

CERTIFICATION WITH ORACLE ENTERPRISE LINUX 5

ORACLE ENTERPRISE LINUX 5

- Oracle Enterprise Linux 5 is fully compatible—both source and binary—with Red Hat Enterprise Linux 5;
- Oracle Enterprise Linux 5 is fully KABI compliant.

Partners: Join the Oracle Unbreakable Linux Product Focus Area and:

- Accelerate Market Opportunity
- Reduce Complexity and Lower Cost
- Gain Flexibility

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Available as open source, Oracle Enterprise Linux is fully compatible—both source and binary—with Red Hat Enterprise Linux AS (RHEL AS). Partners testing and certifying their applications on Oracle Enterprise Linux will, at most, simply install their application on Oracle Enterprise Linux and verify the information described in this data sheet.

Comparing Oracle Enterprise Linux 5 and RHEL5

This data sheet describes the key points that ISVs should consider when installing and certifying their products on [Oracle Enterprise Linux 5](#). In general, no changes are required. Some applications may need a minor modification to extend their installation checks to identify Oracle Enterprise Linux 5. The examples below highlight these areas.

Oracle Enterprise Linux Release 5 - [Appendix A of this data sheet](#) includes a complete, detailed list of all the RHEL5 Server packages Oracle has modified in Oracle Enterprise Linux 5, either to address trademark/logo compliance issues, or for bugfixes/patches.

Oracle Enterprise Linux Release 5.1 - [Appendix B of this data sheet](#) includes a complete, detailed list of all the RHEL5 Server packages Oracle has modified in Oracle Enterprise Linux 5, either to address trademark/logo compliance issues, or for bugfixes/patches.

Checking /etc/redhat-release

RHEL5 Server provides a text file called /etc/redhat-release which contains a one line string identifying the specific distribution release. This file is part of redhat-release package. Oracle Enterprise Linux 5 also contains a text file called /etc/redhat-release which gets installed by a package called enterprise-release. There are a few textual changes in this file due to copyrights and trademarks.

RHEL5 Server	Oracle Enterprise Linux 5
# rpm -qf /etc/redhat-release redhat-release-5Server-5.0.0.9	# rpm -qf /etc/redhat-release enterprise-release-5-0.0.4
# cat /etc/redhat-release Red Hat Enterprise Linux Server release 5 (Tikanga)	# cat /etc/redhat-release Enterprise Linux Enterprise Linux Server release 5 (Carthage)

RHEL5 Server Update 1	Oracle Enterprise Linux 5 Update 1
# rpm -qf /etc/redhat-release redhat-release-5Server-5.1.0.2	# rpm -qf /etc/redhat-release enterprise-release-5-0.0.7
# cat /etc/redhat-release Red Hat Enterprise Linux Server release 5.1 (Tikanga)	# cat /etc/redhat-release Enterprise Linux Enterprise Linux Server release 5.1 (Carthage)

RHEL5 Server Update 2	Oracle Enterprise Linux 5 Update 2
<pre># rpm -qf /etc/redhat-release redhat-release-5Server-5.2.0.4 # cat /etc/redhat-release Red Hat Enterprise Linux Server release 5.2 (Tikanga)</pre>	<pre># rpm -qf /etc/redhat-release enterprise-release-5-0.0.9 # cat /etc/redhat-release Enterprise Linux Enterprise Linux Server release 5.2 (Carthage)</pre>

If your application checks the actual content of `/etc/redhat-release`, then it would have to also detect the changes Oracle has made (the release name has changed); no other change would be required.

Checking for the redhat-release package

Oracle Enterprise Linux 5 does not include the redhat-release package. Oracle provides an enterprise-release package which installs an equivalent set of files installed by redhat-release on RHEL5 Server. However, the enterprise-release package supplied by Oracle Enterprise Linux 5 provides the redhat-release capability in order to satisfy potential ISV's dependencies on existence and contents of the `/etc/redhat-release` file.

RHEL5 Server	Oracle Enterprise Linux 5
<pre># rpm -qa grep redhat-release-5 redhat-release-5Server-5.0.0.9</pre>	<pre># rpm -qa grep redhat-release-5 # # rpm -qa grep enterprise-release enterprise-release-5-0.0.4 # rpm -q --provides enterprise-release config(enterprise-release) = 6:5-0.0.4 enterprise-release redhat-release enterprise-release = 6:5-0.0.4</pre>

