ORACLE OPS CENTER: VIRTUALIZATION MANAGEMENT PACK

ORACLE® 11ᵍ
ENTERPRISE MANAGER
OPS CENTER

KEY FEATURES

LIFECYCLE MANAGEMENT OF VIRTUALIZATION TECHNOLOGIES MADE SIMPLE

- Automation of lifecycle management—reduces costs and errors while improving support and performance
- Unique solution for managing Oracle built-in virtualization technologies—including Oracle Solaris Containers and Oracle VM Server for SPARC
- Dynamic resource allocation—automated workflows dynamically allocate resources as required
- Scales with the environment—multitier architecture scales to thousands of physical and virtual nodes as needed
- Manages Oracle Solaris Branded Containers for Solaris 8/9/10
- Enables cold migration for Oracle Solaris Containers and warm migration for Oracle VM Server for SPARC to move virtual resources to other systems with minimal downtime

The Oracle Enterprise Manager Ops Center Virtualization Management Pack provides full lifecycle management of virtual guests, including resource management and mobility orchestration. It helps customers streamline operations and reduce downtime. Together, the Virtualization Management Pack and the Ops Center Provisioning and Patch Automation Pack provide an end-to-end management solution for physical and virtual systems through a single Web-based console. This solution automates the lifecycle management of virtual systems and is the most effective systems management solution for Oracle's Sun infrastructure.

Manages Oracle Virtualization Technologies

Oracle Enterprise Manager Ops Center manages the lifecycle of Oracle Solaris Containers and Oracle VM Server for SPARC (previously called Sun Logical Domains). Their resources are monitored continuously to provide up-to-date information on usage. Based on the dynamic needs of the applications, new Oracle Solaris Containers and Oracle VM Server for SPARC virtual guests can be created, deleted, cloned, or reconfigured.

Centralizes Management of Resources

As the central management console for all relevant infrastructures, Oracle Enterprise Manager Ops Center tracks hardware, virtualization components, and operating systems. It provides the appropriate knowledge to keep physical and virtualization assets up to date. For example, Ops Center ensures that the system using Oracle VM Server for SPARC has the appropriate firmware. Ops Center also offers any storage resources coming from a Sun ZFS Storage Appliance automatically during library creation to help facilitate an efficient usage of storage in OVM SPARC and Solaris Containers.

Lifecycle Management—Simple Deployment and Maintenance

With Oracle Enterprise Manager Ops Center, administrators can install and manage all relevant components in a virtualized stack.

- **Asset discovery.** Ops Center can discover all assets, such as hardware, firmware, virtual systems, and operating systems. View them in a usable format for the first time. See storage and network relationships to the virtual machines.

ORACLE®

- **Provisioning.** Provision firmware and operating systems on bare-metal and virtual systems.

- **Patching.** With its unique knowledgebase, Ops Center keeps all components (physical as well as virtual) in the stack up to date.

- **Monitoring.** Ops Center monitors physical and virtual systems to provide end-to-end monitoring of the complete stack. It monitors individual as well as aggregate resources to get a complete view of the system.

Eco-friendly

Oracle Enterprise Manager Ops Center monitors the power of all servers and aggregates consumption patterns. Based on the outcome, administrators can balance the resources by shutting servers down, migrating workloads, or leveraging power capping capabilities in the servers. By leveraging OVM SPARC and Solaris Containers, Ops Center can help consolidate workloads at a high density rate resulting in fewer physical servers.

Reduces Resource Management Complexity

By providing access to all assets, such as hardware, virtual systems, and operating systems (through one interface), Ops Center makes managing these resources simple. Assets can be logically grouped, automated through smart groups, tagged for custom grouping, and filtered with multiple options. Since Ops Center provides a single user experience for three diverse virtualization technologies (OVM SPARC, Solaris Containers, and M-Series hardware domaining), users can more freely pick the best solution for their application needs without worrying about the management costs of leveraging three different underlining technologies.   Ops Center protects its users from that expense.

