CI/CD approach

CI/CD

- Benefits
- Testing and deploy process
- Current approach challenges
- Tools

Benefits / testing and deploy process

How it works:

1. Continuous integration refers to maintaining a central repository Which ensures the software is always maintained in a streamline where users can make use and deploy

2. Continuous delivery prepares code changes for production release without disturbing the production environment for any wrong changes being made

   Fully automates the deploying process

3. Code -> pushing to source repository -> CI server to run the deploy process -> build/test pass the result to the users

4. Due to early capture of bugs and rectified, code pushed to production are less of bugs and developers are alerted before they push code to production

Benefits towards cost

1. Reduce downtime and revert back to production time saving
2. Faster release reducing bug fixing
3. Less of human error , faster deployments with less bugs and stable enviroment
4. Footprint for large infrastructure is not required , less infra cost

Issue with current approach

1. Mindset of the entire team with different technical approach causing delay in delivering the project

2. Infrastructure cost maintaining production and dev environments

3. Understanding the entire process (technical wise with deep knowledge) which required to gain knowledge on many applications to created stacks and deploy

tools

Try it yourself with these two simple “planets”:

1. Circle CI for continuous integration and continuous development

2. AWS cloud provided by udacity

CONCLUSION

Following this approach reduces the development and release cost and utilizing the resource in other projects and tasks