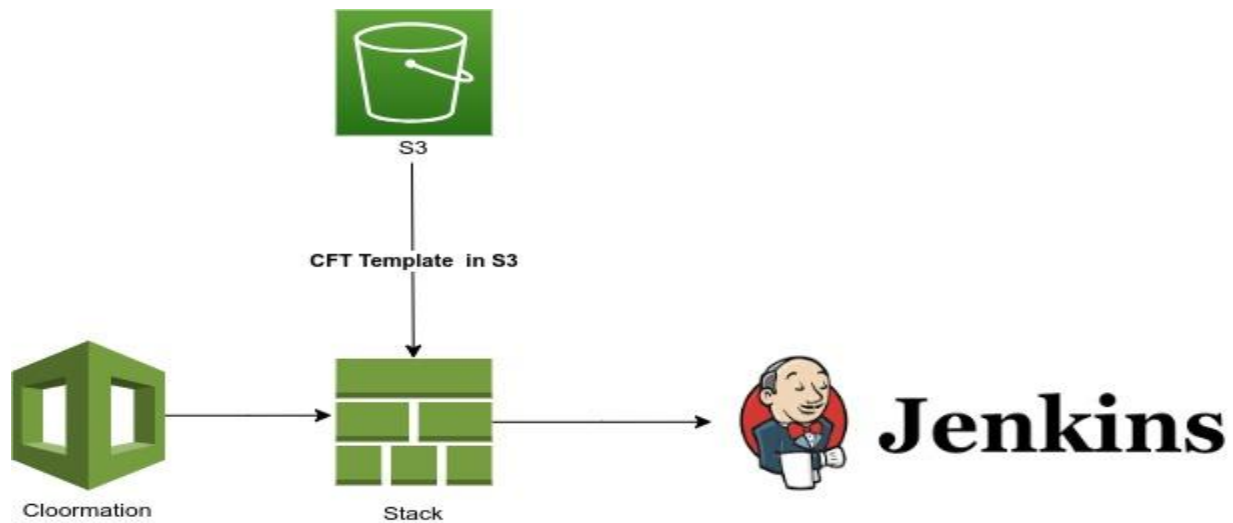
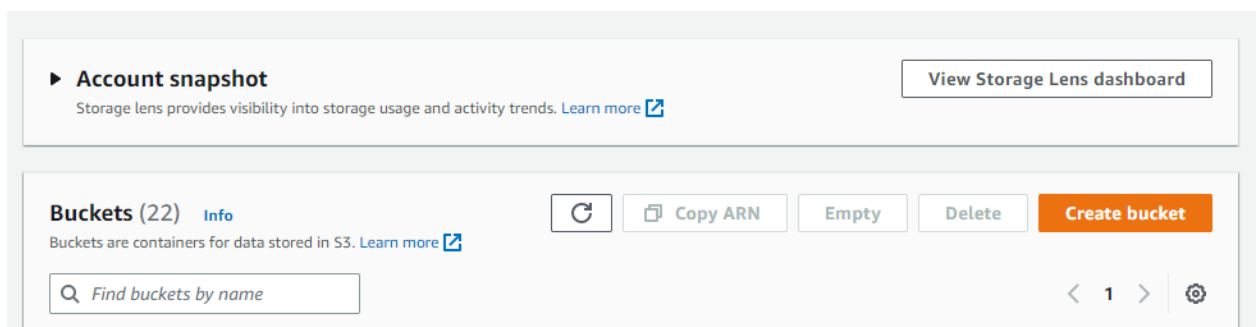


Deploying Jenkins Using CloudFormation



Create S3 bucket

1. Sign in to the AWS Management Console and open the Amazon S3 console
2. Choose **Create bucket**.



3. In Bucket name, give the suitable bucket name.

4. In **Region**, choose the AWS Region where you want the bucket to reside.

Amazon S3 > Buckets > Create bucket

Create bucket [Info](#)

Buckets are containers for data stored in S3. [Learn more](#)

General configuration

Bucket name

Bucket name must be globally unique and must not contain spaces or uppercase letters. [See rules for bucket naming](#)

AWS Region

US East (N. Virginia) us-east-1

Copy settings from existing bucket - *optional*
Only the bucket settings in the following configuration are copied.

Choose bucket

Object Ownership [Info](#)

5. Click on **Create bucket**.

► Advanced settings

After creating the bucket you can upload files and folders to the bucket, and configure additional bucket settings.

