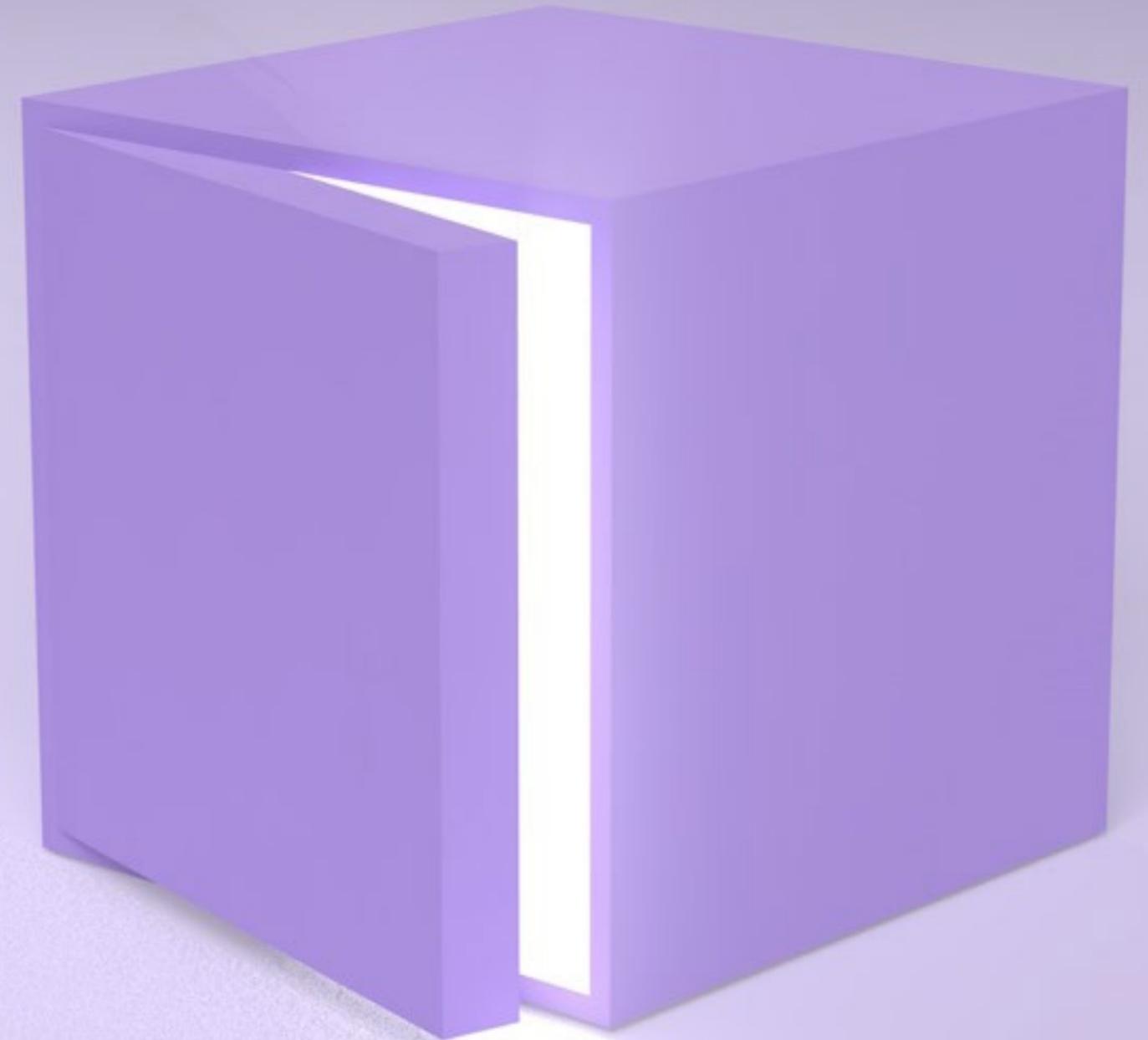BUYER'S GUIDE

Give your Oracle database superpowers

Choosing the right infrastructure—on premises and in the cloud

∏ NetApp

Contents

Up, up, and away

Oracle databases keep today's enterprises running. They're always there when you need them, ready to save the day. But all superheroes have their kryptonite. Disconnected infrastructure and aging storage systems can cripple an Oracle database faster than you can say "Lex Luthor." Symptoms include:

