

Red Hat Application Server and Developer Suite

Installation Guide



Red Hat Application Server and Developer Suite: Installation Guide

Copyright © 2004 by Red Hat, Inc.

1801 Varsity Drive
Raleigh NC 27606-2072 USA
Phone: +1 919 754 3700
Phone: 888 733 4281
Fax: +1 919 754 3701
PO Box 13588
Research Triangle Park NC 27709 USA

Manual identifier:

- PDF: rhaps-rhds-EN-3-PDF-RHI (2004-07-23T16:18)
- HTML: rhaps-rhds-EN-3-HTML-RHI (2004-07-23T16:18)

Red Hat is a registered trademark and the Red Hat Shadow Man logo, RPM, and the RPM logo are trademarks of Red Hat, Inc. Linux is a registered trademark of Linus Torvalds.

IntelTM, PentiumTM, ItaniumTM, and CeleronTM are registered trademarks of Intel Corporation.

EJBTM, J2EETM, JCATM, JCEETM, JDBCTM, JDOTM, JMSTM, RMITM, and SunTM, and Sun Microsystems® are registered trademarks of Sun Microsystems, Inc.

The JOnAS logo is copyright © Bruno Bellamy.

All other trademarks and copyrights referred to are the property of their respective owners.

Copyright © 2004 by Red Hat Inc. This material may be distributed only subject to the terms and conditions set forth in the Open Publication License, V1.0 or later (the latest version is presently available at <http://www.opencontent.org/openpub/>).

HTML, PDF, and RPM versions of the manuals are available on the Documentation CD and online at

<http://www.redhat.com/docs/>.

The GPG fingerprint of the security@redhat.com key is:

CA 20 86 86 2B D6 9D FC 65 F6 EC C4 21 91 80 CD DB 42 A6 0E

Table of Contents

| | |
|---|-----------|
| Introduction..... | i |
| 1. Document Conventions..... | i |
| 2. How to Use This Manual..... | ii |
| 3. We Need Feedback..... | ii |
| 1. Before You Begin..... | 1 |
| 1.1. Verify Your Operating System..... | 1 |
| 1.2. Verify Your System Architecture..... | 1 |
| 1.3. Do You Have Enough Disk Space?..... | 1 |
| 1.4. Do You Have a JDK?..... | 1 |
| 1.5. If Installing from Red Hat Network..... | 1 |
| 1.6. If Installing from ISO Images..... | 1 |
| 2. Installing Red Hat Application Server and Red Hat Developer Suite..... | 3 |
| 2.1. Installing using Red Hat Network (RHN) Channels..... | 3 |
| 2.2. Installing from an ISO Image..... | 3 |
| 3. Installing Red Hat Application Server and Developer Suite Using the Graphical Installer.... | 5 |
| 4. Packages Included in Red Hat Application Server and Red Hat Developer Suite..... | 15 |
| A. Removing Red Hat Application Server and Red Hat Developer Suite..... | 23 |
| A.1. Removing with the Graphical Installer..... | 23 |
| A.2. Removing Using the Command Line..... | 24 |
| B. Setting up Red Hat Application Server to Run with Oracle..... | 25 |
| C. Troubleshooting Your Installation of Red Hat Application Server..... | 27 |
| Index..... | 29 |

This guide describes the system requirements for Red Hat Application Server (RHAPS) and Red Hat Developer Suite (RHDS), the packages that will be installed, how to perform the installation, and how to troubleshoot any installation problems that may occur. There is also information on how to remove RHAPS and RHDS from your server, if required.

1. Document Conventions

Certain words in this manual are represented in different fonts, styles, and weights. This highlighting indicates that the word is part of a specific category. The categories include the following:

Courier font

Courier font represents commands, file names and paths, and prompts.

When shown as below, it indicates computer output:

| | | | |
|---------|-------------|------|--------------------|
| Desktop | about.html | logs | paulwesterberg.png |
| Mail | backupfiles | mail | reports |

bold Courier font

Bold Courier font represents text that you are to type, such as: **service jonas start**

italic Courier font

Italic Courier font represents a variable, such as an installation directory: *install_dir/bin/*

bold font

Bold font represents **application programs** and **text found on a graphical interface**.

When shown like this: **OK**, it indicates a button on a graphical application interface.

Additionally, the manual uses different strategies to draw your attention to pieces of information. In order of how critical the information is to you, these items are marked as follows:



Note

Linux is case-sensitive: a rose is not a ROSE is not a rOsE.



Tip

The directory `/usr/share/doc/` contains additional documentation for packages installed on your system.

**Important**

If you modify the DHCP configuration file, the changes will not take effect until you restart the DHCP daemon.

**Caution**

Do not perform routine tasks as root—use a regular user account unless you need to use the root account for system administration tasks.

**Warning**

Be careful to remove only the listed partitions. Removing other partitions could result in data loss or a corrupted system environment.

2. How to Use This Manual

This manual provides both quick and detailed installation instructions. If you are an experienced System Administrator, everything you need is in Chapter 2 *Installing Red Hat Application Server and Red Hat Developer Suite*. If you require more details, start with Chapter 1 *Before You Begin* to confirm that your system can run Red Hat Application Server and Red Hat Developer Suite, then go to Chapter 2 *Installing Red Hat Application Server and Red Hat Developer Suite* for detailed installation instructions.

3. We Need Feedback

If you have thought of a way to make this manual better, submit a bug report against the documentation component of the product Red Hat Application Server or Red Hat Developer Suite in Bugzilla at: <http://bugzilla.redhat.com/bugzilla/>

When submitting a bug report, be sure to mention the manual's identifier:

rhaps-rhds-EN-3-PDF-RHI (2004-07-23T16:18)

If you have a suggestion for improving the documentation, try to be as specific as possible when describing it. If you have found an error, please include the section number and some of the surrounding text so we can find it easily.

If you have a support question (for example, if you are not sure how to partition your hard drives), use the online support system by registering your product at: <http://www.redhat.com/apps/activate/>

Before You Begin

Before you begin, ensure that your system meets the requirements listed below.

1.1. Verify Your Operating System

You can install Red Hat Application Server and Red Hat Developer Suite only on Red Hat Enterprise Linux 3 (RHEL3). Verify that you have this version of Red Hat Enterprise Linux running on your target hardware.

