TMA SOLUTIONS

DevOps Practices & Experience
DevOps Overview

- More than 8 years of experience in Continuous integration (CI), Continuous Deployment (CD) and DevOps
- Applied CI/CD/DevOps in many large scale projects
- Familiar with many DevOps tools
DevOps Best Practices

- Manage and execute automation for deployment, upgrade, validation of applications using DevOps tools
- Implement Continuous integration (CI) & Continuous Deployment (CD) using DevOps tools
- Create a repeatable, reliable process for releasing software
- Automate acceptance testing, deployment tasks, configuration management, etc.
- Keep everything under version control
- Create Fast Feedback Loops
- All members and teams responsible for the release process
- Quickly identify and fix defects
Sample Continuous Integration Process

**SOURCE CODE REPOSITORY (GIT)**
- App Code
- Unit tests

**BUILD SERVER (JENKIN)**
- Build
- Execute Unit tests

**RESULTS**

**AUTOMATION TEST FRAMEWORK WITH PYTHON**
- Stack of Devices
- Test Execution

**MANUAL TEST CASES**
- Stack of Devices

**TOOLS/FRAMEWORK**
- Git, SVN
- Cunit, Jekin/Hudson, Version One
- Python Script

Developers

Git
Sample DevOps Process

- **Automation:**
  - Auto staging deployment
  - Semi-auto production deployment for better control
  - Manual QA due to nature of billing portal
  - QA working on partial automation

- **CI/CD tools and deployment:**

- **Infrastructure management:**
Sample DevOps Tools

IDEAL CONTINUOUS DELIVERY PROCESS

Continuous Integration Servers

DEPLOYMENT ENVIRONMENT

CONFIGURATION MANAGEMENT AND DEPLOYMENT TOOLS

STORE VALID BINARIES, PACKAGES

TESTING FRAMEWORKS

Avoid Configuration Drift Ensure all Environment are in Sync