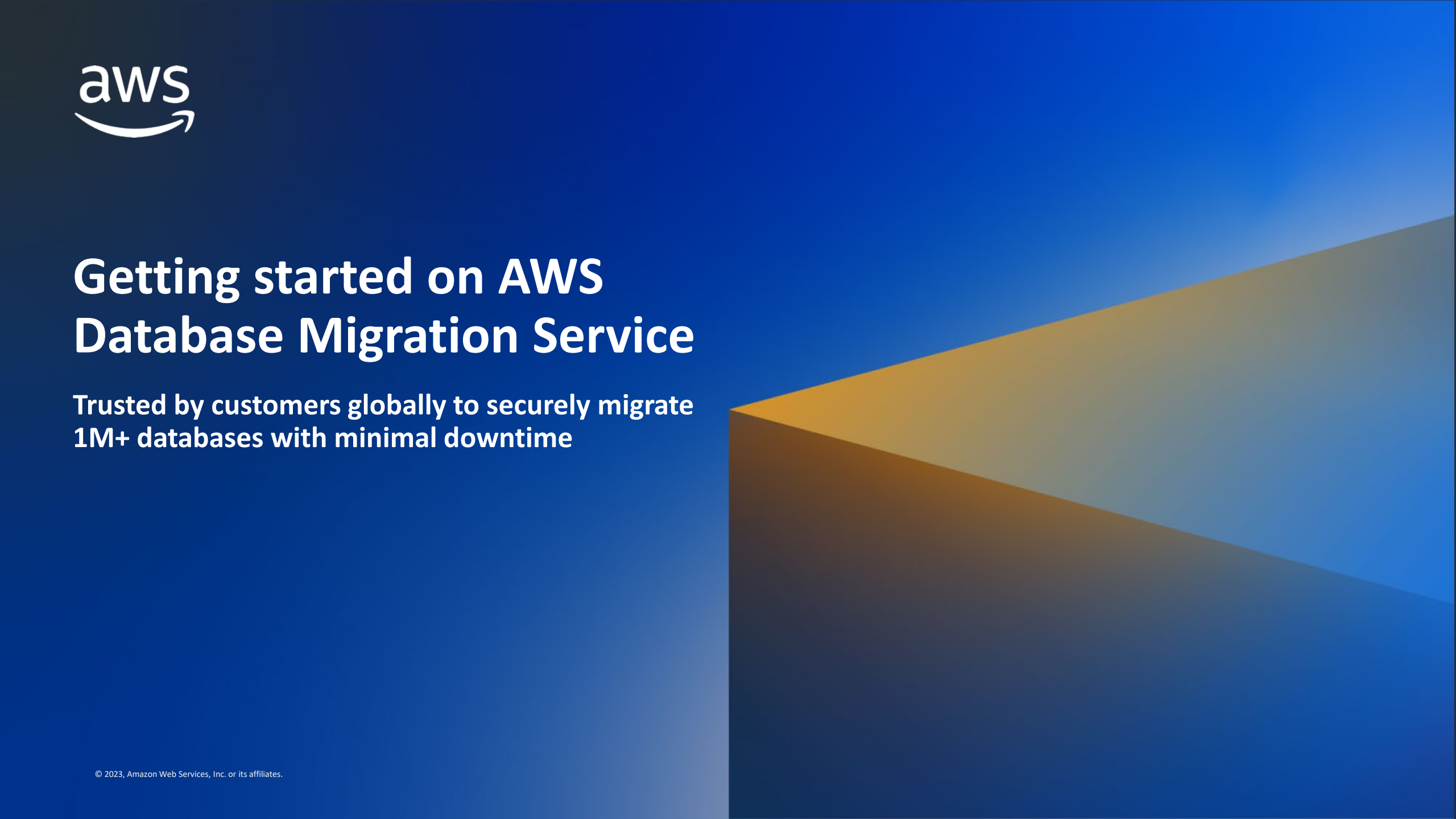

Getting started on AWS Database Migration Service

Trusted by customers globally to securely migrate 1M+ databases with minimal downtime