You should update your system to the latest packages available with Red Hat Network (RHN). See the Red Hat Network documentation at <http://rhn.redhat.com/help/> for details.

1.2. Verify Your System Architecture

Red Hat Application Server and Red Hat Developer Suite is available on x86, Itanium, and PPC architectures.

The most recent list of supported hardware can be found at: <http://hardware.redhat.com/hcl/>

1.3. Do You Have Enough Disk Space?

Red Hat Application Server and Red Hat Developer Suite require 300 MB of free disk space for installation, in addition to the space required by your applications. Before you start the installation process, ensure that your system meets this requirement.

If you are not sure that you meet this condition, or if you want to know how to create free disk space, refer to your *Red Hat Enterprise Linux Installation Guide*.

1.4. Do You Have a JDK?

Red Hat Application Server and Red Hat Developer Suite require that an appropriate JDK be present. The Application Server and Developer Suite were tested with a 1.4.2-level JDK. The IBM JDK and BEA JRockit JDK are available from Red Hat Network's RHEL3 Extras Channel.

Information on installing one of these JDKs is available in Section 2.1 *Installing using Red Hat Network (RHN) Channels*.

1.5. If Installing from Red Hat Network

Installs from Red Hat Network require that you be subscribed to the RHEL3 Extras Channel and the Red Hat Application Server channel. If you are not subscribed to these channels, see the Red Hat Network documentation at <http://www.redhat.com>.

1.6. If Installing from ISO Images

Red Hat Application Server and Red Hat Developer Suite is available in ISO format from Red Hat Network and the <http://ftp.redhat.com> site. However, the JDKs and PostgreSQL packages are not on the ISO image. The JDK packages are available from the RHEL3 Extras ISO image or the RHEL3 Extras RHN channel. The rh-postgresql-server package is available from the RHEL3 Base RHN channel.

Follow steps 1 through 6 in Section 2.1 *Installing using Red Hat Network (RHN) Channels* to install the necessary packages before continuing with Section 2.2 *Installing from an ISO Image*.

Installing Red Hat Application Server and Red Hat Developer Suite

This chapter describes how to install Red Hat Application Server and Red Hat Developer Suite.

2.1. Installing using Red Hat Network (RHN) Channels

These steps describe how to use Red Hat Network Channels to install Red Hat Application Server and Developer Suite on your Red Hat Enterprise Linux 3 system. You will need to have a registered account on RHN and to have obtained access to the Red Hat Application Server channel. This is usually done as part of a subscription or evaluation process. The registered target system will need to be installed with Red Hat Enterprise Linux 3 and must have either direct access to RHN, or be a user of an RHN Proxy Server or RHN Satellite Server.

This is the installation procedure:

1. Install the target system with Red Hat Enterprise Linux 3.
2. Register the system with RHN.
3. Using your enterprise account or evaluation access, subscribe your system to the Red Hat Application Server 1.0 and Red Hat Enterprise Linux 3 Extras channels on RHN. To obtain these entitlements, contact your Red Hat account manager. When available, the packages should appear in the **Software** tab. For more information about how to use RHN, see: <https://rhn.redhat.com/help/>
4. Perform an `up2date` to ensure that the current versions of the packages are installed. Red Hat Application Server and Red Hat Developer Suite were tested with a full U2 Red Hat Enterprise Linux 3 installation.
5. If the IBM Java JDK or BEA JRockit JDK is not installed on the system, use RHN to install your JDK of choice by running either:
`up2date java-1.4.2-ibm-devel`
or
`up2date java-1.4.2-bea-devel`
6. If you do not have the PostgreSQL RDBMS set up on your system with JDBC support, use RHN to install it by running:
`up2date rh-postgresql-jdbc rh-postgresql-server`
7. Install the Red Hat Application Server. RHN will handle the cross-dependencies automatically, installing and updating software packages as needed:
`up2date jonas jonas-docs jonas-examples jonas-client rh-jonas-docs`
8. Install the Red Hat Developer Suite. RHN will handle the cross-dependencies automatically, installing and updating software packages as needed:
`up2date eclipse-jdt eclipse-pde eclipse-cdt eclipse-rpm \
eclipse-oprofile eclipse-changelog eclipse-lomboz`

2.2. Installing from an ISO Image



Note

Red Hat Application Server and Red Hat Developer Suite are available in ISO format from Red Hat Network and the <http://ftp.redhat.com> site.

1. Obtain the Red Hat Application Server and Developer Suite:

- To obtain the Red Hat Application Server and Red Hat Developer Suite ISO from RHN:
 - a. Log into your account at: <http://rhn.redhat.com/>
 - b. Select Software.
 - c. Select Easy ISOs and download the Red Hat Application Server and Developer Suite ISO image.
- To obtain the Red Hat Application Server and Red Hat Developer Suite ISO from the <http://ftp.redhat.com> site:
 - a. Point your browser to <http://ftp.redhat.com/pub/redhat/linux/RHAPS/1.0>.
 - b. Select the architecture of your target machine.
 - c. Read the EULA.
 - d. Select the ISO image to start the download.

2. You may install using the ISO (as root) by either directly installing the RPMs or by using the graphical installer. The graphical installer is described in detail in Chapter 3 *Installing Red Hat Application Server and Developer Suite Using the Graphical Installer*. Refer to this section now if you are installing using the graphical installer.

3. If you are directly installing the RPMs, how you proceed depends on whether you chose to burn a CD of the ISO:

- If you chose to burn a CD of the ISO, upon inserting it you will most likely be presented with the choice of running the graphical installer; select **No**. Should you not be prompted, run the following commands (as root) to mount the CD:


```
mkdir /mnt/rhaps
mount /mnt/cdrom /mnt/rhaps
```
- If you chose not to burn a CD of the ISO, you will need to mount the ISO image. Do so with the following commands (as root):


```
mkdir /mnt/rhaps
mount -o ro,loop path_to_iso /mnt/rhaps
```

4. Use the following commands to install the Red Hat Application Server RPMs:

```
cd /mnt/rhaps/RedHat/RPMS/
rpm -Uvh desired_packages
```



redhat.

Chapter 3.

