Real-Time Analytics with Apache Storm

Duration : 02 Days

1. *Big Data and its Uses*

Learn what is Big Data and relevant concepts, where it is used, and various types of data analytics

2. Storm Introduction

Understand the concepts of Storm architecture, use cases, & its usage in real-time stream processing

3. Storm Installation and Configuration

Learn how to set up Storm and what system configuration is needed to create various topologies

Installation of Storm

- Nimbus Node
- Supervisor Nodes
- Worker Nodes
- Running Modes
- Local Mode
- Remote Mode
- Stream Grouping
- Shuffle Grouping
- Fields Grouping
- All Grouping
- Custom Grouping
- Direct Grouping

4. Spouts and Bolts

Get the knowledge on how to use spouts & bolts along with their mechanism and life cycle

- Basic components of Apache Storm
- Spout
- Bolts
- Running Mode in Storm
- Reliable and unreliable messaging
- Spouts
- Introduction
- Data fetching techniques
- Direct Connection
- Enqueued message
- DRPC
- How to create custom Spouts
- Introduction to Kafka Spouts
- Bolts
- Bolt Lifecycle
- Bolt Structure
- Reliable and Unreliable Bolts
- Basic topology example using Spout and bolts

- Storm UI

5. Storm Trident

Learn how to handle failures in Trident topologies & how to perform real-time computing in Storm

- Trident Design
- Trident in Storm
- RQ Class, Coordinator, Emitter bolt
- Committer Bolts, Partitioned Transactional Spouts
- Transaction Topologies