DevOps Test Integration Workshop

- Gain hands-on Experience with DevOps tools and practices for automating, building, configuring, and deploying on-demand test environments
- Learn how to create and configure virtual testing environments
- Discover how to automate installation and configuration of test automation fixtures and pre-populate test environments with test tools, the system under test, and the necessary test data
- Understand how DevOps enables testing and test automation in the Cloud with disposable test environments

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. Testers need dedicated and controlled testing environments for each iteration that are built, deployed, and configured in a reliable and repeatable manner. DevOps can provide on-demand disposable test environments that are delivered quickly, in a known state, with pre-populated test data and automated test fixture provisioning, to meet Agile Testing demands for multiple test environment configurations that model production.

In this hands-on lab, 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.

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

Bring your specific issues and problems to the training course for discussion as well.

🖥 ***Note: Laptops are required for this class***

This class will have pre-class instructions that involve downloading certain programs that will be needed for the hands-on exercises. These instructions will be provided to you after your registration is completed. If you have any concerns about the specific programs involved, please feel free to reach out to our Client Support team[1].

Who Should Attend
The audience includes software test professionals and software developers.

This course is the follow-on, companion course to**Foundations of DevOps—ICAgile Certification**[2]. Learn more and see course dates, locations, and registration options here [2].

Course Outline

Introduction to Vagrant	Automated Testing (continued)
Installing Vagrant	Automating tests

Building a VM

Introduction to Puppet
Installing Puppet
Configuring a web server and a database

Automated Testing
Testing the deployment
Adding test data

Deploying to multiple test configurations
Re-initializing test environments for multiple test cycles

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