

# Oracle Unbreakable Linux FAQ

[General Overview](#)

[Compatibility & Third Party Solutions](#)

[More Information](#)

[Pricing](#)

[Support Details](#)

[Indemnification](#)

[Transition](#)

## General Overview

### What is Oracle Unbreakable Linux?

[Oracle Unbreakable Linux](#) delivers enterprise-class support for Linux with premier backports, comprehensive management, cluster software, indemnification, testing and more, all at significantly lower cost. Oracle is committed to delivering high quality, comprehensive, and integrated support solutions to help ensure that organizations succeed with the Linux operating system.

Oracle Unbreakable Linux is a support program. It is not a distribution. Oracle refers to the Red Hat compatible distribution it provides as [Oracle Enterprise Linux](#).

### What does Oracle deliver with Unbreakable Linux support?

Driven by enterprise customer requirements, Oracle provides the following for Linux server deployments:

- Free installable binaries for Oracle Enterprise Linux;
- For Linux x86 and x86-64, access to patches, fixes, updates, and backports for Red Hat Enterprise Linux 3 (RHEL3), Red Hat Enterprise Linux 4 (RHEL4), and Red Hat Enterprise Linux 5 (RHEL5) releases, delivered via a subscriber network, the Unbreakable Linux Network (ULN);
- For Linux Itanium, access to patches, fixes, updates, and backports for Red Hat Enterprise Linux 4 Update 6, 7, and 8 (RHEL4U6, RHEL4U7, RHEL4U8), delivered via a subscriber network, the Unbreakable Linux Network (ULN);
- Three levels of Linux support to choose from
  - Network – software, including updates;
  - Basic – 24x7 global support, complete Linux server lifecycle management, cluster software;
  - Premier – 24x7 global support, complete Linux server lifecycle management, cluster software, premier backports, and Oracle Lifetime Support.

### Who can take advantage of Oracle's Linux support?

Anyone can get Linux support from Oracle whether or not they are using Oracle products.

### How can Oracle provide enterprise-quality support for Linux while lowering cost?

For decades, Oracle has been supporting customers' enterprise-class software deployments for the most mission critical data centers in the world. As the industry's leading enterprise support provider, Oracle offers:

- 7000+ support professionals, 145 countries, 27 local languages, 24x7 global coverage;
- 400,000 knowledge solutions;
- Dedicated Linux engineering team;
- Comprehensive testing and optimization of Linux with third-party hardware, storage, networking, and drivers;
- Complete support for the complete software stack running on Linux including enterprise applications, middleware, database and the operating system itself;
- Services and expertise for installation, configuration and full Linux stack deployment.

### Why is Oracle offering Linux support?

Oracle has a long-standing history of supporting standards-based computing to lower the cost of IT infrastructure for customers. Linux is important to Oracle because true enterprise quality support for Linux is something that our customers want. Oracle is deeply committed to delivering high quality enterprise Linux support and advancing Linux

technology so that we can accelerate the growth of the Linux operating system as a viable low cost alternative for enterprises. is critical to the success of the Linux platform

### How does Oracle work with the Linux community?

Oracle is committed to developing, supporting, and promoting Linux. Oracle has been a key contributor to the Linux community for many years, including major code contributions such as Oracle Cluster File System that is now part of Linux kernel 2.6.16. Oracle's Linux Engineering team is a trusted part of the Linux community and several Oracle employees are Linux mainline kernel maintainers. Oracle will continue contributing Linux-related innovations, modifications, documentation and fixes directly to the Linux community on a timely basis. We will strive to set the standard for collaborating with the Linux community.

Oracle puts tremendous effort into testing Linux to run well in the enterprise. Oracle's Linux test lab uses many test kits that are based on real customer workloads to test and stress Linux for performance, reliability, scalability and high availability. The results of these testing efforts make their way into the Linux kernel as bug fixes and new enhancements, thereby making Linux better for our customers. Learn more about [Oracle's work with the Linux community and with other open source projects](#).