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Agenda

- Why migrate?
- Customer modernization and migration journey
- Migration tools and services
- Introduction to AWS Database Migration Service (DMS)
- How to get started with DMS

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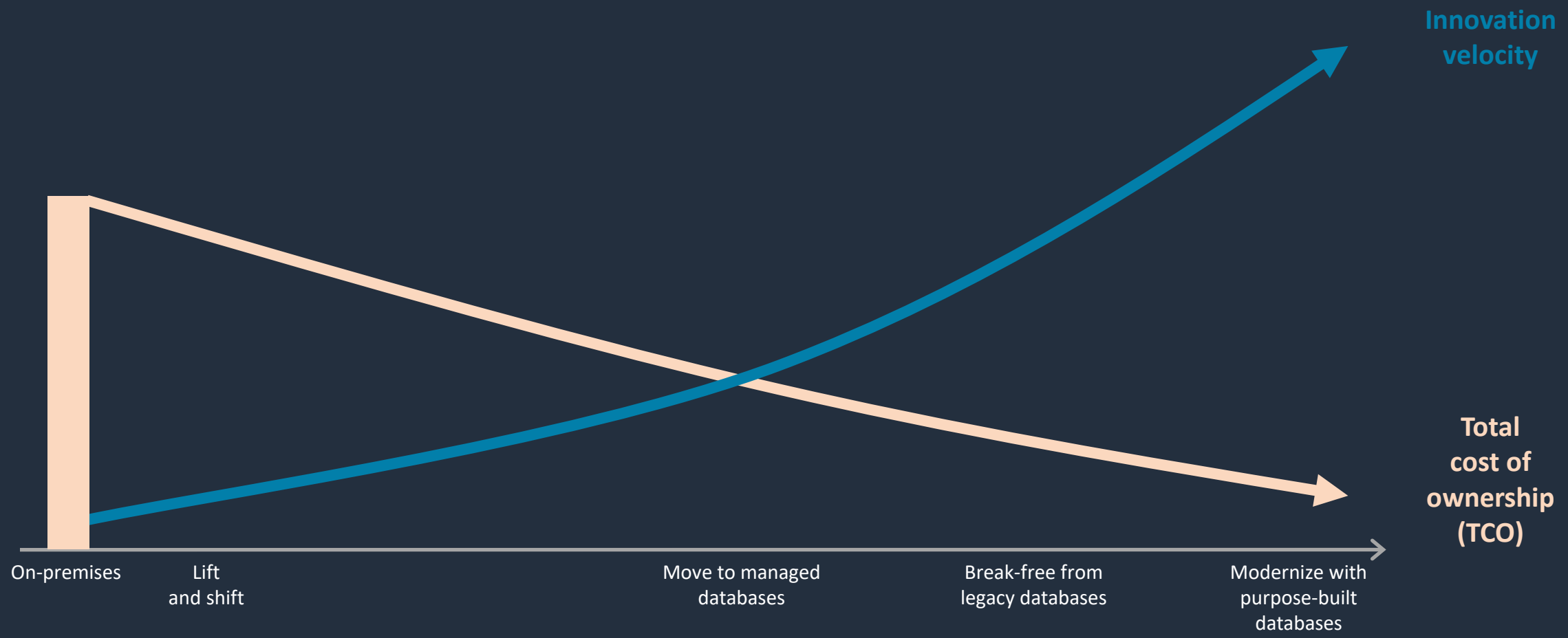
Modernizing leads to maximum innovation velocity and optimal total cost of ownership



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Typical database modernization journeys start here

Relational database application

Existing business critical applications:

- Typically monolithic
- Made to fit relational databases
- Transactional in nature

…but also:

- Startup new applications
- Rapid prototyping, developed locally
- ORM/ODM heavy for agility

