MICRO FOCUS® | **VERTICA**

Vertica in Eon Mode

Take charge of your variable big data compute and storage needs

Vertica in Eon Mode at a Glance

- **Designed for the cloud, and beyond:**
  Separating compute from storage is no longer limited to the cloud! Vertica allows cloud and modern enterprise data centers the benefits of improved operational efficiencies, including scaling compute separately from storage.

- **Dynamic workload management:**
  Manage dynamic workloads by rapidly scaling compute resources to meet increased demand, independently of shared storage. Scale compute down to save money or apply compute resources elsewhere.

- **Improved workload isolation:**
  Use subclusters to provide dedicated compute to separate workloads, without the burden of data replication and copy maintenance. Subclusters ensure that workloads will not impact one another. For example, heavy analytics workloads will not slow down your dashboards. Scale each subcluster to the workload it is servicing, then shut it down when not in use.

Vertica in Eon Mode Architecture
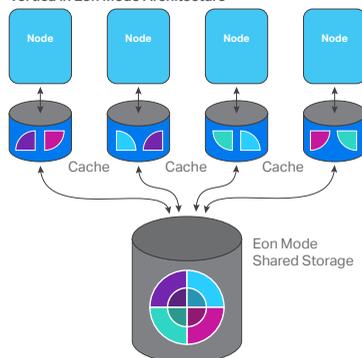
The Vertica Analytics Platform is a purpose-built, read-optimized database designed to manage rapidly growing volumes of data and deliver insights faster than any analytical big data warehouse in the marketplace. Vertica is ANSI SQL compliant, and it extends SQL to a rich set of machine learning and advanced analytics features, at scale, without the need for data movement. For organizations whose workloads are variable and who need to allocate compute resources across a variety of use cases without duplicating the data, Vertica in Eon Mode provides a flexible, efficient way to expand, contract, and manage resources as needs change.

Separating storage and compute – it's never been so straightforward

Vertica was designed to provide blazingly fast analytics on massive data sets, independent of your underlying infrastructure. Eon Mode is available in the Cloud on AWS and GCP as well as on-premises with Pure Storage FlashBlade, MinIO, and HDFS. Each platform offers an object store for communal storage. Vertica in Eon Mode meets the demands of variable workloads through rapid scaling, simplifies database operations such as rapid node recovery, and enables workload isolation so that DBAs can protect the SLAs of one workload from the demands of another.

Vertica in Eon Mode, a primary, durable data copy resides in your shared communal storage. An intelligent cache called the "Depot," local to each compute node,

ensures high performance by storing a copy of the data most relevant to the workload. There is no need to redistribute the primary copy, or create data replicas. You can configure clusters as your use cases demand, and allow heavy storage with minimal compute, or vice versa, depending on workload requirements.

Right-size your data economics
Organizations with variable workloads traditionally need to provision data storage and compute resources to handle those requirements at scale, even when the need diminishes. This is a waste of resources and, more importantly, a waste of money.

Vertica in Eon Mode allows organizations to right-size the economics of its data platform by tying costs directly to business needs. By provisioning just the right amount of compute resources for queries and just the right amount of storage resources for data, teams are able to support variability in workloads and special projects with far less waste.

Reduced ETL and replication
Responding to new database workloads often means replicating some or all of a database to maintain SLAs for the existing workloads. But replication leads to secondary issues, including poor copy synchronization, high consumption of storage and network resources, and copy redundancy.

Vertica in Eon Mode solves these issues through the grouping of compute

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resources into subclusters for reading a common database. Rather than replicate portions of the database or perform time-consuming ETL processes usually associated with that, users can simply spin up a new subcluster on the same database. This also eliminates maintenance of data replicas across IT resources.

Elastic scalability and operational efficiency

Whether using subclusters or not, Vertica in Eon Mode enables you to seamlessly scale data storage capacity and number of nodes independently. As workloads scale upward, you can rapidly expand the number of queries a cluster can handle by simply adding more nodes or subclusters.

You also gain greater operational simplicity and workload isolation to meet SLA and business stakeholder objectives – a win-win for any IT organization. With Vertica in Eon Mode, cluster performance is predictable, even when a node is lost or as the repair process is underway. Node recovery is efficient, quick, and more reliable than ever before.

Deployment options

Vertica in Eon Mode is currently available for public clouds and on-premises installations, as well as a mix for hybrid deployments. Because Vertica licensing does not differentiate between deployment options, Vertica customers can continuously adjust their deployment decisions as needed.

In the clouds:

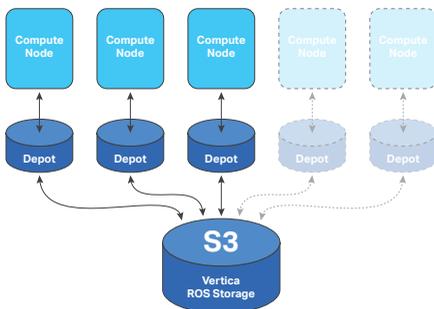- Amazon Web Services S3
- Google Cloud Platform

On-premises, via S3 compatible storage, including:

- Apache Hadoop HDFS for communal storage
- MinIO.
- Pure Storage FlashBlade technology

Learn more at

https://www.vertica.com/eon-mode-faq

Vertica in Eon Mode (Depot)

Vertica in Eon Mode