- Slow overall performance that can't hang with modern Oracle databases
- Time-consuming test/dev cycles due to long resource provisioning and database cloning time
- Increased risk of downtime and security breaches
- Higher costs for power, cooling, and space
- More management and maintenance complexity

Are your Spidey senses tingling? A modern infrastructure can give your Oracle databases the superpowers to take your business to another realm. We're talking superhuman speed, superhuman strength, and nigh-invulnerability. (No X-ray vision yet, but we're working on it.)

? How do you choose the right solution for your Oracle infrastructure?

So, how you do choose the right solution to modernize your Oracle infrastructure? You don't need to find a phone booth or start hanging around radioactive spiders. You just need to answer these four questions:

How will the solution be deployed?
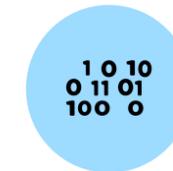
Will the solution help stimulate innovation?

Will the solution deliver a consistent customer experience?

Will the solution simplify operations and lower TCO?

How will the solution be deployed?

First, you need to decide how your solution will be deployed.
On premises? In the cloud? Or both?

On premises
By keeping the Oracle database inside the data center, organizations can maximize:

Performance | Control | Data protection

Cloud
The cloud gives organizations an easy way to modernize their Oracle infrastructure without the capital expenditure (capex) investments and management skills needed for on-premises solutions:

Cost efficiency | Scalability | Easy deployment and provisioning

Hybrid cloud
Hybrid cloud solutions provide the performance and control of on-premises solutions with the ease and flexibility of the cloud:

Agility | Scalability | Control

We surveyed the Pulse community to tell us which components of the Oracle database environment they plan to move to the cloud.

Backup — 55%

Production — 53%

Non-production DBs (Dev, Training, QA, etc.) — 43%

Replication — 34%
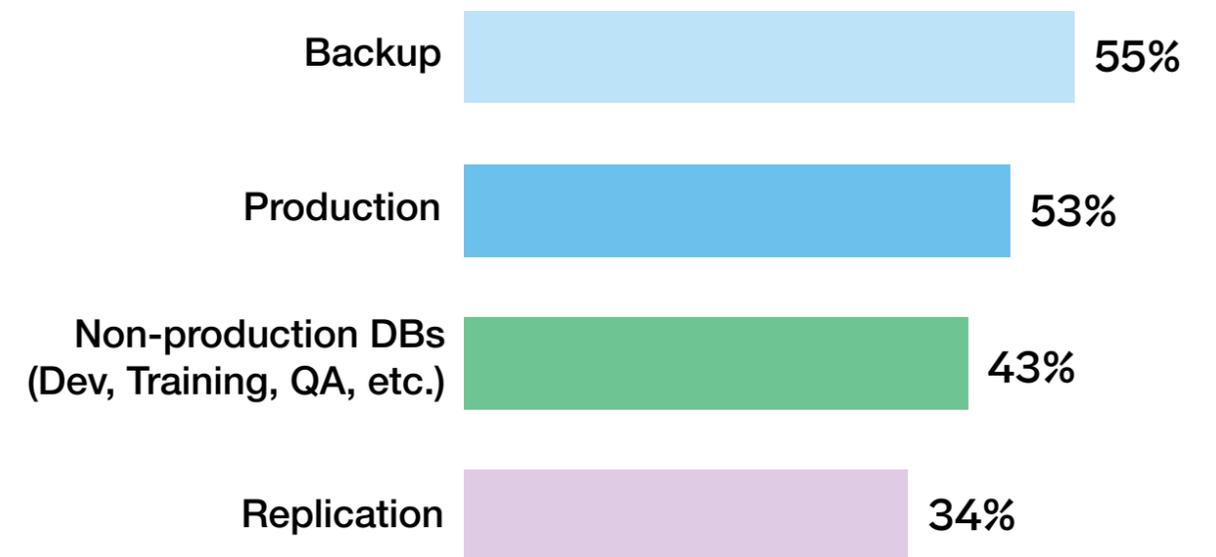
N = 76 technology leaders
Powered by www.pulse.qa

Will the solution help stimulate innovation?

