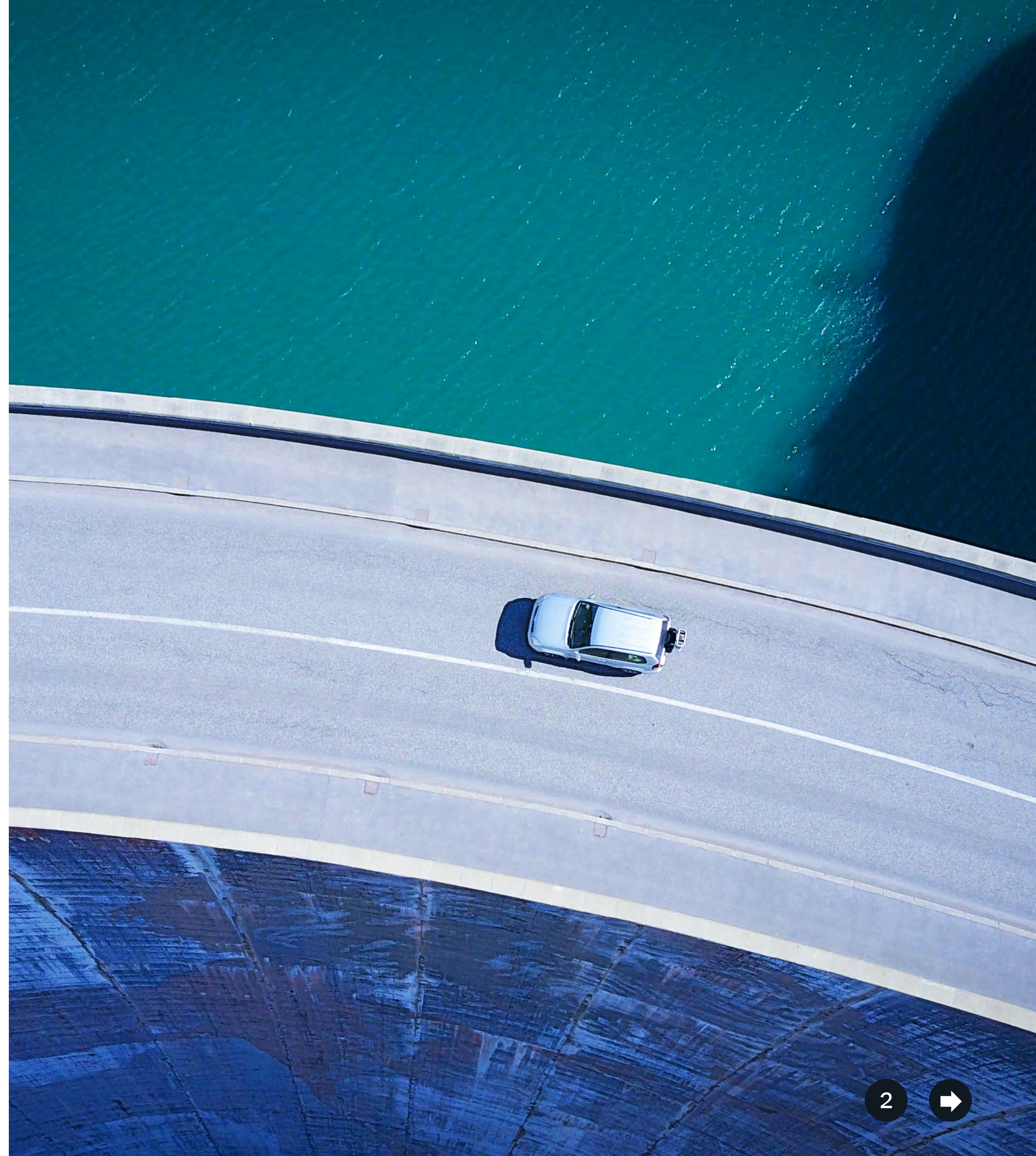# Paving the path to SAP on AWS with "oohs," "aahs," and "we-should-have-done-this-sooners"
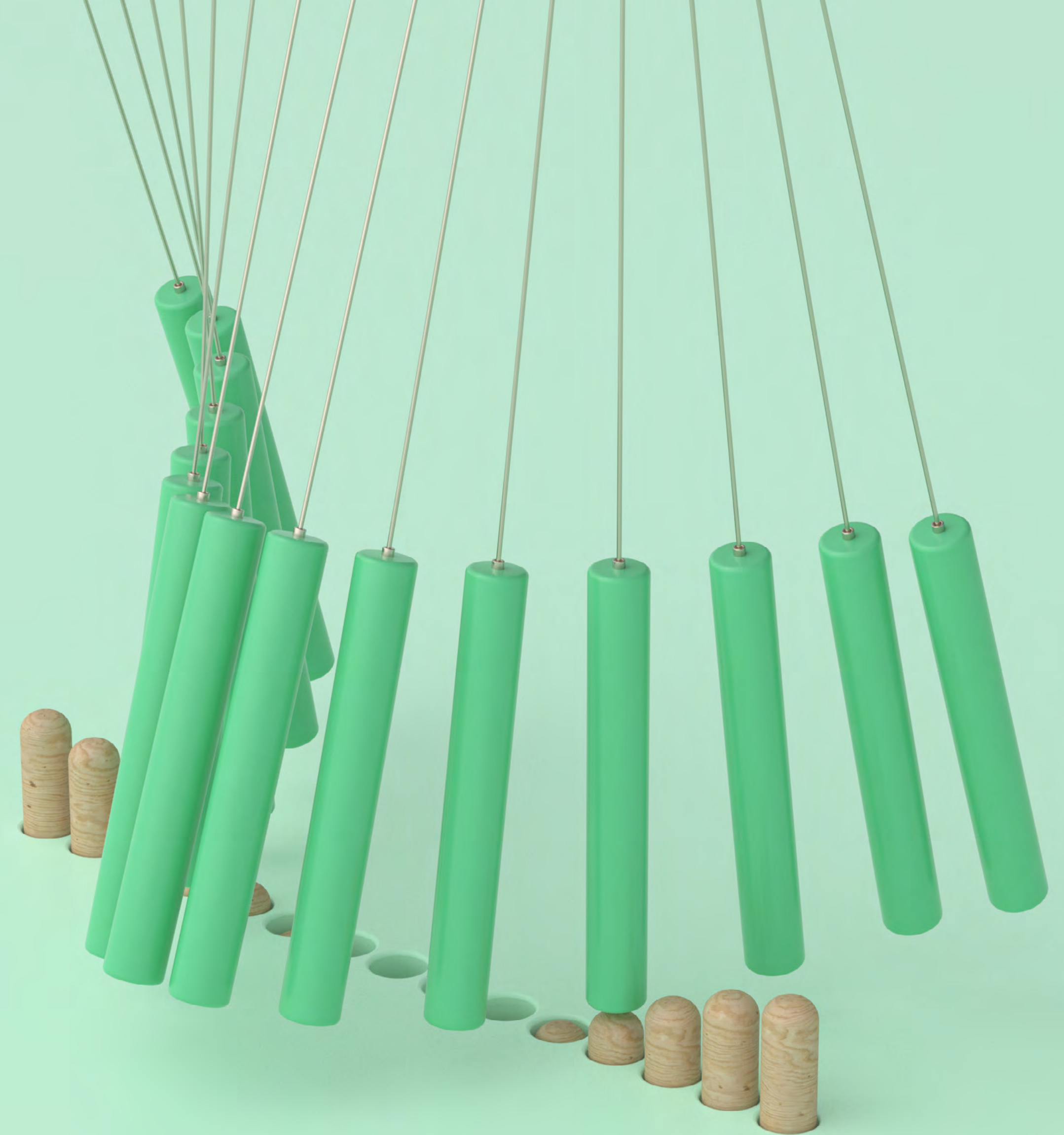
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Contents

