

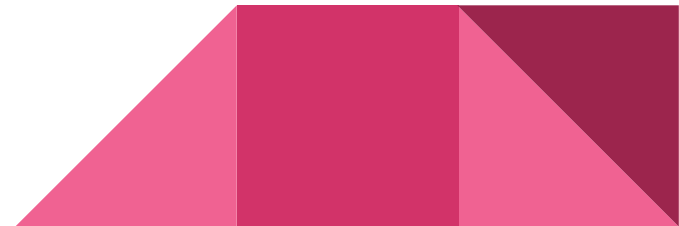


ShipIT

An Alianza CI/CD Solution

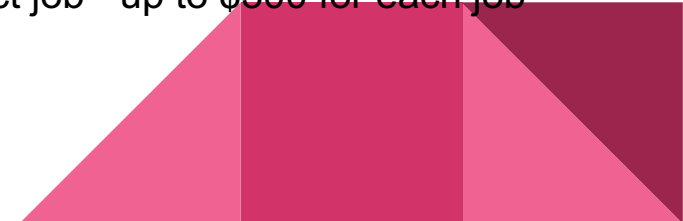
Introduction

- Project Objective Statement
 - Design and develop an AWS code configured pipeline with an API, able to build asynchronously and with an interface for monitoring by April 10, 2019.
- CI/CD solution will be simple to setup and open source



Current Situation

- No automation companies
 - No cohesion - Developer, Testing, and Operations teams are disconnected
 - Developers submit and move on. Testing and deployment failures are hard to roll back
 - Slow deployment - once a month
- Half automation companies
 - Partially complete. Normally only Continuous Integration - repository, build, and testing
 - Confusion
- Custom configuration
 - Possibly built by outside company - expensive
 - Shippable charges at least \$25 a month for each distinct job - up to \$300 for each job
 - Lots of work to create and setup within the company



Stakeholders and Project Requirements

Stakeholder Requirements:

Developers - Submit and forget. Queues.

DevOps Chapter - Easily configurable tool, and contains all parts of a pipeline service

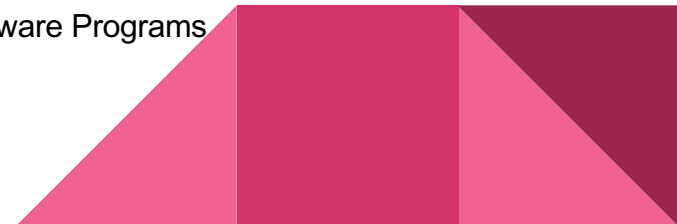
Testing Automation Team - Automated testing capabilities.

Management - Works well, inexpensive/open source.

Manual Testers - Doesn't inhibit. Accelerates work.

Some other problem/concerns that need to be addressed:

- Integrates smoothly with AWS
- Uses Docker containers
- Works with different software products: Web Apps, Mobile Apps, Custom Software Programs



Deliverable/Implementation

User receipts

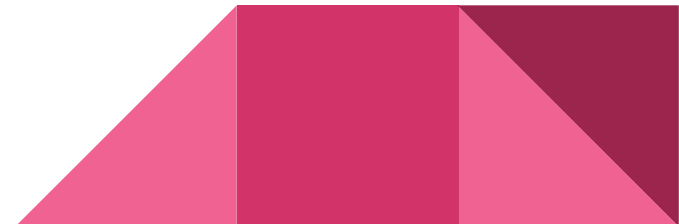
Documentation - README, documentation repository

