Vertica in the Clouds

Vertica maximizes cloud economics for mission-critical big data analytical initiatives, delivering blazing performance and elastic scalability for just-in-time deployments on major public clouds—AWS, Azure, and Google Cloud Platform. Packed with the most comprehensive set of features and functionality, Vertica manages massive amounts of data quickly and reliably to provide fast analytical insight. With Vertica, queries run much faster than other analytical databases and without breaking your budget.

Product Highlight

Vertica performs queries 10 to 50 times faster than traditional databases, at a fraction of the cost and using a fraction of the cloud compute and storage resources. Unlike traditional RDBMS databases, which are not designed for analytics and today’s complex analytics workloads, the Vertica Analytics Platform is built from the ground up for the cloud to elastically and independently scale compute and storage resources to deliver breakneck performance on Exabyte data volumes.

The Vertica Analytics Engine

Columnar Storage and Execution

By eliminating costly disk I/O associated with traditional row-oriented SQL databases, you can perform queries 10 to 50 times faster or more. Vertica’s patented columnar compression allows you to store 10x–30x more data per server than traditional databases.

“Scale-Out” Massively Parallel Processing (MPP)

Scale your data analytics solution as much as you need by adding an unlimited number of compute nodes and storage resources to your analytics environment.

Vertica in the Clouds—Key Features

Multi-Cloud Deployment with a Consistently Optimal Experience

As more and more customers deploy big data in the cloud, Vertica is proven and optimized to run on all major public cloud platforms – AWS, Azure, and Google Cloud Platform. You can consume and rapidly deploy Vertica in minutes, right from the cloud providers’ marketplace. Organizations deploying Vertica on at least two different public clouds can seamlessly replicate data between clouds for rapid disaster recovery.

Vertica Eon Mode Beta Maximizes Cloud Economics

With Vertica 9, you can run Vertica in Eon Mode (currently in Beta) on Amazon Web Services to capitalize on cloud economics, while still enjoying the fast query processing of Vertica. Running Vertica in Eon mode Beta separates the computational processes from the storage layer of your database. This new architecture enables Vertica to scale elastically, adapting to varying dynamic workloads and linearly scaling throughput.

With Eon Mode, organizations provision compute and storage independently. This enables you to elastically scale up and down the cluster to accommodate for analytic workload peaks and troughs. For example, most retail organizations have to over-provision for the holiday season. Eon Mode allows them to provision for normal workloads but add compute resources to scale the query throughput, accommodating greater user concurrency and response times required for peak periods. The Eon Mode architecture makes the analytic database easier to operate even when compute nodes are down. Node recoveries are rapid, reliable, and predictable. Furthermore, Eon Mode simplifies the process of adding and resizing of cluster nodes with no disruption to users or queries.

Seamless Integration with Cloud Object Store and Data Lakes

Vertica provides in-place querying of cloud data-lakes, without having to move and re-format data via direct querying of Hadoop data stored in Parquet and ORC, and of Parquet data on AWS S3. Rapidly load

Quick View

Vertica is a blazingly fast, advanced SQL analytics database with essential enterprise features—built-in machine learning, predictive analytics, fine-tuning capabilities, integrated BI/reporting, data ingestion and more.


• Massively Parallel Processing (MPP) Architecture—Build and deploy models at Petabyte-scale with extreme speed and performance on a unified advanced analytics platform.

• End-to-end Machine Learning Management—Prepare data with functions for normalization, outlier detection, sampling, and more—then create, train and score machine learning models on massive data sets.

• Simple SQL Execution—Manage and deploy machine learning models using simple SQL-based functions to empower data analysts and democratize predictive analytics.

• Familiar Programming Languages—Create and deploy C++, Java, Python or R libraries directly in Vertica with user-defined functions.

At the core of the Vertica Analytics

Platform in the cloud is a column-oriented, elastically scalable, relational columnar MPP database, built specifically to handle today’s analytic workloads on your choice of clouds.

- Fast big data analytics. Gain insights into your data in seconds. Consume, analyze, and make informed decisions at the speed of your business.
- Maximize cloud economics. Provision your compute for the queries that you want to run and provision your storage for all the data that you want to store.
- Elastic scalability of compute and storage. Innovative parallel processing and distributed architecture enables you to elastically scale your analytics by adding compute instances on the fly.
- Frictionless Cloud Deployment. Consume and monetize your data in a matter of minutes, not weeks, via seamless deployment from cloud platform providers’ marketplace.

Try Vertica Today

Vertica is the core SQL database analytics engine that was purpose-built for the cloud with speed, elastic scalability, simplicity, and openness. With Vertica, your queries run 10–50x faster than any data warehouse or database technology. It’s proven to run at Exabyte-scale and gives you complete openness to use any BI/ETL tool, and leverage scalable predictive analytics and a comprehensive library of built-in advanced analytical functions.


Learn More

www.vertica.com/clouds
www.vertica.com/eonmode