

Tintri for Oracle

Predictable performance, simplified troubleshooting, and enhanced availability

Businesses rely on fast and uninterrupted Oracle database access to make critical decisions. Many of the largest enterprise data warehouses and transactional databases run on Oracle. However, the complexity and size of Oracle database make it hard to set up and configure, and a running database can put tremendous demands on underlying storage, which must provide sub-millisecond latency and predictable performance under heavy workloads.

Tintri VM-aware storage (VAS) addresses these challenges, delivering outstanding performance and helping your organization meet key business requirements for:

- **Availability** — business-critical databases must be running and available 24/7
- **Resiliency** — databases must offer multiple backup and restore options and the ability to failover to a disaster recovery (DR) site
- **Maintainability** — simple monitoring with clear insight into infrastructure is a must for analysis and troubleshooting of database performance issues

Most Oracle database administrators (DBAs) are not storage experts. They speak in terms of recovery point objective (RPO) and recovery time objective (RTO) and are accountable for these metrics down to the second. DBAs often find conventional storage based on LUNs too complicated. It requires constant tuning and becomes obsolete quickly as business needs change.

Tintri eliminates storage complexity, making it easier for DBAs to achieve their performance and availability goals. Multiple virtualized databases can share the resources of a single Tintri VMstore, with each database getting the storage resources—both capacity and performance—it deserves.

Performance Isolation

Individual performance lanes with auto tuning, and elimination of noisy neighbors

The value of virtualization comes from running multiple virtualized workloads on shared infrastructure. The ability to isolate mixed workloads effectively is a must. The Tintri VAS architecture delivers the IOPS needed for high performance databases and is unique in providing performance isolation for each IO request from each database. Tintri technology guarantees the performance of virtualized Oracle databases including Oracle Real Application Clusters (RAC). Powerful per-VM manageability tools are uniquely suited to guarantee the performance of Oracle databases.

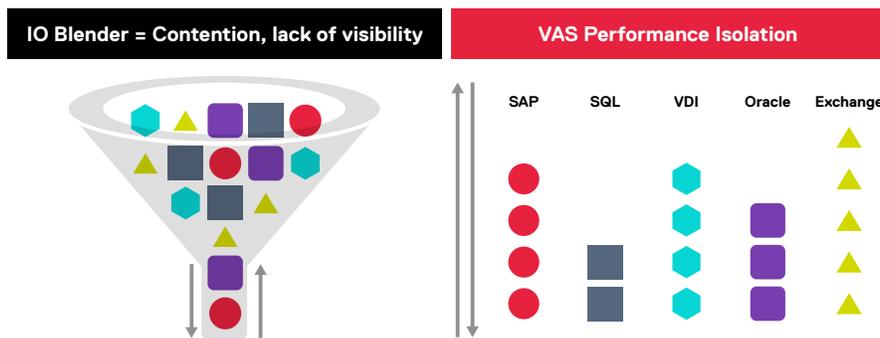


Figure 1—Performance isolation delivers predictable performance for mixed workloads

Latency and Performance Visualization

Cross-infrastructure troubleshooting that puts an end to finger-pointing

When a database encounters a performance issue, it often takes an army of DBAs, plus storage, network, and virtualization admins to figure out the cause. However, since each administrator only has visibility into one part of the infrastructure, problems take longer to resolve and your business suffers. Tintri provides end-to-end visibility across the entire infrastructure stack to identify the root cause of issues.

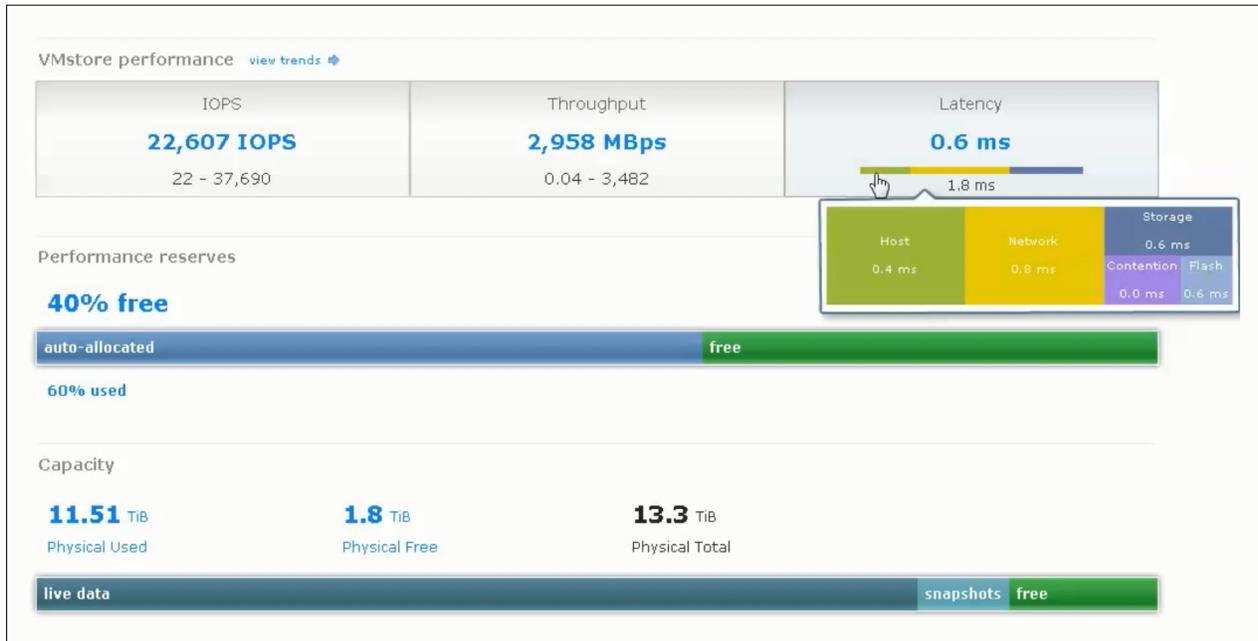


Figure 2—Tintri end-to-end visibility across host, network and storage

Simple and Reliable Disaster Recovery

Enhanced availability through efficient data protection and faster test / development

Availability is a top priority. Tintri ReplicateVM provides efficient synchronous and 1:many replication options to support your Oracle database DR strategy. However, often overlooked is the ability to provide a robust testing ground for snapshots and mirroring, data refresh and restore without impacting production Oracle databases. Tintri SyncVM—a copy data management tool—simplifies the provisioning and distribution of up-to-date test/dev instances to accelerate application development.