Software - Build agent, pipeline server, test environment, user interface

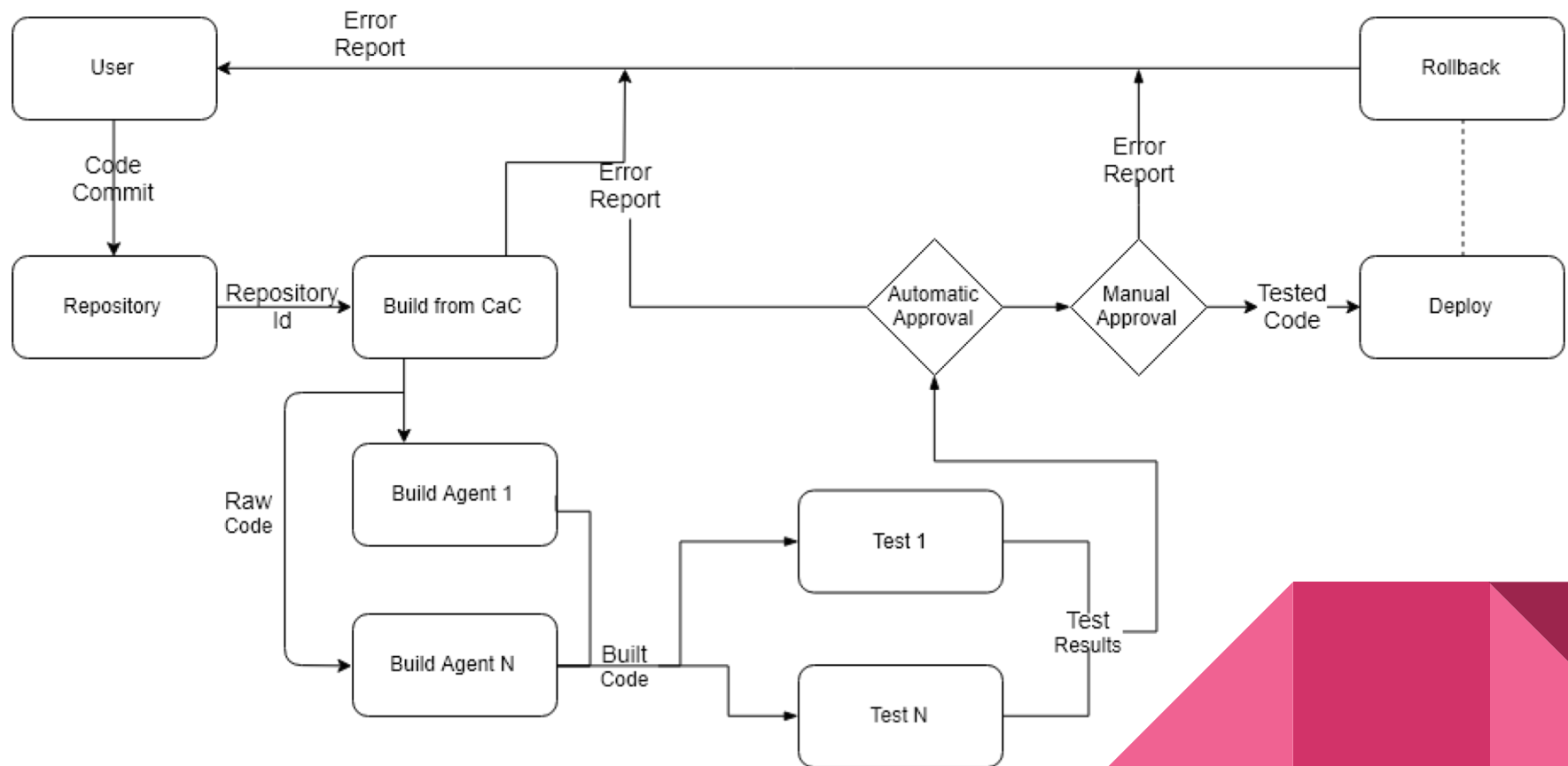
Source Code - Working baseline code

Training (physical/video) - Practice training, video

Kickstarter Trailer - Video



Logical Diagram



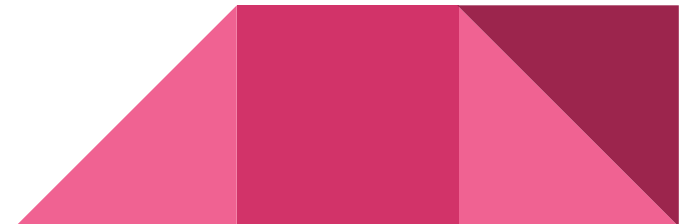
DEMO

[Github](#)

[Jenkins Server](#)

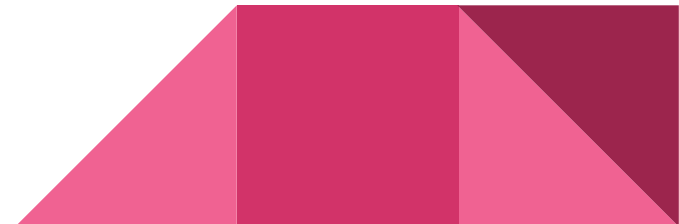
[AWS ECS](#)

[AWS EC2](#)



What's Next?

- Develop plugins to allow jenkins to communicate with Alianza's test framework
- Integrate manual and automatic gates.
- Apply Configuration as Code principles
- Design and deploy monitoring UI
- Deploying to multiple environments in a single pipeline
- Slack Reporting



Questions?

