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Name	Size	Last commit	Message
..			
5g-support		2022-02-08	Added setting up network local pro...
5g		2022-02-04	Update in zipping of server build
admin-stack		2022-02-01	README.md edited online with Bit...
delete-admin-stack		2022-01-10	Code with private provisioner per n...
delete-operations-stack		2022-02-01	Dynamic account id
docker-image-build		2022-02-05	added docker prune
operations-stack		2022-02-09	moved ses user and ses user creden...
provision-network-eks		2022-02-01	Dynamic account id
screenshots		2022-02-07	Added process of keycloak installat...
5gaasnetwork.sql	62.12 KB	2022-02-11	Modified database name in md file
JenkinsServerSetup.md	4.94 KB	2022-02-01	JenkinsServerSetup.md edited onli...
KeyCloakServerSetup.md	4.37 KB	2022-02-14	Corrected key cloak doc
MySQLServerSetup.md	7.15 KB	2022-02-11	Modified database name in md file
README.md	5.02 KB	2021-09-23	README.md edited online with Bit...
SceptreInstallation.md	2.37 KB	2022-02-01	SceptreInstallation.md edited onlin...
SettingUpNetworkLocalProvisio...	6.64 KB	2022-02-09	Updated for adding InboundRule in...

[README.md](#)

README

This README document contains the steps to Invoke Jenkins to create AWS Stack using AWS CloudFormation and sceptre and Ansible on Ubuntu 20.4

How do I get set up?

Prerequisites to Create AWS Stack using sceptre

- 1) Need Jenkins Server with following packages installed on the server (Please refer to the document [JenkinsServerSetup.md](#) present in the repo)
- 2) Install Python 3.8 and boto3 and botocore (please refer to the document, this will contains the steps to install python3.8 as well [SceptreInstallation.md](#) present in the repo)

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- 5) Install AWS CLI package (<https://docs.aws.amazon.com/cli/latest/userguide/install-cliv2.html>)
- 6) Configure your IAM user - under Jenkins User
 - Create `~/.aws/config` and `~/.aws/config` file and edit these files to add aws user configurations and credentials. Follow this [link](#)
 - Edit `~/.profile` and add two environment variables as shown below -

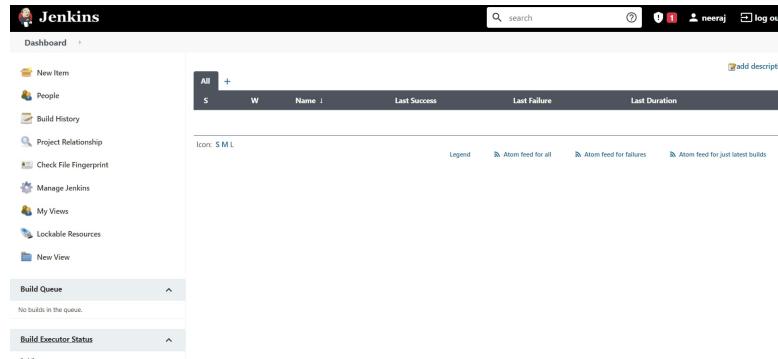

```
AWS_CONFIG_FILE=~/aws/config
AWS_SHARED_credentials_FILE=~/aws/credentials
export AWS_CONFIG_FILE
export AWS_SHARED_credentials_FILE
```

How to start

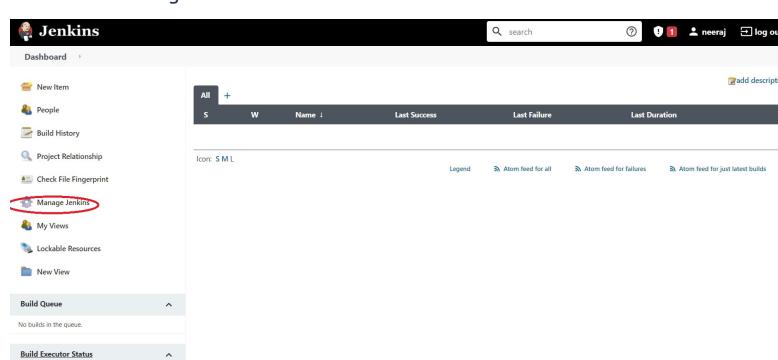
NOTE Make sure to check the specific Readme file present in each project directory, this file only provide us the basic information about the setup

