

A Customer Case Study on Big Data Product Benchmarking executed by Zeptoh

About WANdisco Fusion and Cloudera BDR

Cloudera provides the world's fastest, easiest, and most secure data platform built on Hadoop. It solves the most demanding business challenges with data. With a foundation of 100% open source software and open standards, Cloudera's platform delivers more flexibility, more cost control, and better results for your business. Cloudera BDR features provide an integrated, easy-to-use solution for enabling data protection in the Hadoop platform. It provides the necessary capabilities to ensure that the data is available at all times, even in the face of the complete shutdown of a data center.

The patented WANdisco Fusion Active Transactional Data Replication technology provided by WANdisco guarantees data consistency and availability across any combination of on-premise and cloud environments regardless of distance and data source. This technology keeps data consistent across different data centers no matter where they are in the world. It gives organizations the ability to integrate different types of storage into the same environment. It means all your hardware is used all the time as you read and write to any data center. It enhances collaboration and increases productivity in your business.

Benchmarking Project Objectives

Appvance wanted Zeptoh to setup a Data-center cluster using IBM Softlayer and Amazon AWS. IBM Softlayer machines were physical and were used for functional testing, whereas Amazon AWS 16*16 clusters were setup for performance testing. Zeptoh built all the clusters from scratch on both IBM Softlayer and Amazon AWS.

Benchmarking Project Overview

The key areas that Zeptoh worked on included Product benchmarking, Hadoop Ecosystem, Backup and Disaster Recovery and Data replication in Data-center Operations. The technologies used by Zeptoh included Hadoop, Cloudera BDR, Disaster Recovery operations, Data Center and Bench-marking and Stress Testing using Terasort, Teragen.

Zeptoh did the functional and performance testing comparing WANdisco Fusion and Cloudera BDR. There were Functional Test cases involved in comparing the active replication technology of WANDISCO to the Cloudera's BDR. Performance test cases compared the active replication of WANdisco Fusion to the passive replication of Cloudera BDR. The team executing this project included 3 architects, 3 developers, 2 testers and a project manager.

Key Findings / Results

Zepto found that active replication of WANdisco Fusion is by far a comprehensive product in the active replication arena. The active replication of WANdisco Fusion is way faster than the competitive product Cloudera BDR. Active replication of WANdisco Fusion is a class in itself since the replication technology provided by WANdisco is active whereas the replication of Cloudera BDR is passive.

The key results of the Big Data Product Benchmarking project executed by Zepto are as follows:

- WANdisco Fusion's active-transactional replication with automated forward recovery avoids Cloudera BDR's risk of data loss and extended downtime after outages. Cloudera BDR runs in batch and requires the replication job to be restarted from the beginning after an outage.
- WANdisco Fusion ingests and replicates data at the same time, making it ideal for streaming fast data applications that require replication, unlike Cloudera BDR, which requires files to be written and closed.
- WANdisco Fusion replicates data between Hadoop clusters running on any distribution, version and storage, including cloud Storage. Cloudera BDR only replicates data between clusters running specific versions of Cloudera's CDH distribution of Hadoop, creating vendor lock-in.

About Zepto Solutions Pvt. Ltd.

Zepto is a software product and technology services company headquartered in Chennai, India. Zepto is a preferred Outsourced Product Development partner for Startups, Independent Software Vendors (ISVs), Enterprises and SMBs across diverse industry verticals including Banking and Financial Services, Healthcare, Education, Retail, Media and Telecom.

Zepto provides end-to-end solutions for outsourced product development and custom application development leveraging emerging technologies on the web, mobile and cloud. It also provides a-la-carte services like UI/UX design, Product Enhancement and Support, Software Testing, Cloud Infrastructure Management and Performance Consulting.