Slow and steady does not always win the race. To win, sometimes you've got to go fast. That means getting more projects done faster and accelerating time to market. To do it better than your competitors, you need a super-powered Oracle database. You need an Oracle solution that will stimulate innovation instead of stifling it.

So, what do you look for? Make sure your solution delivers these key features and capabilities:

- ✓ Built-in automation
- ✓ Thin-cloning technology
- ✓ Ability to scale up or out smoothly
- ✓ Access to data across your entire IT infrastructure

Why it matters

By including these key features and capabilities in your solution, you can:

⏱	Deploy new projects faster	**Built-in automation** enables faster deployment of your Oracle projects with less risk of human error. System provisioning and prototyping that typically take days to complete are done in just minutes with one-touch automation.
🔄	Shorten development cycles	**Thin-cloning technology** lets you clone the largest volumes in just seconds, instead of hours or days. If a test corrupts the data, you can start again almost immediately.
📈	Scale seamlessly, without limits	**Scale up or out smoothly.** Grow as your business needs dictate—without disruption or downtime, and without migrating data or changing operating systems. Remove bottlenecks for projects and keep the innovation flowing.
👍	Make better-informed decisions	**Access data across your entire IT infrastructure.** Know what's going on across your business—on premises and in the cloud. These insights can help you make better-informed decisions.

Will the solution deliver a consistent customer experience?

Have you ever lost 10 minutes staring at your phone while waiting for a page to load on your computer? Customers don't have time to wait—they want to move on to the next thing. Always-on performance and availability are must-haves for any modern Oracle solution.

So, what do you look for? Make sure your solution delivers these key features and capabilities:

- ✓ All-flash storage system
- ✓ Proactive monitoring and predictive analytics
- ✓ Ability to absorb multiple concurrent faults
- ✓ Automatic recovery
- ✓ Nondisruptive software updates and hardware maintenance

Why it matters

By including these key features and capabilities in your solution, you can:

Deliver fast, consistent application response times	**All-flash storage systems** can cut application response times in half, so you can easily support peak demand. **Proactive monitoring** and predictive analytics help avoid bottlenecks so that you can deal with issues proactively.	
Maximize availability	**Absorb multiple concurrent faults** without affecting performance. **Automatically recover** in minutes if a drive or node fails. Deliver **nondisruptive software updates and hardware maintenance.**	
Enable 24/7 operations	Make sure your solution has a **viable disaster recovery plan** in place. Ideally, you'll be able to test your plan without interruption.	
Protect data wherever it lives	**Integrated, automated data protection** safeguards data across edge, core, and cloud resources.	

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Will the solution simplify operations and lower TCO?

Oracle environments can be tricky. And pricey. Simplifying management and maintenance of your Oracle environment can help you save money and time. You need an Oracle solution that will help you simplify operations and reduce TCO.

So, what do you look for? Make sure your solution delivers these key features and capabilities:

- ✓ Unified architecture with built-in automation
- ✓ Integrated data protection
- ✓ Native cloud integration
- ✓ Fully tested and proven solution
- ✓ Automated capacity monitoring and proactive issue monitoring
- ✓ Quality of service; independent compute and storage scaling
- ✓ Tools to help understand consumption and cost
- ✓ Data deduplication and compression

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Why it matters

By including these key features and capabilities in your solution, you can:

▦	Reduce management complexity	**A unified architecture, built-in automation,** and **integrated data protection** can simplify management and enable easy data mobility across on-premises and cloud resources. **Native integration** with all the major cloud service providers makes getting to the cloud easy.
⊘	Eliminate guesswork	**Fully tested and proven solutions** operate seamlessly with Oracle databases. **Automated capacity monitoring and proactive issue monitoring** take the guesswork out of purchasing storage and troubleshooting issues.
↘	Lower TCO	**Quality of service (QoS), independent compute and storage scaling, tools to help understand consumption and cost,** and storage efficiency technologies such as **data deduplication** and **data compression** help keep costs under control.