- 1) After login to Jenkins Server, Go to Manage Jenkins and then go to Manage Plugins and check for some plugins if they are installed or not
 - Credentials Binding Plugin
 - Pipeline
 - Pipeline: Stage View Plugin
 - Timestamper
 - Build Timeout
 - Git
 - Extended Choice Parameter

If the above plugins are not installed, please install them and restart the Jenkins server.
- 2) Now follow the process as described below to store Bitbucket credentials into Jenkins which will be used to pull from the repo.
 - Go to Dashboard



- Go to Manage Jenkins



- Go to Manage credentials

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Building on the controller node can be a security issue. You should set up distributed builds. See the documentation.

System Configuration

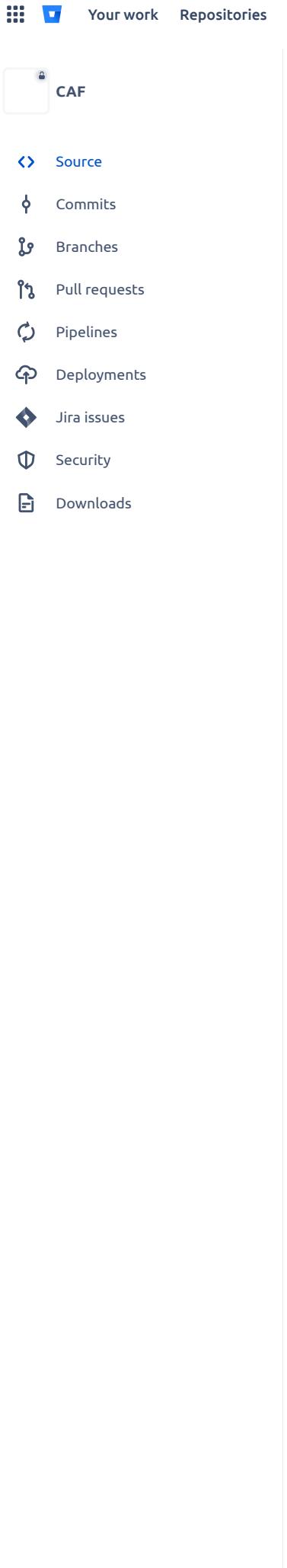
- Configure System
- Global Tool Configuration
- Manage Nodes and Clouds
- Configure Global Security
- Manage Credentials (Configure credentials)
- Manage Users
- Configure Credential Providers

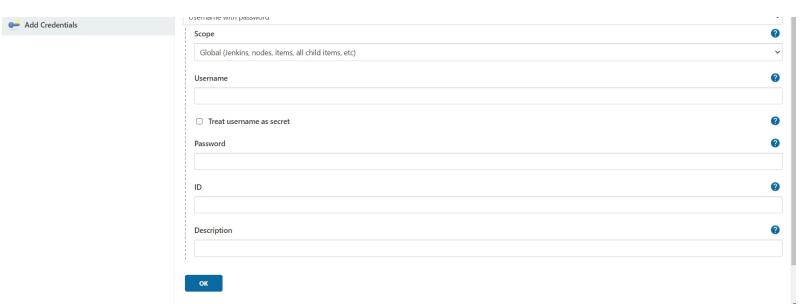
then click the Jenkins (present in the Stores scoped to Jenkins Section) as shown in the figure below

Now we are at Systems Tab, now click Global credentials (unrestricted) as shown in the figure below

Now in the Global credentials (unrestricted) Tab, click on the Add New credentials present on the left sidebar

Now select kind as username with a password and in Scope it has to be Global (Jenkins, Nodes, items, all child items, etc)

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 Add Credentials

Scope: Global (Jenkins, nodes, items, all child items, etc)

Username:
 Treat username as secret

Password:

ID:

