

## Enterprise-Class Converged Database for Big Data

EsgynDB provides operational ease of running OLTP, ODS, BI and Analytical workloads on a single Big Data platform. EsgynDB is the only Big Data SQL solution that provides a pluggable data management framework, for disparate data sources, to handle mixed workloads (read while writing in real-time) minimizing data movement and duplication. EsgynDB reduces ETL costs by transforming data (ELT) within the database. It's Massively Parallel Processing (MPP) architecture ensures that the strictest SLAs can be accomplished by executing queries in parallel. A mature ANSI SQL engine enables application portability over HDFS-based Data Lakes; proven to handle petabytes of data at high concurrency in numerous demanding enterprises for over 20+ years.

**The Ultimate Query** Only EsgynDB can support querying and joining data from multiple storage engines and across structured, unstructured and semi-structured data.

```
select * from struct_table, unstruct_table, semi_struct_table, external_source
```

**The Most Capable** EsgynDB runs the entire official TPC-DS benchmark out-of-the-box and delivers high performance/concurrency running industry-standard benchmarks YCSB and TPC-C.

### Expect More From Your Big Data Database

**Maturity.** Sophisticated cost-based and rules-driven query Optimizer adapts to varied and changing workloads. Dynamic parallel execution engine enables executing a mixed set of queries efficiently.

**Transactions to Analytics.** Run distributed ACID transactions, reporting, BI and analytics on the same platform and eliminate data copies for different workloads.

**SQL Power with NoSQL flexibility.** Get the best of both worlds – flexibility and scalability of NoSQL with ease of use and streamlined application access of RDBMS.

**Predicate Push Down.** Eliminate data movement between compute & storage, and across network.

**User Defined Function Framework.** Extend functionality of the database by allowing integration of external functions (not necessarily written in SQL) within the same SQL statement, and enable automatic query execution in parallel using the SQL engine to boost performance.

**Multi-tenancy.** Effectively allocate resources for various workloads within a single database instance.

**Security.** Sophisticated features - role-based access controls, authentication (LDAP/AD), integration with Kerberos, encryption at multiple levels.

**Manageability.** Esgyn DBManager – a visual dashboard to monitor & manage all aspects of database.

**Disaster Recovery.** Deploy across multiple data centers in active/active or active/passive modes.

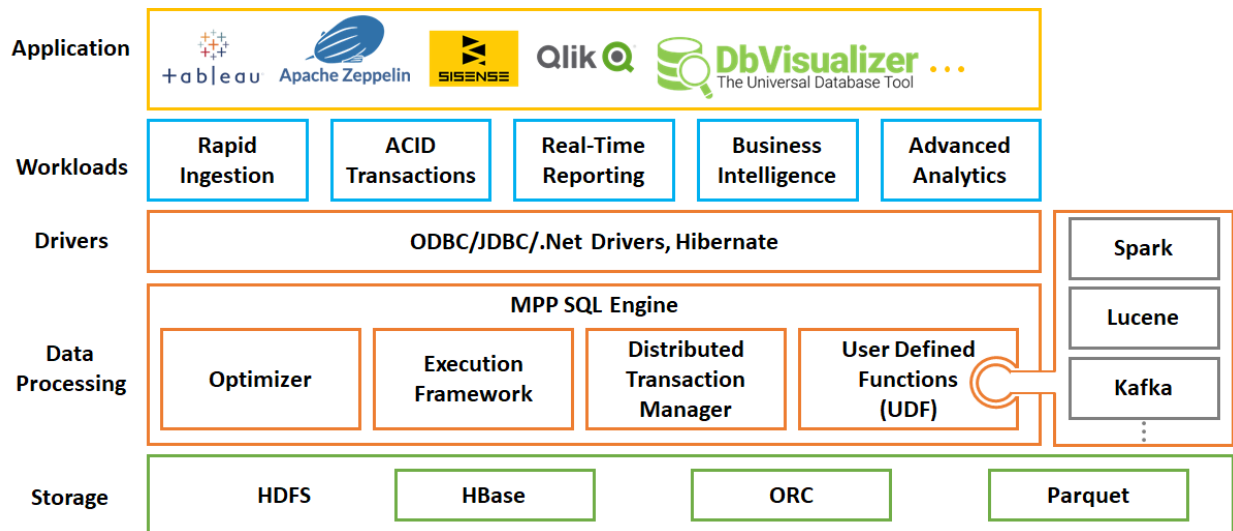
**Deployment.** In-cloud or on-premise (Esgyn-certified Big Data appliances are available).

**Built on Apache Trafodion.** EsgynDB is built on Apache Trafodion and Hadoop.

## Use Cases for Esgyn-powered Data Lakes

- Eliminate data silos / Enhance EDW effectiveness / Self-serve BI & real-time analytics
- Operational Data Store (ODS)
- Internet of Things (IoT and IIoT)
- Offload data transformation (eliminate ETL and use ELT within the SQL engine)
- Reduce time and effort involved in executing AI / ML algorithms

## Architecture



CentOS and RedHat: 6.5-6.9, 7.2-7.3

Certified on Cloudera CDH 5.4-5.10 and Hortonworks HDP 2.4-2.5

## Newly Added Features

- Support for Oracle PL/SQL
- Incremental backup and restore of Trafodion tables
- Extend scale, availability, usability, security

## About Esgyn

Esgyn is the leader in Converged Big Data solutions that empower global enterprises to realize the potential of Big Data. With the industry's first All-in-One SQL Database for Big Data, Esgyn is leading the way enterprises cope with ever increasing data management needs in the cloud or on-premises. Please visit [esgyn.com](http://esgyn.com) for more information on Esgyn and EsgynDB.