

Jenkins

Jenkins, an open source automation server written in java is a software that allows continuous integration. Continuous Integration is a development practice that requires developers to integrate code at regular intervals.

Blue Ocean: Blue Ocean rethinks the User Experience(UX) of Jenkins. It is designed to make Jenkins UI more efficient by reducing clutter and increasing the clarity. Its main features include Sophisticated visualizations, Pipeline editor, Personalisation.

Installing BlueOcean:

- Log into Jenkins and click on Manage Jenkins from the left menu.
- Then Click on manage Plug-ins on the left.
- Click the Available tab and select the Blue Ocean (Blue Ocean Aggregator) Plugin and then install it.
- Then an “open blue ocean” option will be available on the left, click on that to use BlueOcean.

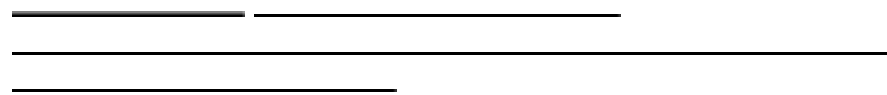
Building a Private GitHub Repository using Jenkins:

- Create a private repository on GitHub.
- Log-in to Jenkins and start a new freestyle project.
- Go to Source Management Section and select Git.
- Paste the URL of the created private repository in the URL section.

- Now as the repository is private we must give Jenkins permission to access the repository. Click on the add button near credentials option.
- Provide the username and password of your GitHub account and select it through credentials dropdown menu.
- Configure other build options as per requirement and apply and build the project.

Using GIT Scm Polling: Git SCM polling creates a link between Jenkins and GitHub and Jenkins builds the project whenever a new commit is made to repository.

- Go to the configure option of the project for which you need to implement Git SCM polling.
- Select GitHub hook trigger for Git SCM polling under build triggers section.



- Configure other build options appropriately and apply and save.
- Now install ngrok and run “./ngrok http 8080”.It will give you a public ip address.
- Go to the settings of the repository on GitHub for which you are using scm polling and then to Integration and services.
- Select add service and then search for Jenkins (GitHub plugin).
- Under Jenkins url section paste “public ip given by ngrok/github-webhook”.

- Select Active and click on Add service. **Post Build Step Email Notification:**

- Click on Manage Jenkins on the left and then configuration systems and then scroll down to email-notifications section.
- Add the smtp server details and then configure the mail account that will be used to send the email.
- Select use SMTP authentication if required and enter account username and password.
- Select use SSL and specify the SMTP port.
- Now, go to the Configuration page of project and scroll down to post build options.
- Select E-mail notifications in drop down menu and enter the email-id of recipients.
- Apply and save changes.