Welcome to Apache™ Hadoop™!

Table of contents

1 What Is Apache Hadoop?	2
2 Download Hadoop	2
3 Who Uses Hadoop?	2
4 News	3
4.1 27 December, 2011: release 1.0.0 available	3
4.2 March 2011 - Apache Hadoop takes top prize at Media Guardian In Awards	
4.3 January 2011 - ZooKeeper Graduates	3
4.4 September 2010 - Hive and Pig Graduate	3
4.5 May 2010 - Avro and HBase Graduate	3
4.6 July 2009 - New Hadoop Subprojects	3
4.7 March 2009 - ApacheCon EU	4
4.8 November 2008 - ApacheCon US	4
4.9 July 2008 - Hadoop Wins Terabyte Sort Benchmark	4

1. What Is Apache Hadoop?

The ApacheTM HadoopTM project develops open-source software for reliable, scalable, distributed computing.

The Apache Hadoop software library is a framework that allows for the distributed processing of large data sets across clusters of computers using a simple programming model. It is designed to scale up from single servers to thousands of machines, each offering local computation and storage. Rather than rely on hardware to deliver high-avaiability, the library itself is designed to detect and handle failures at the application layer, so delivering a highly-availabile service on top of a cluster of computers, each of which may be prone to failures.

The project includes these subprojects:

- <u>Hadoop Common</u>: The common utilities that support the other Hadoop subprojects.
- <u>Hadoop Distributed File System (HDFSTM)</u>: A distributed file system that provides high-throughput access to application data.
- <u>Hadoop MapReduce</u>: A software framework for distributed processing of large data sets on compute clusters.

Other Hadoop-related projects at Apache include:

- **Avro**TM: A data serialization system.
- CassandraTM: A scalable multi-master database with no single points of failure.
- ChukwaTM: A data collection system for managing large distributed systems.
- HBaseTM: A scalable, distributed database that supports structured data storage for large
- <u>HiveTM</u>: A data warehouse infrastructure that provides data summarization and ad hoc querying.
- MahoutTM: A Scalable machine learning and data mining library.
- PigTM: A high-level data-flow language and execution framework for parallel computation.
- **ZooKeeper**TM: A high-performance coordination service for distributed applications.

2. Download Hadoop

Please head to the <u>releases</u> page to download a release of Apache Hadoop.

3. Who Uses Hadoop?

A wide variety of companies and organizations use Hadoop for both research and production.

Users are encouraged to add themselves to the Hadoop **PoweredBy** wiki page.

4. News

4.1. 27 December, 2011: release 1.0.0 available

Hadoop reaches 1.0.0! Full information about this milestone release is available at <u>Hadoop</u> <u>Common Releases</u>.

4.2. March 2011 - Apache Hadoop takes top prize at Media Guardian Innovation Awards

Described by the judging panel as a "Swiss army knife of the 21st century", Apache Hadoop picked up the *innovator of the year* award for having the potential to change the face of media innovations.

See The Guardian web site

4.3. January 2011 - ZooKeeper Graduates

Hadoop's ZooKeeper subproject has graduated to become a top-level Apache project.

Apache ZooKeeper can now be found at http://zookeeper.apache.org/

4.4. September 2010 - Hive and Pig Graduate

Hadoop's Hive and Pig subprojects have graduated to become top-level Apache projects.

Apache Hive can now be found at http://hive.apache.org/

Pig can now be found at http://pig.apache.org/

4.5. May 2010 - Avro and HBase Graduate

Hadoop's Avro and HBase subprojects have graduated to become top-level Apache projects.

Apache Avro can now be found at http://avro.apache.org/

Apache HBase can now be found at http://hbase.apache.org/

4.6. July 2009 - New Hadoop Subprojects

Hadoop is getting bigger!

- Hadoop Core is renamed Hadoop Common.
- MapReduce and the Hadoop Distributed File System (HDFS) are now separate subprojects.
- Avro and Chukwa are new Hadoop subprojects.

See the summary descriptions for all subprojects above. Visit the individual sites for more detailed information.

4.7. March 2009 - ApacheCon EU

In case you missed it.... ApacheCon Europe 2009

4.8. November 2008 - ApacheCon US

In case you missed it.... ApacheCon US 2008

4.9. July 2008 - Hadoop Wins Terabyte Sort Benchmark

<u>Hadoop Wins Terabyte Sort Benchmark</u>: One of Yahoo's Hadoop clusters sorted 1 terabyte of data in 209 seconds, which beat the previous record of 297 seconds in the annual general purpose (Daytona) <u>terabyte sort benchmark</u>. This is the first time that either a Java or an open source program has won.