Oracle Solaris 11.2
Frequently Asked Questions

Introduction
Oracle Solaris 11 is a complete, integrated and open platform engineered for large-scale enterprise cloud environments. It combines OpenStack, no compromise virtualization, powerful application driven Software Defined Networking, and agile, secure and compliant application deployment with a proven enterprise-class OS, all in a single, supported cloud offering.

What’s New in Oracle Solaris 11.2
Oracle Solaris 11.2 introduces many new features that enhance its capabilities as an overall cloud infrastructure solution, including the inclusion of OpenStack cloud controller software.

- **Centralized cloud management**: OpenStack has been integrated into Oracle Solaris 11.2 providing a comprehensive self-service environment for managing compute, network and storage resources in the data center. Integrated into all the core foundations of Oracle Solaris 11, including Oracle Solaris Zones, Elastic Virtual Switch networking, and the Oracle Solaris ZFS filesystem, you no longer need to compromise on mission critical capabilities and can expect an enterprise ready OpenStack distribution courtesy of Oracle.

- **Proven, zero overhead virtualization**: Oracle Solaris Zones are at the heart of OpenStack compute, providing zero overhead virtual environments. A new capability of Oracle Solaris Zones, called Oracle Solaris Kernel Zones, introduce OS independence and isolation allowing administrators to run multiple versions of Oracle Solaris within a single system.

- **Application driven Software Defined Networking**: Oracle Solaris 11.2 introduces a number of new software defined networking capabilities including powerful Elastic Virtual Switching allowing administrators to control their virtual networks within the OS itself and across network hardware in the data centre leveraging fabric intelligence when available. Applications can drive their service level agreements across all layers of the software and hardware stack with powerful new application flows.

- **Error free lifecycle management**: Oracle Solaris 11.2 continues the enhancements around software lifecycle management helping to reduce the biggest cost to businesses, human error. Firmware management is included in the existing package management utilities, helping administrators to always have correct firmware when updating systems. With enhanced support for compliance monitoring and reporting, administrators can reduce the risks across their entire cloud infrastructure.

- **Flexible data management at scale**: Data management is critical with the move towards cloud computing and the opportunity of big data. With exploding requirements, Oracle Solaris ZFS remains at the heart of simple, efficient, flexible and scalable data management through data compression, hybrid data storage and encryption.

Frequently Asked Questions

General Information

**Q**: Where can I download Oracle Solaris 11?

**A**: Oracle Solaris 11 can be downloaded from the Oracle Technology Network (OTN) at the following location:


**Q**: Where can I log issues relating to Oracle Solaris 11?

**A**: Customers who have an active support agreement with Oracle can log issues in My Oracle Support which can be found at the following location:

http://support.oracle.com/

**Q**: Where can I find out more information about Oracle Solaris 11?

**A**: Visit the Oracle Solaris 11 pages on Oracle Technology Network:

http://www.oracle.com/technetwork/server-storage/solaris11/
Q: Can I order Oracle Solaris 11 pre-installed on Oracle hardware products?
A: Yes. Oracle Solaris 11 may be factory pre-installed at the time of order at no additional cost. Please check the available operating system configurations when ordering.

System Requirements

Q: What architectures are supported with Oracle Solaris 11?
A: Oracle Solaris 11 is supported on SPARC and x86.

Q: Is Oracle Solaris 11 only available on Oracle based hardware?
A: No. Oracle Solaris 11 can be installed on both Oracle hardware and hardware from third party vendors as detailed in the Oracle Solaris OS: Hardware Compatibility List that can be found at the following location:

http://www.oracle.com/webfolder/technetwork/hcl/

Q: What hardware and software are required to run Oracle Solaris Kernel Zones?
A: Oracle Solaris Kernel Zones have specific requirements on newer hardware and firmware as detailed in the following product documentation:

http://docs.oracle.com/cd/E36784_01/html/E37629/gnwoi.html

Q: What languages are supported on Oracle Solaris 11?
A: Oracle Solaris 11 includes support for over 200 different locales. Translated messages include Japanese, Simplified Chinese, Traditional Chinese, Korean, French, German, Italian, Spanish and Brazilian Portuguese.

Installation

Q: How do I choose which Oracle Solaris 11 ISO image to download and install?
A: Oracle Solaris 11 provides a number of installation options for different environments and customer scenarios, from initial evaluation of the operating system, to single and multi-node system provisioning. See the following questions for more details on each installation media option.

Q: What is the Oracle Solaris 11 Media?
A: The Oracle Solaris 11 Live Media, available only for x86 based systems, provides customers with an opportunity to explore a complete Oracle Solaris environment without the requirement of installing it onto a system by loading the operating system into RAM. Once evaluated, customers can start a graphical installer to install the operating system. The graphical installer installs a fixed selection of software with minimal configuration, including a full desktop environment.

Q: What is the Oracle Solaris 11 Interactive Text Install?
A: The Oracle Solaris 11 Interactive Text Install, available for SPARC and x86 based systems, provides a text or console-based installation most suitable for server systems. The text installer installs a fixed selection of software with a greater level of configuration than the Oracle Solaris 11 Live Media, but does not include a desktop environment (the required packages can easily be added later, if desired).

Q: What is the Oracle Solaris 11 Automated Installer media?
A: The Oracle Solaris 11 Automated Installer media, available for SPARC and x86 based systems, provides an automated ‘hands-free’ network installation for individual clients without requiring an existing Automated Installer server. Administrators can boot this image and connect directly to an IPS package repository to install their systems.

Q: What options are available to install Oracle Solaris 11 without access to a CD or DVD drive?
A: Oracle Solaris 11 can be installed through the network using an Oracle Solaris 11 Automated Installer server, or directly using USB bootable media.

