



Prodapt - SDIL – Fixathon One Click - Deployment



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Problem Statement

Current Scenario - Overview

- Currently, the deployment is done manually and require SDIL deployment team to present during the deployment window.
- Engineer follow the deployment guide then proceed with deployment at each country and component level.



Current Challenges



- Too many manual steps and swivel process
- More time in validating VMs and N/w Connectivity.
- Too many dependencies/pre-requisites
- High Opex cost

Validation Enablers



- Automate pre-checks and post validations
- Configuration script to enable ONE click deployment.
- Use Docker / kubernetes to orchestrate deployment.

Advantages



- Makes it seamless and simple to operate a complex multi-geographic pipeline.
- Greater accuracy and reducing the human error factor
- Build pipeline as a code with intermediate CI/CD stages using Jenkins.
- Create Monitoring dashboard through artefacts

Results

60%↓

Reduction in Deployment
time for end-to-end
CI/CD window

70%↓

Reduction in waiting time
with parallel execution of
multiple applications/
countries

60%↓

Lower IT spend in the
process and resource usage

Increase↑
Reusability

Same toolchain can be used
for multiple environment
Prod & Pre-Prod.





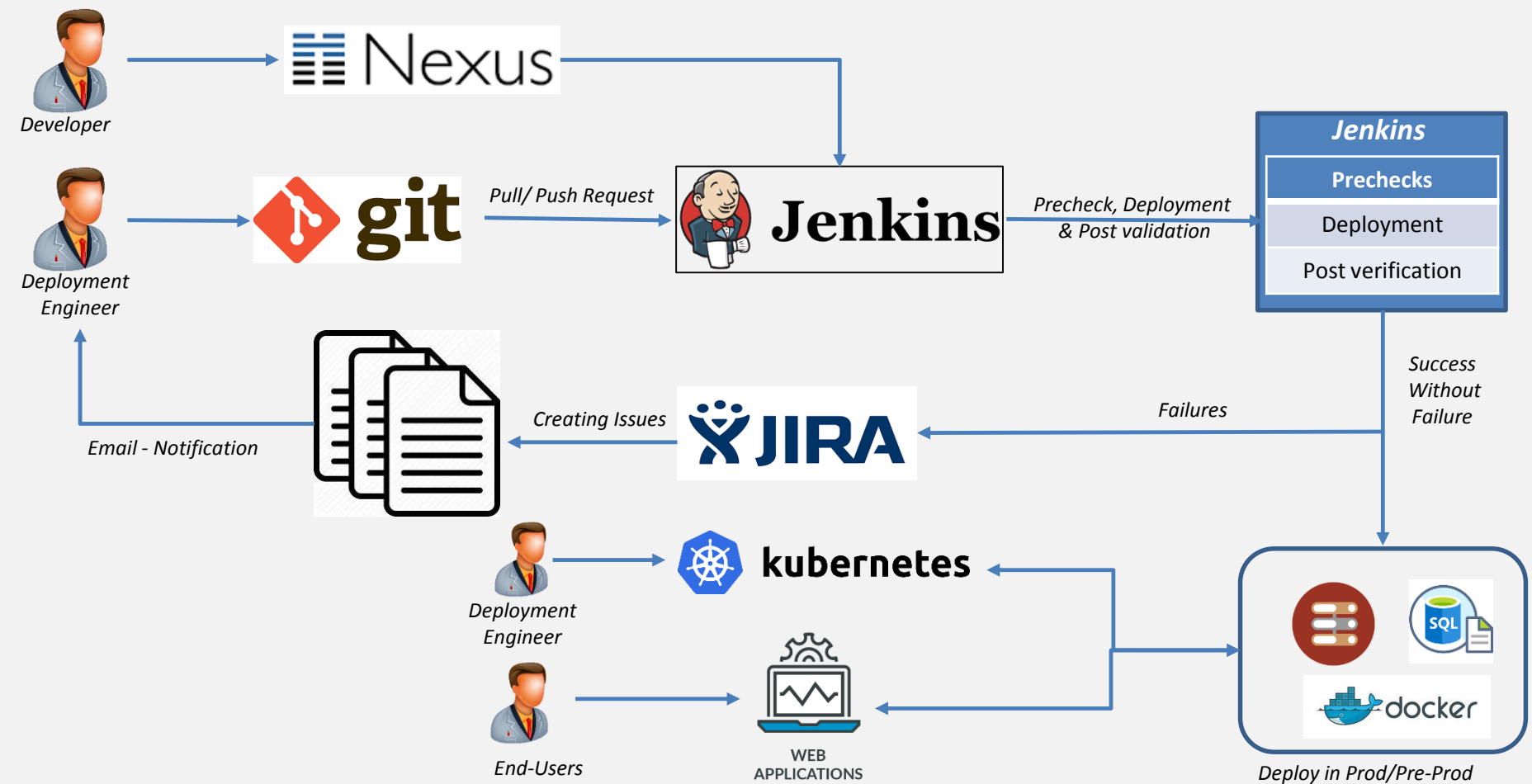
Current Pain Points

- ✗ Manual steps in updating the JIRA story & task.
- ✗ Validate the connectivity between the CICD tools.
- ✗ Manual Status update and Monitoring
- ✗ Post-Deployment checks like checking VMs status and application readiness is done through Putty.

