

AWS SAM Plugin

AWS SAM

The AWS Serverless Application Model ([SAM](#)) is an open-source framework you can use to build serverless applications on AWS.

This plugin helps you automate the deployments of your applications that are defined using SAM.

Features

- Custom build step
- Deploy SAM projects to AWS
- Package SAM projects to a S3
 - Use specific or auto-generated S3 bucket (if not given, a bucket will be automatically generated in your account for you)
- Template parameter support
- Template tags support
- Deploy to specific region
- Use an S3 prefix for packaged artifacts to have fine-grained control of where artifacts are uploaded
- Use a specific KMS key for encrypting packaged artifacts at rest in S3
- Configurable deployment role

Requirements

AWS Account

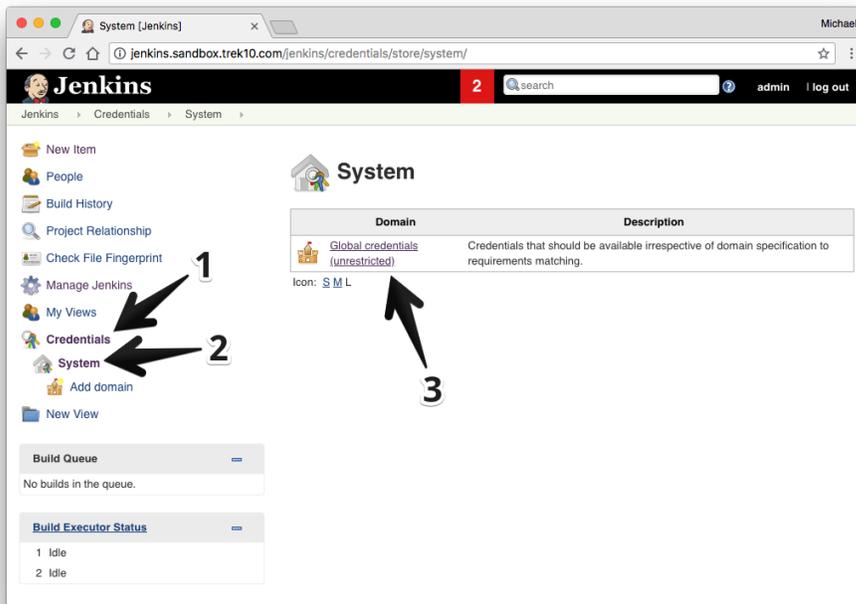
In order to deploy to AWS you must have an AWS account. Visit <https://aws.amazon.com> if you do not have one.

AWS Credential Configuration

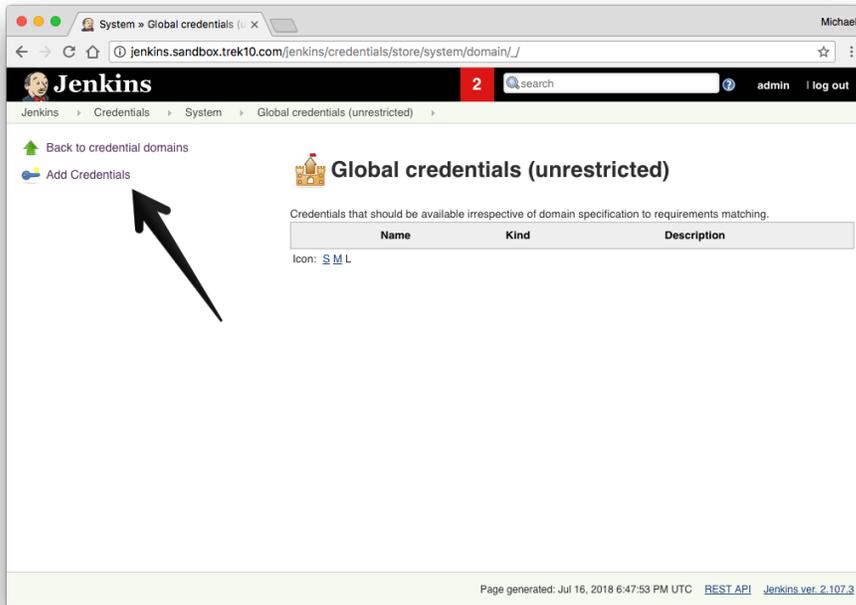
Before you can start building, you *must* have your AWS credentials set up in Jenkins.