RHEL5 Server Update 1	Oracle Enterprise Linux 5 Update 1
<pre># rpm -qa grep redhat-release-5 redhat-release-5Server-5.1.0.2</pre>	<pre># rpm -qa grep redhat-release-5 # # rpm -qa grep enterprise-release enterprise-release-5-0.0.7 # rpm -q --provides enterprise-release config(enterprise-release) = 6:5-0.0.7 enterprise-release redhat-release enterprise-release = 6:5-0.0.7</pre>

RHEL5 Server Update 1	Oracle Enterprise Linux 5 Update 1
<pre># rpm -qa grep redhat-release-5 redhat-release-5Server-5.2.0.4</pre>	<pre># rpm -qa grep redhat-release-5 # # rpm -qa grep enterprise-release enterprise-release-5-0.0.9 # rpm -q --provides enterprise-release config(enterprise-release) = 6:5-0.0.9 enterprise-release redhat-release enterprise-release = 6:5-0.0.9</pre>

An application install check relying on a required redhat-release dependency will work without any change.

Checking the version of the distribution

An application may check for the version of the distribution. In this case, RHEL5 Server will return 5Server, whereas Oracle Enterprise Linux 5 will return 5.

RHEL5 Server:

```
# rpm -q --qf "%{version}\n" -f /etc/redhat-release
5Server
```

Oracle Enterprise Linux 5:

```
# rpm -q --qf "%{version}\n" -f /etc/redhat-release
5
```

Applications using the `%{version}` rpm check would simply have to check for 5, not 5Server.

The preceding items are the only major differences between RHEL5 and Oracle Enterprise Linux 5 that might impact installation and certification. If your application installer depends on any of the above checks, you now have all the information needed to make the absolute minimal changes required to transparently run on both Oracle Enterprise Linux 5 and RHEL5.

For ISVs that also check the Linux kernel version

The Red Hat kernel version is `kernel-2.6.18-x.y.z.el5` by default. When custom kernels are built for resolving customer issues, any other sort of numbering might have been used and shouldn't necessarily be relied upon. However, a standard RHN release kernel is of the above format.

Oracle Enterprise Linux 5 keeps the exact same kernel versions and adds more digits at the end to identify potential fixes incorporated. As always, these fixes are applied only if they are critical fixes not yet applied by Red Hat, and Oracle considers the issues fixed as being important for customer scenarios. Oracle always provides all fixes to Red Hat and the community in the hope that they will be incorporated in a future release. Oracle does not have more than a handful of patches applied at any given time.

For applications that ship binary kernel modules or check a specific kernel release, `uname -a` or `rpm -q kernel` will return this difference.

RHEL5 Server kernel-PAE-2.6.18-8.el5 :	Oracle Enterprise Linux 5 kernel-PAE-2.6.18-8.0.0.4.1.el5:
# uname -r 2.6.18-8.el5PAE	\$ uname -r 2.6.18-8.0.0.4.1.el5PAE

Update 1

RHEL5 Server kernel-PAE-2.6.18-53.el5 :	Oracle Enterprise Linux 5 kernel-PAE-2.6.18-53.0.0.0.1.el5:
# uname -r 2.6.18-53.el5PAE	\$ uname -r 2.6.18-53.0.0.0.1.el5PAE

Update 2

RHEL5 Server kernel-PAE-2.6.18-92.el5 :	Oracle Enterprise Linux 5 kernel-PAE-2.6.18-92.0.0.0.1.el5:
# uname -r 2.6.18-92.el5PAE	\$ uname -r 2.6.18-92.0.0.0.1.el5PAE

Note: In this case, Oracle appends additional digits to the end of the release number.

Full, Verified kABI Compliance

Oracle Enterprise Linux 5 is fully kABI compliant with RHEL5 Server. In fact, scripts exist to double check if any patch that were to be applied would have any chance of breaking kABI, and Oracle verifies if this would be the case. These verifications are the same as what Red Hat would do.

Any comparison between any kernel of Oracle Enterprise Linux 5 and RHEL 5 will show absolutely no difference in kABI. Kernel modules built for any RHEL5 kernel that load on any other RHEL5 kernel (since original release) will also load on any kernel released for Oracle Enterprise Linux 5.

When purchasing Oracle Unbreakable Linux support, customers could already have a version of RHEL installed or they could start with Oracle Enterprise Linux. Whichever is the case, customers receive Oracle Unbreakable Linux support for exactly the same set of packages.

Compatibility

The preceding information compares Oracle Enterprise Linux 5 and RHEL5, and highlights areas that are of importance to application vendors from a testing and certification point of view. If your application relies on any of the above examples, you now have all the information on what little needs to change. If your application does not rely on any of the above examples, it will run transparently and Oracle is confident that re-certification isn't necessary.