Q: How do I install a USB image onto a flash drive?
A: If you have an existing Oracle Solaris 11 system installed, use the `usbcopy` utility. If you do not have such a system then you can use the `dd` utility on most common platforms.

On Oracle Solaris 11, follow these steps:
Disable the HAL service.
# svcadm disable -t hal
Insert the flash drive and locate the appropriate device.

# rmformat
Copy the image.

# dd if=<path_to_image.usb> of=/dev/rdsk/<device> bs=16k
Enable the HAL service again.

# svcadm enable hal

On MacOSX, follow these steps:

# diskutil list
Identify the drive, /dev/diskN where N is the disk number.

# diskutil unmountDisk /dev/diskN
# dd if=<path_to_image.usb> of=dev/diskN bs=16k

On Linux, insert the flash drive and locate the appropriate device.

# dmesg | tail
Then copy the image using `dd(1)` as above.

Q: Does Oracle Solaris 11 install on laptops?
A: Yes. Oracle Solaris 11 installs onto many different laptop configurations. Check out the Oracle Solaris OS: Hardware Compatibility List to see a full list of supported systems:

http://www.oracle.com/webfolder/technetwork/hcl/index.html

If your laptop is not listed, Oracle VM VirtualBox can provide a virtualized environment in which to run Oracle Solaris 11 or other virtualization options from third party vendors.

Q: Can I install Oracle Solaris 11 into a virtual environment?
A: Yes. Oracle Solaris 11 is a supported guest operating system on Oracle VM Server for SPARC, Oracle VM Server for x86, and Oracle VM VirtualBox. Oracle Solaris 11 is known to work on a number of other third party virtualization offerings from vendors including VMware, Windows, and Red Hat.

Q: How can I customize my Oracle Solaris 11 installation?
A: Oracle Solaris 11 installations can be customized using a number of administrative commands, including the package management utilities. You can learn more about administrative customization by reading the Oracle Solaris 11.2 product documentation:


Q: Can I get an Oracle Solaris 11 Media Pack?
A: Media Packs are only orderable from MOS. Log in, select “Contact Us”, and “Software & OS Media Requests”

http://support.oracle.com

System Update

Q: Can I update my systems from Oracle Solaris 11.1 to Oracle Solaris 11.2?
A: Yes. Systems installed with Oracle Solaris 11.1 can be updated to Oracle Solaris 11.2 using the integrated IPS software management tools. Refer to the Oracle Solaris 11.2 Release Notes before attempting this update:


Q: Can I upgrade to Oracle Solaris 11 from Oracle Solaris 10?
A: There is no direct upgrade path from Oracle Solaris 10. Customers wishing to upgrade to Oracle Solaris 11 must either install a system from scratch, or consider the use of Oracle Solaris 10 Zones running on Oracle Solaris 11 and take advantage of built-in physical-to-virtual and virtual-to-virtual migration tools.

Application Support

Q: How do I find out which applications are certified on Oracle Solaris 11?
A: You can view the latest list of certified applications on Oracle Solaris 11 by visiting the Oracle Partner Network blog:

http://blogs.oracle.com/partnertech

You can also visit the Oracle Partner Network to see the “Oracle Solaris Ready” partners:


Oracle Solaris Ready recognizes qualifying OPN members
who are developing and supporting their software applications on the latest major releases of Oracle Solaris 11. These partners can be viewed by application or by partner name.

**Q:** Will I need to recertify my application on Oracle Solaris 11.2?

**A:** No. Applications certified for Oracle Solaris 11 do not need to be recertified when updating to Oracle Solaris 11.2 or later updates. This is due to the Oracle Solaris Binary Compatibility Guarantee:


This guarantee ensures applications running on earlier versions of Oracle Solaris can be run on future versions of Oracle Solaris.

**Q:** How can I package my application for Oracle Solaris 11?

**A:** You can learn more about packaging your application using IPS by checking out the Packaging and Delivering Software with IPS Developer Guide:


**Q:** What recommendations are there for deploying applications on Oracle Solaris 11 and future updates?

**A:** Thanks to the Oracle Solaris Binary Compatibility Guarantee, applications running on earlier versions of Oracle Solaris can be run on Oracle Solaris 11 and all future updates without being recompiled.

To create new applications, or to move existing applications to Oracle Solaris 11 from other platforms, the use of Oracle Solaris Studio is recommended as the compiler of choice. Oracle Solaris Studio provides a comprehensive C, C++, and Fortran tool suite for Oracle Solaris that accelerates the development of scalable, secure and reliable enterprise applications.

During the development and deployment of applications on the Oracle Solaris platform, it is recommended that customers consider the use of native OS virtualization using Oracle Solaris Zones. This virtualization technology provides a rapid provisioning environment with zero overhead helping to streamline the application deployment process. You can learn more about Oracle Solaris virtualization by looking at the Oracle Solaris 11 Virtualization Technology Spotlight:

http://www.oracle.com/technetwork/server-storage/solaris11/technologies/

**Q:** Where can I download Oracle Solaris Studio?

**A:** Oracle Solaris Studio is available for download at no cost from the Oracle Technology Network:

http://www.oracle.com/technetwork/server-storage/solarissstudio/

**Q:** Does Oracle Solaris Cluster run on Oracle Solaris 11.2?

**A:** Yes. Oracle Solaris Cluster 4.2 is supported on Oracle Solaris 11.2

More Information

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**Q:** What training courses or certification programs are available for Oracle Solaris 11?

**A:** An extensive set of training courses and certification programs are available from Oracle University. A list of training courses can be found here:
