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| **Cloudera Hadoop Administration Training** |  |
| **Cloudera Hadoop Administration - Basics** |  |
| Introduction to Hadoop |  |
| Overview of Hadoop Ecosystem Components |  |
| Hadoop Distributed File System concepts |  |
| MapReduce & YARN concepts |  |
| Hadoop installation prerequisites |  |
| Install and configure Cloudera Manager ,CDH repositories |  |
| Installation of Cloudera Manager |  |
| Installation of Cloudera Distribution of Hadoop ( CDH ) |  |
| Edit Logs and Name Node Image File details |  |
| Logging in Hadoop and setting up Logging using Log4j properties |  |
| Configuring Rack awareness |  |
| Day to Day Production Task for Hadoop Admin |  |
| Understanding schedulers in YARN (Fair and Capacity Schedulers) |  |
| Configuring Dynamic Resource Pool |  |
| YARN Tuning |  |
| Hadoop Ecosystem Components |  |
| Understanding **Hive** |  |
| Understanding **Pig** |  |
| Understanding **Sqoop** |  |
| Understanding **Kafka** |  |
| Understanding **Hbase** |  |
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| **Cloudera Hadoop Administration - Advanced Topics** | |  |
| Fundamentals for High Availability | |  |
| Configure Name Node High Availability | |  |
| Configure Resource Manager High Availability | |  |
| Configure Hive High Availability | |  |
| Hadoop Security - Securing authentication with Kerberos | |  |
| Hadoop Security -Authorization using Sentry | |  |
| Hadoop Security - Access Control List ( ACL ) | |  |
| Hadoop security - HDFS encryption using Java KMS | |  |
| Hadoop Security - Auditing & Lineage ( Cloudera Navigator ) | |  |
| Installation and configuration of Active Directory | |
| Integrating Linux machines with Active Directory | |
| Integrating HUE with Active Directory | |
| Integrating Cloudera Manager with Active Directory | |
| Cloudera Backup and Disaster Recovery ( BDR ) | |
| Cloudera Manager upgrade process | |
| CDH Upgrade process using Cloudera Manager | |
| JDK Upgrade | |
| Hadoop Sizing considerations | |
| Best practices for Hadoop Administrations | |
| Day to Day Production Task for Hadoop Admin | |  |

**Instructor Lab Demo :**

Using Amazon Web Service EC2 instances / VM Ware virtual machines on Desktop

**Theory Part :**

White Board & power point presentation

**Participants Hands on Platform:**

Fort participants Hands on exercise : - Need to arrange Amazon EC2 instances /VMs