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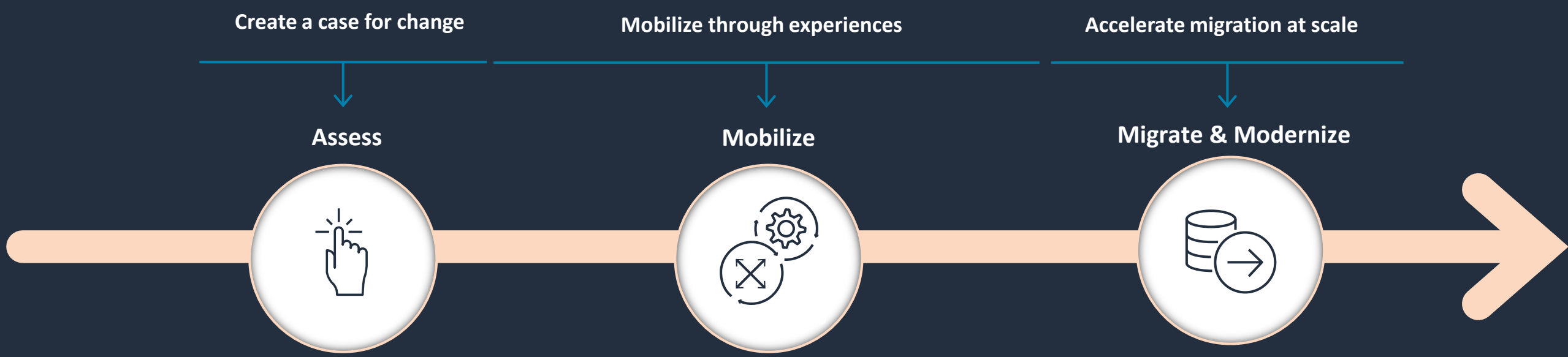
Migrations tools & services



Tools	AWS DMS Fleet Advisor	AWS Schema Conversion Tool (AWS SCT) AWS DMS Schema Conversion	AWS Database Migration Service (AWS DMS)	
People	AWS Solutions Architects	AWS Partners & Professional Services	Database Migration Accelerator - Advisors	
Programs	Migration Acceleration Program (MAP & OLA)	Database Freedom	Database Migration Best Practices, Playbooks, & Guides	Database Migration Accelerator

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1M+ databases migrated using DMS

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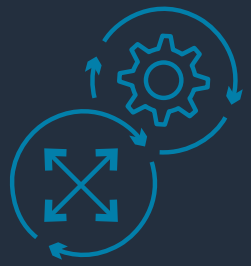
AWS Database Migration Service (AWS DMS)

Securely migrate your databases and data warehouses to AWS with ease and minimal downtime



Managed Migration

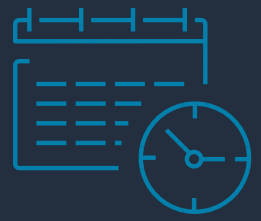
Automated migration service will discover, assess, convert and migrate your database and analytics workloads to AWS

Easy to use with a few clicks to start the process

Breadth of Options

Migrate data to and from most widely used commercial and open-source databases

Supports SQL, NoSQL, text-based and data warehouse targets



High availability

Multi-AZ option; highly resilient and self–healing with continuous replication and monitoring for minimal downtime.

Low Cost

Self-service tool

Only pay for compute resources and additional log storage used

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DMS supported sources and targets

SOURCES

RELATIONAL

- Oracle
- SQL Server
- PostgreSQL
- MySQL
- MariaDB
- Amazon Aurora
- SAP ASE
- IBM Db2 LUW
- IBM Db2 z/OS
- SQL Azure
- GCP MySQL
- Amazon RDS
- Amazon EC2

NOSQL

- MongoDB
- Cassandra
- Amazon DocumentDB

ANALYTICS

- Amazon S3
- AWS Snowball

DATA WAREHOUSE

- Oracle
- SQL Server
- Greenplum
- Teradata
- Vertica
- Azure Synapse
- Netezza

TARGETS

RELATIONAL

- Oracle
- SQL Server
- PostgreSQL
- MySQL
- MariaDB
- Amazon Aurora
- SAP ASE
- Amazon EC2
- Amazon RDS
- Db2
- IBM Db2 LUW

NOSQL

- Amazon DynamoDB
- Amazon DocumentDB
- Amazon Neptune
- Amazon ElastiCache
- Amazon Timestream

