.

Figure 2–1 Use Python 1.5.2-24 or later

The opening screen for the Red Hat Network Registration Client gives you a brief overview of the services available and the steps required to register (see Figure 2–2, *Welcome Screen*). Click **Next** to continue with the registration process. If you click **Cancel**, the registration process will end and no information will be sent.

Figure 2–2 Welcome Screen



Red Hat is committed to protecting your privacy (see Figure 2–3, *Red Hat Privacy Statement*). The information gathered during the Red Hat Network Registration process is used to create a System Profile. The System Profile is essential if you wish to receive update notifications about your system. If you have any questions about how your information is being used, please contact us at `feedback@redhat.com`.

Figure 2–3 Red Hat Privacy Statement

2.3 Registering a User Account

Before you can create a System Profile, you must create a user account. The only required information in this section is a unique user name and password and a valid email address.

In the screen shown in Figure 2–6, *Create a Unique User Name and Password*, you must choose a user name and password. Once logged into Red Hat Network, you can modify your preferences, view your existing System Profile, or obtain the lastest Red Hat software packages. You must choose a unique user name. If you enter one already in use, you will see an error message (see Figure 2–4, *Error: Username Already Exists*).

Figure 2–4 Error: Username Already Exists

Note

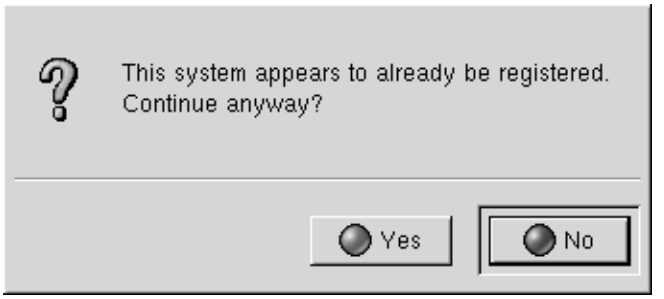
If you are already a member of redhat.com, you can use the same user name and password. However, you will still need to continue with the registration process to create your System Profile.

Your user name and password have the following restrictions:

- Must be at least four characters long
- Are case-insentitive
- Can not contain any spaces
- Can not contain any tabs
- Can not contain any line feeds
- Can not contain the characters &, +, %, or ’

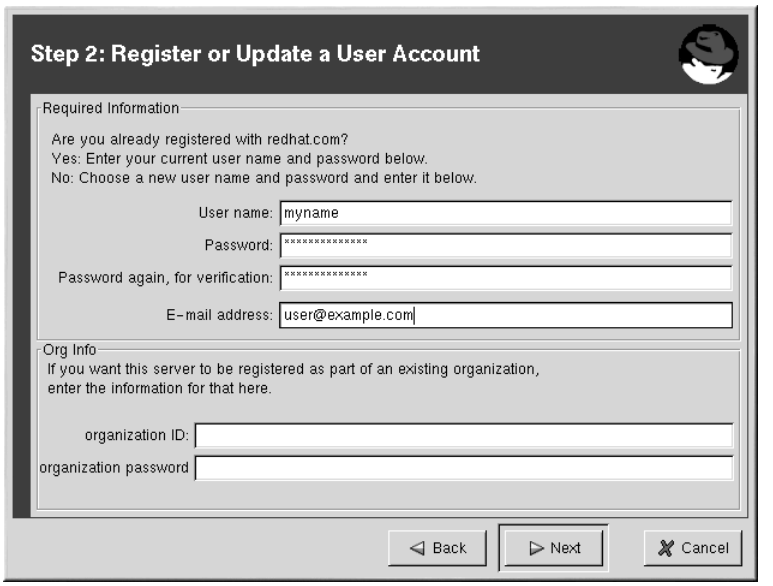
If you have already registered your system and try to register it again, the dialog box shown in Figure 2–5, *Warning: This System Already Registered* will appear. If you continue, it will overwrite your existing systemid file (`/etc/sysconfig/rhn/systemid`) and you will create a different System Profile. You will no longer be able to use your previous System Profile — be sure this is what you want to do before you choose **Yes**.

Figure 2–5 Warning: This System Already Registered



If you have already registered a machine and created a System Profile, you can add a new machine to your account. Run the Red Hat Network Registration Client on the new machine you wish to add and enter your existing Red Hat Network user name and password. The new machine will be added to your existing account, and you can log into Red Hat Network with your user name and password to view all your systems simultaneously.

Figure 2–6 Create a Unique User Name and Password



Most users can leave the **Org Info** section blank. If you have an existing organization account, enter your organization's ID and password in the provided text fields. If the values are valid, the system will be added to the organization's Red Hat Network account.

Click **Next** to continue.

2.4 Registering a System Profile

Now that you have a user account, you can create a System Profile that consists of hardware and software information about your Red Hat Linux system. The software System Profile information is used by Red Hat Network to determine what software update notifications you receive.

2.4.1 Hardware System Profile

After creating a user name and password for your Red Hat Network account, the Red Hat Network Registration Client probes your system for the following information:

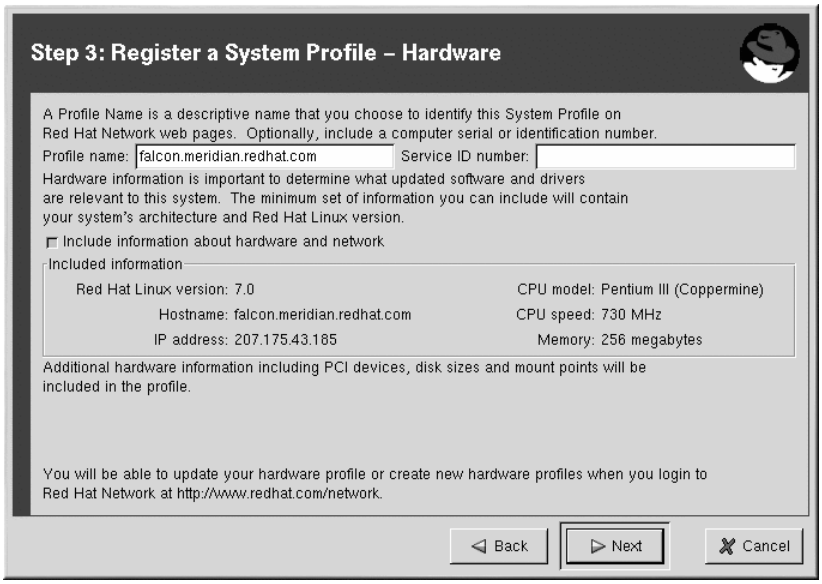
- Red Hat Linux version
- Hostname
- IP address
- CPU model
- CPU speed
- Amount of RAM
- PCI devices
- Disk sizes
- Mount points

The next step is choosing a profile name for your system as shown in Figure 2–7, *System Profile - Hardware*. The default value is the hostname for the system. You may modify this to be a more descriptive string such as **Email Server for Support Team** if you find it more helpful. Optionally, you can enter a computer serial or identification number for the system.

If you do not wish to include information about your hardware or network in your System Profile, deselect **Include information about hardware and network** (see Figure 2–7, *System Profile - Hardware*).

Click **Next** to continue with the registration process.

Figure 2–7 System Profile - Hardware



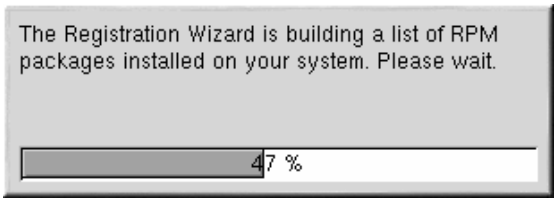
2.4.2 Software System Profile

The software System Profile consists of a list of RPM packages for which you wish to receive notifications. The Red Hat Network Registration Client shows you a list of all RPM packages listed in the RPM database on your system and then allows you to customize the list by deselecting packages.

Gathering RPM Database Information

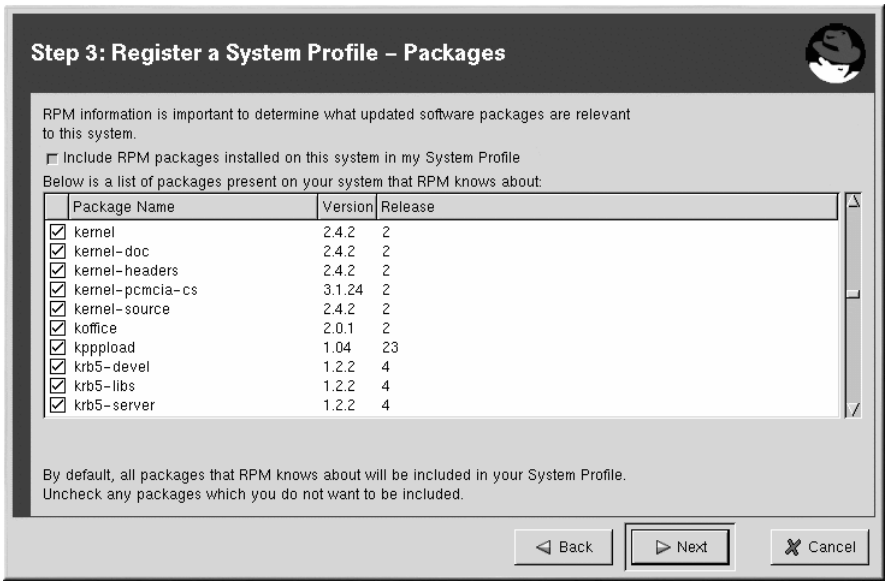
Only those packages you choose during this part of the registration will be included in in your System Profile, and you will only receive notifications about the packages in your System Profile. Thus, if you use an older version of a package and deselect it from the list, it will not be replaced with a newer version. This RPM list can be modifed through the Red Hat Network web interface or by using the Red Hat Update Agent. As shown in Figure 2–8, *Registration Wizard* , querying the RPM database may take some time depending on your system.

Figure 2–8 Registration Wizard



Once the RPM package list is built, the list will be displayed as shown in Figure 2–9, *RPM Package Information*. Deselecting **Include RPM Packages installed on this system in my System Profile** will omit this information from your System Profile.

Figure 2–9 RPM Package Information



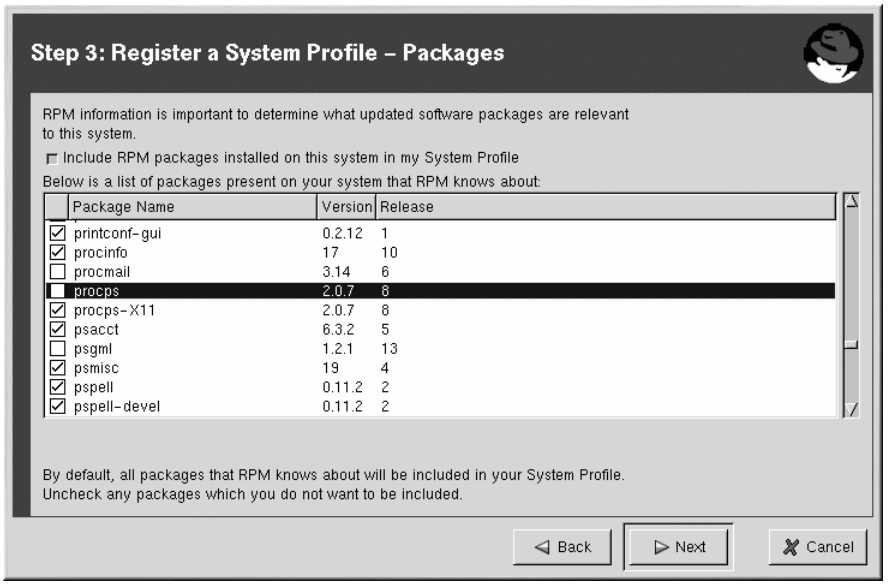
Choosing Which RPM Packages to Exclude from the System Profile

By default, all RPM packages in your RPM database are included in your System Profile to be updated by Red Hat Network. To exclude a package, uncheck the package from the list by clicking the X beside the package name. For example, Figure 2–10, *Choose which RPM Packages to Exclude from System*

Profile shows that the **procmail**, **procps**, and **psgml** packages have been omitted from the package list.

