About This Guide
The SUSE® Cloud Service Provider (CSP) Guide describes the SUSE program under which a CSP may resell SUSE product subscriptions in an on-demand (multi-tenant) or managed hosting (single-tenant) arrangement. This guide is referenced in the SUSE Cloud Service Provider Agreement, which contains the detailed terms and conditions to which the CSP must agree prior to reselling SUSE subscriptions for use in a cloud model.

Architecture Overview
SUSE, a pioneer in open source software, provides reliable, interoperable Linux¹, cloud infrastructure and storage² solutions that give enterprises greater control and flexibility. Through the SUSE Cloud Service Provider Program, you can expand your customer base and increase revenue by offering your customers SUSE Linux Enterprise products on demand in your cloud. The flexibility of the SUSE Linux Enterprise model means your customers can develop and test new applications or migrate existing certified applications to the cloud via a managed hosting arrangement or a seamless, pay-as-you-go purchase experience.

If you are providing managed hosting services, the SUSE Cloud Service Provider program allows you to provide SUSE Linux Enterprise products to your customers in a dedicated environment to run their business applications. As part of the program, you can include SUSE Manager to easily update and monitor your hosted Linux systems to ensure the security and compliance of your environment. SUSE partners with you to ensure that you have resilient and fully supported infrastructure for your customers. If you are a Cloud Service Provider who wants maximum flexibility and return on investment, the SUSE Cloud Service Provider program is the answer.

Application Process
To enroll in the SUSE CSP Program, speak with your SUSE representative or send an email to public.cloud@suse.com and a SUSE CSP program representative will follow up promptly to initiate the process.

¹ www.suse.com/products/server
² www.suse.com/products/suse-enterprise-storage
Program Requirements
The following items are required for participation in the SUSE CSP Program:

- A current SUSE Cloud Service Provider Agreement
- Membership in the SUSE Partner Program
- Adherence to the SUSE Public Cloud Infrastructure Setup Guide, which details image creation and maintenance requirements for SUSE images hosted in your cloud
- Ability to provide Level 1 and Level 2 support to end customers
- Process for metering of SUSE product usage in your cloud
- A method for ensuring that all end customers have agreed to the SUSE end user license agreement
- Monthly tracking and monthly or quarterly invoicing reports (depends on CSP agreement)

Guest Image
The creation of the guest image—the image that provides the basis for the instances CSP customers will use—is the responsibility of the CSP. The content of the guest image is customizable to the desires of the cloud framework provider.

For an image to be considered supportable, the image must have at least the Minimal Pattern installed. In addition to this, a cloud image generally requires some initialization code that handles SSH key injection, account creation and other housekeeping tasks. This initialization code can be cloud-init, an open source solution found in the Public Cloud Module repository, or some other initialization implementation. Please refer to the SUSE Public Cloud Infrastructure Setup Guide located at www.suse.com/documentation/suse-best-practices/publiccloudinfra/data/publiccloudinfra.html for additional detail.

Maintenance
The CSP is required to ensure that the SUSE images that are hosted on the CSP partner’s infrastructure are kept up to date with the most current patches from SUSE. The SUSE Public Cloud Infrastructure Setup Guide, located at www.suse.com/documentation/suse-best-practices/publiccloudinfra/data/publiccloudinfra.html, provides detail that will guide the CSP partner in setting up a highly available and scalable infrastructure for hosting SUSE certified images and an update infrastructure to ensure SUSE image accessibility, persistence and security.

The CSP is required to ensure that the patching infrastructure is secure and that patches are only accessible by qualified customers. Separate patching infrastructures are required for separate products (for example, SUSE Linux Enterprise Server and SUSE Linux Enterprise Server for SAP). See the SUSE Public Cloud Infrastructure Setup Guide for details.

Support
The CSP is required to provide Level 1 (L1) and Level 2 (L2) support to their end customer. SUSE support is delivered as Level 3 (L3) support to the CSP partner. SUSE does not provide support directly to the end customer. Support level definitions are provided in the SUSE Support Handbook located at: www.suse.com/support/handbook

EULA Acceptance by End User
Use of the software and subscriptions is subject to the applicable SUSE subscription terms and conditions. Prior to providing an end customer with access to the software subscriptions, the CSP partner must require each end customer to assent to the end user license agreement (EULA) set forth at www.suse.com/licensing/eula/ as a condition to providing end customers with access to the SUSE products.

