# • Executive Summary: POC on Mobile DevOps for Android Apps.

***Process***

- To develop mobile pipeline for DevOps deployment of Android applications.
- Android application developed in android Studio, Developer will commit the code in Github repository.
- ALM, life cycle managed and maintained in by JIRA, it will record all builds in Jenkins and is linked to created stories.
- Once code committed in GIT a Jenkins job will be triggered for build. Jenkins is configured in HA mode.
- Gradle will process the Android build and provide the APK's to future and release branches.
- The artifacts will be stored in Nexus,
- MS app Center will do the deployment to respective release environments for PROD,QA and DEV and create dashboard reports.

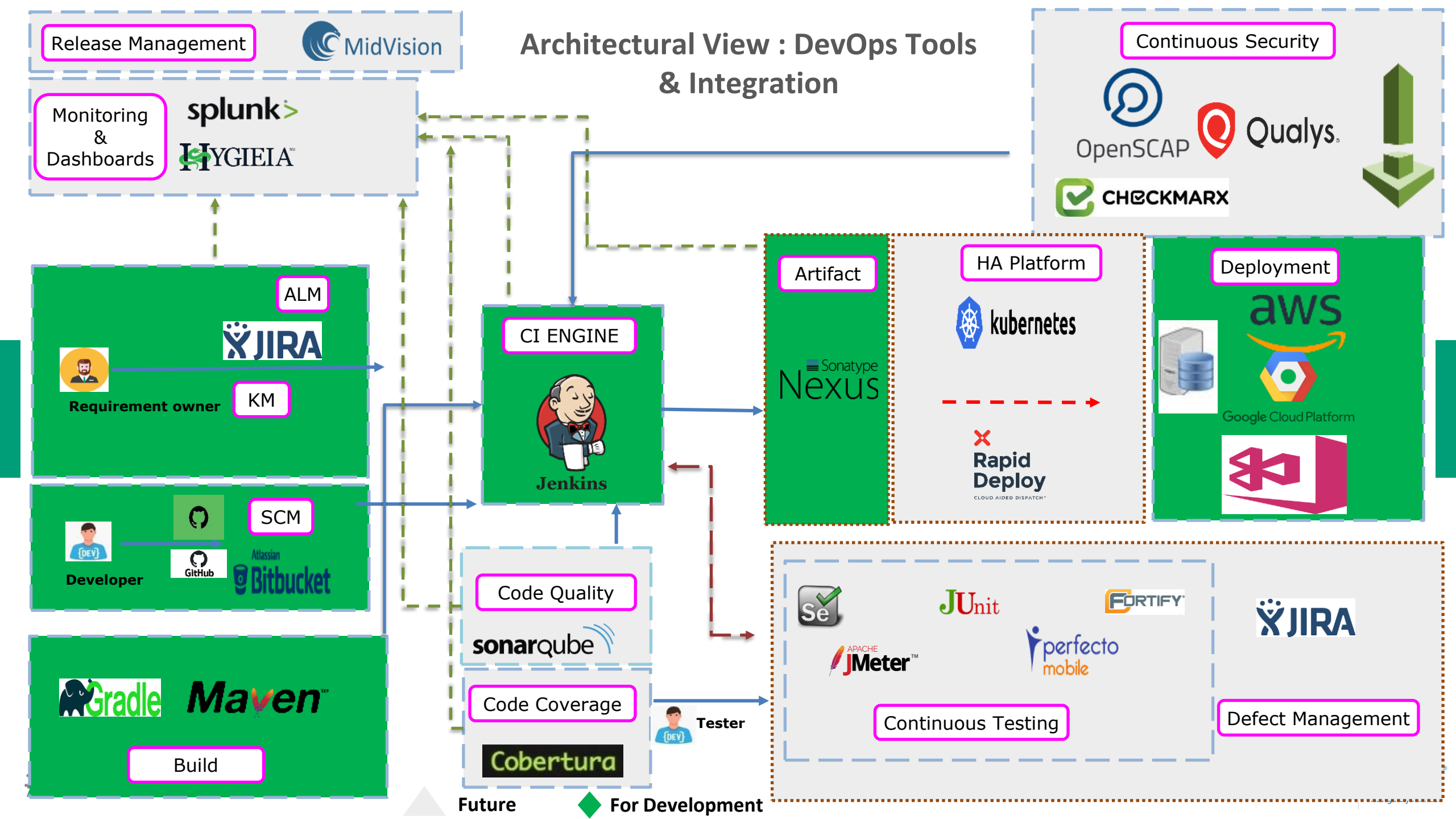
***Tools Integration***

- Android studio integrated to GITHub and Jira creation of build story
- GIBhub integrated with Jenkins plugins
- Gradle is integrated to Jenkins, Jenkins is configured for Master and Slave for HA in Cloud environment.
- CI/CD pipeline orchestrated by Jenkins. Integrated from GIThub, AppCenter and NEXUS.
- MS App Center deploys the build successfully to various environments necessary plugins are configured.