Choose which packages to exclude from the system profile, and click **Next** to continue with the registration process.

Figure 2–10 Choose which RPM Packages to Exclude from System Profile



2.5 Finishing Registration

As seen in Figure 2–11, *Finished Collecting Information for System Profile*, the last step of registration is to confirm that you want to send your System Profile to the Red Hat Network. If you choose **Cancel** at this point, no information will be sent. Clicking **Next** will send your profile.

Figure 2–11 Finished Collecting Information for System Profile

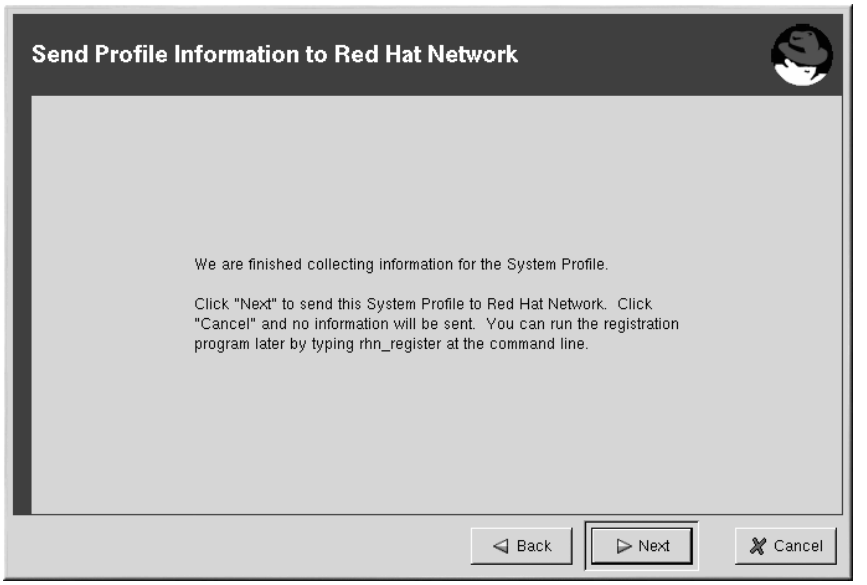
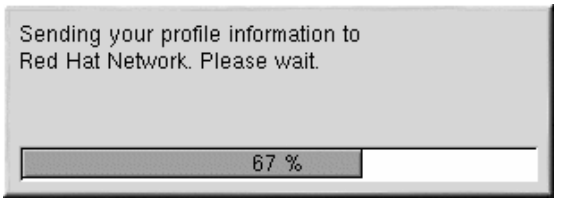


Figure 2–12, *Send System Profile to Red Hat Network* shows the progress bar you will see while your profile is being sent. This process may take some time depending on your connection speed.

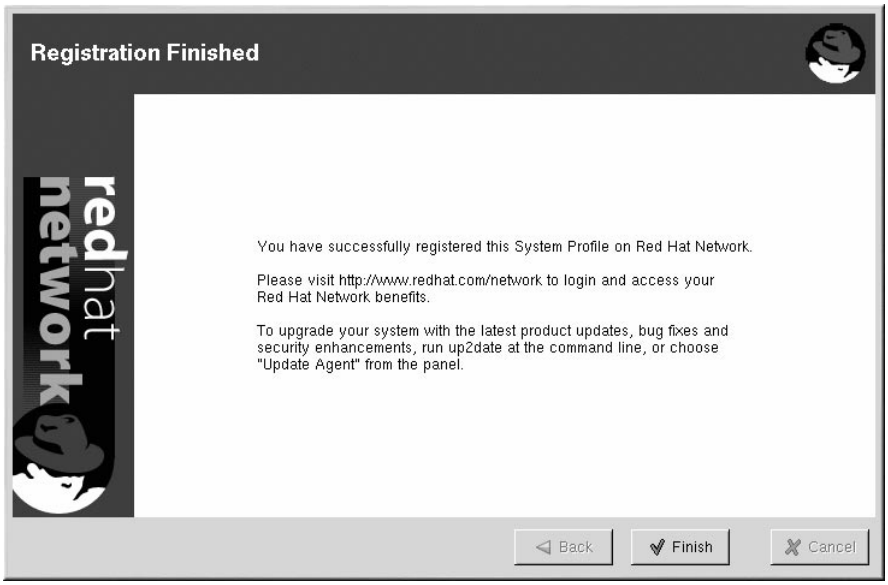
Figure 2–12 Send System Profile to Red Hat Network



You will know your System Profile has been successfully sent when you see the Registration Finished screen (Figure 2–13, *Registration Finished*). Click **Finish** to exit the Red Hat Network Registration Client.

After completing registration, visit http://rhn.redhat.com to verify your System Profile and make any changes.

Figure 2–13 Registration Finished



2.6 Entitling Your System

Now that you have registered your system, it must be entitled before you can receive updated packages. In other words, you must subscribe it to Software Manager. Everyone automatically receives one free Software Manager subscription after creating an account through registering a system for RHN or creating a redhat.com account.

To entitle a system, go to http://rhn.redhat.com and login using the same username and password you just used in the Red Hat Network Registration Client. On the left navigation bar, click **Entitlements** under the **Your RHN** category. The **Entitlement Manager** tells you how many entitlements you have left. If you have one or more left, check the checkbox under the **Entitled** column beside the name of the system that you just registered. Then click the **Update Entitlements** button at the bottom of the page. The number of entitlements remaining will decrease, and your system is now ready to use the Red Hat Update Agent and Software Manager. Refer to Chapter 4, *Red Hat Update Agent* and Chapter 5, *Software Manager* for details on how to use them. If you do not have any entitlement slots left, enter the number you want to purchase and click the **Buy Now!** button to purchase additional subscriptions.

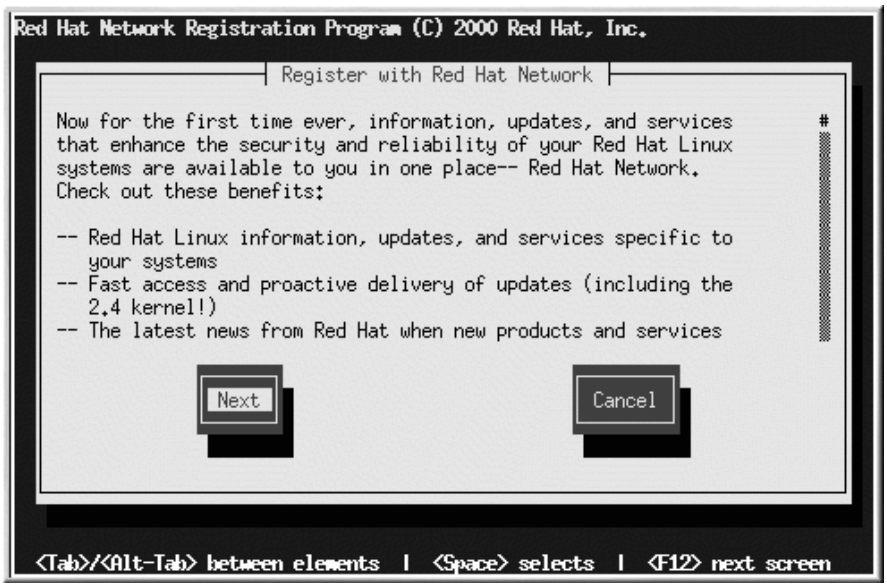
2.7 Text Mode RHN Registration Client

You can force the Red Hat Network Registration Client to run in text mode with the command:

```
rhn_register --nox
```

The screens for the Text Mode Red Hat Network Registration Client are almost identical to the screens for the graphical version of Red Hat Network Registration Client. Some of the text in the text mode version is more concise due to lack of space in the interface. However, there is an equal number of screens and fields in both versions. Thus, if you are using the text mode version, you can still follow the instructions that begin in Section 2.2, *Starting the Red Hat Network Registration Client*.

Figure 2–14 Text Mode Welcome Screen



3 Red Hat Update Agent Configuration Tool

Before using the Red Hat Update Agent, you should configure the settings. This can be done with the Red Hat Update Agent Configuration Tool.

If you are not running the X Window System or prefer the command line version, skip to Section 3.5, *Command Line Version of Red Hat Update Agent Configuration Tool.*

3.1 Configuring the Red Hat Update Agent

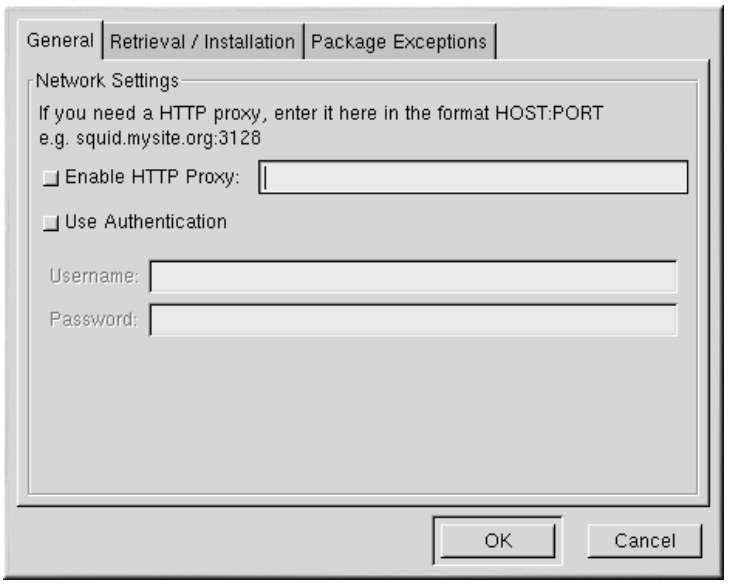
You must be root to run the Red Hat Update Agent Configuration Tool. If you start the Red Hat Update Agent Configuration Tool as a standard user, you will be prompted to enter the root password before proceeding. The Red Hat Update Agent Configuration Tool can be started using one of the following methods:

- On the GNOME desktop, go to the **Main Menu Button** (on the Panel) => **Programs** => **System** => **Update Agent Configuration**
- On the KDE desktop, go to the **Main Menu Button** (on the Panel) => **Red Hat** => **Update Agent Configuration**
- Type the command `up2date-config` at a shell prompt (for example, an xterm or a gnome-terminal)

3.2 General Settings

The **General** tab allows you to enable an HTTP Proxy Server. If your network connection requires you to use an HTTP Proxy Server to make HTTP connections, select the **Enable HTTP Proxy** option and type your proxy server in the text field with the format HOST:PORT. For example, to use the proxy server squid.mysite.org on port 3128, you would enter **`squid.mysite.org:3128`** in the text field. Additionally, if your proxy server requires a username and password, select the **Use Authenication** option and enter your username and password in the respective text fields.

