## Monitoring and Diagnostics

- Accessing the Cloudera Manager Admin Console
- Monitoring and Diagnostics
- Time Line.
  - Selecting a Point In Time or a Time Range
- Health Tests.
  - Viewing Health Test Results
  - Suppressing Health Test Results
  - Suppressing a Health Test
  - Configuring Suppression of Health Tests Before Tests Run
  - Viewing a List of Suppressed Health Tests.
  - Unsuppressing Health Tests.
- Viewing Charts for Cluster, Service, Role, and Host Instances.
  - Exporting Data from Charts.
  - Adding and Removing Charts from a Dashboard
  - Creating Triggers from Charts
- Configuring Monitoring Settings
  - Configuring Health Monitoring
  - Configuring Service Monitoring
  - Configuring Host Monitoring
  - Configuring Directory Monitoring
  - Configuring YARN Application Monitoring
  - Configuring Impala Query Monitoring
  - Configuring Impala Query Data Store Maximum Size
  - Enabling Configuration Change Alerts
  - Filtering Metrics
  - Configuring Log Events
    - \* Configuring Logs
    - \* Configuring Logging Thresholds
    - \* Configuring Log Directories
    - \* Enabling and Disabling Log Event Capture
    - \* Configuring Which Log Messages Become Events
    - \* Configuring Log Alerts
- Monitoring Clusters
- Cluster Utilization Report overview
  - Enable the Cluster Utilization Report
  - Configure the Cluster Utilization Report Cloudera Manager
  - Use the Cluster Utilization Report to manage resources
    - \* Overview Tab
    - \* Impala Tab
    - \* Download the Cluster Utilization Report
  - Creating a Custom Cluster Utilization Report
    - \* Metrics and queries
    - \* Impala query counter metrics
    - \* Calculations for reports

- \* Retrieving metric data
- \* Querying metric data
- Inspecting Network Performance.
  - Running the Network Performance Inspector From the Cloudera Manager Admin Console
  - Running the Network Performance Inspector From the Cloudera Manager API
- Monitoring Services
  - Monitoring Service Status
    - \* Viewing the URLs of the Client Configuration Files
    - \* Viewing the Status of a Service Instance
    - \* Viewing the Health and Status of a Role Instance
    - \* Viewing the Maintenance Mode Status of a Cluster
  - Viewing Service Status
    - \* Viewing Past Status
    - \* Status Summary.
    - \* Service Summary
    - \* Health Tests and Health History
  - Viewing Service Instance Details
    - \* Role Instance Reference.
  - Viewing Role Instance Status
    - \* The Actions Menu
    - \* Viewing Past Status
    - \* Summary.
    - \* Health Tests and Health History
    - \* Status Summary.
    - \* Charts.
    - \* The Processes Tab
  - Running Diagnostic Commands for Roles
  - Periodic Stacks Collection
    - st Configuring Periodic Stacks Collection.
    - $\ast$  Viewing and Downloading Stacks Logs
  - Viewing Running and Recent Commands
    - \* Viewing Running and Recent Commands For a Cluster
    - \* Viewing Running and Recent Commands for a Service or Role
    - \* Command Details
- Monitoring Hosts
  - Viewing All Hosts
  - Role Assignments
  - Viewing the Disks Overview
  - Viewing the Hosts in a Cluster
  - Viewing Individual Hosts
  - Host Details
    - \* Viewing Host Details Cloudera Manager
    - \* Status.
    - \* Processes.

- \* Resources.
- \* Commands
- \* Configuration
- \* Components
- \* Audits
- \* Charts Library
- Host Inspector
  - \* Running the Host Inspector
  - \* Viewing Past Host Inspector Results
- Monitoring Activities
  - Selecting Columns to Show in the Activities List
  - Sorting the Activities List
  - Filtering the Activities List
  - Activity Charts
  - Viewing the Jobs in a Pig, Oozie, or Hive Activity
  - Task Attempts
    - \* Viewing a Job's Task Attempts
    - \* Selecting Columns to Show in the Tasks List
    - \* Sorting the Tasks List
    - \* Filtering the Tasks List
  - Viewing Activity Details in a Report Format
  - Comparing Similar Activities
  - Viewing the Distribution of Task Attempts.
    - \* The Task Distribution Chart.
    - \* TaskTracker Hosts
  - Monitoring Impala Queries
    - \* Viewing Queries
    - \* Configuring Impala Query Monitoring
    - \* Impala Best Practices
    - \* Results Tab
    - \* Filtering Queries
    - \* Filter Expressions
    - \* Filter Attributes
    - \* Choosing and Running a Filter
  - Query Details
  - Monitoring YARN Applications
    - \* Viewing Jobs
    - \* Configuring YARN Application Monitoring
    - \* Results Tab
    - \* Filtering Jobs
    - \* Filter Expressions
    - \* Choosing and Running a Filter
    - \* Filter Attributes
    - \* Sending Diagnostic Data to Cloudera for YARN Applications
  - Monitoring Spark Applications
    - \* Viewing and Debugging Spark Applications Using Logs

