



SUSE Public Cloud FAQ for Amazon Web Services



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1. What is the difference between Virtual Machine (VM), an Amazon Machine Image (AMI) and an Instance?

In AWS terminology, an “Instance” is a virtualized compute resource which has been derived from an Amazon Machine Image (AMI) and is now in either the running or stopped state. AWS does not directly correlate this to a Virtual Machine, because at some point in time, the instance may be represented by a container or other construct.

An AMI is similar to a transportable Virtual Machine. It is a template that contains the software configuration (operating system, application server, and applications and additional cloud tooling) required to launch your instance.

2. What is the difference between Pay-As-You-Go (PAYG) and Bring-Your-Own-Subscription (BYOS)?

A PAYG instance is available on the Amazon EC2 Console for SUSE Linux Enterprise Server, or the AWS Marketplace for SUSE Linux Enterprise Server for SAP Applications as a consumption-based subscription that is metered and supported by a joint agreement between SUSE and AWS. The cost of the SUSE Linux Enterprise subscription is included in the hourly, or annual usage rate. This is the easiest way to consume SUSE products on AWS.

Bring-Your-Own-Subscription (BYOS) is synonymous with the concept of Bring-Your-Own-License (BYOL). A BYOS image is available from the AWS Community

Marketplace, for self-published AMI’s from contributors like SUSE. A customer is expected to bring their existing SUSE Linux Enterprise subscription or acquire a new subscription from SUSE in order to obtain support, updates, and patches for a BYOS image from the SUSE Customer Center (SCC), or from their own installation of SUSE Manager (SUMA). The Cost of a subscription is not included in the AWS hourly or yearly usage charge.

Like the PAYG image, SUSE regularly publishes updated images in the AWS Marketplace or Community Marketplace so that customers have access to the hot fixes for the latest Common Vulnerabilities and Exposures (CVE). SUSE engineering builds the images provided in the Amazon EC2 Console, AWS Marketplace or Community Marketplace. This provides the customer the assurance that the image has been tested and built utilizing SUSE best practices.

3. What is the subscription entitlement difference between PAYG and BYOS?

While PAYG and BYOS are buying options to support customer choice there are some differences in the patch and update infrastructure that customers should consider.

All SUSE PAYG instances have access to the SUSE Public Cloud Update Infrastructure hosted by SUSE on AWS. While PAYG instances automatically register with the SUSE Public Cloud Update Infrastructure, consumers are still responsible for regular maintenance to patch their running instances per

organizational policies and security best practices. BYOS images require that the consumer register the instance with the SUSE Customer Center (SCC). Accessing [SUSE Customer Center](#) requires an out-bound connection from the instance to the internet to gain access to SUSE repositories depending on the customer's cloud environment this could cause them to incur additional charges. Therefore, it may be resource and cost efficient to create their own Repository Mirroring Tool (RMT) server inside AWS for accessing repositories, patches, and updates from a single source.

4. Will SUSE bill me separately for a Pay-As-You-Go (PAYG) instance on Amazon EC2?

No, all billing for PAYG is handled through Amazon EC2 Console or the AWS Marketplace.

5. I have an existing subscription for SUSE Linux Enterprise Server. Can I use my existing subscription on AWS to launch BYOS images?

Yes, please contact your SUSE sales representative for details or email amazon@suse.com.

6. What is the difference between an AWS Marketplace image and the image I can launch directly from the AWS Management Console.

AWS publishing and tooling has expanded over time resulting in 2 different methods for launching images. These include the [AWS Management Console](#) and the [AWS Marketplace](#).

SUSE Linux Enterprise Server is found within the AWS Management Console. SUSE Linux Enterprise Server for SAP Applications is found through the AWS Marketplace.

SUSE Linux Enterprise High Performance Computing for HPC is found in the AWS Community Marketplace, because it's published by SUSE, rather than AWS. There also exist community-based images for SUSE Linux Enterprise Server and SUSE Linux Enterprise Server for SAP Applications published by SUSE in the Community section within the AWS Marketplace. All SUSE published AWS Community Marketplace images are BYOS.

Image	AWS Marketplace	AWS Management Console	Community Marketplace
SUSE Linux Enterprise Server		●	●
SUSE Linux Enterprise High Performance Computing			●
SUSE Linux Enterprise Server for SAP	●		●

7. What “Platform” option should a customer select when purchasing SUSE Linux Enterprise Server (SLES) and SUSE Linux Enterprise Server for SAP Applications (SLES for SAP).

There are three different scenarios:

1. If a customer is purchasing SLES as PAYG directly from AWS (via the Amazon EC2 console), the Reserved Instances (RIs) should use the “Platform” option as “SUSE Linux.”
2. If a customer is purchasing SLES for SAP directly from AWS (via the AWS Marketplace), the RIs should use the “Platform” option as “Linux/Unix.”
3. If a customer is running any SLES or SLES for SAP BYOS image which are published by SUSE (via the AWS Community Marketplace), then the RIs should use the “Platform” option as the “Linux/UNIX.”

8. What is SUSE Linux Enterprise Server on Amazon EC2?

SUSE Linux Enterprise Server is a scalable, highly performant, enterprise operating system for secure computing. SUSE Linux Enterprise Server instances include the Amazon EC2 compute infrastructure with the SUSE Linux Enterprise Server operating system software included.

9. Is there any difference between SUSE Linux Enterprise Server on Amazon EC2 and the versions I can run in my datacenter?

