MODERN DATA WAREHOUSE

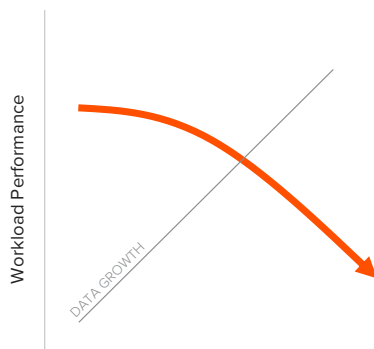## Powered by FlashStack with FlashBlade

SUMMARY

In today's data-first world, the data warehouse is often the foundation for enterprises driving innovation with analytics. Powered by Pure Storage FlashBlade™, the Pure FlashStack™ converged infrastructure solution delivers up to 3x faster analytics and lower total cost of ownership compared to legacy Oracle appliances while enabling customers to jumpstart modern analytics & AI initiatives using the same data platform.

WHERE ORACLE DATA WAREHOUSE APPLIANCES FALL SHORT

Data warehouse appliances simplify infrastructure management for Oracle warehousing and analytics. However, the appliance approach doesn't match what customers need from their infrastructure today. Customers expect cloud-like agility and data-driven intelligence powered by modern analytics; by contrast, data warehouse appliances lock customers into a fast-aging solution that's purpose-built only for a single application. Appliances create additional silos that increase operational costs and infrastructure complexity.

DATA WAREHOUSE APPLIANCES – THREE PROBLEMS

Declining Performance Impacts the Business

While the computational demand of data warehouse workloads like ETL and analytics queries are increasing every year, appliance capabilities are fixed. An appliance's compute, network, and storage are often sized for the initial deployment and don't have the flexibility to grow performance and/or capacity as needed. The result? Customers can miss their SLAs and face potential financial penalties.
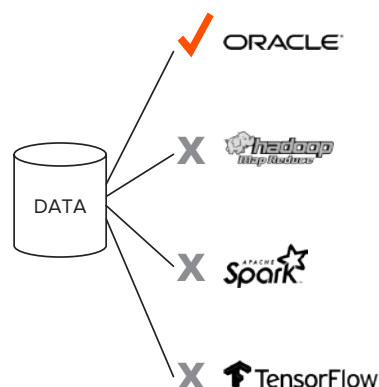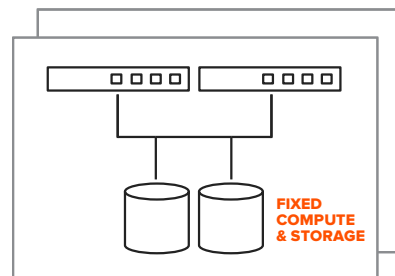
Overpaying for Unused Capabilities

To address the reality of declining performance over time, customers often purchase additional appliances and software licenses. However, because an infrastructure appliance is a static architecture, newer systems are not necessarily right-sized for workload demands. Instead of separately adding compute when more performance is needed, or adding storage when more capacity is required, the only option is to invest in yet another appliance that adds both. The appliance model almost always leads to customers buying licenses and components that are not needed.

Fixed Appliance Design

PAY FOR COMPUTE WHEN NEED STORAGE
PAY FOR STORAGE WHEN NEED COMPUTE

$10K's per Core & HDD

FIXED COMPUTE & STORAGE

Data Locked in a Proprietary System

In this new era of analytics and AI, a new wave of third-party applications tap data to deliver new abilities and insights. However, the appliances lock-in customer data, making that data available only to Oracle applications. If data science teams want to leverage modern tools like Spark, Kafka, or TensorFlow, infrastructure teams are forced to deploy more infrastructure and manage data manually – creating more data silos.

THE NEW APPROACH: FLASHSTACK WITH FLASHBLADE

FlashStack with FlashBlade is industry's only modern, flexible, scale-out compute and storage solution for file and object offering a Data Hub for all data-intensive applications. The Pure Storage FlashBlade array offers a single platform to share and analyze a variety of data types with tools like Spark, Kafka, and TensorFlow.

FlashStack with Flashblade allows enterprises to consolidate workloads and leverage Cisco UCS and Nexus technologies to build a high-performance converged infrastructure. It provides customers with the flexibility to size CPU cores based on business needs, increase storage capacity by adding blades, and adopt a versatile converged infrastructure that drives performance without paying for unneeded capacity.

FlashBlade is powered by Purity software and a massively distributed transaction database, delivering a true scale-out architecture that grows elastically while providing any data to any client without bottlenecks or hotspots.

CASE STUDY: TIER 1 TELECOM

The Challenge: The customer was running Oracle RAC on Exadata X2. They bought X2 in 2013 and their license support expired at the end of 2017. They architected the system based on running 50 ETL workloads and analytics, which used to take 6 hours to complete. By the time 2017 arrived, they had an additional 50 ETL workloads to process and it took 9 hours to complete, resulting in several broken service level agreements.

Additionally, the customer had to meet a massive compliance data backup, and its 16 hour processing time was deemed too slow.
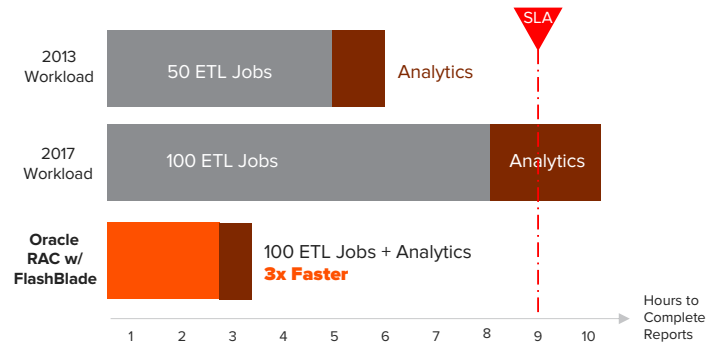
The Solution: The customer deployed FlashStack with FlashBlade and saw 3X faster performance. The ETL workloads and analytics took only 3 hours to complete, while backup jobs were reduced to 2 hours – an 8X improvement.

Benefits: The database administrator is so ahead of schedule that he no longer gets service level agreement penalties and he's able to add ETL workloads and analytics queries as business data demand grows.

FLASHBLADE EASILY MEETS SLAs EXADATA COULD NOT HANDLE…

2013 Workload	50 ETL Jobs — Analytics
2017 Workload	100 ETL Jobs — Analytics
Oracle RAC w/ FlashBlade	100 ETL Jobs + Analytics **3x Faster**

SLA

Hours to Complete Reports
1 2 3 4 5 6 7 8 9 10

… AND SIMULTANEOUSLY ACCELERATES BACKUP BY 8X

2017	**16 Hours** for full DB Backup Job
Oracle RAC w/ FlashBlade	**2 Hours** **8x Faster**

Hours for Backup
2 4 6 8 10 12 14 16 18 20

SUMMARY: MAKE THE MOVE TO FLASHSTACK TODAY

Take the next step toward modernizing your Oracle data warehouse and building a foundation for next-generation analytics. The efficiency of the Pure FlashStack with FlashBlade solution drives down costs while giving you the freedom to scale – something you can't get with a single approach platform. Don't let your data warehouse solution keep you from powering your business to new levels with more in-depth insight that speeds up ad-hoc decisions, reduces risk, and drives innovation.

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