



Market Insight Report Reprint

DataStax goes global, adding multi-region support to its Astra DB serverless database service

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The provider has recently updated its Astra DB serverless database managed service, adding multi-region support to its existing multicloud availability to support geo-distributed application requirements, as well as business continuity and disaster-recovery requirements.

451 Research

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Introduction

DataStax recently announced the addition of multi-region support to Astra DB, its serverless database-as-a-service offering based on Apache Cassandra. The multi-region support, combined with Astra DB's availability on multiple clouds, boosts DataStax's positioning with regard to supporting geo-distributed applications, as well as business continuity and disaster recovery requirements.

THE 451 TAKE

As we noted earlier this year, although there are solid arguments in favor of using database services from the major cloud providers, there is also a case to be made for an infrastructure-agnostic data platform layer that can potentially run on multiple clouds, as well as on-premises datacenters. Key reasons include an ongoing dependency on on-premises infrastructure, regional data storage or processing requirements, facilitating migration to the cloud and replicating data across regions and/or cloud providers. The launch of multi-region support in Astra DB is a significant milestone in DataStax's evolution to drive greater adoption through managed cloud services, rather than software support and subscriptions.

Details

Founded in 2010 to build a business around the Apache Cassandra NoSQL database, DataStax has expanded its portfolio in recent years. DataStax's database portfolio now includes Luna – a support subscription for open source Apache Cassandra – as well as the DataStax Enterprise distribution of Apache Cassandra with additional production-grade bells and whistles, and the Astra DB serverless database-as-a-service, which became generally available in 2020.

Additionally, DataStax also expanded its preview to event streaming in 2021 with the purchase of Kesque and the launch of the Luna Streaming support subscription offering for Apache Pulsar, which was subsequently followed by the launch of the Astra Streaming managed service.

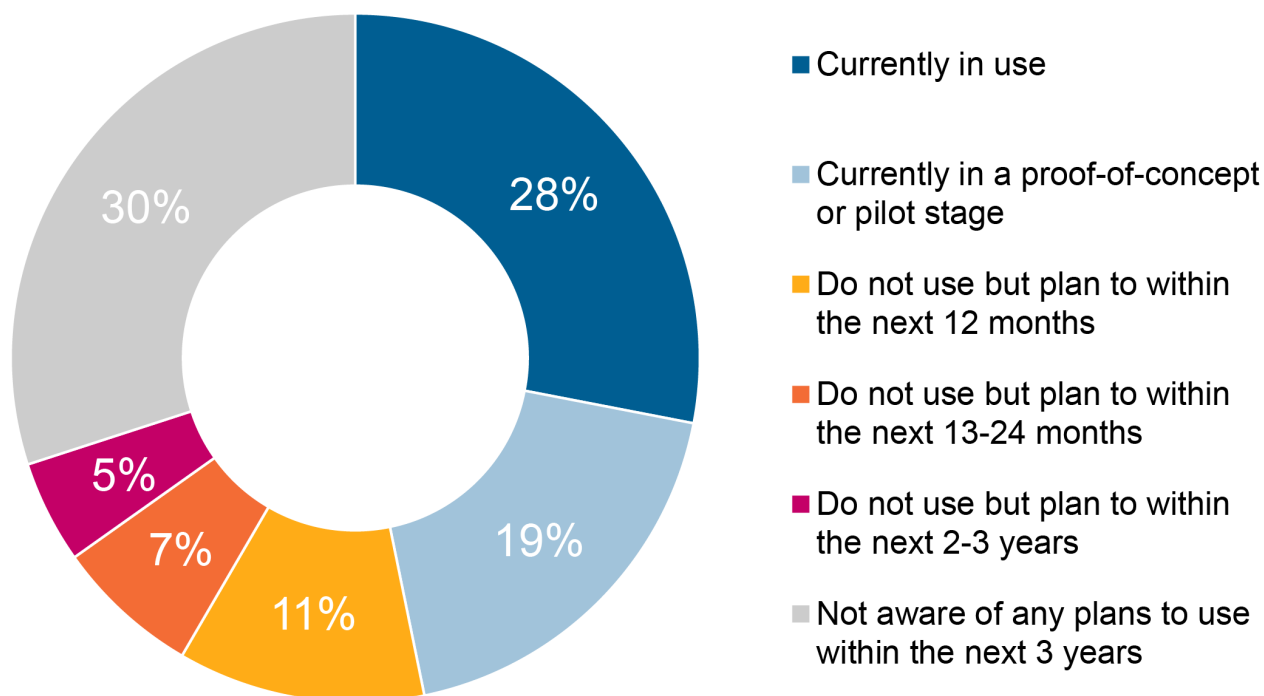
The latest announcement from the company focused on Astra DB. Astra DB was already available on multiple clouds – specifically Amazon Web Services, Microsoft Azure and Google Cloud – and 2021 saw DataStax debut its serverless DBaaS capabilities. It has now followed that up with multi-region support, providing users with additional options for supporting geo-distributed applications, as well as business continuity and disaster recovery. Specifically, Astra DB now enables users to replicate data across multiple regions of a single cloud provider. Inter-cloud replication (across multiple cloud providers or a combination of on-premises datacenter and cloud) is a lot more complicated, but is on the roadmap. In the interim, DataStax believes that the intra-cloud multi-region support will satisfy a large proportion of existing requirements for multi-region capabilities.

These include high availability and disaster recovery through the geographic distribution of replica data across an active-active architecture. The serverless nature of Astra DB also enables a more flexible approach to high availability that does not require infrastructure to be pre-configured or provisioned and sit idle while not used. Astra DB also provides the ability to enforce data replication rules that ensure data remains within a specific region in order to support local data residency, sovereignty, privacy and latency requirements.

Combined with a greater volume of data being generated and stored in the cloud, these requirements are conspiring to make the management of globally distributed data an increasingly important factor when considering database products and services. The delivery of multi-region support in Astra DB is therefore significant in positioning DataStax to compete with database specialists including MongoDB, Couchbase, Redis, ScyllaDB, PlanetScale, Cockroach Labs and Yugabyte, as well as Amazon Web Services, Google Cloud, Microsoft Azure and Instaclustr.

As the chart below illustrates, just over a quarter of respondents to 451 Research's Voice of the Enterprise: Data & Analytics, Data Platforms 2021 survey indicated that their organization is currently using a globally distributed database. However, more than half of respondents expect to be using a globally distributed database within a year, and 70% expect to be doing so within three years. The latter figure is higher among respondents that are already using cloud-only databases (87%).

Globally Distributed Database Adoption Plans



Source: 451 Research, Voice of the Enterprise: Data & Analytics, Data Platforms 2021

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