

# HDP Administration Training

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## OVERVIEW

This course is designed for system administrators who will be managing the Hortonworks Data Platform (HDP) with Ambari. It covers installation, configuration, and other typical cluster maintenance tasks.

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## METHODOLOGY

### *Duration*

4-days

### *Format*

- > 60% Lecture/Discussion
- > 40% Hands-on Labs

### *Target Audience*

IT administrators and operators responsible for installing, configuring and supporting an HDP deployment in a Linux environment using Ambari

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## COURSE OBJECTIVES

Provide a summary of the enterprise environment including Big Data, Hadoop and the Hortonworks Data Platform (HDP)

- > Install HDP
- > Manage Ambari Users and Groups
- > Manage Hadoop Services
- > Use HDFS Storage
- > Manage HDFS Storage
- > Configure HDFS Storage
- > Configure HDFS Transparent Data Encryption
- > Configure the YARN Resource Manager
- > Submit YARN Jobs
- > Configure the YARN Capacity Scheduler
- > Add and Remove Cluster Nodes
- > Configure HDFS and YARN Rack Awareness
- > Configure HDFS and YARN High Availability
- > Monitor a Cluster
- > Protect a Cluster with Backups

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## PRE-REQUISITES

- > Attendees should be familiar with Hadoop and Linux environments
- > Familiarity with a Unix Shell (i.e Bash)
- > Linux administration experience is a plus

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## LIMITATIONS

- > Classroom size is limited to 10 student so that personalized instruction can be provided to maximize learning

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## HANDS-ON LABS

- > Introduction to the Lab Environment
- > Performing an Interactive Ambari HDP Cluster Installation
- > Configuring Ambari Users and Groups
- > Managing Hadoop Services
- > Using HDFS Files and Directories
- > Using WebHDFS
- > Configuring HDFS ACLs
- > Managing HDFS
- > Managing HDFS Quotas
- > Configuring HDFS Transparent Data Encryption
- > Configuring and Managing YARN
- > Non-Ambari YARN Management
- > Configuring YARN Failure Sensitivity, Work Preserving
- > Restarts, and Log Aggregation Settings
- > Submitting YARN Jobs
- > Configuring Different Workload Types
- > Configuring User and Groups for YARN Labs
- > Configuring YARN Resource Behavior and Queues
- > User, Group and Fine-Tuned Resource Management
- > Adding Worker Nodes
- > Configuring Rack Awareness
- > Configuring HDFS High Availability
- > Configuring YARN High Availability
- > Configuring and Managing Ambari Alerts
- > Configuring and Managing HDFS Snapshots
- > Using Distributed Copy (DistCP)

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## DELIVERABLES

- > Students will be provided reference material
  - o Hortonworks will ship printed copies of a student guide and a lab manual
  - o You will also receive electronic versions of the same student guide and a lab manual beforehand
  - o A VM will be made available for the course and is available for later use
- > Students that complete the training will be awarded a Certificate of Competition by Hortonworks

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## RELATED SERVICES

- > OnX HDP Data Science Training
- > OnX HDP Developer: Apache Pig & Hive Training
- > OnX Hadoop Appliance
- > OnX Hadoop Quick Start
- > OnX Hadoop Development
- > OnX Business Analytics and Data Science
- > OnX Hadoop Administration

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## ACCEPTANCE

Service is deemed accepted upon notification to customer from OnX of completion of service scope activities listed above.

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## TERMS AND CONDITIONS

Unless otherwise agreed to in writing by the parties in a document effective as of the date hereof, these products and services are offered subject to the applicable terms, conditions and agreements and the OnX Standard Terms and Conditions of Sale (U.S) available at: [www.onx.com/TermsAndConditionsOfSale/](http://www.onx.com/TermsAndConditionsOfSale/) . Prices may not include taxes, or insurance charges, if any.