

Home (/) > [Big Data \(/Big-data-and-analytics\)](#) > [Big Data Analytics](#)
[\(https://www.edureka.co/blog/category/big-data-analytics/\)](https://www.edureka.co/blog/category/big-data-analytics/) > [Basics of HBase](#)

[Home](#)
[Blogs](#)
[Videos](#)
[Interview Questions](#)
[\(https://www.edureka.co/blog/interview-questions/\)](https://www.edureka.co/blog/interview-questions/)

Basics of HBase

Recommended by Users

[f](#)
[t](#)
[in](#)
[G+](#)

<https://www.edureka.co/blog/author/lucifer/>
<https://www.edureka.co/blog/basics-of-hbase/>

Sep 17, 2014

[Add to Bookmark](#) [\(https://www.edureka.co/blog/basics-of-hbase/\)](https://www.edureka.co/blog/basics-of-hbase/)
[Email](#)

[this Post](#)
[7.6K](#)
[0](#)

[\(https://www.edureka.co/blog/basics-of-hbase/#comments-wrapper\)](#)
[\(https://www.edureka.co/blog/basics-of-hbase/#disqus_thread\)](#)

HBase is an open source, non-relational, distributed database modelled after Google's BigTable and is written in Java. It is developed by Apache Software Foundation and is a part of Apache Hadoop project. HBase runs on top of HDFS (Hadoop Distributed Filesystem), providing BigTable-like capabilities for Hadoop.

HBase is a key/ value store. HBase is specifically Sparse, Distributed, Multi-dimensional, sorted Maps and consistent.

HBase can be used in the following scenarios:

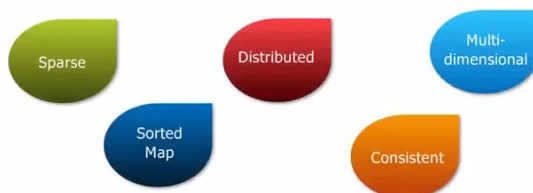
- Huge Data
- Fast Random Access
- Structured Data
- Variable Schema
- Need of Compression
- Need of Sharding

NoSQL Landscape:

The NoSQL databases can be classified as follows:

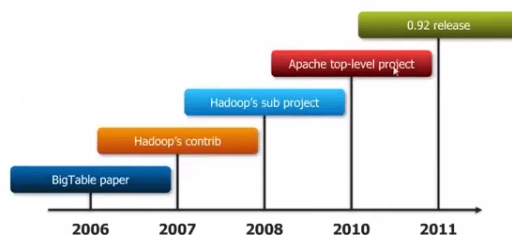
- **Key-Value Stores** – Dynamo (Amazon), Voldemort (LinkedIn), Citrusleaf, Membase, Riak, Tokyo Cabinet, etc.
- **Big Table Clones** – BigTable(Google), Cassandra, HBase, Hypertable, etc.
- **Document Database** – CouchOne, MongoDB, Terrastore, OrientDB, etc.
- **Graph Databases** – FlockDB (Twitter), AllegroGraph, DEX, InfoGrid, Neo4J, Sones, etc.

Features of HBase:



Announcing the Ridiculously Committed Mentor Award [Nominate Now](#)

History of HBase:



Basics of HBase:

The following keywords are required to gain an understanding of the subjects that forms the core foundation of HBase:

- Rowkey
- Column Family
- Column
- Timestamp

An HBase table contains column families, which are the logical and physical grouping of columns. Column families contain columns with time stamped versions. Columns only exist when they are inserted. All column associates of the same column family have the same column family prefix. Each column value is identified by a key. The row key is the implicit primary key. The Rows are sorted by the row key.

Got a question for us? Mention them in the comments section and we will get back to you.

