SUSE® OpenStack Cloud 7

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 7 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 increased innovation, while helping you to control and reduce costs.

Product Overview

SUSE OpenStack Cloud is the open source private cloud solution of choice for enterprise business, helping you respond quickly to today's ever-changing business-critical demands.

SUSE OpenStack Cloud enables you to:

- Build a private cloud infrastructure with the operational agility, speed, scalability and control to take full advantage of new business opportunities and rapidly evolving technology trends, such as DevOps and containers.
- Deliver the robust, production ready private cloud you need to run business-critical workloads and drive business growth, with fast deployment, easy management and enhanced high availability.
- Get there faster with rapid OpenStack cloud deployment and easy management.
- Reduce costs, maximize the value of existing IT investments, while improving choice and flexibility.

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.*
- **Delivers faster innovation, greater flexibility and the world class enterprise support you need.** *SUSE OpenStack Cloud combines SUSE's experience of delivering enterprise-grade open source solutions with the continuous stream of innovation from the vibrant OpenStack development community, one of the fastest growing open source projects in the world.*

   Designed to make it fast and 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 managment solutions. This provides the flexibility to construct an enterprise-ready private cloud.*

Key Features

SUSE OpenStack Cloud is powered by the OpenStack Newton release for fast and easy access to the latest open source technologies for best-in-class private cloud capabilities.

- **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 and CephFS support:** *Unified block, object and file storage delivered via SUSE Enterprise Storage™ and the integration of OpenStack Manila.*
- **Block Storage Plug-Ins:** *Broad choice of from storage vendors such as EMC, NetApp and others.*
- **Container-as-a-Service:** *Build and run innovative containerized applications with full support of Docker using Kubernetes for container orchestration via integration with OpenStack Magnum.*
- **Scalability:** *Cloud control system designed to grow with your demands.*
- **Open APIs:** *Enhance and integrate OpenStack with third-party software using standard APIs.*
- **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.*

System Requirements

Components for deploying and managing private clouds include:

Administration Server: Deploys, configures and provisions the SUSE OpenStack Cloud control, compute and storage nodes.

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

Control Nodes for VMware or z/VM: One or more control nodes to provide self-service image repository and management capabilities for either servers running ESXi through vCenter or IBM system Z servers running z/VM.

Compute Nodes: Are the physical servers 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 that host object storage using Swift.

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:** *8 GB RAM (32 GB recommended); 40GB hard disk space*
- **Control Nodes:** *8 GB RAM (32 GB recommended); 4 GB hard-disk space (30 GB recommended for production). Additional hard-disk storage is required for virtual machine images, volumes and snapshots launched on the compute nodes.*
- **Compute or Swift Storage 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 or distributed object storage. (Note: support of Ceph requires SUSE Enterprise Storage.)*

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

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