aws marketplace

Implementation Guide:
Multi Account SUSE Linux Enterprise Server (SLES) for SAP Applications

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Foreword

SUSE Linux Enterprise Server for SAP Applications is an Operating System that meets your needs for SAP applications and HANA databases on the Amazon Web Services (AWS). Implementing this solution, you can deploy **SAP** services faster with more reliability and security and easier system maintenance.

The purpose of this AWS Implementation Guide is to enable every AWS Marketplace customer to ease the deployment of SLES for SAP Applications in an AWS Control Tower environment while taking full advantage of the resources pre-configured by AWS Control Tower as part of the initialization.

Solution overview and features

Using AWS Marketplace, you can discover, purchase, migrate and deploy SUSE Linux Enterprise Service (SLES) for SAP Applications Linux platform for SAP HANA, SAP NetWeaver, SAPP s/4HANA and SAP Business Applications. The AWS Marketplace subscriptions are local to each AWS account by default and they are not shared with remaining accounts in your Organization. With the combination of Managed entitlements for AWS Marketplace and AWS License Manager, you can subscribe to the product from AWS Management account and share it with remaining accounts in the organization. Users in the managed accounts can directly access the approved marketplace products without a need to go to AWS Marketplace and initiate a new subscription.

Using this solution, you can automate the creation of grants for accounts with in selected Organizational Units (OUs). In addition, this solution leverages AWS Control Tower lifecycle events to automatically create the grants when a new AWS Account is created in those OUs using Account Factory.

This solution is delivered as an AWS CloudFormation template for easy deployment into the environment.

Using this solution, you can:

- ✓ Specify a set of Organizational Units that you like create grant for.
- ✓ Automatically create the grants for both existing accounts and new accounts.
- ✓ Quickly deploy SLES for SAP instances within these Amazon Machine IDs (AMIs) in the managed accounts.

Architecture diagram

The CloudFormation template provided as part of this solution automates creation of grants to all the AWS Accounts in selected Organizational Units. The grants are shared for existing accounts as well as any new accounts created in the future using AWS Control Tower Account Factory.

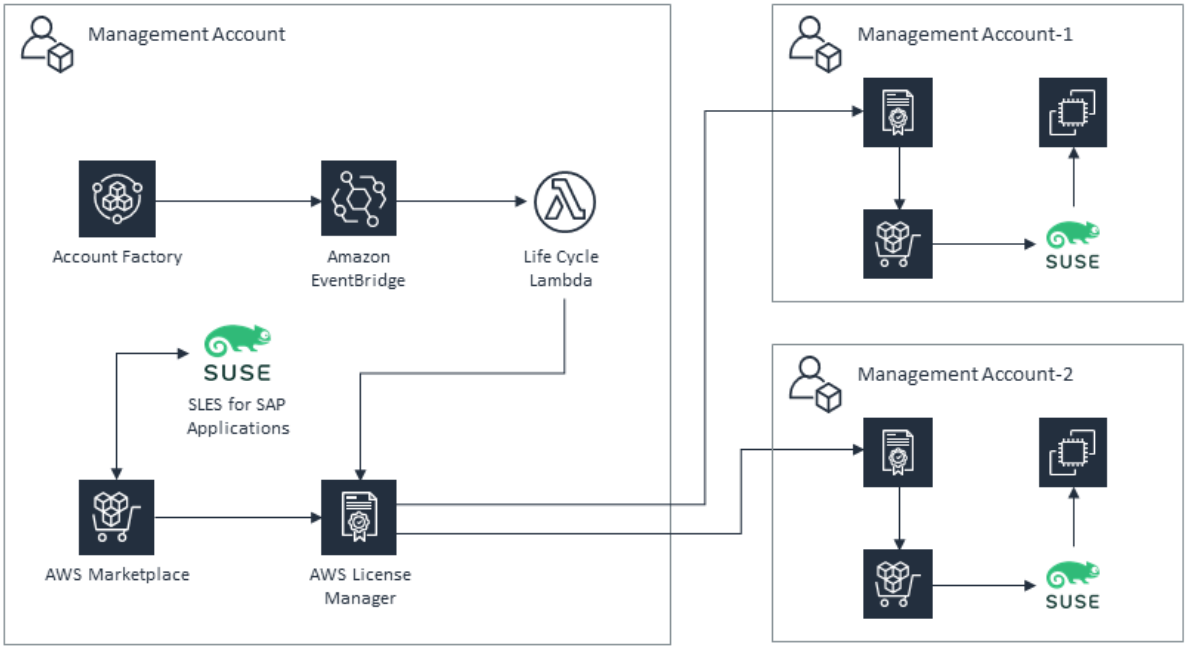


Figure 1 SUSE subscription sharing - Architecture Diagram

Following are the list of events when a new AWS Account is launched using Account Factory:

1. On new AWS account creation, AWS Control Tower generates a CreateManagedAccount event.
2. The EventBridge rule captures this event and triggers a lambda function.
3. The lambda function uses License Manager to share the grant with the new account, if the account create is part to one of the approved OUs.
4. The end users in the managed accounts can access the SLES product from AWS Marketplace without any additional subscriptions.

In addition, at the launch of this solution, the grants are shared with existing AWS Accounts with in the selected OUs.

The representation of EC2 instances in the architecture diagram is to illustrate how end users can use the shared grants. No EC2 instances are deployed in the managed accounts as part of this solution. The SLES AMI which is available in AWS Marketplace can be used to launch the EC2 instances in the managed accounts.

Pre-requisites

- AWS Control Tower should be deployed and working correctly.
- An active subscription to SUSE Linux Enterprise Server for SAP Applications 15 SP1 in the management account.
- The SUSE Integration solution should be downloaded from the SUSE GitHub Repository.

