

## SOLUTION BRIEF

# Modernize Analytics with Vertica and Pure

Transform traditional data warehouses into modern analytics platforms with Vertica in Eon Mode for Pure Storage.

With seemingly endless growth in data volumes, it's a good time to consider new approaches to the traditional data warehouse. You need the ability to rapidly scale your storage resources without compromising performance. Poorly utilized compute and storage resources can lead to costly inefficiencies. A modern approach solves these challenges so that you can maximize the value of new and growing volumes of data.

## Transition to Modern Data Architectures

Two architectural shifts are enabling transformations from traditional data warehouses to modern data analytics platforms. The first is the use of object storage to effectively capture large and growing amounts of big data. The second is the disaggregation of compute and storage, which drives more efficient storage allocation from a single resource pool for multiple, isolated workloads. Leveraging object storage from the cloud is an attractive option. Many enterprises are looking for a hybrid approach with on-premises options for control and compliance that other solutions may not provide.

The Vertica Advanced Analytics Platform is a column-oriented, relational database built to handle today's most challenging analytic workloads. Vertica added Eon Mode to better address variable workloads and isolate workloads from one another with disaggregated compute and storage. Pure Storage® FlashBlade®, the industry's most advanced file and object storage platform, offers disaggregated storage resources for simple, high-performance infrastructure to accelerate time to insights. Together, these capabilities make Vertica in Eon Mode for Pure Storage the industry's first analytical database solution to separate compute from storage for on-premises environments.

Pure brings a focus on the modern data experience to analytics. Pure accelerates time to insight with fast "time to first byte" and high throughput. Deploying fast object storage on premises increases choice and reduces risk via a cloud-native architecture. IT admins can improve productivity with FlashBlade's non-disruptive operations and consolidate silos by supporting multiple data sources on one storage platform.



### Accelerate Insights

- Speed ETL and query performance.
- Increase linear performance and scale up to billions of objects.



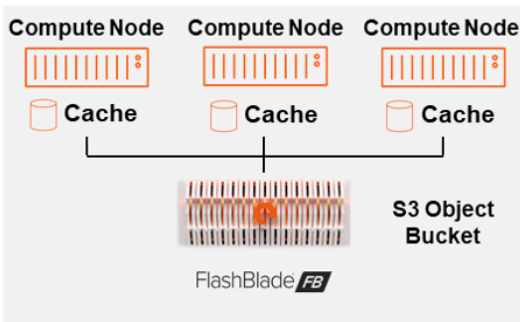
### Build Hybrid Clouds

- Reduce cloud migration risks with cloud-native object support.



### Improve IT Productivity

- Share one set of data infrastructure with multiple isolated workloads.
- Non-disruptive: Maintain 100% performance during maintenance operations.



**Figure 1.** Cloud-native architecture: Vertica in Eon Mode combines disaggregated compute with fast object storage from Pure.

## A New Choice

Vertica in Eon Mode for Pure Storage expands your ability to manage workloads dynamically and simplify operations beyond public clouds. It’s a new option to get the capabilities and benefits of cloud-optimized architectures in on-premises environments, including deployment options such as AWS Outposts. Additionally, the ability to consume Pure as a service combines cloud-optimized architecture with cloud-like economics. Vertica in Eon Mode for Pure Storage helps you achieve advantages, including:

- Combine siloed data, running ETL and analytics with the same storage infrastructure.
- Isolate workloads for specific needs and use cases, eliminating database replication costs and headaches.
- Save storage space with Vertica in Eon Mode (compared to Vertica in Enterprise Mode).
- Deliver the concurrency and performance needed as more users require analytics.
- Elastically scale storage as your database grows from terabytes to petabytes.
- Scale compute up or down on demand for one-time or variable workloads and projects.
- Size compute resources to *hot data* rather than to the overall database for further cost savings.
- Simplify dev/test and data protection with built-in object-based cloning and replication capabilities.
- Mitigate the risks associated with cloud migration by deploying a cloud-native object architecture on-premises.
- Develop policies and procedures around cloud architectures before expanding your public cloud-footprint.
- Leverage the same technology stack with both private- and public-cloud deployments for hybrid-cloud flexibility.

With Vertica and Pure, you have a new choice that addresses the challenges brought by the volume and velocity of modern analytics. With this solution, you can now gain more value from your organization’s data, wherever it lives.

## Additional Resources

- Download the [FlashBlade Data Sheet](#) and simplify deployments with the [Pure Validated Design for Vertica in Eon Mode](#).