To do this:

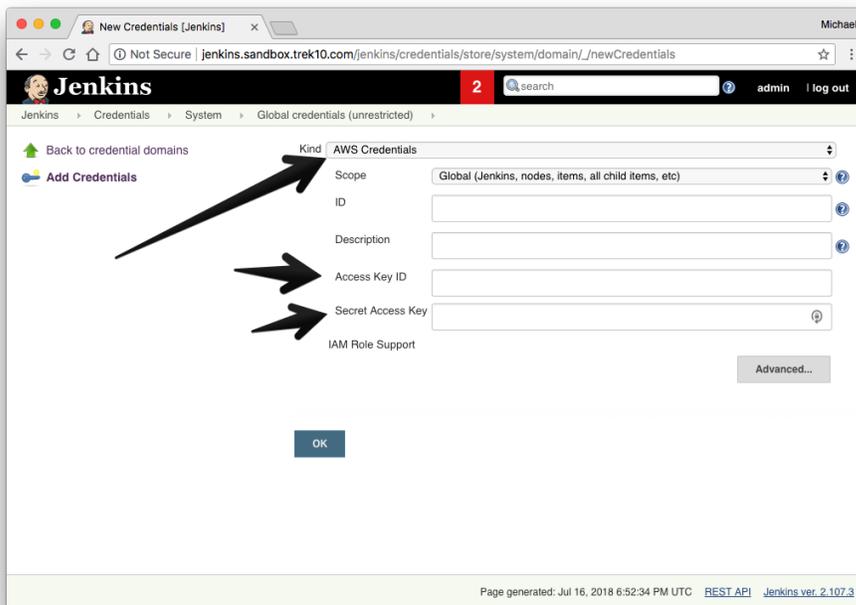
1. From the main page of your Jenkins server go to "Credentials" > "System" and then click on "Global Credentials."



2. Click "Add Credentials."



3. Select from the "Kind" dropdown "AWS Credentials."
4. Finish the form with your AWS access keys and click "OK."



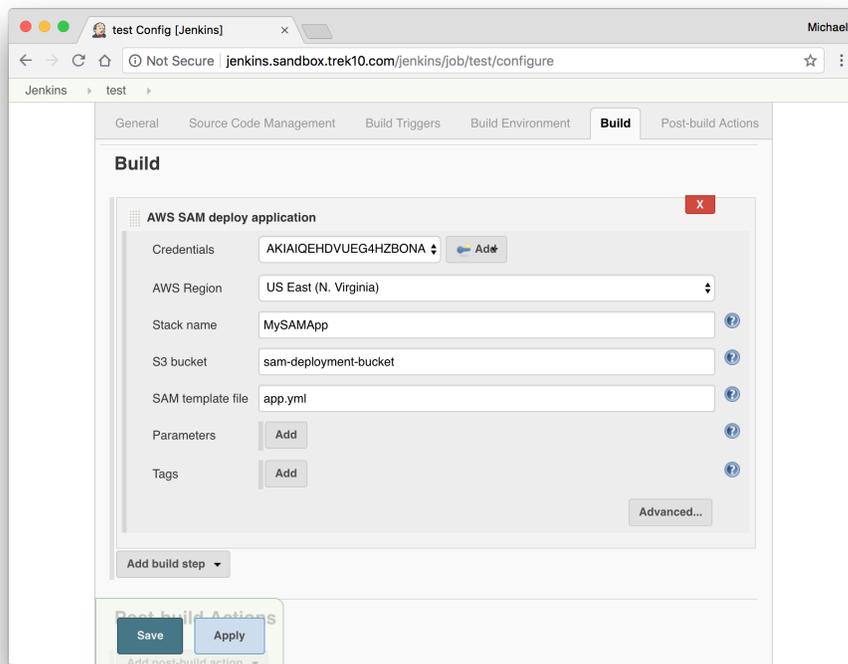
Project Configuration

There are a few steps to configuring your build.

