UDAPEOPLE
CI/CD BENEFITS PROPOSAL

Overview

1. What does CI/CD stand for?
2. What are our current pain points?
3. How can we benefits from CI/CD and DevOps principles?
4. What are challenges we will be confronted with?

What does CI/CD stand for?

Continuous Delivery

- An engineering practice in which teams produce and release value in short cycles.

Continuous Integration

- The practice of merging all developers's working copies to a shared mainline several times a day. Puts an emphasis on automated code built, test, analysis on code quality to finally produce a high quality, deployable artifact.

Continuous Deployment

- A software engineering approach in which the value is delivered frequently through automated deployments with smoke test, blue green strategy,…

What are current pain points?

1. Manual release process is error-prone, lead to delays of production deployments.
2. Poor software quality since do not have time for quality analysis.
3. Deployments are complex, lack of smoke test and rollback mechanisms

How can we benefits from CICD and DevOps

Problem

1. Manual and error-prone release process
2. Poor software quality
3. Complex deployments and often failed

Solution

1. Implement Continuous Integration: automate compiling, testing, code analysis and artifact storage
2. Automate Infrastructure Provision
3. Automate Smoke Test and Rollback Mechanism

Benefits:

1. Cost reduce due to less human errors
2. Reduce troubleshooting time
3. Avoid downtime

What are the challenges we will be confronted with?

1. High amount of initial cost and learning time.
2. CI/CD is not a one time effort, requires support and maintainance.