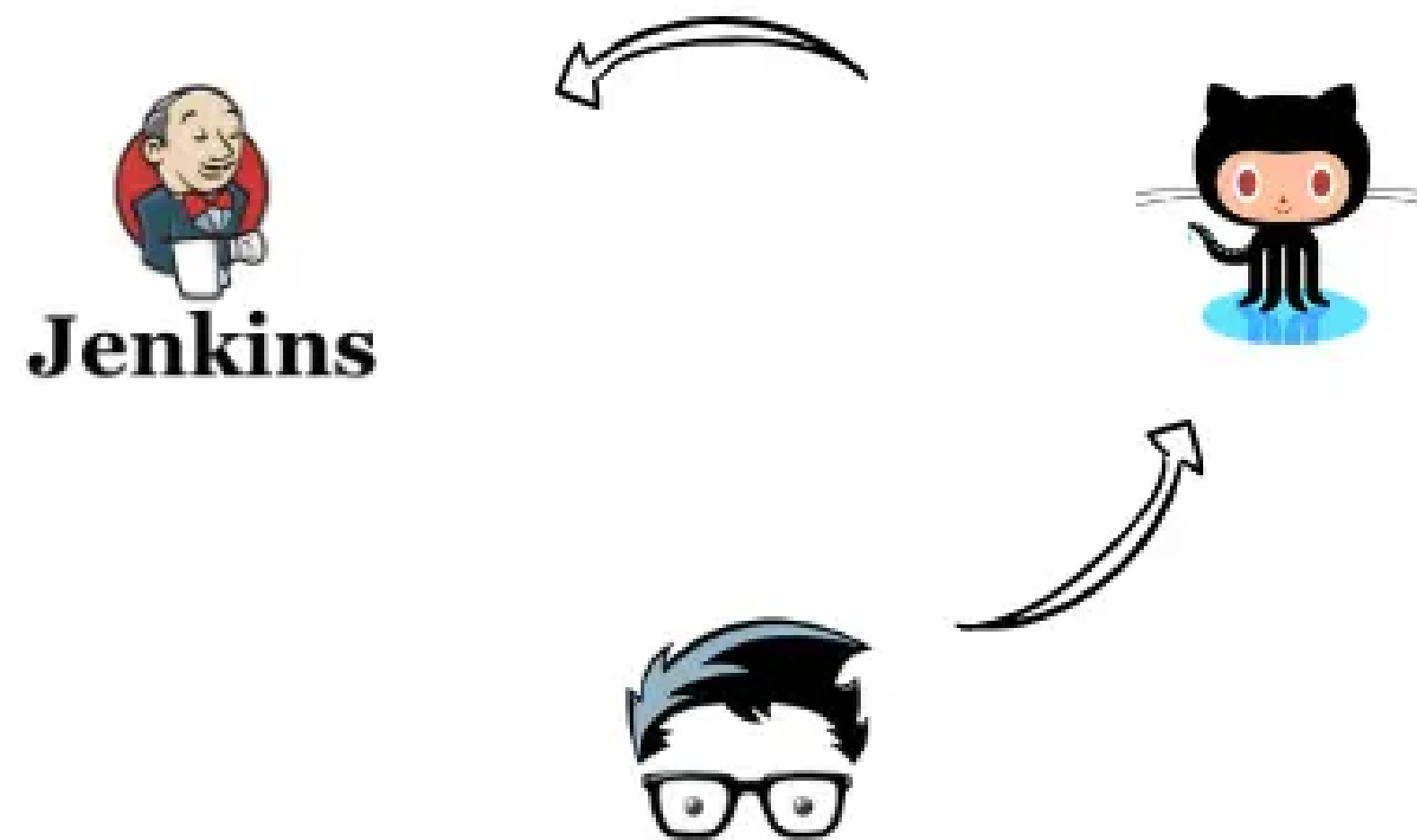# Jenkins Automated Build Trigger On Github Pull Request