Metering
A CSP partner must be able to account for all of the consumption of SUSE offerings within their service in order to report usage to SUSE, as defined under the reporting section below. Metering must be consistent with the revenue units that SUSE is offering to the partner, and the CSP partner must be able to account for total consumption of every hour, month, year or other unit of measure consumed by the partner’s customers and resellers.

Reporting
A CSP partner is required to report usage to SUSE monthly or quarterly, depending on the terms indicated in the CSP Agreement. By the 15th day of each calendar month, or the month following the fiscal quarter, the CSP partner must submit to SUSE a complete and accurate usage report by using the form attached to the CSP Agreement. The CSP partner must identify the applicable time period on the report and must submit the foregoing reports to SUSE, regardless of whether the CSP partner owes fees to SUSE in that particular time period.
Subscriptions
SUSE offers several types of subscriptions through the SUSE CSP Program, which differ depending on the usage model.

End Customer Subscriptions
End customer subscriptions are purchased by the CSP partner to host and resell to end customers on the partner’s cloud.

SINGLE-TENANT AND MULTI-TENANT
The SUSE Cloud Services Price List describes two types of SKUs:

- **Multi-tenant.** Multi-tenant platform pricing listed under the “Cloud” section of the SUSE Cloud Services Price List is used for an on-demand model when a partner has multiple end customers running virtual guests on a server and the size of the virtual guest is based on the number of physical cores, or any portion thereof, that is allocated to the virtual guest. These SKUs may be used to offer SUSE products in an on-demand, multi-tenant scenario, and are offered in time increments of per-hour and per-month.

- **Single-tenant.** Dedicated user pricing listed under the “Hosting” section of the SUSE Cloud Services Price List is used for a managed hosting model: that is, software subscriptions sold on a single system or virtual machine that is running on a hypervisor that is dedicated to no more than one end customer for the term of the software subscription. Dedicated user subscriptions may not be shared by more than one customer. These SKUs may be used to offer SUSE products in a dedicated user scenario and are offered in time increments of per-month.

END CUSTOMER SUBSCRIPTION TYPES
SUSE offers subscription types that accommodate a variety of hosting and support models:

- **Standard.** CSP partner provides L1/L2 support to end customer and SUSE provides Standard (12x5) L3 support to CSP partner. Hours of coverage are based on the primary address indicated in the signed CSP Agreement and are defined in the SUSE Support Handbook located at: [www.suse.com/support/handbook](http://www.suse.com/support/handbook)

- **L3-Priority.** CSP provides L1/L2 support to customer and SUSE provides Priority (24x7) L3 support to CSP partner.

For more detail on hours of coverage, response times and the process for opening a service request, see the SUSE Support Handbook located at: [www.suse.com/support/handbook](http://www.suse.com/support/handbook)

EVALUATION SUBSCRIPTIONS
For hosting end customer workloads that are not considered production (for example, pilot or proof of concept deployments), the CSP partner may use 60-day evaluation subscriptions available at: [www.suse.com](http://www.suse.com)

SUSE Image Subscriptions
SUSE image subscriptions are used by the CSP partner to create and maintain SUSE images that the CSP partner is hosting in their cloud service for end customers. These subscriptions are available at no cost to the CSP partner.

HOW TO GET INITIAL REGISTRATION CODES
Registration codes are required for access to the SUSE update repositories. Upon execution of the SUSE CSP Agreement, the CSP should contact their SUSE representative or send an email to public.cloud@suse.com indicating the type of product they wish to host in their infrastructure. The registration code will be delivered to the primary contact with instructions on how to set up an account in SUSE Customer Center from which the registration codes can be managed. Only one registration code is required per product type. The registration keys have an expiration date and will need to be renewed. These subscriptions are not exposed to the end customer.

Cloud Infrastructure Subscriptions
Cloud infrastructure subscriptions are purchased by the CSP partner to build the cloud infrastructure on which the hosting or on-demand services are offered. These subscriptions are not exposed to the end customer. The CSP partner may purchase subscriptions used for cloud infrastructure from the single-tenant (hosting) SKUs listed on the SUSE Cloud Services Price List.

