HOW TO STREAMLINE AND OPTIMIZE YOUR ON-PREMISES IT INFRASTRUCTURE AND GET CLOUD-READY

PURPOSE-BUILT ENGINEERED SYSTEMS CAN DRIVE OUT COMPLEXITY, SAVE MILLIONS IN COSTS, IMPROVE PERFORMANCE, AND ENSURE A PATH TO THE CLOUD.

Enterprise IT infrastructure has grown unwieldy, with organizations implementing various hardware solutions to address different applications and backup and storage requirements, often lacking an overarching strategy. The result: multiple systems creating a mishmash of difficult-to-manage information silos that drive up staffing expenses.

At the same time, many of these organizations want to realize the benefits of public cloud infrastructure, or at least position themselves to be ready when the time is right. But moving this complex multivendor collection of infrastructure—especially for business-critical workloads—to the cloud is a daunting task for many organizations.

One solution is to first streamline and simplify your on-premises infrastructure and put it on a path to being cloud-ready. Consolidating various systems onto purpose-built engineered systems optimized for specific workloads and designed to work together improves performance while enabling significant savings. Organizations will find they spend less time and fewer resources on the day-to-day management of IT infrastructure, leaving more time to innovate. This strategy also reduces software and support expenses, because you have fewer systems from different vendors and thus need fewer resources to manage your collection of applications.

By streamlining and optimizing on systems that are cloud-ready, you can future-proof your environment so you'll have the cloud option as you move forward.
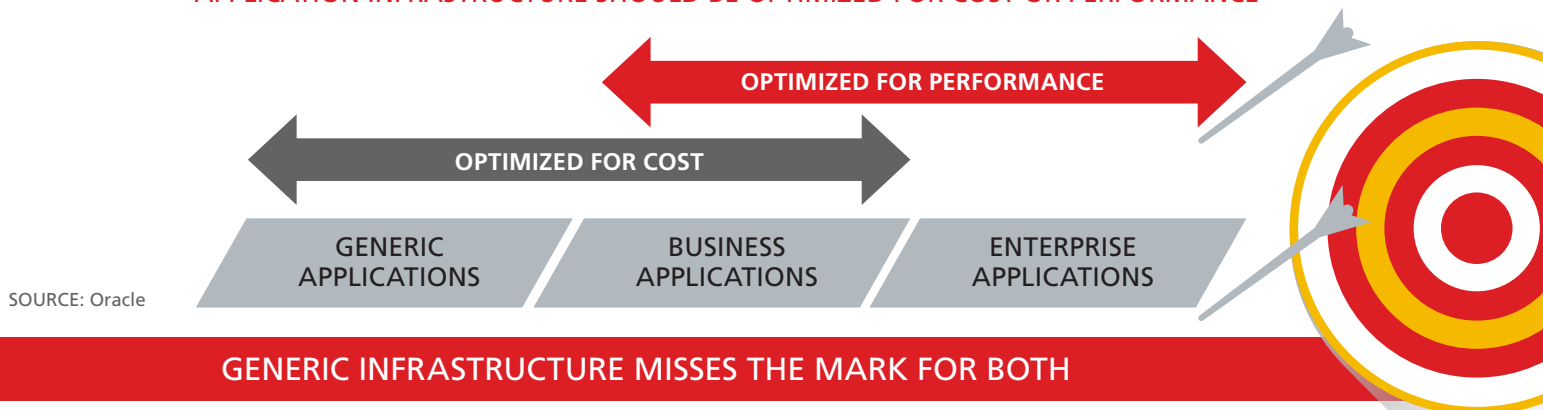
A FOUR-PART SOLUTION

The current IT infrastructure situation requires separate teams of IT experts to manage each silo, resulting in added staffing expense. Furthermore, these complex multivendor do-it-yourself environments make it difficult to achieve the performance and agility needed to deliver innovative solutions that drive the business.

