MongoDB to Azure Cosmos DB Migration Offering

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Microsoft Partnership Overview

- Gold Partner
- 13+ Years of Experience
- 50+ Successful migrations to Azure
- 500+ Customers (Managed Services)
- 550+ Microsoft Certifications
- Cloud Enablement graduate
- ECIF Enabled (US and CAN)
- Recognized in 2017 by Microsoft as Cloud for Global Good Partner of the Year
- Our largest practice: SQL Server
- Datavail's Microsoft Business Unit: Application Development & Modernization using Azure stack / Azure DevOps
- Co-sell Ready Program
- Azure Expert MSP - (in process)
- Advanced Specialization Windows and SQL Server Migration - (in process)

- Gold Competency
  - Application development
  - Cloud Platform
  - DevOps
  - Collaboration and Content
  - Data Analytics
  - Messaging
  - Cloud Productivity
  - Application Integration

Why chose Datavail for migrating MongoDB to Azure Cosmos DB?

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Experience & Trust

1000+ Data, Analytics and Development experts

Relationship Focused
(700 active clients in N. America)

Average client relationship of 7 years

Cloud & Data Leaders

World Leaders with **200,000+ Db** and **200+ Petabytes** of data under management

200+ cloud migrations and **50+ modernizations** in the past 2 years

Strong Partnership
Azure

Longevity

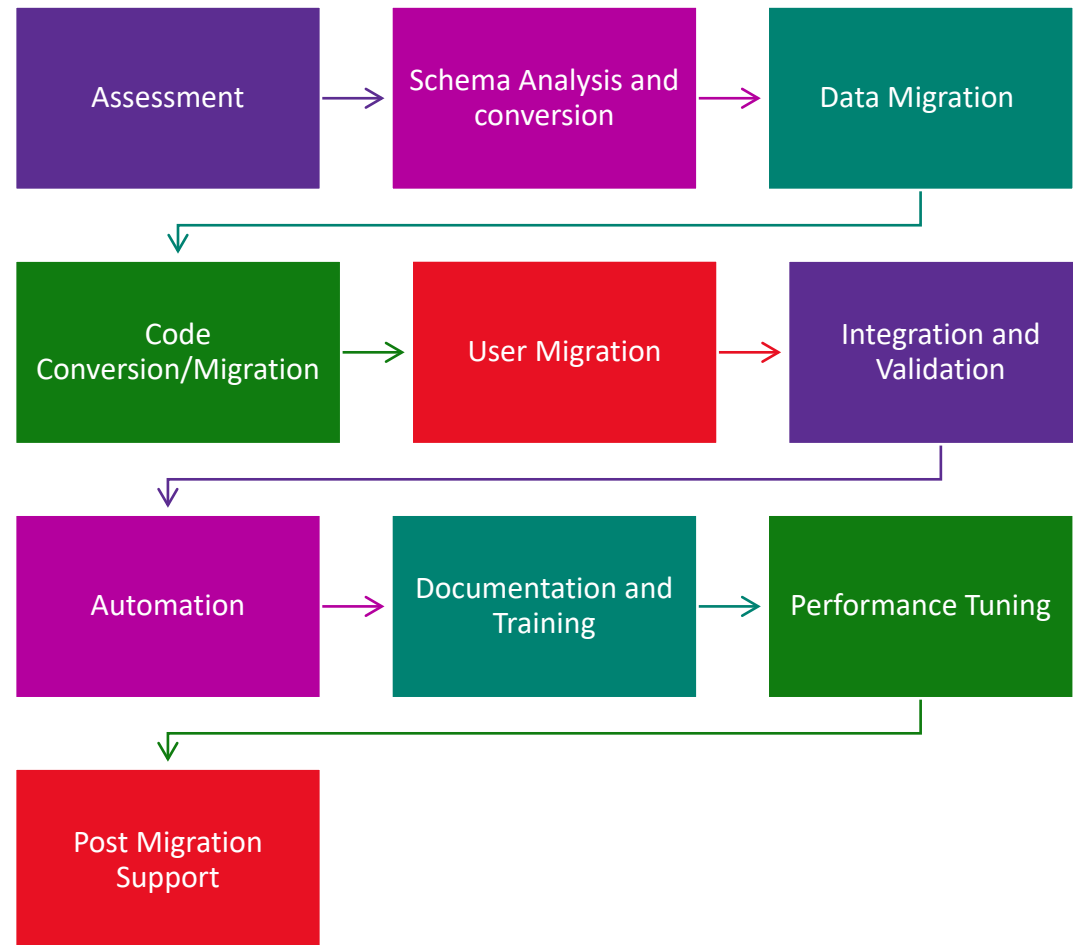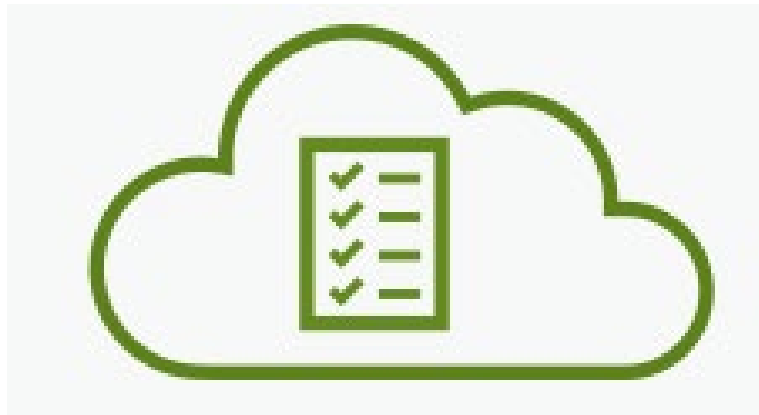Database Experts avg **20 years** experience & Dedicated MongoDB team