Installing Red Hat Application Server and Developer Suite Using the Graphical Installer

Since the graphical installer will only install new packages (and not upgrade those previously-installed), a few packages must be removed prior to installation:

```
rpm -e xalan-j ant-libs ant mx4j commons-modeler jaf javamail junit bcel
```

In a similar manner, remove Eclipse packages if any are installed on your system:

```
rpm -e eclipse eclipse-lomboz
```

If you chose to burn a CD of the ISO, upon inserting the CD you will most likely be presented with the choice of running the graphical installer; select “Yes”. Should you not be prompted, run the following commands (as `root`) to mount the CD:

```
mkdir /mnt/rhaps
mount /mnt/cdrom /mnt/rhaps
```

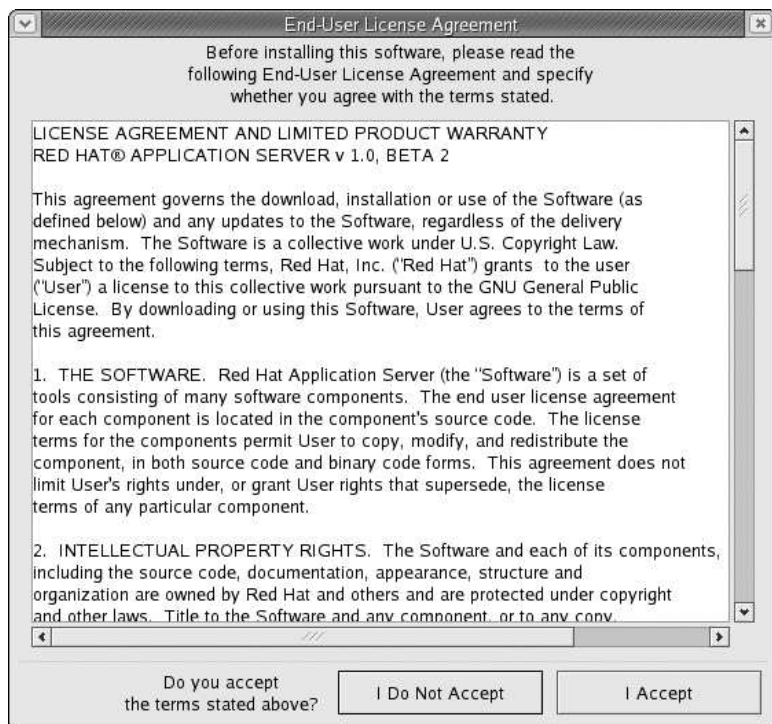
If you chose not to burn a CD of the ISO, you will need to mount the ISO image. Do this by running the following commands (as `root`):

```
mkdir /mnt/rhaps
mount -o loop path_to_iso /mnt/rhaps
```

Once the CD or ISO image is mounted, run the following command (as `root`) to start the installer:

```
cd /mnt/rhaps
./autorun
```

After you start the installer, you are presented with the License Agreement.

**Figure 3-1. License Agreement**

Click **I Accept** to continue.



Figure 3-2. Package Management Introduction

Click **Forward** to begin your installation. The installer will perform some checks to determine which packages it can install and if any are already present on your system.

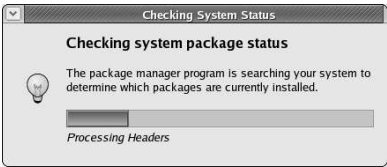


Figure 3-3. Package Checks

Now you can begin selecting which parts of Red Hat Application Server and Developer Suite you want to install. Packages have been grouped into categories for easy selection. The following is a brief description of the package categories:

| Package Category | Description |
|--|--|
| Red Hat Application Server - Common Packages | These packages are required for both JOnAS and Tomcat installations. Selecting either JOnAS or Tomcat installation (the next two package categories) will automatically install this category as well. |

| Package Category | Description |
|---|--|
| Red Hat Application Server - JOnAS Installation | The packages for the JOnAS installation. |
| Red Hat Application Server - Tomcat Installation (Standalone) | The packages for the standalone Tomcat installation. |
| Red Hat Application Server - Examples and Demos | These packages are examples and demonstrations for various components of Red Hat Application Server. |
| Red Hat Application Server - Documentation | Red Hat Application Server documentation in HTML and PDF forms. |
| Red Hat Developer Suite - Eclipse SDK | The packages for Eclipse Platform, Java Development Tools, Plugin Development Environment, and Documentation |
| Red Hat Developer Suite - CDT | The packages for C/C++ Development Tools |
| Red Hat Developer Suite - RPM Plugin | The packages for the RPM Plugin. |
| Red Hat Developer Suite - OProfile Plugin | The packages for OProfile Profiling Support. |
| Red Hat Developer Suite - ChangeLog Plugin | The packages for the ChangeLog Plugin. |
| Red Hat Developer Suite - Lomboz Plugin | The packages for Application Server development tools. |

Table 3-1. Package Categories

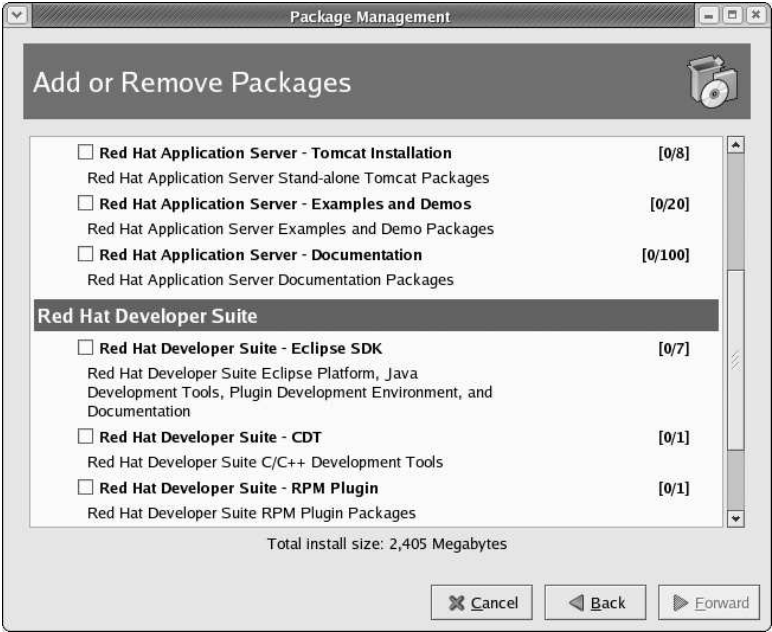


Figure 3-4. Category Selection

Once a package category is selected, the individual packages within that category can be viewed by clicking the **Details** button. Hold the mouse over the word **Details** to make the button appear:

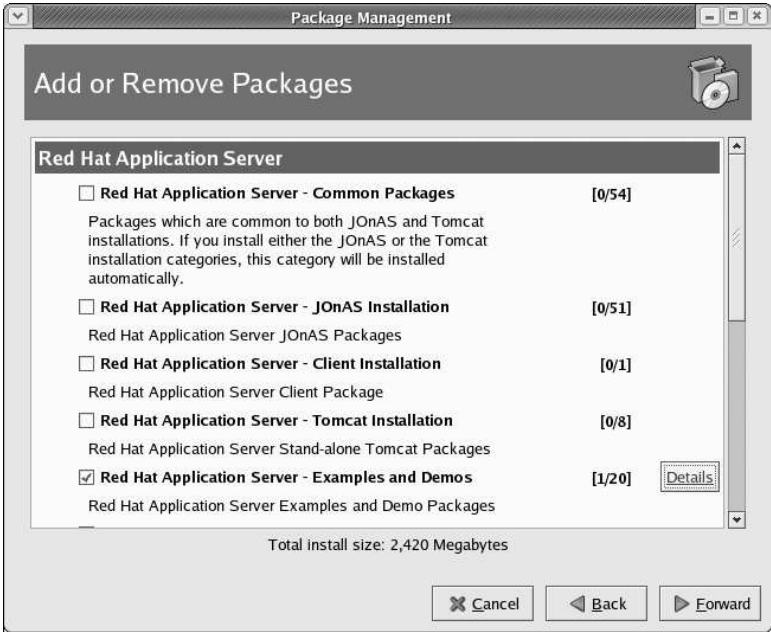


Figure 3-5. Package Details

For the **Red Hat Application Server - Examples and Demos** category, clicking **Details** enables you to pick and choose individual packages that you would like to install:

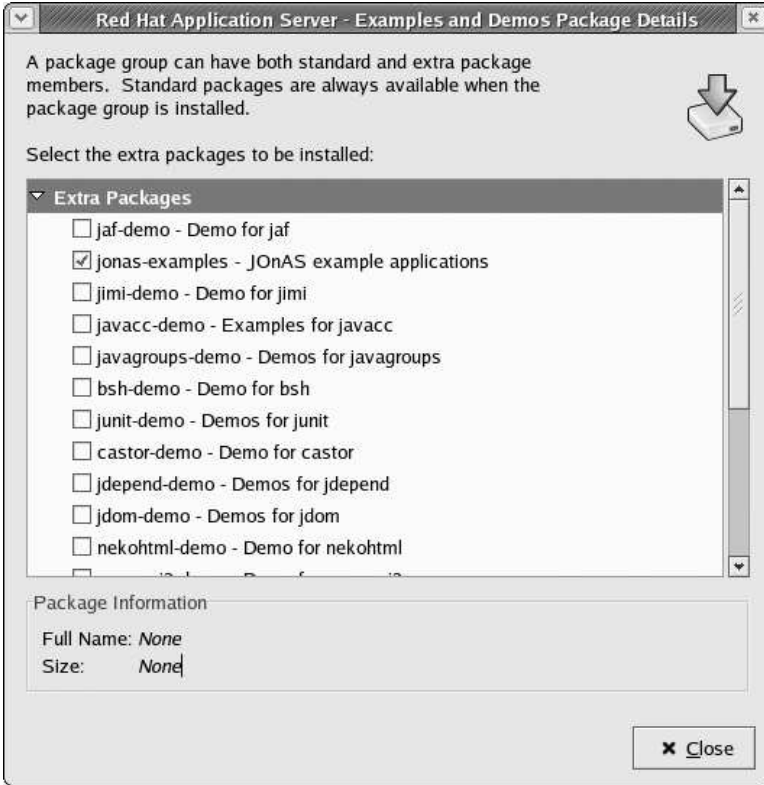


Figure 3-6. Choosing Packages

For all other categories, you cannot individually select and/or un-select packages within the category:

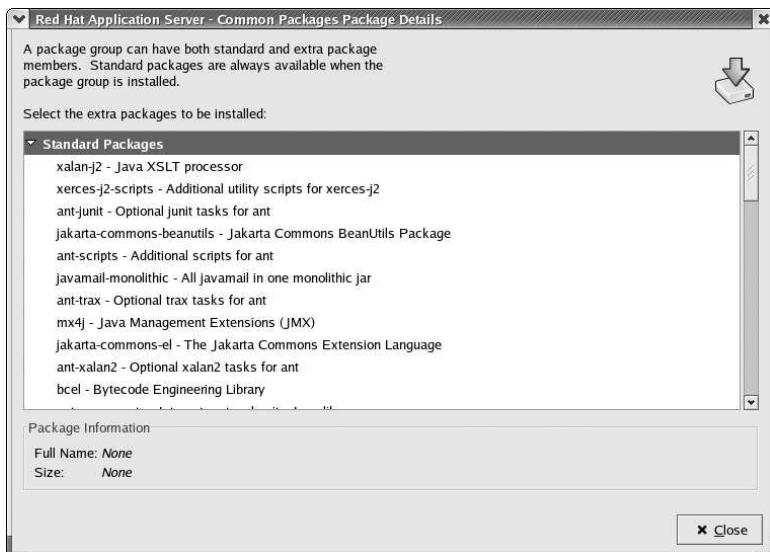


Figure 3-7. Some Packages Occur as Groups Only

After you have made all your selections, clicking **Forward** gives you an overview of what packages will be installed and their space requirements:

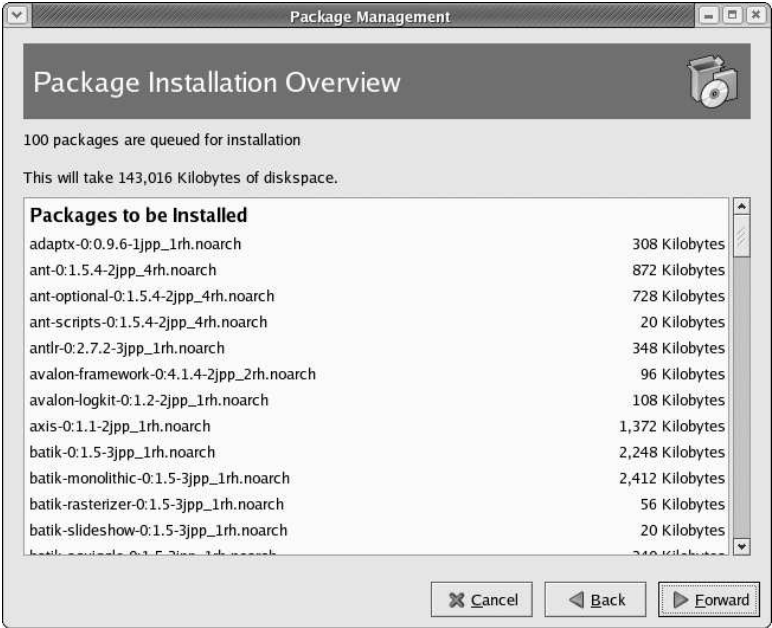


Figure 3-8. Package Installation Overview

During installation of the packages, the installer will display progress information:

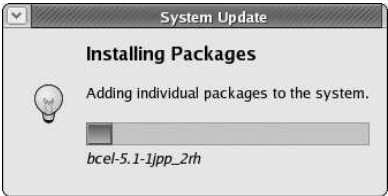


Figure 3-9. Package Installation Progress

Once the installation has completed, the installer indicates that it has finished successfully:



Figure 3-10. Installation Complete

Packages Included in Red Hat Application Server and Red Hat Developer Suite

Red Hat Application Server contains Application Server Packages, JOnAS-specific Packages, JOnAS Client Packages, and stand-alone Tomcat Packages.

Red Hat Developer Suite contains Developer Suite Packages.

| Package | Level | Description |
|---------------------------|-------|---|
| ant | 1.6.1 | Ant is a platform-independent build tool for java. |
| ant-apache-bsf | 1.6.1 | Optional apache bsf tasks for ant. |
| ant-apache-resolver | 1.6.1 | Optional apache resolver tasks for ant. |
| ant-commons-logging | 1.6.1 | Optional commons logging tasks for ant. |
| ant-jakarta-bcel | 1.6.1 | Optional jakarta bcel tasks for ant. |
| ant-jakarta-log4j | 1.6.1 | Optional jakarta log4j tasks for ant. |
| ant-jakarta-oro | 1.6.1 | Optional jakarta oro tasks for ant. |
| ant-jakarta-regexp | 1.6.1 | Optional jakarta regexp tasks for ant. |
| ant-javamail | 1.6.1 | Optional javamail tasks for ant. |
| ant-jdepend | 1.6.1 | Optional jdepend tasks for ant. |
| ant-jmf | 1.6.1 | Optional jmf tasks for ant. |
| ant-junit | 1.6.1 | Optional junit tasks for ant. |
| ant-scripts | 1.6.1 | Additional Perl and Python scripts for ant. |
| ant-swing | 1.6.1 | Optional swing tasks for ant. |
| ant-trax | 1.6.1 | Optional trax tasks for ant. |
| ant-xalan2 | 1.6.1 | Optional xalan2 tasks for ant. |
| antlr | 2.7.2 | ANTLR (ANother Tool for Language Recognition) is a language tool that provides a framework for constructing recognizers, compilers, and translators from grammatical descriptions containing C++ or Java actions. |
| bcel | 5.1 | The Byte Code Engineering Library is intended to give users a convenient means to analyze, create, and manipulate Java class files. |
| jaf | 1.0.2 | JavaBeans Activation Framework reference implementation. |
| jakarta-commons-beanutils | 1.6.1 | Jakarta Commons BeanUtils Package. The scope of this package is to create a package of Java utility methods for accessing and modifying the properties of arbitrary JavaBeans. |

| Package | Level | Description |
|-----------------------------|--------|--|
| jakarta-commons-collections | 2.1 | Utilities for handling Java collections; these extend or augment the Java Collections Framework. |
| jakarta-commons-digester | 1.5 | XML-to-Java-object mapping utility commonly used for parsing XML configuration files. |
| jakarta-commons-el | 1.0 | Implementation for javax.servlet.jsp.el. |
| jakarta-commons-fileupload | 1.0 | Utilities for uploading files. |
| jakarta-commons-launcher | 0.9 | Cross platform Java application launcher. |
| jakarta-commons-logging | 1.0.4 | Logging utilities: wrappers around a variety of logging API implementations. |
| jakarta-commons-modeler | 1.1 | Mechanisms to create Model MBeans compatible with the Java Management Extensions (JMX) specification. |
| jakarta-commons-validator | 1.0.2 | A framework to define validation methods and rules in XML files with support for internationalization. |
| jakarta-taglibs-standard | 1.1.0 | Open source implementation of the JSP Standard Tag Library. |
| jasper5 | 5.0.19 | JSP Engine - JSP 2.0 API. |
| javamail | 1.3.1 | A platform-independent and protocol-independent framework to build mail and messaging applications. |
| javamail-monolithic | 1.3.1 | Javamail in one monolithic jar. |
| jdepend | 2.6 | Java Design Quality Metrics. JDepend allows you to automatically measure the quality of a design in terms of its extensibility, reusability, and maintainability to effectively manage and control package dependencies. |
| jta | 1.0.1 | Java Transaction API reference implementation. |
| junit | 3.8.1 | Java regression test package. JUnit is a regression testing framework used by developer's who implement unit tests in Java. |
| log4j | 1.2.8 | Java logging package. Log4j is a tool to help the programmer output log statements to a variety of output targets. |
| mod_jk2 | 2.0.4 | Connects Apache Web Server and Tomcat. |
| mod_jk2-tools | 2.0.4 | Miscellaneous mod_jk2 analysis and report tools. |
| mx4j | 1.1.1 | OpenJMX is an open source implementation of the Java(TM) Management Extensions (JMX). |
| netcomponents | 1.3.8 | NetComponents is an Internet protocol suite. This version supports Finger, Whois, TFTP, Telnet, POP3, FTP, NNTP, SMTP, and some miscellaneous protocols like Time and Echo. |

