

Software Development

## InfoWorld's 2019 Technology of the Year Award winners

InfoWorld editors and reviewers recognize the year's best software development, cloud computing, big data analytics, and machine learning tools

By James Borck, Martin Heller, Andrew C. Oliver, Ian Pointer, Peter Wayner, and Serdar Yegulalp InfoWorld | Jan 30, 2019

## **DataStax Enterprise**

Apache Cassandra<sup>TM</sup>—an open source large-scale distributed column-family database inspired by Google's Bigtable paper—is a great way to run massively scalable global data infrastructure. The masterless design is ideal for running many types of high-throughput cloud applications.

However, Cassandra is not the easiest system to deploy and manage. It also leaves you wanting when trying to do various types of applications involving analytics, search, and graph operations. DataStax Enterprise (aka DSE) adds these capabilities along with improved performance and security, vastly improved management, advanced replication, in-memory OLTP, a bulk loader, tiered storage, search, analytics, and a developer studio.

Like Bigtable and Cassandra, DataStax Enterprise is best suited for large databases—terabytes to petabytes—and is best used with a denormalized schema that has many columns per row. DataStax and Cassandra users tend to use it for very large-scale applications. For example, eBay uses DataStax Enterprise to store 250TB of auction data with 6 billion writes and 5 billion reads daily.

DataStax Enterprise 6 brought several new features in DSE Analytics, DSE Graph,



## DataStax Enterprise

and DSE Search in 2018, along with finergrained security settings. Improvements to DataStax Studio track the improvements in DSE Analytics, such as support for Spark SQL, and expanded IDE support for DSE Graph with interactive graphs. To top it all off, benchmarks show DSE 6 to be multiples faster than Cassandra.

- Andrew C. Oliver