

Prepared by



# Project Specification

CONTINUOUS INTEGRATION AND DEVOPS

Aaron Mulholland



07783706895



[Aaron.Mulholland@qa.com](mailto:Aaron.Mulholland@qa.com)

# Contents

Document Outline..... 2

Project Overview ..... 2

Deliverables ..... 2

Advice ..... 2

    Stage 1:..... 2

    Stage 2: ..... 2

    Stage 3: ..... 2

    Stage 4 (Bonus Task): ..... 2

## Document Outline

This is the project specification for the deployment environment to be used as the accompanying project for the Continuous Integration short course. The project is intended to be completed over the course of two days.

## Project Overview

This will require the creation of a Linux virtual machine through the use of a Vagrantfile (you should use the chad-thompson box provided to you) and the installation of Jira, Jenkins, Git and other required dependencies. The virtualised environment should be configured to automate the installation of these tools by use of bash scripts.

Simply put you need to install;

- 1) A Virtual Machine (Ubuntu – chad-thompson)
  - a. Jenkins
  - b. Jira
  - c. Git
  - d. Java
  - e. Maven

You should attempt to write bash scripts for the mentioned technologies above.

## Deliverables

Your deliverable is just the **Vagrantfile** and any **scripting files** should be submitted alongside the Vagrantfile.

## Advice

It can be easy to overlook the complexity involved in creating your CI pipeline. Planning is an important part of ensuring that you don't get confused or lost within the project, as you will now be working on two projects concurrently. A set of advised steps are:

### Stage 1:

Create a plan for your CI pipeline so you fully understand the role of each tool and how they coexist and work together. (You can hand draw this, or digitally lay it out.)

### Stage 2:

Create a Vagrantfile for the setup of your Linux virtual machine, ensuring you install the appropriate tools for your environment.

### Stage 3:

Begin writing your scripts to install and configure the required tools.

### Stage 4 (Bonus Task):

Link Jenkins, Jira and Git through the use of built in plugins. You will need to conduct research into this.