1. In your project configuration, scroll down to build steps.
2. Add the "AWS SAM deploy application" build step.

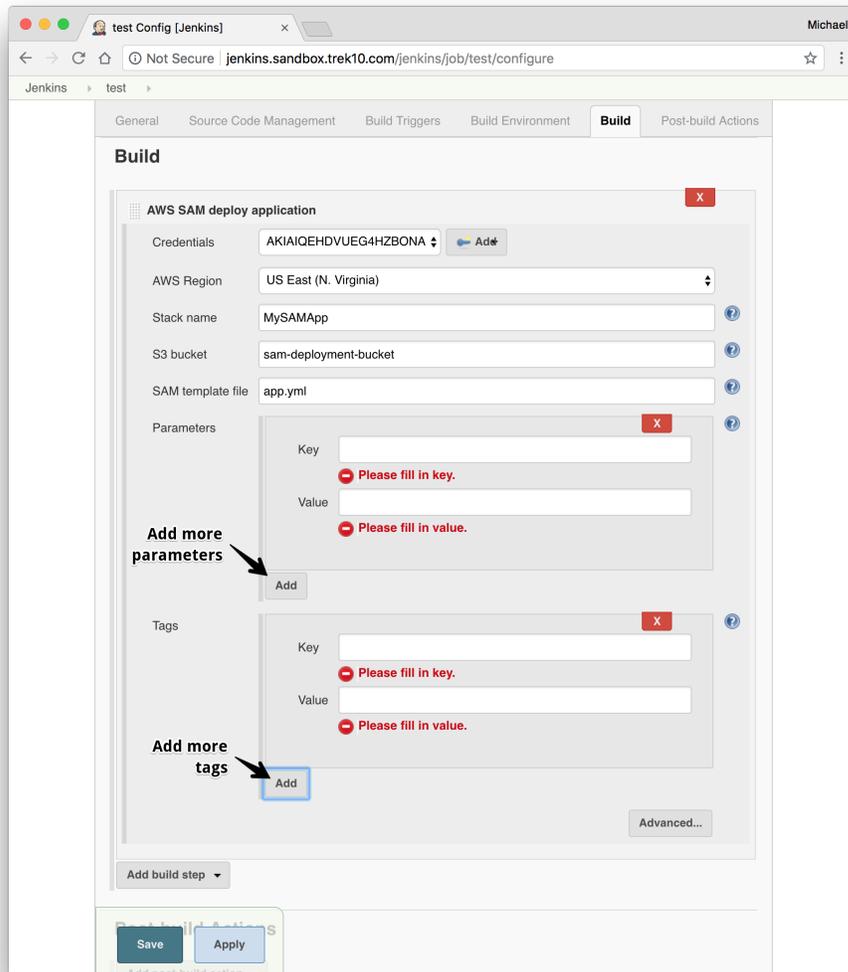
Configuring the Build Step

1. Select your AWS Credentials from the dropdown.
2. Select the target region to deploy to.
3. Give the build step a stack name.
4. *OPTIONAL*: Enter an S3 bucket name to package the artifacts to.
 - a. If you leave this blank, the S3 bucket will be auto-generated.
5. Give the path to the SAM template file.



6. *Optional*: If your template has parameters, add parameters where necessary.

7. *Optional:* Add any tags to the stack you'd like.



8. *Optional:* Finish the "Advanced" configuration
- Give an S3 prefix to package the artifacts in the bucket under.
 - Give a KMS Key ID to encrypt the packaged artifacts.
 - Give a Role Arn that will be assumed by CloudFormation when executing the changeset.

9. Select an output template file for the package step to output to.

The screenshot shows the Jenkins configuration page for a build step named "AWS SAM deploy application". The page is titled "Build" and has several tabs: "General", "Source Code Management", "Build Triggers", "Build Environment", "Build", and "Post-build Actions". The "Build" tab is active.

The configuration fields are as follows:

- Credentials: AKIAIQEHDVUEG4HZBONA (with an "Add" button)
- AWS Region: US East (N. Virginia)
- Stack name: MySAMApp
- S3 bucket: sam-deployment-bucket
- SAM template file: app.yml
- Parameters: Add
- Tags: Add
- S3 prefix: (empty)
- KMS Key Id: (empty)
- Role Arn: (empty)
- AWS SAM output template file: (empty)

An arrow labeled "Advanced Settings" points to the "S3 prefix", "KMS Key Id", "Role Arn", and "AWS SAM output template file" fields, which are enclosed in a red rectangular box.

At the bottom of the configuration area, there is an "Add build step" dropdown menu and two buttons: "Save" and "Apply".