Appendix A**List of RHEL5 packages modified in Oracle Enterprise Linux 5**

The following pages include a complete, detailed list of all the RHEL5 Server packages Oracle had to modify in Oracle Enterprise Linux 5. The modifications were either due to trademark or logo issues or due to bugfixes/patches.

Package Name	Description of Changes
anaconda	Path of the Distribution changed from RedHat to Enterprise on the install CDs.
basesystem	trademark / logo changes
booty	trademark / logo changes
bug-buddy	trademark / logo changes
conga	trademark / logo changes
efax	trademark / logo changes
firstboot	trademark / logo changes
gnome-desktop	trademark / logo changes
gnome-session	trademark / logo changes
gpm	trademark / logo changes
gstreamer	trademark / logo changes
gstreamer-plugins-base	trademark / logo changes
httpd	trademark / logo changes
initscripts	trademark / logo changes
jpackage-utils	trademark / logo changes
kdeadmin	trademark / logo changes
kdebase	trademark / logo changes
kernel	GPG key related changes
kexec-tool	trademark / logo changes
libvirt	trademark / logo changes
libxml2	trademark / logo changes
libxslt	trademark / logo changes
microcode_ctl	Updated firmware from Intel
module-init-tools	trademark / logo changes
openssl	trademark / logo changes
piranha	trademark / logo changes
pirut	trademark / logo changes
postgresql	trademark / logo changes
redhat-artwork	trademark / logo changes
redhat-rpm-config	trademark / logo changes
rhgb	trademark / logo changes
rhpl	trademark / logo changes

Package Name	Description of Changes
rpm	trademark / logo changes
sblim	trademark / logo changes
setroubleshoot	trademark / logo changes
squirrelmail	trademark / logo changes
stunnel	trademark / logo changes
sysreport	trademark / logo changes
system-config-cluster	trademark / logo changes
system-config-date	trademark / logo changes
system-config-httpd	trademark / logo changes
system-config-kickstart	trademark / logo changes
system-config-network	trademark / logo changes
system-config-nfs	trademark / logo changes
system-config-printer	trademark / logo changes
system-config-samba	trademark / logo changes
system-config-securitylevel	trademark / logo changes
system-config-services	trademark / logo changes
system-config-soundcard	trademark / logo changes
system-config-users	trademark / logo changes
tog-pegasus	trademark / logo changes
tux	trademark / logo changes
wireshark	ocfs2 related fix.
xorg-x11-server	trademark / logo changes
zsh	trademark / logo changes

Note: Patch files for Oracle-provided fixes are here <http://oss.oracle.com/el5/oracle-provided-patches/>

The following table contains packages are removed from Oracle Enterprise Linux 5. Packages are either removed due to copyright issues or functionality provided by another package.

Package name	Description of changes
redhat-logos	Replaced by oracle-logos
redhat-release	Replaced by enterprise-release
redhat-release-notes-5Server	Replaced by enterprise-release-notes-5Server
rhn-setup	Replaced by up2date
rhn-setup-gnome	Replaced by up2date-gnome
rhn-client-tools	Replaced by up2date

Package name	Description of changes
rhnsd	Replaced by up2date
rhn-check	Replaced by up2date
yum-rhn-plugin	Not required for ULN
fonts-chinese	Copyright issues
Deployment_Guide	Copyright issues (Documentation Only)
Virtualization	Copyright issues (Documentation Only)
Global_File_System	Copyright issues (Documentation Only)
Cluster_Administration	Copyright issues (Documentation Only)

Appendix B

List of RHEL5 packages modified in Oracle Enterprise Linux 5 Update 1

The following pages include a complete, detailed list of all the RHEL5 Server packages Oracle had to modify in Oracle Enterprise Linux 5 Update 1. The modifications were either due to trademark or logo issues or due to bugfixes/patches.

Package Name	Description of Changes
anaconda	Path of the Distribution changed from RedHat to Enterprise on the install CDs.
basesystem	trademark / logo changes
Booty	trademark / logo changes
bug-buddy	trademark / logo changes
Conga	trademark / logo changes
efax	trademark / logo changes
firstboot	trademark / logo changes
gnome-desktop	trademark / logo changes
gnome-session	trademark / logo changes
gpm	trademark / logo changes
gstreamer	trademark / logo changes
gstreamer-plugins-base	trademark / logo changes
httpd	trademark / logo changes
initscripts	trademark / logo changes
jpackage-utils	trademark / logo changes
kdeadmin	trademark / logo changes
kdebase	trademark / logo changes