If you are new to AWS, see Getting Started with AWS

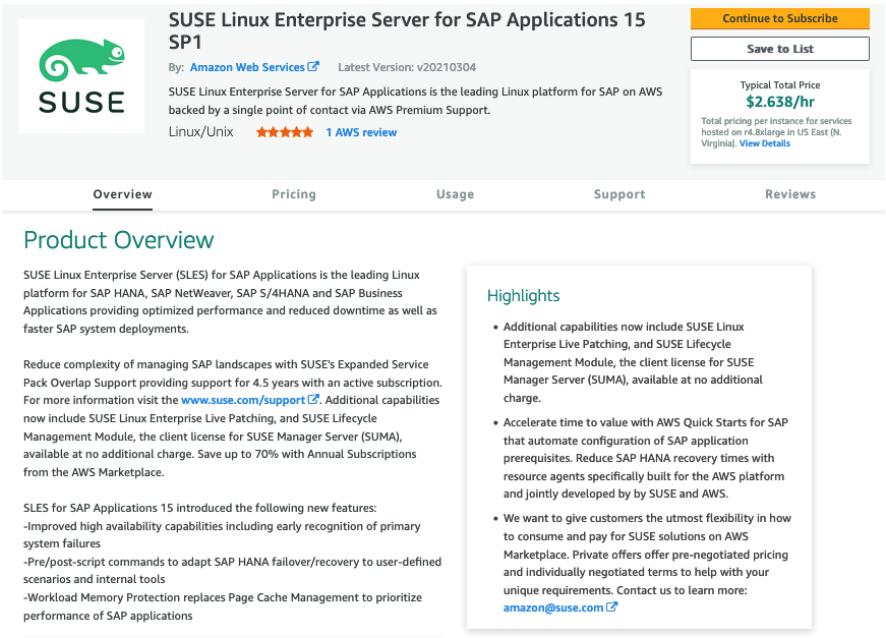
For additional information on AWS Marketplace, see:

To get started with AWS Control Tower, check out the Control Tower User Guide

Deployment and Configuration Steps

Step-1: Subscribe to a SLES for SAP Applications 15 SP1 in AWS Marketplace subscription

- Login to AWS Control Tower management account and access **AWS Marketplace subscriptions**, **Discover products**.
- Search for SLES for SAP Applications 15 SP1



- Click on **Continue to Subscribe**
- Review the Terms and Conditions and choose **Submit for Approval**

Step-2: Capture the required information

- Navigate to **AWS Marketplace Subscriptions**, **manage subscriptions** to list all your active AWS Marketplace subscriptions.

- Find the SUSE product you just subscribed in Step-1 and choose **Manage**.
- Note down the **Product ID** value. You require this information in next step.

Step-3: Launch SLES for SA Applications and Control Tower solution

- Download the CloudFormation template from GitHub repository.
- In the AWS Control Tower Management account, select the Home Region. The home region is the AWS Region where AWS Control Tower is launched.
- Navigate to AWS CloudFormation console and choose **Create stack, With new resources (standard)**.
- Choose **Upload a template file** and select the file you downloaded above and choose **Next.**
- Type in a Stack name of your choice and key-in below Parameter values.
    - **OUsToShareWith:** List of Organizational units, you want to share the accounts with.
    - **ProductSKU**: Key in the Product ID that you captured in Step-2
    - Leave the remaining parameters default.
- Choose **Next**, **Next**
- In Review step, review the options selected and checkbox **I acknowledge that AWS CloudFormation might create IAM resources** and choose **Create stack**

You successfully deployed the solution that shares the marketplace subscriptions with existing and new accounts from a selected list of Organizational units. The solution uses AWS Control Tower Lifecycle events to automatically share the subscriptions with the new AWS Accounts that are created using Account Factory.

Users in the managed accounts can directly access the approved AWS Marketplace products without a need to go to AWS Marketplace and initiate a new subscription on each individual AWS accounts. When Private Images are created in the Management account and shared with other accounts. The end users will be able to launch resources like Amazon EC2 instances using the latest version of AMIs.

In the current version of this solution, we are leaving the patching of EC2 instances and sharing with other AWS accounts as a manual operation. Refer to FAQs and Additional resources sections below for additional information related to Private AMI creation and sharing with remaining AWS accounts.

FAQs

1. What happens on deleting the CloudFormation template?

   The Grants created for the individual accounts in the organization will not be deleted. You can delete the grants using delete-grant CLI command.

2. What happens when an AWS account is moved from allow-listed OU to non-allow-listed OU and vice versa?

   Moving an AWS Control Tower managed between organizations need to go through account update process. This solution listens to the UpdateManagedAccount event and handle the add/deletion of the grant as part of the LifeCycle Lambda.

3. How does the marketplace subscription integrate with License Manager?

   Please refer to AWS License Manager announces Managed Entitlements for AWS Marketplace for additional details.

Solution Estimated Pricing

Publishing Private AMIs to subsidiary accounts should not incur any charges. AWS and SUSE charges may apply when launching instances from the shared AMIs.

Additional resources

- EC2 Image Builder
- Blog: Managed Entitlements in AWS License Manager Streamlines License Tracking and Distribution for Customers and ISVs
- Blog: Golden AMI Pipelines
- https://aws.amazon.com/marketplace/pp/prodview-lwgsonfvizpeg
- https://github.com/SUSE/suse-aws-control-tower-integration
- https://www.suse.com/products/sles-for-sap/

Partner contact information

For any enquires regarding this integration with AWS Control Tower please contact: aws@suse.com