This covers subscriptions needed to build out the update infrastructure according to the setup guide. The CSP needs to purchase priority support SKUs for any server that is used to build out the update infrastructure. There is no restriction on the number of subscriptions used for infrastructure buildout.
Internal Use Subscriptions
Internal Use subscriptions are those subscriptions that are used by the CSP partner which are not directly related to the cloud service offering that the CSP partner is providing to end customers. There are two types of internal use subscriptions.

PRODUCTION SUBSCRIPTIONS
Production subscriptions are used by the CSP partner to run production workloads not related to the cloud service offering that the CSP partner is providing to end customers. In any single month, a CSP partner may consume up to 50% of the total reported subscriptions (based on total subscriptions consumed) for its internal use. In no case may the CSP partner's internal consumption of SUSE subscriptions under the CSP program exceed consumption by its end customers. CSP partners must report and pay the fees for any internal use subscription in the same manner as subscriptions sold to an end customer and must otherwise comply with the terms and conditions of the agreement.

TEST AND DEVELOPMENT SUBSCRIPTIONS
Test and development subscriptions are used by the CSP partner to run test or development workloads that are not considered production workloads. Test and development subscriptions are available at no charge to CSP partners through the SUSE partner program.

Subscription Matching
The CSP partner must offer its end customers SUSE subscriptions in time increments that match the SUSE subscriptions that the CSP partner purchases from SUSE, unless otherwise agreed to in writing. For example, SUSE Linux Enterprise Server sold hourly to the CSP partner can only be offered to end customers on an hourly basis. Subdivision of a subscription or revenue unit is not permitted. For example, a partner may not purchase a monthly SUSE Linux Enterprise Server SKU and resell it as individual hours to end customers.

CSP Product Portfolio
SUSE offers a broad portfolio of products in the SUSE CSP Program, including:

- SUSE Linux Enterprise Server
- SUSE Linux Enterprise Server for SAP Applications
- SUSE Linux Enterprise High Availability Extension
- SUSE Manager
- SUSE OpenStack Cloud

A larger number of SUSE products are available for Hosting scenarios versus On-demand. Details on which SUSE products are available under which hosting model are contained in the SUSE Cloud Services Price List.

SUSE Linux Enterprise Server
SUSE Linux Enterprise provides the most advanced foundation for your mission-critical workloads. Our scalable, flexible solution evolves with your business needs. SUSE Linux Enterprise Server is designed for mixed IT environments, certified on all major hardware platforms and supports all major hypervisors. SUSE Linux Enterprise Server for x86/x86-64 are available on the Cloud Services Price List. Other architectures may be added as requested.

KEY FEATURES
- Increase reliability and reduce costs with Advanced RAS
- Achieve zero downtime with Live Patching
- Easily customize your system using YaST®
- Full support for Docker for automated deployment of applications inside Linux containers
- Stay ahead with cloud-ready networking using Wicked
- Gain operational advantage with the standards-based SolidDriver program

SUSE Linux Enterprise Server for SAP Applications
Get the most from your SAP HANA and SAP business application software with decreased downtime, greater operating efficiency and accelerated innovation. Utilize your business data in real time with the power of SAP and the reliability, availability and serviceability of SUSE Linux Enterprise Server for SAP Applications. This is the only solution that supports both x86-64 and IBM Power Systems servers.

KEY FEATURES
- Built-in high-availability clustering for reduced downtime
- Automated failover for SAP HANA database
- Full system rollback, including service pack updates for fast error recovery
- SAP HANA database firewall secures in-memory data
Installation wizard fully automates SAP HANA and NetWeaver installations
Page cache limit sustains SAP application performance
Linux containers with Docker for automated application deployment
Seamless priority support from SAP and SUSE

SUSE Linux Enterprise High Availability Extension
Maximize your service availability and virtually eliminate downtime. SUSE Linux High Availability Extension provides mature, industry-leading open-source high-availability clustering technologies that are easy to set up and use. It can be deployed in physical and/or virtual environments, and can cluster physical servers, virtual servers or any combination of the two to suit your business needs.