Figure 3–1 General Settings



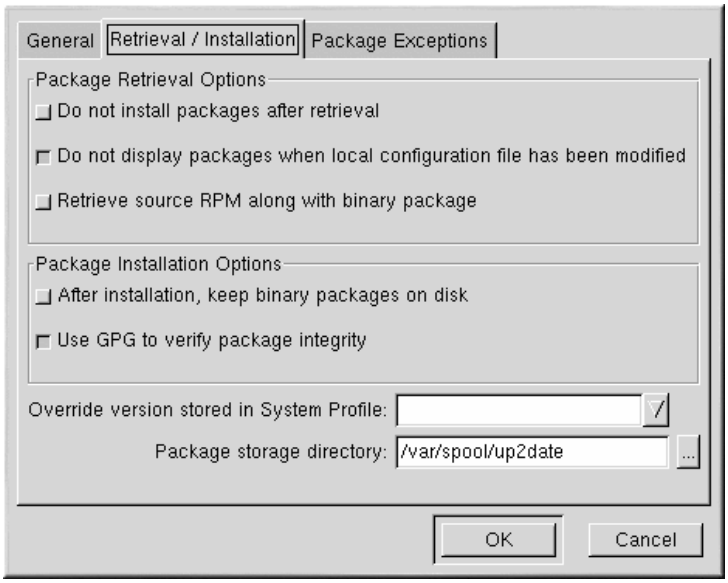
3.3 Retrieval/Installation Settings

The Retrieval/Installation tab allows you to customize your software package retrieval and package installation preferences.

Note

You must use Red Hat Update Agent Version 2.5.4 or higher to upgrade your kernel automatically. Red Hat Update Agent will install the updated kernel and configure LILO to boot the new kernel the next time the system is rebooted.

Figure 3–2 Retrieval/Installation Settings



The following retrieval options can be selected (see Figure 3–2, *Retrieval/Installation Settings*):

- **Do not install packages after retrieval** — download selected RPM packages to desired directory and ignore the installation preferences
- **Do not display packages when local configuration file has been modified** — if the configuration file has been modified for a package such as Apache or Squid, do not display them in the list of available packages
- **Retrieve source RPM along with binary package** — download both the source (*.src.rpm) and the binary (*.[architecture].rpm) files

The following installation options are configurable (see Figure 3–2, *Retrieval/Installation Settings*):

- **After installation, keep binary packages on disk** — save binary packages in desired directory instead of deleting them after installing them
- **Use GPG to verify package integrity** — before installing the packages, verify Red Hat's GPG signature

The following additional options are configurable from this tab:

- **Override version stored in System Profile** — override the Red Hat Linux version in your System Profile
- **Package storage directory** — change the directory where packages are downloaded; the default location is `/var/spool/up2date`

3.4 Package Exceptions Settings

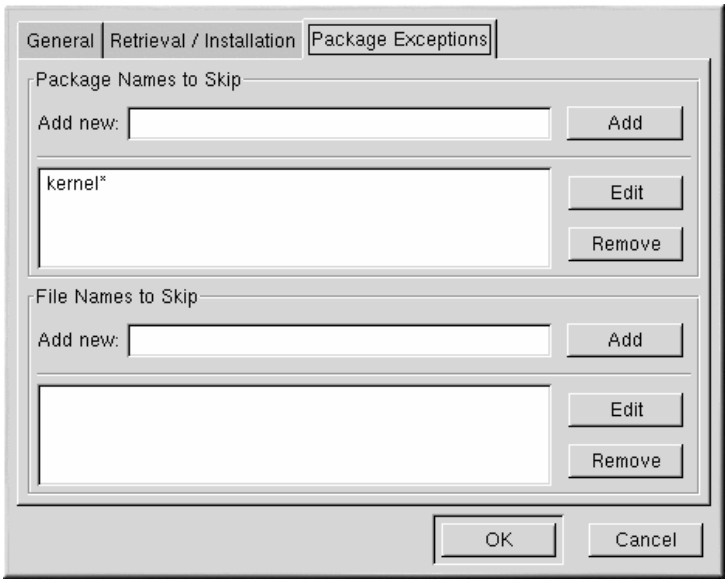
The Package Exceptions tab allows you to define which packages to exclude from the list of updated RPM packages according to the package name or file name (see Figure 3–3, *Package Exceptions Settings*).

To define a set of packages to be excluded according to the package name, click the **Add** button next to the **Package Names to Skip** section and enter a character string including wild cards (*). A wild card (*) at the end of the character string means all packages beginning with the character string will be excluded from the list. A wild card (*) at the beginning of the character string means any packages that end with the character string will be excluded from the list.

For example, if the string kernel* in the **Package Names to Skip** section, the Red Hat Update Agent will not display any packages beginning with kernel.

To exclude packages by file name, follow the same rules except click the **Add** button next to the **File Names to Skip** section.

Figure 3–3 Package Exceptions Settings



3.5 Command Line Version of Red Hat Update Agent Configuration Tool

The command line version of this tool performs the same function as the graphical version. It allows you to configure the settings used by the Red Hat Update Agent and store them in the configuration file `/etc/sysconfig/rhn/up2date`.

To run the command line version of the Red Hat Update Agent Configuration Tool, use the following command:

```
up2date --nox --configure
```

You will be presented with a list of options and their current values:

```
0.  storageDir          /var/spool/up2date
1.  headerCacheSize     40
2.  httpProxy
3.  debug               No
4.  useGPG              Yes
```

```
5.  networkRetries     5
6.  removeSkipList     ['kernel*']
7.  retrieveOnly       No
8.  enableProxy        No
9.  keepAfterInstall   No
10. proxyPassword
11. proxyUser
12. headerFetchCount   10
13. versionOverride
14. enableProxyAuth    No
15. noSSLServerURL     http://www.rhns.redhat.com/XMLRPC
16. noReplaceConfig    Yes
17. noBootLoader       No
18. systemIdPath       /etc/sysconfig/rhn/systemid
19. serverURL          https://beta.rhns.redhat.com/XMLRPC
20. pkgSkipList        ['kernel*']
21. adminAddress       ['root@localhost']
22. forceInstall       No
23. fileSkipList       []
24. retrieveSource     No

Enter number of item to edit <return to exit, q to quit without saving>:
```

Enter the number of the item that you want to modify and enter a new value for the option. When you finish changing your configuration, press [Enter] to save your changes and exit. Press [q] and then [Enter] to quit without saving your changes.

4 Red Hat Update Agent

After configuring the settings for the Red Hat Update Agent using the instructions in Chapter 3, *Red Hat Update Agent Configuration Tool*, you can use the Red Hat Update Agent to retrieve the latest software packages from Red Hat. Using this tool will allow you to always have the most up-to-date Red Hat Linux system with all security patches, bug fixes, and software package enhancements.

Remember that you can not use the Red Hat Update Agent on a system unless it is subscribed to Software Manager.

If you are not running the X Windows System or prefer the command-line version of Red Hat Update Agent, skip to Section 4.6, *Command Line Version of Red Hat Update Agent*.

4.1 Starting the Red Hat Update Agent

You must be root to run the Red Hat Update Agent. If you start the Red Hat Update Agent as a standard user, you will be prompted to enter the root password before proceeding. The Red Hat Update Agent can be started using one of the following methods:

- On the GNOME desktop, go to the **Main Menu Button** (on the Panel) => **Programs** => **System** => **Update Agent**
- On the KDE desktop, go to the **Main Menu Button** (on the Panel) => **Red Hat** => **Update Agent**
- Type the command `up2date` at a shell prompt (for example, an xterm or gnome-terminal)

If you choose the last option and start the application from a shell prompt, you can specify the options in Table 4–1, *Graphical Update Agent Options* to the Red Hat Update Agent.

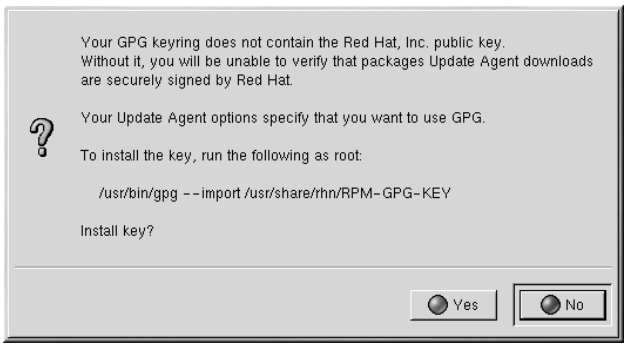
Table 4–1 Graphical Update Agent Options

Argument	Description
--configure	Configure Red Hat Update Agent options. This is equivalent to running the Red Hat Update Agent Configuration Tool (`up2date-config`).
-d, --download	Download packages only, do not install them. This argument will override the configuraton option **Do not install packages after retrieval.**
-f, --force	Force package installation. This option overrides the file, package, and configuration skip lists.

Argument	Description
-i, --install	Install packages after they are downloaded. This argument will override the configuraton option **Do not install packages after retrieval.**
-k, --packagedir	Specify a colon separated path of directories to look for packages before trying to download them.
--nosig	Do not use GPG to check package signatures. This option will override the saved configuration option.
--tmpdir=*directory*	Override the configured package directory. The default location is `/var/spool/up2date`. This option is useful if you do not have enough space in the configured location.
--justdb	Only add packages to the database and do not install them.
--dbpath	Specify a path where an alternate RPM database to use is found.

The first time you run the Red Hat Update Agent, the dialog window in Figure 4–1, *Install GPG Key* will prompt you to install the Red Hat GPG key. This is used to verify the RPM packages you download for security purposes. Click **Yes** to install the key, and you will not see this message again.

Figure 4–1 Install GPG Key



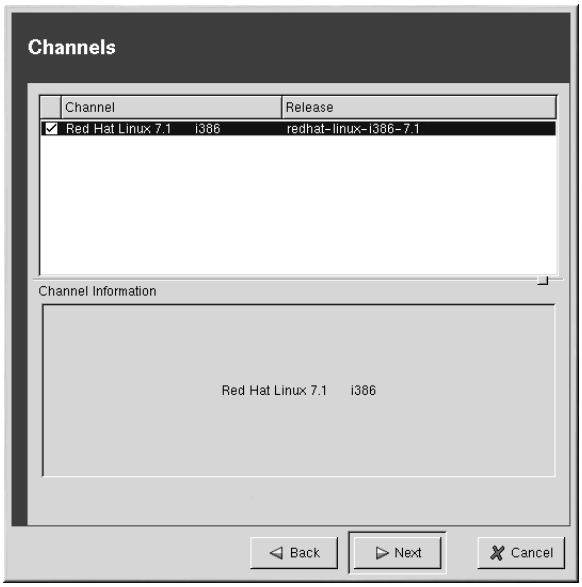
After installing the Red Hat GPG key, the screen in Figure 4–2, *Welcome Screen* will appear. It appears every time you start the Red Hat Update Agent. Click **Next** to continue.

Figure 4–2 Welcome Screen

4.2 Choosing a Channel

The first step is to select the channel(s) from which you want the updated packages to be retreived. Select one or more channels and click **Next**. Refer to Section 5.5, *Channels and Packages* for more information on channels and how channels are used to determine which packages to install.