| Package | Level | Description |
|----------------------|--------------|---|
| oro | 2.0.8 | Full regular expressions API. The Jakarta-ORO Java classes are a set of text-processing Java classes that provide Perl5 compatible regular expressions, AWK-like regular expressions, glob expressions, and utility classes for performing substitutions, splits, filtering filenames, etc. |
| regexp | 1.3 | Simple regular expressions API. |
| servletapi4 | 4.0.4 | Java servlet and JSP implementation classes. Servletapi4 contains the source code for the implementation classes of the Java Servlet and JSP APIs. |
| servletapi5 | 5.0.18 | Java servlet and JSP implementation classes. |
| struts | 1.1 | Web application framework. |
| xalan-j2 | 2.5.2 | Xalan is an XSLT processor for transforming XML documents into HTML, text, or other XML document types. It implements the W3C Recommendations for XSL Transformations (XSLT) and the XML Path Language (XPath). |
| xerces-j2 | 2.6.2 | Java XML parser. Xerces 2 is a fully conforming XML Schema processor. This version of Xerces introduces the Xerces Native Interface (XNI), a complete framework for building parser components and configurations that is extremely modular and easy to program. |
| xerces-j2-scripts | 2.6.2 | Additional utility scripts for xerces-j2. |
| xml-commons | 1.0 | Common code for XML projects. |
| xml-commons-apis | 1.0 | API subproject of xml-commons. |
| xml-commons-resolver | 1.1 | Resolver subproject of xml-commons; catalog-based entity and URI resolution. |
| xml-commons-which | 1.0 | Which subproject of xml-commons. |

Table 4-1. Red Hat Application Server Application Server Packages

| Package | Level | Description |
|------------------|--------------|--|
| adaptx | 0.9.6 | Adaptx is an extensible Stylesheet Language (XSL) processor. |
| avalon-framework | 4.1.4 | Avalon-framework provides interfaces that define relationships between commonly used application components, best-of-practice pattern enforcements, and several lightweight convenience implementations of the generic components. |
| avalon-logkit | 1.2 | Avalon-logkit provides a logging toolkit designed for secure, performance-oriented logging in applications. |

| Package | Level | Description |
|----------------------------|--------|--|
| axis | 1.1 | Apache AXIS is an implementation of the SOAP (Simple Object Access Protocol) submission to W3C. |
| batik | 1.5 | Batik is a toolkit for manipulating SVG images. |
| batik-monolithic | 1.5 | All batik in one monolithic jar. |
| batik-rasterizer | 1.5 | Batik SVG rasterizer. |
| batik-slideshow | 1.5 | Batik SVG slideshow. |
| batik-squiggle | 1.5 | Batik SVG browser. |
| batik-svgpp | 1.5 | Batik SVG pretty printer. |
| batik-ttf2svg | 1.5 | Batik SVG font converter. |
| bsf | 2.3.0 | Bean Scripting Framework (BSF) is a set of Java classes which provides scripting language support within Java applications, and access to Java objects and methods from scripting languages. |
| bsh | 1.3.0 | BeanShell is a small, free, embeddable, Java source interpreter with object scripting language features, written in Java. |
| castor | 0.9.5 | Castor is a data binding framework for Java. |
| castor-test | 0.9.5 | Tests for castor. |
| castor-xml | 0.9.5 | XML support for castor. |
| concurrent | 1.3.2 | Concurrent provides standardized, efficient versions of utility classes commonly encountered in concurrent Java programming. |
| cryptix | 3.2 | Cryptix provides a cleanroom implementation of Sun's Java Cryptography Extensions (JCE) version 1.1. It also contains the Cryptix Provider, which offers a wide range of algorithms and support for PGP 2.x. |
| cryptix-asnl | 3.2 | Java Transaction API reference implementation. |
| ejb | 2.1 | Enterprise Java Bean API. |
| fop | 0.20.5 | Formatting Objects Processor is a print formatter driven by XSL formatting objects (XSL-FO) and an independent formatter. |
| gnu.getopt | 1.0.9 | A Java port of GNU getopt, a class for parsing command-line arguments passed to programs. |
| ht2html | 2.0 | The www.python.org Web site generator. |
| httpunit | 1.5.4 | Test tool for web applications. |
| jakarta-commons-discovery | 0.2 | Tools for locating implementations for pluggable interfaces. |
| jakarta-commons-httpclient | 2.0 | A framework for working with the client-side of the HTTP protocol. |

| Package | Level | Description |
|----------------------|-------|---|
| jakarta-commons-lang | 2.0 | Common set of utility classes that provide extra functionality for classes in java.lang. |
| javacc | 3.2 | A parser/scanner generator for Java. |
| javagroups | 2.1.1 | JavaGroups is a toolkit for reliable multicast communication. It can be used to create groups of processes whose members can send messages to each other. |
| java_cup | 0.10 | A Java source interpreter. |
| jdom | 1.0 | Java alternative to DOM and SAX. |
| jimi | 1.0 | A class library for manipulating images. |
| jlex | 1.2.6 | A lexical analyzer generator. |
| jms | 1.1 | Java Message Service. |
| jonas | 4.1.2 | An open-source application server. |
| jtidy | 1.0 | An HTML syntax checker and pretty printer. |
| jtidy-scripts | 1.0 | Utility scripts for jtidy. |
| jython | 2.2 | A Java implementation of the Python language. |
| ldapjdk | 4.1 | The Mozilla LDAP Java SDK. |
| libreadline-java | 0.8.0 | Java wrapper for the GNU-readline library. |
| nekohtml | 0.8.3 | A simple HTML scanner and tag balancer that enables application programmers to parse HTML documents and access the information using standard XML interfaces. |
| oldrhino | 1.5 | JavaScript for Java. |
| puretls | 0.9 | Java implementation of the SSLv3 and TLSv1 (RFC2246) protocols. |
| rhino | 1.5 | JavaScript for Java. |
| saxon | 6.5.3 | Java XSLT processor. The SAXON package is a collection of tools for processing XML documents. |
| saxon-aelfred | 6.5.3 | Java XML parser. |
| saxon-fop | 6.5.3 | FOP support for saxon. |
| saxon-jdom | 6.5.3 | JDOM support for saxon. |
| saxon-scripts | 6.5.3 | Utility scripts for saxon. |
| wsdl4j | 1.4 | Web Services Description Language for Java Toolkit (WSDL4J) allows the creation, representation, and manipulation of WSDL documents describing services. |
| xalan-j2-xsltc | 2.5.2 | XSLT compiler |