### Does Oracle run its business and product development on Linux?

Yes. Oracle has realized first-hand the benefit of lower IT costs from using Linux in a grid computing infrastructure. [Oracle On Demand](#), Oracle's outsourcing business, runs on Linux. Oracle also runs the Application Demo Systems and Technology Demo Systems, which consist of several hundred servers, on Linux. These systems are utilized by Oracle's worldwide sales organization to provide Oracle product demonstrations to customers and prospects. In addition, several of Oracle's Global IT systems, including worldwide email systems, run on Linux, and Oracle has more than 10,000 Linux servers in the data center.

With more than 9,000 developers using a Linux infrastructure to do product development, Oracle boasts one of the world's largest commercial Linux development organizations. This includes development for all of Oracle's major products including Oracle E-Business Suite, Oracle Fusion Middleware and Oracle Database. Plus, all of Oracle's internal Linux systems are supported by Oracle's Linux support team as part of the Unbreakable Linux Support Program.

## Pricing

### How much do I pay for Linux support from Oracle?

Oracle's pricing for Linux support is simple, and is calculated on a per system basis as follows:

	Annual price per system with up to 2 physical CPUs	Annual price per system with unlimited physical CPUs	
<b>Installable Binaries and Source</b>	Free	Free	Free installable Linux binaries and source will be available through <a href="http://www.oracle.com">www.oracle.com</a>
<b>Enterprise Linux Network Support</b>	\$119	\$119	Access to software and updates through the Unbreakable Linux Network.
<b>Enterprise Linux Basic Support</b>	\$499	\$1,199	Network access plus 24x7 support with global coverage and complete Linux server lifecycle management.
<b>Enterprise Linux Premier Support</b>	\$1,399	\$2,299	Network access, 24x7 support with global coverage, complete Linux server lifecycle management, plus back port of fixes to earlier releases as well as Oracle Lifetime Support.

A monolithic integrated circuit with multiple cores or hyperthreading is counted as a single physical CPU when determining the total number of physical CPUs in a system; see the [pricing guide](#) for further details.

## Indemnification

### Does Oracle indemnify users against intellectual property infringement claims?

Yes. Oracle is committed to the success of the Linux operating system and will stand behind our support offering by providing indemnification for intellectual property claims raised against our customers. This indemnification is offered for all Linux users supported by Oracle, and is included with Network, Basic, and Premier Linux support. The indemnification is not in any way limited to the amount of money a customer has paid Oracle. Oracle's indemnification offer is part of Oracle's Linux support contract, which states

"Provided you are a current subscriber to Oracle Enterprise Linux support services, if a third party makes a claim against you that any covered programs furnished by Oracle ("material" or "materials"), and used by you for your business operations infringes its intellectual property rights, Oracle, at its sole cost and expense, will defend you against the claim and indemnify you from the damages, liabilities, costs and expenses awarded by the court to the third party claiming infringement or the settlement agreed to by Oracle, if you do the following:

- Notify Oracle promptly in writing, not later than 30 days after you receive notice of the claim (or sooner if required by applicable law);
- Give Oracle sole control of the defense and any settlement negotiations; and
- Give Oracle the information, authority, and assistance it needs to defend against or settle the claim."

With Oracle's offer of comprehensive and thorough indemnification against infringement, users can now deploy Linux without hesitation. Oracle's indemnification offer makes Linux an even more attractive choice for enterprise deployments. Read the [Top Five Facts About Oracle's Indemnification for Linux](#) for more information.

## Compatibility and Third-Party Solutions

### Is Oracle taking Red Hat's source code?

Linux is available under the GPL license, which requires free distribution of the source code. A significant amount of code that is shipped by Red Hat as part of its distribution is actually created by developers outside of Red Hat. Oracle takes the source code that Red Hat makes available under GPL. Oracle will track the Red Hat distribution closely to ensure compatibility for users.

### What happens to third party application certification if I start using Oracle's Linux Support?

Customers can continue to use any ISV application that has been certified for use with RHEL3, RHEL4, and RHEL5. Oracle will offer support for the operating system running underneath applications that have been certified with these versions of Red Hat Enterprise Linux.

For the last four years, Oracle has been providing patches and fixes for RHEL while fixing P1 issues for the Linux OS for our customers. Oracle has maintained compatibility with RHEL, proving that Oracle can effectively manage this process with 3rd party applications.

