Adopting CI/CD For Our Cloud-Based Software Products

A Proposal

Overview

Continuous Integration

This is a way to get developers to work together seamlessly. It is the practice of properly pulling all developers' codes into a shared repository.

Overview (Contd)

Continuous Deployment

This involves the process of **automatically** rolling out software features to users **frequently**.

Why CI/CD is Essential At This Time

- **Catch Errors and Security Issues Early**: Merging to a repository involves compiling and testing the codes being merged. Each merge process will quickly identify compile errors, test errors and vulnerability issues while also revealing the sources of these errors. Error detection would otherwise be tedious, time consuming, costing so much.
- **Automated Infrastructure Creation and Cleanup**: Cloud infrastructure can be created automatically after careful consideration of company and software requirements. Infrastructure as code means less error in infrastructure creation. This process is often repetitive, therefore time can be saved by creating them as code for reuse.
- **Automatic Deployment**: This ensures that completed features are automatically sent to production and placed in the hands of users as fast as possible. Because the process is automatic, there are less delays caused by manual checks and other bottlenecks.
- **Automated Smoke tests and Rollback**: After deploying a feature to production, the feature and indeed the entire software is automatically checked against set metrics to ensure that everything is behaving exactly as expected. In the event that a feature or the software is not behaving quite well, the entire deployment is immediately rolled back and restored to working condition.

What Does That Mean For Us?

Increased Revenue

Timely Rollout of Features

Achieving Business Goals

Fewer Errors

And

Reduced Costs

Customer Satisfaction and Employee Morale Boost