# Rabbit MQ Duration – 3 days

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1. Introduction to RabbitMQ
Setting up the required folders
Downloading and installing RabbitMQ

2. Understanding messaging

The role of a consumer

The role of a producer

Bindings consumers and producers
Messages and durability

How to verify delivery

Messaging
Consumers/Producers
Consumers and producers
Queues
Exchanges and bindings
Virtual hosts and separation
Durability
Using publisher
confirms to verify delivery

3. Administering RabbitMQ

Starting and stopping nodes
RabbitMQ configuration files

How to manage privileges

Viewing statistics and analyzing logs
Sending alerts

How to set up parallel processing

4. High availability with cluster

Architecture of a cluster

Queues in a cluster

Setting up a test cluster
Distributing the nodes to more machines
How to preserve messages: mirrored queues

5. Brokers on Clusters

6. A programmer perspective
Writing robust code

Installing and configuring HAProxy
Failing clients between servers

7. Implementing failover and replication

Setting up a load balancer-based master/slave
Installing the Shovel plugin

Configuring and running Shovel

8. Web tools to administer RabbitMQ

The RabbitMQ Management plugin
Managing RabbitMQ from the web console
Administering users from the web console
Managing queue from the web console
Using the command line interface

9. RabbitMQ and the REST API

REST API features
Accessing statistics
vhost and user provisioning

10. Monitoring and securing RabbitMQ

Message durability and Message acknowledgement
Memory usage and process limits

Inbuilt Monitoring techniques

11.Security
Setting up SSL

Object Security
Server Security concepts

12. Probelm Determination
Identifying Network based Issues
CPU and Memory based tuning practices

13. Spring Boot Application creation with RabbitMQ
Working with Queues in boot

Using RabbitMQ as Message Engine