Fundamentally, no. The cloud-enabled version of SUSE Linux Enterprise Server, SUSE Linux Enterprise Server for SAP Applications, or SUSE Linux Enterprise

SUSE Linux Enterprise High Performance Computing for HPC on Amazon EC2 is maintained by SUSE and the base OS is identical to the version of SUSE Linux Enterprise Server available for installation on physical hardware. The cloud AMI however, includes tooling and metadata vital to the running and managing of the operating system on AWS infrastructure. AWS customers running PAYG instances of SUSE Linux Enterprise Server on Amazon EC2 receive access to the base OS, the included cloud module, and SUSE Public Cloud Update Infrastructure.

10. What versions of SUSE Linux Enterprise Server are available on Amazon EC2?

PAYG and BYOS images published by SUSE are current and supported instances. Once launched it is critical that customer maintain good patch and update process to keep those running current according to published lifecycle.

You can visit the product lifecycle information page to determine what SUSE Linux Enterprise Server versions are currently under general support: <https://www.suse.com/lifecycle/>

11. How is SUSE Linux Enterprise Server on Amazon EC2 offered and priced?

SUSE Linux Enterprise Server products on Amazon EC2 infrastructure support all standard offerings including: On-Demand, Reserved, Spot Instances and Dedicated Hosts. PAYG pricing includes Amazon EC2 compute charges and SUSE Linux Enterprise Server support subscription charges. Pricing for all instance sizes and AWS regions can be found on the [Amazon EC2 Pricing page](#).

You can launch SUSE Linux Enterprise Server instances using your own subscription, known as Bring-Your-Own-Subscription (BYOS) via the Community Marketplace.

You can also visit the [AWS Marketplace](#) to see pricing, as well as launching SUSE Linux Enterprise Server directly from the [AWS Console](#).

The [AWS Pricing Calculator](#) can be used to price out larger deployments.

12. Is SUSE Linux Enterprise Server available on the AWS Free Tier?

Yes. SUSE Linux Enterprise Server on Amazon EC2 is available on AWS Free Tier. You can get up to 750 hours per month on a t2.micro or t3.micro during the 12 month trial period. You can sign up on the [AWS Free Tier page](#).

13. In which AWS Regions are SUSE Linux Enterprise products on Amazon EC2 available?

SUSE Linux Enterprise products on Amazon EC2 are available in all AWS Regions worldwide, including [AWS GovCloud \(US\)](#). Visit [AWS Marketplace](#) for version availability by region. To learn more about AWS Regions, visit aws.amazon.com/about-aws/global-infrastructure.

14. How does support work for PAYG Instances of SUSE Linux Enterprise Server products on Amazon EC2?

SUSE Linux Enterprise Server on Amazon EC2 is covered under Premium Support. Premium Support customers that contact AWS for help will work directly with AWS to resolve issues that are related to SUSE Linux Enterprise Server. Amazon and SUSE engineering teams will work together to resolve any SUSE issue that requires escalation. See the [SUSE Technical Support Handbook](#) for more info. This applied to all launch instance types, including Spot, Reserved, and On-Demand.

15. How do I perform an in-place upgrade for prior versions of SUSE Linux Enterprise Server on Amazon EC2?

Yes, you can upgrade any supported instance to a newer service pack level or major release via the guidance in the Product Upgrade Guide for your version. Example [here](#) for SUSE Linux Enterprise Server 15 SP2. Consult AWS or SUSE for guidance on this topic.

16. How do I improve uptime of my instance through maintenance, migrations and other considerations?

SUSE develops and maintains several technologies to dramatically decrease planned and unplanned

downtime. This includes SUSE Linux Enterprise Live Patching for SUSE Linux Enterprise Server for SAP Applications, as well as software and guidance for High Availability and Disaster Recovery (HADR), including configuration guidance and the SUSE Linux Enterprise High Availability Extension for automated Pacemaker-based failover. Additional value can be gained for managing, orchestrating, and patching your SUSE environment by leveraging SUSE Manager (SUMA). See '[Move Toward Zero Downtime for SAP Solutions](#)' for a high-level introduction on this topic. Finally, SUSE develops AWS QuickStarts which leverage the AWS Well Architected Framework (WAF) for increased durability and security.

17. Is auto-scaling available for SUSE Linux Enterprise Server on Amazon EC2?

Yes. Visit the [auto-scaling page](#) to learn more. Autoscaling operations are included in SUSE-supported AWS QuickStarts which follow the Well Architected Framework (WAF).

18. How do I run SUSE Linux Enterprise High Performance Computing (SLE for HPC)

SUSE Linux Enterprise Server is widely used in High Performance Computing (HPC) and ideally suited for

cluster compute instances. SUSE Linux Enterprise High Performance Computing for HPC is available with support for GPU instances, including the libraries required to run application code for supported GPUs. For a complete list of included HPC software reference: <https://www.suse.com/products/server/hpc/>.

SUSE Linux Enterprise High Performance Computing for HPC - BYOS AMI is currently found in the AWS Community Marketplace.

19. How does patch and hotfix management occur during a PAYG Instance lifespan?

SUSE patches existing images on a regular schedule for Common Vulnerabilities and Exposures (CVE). A launched instance will be fairly current but the consumer should still examine the instance for hotfixes they prefer to have after the image creation date. Once the image is launched, it's up to the consumer to perform updates at their discretion using either the 'zypper' command or 'YaST' tool, or in a fully managed context with 'SUSE Manager.'