Related Posts:

Big Data and Hadoop Training (<https://www.edureka.co/big-data-and-hadoop>)

Overview of HBase Storage Architecture (<https://www.edureka.co/blog/overview-of-hbase-storage-architecture/>)

HBase Vs Cassandra (<https://www.edureka.co/blog/hbase-vs-cassandra/>)



About edureka (251 Posts (<https://www.edureka.co/blog/author/lucifer/>))



(<https://www.edureka.co/blog/overview-of-hbase-storage-architecture/>)
 u=<https://www.edureka.co/blog/overview-of-hbase-storage-architecture/>
 of- of- of- of-
 hbase/) hbase/) hbase/) hbase/)

Share on

**Got your brain cells running?
Stay tuned to latest technology updates**

Enter your Email Address

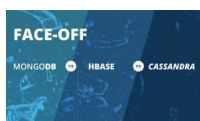
SUBSCRIBE

Related Posts



Insights on HBase Architecture
 👁 13.1K

(<https://www.edureka.co/blog/insights-on-hbase-architecture/>)



Face Off: MongoDB Vs HBase Vs Cassandra
 👁 4.8K

(<https://www.edureka.co/blog/face-off-vs-hbase-vs-cassandra/>)



Top Hive Commands with Examples in HQL
 👁 173.2K

(<https://www.edureka.co/blog/top-hive-commands-with-examples/>)



How to Set Up Hadoop Cluster with HDFS High Availability
 👁 46.8K

(<https://www.edureka.co/blog/how-to-set-up-hadoop-cluster->

Announcing the Ridiculously Committed Mentor Award

[Nominate Now](#)

Browse Categories

[Big Data NoSQL \(https://www.edureka.co/blog/category/big-data-nosql/\)](https://www.edureka.co/blog/category/big-data-nosql/)[Blockchain \(https://www.edureka.co/blog/category/blockchain/\)](https://www.edureka.co/blog/category/blockchain/)[Business Intelligence \(https://www.edureka.co/blog/category/business-intelligence/\)](https://www.edureka.co/blog/category/business-intelligence/)[Cloud Computing \(https://www.edureka.co/blog/category/cloud-computing/\)](https://www.edureka.co/blog/category/cloud-computing/)[Cyber Security \(https://www.edureka.co/blog/category/cyber-security/\)](https://www.edureka.co/blog/category/cyber-security/)[Deep Learning \(https://www.edureka.co/blog/category/deep-learning/\)](https://www.edureka.co/blog/category/deep-learning/)[Finance \(https://www.edureka.co/blog/category/finance/\)](https://www.edureka.co/blog/category/finance/)[Frameworks \(https://www.edureka.co/blog/category/frameworks/\)](https://www.edureka.co/blog/category/frameworks/)[Marketing \(https://www.edureka.co/blog/category/marketing/\)](https://www.edureka.co/blog/category/marketing/)[Mobile Development \(https://www.edureka.co/blog/category/mobile-development/\)](https://www.edureka.co/blog/category/mobile-development/)[Operations \(https://www.edureka.co/blog/category/operations/\)](https://www.edureka.co/blog/category/operations/)[Programming \(https://www.edureka.co/blog/category/programming/\)](https://www.edureka.co/blog/category/programming/)[Project Management \(https://www.edureka.co/blog/category/project-management/\)](https://www.edureka.co/blog/category/project-management/)[Robotic Process Automation \(https://www.edureka.co/blog/category/robotic-process-automation/\)](https://www.edureka.co/blog/category/robotic-process-automation/)[Success Story \(https://www.edureka.co/blog/category/success-story/\)](https://www.edureka.co/blog/category/success-story/)[Systems & Architecture \(https://www.edureka.co/blog/category/systems-architecture/\)](https://www.edureka.co/blog/category/systems-architecture/)[Systems Engineering \(https://www.edureka.co/blog/category/systems-engineering/\)](https://www.edureka.co/blog/category/systems-engineering/)[Testing \(https://www.edureka.co/blog/category/testing/\)](https://www.edureka.co/blog/category/testing/)

Comments

0 Comments

0 Comments

<https://www.edureka.co/blog/> Rajiv Chaudhuri ▾ Recommend 4 Share

Sort by Best ▾



Start the discussion...

