# JFROG CLOUDOPS ACADEMY LEARNING JOURNEY



The Complete Reference Guide



#### 1. CORE TRAINING - THE JFROG DEVOPS PLATFORM STORY

Whether you're an expert or a newbie, there's always more to know about the JFrog eco-system.

JFrog engineers use our very own JFrog Academy - and everyone can use it for free! Yes! It's pretty simple. There's no cost to you and you learn at your own pace. Just create an account with JFrog Academy and start your learning. That's it!



#### 2. CORE TRAINING - THE LINUX STORY

The goal was to learn <u>Linux basics</u> including file manipulation and navigation, file permissions, <u>SSH/SSL</u>, <u>source control with Git</u>, <u>Network Routing Fundamentals</u>, <u>NGINX Web Server</u> and <u>Database</u> Essentials.

As a prerequisite, the new engineers had beginner to intermediate Linux command-line skills. Since this is a core topic which can be self taught, we used online courses.

As a graduation assignment we asked the engineers to configure and present a demo of a LEMP Stack.



#### 3. CORE TRAINING - THE PYTHON STORY

The ultimate goal is to automate each task in the development and operations lifecycle to save time. Our engineers harnessed the power of python libraries and modules and learned to build on top of them, extend them and maintain them. Since this is a core topic which can be self taught, we used online python courses, but the first git pull requests to our master code are set with codementor, live 1:1 review and clear guidelines.

As a graduation assignment we asked the engineers to code and present a demo of an API CLI in Python to manage an Artifactory using REST API endpoints (Send a ping request/Create user/ Retrieve info about the current Artifactory version/Get Storage Info/etc..)



### 4. ADVANCED TRAINING - THE CONTAINERS STORY

We went all the way from covering <u>Docker fundamentals</u> to the point our engineers know all about deployments and managing cloud-native applications on <u>Kubernetes</u> in the real world and become <u>Helm captains</u> and <u>k8s security champions</u>.

As a graduation assignment task we asked the engineers to code and present a demo of a Python CLI that is capable of <u>Installing the JFrog Platform Using Helm Chart</u>. The CLI should fetch the latest JFrog's version and to deploy, configure, or update it on minikube.



# 5. ADVANCED TRAINING - THE CLOUD DEPLOYMENT, MONITORING, METRICS AND DATA-DRIVEN TOOLS STORY

Cloud deployment refers to the enablement of SaaS (software as a service), PaaS (platform as a service) and laaS (infrastructure as a service) solutions. Monitoring automation provides enterprises with a significant increase in operational efficiency that's driven by intelligence and predictive golden signals. All topics in this story were taught by JFrog's experienced monitoring and deployment masters.

As a graduation assignment we asked the engineers to present a diagram of an architecture with redundancy in mind (multi-region, clustered, etc), set up a containerized web application architecture with JFrog's CI/CD integrations, set up an open source monitoring tool and gather relevant metrics from the PoC environment.



### 6. CLOUD TRAINING - THE AWS, AZURE AND GCP STORIES

The goal was to introduce the engineers into the major cloud components and learn to master the architectural principles and services of the top cloud platforms.



## 7. AWARENESS, CONFIDENTIALITY & SECURITY TRAINING

Since we were in the process of training an inexperienced group of cloud engineers, we paid attention to the security risks cloud computing introduces and conducted a number of cyber security education training with our security and compliance teams.

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The Liquid Software Company