Chef Training

Chef is an open-source configuration management tool developed by opscode. It is written in Ruby and Erlang. It automates the configuration and maintenance of more than one server. Chef uses Domain Specific Language (DSL) for writing system configuration. Chef follows a client-server architecture.

Course Objective:

- Fully automated deployment
- Within a minute you can configure thousands of nodes.
- Integrate with a cloud-based platform like AWS.
- Chef keeps the system under consistent check.
- You can record the entire infrastructure in the form of chef repository.
- The chef plays a vital role in DevOps software lifecycle

Course Audience:

Who want to understand the features and functionality of Chef and how Chef can help in reducing the complexity of managing infrastructure.

Course Prerequisites:

- Participant should have an understanding of system administration, infrastructure and network protocol communication.
- To automate the infrastructure provisioning, one should have a command over basic Ruby script writing and the underlying system where one wants to use Chef.

Introduction To chef:

- What is DevOps and comparison to other DevOps tools
- Chef-Server
- Common Chef Terminology
- Chef-workstation
- Chef client
- Chef Repository
- Chef Configuration Concepts
- Chef solo
- Server and nodes

Building Web Server Cookbook:

- Starting with Apache Recipe
- Adding attributes and templates
- Attribute Precedence
- Copying file to the webserver
- Adding platform support
- Chef local repository to GitHub
- Recipe includes and dependencies
- Adding HTML templates dynamically

Building dockers and containers:

- Information gathering and setup
- Docker recipe to container images
- Attribute precedence
- Launching container and monitoring
- Adding docker file dynamic container
- Containerizing customizing on the nodes

Node Object and search:

- What is Node Object
- Search Concept
- Searching Node Attributes Using Knife

Data Bags:

- What is Data Bags
- Creating User and Sudo group Data bags
- Building A Recipe To Deploy Local User Account

Chef Environment:

- What is Environment and why they do matter
- Creating And Configuring Environment
- Creating A Second Version of Our Web Server Cookbook
- Deploying To Different Environment

Roles:

- What are the Roles
- Creating Web Server Roles
- Building A simple MySQL and Apache role
- Create a DB role
- Creating A base role

Extending chef:

- Knife Plugins
- Chef Supermarket and Chef Client

Chef specialist advanced course content:

- Deploy chef environment with High availability, replication features
- Integration of chef with public and private cloud
- AWS integration