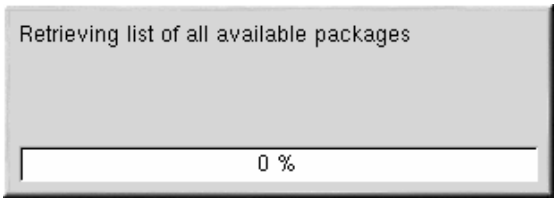
Figure 4–3 Channels



4.3 Choosing Packages to Update

After clicking **Next** on the Welcome Screen, the dialog box in Figure 4–4, *Retrieve Update Information* will appear. This means that a connection to Red Hat Network is being established and that your customized list of updates is being retreived. This might take some time, depending on the speed of your connection and the number of packages you have installed.

Figure 4–4 Retrieve Update Information



While you see this dialog box, Red Hat Update Agent uses your unique Digital Certificate (`/etc/sysconfig/rhn/systemid`) to determine if there are any updated packages available

for your system. If there are no updated packages available for your system, the dialog box in Figure 4–5, *No new packages needed* appears. Click **Ok** to exit Red Hat Update Agent.

Figure 4–5 No new packages needed

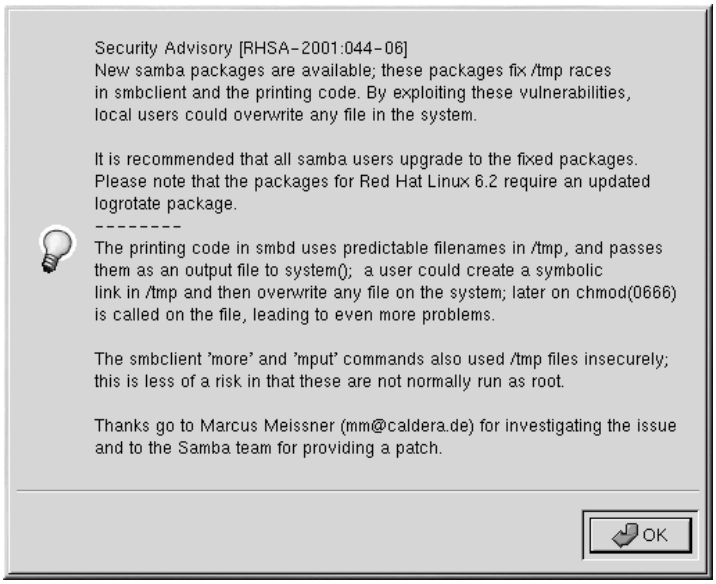
If your system is not up-to-date, your customized list of available updated packages is displayed as shown in Figure 4–6, *List of Available Updates*.

Figure 4–6 List of Available Updates

By default, no packages are selected for download. If you highlight each package, a brief package description is displayed in the **Package Information** section at the bottom of the screen. To select the package for download (and installation if you chose that option), click the checkbox. You can select all the packages listed by clicking the button next to **Select all packages**.

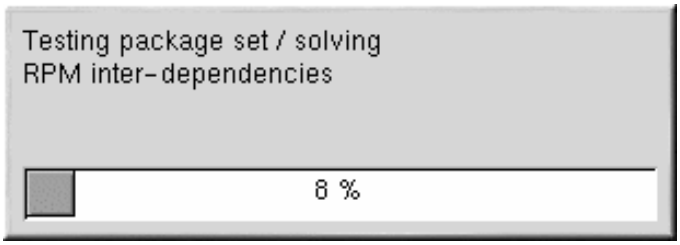
If you want to view the advisory for the RPM Update, click the **View Advisory** button. This will display what type of Errata Alert it is and what problems it addresses as shown in Figure 4–7, *View Advisory*. Click **Next** when you are finished selecting packages.

Figure 4–7 View Advisory



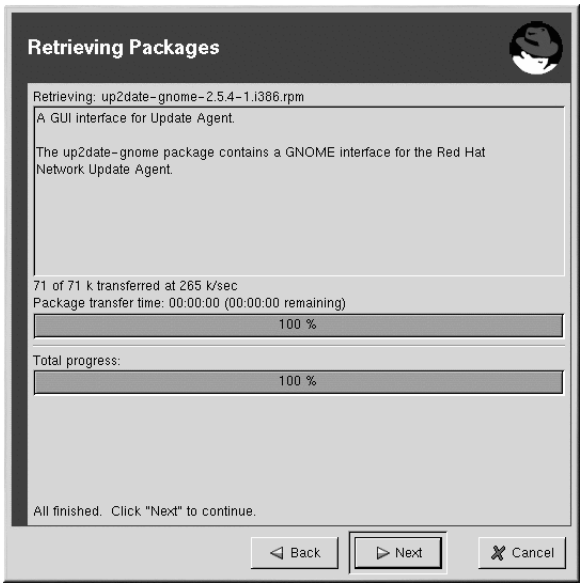
After choosing which packages to update, the Red Hat Update Agent tests for RPM dependencies and prompt you if you have chosen to omit packages that are required for software updates that you did choose. The dialog box in Figure 4–8, *Testing Packages* is shown while it is testing. This process might take some time depending upon how many packages are are updating.

Figure 4–8 Testing Packages



Red Hat Update Agent shows the progress of each package retrieval as shown in Figure 4–9, *Retrieval Finished*. When they have all been retrieved, the message **All finished** is displayed at the bottom of the screen. Click **Next** to continue. If you did not chose to install the packages automatically, skip the next section and go to Section 4.5, *Update Agent Finished*.

Figure 4–9 Retrieval Finished



4.4 Installing Updated Packages

After downloading the packages through the Red Hat Update Agent, they must be installed. If you chose not to have the packages installed automatically, skip to Section 4.7, *Manual Package Installation* for further instructions. If you chose to have all the packages installed automatically (see Chapter 3, *Red Hat Update Agent Configuration Tool*), the selected packages are installed. The progress of installing each package, as well as the total progress, is displayed. When the packages have been installed, as seen in Figure 4–10, *Installation Finished*, click **Next** to continue.

Figure 4–10 Installation Finished

4.5 Update Agent Finished

When the Red Hat Update Agent has finished downloading the desired packages (and installing them if you chose the install option), you will see the screen in Figure 4–11, *Update Agent Finished*. Click **Finish** to exit the Red Hat Update Agent.

Figure 4–11 Update Agent Finished

4.6 Command Line Version of Red Hat Update Agent

If you are not running X, you can still run the Red Hat Update Agent from a virtual console or remote terminal. If you are running X but want to use the command line version, you can force it not to display the graphical interface with the following command:

```
up2date --nox
```

The command line version of the Red Hat Update Agent accepts the following arguments:

Table 4–2 Update Agent Command Line Arguments

Argument	Description
--configure	Configure Red Hat Update Agent options. This is equivalent to running the Red Hat Update Agent Configuration Tool (`up2date-config`). To run the command line version of `up2date-config`, use this option in conjunction with the `--nox` option: `up2date --nox --configure`. Refer to Section 3.5, *Command Line Version of Red Hat Update Agent Configuration Tool* for details.
-d, --download	Download packages only, do not install them. This argument will override the configuraton option **Do not install packages after retrieval.**
-f, --force	Force package installation. This option overrides the file, package, and configuration skip lists.
-i, --install	Install packages after they are downloaded. This argument will override the configuraton option **Do not install packages after retrieval.**
-l, --list	Display the list of updated packages that are available for the system.
--showall	Show a list of all packages available for your release of Red Hat Linux, including those not currently installed.
-k, --packagedir=STRING	Specify a colon separated path of directories to look for packages before trying to download them.
--nosig	Do not use GPG to check package signatures. This option will override the saved configuration option.
-p, --packages	Update the packages associated with your System Profile on Red Hat Network. Use this option if you install RPM packages without using the Red Hat Update Agent.
--whatprovides=<deps>	Sends a comma separated list of dependencies to the RHN servers and returns a list of packages that satisfies the dependencies.
--solvesdeps=<deps>	Performs the same action as --whatprovides in addition to downloading the packages that are needed to resolve the dependencies.

Argument	Description
--tmpdir=*directory*	Override the configured package directory. The default location is `/var/spool/up2date`. This option is useful if you do not have enough space in the configured location.
-u, --update	Update the system. All package updates for your system will be downloaded based on your configured preferences (and installed if you chose that option).
--nox	Force the program to run in command line mode. Do not display the graphical interface.
-h, --help	Display help on command line arguments.
-v, --verbose	Display more information about what actions Red Hat Update Agent is performing.
--justdb	Only add packages to the database and do not install them.
--dbpath	Specify a path where an alternate RPM database to use is found.
--version	Display which version of Red Hat Update Agent you are running.
-?, --usage	Briefly describe the options for `up2date`.
packagename	Specify a package name to download (and install if you chose that option). Only specify the package name. Do not include the version or release numbers. For example, the command `up2date python` downloads (and optionally installs) the python package if there is a newer version available and all of its dependencies. If the package specified is not already installed, it will download it and all of its dependencies (and optionally install it) even if it is not already installed.

The command line version of the Red Hat Update Agent allows you to perform advanced functions or to perform actions with little or no interaction. For example, the following command updates your system with no interaction. It will download the newer packages and install them if you configured it to install them automatically.

```
up2date -u
```

4.6.1 Installing the Red Hat GPG key

The first time you run the graphical version of Red Hat Update Agent, it prompts you to install the Red Hat GPG key. This key is required to authenticate the packages downloaded from Red Hat Network. If you run the command line version the first time you start Red Hat Update Agent, you need to install the Red Hat GPG key manually. If you do not have it installed, you will see the following message:

```
Your GPG keyring does not contain the Red Hat, Inc. public key.
Without it, you will be unable to verify that packages Update Agent downloads
are securely signed by Red Hat.

Your Update Agent options specify that you want to use GPG.

To install the key, run the following as root:

    /usr/bin/gpg --import /usr/share/rhn/RPM-GPG-KEY
```

To install the Red Hat GPG key, use the command it displays: `/usr/bin/gpg --import /usr/share/rhn/RPM-GPG-KEY`, or use the following steps:

Note

GPG keys must be installed for each user. To install the key to use with Red Hat Network, import the key while logged in as root.

