Continuous Integration & Continuous Deployment

What is it?

Continuous Integration:

The practice of merging all developers' working copies to a shared mainline several times a day. Each integration will then be verified by an automated build and unit tests

Continuous Deployment:

A software engineering approach in which the value is delivered frequently through automated deployments. Infrastructure can be automatically created, application deployed, smoke tests run to ensure new version is functional and rollbacks automated in case of issues.

Benefits

Less developer time on issues from new code

Fewer bugs in production and less time testing

Faster deployments with less errors

Quicker to market

Reduced downtime

Easier to return production to a working state in case of issues

Reduced risk

How

The CI/CD Pipeline