Certified Professional DevOps Continuous Testing (CP-DCT) Certification Course



What is CP-DCT course?

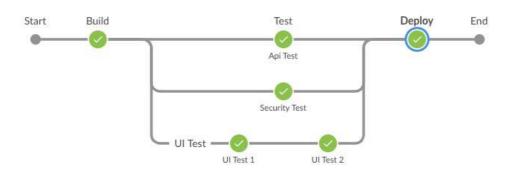
CP-DCT stands for "Certified Professional - DevOps Continuous Testing"

With the advent of DevOps, the need for everyone in the team to learn practical continuous testing has increased manifold. Hence the course is actually applicable for all the roles and not just "testers". Knowledge, experience & certification is consciously designed to focus on "Practical DevOps Continuous Testing" and is not limited to specific roles like "testers".

How is CP-DCT useful?

CP-DCT helps you in learning how testing is done on a continuous basis right from the requirement/ideation phase to the deployment phase. All the concepts are driven using the case studies and actual tasks that are typically involved in any live DevOps projects. Just like any other course from Agile Testing Alliance and DevOps++ Alliance the core differentiation is focus on hands on/practical aspects. There is no better learning than hands on learnings. The CP-DCT program is able to achieve this by introducing participants to tools like GitHub, Maven/Gradle, Junit, Cobertura, SonarQube, Jenkins, Selenium, Docker, Rest Assured, Jmeter.

Below is a snippet of a sample parallel pipeline that CP-DCT program will help participants to create in the program.



The program thus covers practical DevOps Continuous testing using a case study. This makes the program a very powerful one.

Am I Eligible?

You should have basic knowledge of Java and at least 1 year of proven relevant experience in Agile/DevOps or Testing. Prior knowledge of Selenium will be helpful too but is not mandatory. Even though someone without any practical testing or agile experience will be able to easily go through the program but the real value would be delivered to those who have experienced testing and agile and now can corroborate the connections in the DevOps world.

What is the Training and Certification Exam structure?

CP-DCT is designed specifically for corporate and working professionals alike. If you are a corporate you can opt for either <u>4 half days</u> course or <u>2 full days course</u>. The CP-DCT exam has to be taken within one week of training getting over.

CP-DCT certification exam has two parts. A theory exam which is of 1 hour duration and is conducted through online multiple choice question pattern. The theory exam is of 40 marks with no negative marking. The practical exam is taken immediately after the theory exam and is of 2-hour duration. The practical exam is case study based and follows the pattern taught in the program

Learning Objectives and Main Topics

1. Introduction

- ATA Introduction
- Course Introduction
- Introduction to DevOps, difference and similarities with agile
- DevOps Lifecycle
- What is Continuous Testing?
 - Where does testing happen in DevOps LifeCycle
 - o Test First Approach (TDD, BDD) / Shift Left Test Automation

2. Lab Preparation

- Setup Eclipse
- Setup Testing tools
- Setup Jenkins

3. Git Strategies (GitHub)

- Dev Code Analysis & Unit Testing
- Build Dev Code with Mayen / Gradle
- Code Coverage / Code Quality Checks with Cobertura & SonarQube

4. Continuous Test Development

- Rest Assured Integration for API Tests
- Selenium Test Integration for Functional Tests
 - Understand Selenium (Assertions & Basic scripting)
 - o Running tests in headless mode
- Performance Test Development with Jmeter
- Test Code commit along with Dev Code

5. Containerization, Continuous Integration & Continuous Testing

- Docker Basics and need for docker in Continuous testing
- Jenkins file creation
- Docker compose file creation
- Integration with Jenkins
- Run your pipeline
 - o Linear Pipeline
 - o Parallel Pipeline
- Test integration with Pipeline
- Dashboard & Reporting

6. Case Study & Sample Project

Tools Covered:

- Source Code Repository: GitHub
- Build Tool: Maven / Gradle (in v2)
- Code Coverage: Cobertura / OpenClover (Code instrumentation in v2)
- Code Quality (Static Analysis): SonarQube
- Continuous Integration / Delivery: Jenkins
- Continuous Testing
 - Unit Testing: Junit
 - Functional Test Automation: Selenium
 - o API Test Automation: Rest Assured
 - o Performance Test Automation: Jmeter
- Containerization: Docker
- Cloud: AWS (in v2)

How do I enroll myself?

You can enroll by following the information on these URL's.

http://cpdct.devopsppalliance.org/

http://devopsppalliance.org/cp-dct.html

If you are interested in getting a corporate program done at your location please do get in touch with us on ATASupport@AgileTestingAlliance.org