Oracle Linux for Oracle Cloud Infrastructure

Frequently Asked Questions

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INTRODUCTION

Oracle Linux is a proven operating environment that is optimized for performance, scalability, reliability, and security. It offers the most cost-effective and integrated operating environment for Oracle Cloud, with the best platform experience for Oracle and non-Oracle applications alike.

This document provides answers to frequently asked questions relating to Oracle Linux for Oracle Cloud Infrastructure (OCI), and includes information on support, licensing, compatibility, deployment, and resources.

ORACLE LINUX FEATURES IN ORACLE CLOUD INFRASTRUCTURE

What Oracle Linux features are provided for Oracle Cloud Infrastructure customers?

- Customers deploying Oracle Linux on Oracle Cloud Infrastructure have access to the features, components, and Linux programs supported under Oracle Linux Support as outlined in the Oracle Linux License Information User Manual. Additionally, features and tools are provided to facilitate and enhance the deployment and development platform experience in Oracle Cloud Infrastructure. This includes:
  - Oracle Autonomous Linux, based on the Oracle Linux operating environment, provides autonomous capabilities such as automated zero downtime patching and known exploit detection, to help keep the operating system highly secure and reliable.
  - OS Management, an Oracle Cloud Infrastructure integrated service that helps users manage which of their servers to automate or control manually. It also enables users to automate capabilities that will execute common management tasks for Linux systems, including patch and package management, and security and compliance reporting. OS Management also supports Autonomous Linux and Windows Server instances in OCI.
  - Frequent Oracle Linux image updates with the latest bug fixes, security errata, Oracle Cloud tools and enhancements.
  - Faster downloads from the mirrored Oracle Container Registry and Oracle Linux yum server within Oracle Cloud Infrastructure, without having to incur network charges.
  - Oracle Ksplice, pre-installed with Oracle Cloud and ready to update the Oracle Linux kernel and user space with zero downtime.
  - Comprehensive container and container management support for Oracle Container Runtime for Docker and Oracle Linux Container Services for use with Kubernetes.
  - Oracle Cloud Infrastructure utilities to simplify and accelerate the deployment and configuration of Oracle Linux and KVM instances on Oracle Cloud Infrastructure.
  - An optimized developer platform that allows for easy access to Linux developer and preview software channels available in the Oracle Linux yum server, and thousands of EPEL packages, built and signed by Oracle for security and compliance. In addition, Software Collection Library support is included to enable developers to install recent versions of Python, PHP, NodeJS, nginx, and more, without risk of disrupting applications running on different versions of these components.
  - Oracle Cloud Infrastructure client tools such as Terraform, Software Development Kits (SDKs), and Command Line Interfaces (CLIs) are deployed faster and easier through Oracle-provided yum server RPM's available locally in OCI.
  - Oracle Linux Cloud Developer image, an Oracle Linux 8 based, ready-to-run image that provides a comprehensive out-of-the-box development platform on Oracle Cloud Infrastructure. It pre-installs and automatically configures and launches a complete development environment on Oracle Cloud Infrastructure that includes the latest tools, a choice of popular development languages, Oracle Cloud Infrastructure software development kits, and Oracle Database connectors. The image is available for the Oracle Linux x86_64 and aarch64 platforms in OCI. The Oracle Linux Cloud
Developer image is readily available from the OCI console for quick and easy deployment. This image is available to Oracle Cloud Infrastructure customers at no additional cost. Some individual components included in the image may have additional licensing and support subscription requirements.

- Quickly and easily build NFS and Samba shared storage using NVMe devices or block volumes attached to Oracle Cloud Infrastructure compute instances by using the Oracle Linux Storage Appliance.
- Oracle Cloud Marketplace and Partner Image catalog in Oracle Cloud Infrastructure, to quickly and easily install Oracle Linux KVM, Oracle Linux Storage Appliance, Oracle Linux STIG image, and other Oracle and partner applications.
- Oracle Linux Cloud Developer image for Arm is readily available from the Oracle Cloud Infrastructure console for quick and easy deployment.
- Oracle Linux Premier level support, at no additional cost to Oracle Cloud Infrastructure customers.
- Oracle Linux Extended Support, included with an Oracle Cloud Infrastructure subscription. Refer to the Lifetime Support Policy for support coverage dates for Oracle Linux.
- OCI supports and simplifies Oracle Linux 7 to 8 (x86_64 and aarch64) in-place upgrades using the Leapp utility, a Linux community framework for updating operating systems and applications. For more information, read the Oracle Linux 8 Performing System Upgrades with Leapp documentation.

