

SUSE® OpenStack Cloud

Everything is moving fast and your business has to keep up. The pace of change can be painful to manage, but it also creates new opportunities. SUSE® OpenStack Cloud provides an Infrastructure-as-a-Service (IaaS) for your data center, with access to automated pools of IT resources to run applications. This gives you the flexibility to respond quickly and easily to new demands, providing the ideal platform for development and increased innovation, while helping you to control and reduce costs.

Product Overview

SUSE OpenStack Cloud is an enterprise OpenStack distribution that rapidly deploys and easily manages highly available, mixed hypervisor IaaS clouds. It leverages existing data center investments to help enterprises increase business agility, economically scale current IT capabilities and easily consume future innovations.

Key Benefits

- **Drives the agility required for a rapid response to the needs of your business** by improving the speed and ensuring the availability of service delivery. The orchestration and self-service capabilities in SUSE OpenStack Cloud reduce the time to provision services. Through the automated deployment of a highly available cloud control plane, these services are continuously accessible. SUSE OpenStack Cloud provides a more flexible and resilient infrastructure that accelerates time to value for new projects.
- **Offers faster innovation and greater choice with the enterprise support you need** by providing the benefits of open source development while ensuring stability and security.

The openness of SUSE OpenStack Cloud and the vibrant OpenStack community not only provide a continuous stream of innovation, but reduce vendor lock-in. Designed to make it easy for enterprises to harness the power of OpenStack, SUSE OpenStack Cloud is rigorously tested, includes 24x7 worldwide technical support and is fully integrated into SUSE update processes, so enterprises can easily maintain and patch their cloud deployments.

- **Allows enterprises to scale infrastructure without growing IT staff** by tracking usage of computing resources to improve server utilization and automating service delivery. The SUSE OpenStack Cloud Administration Server includes an installation framework that simplifies deployment and ongoing administration. Automating these tasks improves IT staff productivity, while providing maximum flexibility to configure clouds.
- **Expands the enterprise capabilities of your IT infrastructure while maintaining current investments** with a broad choice of third-party solutions. SUSE OpenStack Cloud helps to maximize workload performance

and optimize licensing costs of virtual environments by delivering mixed hypervisor support for organizations using KVM, Xen, Microsoft Hyper-V, VMware vSphere or IBM z/VM. SUSE also supports the Ceph distributed storage system as well as third-party storage, networking and management solutions. This provides the flexibility to construct an enterprise-ready private cloud.

- **Transparently prepares a platform for hybrid cloud computing** by integrating with SUSE Studio™ and SUSE Manager—robust tools for easily building and managing cloud-based applications. With SUSE Studio, enterprises can rapidly adapt and deploy applications for both private and public clouds. And by managing workloads across public or private clouds with SUSE Manager, enterprises can efficiently maintain and monitor their Linux environment, inside or outside the cloud.

Key Features

SUSE OpenStack Cloud supports all OpenStack Liberty release components for best-in-class capabilities to deploy an open source, private cloud.

- **Installation Framework:** *Integration with the Crowbar project speeds and simplifies installation and administration of your physical cloud infrastructure.*
- **Mixed Hypervisor Support:** *Enhanced virtualization management through support for multi-hypervisor environments that use KVM, Xen, Microsoft Hyper-V, VMware vSphere or IBM z/VM.*
- **High Availability:** *Automated deployment and configuration of control plane clusters. Ensures continuous access to business services and delivery of enterprise-grade SLAs.*
- **High availability for KVM / Xen Compute Nodes and Workloads:** *Enhanced support for critical workloads not designed for cloud architectures.*
- **Ceph:** *Integration with SUSE Enterprise Storage™ provides a streamlined deployment of a single solution for distributed block, object and virtual machine image storage.*
- **Docker Support:** *Build and run innovative containerized applications.*
- **Scalability:** *Cloud control system designed to grow with your demands.*
- **Open APIs:** *Using the standard APIs, customers can enhance and integrate OpenStack with third-party software.*
- **Block Storage Plug-Ins:** *Broad choice of from storage vendors such as EMC, NetApp and others.*
- **Networking Plug-Ins:** *From Cisco, Midokura, Infoblox, Nuage Networks, PLUMgrid, Open vSwitch and VLAN bridging solutions for flexibility.*
- **Award-winning Support:** *Backed by 24x7 worldwide technical support.*
- **Full Integration into SUSE Update Processes:** *Easily maintain and patch cloud deployments.*
- **Non-disruptive Upgrade Capabilities:** *Ease migration to future SUSE OpenStack Cloud releases.*

Deployment and System Requirements

Components for setting up and managing private clouds include:

Administration Server: Sets up the cloud; configures and provisions the SUSE OpenStack Cloud control nodes and compute or storage nodes.

Control Node: One or more control nodes provide the self-service, image repository and management capabilities.

Compute Nodes: Are the physical servers managed by SUSE OpenStack Cloud that host KVM or Xen VMs for workloads running in the private cloud or that integrate with VMware vCenter.

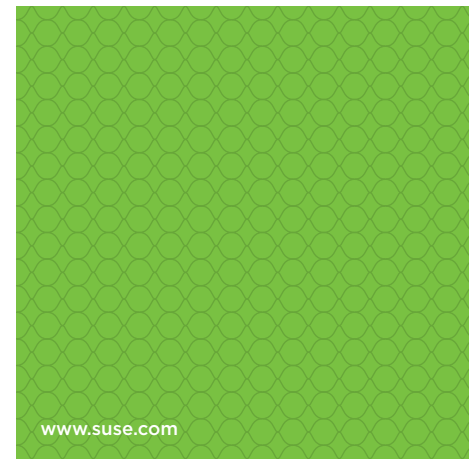
Swift Storage Nodes: Are the physical servers managed by SUSE OpenStack Cloud to host object storage using Swift.

Compute Node for Microsoft Hyper-V: Are the physical servers running Microsoft Hyper-V Server 2012 or Windows Server 2012 Hyper-V as hosts for virtual machines managed as part of a SUSE OpenStack Cloud deployment.

The technical requirements for all nodes are the same unless otherwise noted:

- **x86_64 Server:** *Intel Xeon or later or AMD Opteron or later, 2 GHz, 512 K cache or equivalent (Recommended: Intel or AMD multi-core processor, 2.4 GHz) with Intel-VT or AMD-V virtualization extensions.*
- **Administrative Server:** *2 GB RAM (8 GB Recommended); 40 GB hard disk*
- **Control Nodes:** *2 GB RAM (8 GB Recommended); 4 GB of hard-disk space (30 GB recommended for production). Additional hard-disk storage is required for virtual machine images, volumes and snapshots, which will be launched on the compute nodes.*
- **Compute Nodes:** *4 GB RAM plus additional RAM for each virtual machine (16 GB recommended for production); 30 GB hard-disk space plus additional space for virtual machine local storage.*
- **Swift Storage Node:** *30 GB hard-disk space plus additional space for distributed object storage. (Note: support of Ceph requires SUSE Enterprise Storage.)*

For more information visit: www.suse.com/cloud



Contact your local SUSE Solutions Provider, or call SUSE at:

1 800 796 3700 U.S./Canada
1 801 861 4500 Worldwide

SUSE
Maxfeldstrasse 5
90409 Nuremberg
Germany