

DAT219

# What's new with Amazon DocumentDB

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# DAT219

## What's new in DocumentDB

### Speakers

- Vin Yu, Super Product Manager, Amazon
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### Relevant Announcements

- ❖ [New](#) – DocumentDB Elastic Clusters

### Takeaways

- ❖ DocumentDB now allows for sharding..

### Azure

- ❖ Azure has [CosmosDb](#) which has a MongoDB compatible API and supports sharding.

## Overview

- DocumentDB
  - Fast and Scalable
  - Fully Managed
  - MongoDB API Compatible

## What's New

- [New](#) – Regions and Instance availability
- [New](#) – Query Capabilities – Geospatial Indexes, Aggregation operators, Decimal128
- [New](#) – Enterprise Management – Dynamic volume resizing, Fast database cloning, Query auditing, Performance Insights ([Demo](#))
  - Great Slide covering the types of migration

## DocumentDB Elastic Clusters

- [New](#) – DocumentDB Elastic Clusters
  - Compatible with MongoDB APIs for sharding
  - Millions of reads and writes
  - Up to 300,000 connections
  - Easy and Fast scaling
- Pricing – No upfront costs only pay by Compute, Storage, and Backups used.

## Demos

- [Demo](#) - Getting Started & Product Tour

[< Section Header](#)

[< Table of Contents](#)

# Amazon DocumentDB

SCALABLE, HIGHLY DURABLE, AND FULLY MANAGED DATABASE SERVICE  
FOR OPERATING MONGODB API-BASED WORKLOADS



## Fast and scalable

- Auto scaling storage and I/O
- Storage scales to 64 TiB
- Scale compute in minutes
- Scale out to 15 replicas for millions of reads
- Globally distributed



## Fully managed

- Built-in high availability
- Backups enabled by default
- Durable by default
- Security best practices by default
- Automatic patching
- Monitoring and alerting



## MongoDB API compatible

- Applications, drivers, and tools can be used with little or no change
- Supports hundreds of APIs, operators, and stages
- Continually working backward from customers to deliver the capabilities they need



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# New Regions and instance availability



# Query capabilities

## Geospatial indexes

`$nearSphere`, `$geoNear`, `$minDistance`, `$maxDistance`, `$geoWithin`, `$geoIntersects`

## Aggregation operators

`$mergeObjects` and `$reduce`

## Decimal128

Provides 128 bits of decimal representation supporting 34 decimal digits of precision



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# Enterprise management features

## Dynamic volume resizing

Storage space automatically increases up to a maximum size of 64 tebibytes (TiB) when you need more storage and decreases automatically when you delete data.

## Fast database cloning

Create clones to enable fast creation of a new cluster that has the same data as the original. Database cloning is faster than restoring a snapshot and requires no additional space at the time of creation.

## Query auditing (now with DML)

DocumentDB will record Data Manipulation Language (DML) events to Amazon CloudWatch Logs for monitoring and analysis. This includes events corresponding to `insert()`, `update()`, `delete()`, `find()`, aggregates, and more.

## Performance Insights (preview)

Performance tuning and monitoring feature that helps you quickly assess the load on your database and determine when and where to take action.

With one click, you can add a fully managed performance monitoring solution to your Amazon DocumentDB instances.



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# Amazon DocumentDB Elastic Clusters NEW!

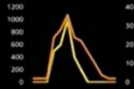


New type of cluster (Elastic Cluster) for Amazon DocumentDB that supports workloads with **millions of reads/writes per second** and **petabytes of storage capacity**

Elastic Clusters also simplify how developers interact with Amazon DocumentDB; no need to **choose, manage, or upgrade instances!**



Compatible with MongoDB APIs for sharding



Millions of reads and writes



Up to 300,000 connections



Easy and fast scaling



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## How is it priced?

No upfront costs and only pay for what you use with easy-to-understand predictable pricing



Compute – vCPUs per hour



Storage – GB per month



Backups – GB per month



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