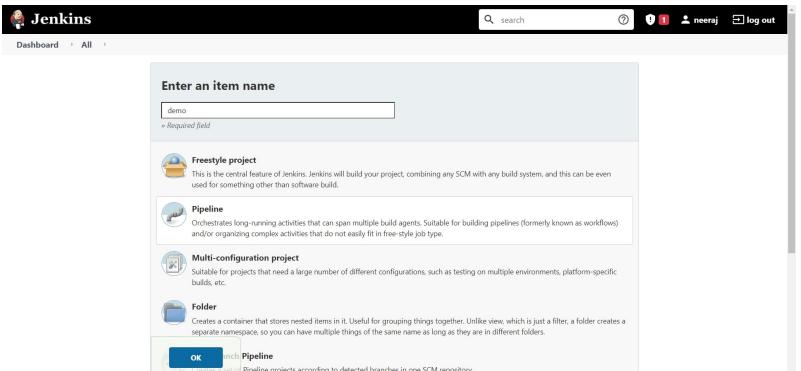
Description:

OK

- Enter your Bitbucket Username and password, Then Click on OK. You will get the credentials id auto-generated, Now copy this credentials id. We will be using it in our pipeline.

• 3) Now Go to Dashboard and Create a new job/item with a name (" You can use any name as per the project requirement ")

• 4) Choose Pipeline and proceed Further.


 Jenkins

Dashboard · All ·

Enter an item name: demo

Freestyle project: This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software builds.

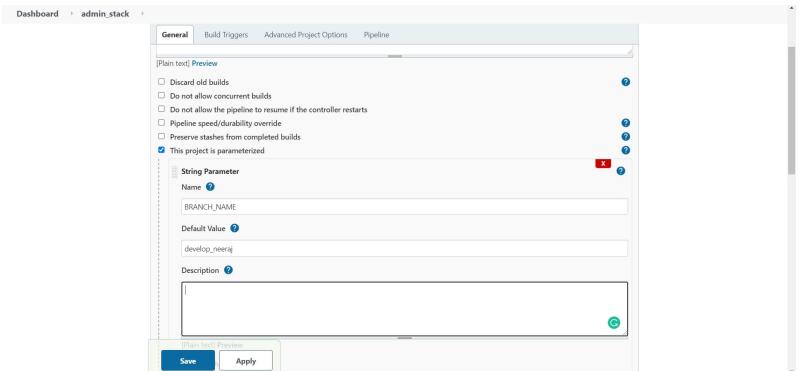
Pipeline: Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

Multi-configuration project: Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

Folder: Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.

OK · Pipeline · Pipeline projects according to detected branches in one SCM repository.

- 5) Now under General Tab select This project is parameterized and use string parameter Write "BRANCH_NAME" in the Name and Default Value write the branch name: "master" (Enter the default branch name as per the project and git repository)


 Dashboard · admin_stack ·

General · Build Triggers · Advanced Project Options · Pipeline

[Plain text] · Preview

 Discard old builds

 Do not allow concurrent builds

 Do not allow the pipeline to resume if the controller restarts

 Pipeline speed/durability override

 Preserve slaves from completed builds

 This project is parameterized

String Parameter

Name: BRANCH_NAME

Default Value: develop_neeraj

Description:

Save · Apply

- 6) Now in the Pipeline tab paste the content from JenkinsFile Present in [admin-stack/operations-stack/docker-image-build](#)

Please replace the credentials id and git repo URL with your name-specific URL.

NOTE There is the feature with the name "pipeline-syntax" available in the "Pipeline plugin" which we had installed in the earlier steps. Using this feature we can get help in creating our Declarative Pipeline in the Groovy language.

You can find this feature just below the Pipeline Definition block inside a job/item. Please see the screenshots below. Also, you can find complete documentation present at this [location](#)

The screenshot shows the Bitbucket interface for generating Pipeline Syntax snippets. On the left, there's a sidebar with various project links like Source, Commits, Branches, Pull requests, Pipelines, Deployments, Jira issues, Security, and Downloads. The main area has a header "Script" with a "try sample Pipeline..." button. Below it is a "Use Groovy Sandbox" checkbox and a link "Pipeline Syntax" which is circled in red. The URL in the address bar is "Dashboard > demo > Pipeline Syntax". The page content includes an "Overview" section with a snippet generator for "archiveArtifacts". It shows a "Steps" section with "archiveArtifacts" and "Files to archive" fields, and a "Generate Pipeline Script" button.

Who do I talk to?

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