Package Name	Description of Changes
kernel	GPG key related changes
kexec-tool	trademark / logo changes
libvirt	trademark / logo changes
libxml2	trademark / logo changes
libxslt	trademark / logo changes
microcode_ctl	Updated firmware from Intel
openssl	trademark / logo changes
piranha	trademark / logo changes
pirut	trademark / logo changes
postgresql	trademark / logo changes
redhat-artwork	trademark / logo changes
redhat-rpm-config	trademark / logo changes
rhgb	trademark / logo changes
rhpl	trademark / logo changes
rpm	trademark / logo changes
sblim	trademark / logo changes
sos	trademark / logo changes
setroubleshoot	trademark / logo changes
squirrelmail	trademark / logo changes
stunnel	trademark / logo changes
sysreport	trademark / logo changes
system-config-date	trademark / logo changes
system-config-httpd	trademark / logo changes
system-config-kickstart	trademark / logo changes
system-config-network	trademark / logo changes
system-config-nfs	trademark / logo changes
system-config-printer	trademark / logo changes
system-config-samba	trademark / logo changes
system-config-securitylevel	trademark / logo changes
system-config-services	trademark / logo changes
system-config-soundcard	trademark / logo changes
system-config-users	trademark / logo changes

Package Name	Description of Changes
tog-pegasus	trademark / logo changes
tux	trademark / logo changes
wireshark	ocfs2 related fix.
xorg-x11-server	trademark / logo changes
zsh	trademark / logo changes

Appendix C

List of RHEL5 packages modified in Oracle Enterprise Linux 5 Update 2

The following pages include a complete, detailed list of all the RHEL5 Server packages Oracle had to modify in Oracle Enterprise Linux 5 Update 1. The modifications were either due to trademark or logo issues or due to bugfixes/patches.

Package Name	Description of Changes
anaconda	Path of the Distribution changed from RedHat to Enterprise on the install CDs.
basesystem	trademark / logo changes
Booty	trademark / logo changes
bug-buddy	trademark / logo changes
clustermon	trademark / logo changes
Conga	trademark / logo changes
crash	trademark / logo changes
eclipse	trademark / logo changes
efax	trademark / logo changes
filesystem	trademark / logo changes
freeipmi	trademark / logo changes
firstboot	trademark / logo changes
gnome-desktop	trademark / logo changes
gnome-session	trademark / logo changes
gpm	trademark / logo changes
gststreamer	trademark / logo changes
gststreamer-plugins-base	trademark / logo changes
gzip	trademark / logo changes
httpd	trademark / logo changes

Package Name	Description of Changes
initscripts	trademark / logo changes
jpackage-utils	trademark / logo changes
kdeadmin	trademark / logo changes
kdebase	trademark / logo changes
kernel	GPG key related changes
kexec-tool	trademark / logo changes
libvirt	trademark / logo changes
libxml2	trademark / logo changes
libxslt	trademark / logo changes
microcode_ctl	Updated firmware from Intel
openssl	trademark / logo changes
piranha	trademark / logo changes
pirut	trademark / logo changes
postgresql	trademark / logo changes
procmail	trademark / logo changes
python-virtinst	trademark / logo changes
redhat-artwork	trademark / logo changes
redhat-rpm-config	trademark / logo changes
rgmanager	trademark / logo changes
rhgb	trademark / logo changes
rhpl	trademark / logo changes
rpm	trademark / logo changes
sblim	trademark / logo changes
sos	trademark / logo changes
setroubleshoot	trademark / logo changes
squirrelmail	trademark / logo changes
stunnel	trademark / logo changes
sysreport	trademark / logo changes
system-config-date	trademark / logo changes
system-config-httpd	trademark / logo changes
system-config-kickstart	trademark / logo changes
system-config-netboot	trademark / logo changes

Package Name	Description of Changes
system-config-network	trademark / logo changes
system-config-nfs	trademark / logo changes
system-config-printer	trademark / logo changes
system-config-samba	trademark / logo changes
system-config-services	trademark / logo changes
system-config-soundcard	trademark / logo changes
system-config-users	trademark / logo changes
tog-pegasus	trademark / logo changes
tftp	trademark / logo changes
tux	trademark / logo changes
wireshark	ocfs2 related fix.
xorg-x11-server	trademark / logo changes
xulrunner	trademark / logo changes
zsh	trademark / logo changes

Partners: Join the Oracle Unbreakable Linux Product Focus Area

Join the Oracle Unbreakable Linux Product Focus Area and benefit your business by accelerating your market opportunity and lowering your cost of providing Linux solutions and support to users.

For more information to become an Oracle partner and to join the Oracle Unbreakable Linux Product Focus Area, simply visit the [Oracle PartnerNetwork](#).

For further information on the Oracle Unbreakable Linux support program, visit oracle.com/linux

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