Cancel **Create bucket**

6. Now, Upload two CFT files into the S3 bucket.

Amazon S3 > Buckets > jenkins-lts-test

jenkins-lts-test [Info](#)

[Objects](#) | [Properties](#) | [Permissions](#) | [Metrics](#) | [Management](#) | [Access Points](#)

Objects (2)

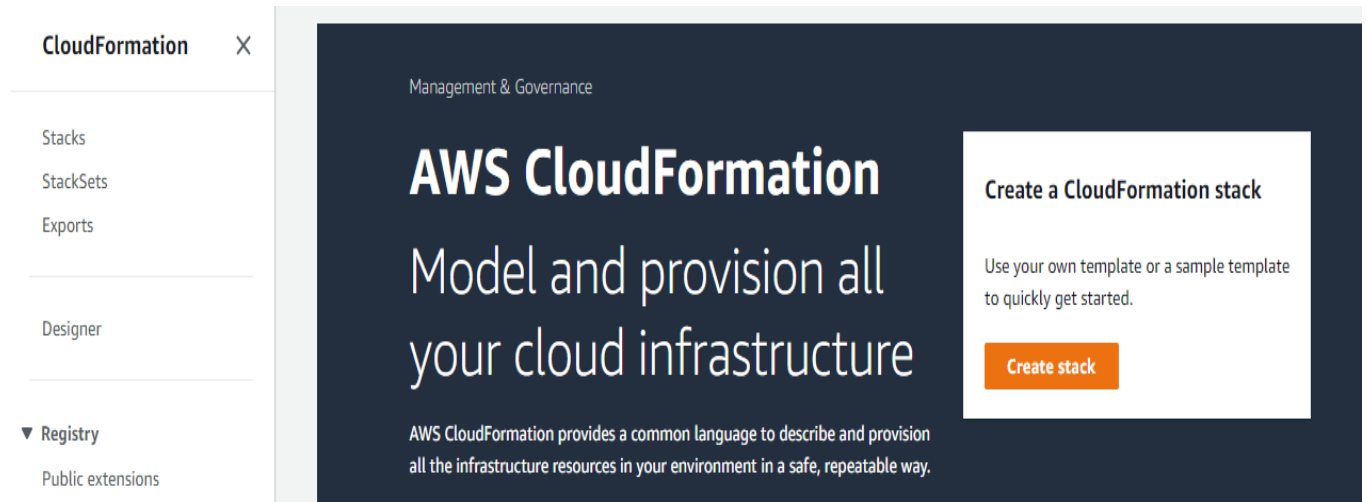
Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

[Refresh](#) [Copy S3 URI](#) [Copy URL](#) [Download](#) [Open](#) [Delete](#) [Actions](#) [Create folder](#) **[Upload](#)**

| <input type="checkbox"/> | Name | Type | Last modified | Size | Storage class |
|--------------------------|---------------------|------|--|--------|---------------|
| <input type="checkbox"/> | default-vpc.yml | yml | October 17, 2022, 14:06:33 (UTC+05:30) | 4.6 KB | Standard |
| <input type="checkbox"/> | jenkins-for-ecs.yml | yml | October 17, 2022, 14:08:53 (UTC+05:30) | 7.4 KB | Standard |

Create a stack on the CloudFormation console

1. Open the AWS CloudFormation console.
2. Choose **Create Stack**.



3. On the Specify template page, choose a stack template by using one of the following options:
 - Template is ready
4. In the **Specify template section**, select the appropriate option based on the template's location:
 - **Amazon S3 URL**
Enter the URL in the Amazon S3 URL field. (CloudFormation Template is in S3 bucket)

The screenshot shows the 'Specify template' form. At the top, it says 'Specify template' and 'A template is a JSON or YAML file that describes your stack's resources and properties.' Below this, the 'Template source' section has two options: 'Amazon S3 URL' (selected with a radio button) and 'Upload a template file'. The 'Amazon S3 URL' option has a text input field containing 'https://jenkins-lts-test.s3.amazonaws.com/jenkins-for-ecs.yml'. Below the input field, it says 'Amazon S3 template URL'. At the bottom, it shows 'S3 URL: https://jenkins-lts-test.s3.amazonaws.com/jenkins-for-ecs.yml' and a 'View in Designer' button. At the very bottom right are 'Cancel' and 'Next' buttons.

5. Click on **Next**.
6. On the **Specify stack details** page, type a **stack name** in the Stack name box.
7. In the **Parameters** section, specify parameters that are defined in the stack template.
8. When you are satisfied with the parameter values, choose **Next**

Specify stack details

Stack name

Stack name

Stack name can include letters (A-Z and a-z), numbers (0-9), and dashes (-).

Parameters
Parameters are defined in your template and allow you to input custom values when you create or update a stack.

JenkinsDockerImage
Docker image used in the ECS task definition. Override the default to use a custom image (mandatory).