**ORACLE AUTONOMOUS LINUX**

Is Oracle Autonomous Linux a new Linux distribution?

- No, Oracle Autonomous Linux is Oracle Linux with built-in autonomous capabilities and services that include automated Ksplice and yum updates and critical system event monitoring using the OS Management service.

Can Oracle Autonomous Linux be deployed on Oracle Cloud Always Free Tier compute resources?

- Beginning August 31, 2021, Oracle Autonomous Linux instances created using Oracle-Autonomous-Linux-7.9-2021.08-0 platform image or later are integrated with the OS Management service and not supported in the Oracle Cloud Free Tier. Existing instances that were launched before August 31, 2021 remain standalone instances until a migration plan is available.

Does Oracle Linux Premier Support cover Oracle Autonomous Linux deployments in Oracle Cloud Infrastructure?

- For customers with OCI subscriptions, Oracle Linux Premier Support includes support at no additional cost for Oracle Autonomous Linux deployments, just as it would when you deploy Oracle Linux on paid OCI compute resources. The same support policies apply to Oracle Autonomous Linux as for Oracle Linux deployments in Oracle Cloud Infrastructure for customer subscriptions.
- When Oracle Autonomous Linux is deployed on Always Free Tier resources, support is provided by the community, and not by Oracle.

Does the OS Management service support Oracle Autonomous Linux instances?

- Yes, OS Management supports the configuration of Autonomous Linux instances, autodiscovers and monitors application resources, and automatically collects critical system events data.

Is Oracle Autonomous Linux available for deployment on-premises?

- Currently, Oracle Autonomous Linux is only available for deployment in Oracle Cloud Infrastructure.

Is Oracle Autonomous Linux binary compatible with IBM’s Red Hat Enterprise Linux?

- Yes, Oracle Autonomous Linux, which is based on Oracle Linux, is 100% application binary compatible with IBM’s Red Hat Enterprise Linux. This means that applications certified to run on Red Hat Enterprise Linux can run on Oracle Autonomous Linux unmodified. Oracle Linux binaries are provided for patching and updating Red Hat Enterprise Linux installations.

Are Oracle solutions such as Oracle Database and E-Business Suite certified to run on Oracle Autonomous Linux?

- Oracle Autonomous Linux is based on the Oracle Linux 7 image, hence solutions certified on Oracle Linux 7 are also certified on Oracle Autonomous Linux.

What OCI images are available that use Autonomous Linux?

- Autonomous Linux is available with the Oracle Linux KVM, Oracle Linux Storage Appliance, and Oracle Linux Cloud Developer images.
OS MANAGEMENT SERVICE

What does it cost to use the OS Management service in OCI?

- For OCI customers, there is no additional cost for Oracle Cloud Infrastructure customers to use the OS Management service. Support for the OS Management service is also provided at no additional cost for OCI customers.

What platform (operating system) instances can the OS Management service manage?

- Currently, the OS Management service manages Oracle Linux and Windows Server instances deployed on Oracle Cloud Infrastructure. For Oracle Linux 8, OS Management does not support updating application streams, also known as Appstreams or module streams. Autonomous Linux instances are also supported, using images beginning with the August 2021 platform image. For more information, see Oracle Autonomous Linux.

Does OS Management support Oracle Cloud Free Tier resources?

- No, instances deployed on Oracle Cloud Free Tier shapes are not supported and cannot be managed by the OS Management service.

Does OS Management support Oracle Linux for Arm instances?

- Yes, beginning with Oracle Cloud Agent 1.15.0, the OS Management service is supported on Arm-based Ampere A1 Compute shapes in OCI. See the documentation to enable OS Management for Oracle Linux for Arm instances.

Can I manage Ksplice patching with the OS Management service?

- Yes, Ksplice updates can be managed using the OS Management service. Autonomous Linux instances use Ksplice technology to run zero-downtime patching. Oracle Linux instances deployed from OCI platform images automatically enable Ksplice. OS Management offers the convenience of managing and configuring Ksplice updates for OCI instances whether you’re running Autonomous Linux or Oracle Linux.

Can the OS Management service manage on-premises operating system deployments?