Low Offshore Turnover
(<8% vs industry avg 31%)

15 years managing and optimizing databases

How We Migrate - Migration Methodology

```
Assessment → Schema Analysis and conversion → Data Migration
    ↓
Code Conversion/Migration → User Migration → Integration and Validation
    ↓
Automation → Documentation and Training → Performance Tuning
    ↓
Post Migration Support
```

Understand Business & Technology Drivers, Solution & Outcomes from Datavail's Migration Engagement

Understand Business / Technology Drivers

Common reasons for Migrating to Cosmos DB:

- Other workloads are already in Azure
- Enterprise licensing cost for MongoDB
- Azure Cosmos DB API for MongoDB: Plug-and-play implementation with existing MongoDB compatible code
- Near infinite scaling without complex sharding and replica sets
- High Availability Built-in
- Automatic Backups
- Reduced Document Size – clean schema
- Global Replication available

Solution / Design

Why Choose Cosmos DB over MongoDB Atlas:

- Improved availability (unless moving to tier M30)
- Automatic scaling – regardless of which tier
- Customer support – including with all Azure support plans
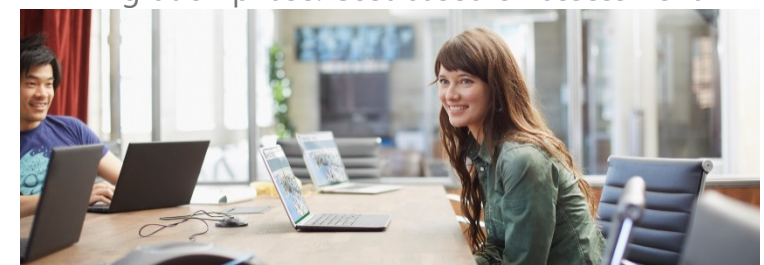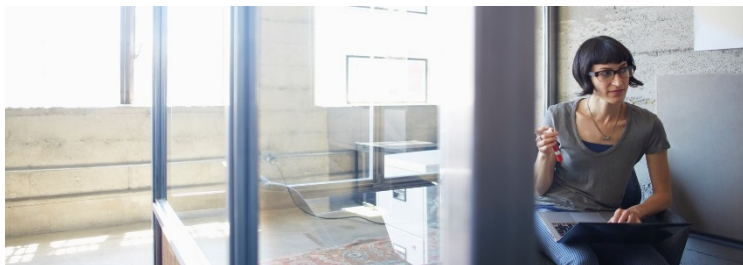- Pay-as-you-go Model

Desired Outcomes / Deliverables

Overview for MongoDB Migration to Cosmos DB:

- Pre-migration discovery
  i. Create a data estate migration spreadsheet
  ii. Discover existing MongoDB data estate resources
- Pre-migration assessment
  - Pre-migration mapping
  - Plan the Azure Cosmos DB Data Estate

Total cost for above: Small: $10,000, Medium: $15,000, Large: $20,000 (complexity/size is determined during call with customer)

- Migration phase: Cost based on assessment

Datavail Delivers Cosmos DB: Migration Phases

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Our Project managers will be with you each step of the way, building out a Gantt chart for dependencies, ensuring we establish doable milestones, and track dependencies.

Pre-migration Discovery

Discovery Phase: 1-2 Weeks

- Assess the existing environment- pain points and usage
- Determine the shard key for your future Cosmos DB environment
- If currently sharding in MongoDB environment, this will be adjusted to address expected good keys
- Prep for Migration Plan – scope
- Determine needs for migration scripts – dump and load, or migration toolkit

Pre-Migration Assessment & Planning

Planning Phase: 3-5 Weeks

- Test Cases (POC) and code compatibility testing with your team
- Goals and Objectives
- Cost Analysis
- Resource Planning
- Build a Migration Solution
- Schedules and Milestones
- Risk Mitigation/Contingency Plan
- Communication Protocols

Migration

Migration Phase: 5-8 Weeks

- Configure target database environment
- Automation is key for repeatability and checking success and problem areas
- Migration includes validation using custom scripts
- Assist customer during application testing

Post Migration

Cutover & Post Migration Phase:

- Incremental Migration if needed
- Offline Cutover with minimal downtime
- Post-checks will determine success/failover as well as any additional post-migration work
- Data Quality and Management
- Run Performance Tests
- Lessons learned documentation
- Operational Support

Case Studies

Financial Industry Customer

Datavail migrated an active large sharded replica set to the cloud for a top financial information and analytics company. We achieved near zero downtime in a smooth migration process.
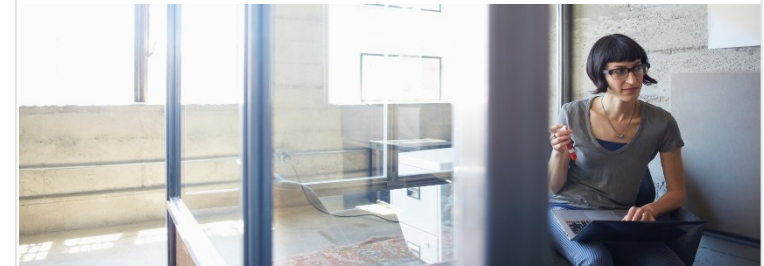
IoT Company

Datavail migrated a very large (80+TB) sharded cluster to the cloud for an IoT company. This migration required a phased approach, as well as custom code and scripts.

Healthcare

Datavail migrated a large sharded cluster to the cloud for a healthcare management company.

"It's rare that an entire program exceeds expectations from start to finish, but you made it happen. You should not only be proud of what you've accomplished, but also in the way you achieved such stellar results. Well done!"
- Senior Director-Technology & Architecture, Fortune 500 Fast Food Chain