ANALYTICS

- Amazon OpenSearch Service
- Amazon Kinesis Data Streams
- Amazon S3
- Amazon Managed Streaming for Kafka

DATA WAREHOUSE

- Amazon Redshift

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AWS DMS Fleet Advisor

Automatically inventories and assesses on-premises database and analytics server fleets

Identify databases to migrate at scale with minimal effort

Save on costs associated with migration planning and migrating workloads

Build a migration plan in hours instead of weeks

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AWS Schema Conversion Tool (AWS SCT)

Convert your commercial database and data warehouse schemas to AWS

Automated inventory and migration recommendations to accelerate migrations

Converts schema and code objects to target engine

Supports a wide variety of source and target databases and data warehouses

Extracts and migrates data warehouses to Redshift

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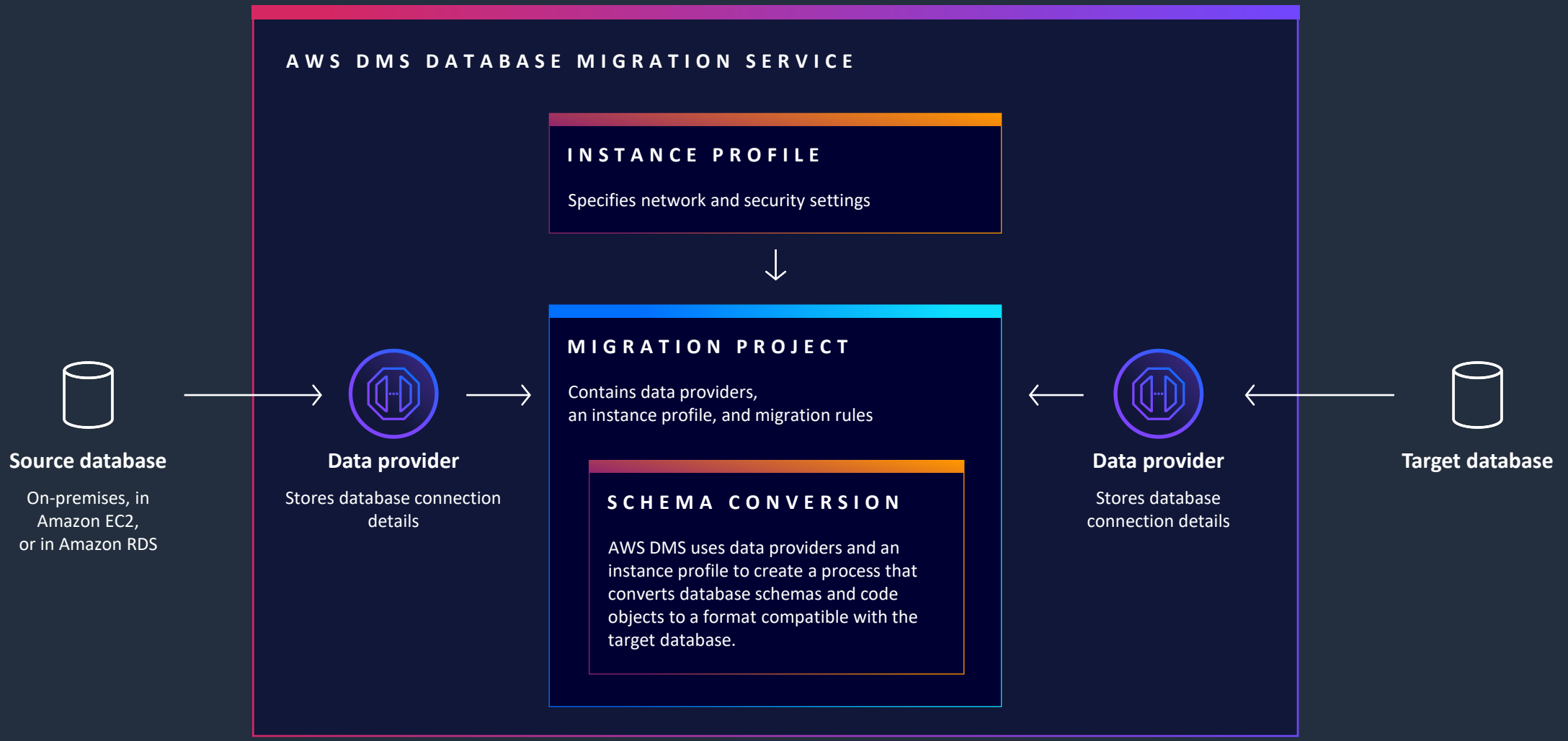
AWS DMS Schema Conversion