***Benefits from Mobility***

- Better maintainability of mobile apps over cloud for frequent releases
- Secured platform for Developing app at lower cost
- Automated deployments and standardized environments support increasing code quality with automation
- Applications have made it easier for customers on business information with speed, easiness and at same time remain connected.
- Provides continuous High availability across releases, less time to market with recent updates in mobile platform.
- Improved visibility OTG and major reach for customers

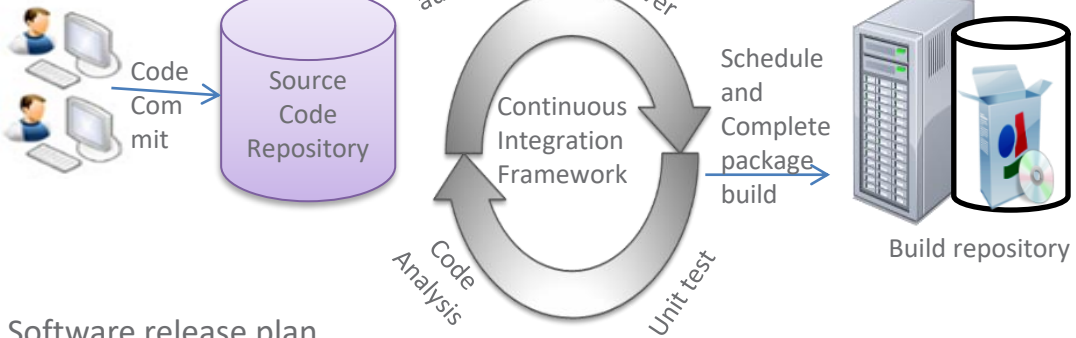
# Architectural View : DevOps Tools & Integration

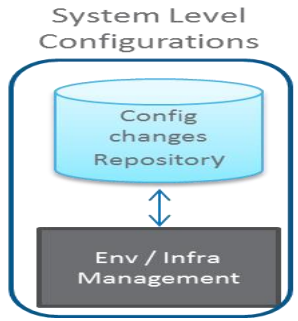


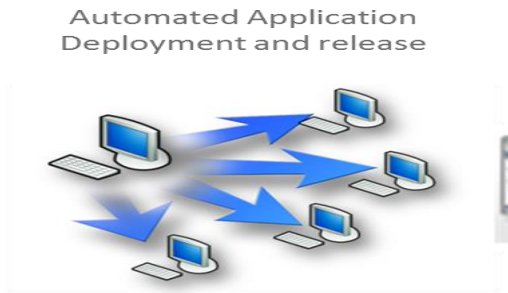
# Illustrative* CI/CD Pipeline View

## Continuous Integration

## Continuous Deployment





Software release plan

| IDE | Application Lifecycle Management Tools | Version Control | Build | Artifact Respiratory | Orchestrator | Deployment Automation | Application & Infra Monitoring | Environment Provisioning | Dashboard |
|---|---|---|---|---|---|---|---|---|---|
| Android | android studio, JIRA | Atlassian Bitbucket, GitHub | Gradle | Sonatype Nexus | Jenkins | Visual Studio App Center (Obj-C) | ELK, splunk> | aws, Google Cloud Platform | HYGIEIA |