

## **Deploy react app on Nginx which is installed on EC2 Using Jenkins** **And send Email Notification.**

### **What is Angular ?**

Angular is a powerful open-source framework for building dynamic web applications. Angular is a platform and framework for building single-page client applications using HTML and TypeScript. Angular is written in TypeScript. It implements core and optional functionality as a set of TypeScript libraries that you import into your applications.

The basic building blocks of the Angular framework are Angular components that are organized into NgModules. NgModules collect related code into functional sets; an Angular application is defined by a set of NgModules.

### **Prerequisite :**

- **Node.js and npm** : Angular projects require Node.js, which includes npm (Node Package Manager), to manage dependencies and build processes. Make sure you have Node.js installed on your system. Following are the commands we use in our project to install node js and npm(node package manager).

```
curl -fsSL https://deb.nodesource.com/setup_18.x | sudo -E bash -  
sudo apt-get install -y nodejs  
sudo npm install -g npm@9.8.1(To update npm package)  
sudo npm install -g @angular/cli  
node -v  
npm -v
```

- **Angular CLI** : The Angular CLI (Command Line Interface) is a powerful tool that helps you create, manage, and build Angular projects. Using the following command we can install angular cli.

```
sudo npm install -g @angular/cli  
ng version
```

Following are the steps to deploy angular app on Nginx(EC2 server):

**Steps :**

- 1) Launch one EC2 instance(ubuntu).
- 2) Goto Jenkins Dashboard, click on “**New Item**”, select **freestyle job** and give Name to it.
- 3) In the **source code management section**, select the **Git radio button** and copy paste repository url and also select credential for your repository. Specify your branch name.

Git ?

Repositories ?

Repository URL ?

https://github.com/SumitMatte/simple-login.git

Credentials ?

SumitMatte/\*\*\*\*\* (git)

Add ▾

Advanced ▾

Branches to build ?

Branch Specifier (blank for 'any') ?

\*/master

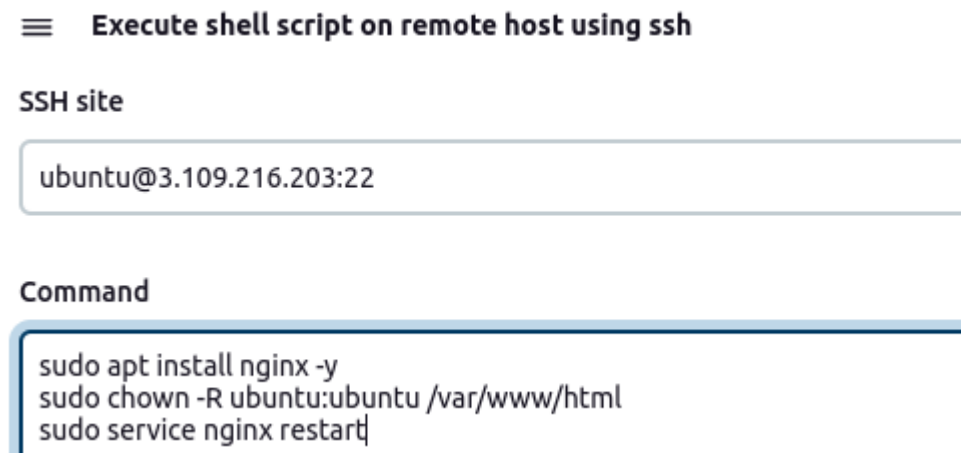
Add Branch

- 4) Under the **build environment section**, click on checkbox “**Delete workspace before build starts**”. If we want to run a job again it will clean the workspace.
- 5) In the build **step section** select **execute shell** and write following command. It is necessary to **install nodejs and npm** to run react application.

## Build Steps



- 6) For deploying an angular app on Nginx, we need to install Nginx on EC2(Ubuntu), again under the build step section select, “**Execute shell script on remote host using ssh**” and write the following command.



- 7) Under post build action select “**Send build artifacts over SSH**”, Select your SSH server Name, mention files or directory which you want to copy and write command in “**Exec command**” section.

☰ **Send build artifacts over SSH** ?

**SSH Publishers**

SSH Server

**Name** ?

ubuntu

Advanced ▾

**Transfers**

Transfer Set

**Source files** ?

dist/\*\*

**Remove prefix** ?

dist/simple-login/

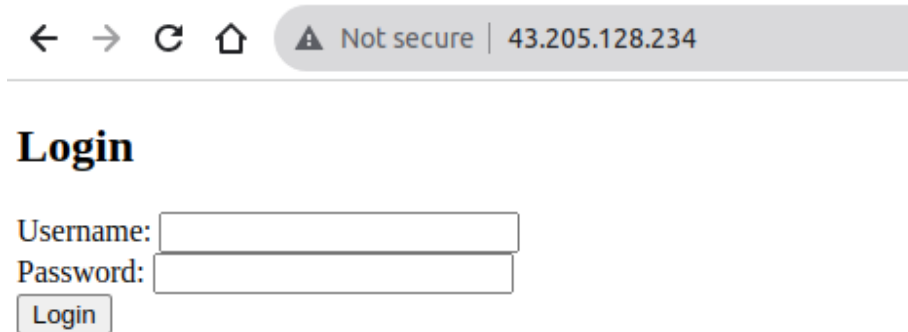
**Remote directory** ?

/var/www/html

**Exec command** ?

sudo service nginx restart

- 8) At last click on apply and save and run your job and see the output on the browser.



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## Login

Username:

Password:

- 9)