

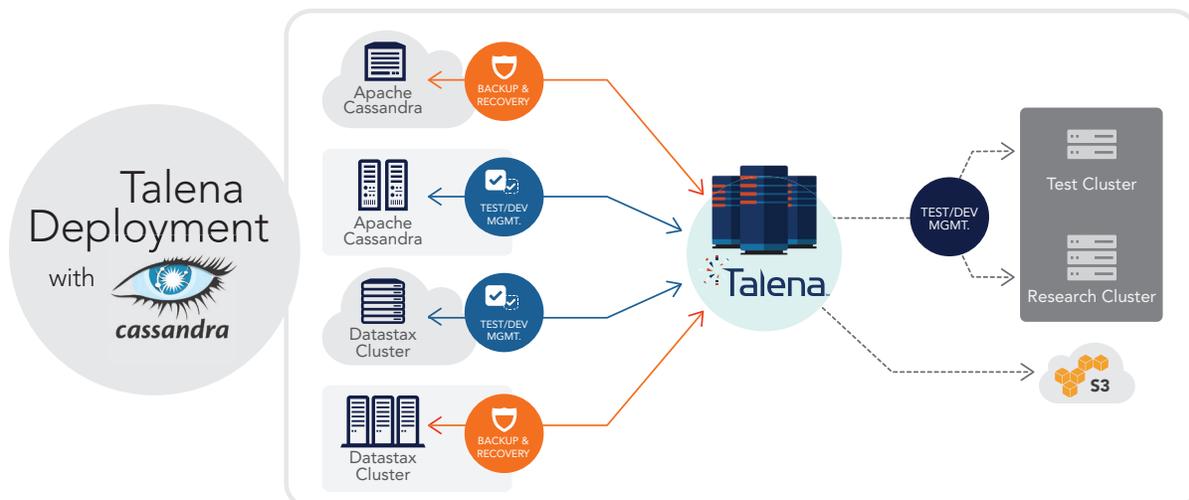
# Talena Deployment With Cassandra

Cassandra has become a database of choice for online applications such as fraud detection, product catalogs, analyzing sensor data, and personalization. In most cases, these applications are critical to the success of a business. Downtime or data loss can severely impact revenue and your business reputation. Hence, constant availability and recoverability of your Cassandra infrastructure is absolutely essential to sustaining business operations.

To ensure data recoverability from user error or application corruption, an enterprise grade backup and recovery solution that goes beyond the capabilities of today’s solutions is required. Having three replicas protects against hardware and site failures but won’t prevent data loss if a user accidentally deletes data in a table or an application corrupts data in your Cassandra database. Implementing the wrong solution can have catastrophic consequences.

An enterprise grade backup and recovery solution for Cassandra must address common issues encountered by customers.

- ① The solution must be designed with both recoverability and backup in mind, versus just the latter. No matter how well a solution can back up data, if data recovery is manual, unreliable or onerous, it can result in downtime and data loss and won’t meet the service level agreement needs of enterprise applications.
- ② IT best practices require that backup copies be stored on a system different from the production system. Cassandra capabilities such as eventual consistency and compaction will result in more data getting backed up requiring excessive backup storage capacity. Storage reduction techniques such as de-duplication and compression are essential to store these backups efficiently.
- ③ An ideal backup solution must also natively facilitate database cloning for non-production use cases such as test & development. However, making a full clone is inefficient and can pose compliance risks especially if the database contains personally identifiable information (PII) or other confidential data. Cloning must include the ability to mask confidential data and create smaller databases (via sampling or filtering of data)



The Talena solution solves these challenges and gives enterprises confidence in their Big Data backup & recovery solution. Talena provides automatic, efficient, and frequent backups of Cassandra, Hadoop, and HPE Vertica to commodity storage. Backups are stored in a de-duplicated and compressed format and are erasure coded to protect against hardware failures. Restores are as simple as running a Google-like search. Tables and databases can be restored from the most current backup or from a previous point in time.

---

## KEY BENEFITS

### Rapid Recovery

leverages Talena FastFind™ so enterprises can find the backed up data and restore with lightning speed.

### Data Durability

uses erasure coding, SMART, and WORM technologies so enterprises can withstand unexpected hardware failures.

### Storage Optimization

is typically 5X or greater with compression, de-duplication, and erasure coding, saving significant money and resources on CapEx and OpEx.

### Heterogeneous Backup

enables backup of multiple applications and databases using a single user interface.

### Combined Backup & Cloning

simplifies data availability management while ensuring that confidential PII data is protected.

### Granular Backup & Recovery

allows backup & recovery of either the entire database or individual tables.

---

Please contact us for more information at [info@talena-inc.com](mailto:info@talena-inc.com) or visit us at [www.talena-inc.com](http://www.talena-inc.com).



Talena, Inc. | 2860 Zanker Road,, Suite 109, San Jose CA 95134 | +1.408.649.6338 | [talena-inc.com](http://talena-inc.com)

© 2016 Talena, Inc. All rights reserved. Talena and the Talena logo are trademarks of Talena in the US and in other countries. Information subject to change without notice. All other trademarks and service marks are property of their respective owners.