[Cancel](#) [Previous](#) [Next](#)

9. On the Review page, review the details of your stack.
10. choose to **Submit** to launch stack.

Capabilities

The following resource(s) require capabilities: [AWS::CloudFormation::Stack]

This template contains Identity and Access Management (IAM) resources. Check that you want to create each of these resources and that they have the minimum required permissions. In addition, they have custom names. Check that the custom names are unique within your AWS account. [Learn more](#)

For this template, AWS CloudFormation might require an unrecognized capability: {0}. Check the capabilities of these resources. [Learn more](#)

☒

I acknowledge that AWS CloudFormation might create IAM resources with custom names.

☒

I acknowledge that AWS CloudFormation might require the following capability:
CAPABILITY_AUTO_EXPAND

Create change set

CancelPreviousSubmit

Stacks (2)

Filter by stack name

Active

View nested

< 1 >

Stacks

NESTED

Jenkins-Its-VPCStack-1HR6PLW8VTIK5

2022-12-21 00:08:18 UTC+0530

CREATE_IN_PROGRESS

Jenkins-Its

2022-12-21 00:08:13 UTC+0530

CREATE_IN_PROGRESS

DeleteUpdateStack actionsCreate stack

< Stack infoEventsResourcesOutputsParametersTempla >

Events (24)

Search events

| Timestamp | Logical ID | Status | Status reason |
|------------------------------|------------------------|--------------------|-----------------------------|
| 2022-12-21 00:09:18 UTC+0530 | JenkinsTaskDefiniti on | CREATE_COMPLETE | - |
| 2022-12-21 00:09:17 UTC+0530 | JenkinsTaskDefiniti on | CREATE_IN_PROGRESS | Resource creation Initiated |
| 2022-12-21 00:09:15 UTC+0530 | JenkinsTaskDefiniti on | CREATE_IN_PROGRESS | - |

Now, the CloudFormation template is complete.

CloudFormation > Stacks > Jenkins-Its

Stacks (2)

🔄

🔍 Filter by stack name

Active ▾

☒ View nested

< 1 >

Stacks

☐

NESTED

Jenkins-Its-VPCStack-1HR6PLW8VTIK5

2022-12-21 00:08:18 UTC+0530

✔️ CREATE_COMPLETE

☐

Jenkins-Its

2022-12-21 00:08:13 UTC+0530

✔️ CREATE_COMPLETE

Go to the ECS cluster. In the Task section, the task status is **running**. Now, Click on Task.

In the Task, click on **Logs**.

DetailsTags**Logs**

Last updated on December 21, 2022 12:27:53 AM (8m ago)

All 30s 5m **1h** 6h 1d 1w < 1-42 >

| Timestamp (UTC+00:00) ▾ | Message |
|-------------------------|---|
| ▶ 2022-12-21 00:16:34 | 2022-12-20 18:46:34.432+0000 [id=44] INFO hudson.util.Retrier#start: Performed the action check updates server success... |
| ▶ 2022-12-21 00:16:34 | 2022-12-20 18:46:34.432+0000 [id=44] INFO h.m.DownloadService\$Downloadable#load: Obtained the updated data file fo... |
| ▶ 2022-12-21 00:16:33 | 2022-12-20 18:46:33.809+0000 [id=22] INFO hudson.lifecycle.Lifecycle#onReady: Jenkins is fully up and running |
| ▶ 2022-12-21 00:16:33 | 2022-12-20 18:46:33.624+0000 [id=28] INFO jenkins.InitReactorRunner\$1#onAttained: Completed initialization |
| ▶ 2022-12-21 00:15:22 | 2022-12-20 18:45:22.118+0000 [id=29] INFO jenkins.install.SetupWizard#init: |
| ▶ 2022-12-21 00:15:22 | ***** |
| ▶ 2022-12-21 00:15:22 | ***** |
| ▶ 2022-12-21 00:15:22 | ***** |
| ▶ 2022-12-21 00:15:22 | Jenkins initial setup is required. An admin user has been created and a password generated. |