Be the first to comment.

ALSO ON [HTTPS://WWW.EDUREKA.CO/BLOG/](https://www.edureka.co/blog/)**AWS DevOps: Introduction to DevOps on AWS**

4 comments • 7 months ago

NAVEEN SAI — i am looking to learn Devops +Aws. So should i learn Aws Developer + Devops ?

Spring Boot Microservices: Building Microservices Application Using Spring Boot

97 comments • 4 months ago

Hardik — Hi,please share the source code at devk9383@gmail.com

Kubernetes vs Docker : Which One Would You Pick?

1 comment • 9 months ago

Ashish Grover — As per this link from Docker, it does seem to support automatic roll-backs. <https://docs.docker.com/v17...>**Cybersecurity Tools You Must Know – Tools for Cyber Threats**

1 comment • 2 months ago

Gvsm Chaithanya — what are the industrial applications for information security

Related Blogs

Announcing the Ridiculously Committed Mentor Award

Nominate Now

to our newsletter

Enter your Email Address

SUBSCRIBE



Insights on HBase Architecture (<https://www.edureka.co/blog/insights-on-hbase-architecture>)

(<https://www.edureka.co/blog/insights-on-hbase-architecture>)



Face Off: MongoDB Vs HBase Vs Cassandra (<https://www.edureka.co/blog/mongodb-vs-hbase-vs-cassandra/>)

(<https://www.edureka.co/blog/mongodb-vs-hbase-vs-cassandra/>)



Top Hive Commands with Examples in HQL (<https://www.edureka.co/blog/hive-commands-with-examples>)

(<https://www.edureka.co/blog/hive-commands-with-examples>)



Top 50 Hadoop Interview Questions You Must Prepare In 2018 (<https://www.edureka.co/blog/interview-questions/top-50-hadoop-interview-questions-2016/>)

([https://www.edureka.co/blog/interview-questions-top-50-hadoop-interview-questions-2016/](https://www.edureka.co/blog/interview-questions/top-50-hadoop-interview-questions-2016/))

Big Data Analytics Courses



Big Data Hadoop Certification Training (/big-data-and-hadoop)

(/big-data-and-hadoop)



Apache Spark and Scala Certification Training (/apache-spark-scala-training)

(/apache-spark-scala-training)



Hadoop Administration Certification Training (/hadoop-admin)

(/hadoop-admin)



Splunk Power User & Admin Certification Training (/splunk)

(/splunk)

Edureka

About us

(<https://www.edureka.co/about-us>)

News & Media

(<https://www.edureka.co/all-media>)

Contact us

(<https://www.edureka.co/contact-us>)

Blog

(<https://www.edureka.co/blog/>)

Work with us

Careers

(<https://www.edureka.co/careers>)

Become an Instructor

(<https://www.edureka.co/instructor-program>)

Become an Affiliate

(<https://www.edureka.co/affiliate-program>)

Hire from Edureka

(<https://www.edureka.co/hire-from-edureka>)

Usefull Links

Reviews

(<https://www.edureka.co/reviews>)

Terms & conditions

(<https://www.edureka.co/terms-and-conditions>)

Privacy policy

(<https://www.edureka.co/privacy-policy>)

Sitemap

(<https://www.edureka.co/sitemap>)

Follow us on

f t in v

(<https://www.edureka.co/follow-us>)

Learn on the GO!

(<https://itunes.apple.com/in/app/edureka/id1033145415?mt=8>)

(<https://play.google.com/store/apps/details?id=co.edureka.app>)

Announcing the Ridiculously Committed Mentor Award

[Nominate Now](#)

<https://www.edureka.co/community>

edureka!
(<https://www.edureka.co>)
© 2014 Brain4ce Education Solutions Pvt. Ltd. All rights Reserved.

"PMP®", "PMI®", "PMI-ACP®" and "PMBOK®" are registered marks of the Project Management Institute, Inc.
MongoDB®, Mongo and the leaf logo are the registered trademarks of MongoDB, Inc.