KEY FEATURES
- Manage Pacemaker HA clusters using High Availability Web Konsole (Hawk)
- Easy and fast setup
- High performance Oracle Cluster File System 2 (OCFS2)
- Feature-rich Global File System 2
- A mature, 5th-generation Pacemaker-based HA solution
- HAProxy support to complement Linux virtual server load balancer
- Update to the latest Relax & Recover (ReaR) version
- Support for EMC NetWorker connector & btrfs file system included

SUSE Manager
SUSE Manager delivers best-in-class open source infrastructure management capabilities that empower IT to reduce complexity and regain control of IT assets by enabling you to comprehensively manage Linux systems with a single, centralized solution. SUSE Manager provides automated and cost-effective software, asset, patch and configuration management, as well as system provisioning and monitoring capabilities. These capabilities enable you to easily manage your enterprise Linux system deployments across physical, virtual and cloud environments. As a result, your organization can decrease total cost of ownership while securing enterprise systems and improving compliance and service quality.

KEY FEATURES
- Manage multiple Linux distributions (SUSE and Red Hat) from a single, centralized console
- Compatible with a wide variety of hardware across physical, virtual and cloud environments
- Easily maintain & demonstrate compliance to internal security policies and external regulations
- Standard approach to maintain Linux security
- Simple, automated hardware and software inventory with advanced reporting

SUSE OpenStack Cloud
SUSE OpenStack Cloud provides the ideal platform for increased innovation, while helping you to control and reduce costs. It delivers enterprise-ready technology for building Infrastructure-as-a-Service (IaaS) private clouds, giving you access to automated pools of IT resources to efficiently develop and run applications and workloads in your data center. SUSE OpenStack Cloud closely integrates with SUSE Enterprise Storage™, powered by Ceph, for highly scalable and resilient software-defined storage capabilities.

KEY FEATURES
- Streamlined installation process
- Integrated with the SUSE portfolio
- Reliable and production ready
- Based on upstream OpenStack release

Pricing
Pricing for the SUSE subscriptions offered under the SUSE Cloud Service Provider Program is governed by the SUSE Cloud Services Price List.

Cloud Services Price List
The SUSE Cloud Services Price List is published monthly and is available to all SUSE CSP partners. The SUSE Cloud Services Price List contains pricing for all SUSE SKUs that are offered under the SUSE CSP Program, both for multi-tenant on-demand hosting and single-tenant managed hosting. The prices listed on the SUSE Cloud Services Price List are the prices at which the CSP partner may purchase the SUSE SKUs.
Add/Drop SUSE Software
SUSE reserves the right at any time to add or drop SUSE software from the SUSE Cloud Services Price List. A specific version of a product (for example, SLES 12 SP1) will go end of life at a certain point in time, after which SUSE will not provide updates or support. The mitigation in this case is to move to a newer version that is still under support. SUSE open source-based products come with eternal use rights, so in the unlikely event we completely stop a product, you may continue to use it, but SUSE will no longer provide updates or support.

Price Change Policy
SUSE may decrease the price of any SUSE product on the Cloud Services Price List at any time. SUSE may increase the price of any SUSE product on the Cloud Services Price List with a 90-day notice, or at any time, to offset exchange rate fluctuations for prices other than pricing in US dollars.

Support
As indicated in the program requirements section, the CSP is responsible for providing L1 and L2 support to the end users of their infrastructure. SUSE will provide L3 support to the CSP based on the level of support associated with the subscriptions that the CSP is purchasing from SUSE. All SUSE part numbers on the SUSE Cloud Services Price List come with L3 support from SUSE. There are two support types: L3-Standard, which allows 12x5 access to SUSE L3 support, and L3-Priority, which allows 24x7 access to SUSE support. The CSP may only purchase subscriptions at one level of support; these subscription types should not be mixed. See the “Subscriptions” section above for more detail.

Getting a Support Entitlement
Prior to contacting SUSE for support, the CSP must have a support entitlement in the SUSE support system. Upon executing the SUSE Cloud Service Provider Agreement, the CSP should contact SUSE and let us know what level of L3 support (L3-Standard or L3-Priority) they will be purchasing.

SUSE Partner Program
The CSP partner must join the SUSE partner program at https://partner.suse.com as a prerequisite to joining the SUSE CSP Program. The SUSE partner program is free of charge and provides a number of partner benefits, including access to not-for-resale subscriptions, support, and discounts on SUSE training and SUSECON, SUSE’s annual user conference.

Contact Information
If you have questions, you may contact your SUSE Partner Executive or send an email to: public.cloud@suse.com
Contact your local SUSE Solutions Provider, or call SUSE at:
1 800 796 3700 U.S./Canada
1 801 861 4500 Worldwide
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