A smarter solution is to have different purpose-built hardware tiers, with varying price/performance levels, to handle the four main sorts of business-critical applications in the typical organization, namely:

- **Databases:** Typically, the most demanding—and important—IT services in an organization, databases require a system with top-tier performance and security.

- **Big data and analytics:** These applications require a system that can ingest and visualize large amounts of data and deliver results with fast and predictable performance levels.

ORACLE®

APPLICATION INFRASTRUCTURE SHOULD BE OPTIMIZED FOR COST OR PERFORMANCE

OPTIMIZED FOR PERFORMANCE

OPTIMIZED FOR COST

GENERIC APPLICATIONS

BUSINESS APPLICATIONS

ENTERPRISE APPLICATIONS

SOURCE: Oracle

GENERIC INFRASTRUCTURE MISSES THE MARK FOR BOTH

- **Application logic and middleware:** Everyday applications offer a great opportunity to consolidate multiple servers on an engineered system built to be optimized for performance or for cost.

- **Backup/recovery:** Just as each application should be targeted for a specific type of compute platform from a price/performance perspective, the same goes for backup and recovery. Your most valuable IT asset, the data in databases, requires a different level of backup-and-recovery performance than other applications.

THE ORACLE APPROACH

Oracle offers a range of purpose-built systems that enable companies to dramatically consolidate infrastructure while also ensuring an appropriate price/performance level for each application. Let's look at a few of the systems in the family.

Oracle Exadata is purpose-built to handle the most-demanding database applications. It comes with highly scalable integrated database servers and storage, connected by an extremely high-speed InfiniBand internal fabric. Unique software algorithms implement database intelligence throughout the system—in storage, flash memory, and networking—to deliver a level of performance that is simply not possible with generic hardware.

Similarly, the Oracle Exalogic platform is an engineered system optimized for Oracle WebLogic and Java middleware, whereas the Oracle Exalytics platform is optimized for Oracle Business Intelligence. All three platforms are intended to deliver the kind of performance these demanding applications require.

In terms of database backup and recovery, Oracle's Zero Data Loss Recovery Appliance is a purpose-built storage solution for Oracle Database instances. It enables companies to consolidate multiple existing storage solutions, in part due to its built-in Oracle Database deduplication and compression technology. It is a high-performance solution that offers recovery to any point in time to eliminate the risk of data loss and also has recovery capabilities that are up to 90 percent faster than legacy solutions.

More good news: Oracle engineered systems have precise equivalents in the Oracle Public Cloud, making them inherently cloud-ready. It'll be a simple transition, should you decide to take advantage of cloud offerings.

SUCCESS STORIES

Besides providing outstanding performance, Oracle engineered systems enable significant cost savings.

A US$250 billion financial services firm is saving US$30 million by replacing 1,930 database servers with 35 Oracle Exadata systems. The savings are in two main areas. The first is database software licensing and support costs, based on the number of server cores in production. Getting the same performance out of fewer server cores means significant savings. The remaining savings come from a 95 percent reduction in patching times and other administrative tasks, which enable IT staff to work on more-valuable tasks.

In terms of storage and backup, the firm replaced 30 legacy backup systems with just 18 Oracle ZFS Backup Appliances, for a savings of US$33 million—along with a 10x performance improvement. And it replaced more than 100 legacy storage systems with 34 Oracle ZFS Storage Appliances, saving US$24 million and gaining a 12x performance improvement—in just a quarter of the footprint. In total, the company saved US$87 million with Oracle engineered systems.

It's not just large enterprises that can save with Oracle engineered systems, however. After standardizing on Oracle infrastructure, a home renovation retailer in Japan cut IT operating costs by 40 percent and floor space by 64 percent while doubling the speed of its sales data reporting.

Such stories make it clear that removing complexity by streamlining and consolidating infrastructure onto engineered solutions makes a large, immediate impact. At the same time, it positions you to take advantage of cloud offerings when the time is right.

To learn more, visit www.oracle.com/it-infrastructure.