Schema assessment and conversion capabilities now available within DMS workflow



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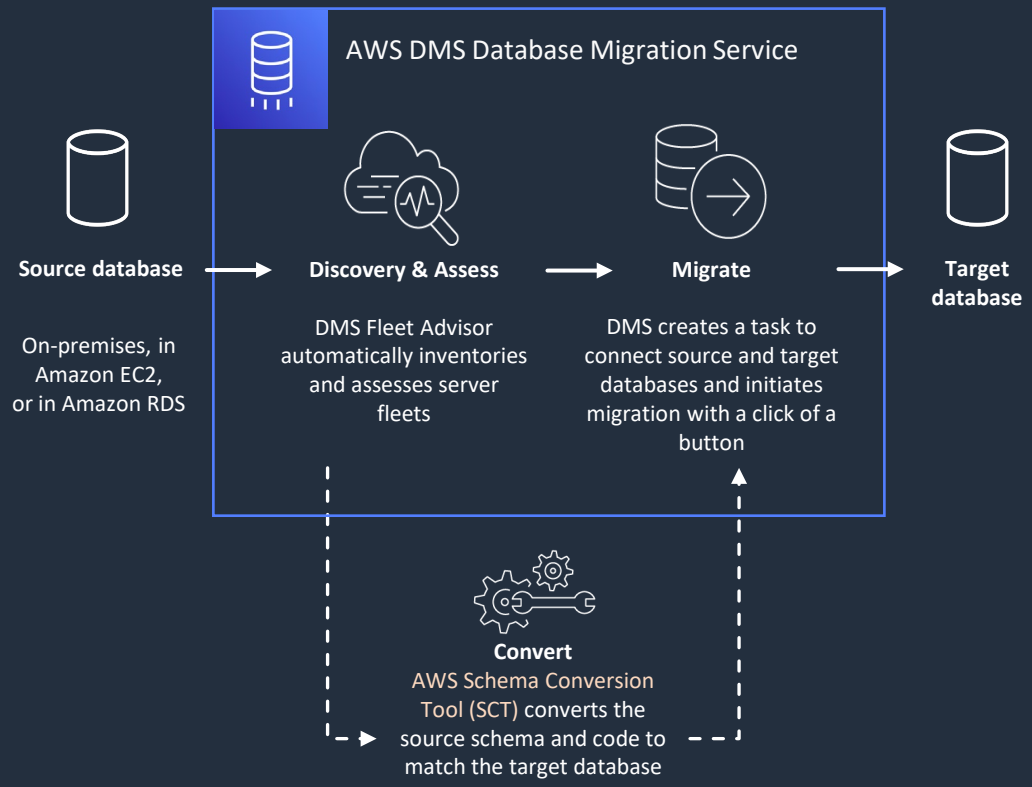
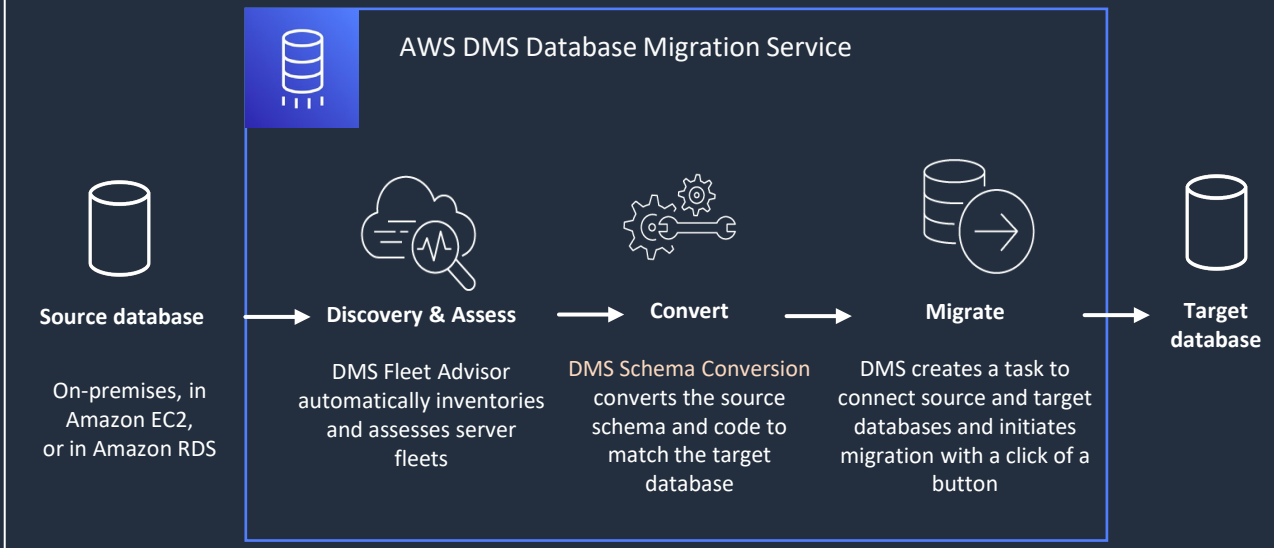
AWS SCT vs. AWS DMS Schema Conversion

