

How We Use Jenkins in WeiDai ?

Build Deploy and Test With Jenkins for Java Application

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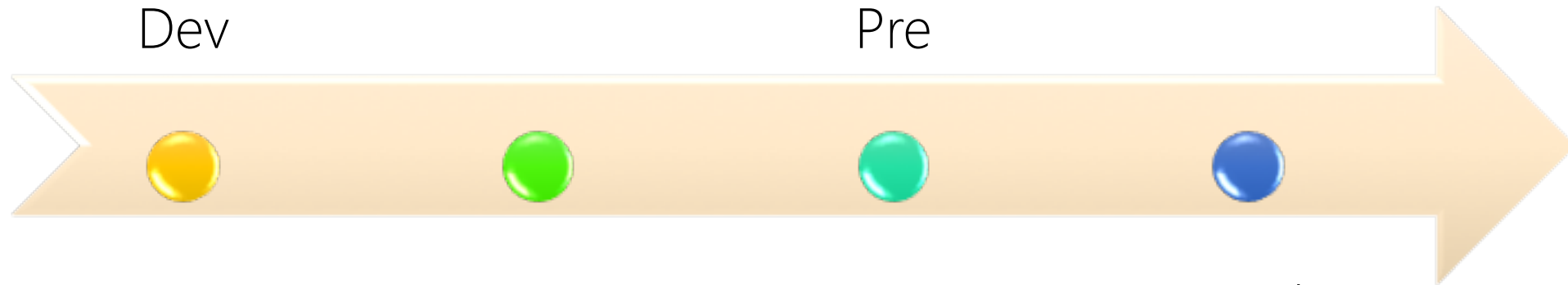
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Java Application Summary

- Application Number: 400+
- Build Tool: Apache Maven
- RPC Framework: Apache Dubbo
- Package Type: Jar & War

Environment

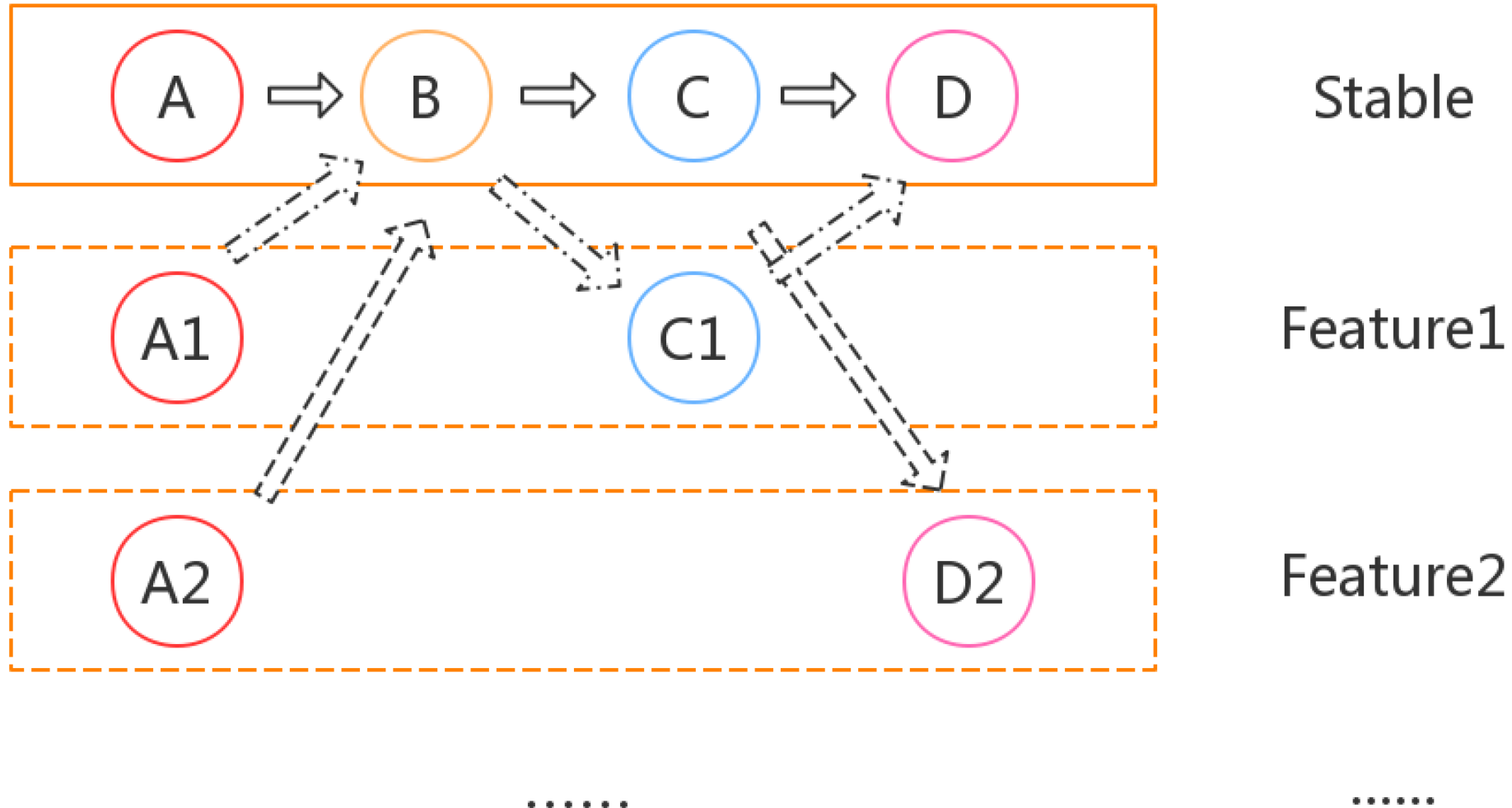


Test

- Feature
- Stable

Prod

Test Environment: Feature VS Stable



Test Environment: Feature VS Stable

Java Application	App A	App B	App C	App D
Jenkins Job for Stable	TEST_A	TEST_B	TEST_C	TEST_D
Jenkins Job for Feature1	TEST_A_1		TEST_C_1	
Jenkins Job for Feature2	TEST_A_2			TEST_D_2

Use Jenkins API

- Standardization & Automation
- Python API & Java API
- Feature:
 - Job create、 build、 remove
 - get build logs and status

Jenkins for Deploy

- Jenkins Job Number: 2000+
- Jenkins Node Number: 1 Master + 4 Agents
- Deploy Tools:
 - Shell & Python Script
 - Publish Over SSH Plugin & Ansible

SonarQube Code Quality Analysis

- Jenkins Kubernetes Plugin
- Per Application, Per Jenkins Job
- Per Job Build, Per Jenkins Agent
- Per Jenkins Agent, Per K8s Pod

JaCoCo Coverage for Functional Test

- Add JVM args of jacocoagent on application start script
- Pipeline:
 - Checkout -> Build -> DumpJaCoCoExec -> Report
- Custom: get coverage of changed files

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Thank You !