by **devopscube** · June 16, 2020

Building projects based on pull request is something you cannot avoid in CI/CD pipelines. Nowadays every team does several deployments/operations per day and lots of builds have to happen in this process.
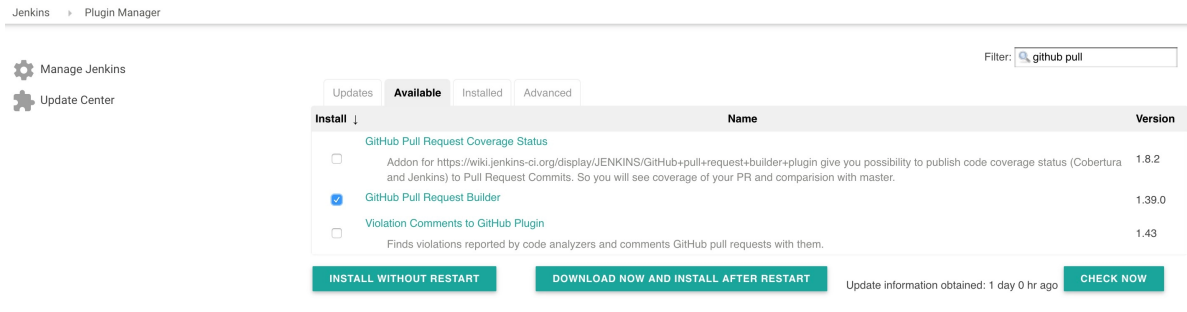
Also, the teams work on the same repo collaborating code require faster code integrations. So it is better to have an automated build process that kicks off the CI/CD pipeline on a pull request rather than manually triggering the jobs.

Trigger Builds Automatically On Github Pull Request

Note: Multipbranch Pipeline is the best way to achieve Jenkins pull request based workflow as it is natively available in Jenkins. Check out this article on the multibranch pipeline for setup and configuration.

Install Github Pull Request Builder Plugin

1. Go to `Manange Jenkins --> Manage Plugins`

2. Click on the `available` tab at the top and search for `Github Pull Request Builder`. Select the plugin using the checkbox and click `Install without restart` as shown in the image below.
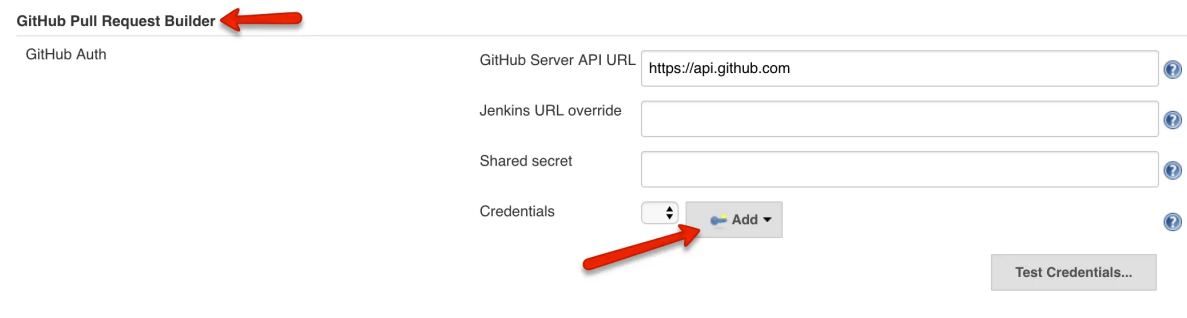