Moving SAP to the cloud isn't without sacrifice

Large enterprises around the world rely on SAP core business applications to process trillions of dollars in transactions each year. Any disruption or downtime to an SAP landscape potentially carries a high cost to the business. Following an if-it-ain't-broke-don't-fix-it philosophy, businesses are reluctant to make any changes to their finely tuned deployments.

Unfortunately for them, the status quo has become the status "no." Business leaders are mandating that IT infrastructure and services look toward the cloud. On top of that, the end of support for SAP ECC on non-HANA databases is fast approaching.[1] To continue receiving support from SAP and take advantage of the latest SAP software, customers must migrate to S/4HANA by 2027. Considering that a typical SAP migration can take 18 months or longer, that sound you hear is the clock ticking down faster than you think.

Migrating SAP S/4HANA to the cloud could increase agility, accelerate development, and speed time to market. On the downside, moving to the cloud can be time consuming and risky. And for many customers who do get their SAP applications into the cloud, the results aren't what they expected. Poor performance and scalability leave them struggling to deliver the promises of faster, flexible, highly available environments that SAP landscapes need.

Prepare to have your cake and eat it, too

Amazon FSx for NetApp ONTAP is your SAP migration hero. Sold, managed, and supported by AWS, FSx for ONTAP meets your demands for performance, data protection, and efficiency. It offers the data availability, accessibility, and security that you need—all nestled within an AWS native experience that lets you access the complete NetApp® portfolio. What's more, FSx for ONTAP is SAP HANA–certified, so you can safely migrate your SAP landscapes with reduced risk and greater flexibility.

Finding the right path to cloud can help reduce risks and simplify the migration process. There are four main avenues to get your SAP landscape onto Amazon FSx for NetApp ONTAP:
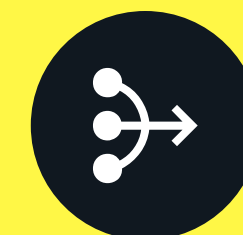
1. Lift and shift.

Replicate your current environment (including the old architecture) and start running it as is. Then start the process of upgrading to an SAP S/4HANA landscape within the cloud.

2. Lift and migrate.

Cleanse your current environment, update patches, delete old data and projects, and move the cleaned-up architecture to the cloud. When you've converted to SAP HANA, you can start building and migrating to an SAP S/4HANA landscape within the cloud. The first step is to stabilize and modernize your SAP operating model.[2]

3. Shift and migrate.

Transition the existing systems directly into the cloud; then upgrade part or all to SAP HANA while developing a new operating model.

4. Go directly to S4/HANA on cloud.

Move to the cloud and transition to a new deployment of SAP S/4HANA while developing a new operating model.

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Don't give up performance and reliability

Even with the public cloud's promise of simplicity and agility, many infrastructure architects are hesitant to move their organization's business-critical applications there. Cloud infrastructure doesn't typically have enterprise data management capabilities or features, so they're concerned about performance limitations, SLAs, security, and the potential for data loss.

Amazon FSx for NetApp ONTAP brings the full capabilities of NetApp ONTAP® data management software to a native AWS-managed service, delivering a consistent hybrid cloud experience everywhere. What you get in the data center—enterprise-grade management capabilities, submillisecond latency performance, and proven data protection—you can now get with FSx for ONTAP.
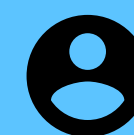
With FSx for ONTAP, you have the freedom to migrate and integrate performance-intensive and latency-sensitive applications with submillisecond response times, along with protection against node failure in your cloud-based SAP production environments.

Using FSx for ONTAP as a native AWS service, you get high reliability and 99.99% availability without having to build or manage your own cloud infrastructure. With zero impact on performance, NetApp Snapshot™ technology lets you back up your SAP data efficiently in minutes, enabling near-instantaneous recovery to any point in time if needed.

In addition to the intra–Availability Zone high availability (HA) features, when you need to create secondary copies of your data to protect against site failures, FSx for ONTAP supports NetApp SnapMirror® unified replication between Availability Zones. This capability allows you to replicate data between two remote ONTAP systems. You can configure automatic SnapMirror replication of your data to another FSx for ONTAP system, including a system in another AWS Region.

Creating copies of your production database for development-testing (dev/test) projects can add days to the development cycle. With the built-in cloning technology of FSx for ONTAP, you can clone your largest databases in just seconds. Each clone is based on a Snapshot image, so it adds only a small amount of space for metadata. You can create as many clones of your production database as you want. If a test or process corrupts the data, you can reset and start again in minutes.

"I like NetApp's unique way of thinking about data management and storage. Its dedication to simplicity is a real advantage in complex environments."

Senior Expert, SAP Technical Support at a leading service provider

Accelerate projects and speed time to market

When cloud initially was an option, many organizations had to choose between agility and performance. Typical public cloud infrastructure didn't provide the throughput that organizations needed for larger landscapes. For this reason, many cloud-based use cases have been limited to PoC SAP project landscapes, disaster recovery, and smaller-scale production landscapes.

Amazon FSx for NetApp ONTAP delivers fast and consistent performance and access to highly available shared storage that meets the demands of intensive database workloads. It also supports common database features such as application-consistent Snapshot copies using NetApp SnapCenter® software, NetApp FlexClone® data volumes, continuously available SMB shares, and instant file initialization for use around SAP shared files or interface directories.

With NetApp, it's simple to back up, archive, or replicate data from your on-premises file servers to AWS. FSx for ONTAP automatically creates highly durable daily backups of every volume in your file system, and you can create more backups of your volumes at any point. The system maintains business continuity with built-in capabilities for cloud-based disaster recovery, compliance, and data sovereignty.

Performance so fast, you'll swear you're on premises
Amazon FSX for NetApp ONTAP offers the high performance you need to support your most demanding SAP workloads.

Raise the bar on your cloud migration goals

While you're migrating more database workloads to the cloud, your company is trying to be more efficient and competitive. To those ends, you need applications to perform as expected—which is why it helps to have the same ONTAP technology at work everywhere. With Amazon FSx for NetApp ONTAP, you don't need to do as much upfront planning in order to have successful cloud deployments and initiatives. With FSx for ONTAP, your organization can store data confidently, speed up workloads effortlessly, and innovate more intelligently.

FSx for ONTAP is an SAP HANA–certified storage solution that delivers the high performance, reliability, enterprise data management features, and security that SAP landscapes require. Sold, managed, and supported by AWS, FSx for ONTAP helps optimize SAP operations by providing performance, data protection, and efficiency. It offers the compute, security, monitoring, and data services you need— all integrated with the complete NetApp portfolio.

Learn how Amazon FSx for NetApp ONTAP can help migrate your organization's SAP landscape to the cloud today.

- [Meet with an AWS specialist](#)

- [Visit the AWS for SAP HANA overview](#)

- [Visit the FSx for ONTAP overview](#)

- [Get started with FSx for ONTAP](#)

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.

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