

Ci - CD Proposal

After thorough review for the existing process , our team has identified the below challenges which can be improved with the introduction of CI/CD pipelines

Challenges

- . 1) Current deployment takes several takes hence leading to longer time to market
- . 2) On-prem infrastructure costing more as several un-used services continues to be live
- . 3) Scalability issue as its is difficult to extend the resources as per need
- . 4) Longer feedback as there are very few automated tests in the existing pipeline

Proposed Solution

1) Enable Continuous Integration Description

Integrate the CI Tools with current code repository and it should check whether there the code is build successfully upon each merge

Technical Benefits

Faster Feedback and confidence that any new check-in doesn't break the code

Business Benefit

Reduced cost due to fixing of issues at later stage

2) Setup the unit testing code coverage criteria Description

Add certain rules such as minimal unit testing pass percentage and sonar cube code coverage to ensure right coverage

Technical Benefits

High quality code and minimal defect leakage

Business Benefit

Enhanced customer satisfaction

3) Setup infrastructure as Code

Description

The infrastructure will be setup as part of the code and with every new build, a new scalable

and reliable environment will be setup

Technical Benefits

High scalable cost effective infrastructure

Business Benefits

Reduced cost to manage the infrastructure

4) Automated tests as part of CI/CD Description

Create automated tests to verify the application after deployment and ensure the high quality build is promoted to next phase

Benefits

High Quality Product with minimal defect leakage

Business Benefit

Enhanced customer satisfaction and increased revenue

5) Monitoring

Description

Implement the production monitoring to analyse the system behaviour and resource utilisation

Benefits

Capturing several stats from the production to understand the behaviour and resource utilization

Business Benefit

Cost reduction