Side-by-side comparison

AWS Schema Conversion Tool (AWS SCT)



AWS DMS Schema Conversion



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AWS DMS Serverless

Automatically provisions, monitors, and scales migration resources

- **Auto-Provisioning & Scaling**. Reduces operation burden by removing the time consuming tasks of provisioning, monitoring, and scaling migration resources.
- **Cost Effective**. Removes the guesswork by determining the optimal capacity needed. Only pay for the capacity used.
- **Breadth of Services**. Supports popular database and analytics engines, as source and target endpoints.
- **Highly Secure**. Protects your data with minimal data loss and downtime.

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*These price points are subject to change at our discretion.

Common customer use cases

Migrate

Migrate business-critical applications and data warehouses

Migrate from NoSQL to SQL, SQL to NoSQL, or NoSQL to NoSQL

Upgrade to a minor / major version

Consolidate and Archive data

Replicate

Create cross-region read replicas

Hydrate your data lakes / data warehouses

Replicate to streaming platform

Modernize

Move to AWS modern managed databases like Aurora, DynamoDB, and Redshift for faster innovation

Break free from legacy databases to save, grow and innovate

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Samsung

SAMSUNG

Challenge

The Oracle database was expensive and difficult to maintain. Simple tasks required manual maintenance.

Solution

By migrating from Oracle to Amazon Aurora, Samsung achieved cost savings and decreased operational tasks,
all without service disruption during the migration.

Result

“Our Oracle online migration in EU IDC to Amazon Aurora PostgreSQL completed in 22 weeks without service disruption. This success is unprecedented in Korea. The biggest win for us is cost savings, but we also have decreased our operational tasks, thanks to Aurora.”

