# DevOps 1-Day Hands-on Workshop

## Course Overview

Agile development adoption is driving the need for increased value delivery efficiency. Software development, testing, and operations must evolve to meet iteration and release delivery goals while continuing to meet organizational quality objectives.

DevOps combines development, testing, and operations and includes continuous integration, automated testing, continuous delivery, and rapid deployment practices. Because DevOps practices require confidence in nearly all changes, automated testing is an essential ingredient that is integrated into the process and relied upon for enforcement of quality gates and to ensure overall delivery quality.

This course is the add-on lab companion to our Fundamentals of DevOps course and will teach you how to avoid the common mistakes of DevOps implementations and to leverage DevOps best practices. Upon completion of the course, students will understand and have hands-on experience with critical DevOps techniques including:

- The use of Puppet for system installation and configuration
- Setup and use of Vagrant workflows for creating, customizing, and configuring virtual environments
- Customization and use of automated deployment scripts to implement the environment
- Provisioning
- Deployment
- Configuration
- Test Data Population
- Automated Test execution
- Environment cleanup/disposal

## Hands-on Exercises

In this 1-day hands-on workshop, students will standup a local test environment including initial provisioning and configuration of a multi-tier test application, web server, DB server, and a selenium test client. Students will also utilize automation scripts to execute automated testing.

## Laptop Required

With their laptops, participants will connect remotely via Google Chrome VNC to a specialized virtual environment for the hands-on portion of this session, so a laptop is required and software will need to be pre-loaded and configured before class begins.

## Who Should Attend

This course is appropriate for experienced test professionals, operations engineers, developers, project managers, and business owners.

## Course Structure

1-Day Hands-on Workshop

## 1-Day Workshop Course Outline

1. Introduction to Vagrant
   - Installing Vagrant
   - Building a VM

2. Introduction to Puppet
   - Installing Puppet
   - Configuring a web server and a database

3. Automated Testing
   - Testing the deployment
   - Adding test data
   - Automating tests
   - Deploying to multiple test configurations
   - Re-initializing test environments for multiple test cycles

4. Deploying and Testing in the Cloud
   - Managed Boxes
   - Remote Public Clouds
   - Using Hosted Test Tools for Test Execution

## Class Daily Schedule

Sign-In/Registration 7:30-8:30 a.m.
Morning Session 8:30 a.m.-12:00 p.m.
Lunch 12:00-1:00 p.m.
Afternoon Session 1:00-5:00 p.m.

*Times represent the typical daily schedule and do not include morning and afternoon breaks typically included. Please confirm your schedule at registration.*

## Contact Us for More Information:

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