Table 4-2. Red Hat Application Server JONAS-specific Packages

| Package | Level | Description |
|--------------|-------|-----------------------------|
| jonas-client | 4.1.2 | JOnAS "fat client" support. |

Table 4-3. Red Hat Application Server JOnAS Client Packages

| Package | Level | Description |
|------------------------|--------|---|
| jakarta-commons-daemon | 1.0 | Jakarta Commons Daemon Package. The scope of this package is to define an API in line with the current Java(tm) Platform APIs to support an alternative invocation mechanism. |
| jakarta-commons-dbc | 1.2.1 | Jakarta Commons Database Pooling Package. |
| jakarta-commons-pool | 1.1 | A generic object pooling interface: a toolkit for creating modular object pools and several general purpose pool implementations. |
| struts-webapps-tomcat5 | 1.1 | Sample struts webapps for tomcat5. |
| tomcat5 | 5.0.27 | Apache Servlet/JSP Engine that conforms to the Servlet 2.4 and JSP 2.0 specifications. |
| tomcat5-admin-webapps | 5.0.27 | Administration web application for Tomcat. |
| tomcat5-admin | 5.0.27 | Web application for Tomcat. |
| tyrex | 1.0 | Service provider for both Servlet and EJB containers, JMS providers and generic connectors. |

Table 4-4. Red Hat Application Server Stand-alone Tomcat Packages

| Package | Level | Description |
|------------------|-------|--|
| eclipse-jdt | 3.0.0 | Eclipse Java development tools. |
| eclipse-gtk2 | 3.0.0 | GTK2 UI for the Eclipse IDE. |
| eclipse-source | 3.0.0 | Eclipse Source. |
| eclipse-scripts | 3.0.0 | Eclipse startup scripts. |
| eclipse-platform | 3.0.0 | Eclipse platform common files. In addition to this, you'll need the startup scripts and a UI package (GTK2) to be able to run the IDE. |
| eclipse-pde | 3.0.0 | Eclipse PDE. |
| libswt3-gtk2 | 3.0.0 | SWT Library for GTK2. |

Table 4-5. Red Hat Developer Suite SDK Packages

| Package | Level | Description |
|-------------|-------|--|
| eclipse-cdt | 2.0 | The eclipse-cdt package contains Eclipse features and plugins that are useful for C and C++ development. |

Table 4-6. Red Hat Developer Suite CDT Packages

| Package | Level | Description |
|-------------|-------|---|
| eclipse-rpm | 1.1.0 | The eclipse-rpm package contains an Eclipse plugin for building RPMs. |

Table 4-7. Red Hat Developer Suite RPM Plugin Packages

| Package | Level | Description |
|------------------|-------|---|
| eclipse-oprofile | 1.1.0 | The eclipse-oprofile package contains Eclipse plugins for the OProfile package. |

Table 4-8. Red Hat Developer Suite OProfile Plugin Packages

| Package | Level | Description |
|-------------------|-------|--|
| eclipse-changelog | 1.1 | The eclipse-changelog package contains Eclipse features and plugins that are useful for ChangeLog maintenance. |

Table 4-9. Red Hat Developer Suite ChangeLog Plugin Packages

| Package | Level | Description |
|----------------|-------|--|
| eclipse-lomboz | 3.0 | The eclipse-lomboz package contains the Lomboz Eclipse plugin, a toolkit for web and J2EE (TM) applications development. |

Table 4-10. Red Hat Developer Suite Lomboz Plugin Packages



Removing Red Hat Application Server and Red Hat Developer Suite

Red Hat Application Server and Red Hat Developer Suite can be removed using either the graphical installer or directly using the `rpm` command.

A.1. Removing with the Graphical Installer

1. Mount the ISO as described in Section 2.2 *Installing from an ISO Image*.
2. If you are not presented with the option of running the graphical installer, run the following commands (as root):

```
cd /mnt/rhps
./autorun
```

The graphical installer will run as described in Chapter 3 *Installing Red Hat Application Server and Developer Suite Using the Graphical Installer*. Instead of selecting package categories or individual packages to install, un-select installed portions of Red Hat Application Server and Red Hat Developer Suite that you would like to uninstall. When you have selected packages that you wish to remove, you are presented with a confirmation dialog listing these packages.

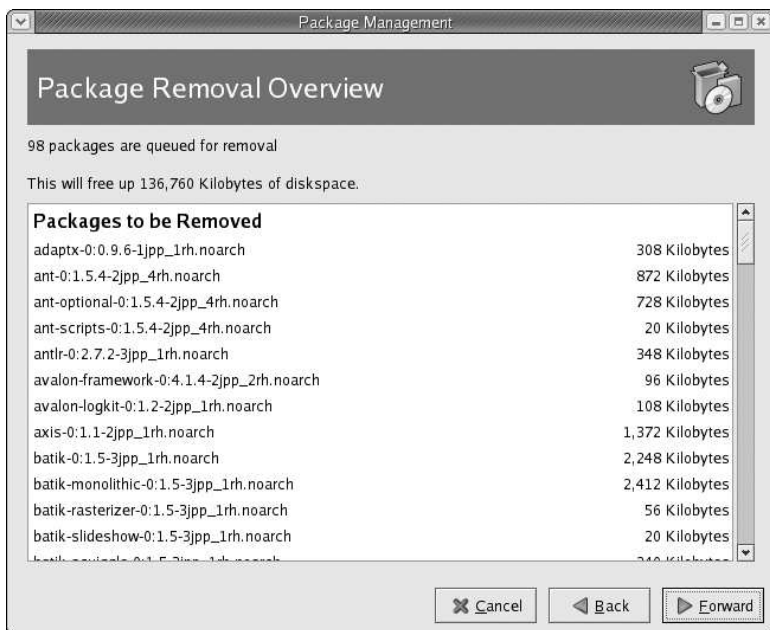


Figure A-1. Package Removal Overview

Clicking **Forward** begins the package removal. The installer displays its progress as it uninstalls packages.

