

## About Brisk

Brisk is an open-source Hadoop and Hive distribution developed by DataStax that utilizes Apache Cassandra for its core services and storage. Brisk provides Hadoop MapReduce capabilities using CassandraFS, an HDFS-compatible storage layer inside Cassandra. By replacing HDFS with CassandraFS, users are able to leverage their current MapReduce jobs on Cassandra's peer-to-peer, fault-tolerant, and scalable architecture. Brisk is also able to support dual workloads, allowing you to use the same cluster of machines for both real-time applications and data analytics without having to move the data around between systems.

Brisk is now available via Apache license v2.0. The DataStax team welcomes your valued feedback.

## Release Contents

*\* Brisk is comprised of the following components. For component-specific information, refer to their respective release notes and documentation.*

- Apache Hadoop 0.20.203.0 + ([HADOOP-7172](#), [HADOOP-5759](#), [HADOOP-7255](#))
- Cassandra 0.8.1 + ([CASSANDRA-2683](#))
- Apache Hive 0.7
- Apache Pig 0.8.3

## New Features in Brisk 1.0 Beta 2

The following new features have been added in this release:

| Feature                   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">BRISK-12</a>  | Apache Pig Integration. See the <a href="#">DataStax Documentation</a> for more information about using Pig in Brisk.                                                                                                                                                                                                                                                                                                                                             |
| <a href="#">BRISK-89</a>  | Job Tracker Failover. See the <a href="#">DataStax Documentation</a> for more information about using the new <code>brisktool movejt</code> command.                                                                                                                                                                                                                                                                                                              |
| <a href="#">BRISK-207</a> | New Snappy Compression Codec built on <a href="#">Google Snappy</a> is now used internally for automatic CassandraFS block compression.                                                                                                                                                                                                                                                                                                                           |
| <a href="#">BRISK-180</a> | Automap Cassandra Column Families to Hive Tables in the Brisk Hive Metastore.                                                                                                                                                                                                                                                                                                                                                                                     |
| <a href="#">BRISK-152</a> | Add a second HDFS layer in CassandraFS for long-term data storage. This is needed because the blocks column family in CFS requires frequent compactions - Hadoop uses it during MapReduce processing to store small files and temporary data. Compaction cleans this temporary data up after it is not needed anymore. Now there is the <code>cfs:///</code> and <code>cfs-archive:///</code> endpoints within CFS. The blocks column family in <code>cfs-</code> |

| Feature | Description                                                                                            |
|---------|--------------------------------------------------------------------------------------------------------|
|         | <code>archive:///</code> has compaction disabled to improve performance for static data stored in CFS. |

## Major Fixes in Brisk 1.0 Beta 2

Brisk 1.0 Beta 2 also includes the following major fixes. For details on all fixes in Beta 2, see the [Brisk Jira Project Web site](#):

| Issue                          | Description                                                                                           |
|--------------------------------|-------------------------------------------------------------------------------------------------------|
| <a href="#">BRISK-126</a>      | Remove multiple slf4j warnings                                                                        |
| <a href="#">BRISK-203</a>      | Use <code>batchMutate</code> instead of <code>insert</code> in <code>HiveCassandraOutputFormat</code> |
| <a href="#">BRISK-219</a>      | Cassandra super columns not mapping in Hive                                                           |
| <a href="#">BRISK-220</a>      | Improve performance of <code>hadoop fs -ls</code>                                                     |
| <a href="#">CASSANDRA-2683</a> | Compaction issue causing secondary index corruption.                                                  |

## Open Issues

For a description of the open issues in Brisk, see the [Brisk Jira Project Web site](#).

## Upgrading from Beta 1 to Beta 2

Perform a rolling upgrade by performing the following steps on each node in your Brisk cluster, one node at a time.

1. Flush the commit log: `nodetool drain`
2. Stop any client applications.
3. Stop the Brisk service: `service brisk stop`
4. Upgrade the Brisk packages to Beta 2.  
**On RedHat Systems:** `yum upgrade brisk-full brisk-demos`  
**On Debian Systems:** `apt-get upgrade brisk-full brisk-demos`  
**For Binary Installs:** Download and unpack the tar file and update `$BRISK_HOME` and `$PATH` to point to the new location.
5. Restart Brisk: `service brisk start`