An ISV does not need to do anything special to test and certify their application with Oracle Enterprise Linux. Going forward, the ISVs should test Oracle Enterprise Linux by running the same tests they run against RHEL. Most ISVs only test major releases coming out of Red Hat (i.e. do not test individual patches). Oracle expects that most third party application providers will do the same with Oracle supported Linux.

### What happens if Red Hat does not take Oracle's patches in their release?

Oracle makes all Linux patches and updates available under GPL and anyone including Red Hat can take those fixes. Oracle plans to synchronize with every major RHEL software release including updates. If Red Hat does not include Oracle fixes in their update releases, Oracle will include the additional fixes at the time of each major synchronization with the current RHEL software release.

### Which hardware platforms does Oracle support?

Oracle supports x86 and x86-64 architecture based hardware running the Linux operating system. All hardware platforms that are certified by Red Hat for RHEL3, RHEL4, and RHEL5 for x86 and x86-64 architectures are

supported by Oracle. Oracle supports Intel Itanium for Red Hat Enterprise Linux 4 Update 6, 7, and 8 (RHEL4U6, RHEL4U7, and RHEL4U8). Oracle does not support PowerLinux and z/Linux architectures.

### How can I find out which third party providers have endorsed Oracle?

Oracle has strategic partnerships with key industry vendors including the ones that run on Linux. Visit the [Partner Endorsements page](#) to see the third party solutions which support for the Oracle Unbreakable Linux program.

## Support Details

### What is the Unbreakable Linux Network (ULN)?

The [Unbreakable Linux Network](#) (ULN) is a comprehensive resource for Oracle Unbreakable Linux support subscribers, and offers access to Linux software patches, updates and fixes through the up2date program. ULN is similar to Red Hat Network (RHN). Read the [Unbreakable Linux Network data sheet](#) and the [Unbreakable Linux Network white paper](#) for more information. To access ULN, a valid Customer Support Identifier (CSI) is required. To obtain a CSI, purchase Linux support from the [Oracle Unbreakable Linux Store](#).

### How can users manage their Linux servers once they download patches from ULN?

Oracle Management Pack for Linux delivers comprehensive provisioning, patching, monitoring and administration capabilities via a single, web-based interface, further reducing the complexity and cost of managing Linux environments. Oracle Unbreakable Linux support customers at the Basic and Premier levels have access to the [Oracle Management Pack for Linux](#) license and support, at no additional charge.

### Is cluster software included with Unbreakable Linux support?

Oracle Unbreakable Linux support customers at the Basic and Premier support levels can download and deploy Oracle Clusterware at no additional license fee or support cost. Oracle Clusterware is portable cluster software that groups together individual servers so they can cooperate as a single system. A fundamental component of Oracle Real Application Clusters, Oracle Clusterware can operate independently and helps ensure the protection of an application, Oracle or third-party.

Oracle Clusterware enables high availability, an essential component of business continuity, for applications and databases managed in the cluster environment—including Oracle Single Instance Databases, Oracle Application Servers, Oracle Enterprise Manager components, third party databases, and other applications. Oracle Clusterware for Unbreakable Linux is available for Linux x86 and Linux x86-64. For more information, read the [Oracle Clusterware for Unbreakable Linux FAQ](#).

### How does Oracle support Linux x86, Linux x86-64, and Linux Itanium architectures?

For Linux x86 and Linux x86-64 architectures, Oracle supports RHEL3U8 and onward through the Unbreakable Linux Support program. [Unbreakable Linux Network](#) (ULN) offers a channel for RHEL3U8 patches, which users can subscribe to. Users can run up2date rpm for RHEL3 and download all patches including security erratas. Basic and Premier support customers can also call Oracle support 24x7 and get patches for specific issues on RHEL3. Oracle supports all existing installations of RHEL3. Oracle makes rpms available for all the patches and updates and all changes are published. If RHEL3U9 is released, everything new since U8 will be made available through ULN. Oracle will provide rpms for all the packages that were changed in U9. Oracle will not provide ISOs for RHEL3. Oracle provides complete support for RHEL4U4, RHEL4U5, RHEL5, and onward, etc., including the availability of ISOs.