1. Cut and paste the following into a file and save it as `redhat2.asc` or download it from http://www.redhat.com/about/contact/.

```
Type bits/keyID    Date        User ID
pub  1024D/DB42A60E 1999-09-23 Red Hat Software, Inc. (security@redhat.com)
sub  2048g/961630A2 1999-09-23

-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: GnuPG v1.0.0 (GNU/Linux)
Comment: For info see http://www.gnupg.org

mQGiBDfqVDgRBADBKr3Bl6PO8BQ0H8sJoD6p9U7Yyl7pjtZqioviPwXP+DCWd4u8
HQzcxAZ57m8ssA1LK1Fx93coJhDzM130+p5BG9mYSWShLabR3N1KXdXQYYcowTOM
GxdwYRGr1Spw8QydLhjVfU1VSl4xt6bupPbWJbyjkg5Z3P7BlUOUJmrx3wCgobNV
EDGaWYJcch5z5B1of/41G8kEAKii6q7Gu/vhXXnLS6m15oNnPVybyngiw/23dKjS
ZVG7rKANEK2mxg1VB+vc/uUc4k49UxJJfCZg1gu1sPFV3GSa+Y/7jsiLktQvCiLP
lncQt1dV+ENmHR5BdIDPWDzKBVbgWnSDnqQ6KrZ7T6AlZ74VMpjGxxkWU6vV2xsW
```

```
XCLPA/9P/vtImA8CZN3jxGgtK5GGtDNJ/cMhhuv5tnfwFg4b/VGo2Jr8mhLUqoIb
E6zeGAmZbUpdckDco8D5fiFmqTf5+++pCEpJLJkkzel/32N2w4qzPrcRMCiBURES
PjCLd4Y5rPoU8E4kOHc/4BuHN903tiCsCPloCrWsQZ7UdxfQ5LQiUmVkIEhhdCwg
SW5jIDxzZWN1cml0eUByZWRoYXQuY29tPohVBBMRAgAVBQI36lQ4AwsKAwMVAwID
FgIBAheAAAoJECGRgM3bQqYOsBQAnRVtg7B25Hm11PHcpa8FpeddKiq2AJ9aO8sB
XmLDmPOEFI75mpTrKYHF6rkCDQQ36lRyEAgAokgI2xJ+3bZsk8jRA8ORIX8DH05U
lMH27qFYzLbT6npXwXYIOtVn0K2/iMDj+oEB1Aa2au4OnddYaLWp06v3d+XyS0t+
5ab2ZfIQzdh7wCwxqRkzR+/H5TLYbMG+hvtTdylfqIX0WEfoOXMtWEGSVwyUsnM3
Jy3LOi48rQQSCKtCAUdV20FoIGWhwnb/gHU1BnmES6UdQujFBE6EANqPhp0coYoI
hHJ2oIO8ujQItvvNaU88j/s/izQv5e7MXOgVSjKe/WX3s2JtB/tW7utpy12wh1J+
JsFdbLV/t8CozUTpJgx5mVA3RKlxjTA+On+1IEUWioB+iVfT7Ov/0kcAzwADBQf9
E4SKCWRand8K0XloMYgmipxMhJNnWDMLkokvbMNTUoNpSfRoQJ9EheXDxwMpTPwK
ti/PYrrL2J11P2ed0x7zm8v3gLrY0cue1iSba+8glY+p31ZPOr5ogaJw7ZARgoS8
BwjyRymXQp+8Dete0TELKOL2/itDOPGHW07SsVWOR6cmX4VlRRcWB5KejaNvdrE5
4XFtOd04NMgWI63uqZc4zkRa+kwEZtmbz3tHSdRCCE+Y7YVP6IUf/w6YPQFQriWY
FiA6fD10eB+BlIUqIw80VgjsBKmCwvKkn4jg8kibXgj4/TzQSx77uYokw1EqQ2wk
OZoaEtcubsNMquuLCMWijYhGBBgRAgAGBQI36lRyAAoJECGRgM3bQqYOhyYAnj7h
VDY/FJAGqmtZpwVp9IlitW5tAJ4xQApr/jNFZCTksnI+4O1765F7tA==
=3AHZ
-----END PGP PUBLIC KEY BLOCK-----
```

2. At the shell prompt, import the key with the following command:

```
gpg --import redhat2.asc
```

The resulting message tells you that the key was processed. To check that the key was added, type `gpg --list-keys`. You will see the key you just downloaded from Red Hat, as well as your own keys.

4.7 Manual Package Installation

If you chose to download the software updates with the Red Hat Update Agent, over the Web through Software Manager, or have RPM Updates delivered to your system automatically (but not have them automatically installed), you must install them manually using the `rpm` utility.

To install them, change to the directory that contains the downloaded packages. The default directory is `/var/spool/up2date`. Then, type the command `rpm -Uvh *.rpm`. When the packages are finished installing, you can delete them if you wish. You do not need them anymore.

After installing the packages, you must update your System Profile so that you are not prompted to download them again. Refer to Section 4.8, *Syncronizing Your System Profile* for details.

4.8 Syncronizing Your System Profile

If you configured the Red Hat Update Agent to install the latest packages automatically, then your System Profile stored by Red Hat Network will be updated automatically also. However, if you only download the latest RPM packages using the Red Hat Update Agent or through the Web interface and upgrade or install the packages yourself, your System Profile will not be updated automatically. If you remove packages, you need to update your RPM package list in your System Profile.

To syncronize the RPM package list on your local system and on Red Hat Network run the command

```
up2date -p
```

After running this command, your System Profile on Red Hat Network will reflect the latest software versions installed on your system.

4.9 Log File

The Red Hat Update Agent keeps a log of all the actions that it peforms on your system in the file `/var/log/up2date`. It uses the standard rotating log method. Thus, older logs are in `/var/log/up2date.1`, `/var/log/up2date.2`, and `/var/log/up2date.3`. The log files store actions performed by the Red Hat Update Agent such as when your RPM database is opened, when it connects to Red Hat Network to retreive information from your System Profile, which packages are downloaded, which packages are installed using the Red Hat Update Agent, and which packages are deleted from your system after installation. If you choose to install and delete packages yourself, it will not be logged in this file. You will have to keep your own log of actions not performed with the Red Hat Update Agent.

5 Software Manager

Software Manager also refers to the Web interface to Red Hat Network. You can use Software Manager to manage multiple Red Hat Linux systems simultaneously including viewing Errata Alerts, applying Errata Updates, and installing packages.

Before you can use Red Hat Network, you must register each system that you want to benefit from its services. The only information required is a unique username and password combination and a valid email address. Refer to Chapter 2, *Red Hat Network Registration Client* for more information.

Your system must be subscribed to Software Manager to fully utilize the Software Manager interface. If a system is not subscribed (entitled), it will appear in the list of systems but will not be available for RPM Updates through Software Manager.

5.1 Logging into Software Manager

In a Web browser, go to http://rhn.redhat.com. The page shown in Figure 5–1, *Logging into Red Hat Network* will be displayed.

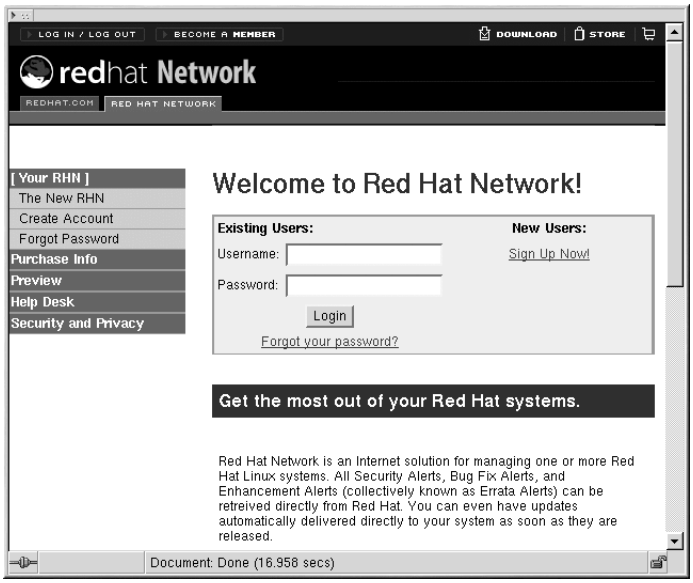
If you have not registered a system yet or do not have a redhat.com account, create a new account by clicking **Create Account** under the **Your RHN** category on the left navigation bar. After creating a new user account, you must register your system before using Software Manager. Refer to Chapter 2, *Red Hat Network Registration Client* for step-by-step instructions.

After registering your system with Red Hat Network through the Red Hat Network Registration Client, use the same username and password combination to log into Software Manager. Type them in the provided text entry boxes, and click the **Login** button.

Note

If you have an SSL-enabled Web browser, it is recommended that you use the secure version of Software Manager available at https://rhn.redhat.com. Information transferred with the secure version is encrypted.

Figure 5–1 Logging into Red Hat Network



5.2 Introduction to the Web Interface

The **left navigation bar** is divided into **categories** and **pages** within the categories.

A user with entitled systems has permission to use the following categories and pages. Each will be explained in more detail throughout this manual.

- **Your RHN** — Displays a quick overview of your account. It notifies you if systems need attention, provides a quick link to go directly to them, and displays the most recent Errata Alerts for your account.
  - **Your Account** — Update your personal profile and addresses. Indicate if you wish to receive email notifications about Errata Alerts for your systems.
  - **Entitlements** — Select systems that you want to be entitled to use Software Manager. Purchase additional Software Manager subscriptions.
  - **The New RHN** — Explains the differences between the previous Software Manager interface and the current interface.

- **Systems** — Manage your systems here.
  - **System List** — View a list of all your systems along with how many Errata Alerts each system has, which channels the systems are subscribed to, and which systems are entitled.
  - **System Search** — Quickly search all of your systems by specific criteria.
  - **System Preferences** — Change the preferences for one or more selected systems.

- **Channels and Packages**
  - **System List** — View a list of all your systems along with how many Errata Alerts each system has, which channels the systems are subscribed to, and which systems are entitled.
  - **Channel List** — View a list of all channels available through Red Hat Network.

- **Errata**
  - **All Errata** — List of all released Errata Alerts.
  - **Applicable Errata** — List of all applicable Errata Alerts for all of your systems.
  - **Errata Search** — Search Errata Alerts based on specific criteria.

- **Scheduled Actions**
  - **Pending Actions** — List of scheduled actions that have not been completed.
  - **Completed Actions** — List of scheduled actions that have been completed. Completed actions can be archived at any time.
  - **Archived Actions** — List of completed actions that have been selected to archive.

- **Help Desk**
  - **Terms and Conditions** — License Agreement and Limited Product Warranty.
  - **FAQ** — List of Frequently Asked Questions.
  - **Contact Customer Support** — Form to send an email to Red Hat Customer Service for support.
  - **RHN and Red Hat Linux 6.2** — Help for using RHN on Red Hat Linux 6.2.
  - **Support Forums** — Link to Red Hat Developer Network Forums.

  - **RHN User Reference** — Link to *RHN User Reference Guide* that provides step-by-step instructions for using RHN.

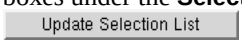
- **Security and Privacy** — Detailed information about how Red Hat protects the information about your systems and the personal information that you provide.
- **Current Selections** — List of currently selected items on which you want to perform an action. Refer to Section 5.2.2, *Selection List* for details.
- **Recent Wizards** — List of recently selected wizards.

5.2.1 Errata Alerts

Throughout Red Hat Network you will see three Errata Alert icons.  represents a Security Alert.  represents a Bug Fix Alert.  represents an Enhancement Alert.

Click on the Errata synopsis to view details about the Errata, or click on the number of systems affected to view a list of systems affected by the Errata Alert.

5.2.2 Selection List

Before performing actions such as applying errata updates, you must select the packages and systems you wish to modify. Pages including **System List** and **System Search** have a column of checkboxes under the **Select** column. Click the checkbox beside the item that you want to select, and click 

to add the selected items to the **Current Selections** list.

The **Current Selections** box below the left navigation bar (as shown in Figure 5–2, **Current Selections**) helps you keep track of your current selections. Click the name of the category (Errata, Systems, etc.) to view the selected items in a specific category.

Figure 5–2 Current Selections

To clear all items in a selection category, click **clear selection** under the category name.

To clear all items in all categories, click **clear all**.

To remove individual items from a selection list, follow these steps:

1. Click the category name in the **Current Selections** box.
2. Unselect the items from the list by clicking the checkbox under the **Select** column.
3. Click Update Selection List.

After clicking Update Selection List, the number of selections in the category will change in the **Current Selections** box.

