

Hadoop Online Training Course Content

BIG Data Hadoop Architecture

- ✓ Introduction to BIG Data Hadoop
- ✓ Parallel Computers vs. Distributed Computing technique
- ✓ Hadoop Installation on your system
- ✓ How to install Hadoop cluster on multiple nodes
- ✓ Hadoop Daemons introduction: Name Node, Data Node, Job Tracker and Task Tracker
- ✓ Exploring the HDFS Apache Web UI & Exploring HDFS (Hadoop Distributed File System)
- ✓ Architecture of Name Node (FsImage, EditLog & location of replicas) Secondary Name Node architecture
- ✓ Data Node architecture

Map-Reduce Architecture

- ✓ Exploring JobTracker & TaskTracker
- ✓ How a client submits a Map-Reduce job
- ✓ Exploring Mapper, Reducer, Combiner
- ✓ Shuffle: Sort and Partition
- ✓ Input and output formats
- ✓ Job Scheduling (FIFO, Fair Scheduler, Capacity Scheduler) and Exploring the Apache MapReduce Web UI

Hadoop Developer Tasks

- ✓ Writing a Map-Reduce programme
- ✓ Reading and writing data using HDFS
- ✓ Java BIG Data Hadoop Eclipse integration
- ✓ Mapper in details
- ✓ Reducer in details
- ✓ Using of Combiners
- ✓ Reducing Intermediate Data by Combiners
- ✓ Writing Partitioners for Better Load of Data
- ✓ Balancing and Sorting in HDFS
- ✓ Searching Data in HDFS
- ✓ Indexing data in HDFS
- ✓ Hands-On Exercises

Hadoop Administrative Tasks

- ✓ Routine Administrative Procedures
- ✓ Understanding the dfsadmin and the mradmin Block Scanner and Balancer
- ✓ Health Check of Cluster & Safe mode
- ✓ Data Node commissioning and de-commissioning
- ✓ Jobs Monitoring and Debugging on a production
- ✓ cluster Name Node Back up and Recovery in case of name node failure
- ✓ ACL Upgrading Hadoop (Access control list)

HBase Architecture

- ✓ Introduction to Hadoop Hbase
- ✓ RDBMS vs. Hadoop HBase
- ✓ Exploring Hadoop HBase Master & region server
- ✓ Column Families and Regions
- ✓ Basic Hadoop Hbase shell commands.

Hive Architecture

- ✓ Introduction to Hadoop Hive
- ✓ Hadoop HBase vs Hadoop Hive
- ✓ Installation of Hive
- ✓ HQL (Hive query language)
- ✓ Basic Hive commands