3. Once the plugin is installed, select the restart checkbox as shown in the image below.
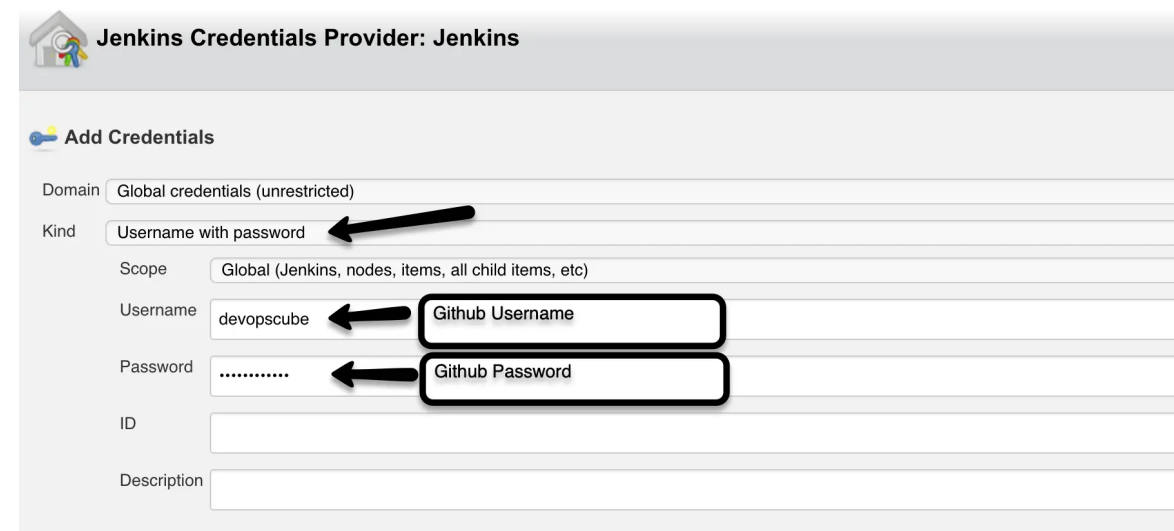

Github Pull Request Builder Configuration

Once Jenkins is restarted, follow the steps given below for configuring the plugin with your GitHub account.
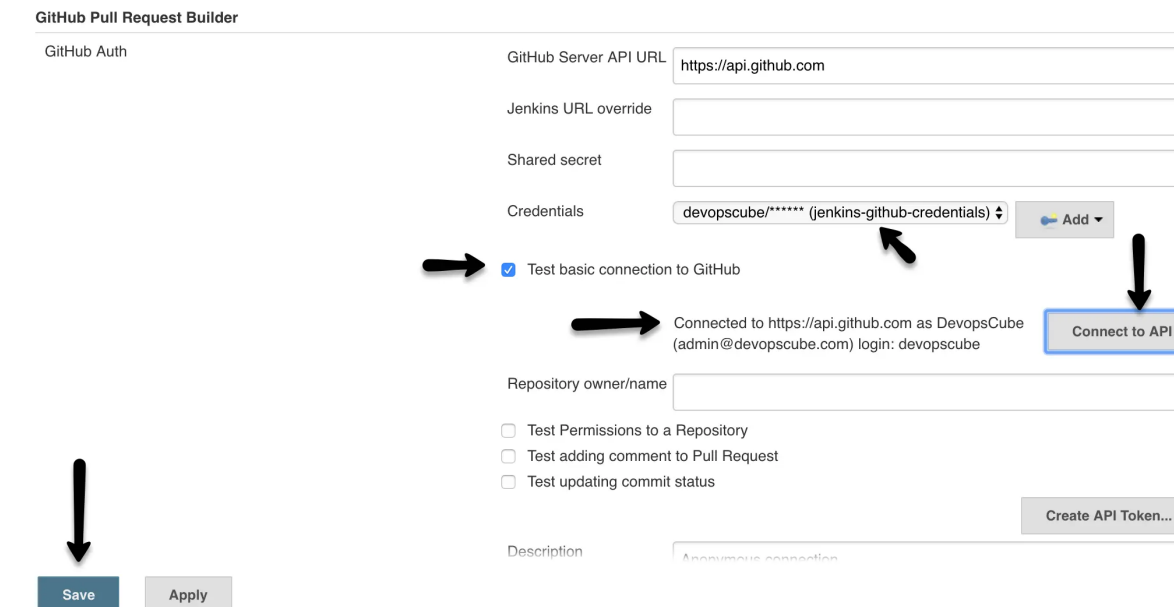
1. Head over to `Manange Jenkins --> Configure System`