For Linux architectures, Oracle supports RHEL4U6, RHEL4U7, and RHEL4U8 through the Unbreakable Linux Support program. [Unbreakable Linux Network](#) (ULN) offers channels for RHEL4U6, RHEL4U7, and RHEL4U8 patches, which users can subscribe to. Users can run up2date rpm for RHEL4U6, RHEL4U7, and RHEL4U8 and download all patches including security erratas. Basic and Premier support customers can also call Oracle support 24x7 and get patches for specific issues on RHEL4U6, RHEL4U7, and RHEL4U8. Oracle makes rpms available for all the patches and updates and all changes are published. Oracle does not provide ISOs for RHEL4U6 or RHEL4U7, but does starting with RHEL4U8.

### What Red Hat code does Oracle Enterprise Linux offer – AS, ES or WS?

Oracle Enterprise Linux is the same as Red Hat Enterprise Linux. Whereas Red Hat differentiates their support offerings through different product releases such as WS, ES and AS, Oracle only offers binaries based on AS, the version that is the most complete. AS includes all of the packages that are included in ES and WS.

### **Does Oracle provide support for Red Hat Global File System (GFS), Red Hat Cluster Suite (RHCS), or Red Hat Application Server (RHAS)?**

Red Hat Global File System (GFS) and Red Hat Cluster Suite (RHCS) are part of RHEL5 and OEL5 so they are supported by Oracle under the Unbreakable Linux Program. However, since GFS and RHCS are not included with RHEL4, OEL4 and earlier versions, they are not supported by Oracle with RHEL4, OEL4, and earlier versions.

As an alternative to GFS, Oracle Enterprise Linux software already includes the [Oracle Cluster File System \(OCFS2\)](#). Developed by Oracle, OCFS2 is a shared storage file system integrated into the Linux kernel (2.6.16) and released under the GNU General Public License. RHAS is not supported under the Unbreakable Linux program.

## **Transition**

### **What is the transition path for existing Red Hat and Novell Linux users?**

Transition is very easy. Existing Red Hat and Novell Linux customers who move to the Unbreakable Linux support program may receive credit for the remainder of their existing support contract. Please see [Oracle's Linux Support Policies](#) for important information regarding this offer.

From a technical perspective, for systems where RHEL3, RHEL4, or RHEL5 are installed, customers need to only download the "up2date" program from the [Unbreakable Linux Network](#), and run that program on each system. No reinstall is necessary. From that point on, the customer will receive bug fixes and new versions through Oracle's Unbreakable Linux Network.

For systems where other distributions or other Red Hat versions are installed, Oracle will provide a migration guide, and Oracle Consulting Services offers an Unbreakable Linux [Migration Strategy Service](#).

### **When switching to Unbreakable Linux support for my current Red Hat Enterprise Linux installations, am I required to remove any Red Hat logos or other Red Hat files from my system?**

No. As per the [Red Hat license agreement](#), as long as you do not redistribute the Red Hat Enterprise Linux software, you do not have to change or remove any packages in the Red Hat Enterprise Linux distribution when switching to Oracle Unbreakable Linux support. In order to receive updates for Oracle Enterprise Linux, you must register your system with Unbreakable Linux Network by [downloading the appropriate up2date program](#).

### **Will Oracle continue to support other operating systems?**

Yes. Oracle has a thirty-year history of supporting Oracle products on numerous popular operating systems. Unbreakable Linux does nothing to decrease our commitment to other operating systems such as Windows, other distributions of Linux, or UNIX environments.

### **Will Oracle continue to support customers that are using Oracle products on Red Hat RHEL, Novell SLES, and Asianux?**

Yes. Oracle is fully committed to all of its customers that have deployed or will deploy Oracle products—applications, middleware, database—on other Linux distributions that are currently supported, including Red Hat, Novell and Asianux. We will continue to certify and offer support for Oracle products running on these Linux distributions. However, for operating system issues users will need to work with their vendor.

## **More Information**

### **How do I get more information and purchase Linux support from Oracle?**

- To get more information, visit [oracle.com/linux](http://oracle.com/linux)
- To purchase Linux support, visit [oraclestore.oracle.com/linux](http://oraclestore.oracle.com/linux)

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