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 **Join us as beginner, walk out as an Expert**

 **By Mr Suraz...**

**Our Teaching Strategy.**

* Focus on each and every concept of Hadoop.
* Map-Reduce will be taught for more than 45 sessions of at least 1 hour each
* More than 45 POCS only for Map-Reduce which illustrate different concepts.
* Free 25 Recorded session on Core Java to brush up your Knowledge on core Java
* Free First 18 Hadoop Recorded Sessions to make you comfortable with Hadoop setup and architecture & basic concept
* Tips and Trick while programming Map-reduce.
* Flow control of Each Program will be explained very clearly...
* Each Student will create their own Hadoop Cluster Setup
* Working on Latest and greatest Versions
* Hive ,Pig, Scoop, HBase, Oozie in details
* Complete guidelines on Cloudera Certifications.
* Special sessions on Eclipse tools to understand how to use them effectively.

# Big-Data and Hadoop

* 1. Introduction to big data and Hadoop
	2. Hadoop Architecture
	3. Installing Ubuntu with Java 1.8 on VM Workstation 11
	4. Hadoop Versioning and Configuration
	5. Single Node Hadoop 1.2.1 installation on Ubuntu 14.4.1
	6. Multi Node Hadoop 1.2.1 installation on Ubuntu 14.4.1
	7. Linux commands and Hadoop commands
	8. Cluster architecture and block placement
	9. Modes in Hadoop
		1. Local Mode
		2. Pseudo Distributed Mode
		3. Fully Distributed Mode
	10. Hadoop Daemon
		1. Master Daemons(Name Node, Secondary Name Node, Job Tracker)
		2. Slave Daemons(Job tracker, Task tracker)
	11. Task Instance
	12. Hadoop HDFS Commands
	13. Accessing HDFS
		1. CLI Approach
		2. Java Approach
	14. Installing and using Hadoop 2.X

## Map-Reduce(Using New API)

* 1. Understanding Map Reduce Framework
	2. Inspiration to Word-Count Example
	3. Developing Map-Reduce Program using Eclipse Luna
	4. HDFS Read-Write Process
	5. Map-Reduce Life Cycle Method
	6. Serialization(Java)
	7. Data-types
	8. Comparator and Comparable(Java)
	9. Custom Output File
	10. Analysing Temperature dataset using Map-Reduce
	11. Custom Partitioner & Combiner
	12. Running Map-Reduce in Local and Pseudo Distributed Mode.

# Advanced Map-Reduce

* 1. Enum(Java)
	2. Custom and Dynamic Counters
	3. Running Map-Reduce in Multi-node Hadoop Cluster
	4. Custom Writable
	5. Site Data Distribution
		1. Using Configuration
		2. Using DistributedCache
		3. Using stringifier
	6. Input Formatters
		1. NLine Input Format
		2. XML Input Format
		3. DB Input Format
		4. Sequence File Format
		5. Avro File Format
	7. Sorting
		1. Primary Reverse Sorting
		2. Secondary Sorting
	8. Joins
		1. Map-side Joins
		2. Reduce side Joins
	9. Compression Technique
		1. Gzip
		2. snappy
		3. bzip2
		4. deflate
	10. Processing Multiple Line using Map-Reduce
	11. Processing XML File using Map-Reduce
	12. TokenMapper
	13. Testing MapReduce with MR Unit
	14. Working with NYSE DataSets
	15. Running Map-Reduce in Cloudera Box

# HIVE

* 1. Hive Introduction & Installation
	2. Data Types in Hive
	3. Commands in Hive
	4. Exploring Internal and External Table
	5. Partitions
	6. Complex data types
	7. UDF in Hive
		1. Built-in UDF
		2. Custom UDF
	8. Thrift Server
	9. Java to Hive Connection
	10. Joins in Hive
	11. Working with HUE
	12. Bucket Map-side Join
	13. More commands
		1. View
		2. SortBy
		3. Distribute By
		4. Lateral View
	14. Running Hive in Cloudera

# SQOOP

* 1. Installing oracle XE in Windows
	2. Installing oracle XE in Ubuntu
	3. Sqoop Installation and Basics
	4. Working with Oracle and Sqoop
	5. Advance Imports
	6. Sqoop and Hive Export
	7. Sqoop Job and MetaStore
	8. Real Time UseCase
	9. Exporting Data from HDFS to Oracle
	10. Running Sqoop in Cloudera

# PIG

* 1. Installation and Introduction
	2. WordCount in Pig
	3. NYSE in Pig
	4. Working With Complex Datatypes
	5. Pig Schema
	6. Miscellaneous Command
		1. Group
		2. Filter
		3. Order
		4. Distinct
		5. Join
		6. Flatten
		7. Co-group
		8. Union
		9. Illustrate
		10. Explain
	7. UDFs in Pig
	8. Parameter Substitution and DryRun
	9. Pig Macros
	10. Running Pig in Cloudera

# HBase

* 1. HBase Introduction & Installation
	2. Exploring HBase Shell
	3. HBase Storage Techinique
	4. HBasing with Java
	5. CRUD with HBase
	6. Map-Reduce HBase Integration

# OOZIE

* 1. Installing Oozie
	2. Running Map-Reduce with Oozie
	3. Running Pig and Sqoop with Oozie
	4. Integrating Map-reduce,Pig,Hive with Oozie
1. **Project Works**

Working on Amazon dataset with advance map-reduce concept, Integrated with HBase, scheduled through oozie workflow.