2. Find "GitHub Pull Request Builder" section and click add credentials.

3 Enter your Github username and password and add it.

4 You can test the Github API connection using the test credentials button. It should show "connected" as shown below. Save the configuration after testing the API connection.
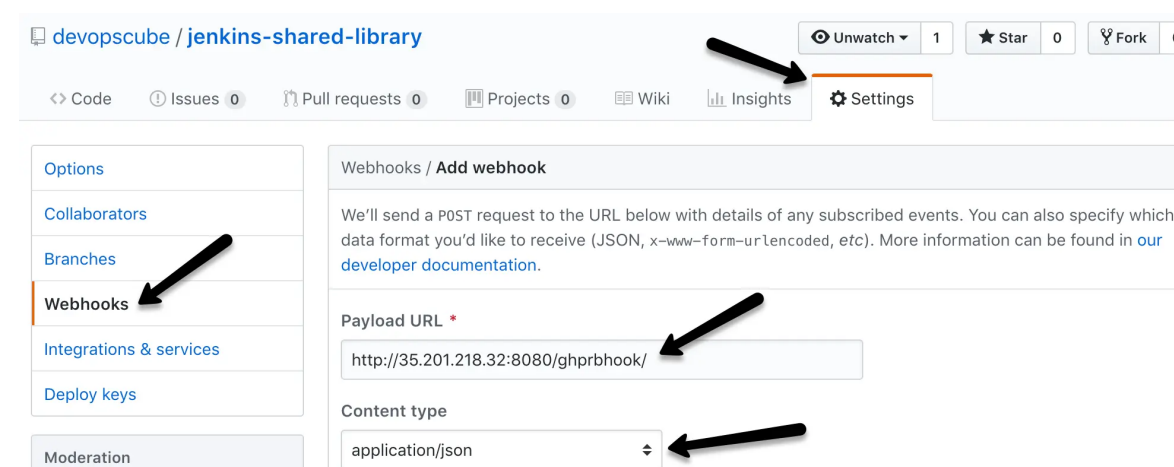

Github Repo Webhook Configuration

For Jenkins to receive PR events through the pull request plugin, you need to add the Jenkins pull request builder payload URL in the Github repository settings.

1 Go to Github repository settings, and under webhooks, add the Jenkins pull request builder payload URL. It has the following format

```
http://<Jenkins-IP>:<port>/ghprbhook/
```


If you need just the PR triggers, you can select the "Let me select individual events" option and select just the "Pull requests" option. Save

the webhook after selecting the required events.

2 Once saved, go back to the webhook option and see if there is a green tick. It means Github is able to successfully deliver the events to the Jenkins webhook URL.

Job Configuration for Automated Pull Request Builds

Lets get started with the build job configuration for PR plugin.

1 Under the General tab, select Github project option and enter the Github repo URL for which you want the PR builds without .git extension as shown below.

2 Click advanced option and enable automatic PR build trigger and add the target branches you would raise the PR for.

3 Add your pipeline build steps and save the configuration.

4 Now raise a PR against the whitelisted branch you have given in the Jenkins PR trigger settings. You should see the job getting triggered on Jenkins.

Other Jenkins PR based Build Workflows

Github Pull request builder plugin is not actively developed as the same functionality is being provided by multi-branch pipelines and Github organisation project.

There is also a Generic Webhook Plugin that can be used to trigger Jenkins jobs on a Pull Request.

Also, you can write custom API endpoints that accept Github webhooks and process PR requests to trigger Jenkins job remotely. Custom APIs help only when the native Jenkins functionalities are not providing the workflow you are looking for.

TAGS: GIT

2 SHARES: **SHARE** 2   **TWEET**

devopscube

Established in 2014, a community for developers and system admins. Our goal is to continue to build a growing DevOps community offering the best in-depth articles, interviews, event listings, whitepapers, infographics and much more on DevOps.

VIEW COMMENTS (13)

