

Name:

Cloud DevOps Immersion

Purpose:

Most technical professionals, especially presales engineers within EMC express a strong preference for lab (and even better, real hands on) work over slide training. This is even more critical when learning about methodologies (ITIL, etc) as compared to specific technologies.

The intent of this course is to use an immersive method to give an introduction to modern methodologies and tools in use at today's 3rd platform and web-scale startups and incubators.

Target Areas of Education

Participants of this course can expect to come away with basic hands on experience in:

- Agile methodology
- Distributed, public source code management
- PaaS and Cloud Foundry application deployment
- DevOps management methods and ideas

- Basic application management/infra tools (Docker, cf, New Relic, object storage, etc)

After having completed this course, any participant should be able to comfortably speak with any customer using these tools and methods without feeling underwater, and will be able to express some level of familiarity with the procedures and challenges posed by modern deployment and management methods.

Requirements

Participants should:

- Be able to commit fully to the program, for the entire duration with at least 75% of their time each day. This is a critical, hard requirement to experience the course material as designed.
- Have a basic understanding of virtualization, database, systems and storage concepts at a 101 level (Any EMC SE beyond Associate should be at this level).
- Be able to *read* (writing not required) very basic code in at least one language. For example, be able to understand [whats happening in the following Task in at least one language at Rosetta Code](#). This course is not focused on significant development, but some basic familiarity is important.

Basic Course Overview

A basic outline of the course follows, on a day-by-day basis.

Throughout the course the proctor/instructor will participate both as a team member completing work as well as mentor for individual tasks (writing code if needed, etc), as well as guiding based on Agile principles.

Day 1:

- Get acclimated to the tools in use
- Discuss basic Agile development methods and tools
- Do first Sprint Planning for team project, including story pointing.

Day 2:

- Daily standup
- Basic tutorial on GitHub / Source Code Management
- Team works via collaborative methods (Slack, Asana, Google Hangouts, etc) to complete tasks committed for that day. Code will be written, containers deployed locally.

Day 3:

- Daily standup
- Basic tutorial on CF concepts and provisioned services (including object storage)

- Team works to produce basic working deployed application to CF by end of day

Day 4:

- Daily standup
- Basic tutorial on application instrumentation and management (logging, application performance analytics) using Blue/Green Deployment.
- Team works to add monitoring and management to application, signs up for alerts, etc.

Day 5:

- Daily standup
- Any last minute items finished/deployed as needed.
- Sprint Retrospective conducted, along with Velocity analysis
- Project presented to leadership team and proctors/instructors.