The Wonder Twins:
Oracle and NetApp

Bringing justice to outdated applications and data centers. Saving your IT team from the burdens of day-to-day management and administrative tasks. Preventing disaster by delivering 99.9999%+ availability. For these Wonder Twins, the real power comes when they work together in the shape of a single, integrated solution. Wonder Twin powers, activate!

Why NetApp and Oracle are better together:

Deploy anywhere, without compromise.

Deliver projects up to 30% faster.

Access data when and where it's needed.

Streamline operations and reduce costs.

" While every enterprise data center is different, we believe that consolidating Oracle database storage to NetApp storage platforms will save administrative time while satisfying the needs of Oracle database users, developers and DBAs. This will equate to cost savings that will justify the effort in replacing an inadequate storage platform with NetApp AFF or FAS."

—Evaluator Group, Inc.[1]

Deploy anywhere, without compromise

NetApp and Oracle are a dynamic duo that:

Delivers cloud efficiencies on premises

Offers on-premises performance and data protection in the cloud, with your choice of hyperscalers

Integrates natively with the largest cloud service providers so you can skip refactoring and simply move to the cloud

Avoids vendor lock-in and allows you to move to cloud at your own pace with true hybrid cloud solutions

NetApp

" We looked for a cloud storage solution that could integrate with on-premises deployment. That is the main reason we came to NetApp. We examined a few vendor products and checked their offerings. NetApp was the most mature. It had capabilities on the cloud that competitors couldn't offer."