- \* Managing Spark Driver Logs
- \* Visualizing Spark Applications Using the Web Application UI
- \* Accessing the Web UI of a Running Spark Application
- \* Accessing the Web UI of a Completed Spark Application.
- Events Cloudera Manager
  - Viewing Events.
  - Filtering Events.
    - \* Adding an Event Filter.
    - \* Removing an Event Filter
- Alerts
  - Managing Alerts
  - Configuring Alert Email Delivery
  - Configuring Alert SNMP Delivery
  - Configuring Custom Alert Scripts
    - \* Sample Custom Alert Script
  - Alert email routing
    - \* Configuring user profiles for email alerts.
    - \* Configuring host groups for email alerts
    - \* Configuring service groups for email alerts
    - \* Configuring role groups for email alerts
    - \* Configuring alert rules for email alerts
  - Enabling Configuration Change Alerts
  - Enabling HBase Alerts
  - Enabling Health Alerts
  - Modifying the Health Threshold
  - Configuring Alerts Transitioning Out of Alerting Health Threshold
  - Configuring Log Alerts
  - Configuring Alert Delivery
- Triggers
  - Creating a Trigger Using the Expression Editor
  - Editing, Deleting, Suppressing, or Deleting a Trigger
  - Cloudera Manager Trigger Use Cases.
    - \* Creating a Trigger for Memory Capacity.
    - \* Creating a Trigger for CPU Capacity
- Lifecycle and Security Auditing
  - Viewing Audit Events.
  - Filtering Audit Events.
    - \* Adding a Filter.
    - \* Removing a Filter
  - Downloading Audit Events
- Charting Time-Series Data
  - Terminology
  - Building a Chart with Time-Series Data
  - Configuring Time-Series Query Results
  - Using Context-Sensitive Variables in Charts
  - Chart Properties

- \* Changing the Chart Type
- \* Grouping (Faceting) Time Series
- Displaying Chart Details
- Editing a Chart
- Saving a Chart Cloudera Manager
- Obtaining Time-Series Data Using the API
- Dashboards
  - \* Dashboard Types
  - \* Creating a Dashboard
  - \* Managing Dashboards
  - \* Configuring Dashboards
  - \* Saving Charts to Dashboards
  - \* Saving Charts to a New Dashboard
  - \* Saving Charts to an Existing Dashboard
  - \* Adding a New Chart to the Custom Dashboard
  - \* Removing a Chart from a Custom Dashboard
  - \* Moving and Resizing Charts
- tsquery Language
  - \* tsquery Syntax
  - \* Metric Expressions
  - \* Metric Expression Functions
  - \* Predicates
  - \* Discovering possible predicates
  - \* Filtering by Day of Week or Hour of Day
  - \* Time Series Attributes
  - \* Time Series Entities and their Attributes
  - \* FAQ.
- Metric Aggregation
  - \* Presentation of Aggregate Data
  - \* Accessing Aggregate Statistics Through tsquery
- Filtering Metrics
- Logs.
  - Viewing Logs
  - Logs List
  - Filtering Logs
  - Log Details
  - Viewing the Cloudera Manager Server Log
    - \* Viewing Cloudera Manager Server Logs in the Logs Page
    - \* Viewing the Cloudera Manager Server Log
  - Viewing the Cloudera Manager Agent Logs
    - $\ast\,$  Viewing Cloudera Manager Agent Logs in the Logs Page
    - \* Viewing the Cloudera Manager Agent Log
  - Managing Disk Space for Log Files
    - \* Disk Space Requirements
    - \* Managing Log Files
- Reports.

- Directory Usage Report
  - \* Accessing the Directory Usage Report
  - \* Using the Directory Usage Report.
- Disk Usage Reports
  - \* Viewing Current Disk Usage by User, Group, or Directory
  - \* Viewing Historical Disk Usage by User, Group, or Directory
  - \* Downloading Reports as CSV and XLS Files
- Activity, Application, and Query Reports.
- The File Browser
  - \* Searching Within the File System
  - \* Enabling Snapshots.
  - \* Setting Quotas
  - \* Designating Directories to Include in Disk Usage Reports
  - \* Downloading HDFS Directory Access Permission Reports
- Cluster Support Tokens using Cloudera Manager
- Sending Usage and Diagnostic Data to Cloudera
  - Configuring a Proxy Server
  - Managing Anonymous Usage Data Collection
  - Diagnostic Data Collection.
  - Log support in Cloudera Manager for ECS cluster
  - Configuring the Frequency of Diagnostic Data Collection
  - Configuring collection of Cloudera Manager table data
  - Specifying the Diagnostic Data Directory.
  - Redaction of Sensitive Information from Diagnostic Bundles
  - Disabling the Automatic Sending of Diagnostic Data from a Manually Triggered Collection
  - Manually Triggering Collection and Transfer of Diagnostic Data to Cloudera
- Troubleshooting Cluster Configuration and Operation
  - Solutions to Common Problems
  - Logs and Events