Driving First Time Quality & Enabling Rapid Feedback

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Agenda

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• Continuous Integration
  o Definition
    o Continuous Delivery Pipeline
  o Key Concepts
  o How it works?
  o Benefits

• Questions
Continuous Integration is the practice of testing each change done to your codebase automatically and as early as possible.
Continuous Delivery Pipeline

1. Develop
   - Branching by Abstraction
   - Peer Review
   - Unit Tests

2. Continuous Integration System

3. Environment Mgmt. Engine
   - Baslined Environments
   - Test Data Propagation
   - Automatic Configuration

4. Deployment Orchestration Engine
   - Examples of Environments
     - Managed: Development, Test, UAT, Production

5. Automatic Test Harnesses
   - GUI
   - API
   - Back End
   - Layered Test Techniques

6. Approval and Toggling
   - Dashboards
   - APLM
   - Reports
   - Notifications

7. Production Deployment
   - Phased Rollouts
   - Rollback Capabilities
   - APM and Analytics

8. Feedback Mechanisms
   - Version
   - Build
   - Basic Test Package
   - Deploy to SAR
   - Governance Checks
   - Feedback Mechanism

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Key Concepts

- Maintain a source Code Repository
- Automate the build process
- Automatically run tests after every build
- Every Code Check-In Go thru the CI System
How it works?

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Benefits

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• First time quality
  • Errors detected early stage
  • Quality built-in

• Rapid Feedback
  • Reduce complex and long integration
  • Deliver faster
  • Increase visibility

• Optimize cost
  • Reduce re-work
Continuous integration (CI) is the real meat behind the Continuous Delivery (CD) process and is the reason that makes Continuous Delivery possible.
Questions
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