devops

Learn   Resources   News   Newsletter   Certification Guides

START HERE

D — DEVOPS

How To Backup Jenkins Data and Configurations

by **Bibin Wilson** · June 14, 2021

It is very important to have Jenkins backup with its data and configurations. It includes job configs, builds...
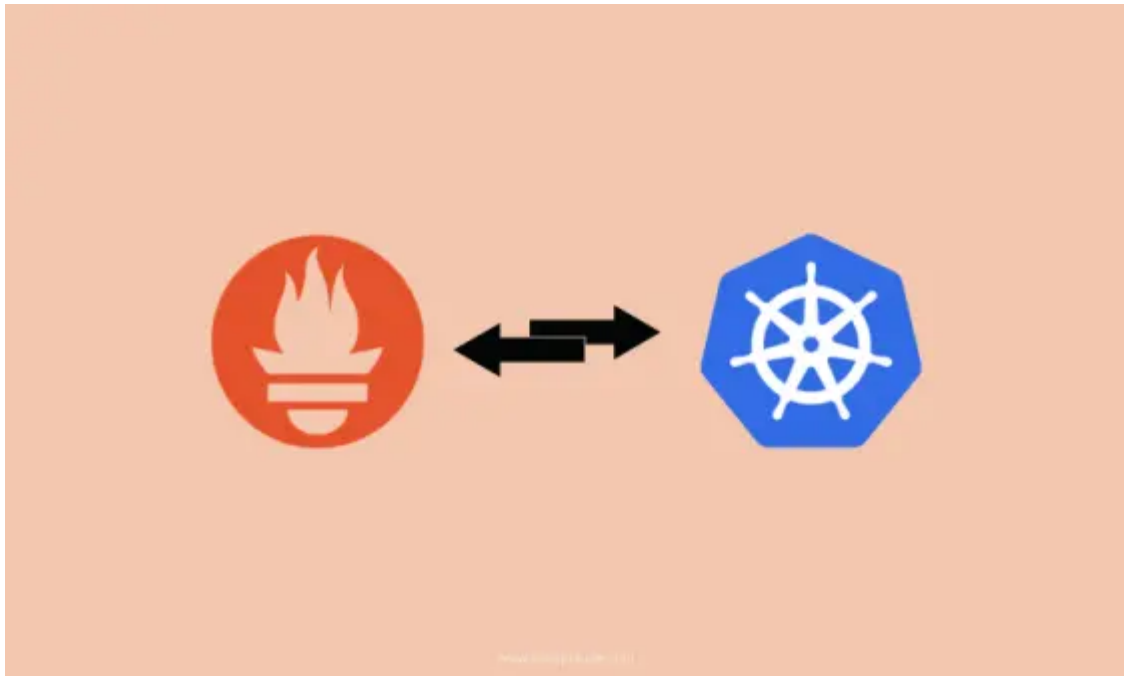

H — HOW TO

How to Setup Custom UI Theme For Jenkins

by **devopscube** · September 12, 2019

If you are bored with the old Jenkins UI, its font, and icons, you can give your Jenkins...

D — DEVOPS

How to Setup Prometheus Monitoring On Kubernetes Cluster

by **Bibin Wilson** · April 7, 2021

This article will guide you through setting up Prometheus on a Kubernetes cluster for monitoring the Kubernetes cluster....
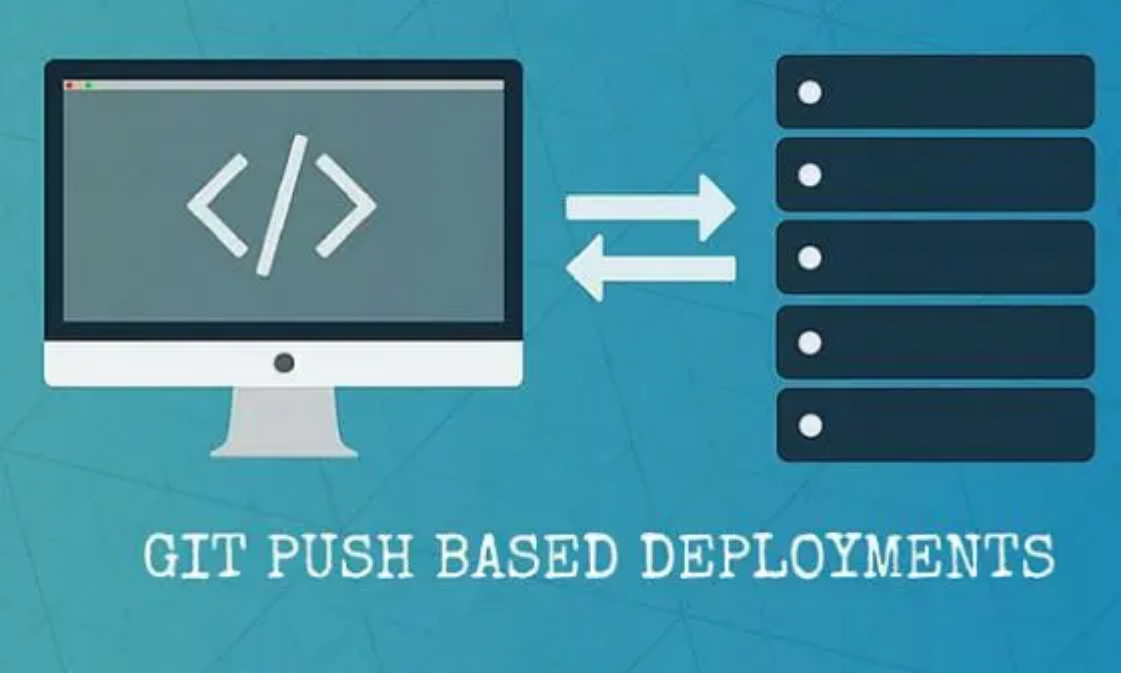