—Nir Boyarsky, Mellanox storage team leader

Read the full story
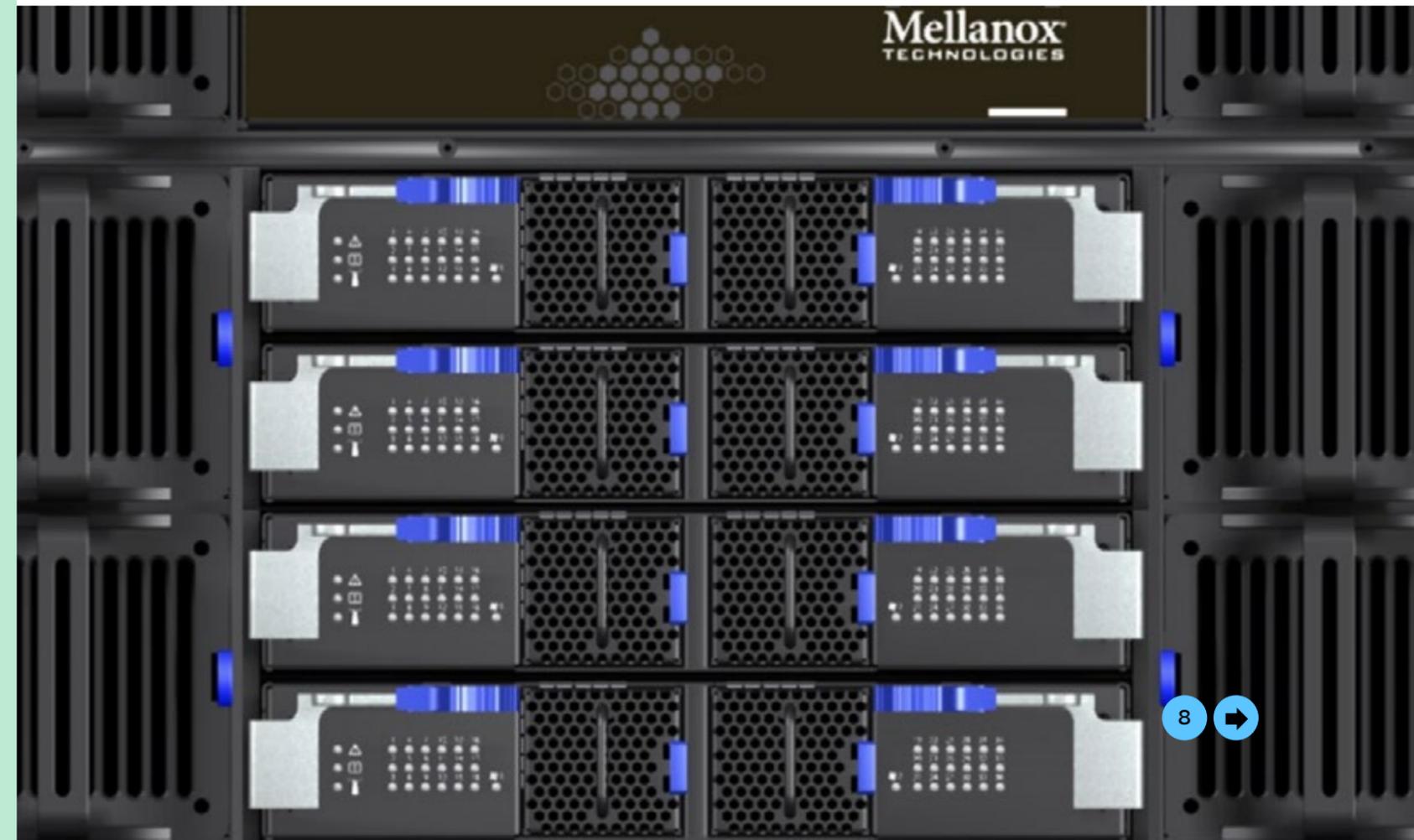
Deliver projects up to 30% faster

Operate your IT at superhuman speed with a solution that:

Uses built-in automation so you can provision test/dev systems in minutes rather than days; cloud volumes can be provisioned in just 8 seconds

Clones the largest volumes in just seconds—without consuming a lot of additional storage space—with NetApp® FlexClone® thin-cloning technology

Scales without requiring migration or change of operating system; NetApp ONTAP® systems can handle a variety of workload types—from transactional to analytical, or a mix of both

Enables access to data across the entire IT infrastructure with a data fabric that spans from edge to core to cloud

" With Azure NetApp Files, we can back up or clone a database in seconds through snapshots. When fully adopted and automated, this methodology is a great game changer."

