Hyperledger Fabric v1.4: Architecting, Designing and Deploying a Network

Duration: 3 days; Instructor-led
Time: 9:00 AM – 5:00 PM

ABOUT THIS COURSE

This 3 day course is designed for Architects, and System Administrators interested in gathering a deeper understanding on how Hyperledger Fabric Networks are Architected and operated throughout.

OBJECTIVES

You will learn about the integral base files in which Fabric are built upon. You will learn about how identity, and permissions are administered throughout Membership Only networks. Additionally, you will gather the experience necessary to enter into and manage nodes/peer needs (i.e. chaincode installation, securing communication, etc).

- Gain an understanding of the Hyperledger Fabric network topology
- Learn about Chaincode, its purpose, and how to develop it using Go
- Learn how to handle chaincode operations such as making chaincode packages accessible to peers, invoking and interacting with the chaincode logic from the CLI, and much more
- Learn about how to create and develop an initial client Side solution (Using Node) to interact with the network
- Learn about how to scale the network organizations, peers, and orderer nodes
- Perform Certificate Authority Related operations & setup necessary for initial network Identity relations

PREREQUISITES

No prerequisites.

AUDIENCE

System Administrators or anyone who wants to know how to run day-to-day network operations on a Hyperledger Fabric network.

COURSE CONTENTS

Module 1: Setting Up Fabric

Module 2: Docker Basics

- Lab: Installing HLF & setting

Module 3: Hyperledger Fabric Architect's Use Cases

Module 4: Architecting a solution/Architects Considerations

Module 5: Database Administration in Fabric

Module 6: Fabric Network Topology

- Lab: Bootstrapping the Network
- Lab: Building the Network Artifacts and basis
- Lab: Building the Network

Module 7: System Administrator's Chaincode Process

- Lab: Chaincode on Network

Module 8: Communication on the Network

- Lab: Creating and Implementing New Organizations

Module 9: Ordering Services

- Lab: Scaling the network & Modularity

Module 10: Permissioning (Membership,ACL's, Channels)

- Lab: Creating the Channels, and implementing Permissions
- Lab: Adding Pearson Vue
- Lab: MSP/CA Operations

Module 11: Deployment Tips