Welcome to HBase!

1. News



November 19th 2010, <u>Hadoop HUG in London</u> is all about HBase

November 15-19th 2010, <u>Devoxx</u> features HBase Training and multiple HBase presentations

October 12th 2010, HBase-related presentations by core contributors and users at <u>Hadoop World 2010</u>

October 11th 2010, <u>HUG-NYC: HBase User Group NYC Edition</u> (Night before Hadoop World)

October 5th, 2010: HBase 0.89.20100924, the third in our series of 'developer preview' releases, is now available; <u>Download!</u>. See <u>HBase Versions</u> for more on this developer series of releases.

August 9th, 2010: HBase 0.89.20100726, the second in our series of 'developer preview' releases, is now available; <u>Download!</u>. See <u>HBase Versions</u> for more on this developer series of releases.

July 30th, 2010: HBase 0.20.6 released; Download!

June 25th, 2010: HBase 0.89.20100621, the first in a series of 'developer preview' releases, is now available; <u>Download!</u>. See <u>HBase Versions</u> for more on this developer series of releases.

June 24th, 2010: HBase 0.20.5 released; Download!

June 30th, <u>HBase Contributor Workshop</u> (Day after Hadoop Summit)

May 10th, 2010: HBase graduates from Hadoop sub-project to Apache Top Level Project Old news...

2. Overview

HBase is the <u>Hadoop database</u>. Use it when you need random, realtime read/write access to your Big Data. This project's goal is the hosting of very large tables -- billions of rows X millions of columns -- atop clusters of commodity hardware.

HBase is an open-source, distributed, versioned, column-oriented store modeled after Google' <u>Bigtable</u>: A <u>Distributed Storage System for Structured Data</u> by Chang et al. Just as Bigtable leverages the distributed data storage provided by the Google File System, HBase provides Bigtable-like capabilities on top of Hadoop. HBase includes:

- Convenient base classes for backing Hadoop MapReduce jobs with HBase tables
- Query predicate push down via server side scan and get filters
- Optimizations for real time queries
- A high performance Thrift gateway
- A REST-ful Web service gateway that supports XML, Protobuf, and binary data encoding options
- Cascading, hive, and pig source and sink modules
- Extensible <u>iruby</u>-based (JIRB) shell
- Support for exporting metrics via the Hadoop metrics subsystem to files or Ganglia; or via JMX

HBase 0.20 has greatly improved on its predecessors:

- No HBase single point of failure
- Rolling restart for configuration changes and minor upgrades
- Random access performance on par with open source relational databases such as MySQL

3. Getting Started

Start by installing HBase on a single machine or a very small cluster.

- 1. Learn about HBase by reading the documentation.
- 2. <u>Download</u> HBase from the release page.

4. Getting Involved

HBase is an open source volunteer project under the Apache Software Foundation. It is a subproject of <u>Hadoop</u>. We encourage you to learn about the project and contribute your expertise. Here are some starter links:

- 1. See our <u>How to Contribute to HBase</u> page.
- 2. Give us **feedback**: What can we do better?
- 3. Join the mailing list: Meet the community.
- 4. Get the latest at up on the hbase blog.
- 5. Come hang with us on <u>IRC</u>.
- 6. Become an HBase Fan up on facebook.
- 7. Or up on twitter, <u>HBase</u>.