Proposed Solution

- ✓ Auto update the JIRA stories and task.
- ✓ Automation script that will enable deployment across multiple application/VMs
- ✓ Visualized view of VMs and its current status.
- ✓ Automated post deployment validation steps.

Proposed - Solution Design



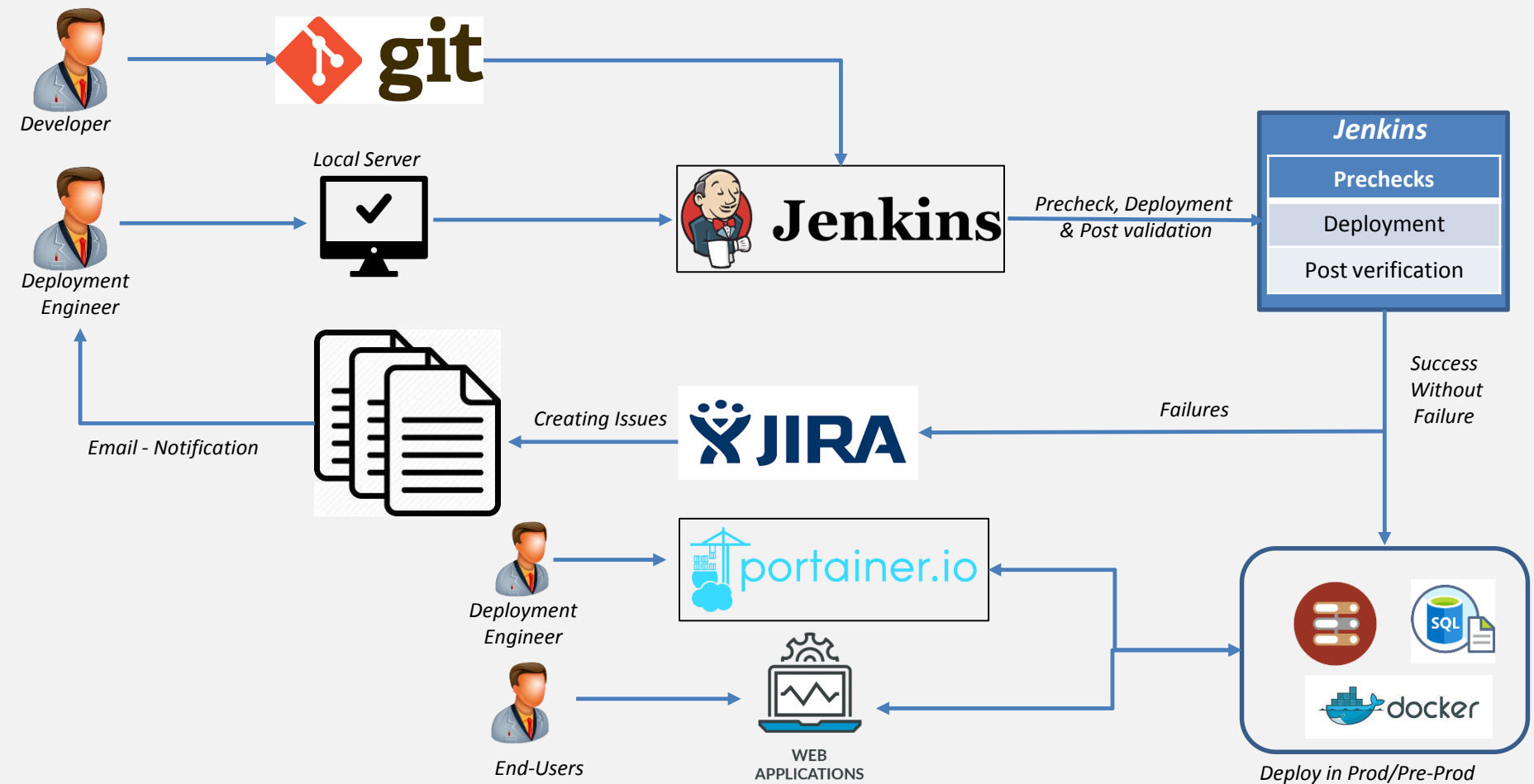
Tools Used



- Jenkins is deployed through Linux OS which manages entire CI/CD work flow.
- JIRA Server instance used as Lifecycle management tool to align user stories & log issues.
- GIT chosen for source code management repository
- Docker container is used instead of VMs to containerize applications.
- Portainer is used to orchestrate the Docker container.

Note: All the above picked tools are open-source except JIRA with 30 days free server trial pack.

Demo





THANKYOU!

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