—Giuliano Caglio, Cloud Services and Infrastructure, Italgas

Read the full story
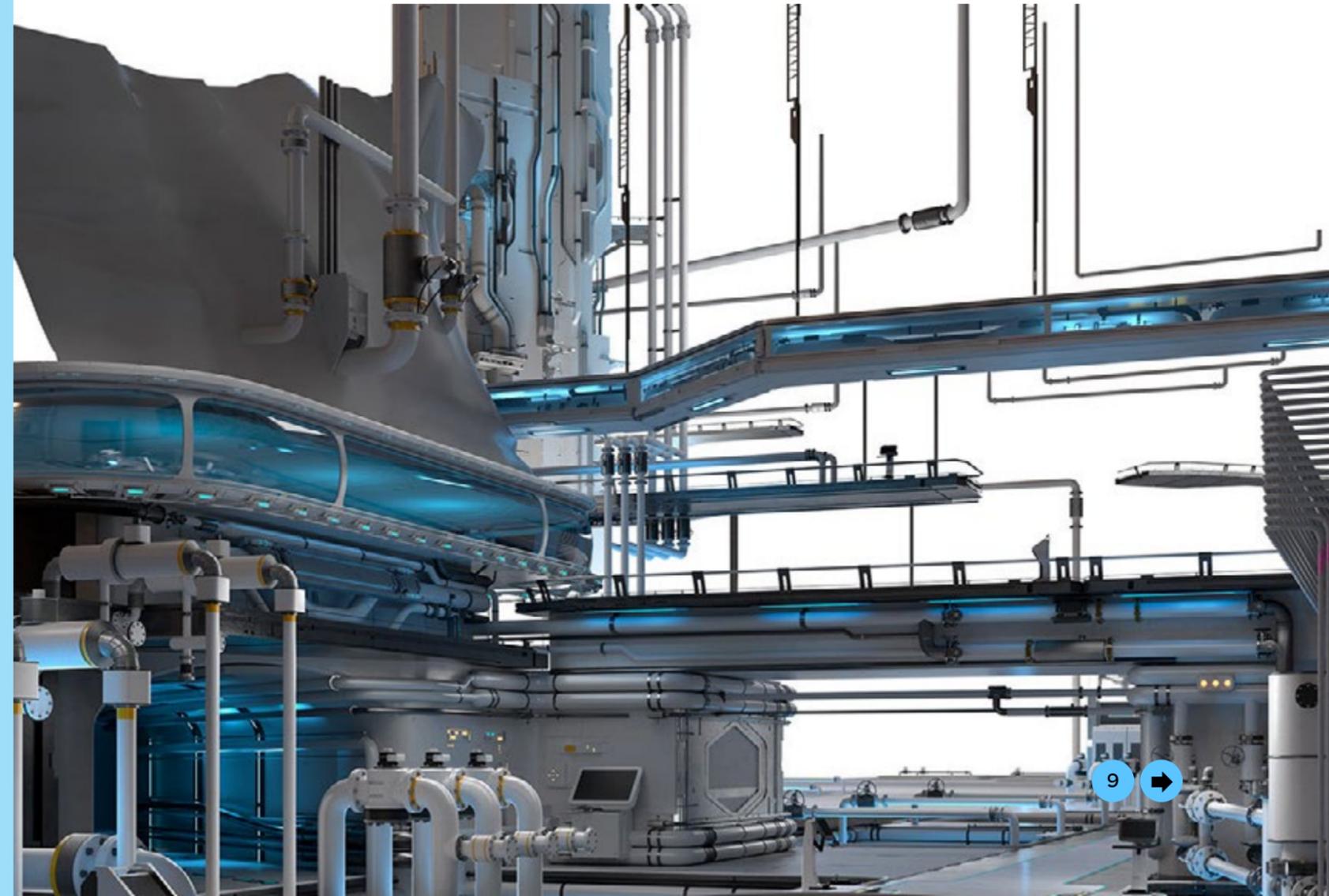
⊓ NetApp

Access data when and where it's needed

Never fear. NetApp and Oracle are here. When you run your Oracle database on NetApp, you get a solution that:

- Delivers 1 million IOPS and latency of about 100 microseconds

- Provides 99.9999% availability with automatic failover and nondisruptive updates and maintenance

- Enables 24/7 operations with seamless, integrated data protection powered by NetApp Snapshot™ and SnapMirror® replication technologies

- Mitigates risk with NetApp Active IQ® predictive analytics and actionable intelligence

" When we make adjustments, we no longer have to wait 10 minutes to recover the server and start testing again. We barely have enough time to drink our coffee before it's back up and ready."

—Mike Wood, Senior Analyst Programmer, Enterprise Applications, California State University, Chico
Read the full story

NetApp

Streamline operations and reduce costs

Save the day (and the budget) with a NetApp and Oracle solution that:

🦾	Delivers 90% savings in time and effort through unified management and automation features
☁	Allows easy, nondisruptive movement of data between cloud and on-premises resources
🔄	Operates smoothly with Oracle databases—tested and proven
💲	Offers the lowest $/MBps for all-flash arrays in the SPC-2 top ten list

" While every enterprise data center is different, we believe that consolidating Oracle database storage to NetApp storage platforms will save administrative time while satisfying the needs of Oracle database users, developers and DBAs. This will equate to cost savings that will justify the effort in replacing an inadequate storage platform with NetApp AFF or FAS."