Investment Protection

Oracle Solaris 8 and Oracle Solaris 9 servers can easily migrate to Oracle Solaris 10. This allows Oracle Solaris 8 and Oracle Solaris 9 implementations to leverage the latest capabilities in Oracle Solaris 10 and newer processors. Virtual resource management is a seamless extension of physical system management. System management software users can easily adjust to virtual resource management through Oracle Enterprise Manager Ops Center's rich user interface.
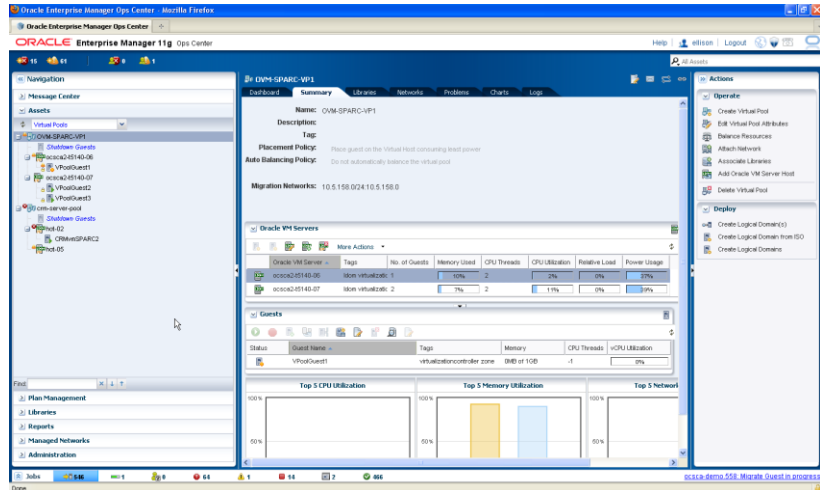
ORACLE®

Oracle Enterprise Manager Ops Center delivers comprehensive lifecycle management of physical and virtual resources in an easy-to-use interface.

Scale with Resources

Virtualization makes it easy to deploy resources on demand. A proliferation of resources requires a robust management platform that can not only manage the compute elements in one location, but can also scale with different geographic locations. With its three-tier architecture, Oracle Enterprise Manager Ops Center scales its performance and usability from a single datacenter to distributed datacenters. With proxies deployed closer to the managed systems, performance more-easily meets required service levels. Ops Center uses the latest Web technologies and fits into existing datacenter designs—reducing the need for configuration changes. With its new Plan Management features, Ops Center can deploy OVM SPARC as part of a larger server deployment plan. Thus connecting the workflow from a new server through to production with virtualization playing an important role.

Efficient Resource Use

Ops Center pools virtual resources to cater to similar applications. Appropriate policies can be applied to virtual resources that are generated on demand and placed in pools of physical machines that meet the application requirements. Once in the pool, resource policies continue to watch over the workload and auto balance the environment automatically by migrating Oracle VM Server for SPARC guests within the pool to assure the most optimal use of physical resources.

Availability

Virtual resources are offered depending on the application needs. Virtualization mobility features—such as cold migration for Oracle Solaris Containers and warm migration for Oracle VM Server for SPARC—can be used to move virtual resources to other systems to improve utilization with minimal downtime.

Security

Oracle Solaris Container and Oracle VM Server for SPARC technologies ensure isolation between different containers and domains. In addition, role-based mechanisms are implemented to allow multiple users to manage systems with

different access controls. Ops Center can patch physical as well as virtual systems that have security vulnerabilities.

Feature Summary

Virtualization Management Pack
• Requires the Provisioning and Patch Automation Pack • Life Cycle Management of Oracle VM for SPARC (Sun Logical Domains) • Life Cycle Management of Oracle Solaris Containers (Solaris Zones) • Guest Provisioning • Resource Control for Virtual Machines • Virtual Machine Replication • Storage Management and Assignment • Performance Monitoring • Mobility and Migration of Virtual Machines • Virtual Resource Pool and Policy Based Relocation Automation

Technical Specifications

Oracle VM Server for SPARC Version 1.2 or higher
Supported servers: • SPARC chip multithreading–based servers • Oracle Solaris 10 8/07 and later
Oracle Solaris Containers x64 or SPARC
Oracle Solaris 10 8/07 and later

Warranty

Visit oracle.com/sun/warranty for Oracle's global warranty support information on Sun products.

Services

Visit oracle.com/sun/services for information on Oracle's service program offerings for Sun products.

Contact Us

For more information about Oracle Enterprise Manager Ops Center, please visit oracle.com/sun or call +1.800.786.0404 to speak to an Oracle representative.

Oracle is committed to developing practices and products that help protect the environment

ORACLE®