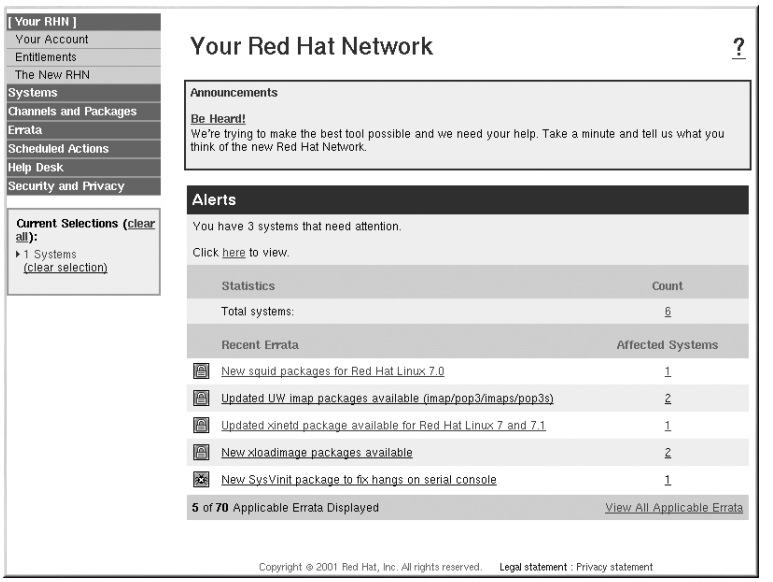
5.3 Your RHN

After logging into the Web interface of Red Hat Network, the first page you see is the main page, or the **Your Red Hat Network** page. This page displays important information about your systems including Recent Errata Alerts for your systems under the title **Recent Errata**. To view a complete list of applicable Errata Alerts for a system, click **View All Applicable Errata** in the bottom right-hand corner.

Tip

If you are new to the Software Manager interface, it is recommended that you read Section 5.2, *Introduction to the Web Interface* to become familar with the layout and symbols used through the interface.

Figure 5–3 Your Red Hat Network



The first line of the **Your Red Hat Network** page shows how many systems need attention and provides a link to quickly view those systems. Clicking the **here** link displays the **System List** page that lists the systems that need attention. Refer to Section 5.4.1, *System List* for information on using this page.

In the **Statistics** section, the number of total systems refers to the number of total systems that you have registered for your account.

You can return to this page by click **Your RHN** on the left navigation bar.

5.3.1 Your Account

The **Your Account** page under the **Your RHN** category allows you to modify your personal information as well as set some RHN preferences. To modify any information on the **Details** tab or the **Addresses** tab, change the information and click the **Update** button on the page.

If you want to change your Red Hat Network password (the one used to log into Software Manager and redhat.com) click the **Details** tab on the **Your Account** page and replace the asterisks in the **Password** and **Password Confirmation** text fields with your new password. You will not see your password as you type it for security reasons. Click **Update** to change your password.

The email address on the **Details** tab is the one Red Hat Network sends email notification to if you have selected to receive Errata Alert email for your systems under the **Preferences** tab. To change your preferred email address, replace in on the **Details** page and click **Update**.

The **Preferences** tab allows you to configure two Red Hat Network options:

- Email notifications — Determine whether you want to receive email everytime an Errata Alert is applicable to one or more systems in your RHN account.
- Don't clear selections — Determine whether you want to remove selections the **Current Selections** list after an action has been completed on the selection. For example, if you select five packages and apply Errata Updates to them, the five packages will be removed from the selection list after the action is confirmed and is added to the scheduled actions list. If you select **Don't clear selection set when completing an action in a wizard**, the packages would not be removed from the selection list until you remove them.

5.3.2 Entitlements

To use all of the features in Software Manager, your systems must be **entitled** — they must be subscribed to the Software Manager subscription service. Every user receives one free entitlement slot.

The **Entitlement Manager** page displays the number of total, used, and available entitlement slots for your account. To buy more entitlement slots, enter the number to purchase and click the **Buy Now!** button.

This page also allows you to change the entitlement of a system. The systems that are currently entitled have a check under the **Entitled** column. To entitle a system, check its entitlement box. To unentitle a system, uncheck its entitlement box. Click the **Update Entitlements** to apply the changes.

5.3.3 The New RHN

The New RHN page explains the differences between the previous Software Manager interface and the current interface.

5.4 Systems

If you click the **Systems** link on the left navigation bar, the **Systems Overview** page appears. The pages in the **System** category allow you to select systems so that you can peform actions on them. It also allows you to set system preferences.

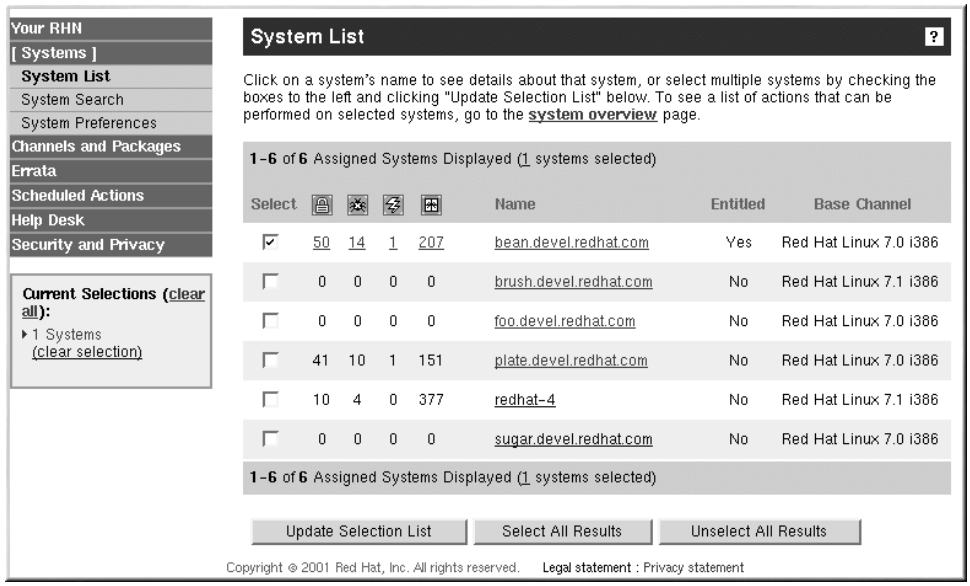
After selecting systems (adding them to the current selections list), you have the following options:

- Apply Errata Updates (Refer to Section 5.6.4, *Apply Errata Updates* for instructions.)
- Install Packages (Refer to Section 5.5.4, *Package Install* for instructions.)

5.4.1 System List

As shown in Figure 5–4, *Systems List*, the **System List** page displays a list of all your registered systems.

Figure 5–4 Systems List



The **System List** contains several columns for each registered system:

- **Select** — To select systems so that you can perform actions such as package installation on them, check the **Select** box beside each system that you want to select and click Update Selection List
-  — Number of Security Alerts for the system.
-  — Number of Bug Fix Alerts for the system.
-  — Number of Enhancement Alerts for the system.
-  — Total number of package updates for the system. Includes packages from Errata Alerts as well as newer packages that are not from Errata Alerts. For example, if a system is subscribed to the Red Hat Linux 7.1 i386 channel that contains version 2.5.4 of a package because that is the version that shipped with Red Hat Linux 7.1, but the system has version 2.5.2 of the package installed, the newer version of the package will be in the list of updated packages for the system.

- **Name** — The name of the system as configured when registering the system. The default name is the hostname of the system. Clicking on the name of a system takes you to the System Details page for the system. Refer to Section 5.4.4, *System Details* for more information.
- **Entitled** — If **Yes**, the system is entitled (subscribed to the Software Manager service level).
- **Base Channel** — The base channel for the system. To view all the channels for a system, go to its System Detail page by clicking on the name of the system in the **System List**.

5.4.2 System Search

The results of the last search are on the bottom of the page. You can create a new result set, choose to union with the previous result set, or intersect with the previous result set.

The **System Search** page allows you to search through your systems according to specific criteria. Select the criteria to search by and click **Submit Query**. The results appear at the bottom of the page.

For details about the resulting system list, refer to Section 5.4.1, *System List*.

5.4.3 System Preferences

From the **System Preferences** page, you can select three configuration preferences:

- **Receive Notifications of Updates** — If you select this, you will receive email notifications when Errata Alerts are issued for any of your registered systems.
- **Automatic Download of New Packages** — If you select this, packages will be automatically downloaded to your systems when Errata Alerts are issued for them. The download is peformed the next time the RHN Daemon connects to RHN and asks if any actions are required for the system. The packages are downloaded into the directory `/var/spool/up2date` by default. Run `up2date-config` to specify a different directory. You must have the RHN Daemon enabled on your systems. Refer to Chapter 6, *Red Hat Network Daemon* for more details.
- **Automatic Installation of New Packages** — If you select this, packages will be automatically downloaded and installed on your systems when Errata Alerts are issued for them. These actions are performed by the RHN Daemon. You must have the RHN Daemon enabled on your systems. Refer to Chapter 6, *Red Hat Network Daemon* for more details.

Before you can configure the preferences for one or more systems using the **System Preference Wizard**, you must select one or more systems and add them to the current selections list. Refer to Section 5.2.2, *Selection List* for details. After the systems have been added to the selection list, go to the **Do It!** tab of the **System Preference Wizard**, choose your preferences, and click **Confirm**. The preferences are applied to all selected systems.

5.4.4 System Details

If you click on the name of a system on any page, it will display the System Details page for the system.

The System Details page is further divided into tabbed pages. The first tabbed page you see is the **Details** page. Notice the button **Update this System**. If you click it, you can apply all relevant Errata Updates to the individual system. Be sure you review the Errata List for the system before performing this action. After clicking the button, you will be asked to confirm the update. Click the **Confirm Update For This System** to confirm. After confirming, the action is added to the **Pending Actions** list under **Actions** => **Pending Actions** from the left navigation bar.

The packages will be updated by the RHN Daemon. You must have the RHN Daemon enabled on your systems. Refer to Chapter 6, *Red Hat Network Daemon* for more details.

The following tabbed pages are available:

- **Details** — Includes the system's unique System ID, entitlement status, profile name, description, OS Release, channels, automation options, and notification options. To change the system's profile name, description, automation options, or notification options make the change and click the **Modify System Profile** button. To delete a system from your account, click the **Delete System Profile** button.
- **Errata** — List of Errata Alerts applicable to the system. You can select one more Errata to add to your selection list from here. Clicking on the Synposis displays the Errata Details page for the Errata Alert. Refer to Section 5.6.5, *Errata Details* for more information about the Errata Details page. This tab only appears for entitled systems.
- **Installed Packages** — List of installed packages from the system's Sofware System Profile. Click on a package name to view its Package Details page. (Refer to Section 5.5.3, *Package Details*.) If the package list looks incomplete or outdated, click the **Schedule Package List Refresh** button to schedule a Package List Profile Update for your system. The next time the RHN Daemon connects to RHN, it will update your System Profile with the latest list of installed packages. To look for particular packages by name, use the **filter by name** field.
- **Outdated Packages** — List of packages that have a new version available based on the package versions in the channel for the system. Click on the newer package name to view the Package Details page for it. Click on the Related Errata number to view the Errata Details page for the Errata Alert if an Errata Alert is associated with the newer package. This tab is only displayed for entitled systems.
- **Hardware** — During registration, if you selected to include the Hardware Profile for this machine, this tabbed page displays the Hardware Profile. If the hardware profile looks incomplete or outdated, click the **Schedule Hardware List Refresh** button to schedule a Hardware Profile Update for your system. The next time the RHN Daemon connects to RHN, it will update your System Profile with the latest list of hardware.

- **Notes** — Create notes about the system. Click **Add a new note**, type a subject and the note, and click **Update Note**. To delete a note, click on its title for the list of notes, check **Delete this note**, and click **Update Note**.
- **History** — A history of events for your system that is automatically generated by Software Manager.

5.5 Channels and Packages

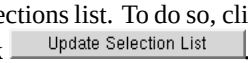
A channel is a list of Red Hat Linux packages. Channels are used to choose packages to be installed in the **Channels and Packages** section of **Software Manager**.

There are two types of channels: base channels and child channels. A **base channel** consists of a list of packages based on a specific architecture and Red Hat Linux release. For example, all the packages in Red Hat Linux 7.1 for the x86 architecture is a base channel. The list of packages in Red Hat Linux 7.1 for the Itanium architecture is a different base channel. A **child channel** is a channel associated with a base channel but contains extra packages. For example, an organization can create a child channel that is associated with the Red Hat Linux 7.1 for the x86 architecture and that contains extra packages needed only for the organization, such as a custom engineering application.

5.5.1 Channel List

The **Channel List** page provides a list of all base channels and their child channels. To view a list of individual packages in a channel, click on the name of the channel (base or child). You will be presented with a list of packages in the channel in groups of 20. Click **Next** to see the next group of packages. Click **Prev** to see the previous group of packages.

If you are looking for a specific package or a subset of packages, you can use the package filter on the top of the list. Enter a substring to search for. It will search all the packages in the list for the substring at the beginning, in the middle, or at the end of the package name. The filter is case-insensitive. For example, typing **ks** in the filter might return all the `ksconfig`, `krb5-workstation`, and `links`.

You can also use this list to select packages and add them to your current selections list. To do so, click the checkbox beside the package name and under the **Select** column. Click 

Click **Next** to view the next set of packages in the channel.

Clicking on a package name displays a set of tabbed pages with information about the package. This information includes which architectures it runs on, the package size, build date, package dependencies, the change log, list of files in the package, and which systems have the package installed. Refer to Section 5.5.3, *Package Details* for more information.

5.5.2 Channel Subscribe and Unsubscribe

Each RHN client system must be subscribed to a base channel and can only be subscribed to one base channel. This base channel is selected automatically during registration from the Red Hat Linux release and system architecture selected. Each RHN client system can be subscribed to zero or more child channels.

To view the list of channels to which each system is subscribed, click **Systems** => **System List** from the left navigation bar. From the **System List**, click on the name of the system to display the System Details page. On the System Details page, there is a check beside the channels to which the system is subscribed. To subscribe the system to additional child channels, check the box beside it and click the **Modify System Profile** button at the bottom of the page. To unsubscribe the system from a child channel, uncheck the box beside the channel name and click **Modify System Profile**.

5.5.3 Package Details

If you click on the name of an RPM package or the name of the Newer Package in the **Outdated Packages** section of the **System Details** page, the Package Details page for the package will appear. This page contains the following tabbed pages:

- **Details** — Details about the package including the package description, package size, and package version (This information is similar to issuing the command `rpm -qi` *`packagename`*).
- **Dependencies** — Lists the package dependencies, what the package provides, the packages it obseletes, and the packages with which it conflicts.
- **Change Log** — The Change Log for the package (This information is similar to issuing the command `rpm -q --changelog` *`packagename`*).
- **File List** — List of files installed from the package.
- **Installed Systems** — List of systems with this package installed.
- **Target Systems** — Go here to install packages on entitled systems. Refer to Section 5.5.4, *Package Install* for instructions.

5.5.4 Package Install

To install individual packages on one or more entitled systems, follow these steps:

1. Select **Channels and Packages** => **Channel List** from the left navigation bar.
2. Click on the name of a channel to view its package list.
3. Click on the name of the package that you want to install.
4. Click on the **Target Systems** tab.

5. Select the entitled systems that you want to install the package on.
6. Click the **Install Packages on Selected Systems** button.
7. Confirm the action.

5.6 Errata

Red Hat releases Errata Alerts in three categories: Security Alerts, Bug Fix Alerts, and Enhancement Alerts. Each Errata Alert is comprised of a summary of the problem and the solution, including the RPM packages required to fix the problem. The **Errata** category of Software Manager allows you to view all released Errata Alerts, only Errata Alerts applicable to your systems, search Errata Alerts, and apply Errata Updates to one or more of your systems.

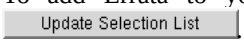
Tip

If you want to receive an email when Errata Alerts are issued for your system, go to **Systems** => **System Preferences** and select **Receive Notifications of Updates**.

5.6.1 All Errata

The **All Errata** page displays a list of all Errata Alerts released.

If you click on the synopsis of an Errata Alert, the Errata Details page for the Errata Alert will appear. Refer to Section 5.6.5, *Errata Details* for more information.

To add Errata to your selection list, check the **Select** box beside the Errata, and click 

5.6.2 Applicable Errata

The **Applicable Errata** page displays a customized list of Errata Alerts that apply to your registered systems.

If you click on the synopsis of an Errata Alert, the Errata Details page for the Errata Alert will appear. Refer to Section 5.6.5, *Errata Details* for more information.

To add Errata to your selection list, check the **Select** box beside the Errata, and click 

5.6.3 Errata Search

The results of the last search are on the bottom of the page. You can create a new result set, choose to union with the previous result set, or intersect with the previous result set.

The **Errata Search** page allows you to search through your systems according to specific criteria. Select the criteria to search by and click **Submit Query**. The results appear at the bottom of the page.

5.6.4 Apply Errata Updates

Errata Alerts include a list of updated packages that are required to apply the Errata Update. You can use Software Manager to update these packages automatically through the RHN Daemon on the client. No user intervention is required except selecting the Errata Alerts and systems to update. The system must be entitled.

You can use one of these methods to apply Errata Updates:

1. To apply all applicable Errata Updates to a system, click on **Systems** => **System List** on the left navigation bar. Click on the name of an entitled system, and click the **Update This System** button on the **Details** tabbed page. This action will apply all available Errata Updates on the system. To view a list of the Errata, click the **Errata** tab on the system details page for the system.
2. To apply a specific Errata Update to one or more systems, click on **Errata** on the left navigation bar and use the **All Errata**, **Applicable Errata**, or **Errata Search** page to find the Errata Update that you want to apply. From the Errata List, click on the **Synopsis** for the Errata Alert to display a summary of it. Click on the **Affected Systems** tab, and select the systems that you want to apply this update to. Click **Update Selected Systems** to apply the Errata Update to all selected systems, or click **Update All Affected Entitled Systems** to apply the update to all the affected systems listed.

The following rules apply to Errata Updates:

1. Each package is a member of one or more channels. If a selected system is not subscribed to the channel that the selected package is a member of, the package will not be installed on that system.
2. If a newer version of the package is already on the system, the package will not be installed on that system.
3. If an older version of the package is installed, the package will be upgraded.

The packages will be updated by the RHN Daemon. You must have the RHN Daemon enabled on your systems. Refer to Chapter 6, *Red Hat Network Daemon* for more details.

5.6.5 Errata Details

If you click on the synopsis of an Errata Alert, the Errata Details page for the Errata Alert will appear. This page is further divided into two tabbed pages: **Details** and **Systems Affected**.

The **Details** page provides the Errata Report issued by Red Hat. It describes what channels the Errata Alert affects, its problem and solution, MD5 verfication for each of the packages, and the packages required for the Errata Update. Clicking on the RPM package name displays the Package Details page for the package. Refer to Section 5.5.3, *Package Details* for more information.

The **Systems Affected** page shows a list of systems affected by the Errata Alert.

5.7 Scheduled Actions

An action is a scheduled RHN task that is to be performed on one or more client systems. For example, an action can be scheduled to apply all Errata Updates to a system.

Each tabbed page on the **Scheduled Actions** page represents a type of action. There are three types of actions:

- **Pending Actions** are actions that have not started or are in progress.
- **Completed Actions** are actions that have been completed.
- **Archived Actions** are actions that you have selected to archive.

In each tabbed page, each row in the list represents a single scheduled event or action that might affect multiple systems and involve multiple packages.

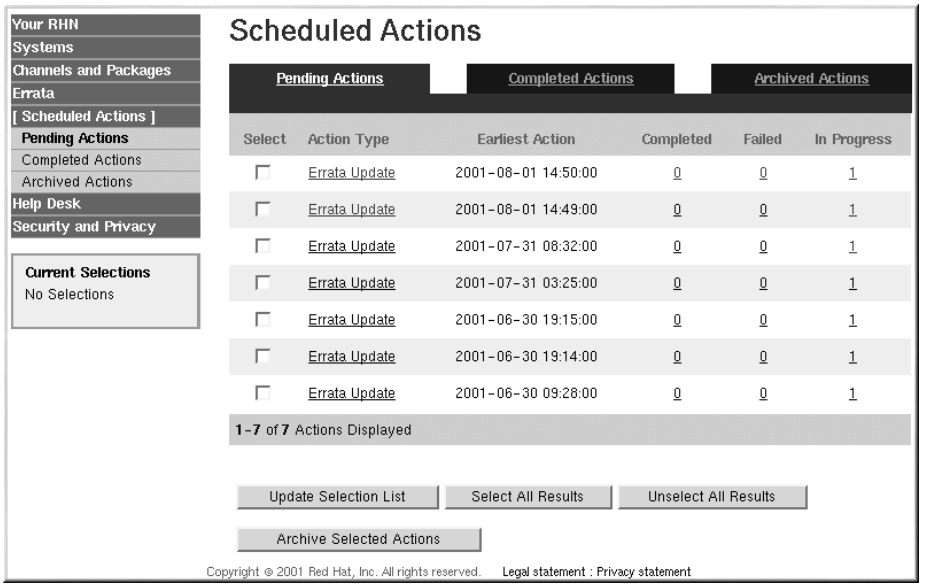
The list includes six columns of information:

- **Select** — Use the checkboxes in this column to select actions. After selecting actions, you can either add them to your selection list or move them to the **Archived Actions** list. If you archive a pending action, it is not cancelled, the action item just moves to the **Archived Actions** list so you do not see it in the **Pending Actions** list.
- **Action Type** — Type of action to perform such as Errata Update or Package Install.
- **Earliest Action** — The earliest day and time to perform the action.
- **Completed** — Number of systems on which this action has been completed.
- **Failed** — Number of systems on which this action has been tried and failed.
- **In Progress** — Number of systems on which this action is taking place.

If you click on a link under the **Action Type** column, you can view details for the action. For example, for an Errata Update action, you can view which Errata Updates are to be applied, which systems are

currently performing the Errata Update, which systems have completed the action, and which systems tried the action but failed to complete it.

Figure 5–5 Scheduled Actions



6 Red Hat Network Daemon

The Red Hat Network Daemon periodically connects to the Red Hat Network to check for updates and notifications. The default interval time is two hours (120 minutes). This can be configured in the `/etc/sysconfig/rhn/rhnsd` file by specifying the time interval in minutes. If you modify the configuration file, you must (as root) restart the daemon with the command `service rhnsd restart` or `/etc/rc.d/init.d/rhnsd restart`.

Note

The minimum time interval allowed is one hour (60 minutes). If you set the interval below one hour, it will default to two hours (120 minutes).

You can view the status of the rhnsd by typing the command `service rhnsd status` or `/etc/rc.d/init.d/rhnsd status` at a shell prompt.

To disable the daemon, (as root) run the ntsysv utility and uncheck rhnsd. You can also (as root) execute the command `chkconfig rhnsd off`. Using these two methods will only disable the service the next time the system is started. To stop the service immediately, use the command `service rhnsd stop` or `/etc/rc.d/init.d/rhnsd stop`.

The same rules you configured for the Red Hat Update Agent apply to the Red Hat Network Daemon (see Section 3.1, *Configuring the Red Hat Update Agent*).

7 Using Red Hat Network with Red Hat Linux 6.2

Red Hat Linux 6.2 shipped with a program named Red Hat Update Agent (`up2date`). However, this version of Red Hat Update Agent can not be used to connect to Red Hat Network to receive package updates. You need a new version of the Red Hat Update Agent and the Red Hat Network Registration Client to use Red Hat Network on a Red Hat Linux 6.2 system.

To download and install these programs, use the following steps:

1. In a shell prompt, login as root and execute the command `mkdir rhnpackages` to create a new directory in which to download the packages.
2. In the same shell prompt, execute the command `cd rhnpackages` to change to the new directory.
3. In a Web browser, download the necessary packages from http://rhn.redhat.com/help/rh62.pxt.
4. Go back to the shell prompt in the `rhnpackages` directory (you must still be root) and execute the command `rpm -Uvh *` to upgrade the existing Red Hat Update Agent to the version that works with Red Hat Network. The Red Hat Network Registration Client will also be installed with this command along with other packages your system needs to run the Red Hat Network programs.
5. After they are installed, run the Red Hat Network Registration Client (`rhn_register`) to register your system. See Chapter 2, *Red Hat Network Registration Client* for details.
6. Login to your account at http://rhn.redhat.com to configure your preferences and to configure which systems you want to subscribe to Software Manager.

8 Frequently Asked Questions

The following contains answers to common questions about Red Hat Network.

Q: What is Red Hat Network?

A: Red Hat Network is a systems support and management environment for Red Hat Linux networks. For more information, please see the Red Hat Network product information page.

Q: What is Software Manager?

A: Software Manager is the name of the first subscription service offered through Red Hat Network.

Q: What do Red Hat Network and Software Manager cost?

A: Registering with Red Hat Network is free and creating system profiles is free. Every customer receives a free Software Manager subscription for one system. Additional subscriptions are $19.95/month for each system.

Q: How do I purchase Software Manager subscriptions?

A: Go to http://rhn.redhat.com/purchase_info.pxt for instructions.

Q: Can I cancel my Red Hat Network Software Manager subscriptions?

A: To cancel your subscriptions, contact Customer Service at (888) RedHat1.

Q: Do I need to use Red Hat Linux to benefit from Red Hat Network?

A: Yes. Currently, you must be running Red Hat Linux 6.2 or higher to utilize Red Hat Network.

Q: How does Software Manager work?

A: Each registered system has a System Profile that contains hardware and software information about the system. Software Manager uses this information to provide you with customized Errata Alerts relevant to your systems. RPM package updates can be downloaded to the client system with the Red Hat Update Agent or scheduled for installation or upgrade with Software Manager.

Q: I'm concerned about my privacy. How secure is Red Hat Network?

A: Security is a high priority for Red Hat Network. Please see the security & privacy documentation for more information.

Q: I can't find the Red Hat Network Registration Client. What is it and where do I find it?

A: The Red Hat Network Registration Client steps you through the process of creating a user account if you do not already have one and registering your system by creating a System Profile. It can be started by using one of the following methods:

1. In GNOME desktop, go to the **Main Menu Button** (on the Panel) => **Programs** => **System** => **Red Hat Network**
2. In KDE desktop, go to the **Main Menu Button** (on the Panel) => **Red Hat** => **System** => **Red Hat Network**
3. Type the command `rhn_register` at a shell prompt (for example an xterm or gnome-terminal)

Q: I downloaded just the RPM files and installed them myself. Can I update my System Profile to reflect the changes?

A: Yes. Type the command `up2date -p` at a shell prompt. It will update your RPM package list stored on the Red Hat Network servers. Use this command whenever you install, upgrade, or remove packages without using the Red Hat Update Agent.

Q: I forgot my username and password. How do I access my account?

A: Go to http://rhn.redhat.com, click on the **Forgot your password?** link, and complete the form. Your password will be sent to your email address. If this does not work for you, please call our customer service desk.

Q: Will Red Hat Network update packages that were not installed with the Red Hat distribution?

A: No. Red Hat Network currently supports all RPM packages installed from the Red Hat Linux CD, Red Hat PowerTools CD, and the Red Hat Linux Applications CD.

Q: What version of Red Hat Linux do I have to run to be able to use Red Hat Network and Software Manager?

A: You must be running Red Hat Linux 6.2 or higher.

Q: Why is something called `rhnsd` running on my system and what does it do?

A: `rhnsd` is the Red Hat Network Daemon. Every other hour, it sends a request to Red Hat Network asking for any notifications or updates and works in coordination with the Red Hat Network to schedule automated tasks. It only sends information to Red Hat Network requested by you. If you add a new system through the Web, the next time the Red Hat Network Daemon probes Red Hat Network it receives a request to return the information you requested as part of your System Profile, such as what package versions are installed on your system.

Q: Why does the Red Hat Update Agent no longer work?

A: The Red Hat Update Agent (`up2date`) requires a valid System Profile on Red Hat Network and a Software Manager subscription to function properly. To create a System Profile, run the Red Hat Network Registration Client (`rhn_register`) on the system that you wish to register with Red Hat Network. Every user receives one free subscription to Software Manager. To purchase additional subscriptions, go to rhn.redhat.com/purchase_info.pxt.

Q: Can I use Red Hat Network to upgrade my Red Hat Linux kernel?

A: Yes. You must use Red Hat Update Agent version 2.5.4 or higher. If you choose the kernel packages and allow Red Hat Network to install them to your system, it will modify your LILO configuration file so that your system boots the new kernel the next time it is rebooted. If you just download the RPM packages and install them yourself, you will need to modify LILO to boot the new kernel.

Q: Why does the Red Hat Update Agent return the error "No Route to Host"?

A: The system you are running it on is not connected to the Internet, or the system is attempting to access Red Hat Network through a proxy server. Proxy server settings can be configured in the newest version of `up2date` available at http://www.redhat.com/support/errata/RHBA-2000-138.html. For instructions on configuring the proxy server, refer to Section 3.2, *General Settings*.

Q: Why does the Red Hat Network Registration Client return the error "No Route to Host"?

A: The system you are running the Red Hat Network Registration Client (`rhn_register`) on is not connected to the Internet, or the system is attempting to access Red Hat Network through a proxy server. Proxy server settings can be configured in the newest version of rhn_register available at http://www.redhat.com/support/errata/RHBA-2000-138.html. For instructions on configuring the proxy server, refer to Section 2.1, *Configuring the Red Hat Network Registration Client*.

Glossary

A

Action

A task that is scheduled by a system administrator using Red Hat Network to be performed on one or more client systems. For example, an action can be scheduled to update the kernel packages on all the systems within a selected group.

B

Base Channel

A base channel is a type of Channel that consists of a list of packages based on a specific architecture and Red Hat Linux release. For example, all the packages in Red Hat Linux 7.1.94 for the x86 architecture is a base channel.

Bug Fix Alert

An Errata Alert that pertains to a bug fix.

Bugzilla

Bugzilla is an online application (http://www.redhat.com/bugzilla) that allows users to communicate directly with the developers. From Bugzilla, users can submit bug reports and feature requests for Red Hat Linux and related open source packages.

C

Channel

A channel is a list of Red Hat Linux packages. Channels are used to choose packages to be installed from client systems. Every client system must be subscribed to one Base Channel and can be subscribed to one or more Child Channel .

Child Channel

A child channel is a Channel associated with a Base Channel but contains extra packages.

Client System

See Registered System .

D

Digital Certificate

A client component in XML format that is stored in the `/etc/sysconfig/rhn/systemid` file on registered systems. Red Hat Network verifies this certificate to authenticate the registered system before each connection. This certificate is issued by Red Hat and passed to the system as part of the registration process. It includes unique information about the registered system to avoid fraudulent use.

E

Email Notification

Similar to an Errata Alert , except the information is delivered via email. If the email notifications option is selected, notifications are sent for every Red Hat Network Errata Alert . The email includes the type of Errata Alert, summary of the Errata, description of the Errata, and a list of which systems are affected by the report.

Enhancement Alert

An Errata Alert that pertains to a package enhancement request.

Entitled Server

A server that is subscribed to Software Manager . Because the server is entitled, the Software Manager interface can be used to manage its packages.

Errata

Information published by Red Hat describing security fixes, bug fixes, and package enhancements for Red Hat Linux. The information includes the topics of the Errata, Bugzilla bug IDs, relevant releases/architectures, solutions including required RPMs, and MD5 checksums for verification. Errata are also available at http://www.redhat.com/errata/. Each RHN Errata Alert is based on the Red Hat Linux Errata List.

Security issues and bug fixes are submitted by Red Hat engineers as well as the Linux community through Bugzilla which generates a bug report for each issue. Red Hat engineering evaluates the reports, resolves the bug, and generates new RPM packages. After the Red Hat quality assurance team tests new packages they are placed on the Red Hat Public File Server and on the Red Hat Network Server and an Errata is generated.

Errata Alert

RHN Errata Alert that updated packages based on Red Hat Errata are available for one or more systems within an organization. There are three types of Errata Alerts: Security Alerts, Bug Fix Alerts, and Enhancement Alerts.

R

Registered System

A system that is registered with Red Hat Network. Also known as a client system.

Red Hat Network Daemon

The RHN client daemon (`rhnsd`) that periodically polls Red Hat Network for updates and notifications.

Red Hat Network Registration Client

The RHN client application (`rhn_register`) that collects information about the client system, creates a System Profile and Digital Certificate , establishes a connection with the Red Hat Network servers, and registers the system with Red Hat Network.

Red Hat Update Agent

The RHN client application (`up2date`) that allows users to retreive and install all updated packages for the client system on which the application is run. Use the Red Hat Update Agent Configuration Tool to configure its preferences, including whether to install the packages after they are downloaded.

RPM

A software package manager that was developed by Red Hat. It can be used to build, install, query, verify, update, and uninstall software packages. All software updates from RHN are delivered in RPM format.

RPM Database

Each Red Hat Linux system has an RPM database that stores information about all the RPM packages installed on the system. This information includes the version of the package, which files were installed with the package, a brief description of the package, the installation date, and more.

RPM Update

Red Hat Network option to deliver the RPM packages based on the Errata Alert list to a client system automatically and without user intervention. If this feature is selected, packages are delivered through the Red Hat Network Daemon running on the client system.

S

Security Alert

An Errata Alert that pertains to system security.

Service Level

A Red Hat Network subscription service. Different service levels offer different features of RHN. The first service level offered is Software Manager .

Software Manager

The name of the first Service Level offering for Red Hat Network. Software Manager also refers to the Web interface for RHN.

System ID

A unique string of characters and numbers that identifies a registered system. It is stored in the system's Digital Certificate .

System Profile

Hardware and software information about the client system. It is created during the registration process. The software information is a list of RPM packages and their versions installed on the client system. The System Profile is used to determine every Errata Alert relevant to each client system.

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