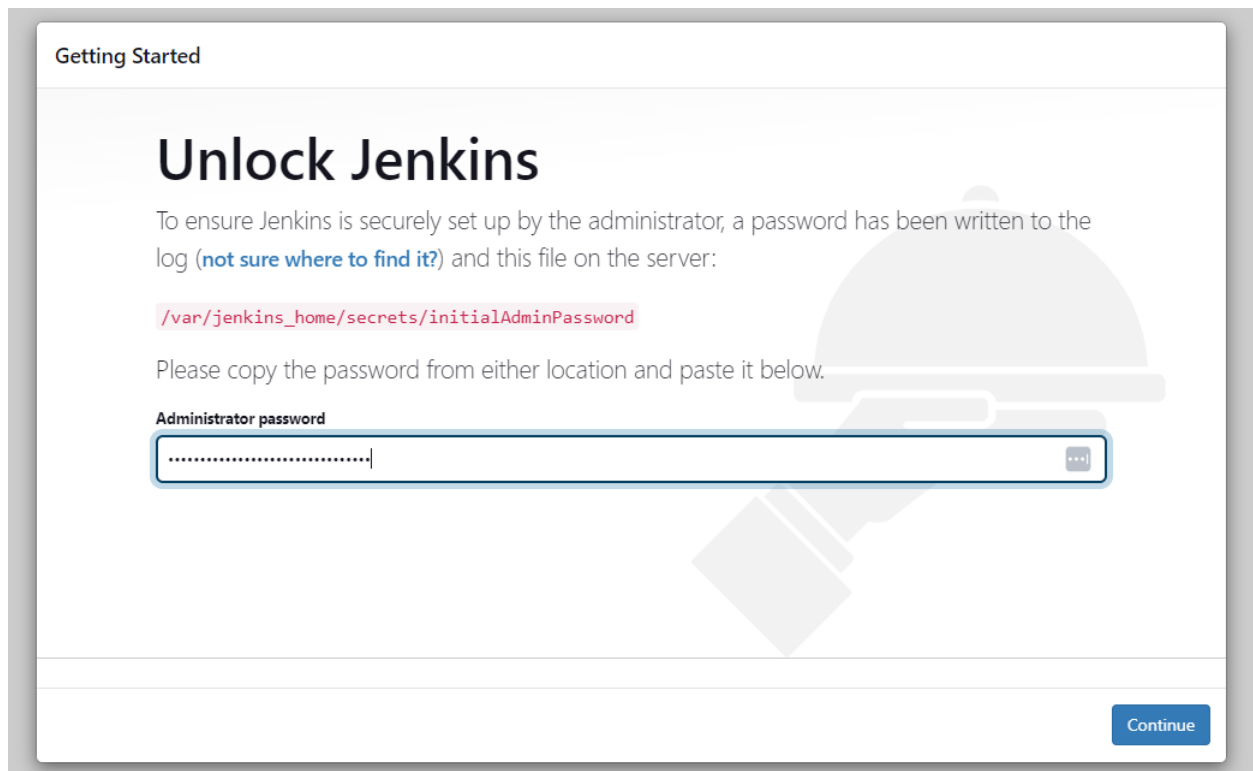
In these Logs, present the Administrator password. Copy the password for login Jenkins.

Filter logs

All 30s 5m **1h** 6h 1d 1w < 1-42 >

| Timestamp (UTC+00:00) ▾ | Message |
|-------------------------|---|
| ▶ 2022-12-21 00:15:22 | ***** |
| ▶ 2022-12-21 00:15:22 | ***** |
| ▼ 2022-12-21 00:15:22 | Jenkins initial setup is required. An admin user has been created and a password generated. |
| | Jenkins initial setup is required. An admin user has been created and a password generated. |
| ▼ 2022-12-21 00:15:22 | Please use the following password to proceed to installation: |
| | Please use the following password to proceed to installation: |
| ▼ 2022-12-21 00:15:22 | c365a496b23f4348a2e9a01e3d069c9d |
| | c365a496b23f4348a2e9a01e3d069c9d |
| ▶ 2022-12-21 00:15:22 | This may also be found at: /var/jenkins_home/secrets/initialAdminPassword |
| ▶ 2022-12-21 00:15:22 | ***** |
| ▶ 2022-12-21 00:15:22 | ***** |
| ▶ 2022-12-21 00:15:22 | ***** |

Go back to the CloudFormation, click on Loadbalancer and copy Loadbalancer DNS name. Past DNS name in the browser. We can see the Jenkins page is open and need an Administrator password. Put Administrator password which is copied from **Logs**. Click on **continue**.

The image shows the Jenkins 'Unlock Jenkins' web interface. At the top, it says 'Getting Started'. The main heading is 'Unlock Jenkins'. Below this, a paragraph explains that a password has been written to the log and a file on the server. The file path `/var/jenkins_home/secrets/initialAdminPassword` is shown in red. A prompt asks the user to copy the password from either location and paste it below. There is a text input field with a blue border and a small 'show/hide' icon on the right. At the bottom right, there is a blue 'Continue' button. A faint background image of a person in a hard hat is visible.

Getting Started

Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log ([not sure where to find it?](#)) and this file on the server:

```
/var/jenkins_home/secrets/initialAdminPassword
```

Please copy the password from either location and paste it below.

Administrator password

Continue

After installed the plugins, need to setup username and password.

Create First Admin User

Username

Password

Confirm password

Full name