D — DEVOPS

Devops Trends 2015 : How it Becomes Mainstream

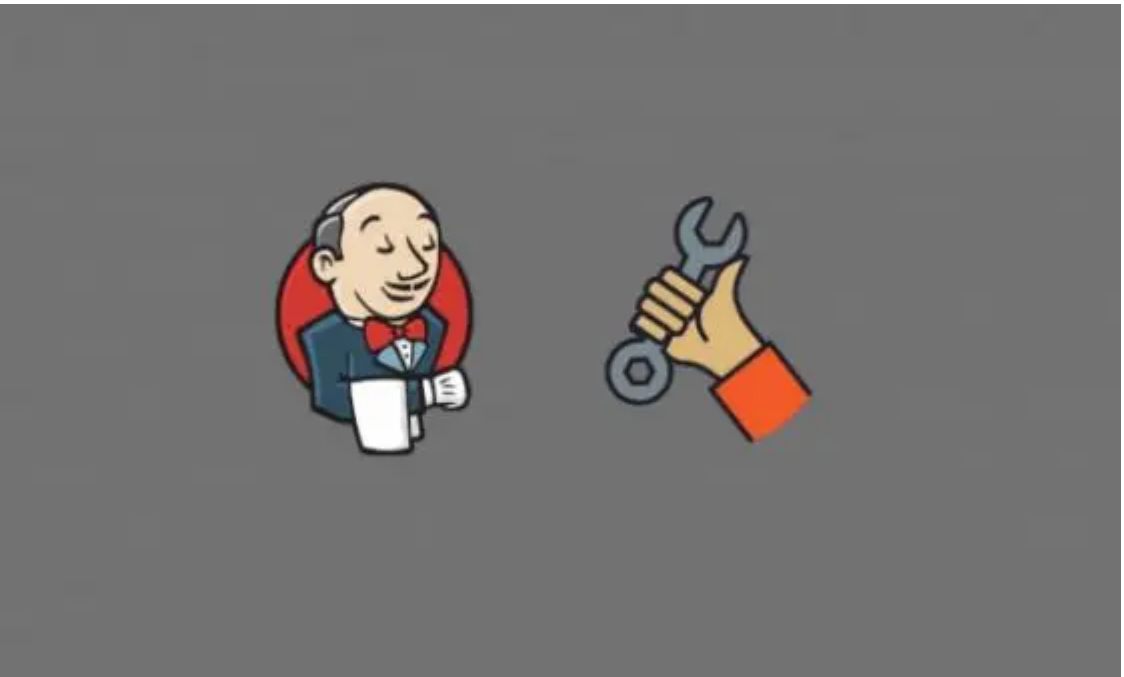by **Bibin Wilson** · March 15, 2015

People are still confused about the term Devops. Devops is a philosophy, where developers and operations team work...

devops

Learn ⌄   Resources ⌄   News   Newsletter   Certification Guides ⌄   START HERE ➤   🔍

D — DEVOPS

Automated Deployment With Git Push Using Ansible

by **Prabhu Vignesh Kumar Rajagopal** · July 30, 2016

Deploying applications these days are really a big thing. Especially developers are already working hard for their logic...

C — CI/CD

How to Install and Configure Jenkins 2 on centos/Redhat Servers

by **devopscube** · April 3, 2020

In our previous post, we explained the latest Jenkins features and installation for Debian-based servers. As per a...

DevopsCube

Privacy Policy

About

Site Map

Disclaimer

Contribute

Advertise

Archives