

Troubleshooting Guide

Overview

The objective of this troubleshooting guide is to provide some common frequently asked questions and their corresponding answers to problems when executing the SaaS on AWS Bootcamp. It is recommended for a user executing the bootcamp to read the directions for each Lab guide in detail as these guides were written thoroughly and should be self-sufficient.

Submitting Issues

The SaaS on AWS bootcamp is hosted within a Github repository located at <https://github.com/aws-samples/aws-saas-factory-bootcamp> and users are recommended to submit requests for issues and enhancements within the "Issues" tab rather than submitting an issue to AWS support. Pull requests will be supported on a case by case basis. Issues, bugs, or enhancements for the content covered within the labs, guides, code, or templates should be submitted via the "Issues" tab.

Security Disclaimer

Warning: It is strongly recommended for a bootcamp executor to provision this infrastructure in an AWS Account that will not be leveraged for their organizations systems in testing, development, or production. One approach is to provision a linked account using AWS Organizations, which allows one to provision AWS accounts under a master billing account so the security remains isolated from the corresponding billing. It is expected that the bootcamp will create a significant amount of resources and some in which there is a wide-net of IAM Policies or insecure API endpoints to demonstrate the value of integrating and resolving application issues and showcasing insecure challenges to demonstrate the value of building a robust approach to security in a real-world SaaS application. **DO NOT RUN THIS IN PRODUCTION**

AWS SaaS Factory - Frequently Asked Questions

What is a Software as a Service (SaaS)? - SaaS is a licensing and delivery model whereby software is centrally managed and hosted by a provider and available to customers on a subscription basis. Your company may look to a SaaS model to deliver your product for a number of reasons, including:

Customer Demand: Provide your customers a flexible way to consume your product.

Improved Operational Efficiency: Save time and money by focusing your development and support on one version of your product.

Increased Agility: Easily control and release upgrades so you can make sure all of your customers benefit from product innovations.

Expand Market and Global Reach: Attract customers in new geographies, different size segments, and new verticals.

What is the AWS SaaS Factory Program? - The AWS SaaS Factory program provides a broad range of business and technical enablement resources for building, migrating, and optimizing software-as-a-service (SaaS) on AWS. There are many factors that will shape and influence your SaaS design and architecture. The domain you're in, the business goals of your product, the scope and time to market of your initial offering—these are some of the many considerations that will impact the approach you take for your SaaS product. Ultimately, you'll need to identify an approach that balances the technical and strategic realities of your business.



[Learn more about AWS SaaS Factory](#)

While the range of SaaS architecture options is diverse, there are some clear themes that every SaaS architect will need to address when building SaaS solutions on AWS. To help you navigate this landscape and develop a solution that meets your product goals, the AWS SaaS Factory offers a variety of prescriptive enablement resources to empower and enable each stage of your SaaS on AWS journey.

How can my organization engage with an AWS SaaS Factory Solutions Architect in a more prescriptive setting? - One on One engagements which constitute prescriptive guidance from SaaS Solutions Architects are for nominated and qualified AWS Partners only. Partners can engage their Partner Development team and request their Partner Development Representative nominate them for a potential engagement. Customers whom are not a registered AWS Partner, can click this [link](#) to learn more. Customers not qualified for a one on one engagement can benefit from the variety of [events](#) the SaaS Factory team runs regularly.

How can I learn more about SaaS on AWS? - Check out the resources on our [home page](#), and view our technical content on our [SaaS Factory Page](#) or [APN Blog](#), and sign up for [SaaS on AWS Interest List](#).

Troubleshooting - Frequently Asked Questions

Errors Running CloudFormation / Shell Scripts – Bootcamp users that are experiencing multiple issues running the CloudFormation Templates, Shell Scripts, or Custom Node Functions may be experiencing issues as a result of deviating from the standard CloudFormation Stack Names suggested in the Documentation, or the corresponding AWS Resource names.

Note, to orchestrate an optimal and consistent bootcamp experience many of these Stack Names must be configured as expected within the documentation. When in doubt, it is recommended that a user verify they created the CloudFormation stacks with the recommended names, as a AWS Resources with the names recommended as well. See suggested CloudFormation Stack Names below, and note **these are case sensitive**.

CloudFormation Templates Created via the AWS Console via User Input

BASELINE STACK -	"module-saas-bootcamp-baseline"
USER MANAGEMENT STACK –	"UserManagerService"
APPLICATION UI STACK –	"ApplicationUI"

CloudFormation Templates Orchestrated Automatically via Shell Scripts

TENANT MANAGEMENT STACK –	"TenantManagerService"
TENANT REGISTRATION STACK –	"TenantRegistrationService"
AUTHENTICATION MANAGER STACK –	"AuthManagerService"
PRODUCT MANAGER STACK –	"ProductManagerService"

AWS Regional Support – At the current time the SaaS on AWS Bootcamp only supports the us-east-1 AWS Region. Support will be coming for other regions later this year, however it is not recommended for a user to provision the bootcamp in any other region from us-east-1 at the current time.

AWS Account Recommendation - At the current time the bootcamp requires a considerable amount of IAM Permissions, and a significant amount of AWS resources are created in order to demonstrate the value of delivering a SaaS on AWS. For this reason, it is recommended to create these bootcamp in a non-production AWS Account that can be terminated following the execution of the bootcamp. For the purpose of in-person bootcamps delivered by AWS the event engine will be used to facilitate temporary AWS accounts that bootcamp users can leverage.

Cloud9 IDE Ran out of Storage Space – Currently there are constraints in CloudFormation with configuring the corresponding EBS storage allocated to the EC2 instance for Cloud9. For this reason, we have provided a custom shell script that will remove the Docker Container Images on the Cloud9 Host. Running the script in Cloud9 **scripts/remove-docker-images.sh** by

opening the folder '**scripts**' and right-clicking **remove-docker-images.sh** and click run, will allow the script to purge the container images on the Cloud9 host.

Cloud9 Failed to Execute Script 'tenant-manager.sh' for Lab1 Part3 – The **tenant-manager.sh** script is responsible for reconfiguring the local AWS credentials file on the Cloud9 host to allow the user to complete additional actions during the course of the bootcamp. As a result of the requirement of this script, the user must decline and cancel the corresponding configuration for Cloud9 to automatically update the credentials file. In the event that one accidentally clicks yes to updating credentials, or in which the **tenant-manger.sh** script fails even when they cancel and decline updating the script, it is recommended for the user to complete the following steps.

Navigate to Cloud9 Toolabar, click "**AWS Cloud9**" > "**Preferences**" > "**AWS Settings**" > "**Credentials**" > "**AWS Managed Temporary credentials**" and click the Button to the right until it turns green. Wait 15 Seconds, and navigate back to Lab1/Part3/scripts and Right-Click **tenant-manager.sh** and click Run again. It should not fail a second time, however if it does do this in sequence again.

Recap: This troubleshooting guide was provided to include some of the common challenges a user may have when running this bootcamp. It is recommended, for things not included here to be submitted as issues, and our team will prioritize resolving.