—John Webster, Evaluator Group
Technical Insight Report
Read the full report

NetApp

It's a bird, it's a plane...

…It's a kickass hybrid cloud infrastructure. With NetApp, you can create a data fabric that enables you to meet business demands and gain a competitive edge now and in the future.

We can't make you a superhero. But we can help you rescue your Oracle databases. (Cape and mask not included.)

Learn more about NetApp solutions for Oracle:

- Oracle database solutions from NetApp
- Oracle database solutions for Azure
- Oracle database solutions for AWS
- Top 10 reasons your Oracle applications belong on NetApp
- NetApp E-Series EF570 and Oracle
- Italgas energizes its Oracle investments by switching to Azure NetApp Files
- DG Khan supports business growth with NetApp hybrid storage for Oracle and Microsoft applications
- Mellanox moves to the cloud for data-driven solutions

1. Evaluator Group, NetApp Takes On Oracle Databases, July 2020.
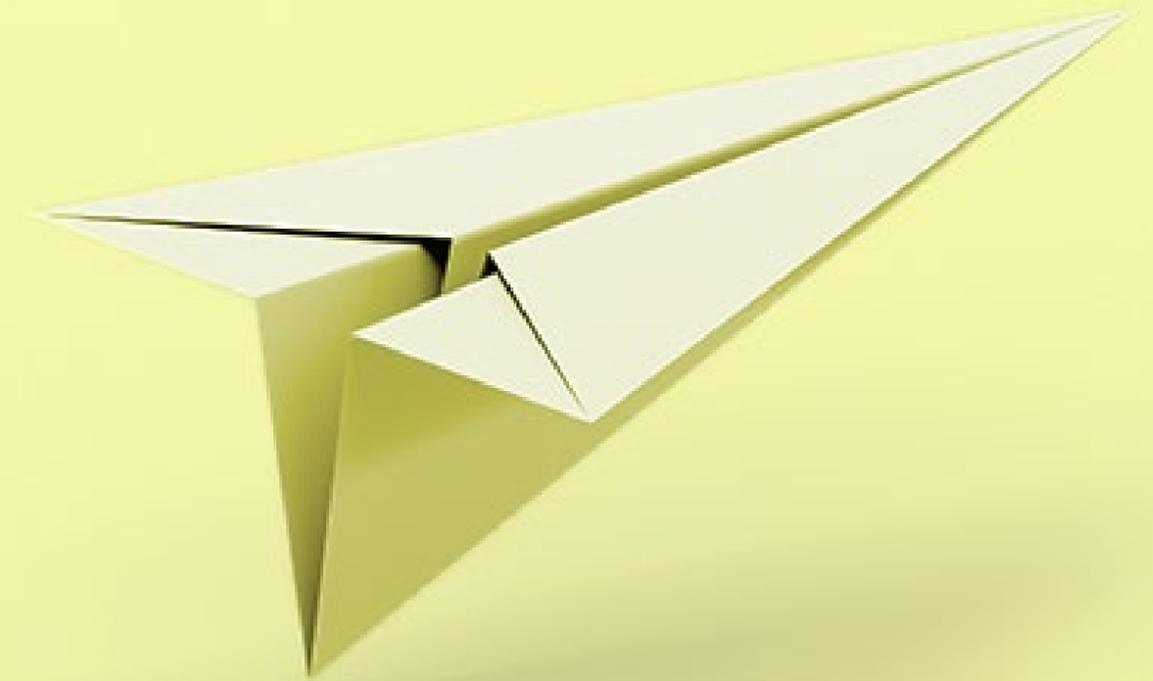
About NetApp
In a world full of generalists, NetApp is a specialist. We're focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world's biggest public clouds.

As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services, and applications to the right people—anytime, anywhere.

To learn more, visit **www.netapp.com**