- Go Byeong-ryul, Database Architect, Samsung Electronics

ORACLE ····· MIGRATIONS → ····· Amazon Aurora

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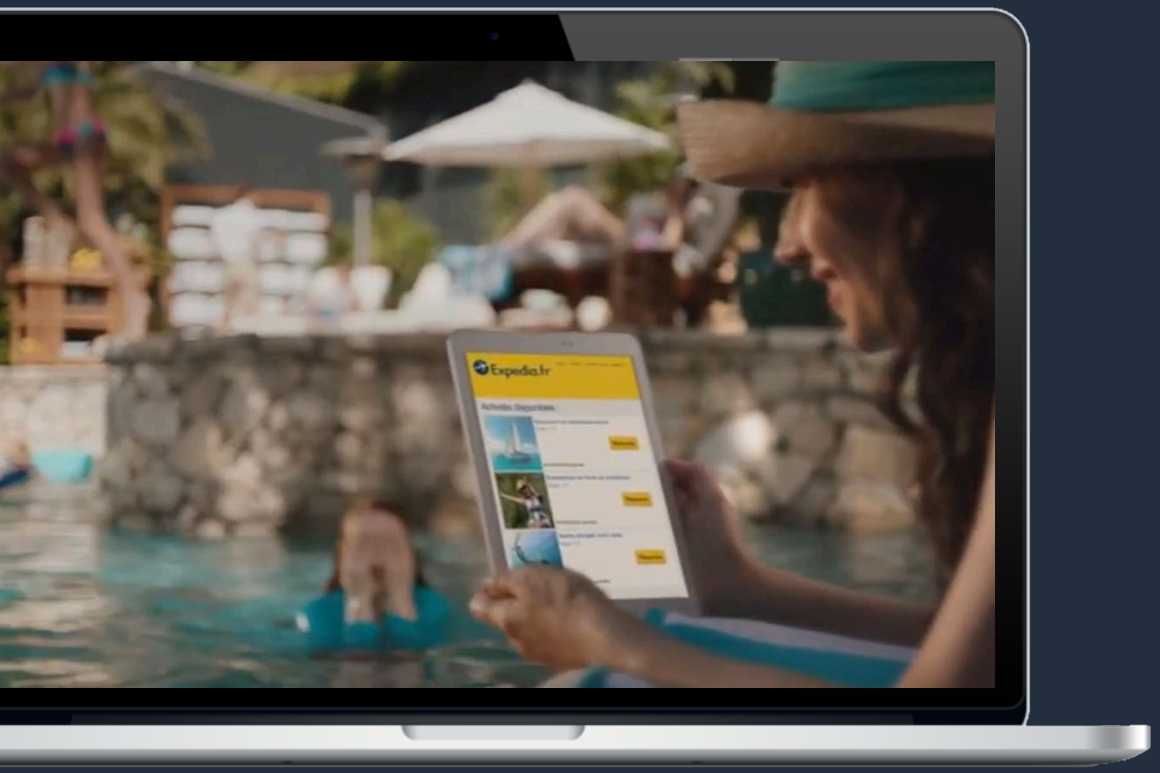
Expedia, Inc



Challenge

Expedia, Inc. is a leading online travel company, providing leisure and business travel to customers worldwide. As part of a corporate-wide initiative to focus its engineering teams on innovation rather than hardware procurement and datacenter management, Expedia continues to move its 20 years' worth of core-business workloads, digital properties, mobile applications, and legacy platforms largely from owned datacenters to AWS.

Solution

Expedia chose Amazon Aurora and used AWS Database Migration Service (DMS) to move legacy databases to the cloud.

Result

DMS simplified the migration to Aurora with monitoring and lodging capabilities. With Aurora, Expedia is now able to handle more than 300 million updates per day at a rate of more than 20,000 writes per second.

MIGRATIONS → Amazon Aurora

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Flexible ways to migrate

Get started with

Self-service migration

tools, including AWS SCT, AWS DMS, and AWS DMS Fleet Advisor,
to enable a quick, secure migration

Get help from

Specialized database programs

for advice and migration support; additionally, Amazon DMA brings
together tools and experts to help
migrate at fixed prices

Get assistance with

AWS Professional Services

and certified AWS Migration
Partners who can help enterprises migrate applications and legacy infrastructure to AWS securely

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DMS Resources - Getting Started

- Visit our website: https://aws.amazon.com/dms
- Technical User Guide: https://docs.aws.amazon.com/dms
- Pricing: https://aws.amazon.com/dms/pricing
- Support: https://forums.aws.amazon.com/forum.jspa?forumID=216
- Get started with Free Tier: https://aws.amazon.com/free

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Thank you!

Speaker name (pronouns)
Speaker contact info (email or socials)

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