- Currently, the OS Management service does not manage on-premises operating system deployments.

Can the OS Management service manage instances across Oracle Cloud Infrastructure regions?

- No, the service is region based, just as with any other Oracle Cloud Infrastructure service.

ORACLE LINUX SUPPORT ON ORACLE CLOUD INFRASTRUCTURE

What Oracle Cloud Infrastructure shapes does Oracle Linux support?

- Oracle Linux platform images in Oracle Cloud Infrastructure can be deployed on Cloud Free Tier, 64-bit AMD/Intel x86_64, and 64-bit Arm (aarch64) compute services.

What does Oracle Linux Support cost on Oracle Cloud Infrastructure?

- With an Oracle Cloud Infrastructure subscription, there is no additional cost for Oracle Linux Premier Support. This includes support for additional Oracle Linux features and tools that integrate with, and enhance the cloud platform experience on Oracle Cloud Infrastructure.

Does an Oracle Cloud Infrastructure subscription include Oracle Linux Extended Support?

- Oracle Linux Extended Support is available at no additional cost to Oracle Cloud Infrastructure subscribers.

SUPPORT FOR RED HAT ENTERPRISE LINUX AND CENTOS

Does Oracle provide support for Red Hat Enterprise Linux and CentOS installations on Oracle Cloud Infrastructure?

- Oracle Linux Premier Support includes support for customers’ existing Red Hat Enterprise Linux (RHEL) and CentOS installations. Oracle Linux Premier Support is included as part of OCI subscriptions at no additional cost.
- For CentOS installations, Oracle will only support systems that are based on CentOS Linux, not CentOS Stream.
- Support for RHEL and CentOS is limited to the packages and versions provided on the Oracle Linux installation media and the topics identified in the Scope of Coverage (PDF) document. All security and bug fix errata and other updates will be Oracle Linux binaries. However, such binaries are fully compatible and will work without a full system reinstallation, or other coding changes.
• Refer to the Getting Started – How to Connect to Oracle Linux Yum Server document for how to connect to the Oracle Linux yum server and obtain software updates via yum for Oracle Linux, RHEL, and CentOS installations.
• For instructions on how to obtain Oracle Linux updates for CentOS installations, refer to: Oracle Linux: A Better Alternative to CentOS.

SUPPORT FOR THE ORACLE LINUX RED HAT COMPATIBLE KERNEL (RHCK) ON ORACLE CLOUD INFRASTRUCTURE

Is the Oracle Linux Red Hat Compatible Kernel (RHCK) supported on Oracle Cloud Infrastructure?
• Yes. Oracle Linux comes with a choice of two kernels, the Unbreakable Enterprise Kernel (UEK), which is installed and enabled by default, and the Red Hat Compatible Kernel (RHCK). Oracle Linux support is provided for both UEK and RHCK on Oracle Cloud Infrastructure.

How do I change the default kernel in Oracle Linux to RHCK?
• To change the default kernel (UEK) for Oracle Linux instances in Oracle Cloud Infrastructure, and boot into an older or other kernel such as RHCK, refer to: Oracle Linux – How to Change the Default Kernel.

ORACLE KSPLICE SUPPORT

Can I use Oracle Ksplice for zero-downtime patching of my Red Hat Enterprise Linux, CentOS, and Ubuntu instances on Oracle Cloud Infrastructure?
• Oracle Ksplice is supported for RHEL, CentOS, and Ubuntu instances on Oracle Cloud Infrastructure (OCI) at no additional cost to OCI customers. Online Ksplice kernel updates are provided for RHEL and CentOS instances. Ksplice’s known exploit detection feature is not available for Linux distributions other than Oracle Linux. More information can be found in the Installing Ksplice Uptrack within Oracle Cloud Infrastructure section of the Ksplice User’s Guide.

Which architectures does Ksplice support?
• Ksplice is available for the 64-bit AMD/Intel (x86_64) and 64-bit Arm (aarch64) platforms.

USING ORACLE LINUX ON ORACLE CLOUD INFRASTRUCTURE

How can I try out Oracle Linux or Oracle Autonomous Linux on Oracle Cloud Infrastructure?
• You will need to register for an Oracle Cloud Infrastructure account here. You may be eligible for Oracle Cloud Free Tier services. Review the instructions in the Getting Started: Oracle Linux for Oracle Cloud Infrastructure guide.

