

Application Deployment

Application:

Clone the below mentioned repo and deploy the application. (Run the application in port 80

[HTTP])

Repo URL: <https://github.com/sriram-R-krishnan/devops-build>

Docker:

Dockerize the application by creating a Dockerfile

Create a docker-compose file to use the above image

Bash Scripting:

Write 2 scripts

build.sh-for building docker images

deploy.sh-for deploying the image to server

Version Control:

Push the code to github to dev branch (use dockerignore & gitignore files)

Note: Use only CLI for related git commands

Docker hub:

Create 2 repos "dev" and "prod" to push images.

"Prod" repo must be private and "dev" repo can be public

Jenkins:

Install and configure jenkins build step as per needs to build, push & deploy the application.

Connect jenkins to the github repo with auto build trigger from both dev & master branch.

If code pushed to dev branch, docker image must build and pushed to dev repo in docker hub.

If dev merged to master, then docker image must be pushed to prod repo in docker hub.

AWS:

Launch t2.micro instance and deploy the create application.

Configure SG as below:

Whoever has the ip address can access the application

Login to server can should be made only from your ip address

Monitoring:

Setup a monitoring system to check the health status of the application.

(Open-source)

Sending notifications only if the application goes down is highly appreciable

Output Screenshots:

Jenkins Login page:

The screenshot shows the Jenkins user interface for managing credentials. The URL is `localhost:8080/user/rivin0609/credentials/`. On the left, there's a sidebar with links like Profile, Builds, My Views, Account, Appearance, Preferences, Security, Experiments, and Credentials (which is selected). The main content area is titled "Credentials". It shows a table with one row:

T	P	Store	Domain	ID	Name
		System	(global)	dockerhub	rivin0609/******** (Docker Hub credentials for pipeline)

Below this, there are sections for "Stores scoped to User: Vineeth" and "Stores from parent", each containing a table with one row:

P	Store	Domains
	User: Vineeth	(global)

P	Store	Domains
	System	(global)

At the bottom, there are icons for S, M, and L.

The screenshot shows the Jenkins dashboard. At the top, there's a header with a back arrow, a search icon, and a 'Finish update' button. Below the header, the Jenkins logo and name are displayed. A 'New Item' button and a 'Build History' link are visible. A 'Build Queue' section shows one item: 'my-ci-cd' (Status: Success, Last Success: 1 hr 7 min ago, Last Failure: N/A, Last Duration: 3.8 sec). A 'Build Executor Status' section indicates '(0 of 2 executors busy)'. At the bottom, there are icons for 'S' (Success), 'M' (Failure), and 'L' (Last failure).

AWS EC2 console:

The screenshot shows the AWS EC2 Instances page. The left sidebar includes links for Dashboard, EC2 Global View, Events, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Capacity Manager, Images, AMIs, and AMI Catalog. Under 'Instances', it lists 'Instances' and 'Instance Types'. The main content area shows a table titled 'Instances (1/1) Info' with one row for 'Application-deployment' (Instance ID: i-07d03686f50b0d399, State: Running, Type: t2.micro, Status: 2/2 checks passed). Below the table, a detailed view for 'i-07d03686f50b0d399 (Application-deployment)' is shown, including sections for Details, Status and alarms, Monitoring, Security, Networking, Storage, and Tags. The 'Details' tab is selected, displaying information such as Instance ID, Public IP address (13.218.140.68), Private IP address (172.31.84.148), Instance state (Running), Hostname type (IP name: ip-172-31-84-148.ec2.internal), and VPC ID (vpc-06ccf86dfa9b07fse).

Docker Hub:

The screenshot shows the Docker Hub 'My Hub' page for user 'ritvin0609'. The left sidebar includes 'Repositories' (selected), 'Hardened Images', 'Collaborations', 'Settings', 'Default privacy', 'Notifications', 'Billing', 'Usage', 'Pulls', and 'Storage'. The main content area shows a table of repositories under the heading 'Repositories'. The table has columns for Name, Last Pushed, Contains, Visibility, and Scout. It lists three repositories: 'ritvin0609/prod' (Last Pushed: 2 days ago, Contains: IMAGE, Visibility: Private, Scout: Inactive), 'ritvin0609/dev' (Last Pushed: 2 days ago, Contains: IMAGE, Visibility: Public, Scout: Inactive), and 'ritvin0609/custom-nginx' (Last Pushed: 4 months ago, Contains: IMAGE, Visibility: Public, Scout: Inactive). A search bar at the top right allows searching by repository name.

Deployed site page:

Not secure 13.218.140.68

Google Lens Finish update

Home Login SignUp

OnlineShop

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