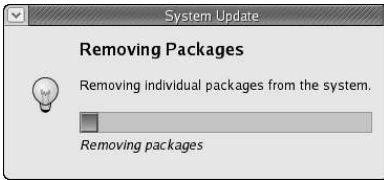


Figure A-2. Package Removal Progress

Once the removal has completed, the installer indicates that it has finished successfully:

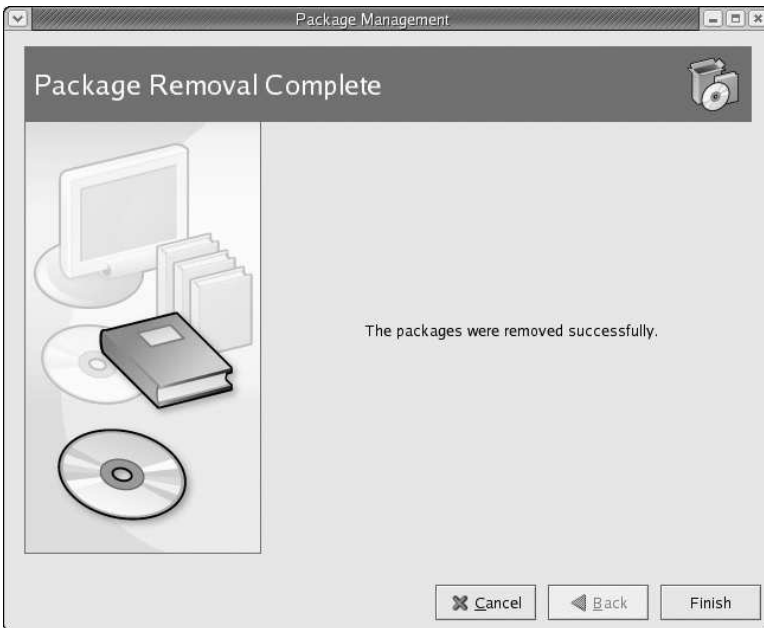


Figure A-3. Package Removal Complete

A.2. Removing Using the Command Line

Check the Package Listings for Red Hat Application Server Red Hat Developer Suite and remove the RPMs listed there that are on your system by issuing the command:

```
rpm -e packagenames
```

Setting up Red Hat Application Server to Run with Oracle

Red Hat Application Server comes preconfigured to use PostgreSQL as the backend. To configure Red Hat Application Server to run with Oracle:

1. Edit `$JONAS_ROOT/conf/jonas.properties`, and change the `datasource` name from PostgreSQL to Oracle1:
`jonas.service.dbm.datasources Oracle1`
2. Edit `$JONAS_ROOT/conf/Oracle1.properties` to fill in the appropriate values for the Oracle installation. Update the `hostname`, `port`, and `SID` for the `datasource.url` entry, as well as the `datasource.username` and `datasource.password`.

For example, for an Oracle installation on a server named `to-rhaps1`, your properties file should have the following entries:

```
datasource.url jdbc:oracle:thin:@to-rhaps1:1521:orcl
datasource.classname oracle.jdbc.driver.OracleDriver
datasource.username jonas
datasource.password jonas
```

3. Make sure you have the Oracle JDBC installed, then update `$JONAS_ROOT/bin/unix/config_env` to change the value for `ORACLE_CLASSES` to point to your JDBC driver. For example:
`ORACLE_CLASSES=/usr/share/java/oracle-jdbc-9.0.2.0.0.jar`
4. Restart JOnAS so that the changes become effective.

Troubleshooting Your Installation of Red Hat Application Server

To troubleshoot your installation of Red Hat Application Server:

1. If you get this traceback when running the graphical installer:

```
Traceback (most recent call last):
  File "/usr/share/redhat-config-packages/InstallDruid.py",
    line 239, in confirm_prepare
    package = self.comps.hdrlist[package_name]
  File "/usr/share/redhat-config-packages/GroupSet.py",
    line 516, in __getitem__
    raise KeyError,
    "No such package %s" %(item,)
KeyError: No such package ant-0:1.5.2-23.i386
```

Run `rpm -e packagenames` before installing using the graphical installer. For example:

```
rpm -e xalan-j ant-libs ant mx4j commons-modeler jaf javamail bcel junit
```

2. After uninstalling, then installing the jonas packages again, point your browser at `http://localhost:9000/`. If you see this:

```
HTTP Status 404 - /
```

```
type Status report
```

```
message /
```

```
description The requested resource (/) is not available.
Apache Tomcat/5.0
```

You need to restart jonas.

3. If you try to add resources into the directory `/usr/share/jonas/rars/autoload/` and get a 'Permission denied' error, update the ownership of that directory to jonas. For example:

```
chown jonas:jonas /usr/share/jonas/rars/autoload/
```

To troubleshoot your uninstallation of Red Hat Application Server:

1. If you try to uninstall and get this traceback:

```
Traceback (most recent call last):
  File "/usr/share/redhat-config-packages/InstallDruid.py",
    line 250, in confirm_prepare
    assert (install_list != [] or remove_list != [])
AssertionError
```

It could be there is a package installed on your system that requires one of the packages that are being removed. Uninstall that package before running the installer for uninstallation.

2. If you see this warning during uninstallation of Red Hat Application Server:

```
warning: /etc/ant.conf saved as /etc/ant.conf.rpmsave
mv: cannot stat '/etc/ant.conf': No such file or directory
sed: can't read /etc/ant.conf.tmp: No such file or directory
```

Check to see if there is an `/etc/ant.conf` file. If so, remove it.

Index

D

disk space requirements, 1

H

hardware requirements, 1

I

installation

- detailed instructions, 3

- removing, 23

- troubleshooting, 27

ISO image installation

- detailed instructions, 4

- quick instructions, 2

P

packages in RHAPS and RHDS, 15

R

removing RHAPS and RHDS, 23

RHN installation

- detailed instructions, 3

- quick instructions, 1

S

system prerequisites, 1

T

troubleshooting the installation, 27

