Hands-On Chef Workshop

- Leverage DevOps best practices and discover how to avoid the common mistakes of DevOps implementations
- Understand the use of Chef for system installation and configuration
- Learn the setup and use of Vagrant workflows for creating, customizing, and configuring virtual environments
- Understand customization and use of automated deployment scripts to implement the environment

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 Foundations of DevOps—ICAgile Certification[1] course and will teach you how to avoid the common mistakes of DevOps implementations and how 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 Chef 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 one-day hands-on workshop, students will stand up 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.

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

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 Putty [2] will need to be pre-loaded and configured before class begins. Complete instructions will be emailed to all registrants.

Course Outline

Introduction to Vagrant
Installing Vagrant
Building a VM

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

Automated Testing
Testing the deployment
Adding test data
Automating tests
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