How can I deploy Oracle Linux and other Oracle Linux based instances on Oracle Cloud Infrastructure?
• Oracle Linux 6, 7, 7 GPU, 8, 8 GPU, Oracle Autonomous Linux, and Oracle Linux Cloud Developer images are available directly from within the Oracle Cloud Infrastructure console as Oracle-provided platform images, so that you can quickly and easily deploy the latest Oracle Linux images on Oracle Cloud Infrastructure. Oracle Linux 7 and 8 GPU images are only available for the x86_64 platform. Oracle Linux images available on Oracle Cloud Infrastructure are updated frequently to include the latest security patches and updates, including enhancements and tools to work with Oracle Linux on Oracle Cloud Infrastructure.
• You can easily deploy Oracle Linux in Oracle Cloud Infrastructure using the Oracle Linux and Oracle Autonomous Linux images available from the Platform Images catalog in Oracle Cloud Infrastructure. The Platform Images catalog is available when selecting the image source when creating a compute instance from the Oracle Cloud Infrastructure console. For more information on deploying and using Oracle Linux on Oracle Cloud Infrastructure, consult the following documents:
  – Getting Started: Oracle Linux for Oracle Cloud Infrastructure
  – Getting Started: Deploying and Configuring Oracle Autonomous Linux on Oracle Cloud Infrastructure
  – Getting Started: Oracle Linux Cloud Developer Image
• Oracle Linux KVM, Oracle Linux Storage Appliance, Oracle Cloud Developer, and Oracle Linux STIG instances can be easily and quickly deployed using the Oracle Cloud Marketplace in Oracle Cloud Infrastructure. Simply navigate to the Marketplace from the Oracle Cloud Infrastructure console, and select the Marketplace image to launch the instance with a few simple clicks. For more information, see the following documents:
  – Getting Started: Oracle Linux KVM for Oracle Cloud Infrastructure
  – Oracle Linux Storage Appliance Deployment and User’s Guide
ORACLE LINUX PARTNER APPLICATIONS
Where can I find a list of Oracle Linux and Oracle Cloud Infrastructure partner applications?
A thriving ecosystem of partners— independent software vendors, hardware vendors, and system integrators— stand behind Oracle Linux. Oracle Linux also works out-of-the-box with partner solutions supported on Red Hat Enterprise Linux. For more about Oracle Linux partners, visit the following link: Oracle Linux and Virtualization Independent Software Vendor Catalog. Oracle Cloud Marketplace.

ORNACLE LINUX FOR ORACLE CLOUD INFRASTRUCTURE RESOURCES
Where can I find more information on Oracle Linux for Oracle Cloud Infrastructure?

- Information on Oracle Linux and Oracle Cloud Infrastructure can be found at the following links:
  - oracle.com/linux
  - Oracle Linux for Oracle Cloud Infrastructure datasheet
  - Oracle Linux for Arm datasheet
  - Oracle Linux for Oracle Cloud Infrastructure FAQ
  - Oracle Autonomous Linux
  - Oracle Cloud Infrastructure
  - Oracle Linux FAQ
- Documentation for related technologies and features can be found at the following links:
  - Oracle Linux
  - OS Management Service
  - Oracle Ksplice
  - Oracle Cloud Infrastructure Utilities
  - Oracle Linux KVM for Oracle Cloud Infrastructure
  - Oracle Linux Storage Appliance Deployment and User's Guide
  - Oracle Linux STIG
  - Getting Started with Oracle Linux for Oracle Cloud Infrastructure
  - Oracle Autonomous Linux on Oracle Cloud Infrastructure
  - Oracle Linux Cloud Developer Image

Where can I learn more about Oracle Linux Support?

- Visit Oracle Linux Support to learn a list of capabilities that are included in Oracle Linux Premier Support.

Are there any Oracle Linux on Oracle Cloud Infrastructure training materials available?

- Oracle Learning Library materials can be found on the Linux on Oracle Cloud Infrastructure training portal.

How can I stay connected with Oracle Linux for Oracle Cloud Infrastructure news and announcements?

- Follow us for announcements, news, tips, and events:
  - Oracle Linux Blog
  - Oracle Cloud Infrastructure Blog
  - Oracle Linux Community
  - Oracle Linux for Oracle Cloud Infrastructure Community
  - Twitter – Oracle Linux
  - Facebook – Oracle Linux
  - Linkedin – Oracle Linux Experts Group