Data is ruling the world today, technologies which are implementing the big data processing, is trending now. Big Data Hadoop is the only solution to resolve huge data set processing by mean of distributed cluster storage(HDFS) and parallel processing(MapReduce). Big Data technology is expanding its own ability to resolve existing global data challenges by integrating many open source eco-systems to Hadoop Core such as SQOOP, HIVE, PIG, KAFKA, NIFI, FLUME, KIBANA, SPARK, TEZ, OOZIEE, ZOOKEEPER and HBASE. Having a sound knowledge on Hadoop development is very crucial in current IT industry.

BTree Systems is providing a professional, 100% hands-on and best big data Hadoop training in Chennai. We are providing Best Big Data Hadoop hand-on training at extremely low cost, here in Adyar (Indra Nagar), Chennai. We possess industrial best trainers for Big Data Hadoop and Spark training.

Our policy is “Demo first Registration next”, Yes...!! we offer you free one-day Hadoop course demo session. We are possessing well defined and best Big Data Hadoop course structure in the market which segregated mainly into 3 sub-divisions as Theoretical, installations, classroom practises and exercises. With many real-time big data Hadoop project demos, we guarantee you with cutting-edge excellent Hadoop BigData training in Chennai.

**Why choose BTree?**

* Free 1-Day demo session
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* Training for Lowest cost
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* Pleasant environment for learning

**Course Content:**

1. Big Data Introduction
   1. What is Big Data?
   2. Characteristics of Big Data
   3. Categories of Data
   4. Data generation sources in modern Era
   5. Data Size Hierarchy
   6. Real Time Projects – How Big data technology changes the current business globally?
   7. Job and career scope in Big Data Hadoop
2. Big Data Hadoop
   1. Introduction to Hadoop
   2. Comparison of RDBMS, Tera Data, Informatica and Hadoop Big Data
   3. Features of Hadoop
   4. What is Check pointing, Replication, Re-replication, Rack Awareness and Checksum in Hadoop?
   5. Components of Hadoop
      1. Hadoop Common or Hadoop Core
      2. Hadoop Distributed File System (HDFS)
         1. What is a file system?
         2. Different types of File Systems
         3. Difference between HDFS and Other file systems (Linux, Oracle, SQL, FAT32, NTFS, etc.,)
         4. Features of HDFS
         5. High Level Architecture of HDFS
         6. Roles of Name Node, Data Node, Secondary Name Node, Standby Name Node
         7. Meta Data Mechanism in HDFS
         8. Anatomy of File Read in HDFS
         9. Anatomy of File Write in HDFS
         10. Low Level HDFS Architecture
         11. Summary
      3. MapReduce (MR)
         1. What is MapReduce?
         2. Features of MapReduce
         3. High Level Architecture of MapReduce
         4. Roles of Job Tracker, Task Tracker and Tasks in MapReduce
         5. Parallel data processing in MapReduce
         6. Work count programming in MapReduce
         7. MapReduce sample programs
         8. Summary
      4. YARN (Yet Another Resource Negotiator)
         1. Difference between Hadoop 1.0 and Hadoop 2.0
         2. How yarn works in Hadoop?
         3. Architecture of YARN
         4. Roles of Resource Manager, Node Manager, Application Manager, Application Master, Container and Scheduler
         5. Complete Job Flow in Hadoop YARN
         6. Type of Scheduling in YARN (FIFO, Resource and FAIR)
         7. Summary
   6. Hadoop Ecosystems
      1. What is Hadoop Ecosystems
      2. List of Hadoop Ecosystems
      3. Brief Introduction on Hadoop ecosystems (Sqoop, Hive, Flume, HBase, Nifi, Kafka, Spark, Spark SQL, Spark Streaming, Zookeeper, Oozie, Pig, HCatalog, mahout, AVRO, Thrift)
   7. Summary
3. Apache Sqoop
   1. Introduction to SQOOP
   2. Purpose of Sqoop
   3. Sqoop Architecture
   4. Realtime sqoop use cases
   5. Sqoop tool
   6. Sqoop eval and list database tools
   7. Sqoop import commands
   8. Sqoop export commands
   9. Advantages and disadvantages of Sqoop
   10. Summary
4. Hive
   1. What is Hive?
   2. Hive Architecture & Modes
   3. HIVE Installation
   4. Hive configuration with MYSQL metastore
   5. Hive Data Types - Homogenous and Heterogeneous datatypes
   6. Hive built-in operators
   7. Hive create and drop database
   8. Hive create, drop, alter table
   9. Hive Managed and external table
   10. Hive Indexes with examples
   11. Hive order by, group by, distributed by and cluster by Queries
   12. Hive Joins and SubQuery
   13. Hive partitioning – static and dynamic partitioning
   14. Hive in-build functions and user defined functions (UDF)
   15. Hive Aggregated UDF and Table UDF
   16. Performance tuning in hive
   17. Hive examples to load Text, JSON and XML files
   18. Summary
5. Apache Flume
   1. Flume Overview
   2. Flume Architecture
   3. Setting up flume agent
   4. Flume Sinks
   5. Flume Channels
   6. Flume Interceptors
   7. Flume real-time scenarios
   8. Summary
6. Apache Nifi
   1. Apache Nifi Overview
   2. Apache Nifi Architecture
   3. Apache Nifi features
   4. Nifi Web UI features
   5. Nifi Dashboard Tools
   6. Nifi Processors and Processor Groups
   7. Nifi Connectors and Funnel
   8. Nifi Controller Services
   9. Nifi Sample flows with various types of processors
   10. Data provenance in Nifi
   11. Data queuing and buffering in Nifi
   12. Apache Nifi error handling
   13. Summary
7. Apache Kafka
   1. Introduction to Apache Kafka
   2. What is message queuing in Kafka
   3. Why Apache Kafka?
   4. Apache Kafka architecture
   5. Apache Kafka Components
      1. Zookeeper role in Apache Kafka
      2. Apache Kafka Producers
      3. Apache Kafka Agent
      4. Apache Kafka Consumers
      5. Apache Kafka Brokers
      6. Topics and Partitions in Apache Kafka
   6. Apache Kafka work flow samples
   7. How to configure Apache Kafka cluster?
   8. Other tools integration with Apache Kafka
   9. Summary
8. Apache HBase
   1. Apache HBase Overview
   2. Comparison between SQL and NoSQL
   3. Features of NoSQL Databases
   4. Apache HBase High Level Architecture
   5. HBase Schema Design
   6. HBase Tables
   7. Creating Tables with the HBase Shell
   8. Working with Apache HBase Tables and Table data
   9. Create, delete, insert, update, get and scan commands in HBase with examples
   10. HBase Replication and Backups
   11. Performance tuning in Apache HBase
   12. Sample flow in Apache HBase
   13. Summary
9. Apache Spark with Scala Programming
   1. Scala language introduction
      1. Basics of Scala
      2. Data Types in Scala
      3. Object Oriented concepts in Scala language
      4. Classes, traits and objects in scala
      5. Functions in Scala
      6. Branching and Looping in scala
      7. Collections in Scala
      8. Exception handling in Scala
   2. Apache Spark
      1. Introduction to Apache Spark
      2. Apache Spark Architecture
      3. Apache Spark Vs MapReduce Vs Tez
      4. Features of Apache Spark
      5. Spark shell overview
      6. Sample programs in Apache Spark-shell
      7. Components of Apache Spark
         1. Spark Core
         2. Spark SQL
         3. Spark Streaming Basics
         4. Spark MLib Basics
         5. Spark RDD and features
         6. DAG concepts in Apache Spark
         7. Transformations in Apache Spark
         8. Actions in Apache Spark
         9. Sample Apache Spark programming with Scala
      8. Spark Submit Overview
      9. Spark Submit tool features and samples
      10. Summary
10. Oozie
    1. Oozie introduction
    2. Oozie architecture and features
    3. Oozie Workflow
    4. Oozie control flow nodes
    5. Action nodes in Oozie
    6. Callback and Polling in Oozie
    7. Action Transitions in Oozie
    8. Oozie Build-in functions
    9. Oozie functions
    10. Summary