

# Linux and Docker Fundamentals

**Duration:** 3 days (8Hours Per Day)

Hands-On Format: This hands-on class is approximately 80/20 lab to lecture ratio, combining engaging lecture, demos, and discussions with comprehensive machine-based practical labs.

## **Module 1 – Linux Basics**

- Executing Commands Using the Bash Shell
- Describing Linux File System Hierarchy Concepts
- Managing Files Using Command-line Tools
- Editing Text Files with Vim
- Describing User and Group Concepts
- Managing File System Permissions from the Command Line
- Controlling System Services
- Installing and Updating Software Packages with Yum
- Accessing the Remote Command Line with SSH

## **Module 2 – Docker Administration**

- Introduction to Containers and Docker
- Installing Docker
- Docker Essential Commands
- Understanding and Building Docker Images
- Storing and Retrieving Docker Images from Docker Hub
- Building Containers from Images
- Overview Networking Docker Containers
- Data Persistence with Volumes
- Linux Capabilities