DATASTAX

❯ DataStax Astra DB

Build, deploy and scale real-time apps from any cloud with Astra DB multi-cloud DBaaS

The total amount of data created, captured, copied, and consumed globally is forecast to increase rapidly with social media, IoT devices, ecommerce and many other applications driving this unprecedented growth. Businesses need to manage and process this data growth effectively and use the data within their real-time applications to drive rich customer experiences and build positive business outcomes.

Astra DB is the fully managed, cloud-native, DBaaS, built on Apache Cassandra®, that scales dynamically and accelerates time-to-value of real-time applications. Astra DB accelerates application development via a wide range of APIs and programming language options, so developers can build real-time applications fast, and scale them without limits.

Build Apps Fast, Scale Without Limits

Faster time-to-market for New Apps

- Developers can create real-time data applications easily with the language and APIs they already love, from Document (JSON), REST, GraphQL, gRPC APIs and CQL with the Stargate data API gateway.

- Developers can readily ensure data security with Astra DB's built-in security mechanisms like Private Link, IP Access Controls, Single Sign-On, application tokens, and Data Encryption (At-Rest and In-Transit). Astra DB is compliant with SOC2 Type II & PCI DSS.

- Astra DB, with Astra Streaming provides a strong foundation for real-time data and applications.

Scale Apps Globally Without Limits

- Astra DB's serverless architecture (built on microservices and API-first principles) scales automatically based on demand without compromising performance and availability.

- High availability and data replication across regions, data centers, and availability zones is built into the Astra DB architecture.

- Astra DB can be deployed on AWS, GCP or Azure and easily expand to one or more regions within those clouds for multi-region availability, low latency data access, data sovereignty and to avoid cloud vendor lock-in.

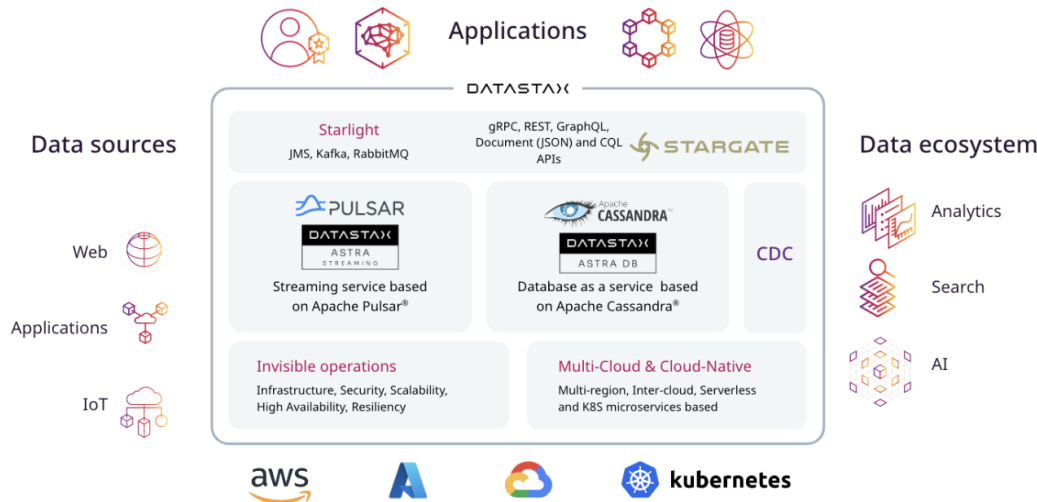### Enterprise Ready with Zero Operations

- Astra DB deploys a fully-managed Apache Cassandra compatible database, with enterprise grade scalability, high-availability, security, and performance in a few clicks.

- Astra DB eliminates the time and effort of installing, operating, upgrading, and scaling infrastructures and databases.

World Class Cloud Economics and Performance

- Astra DB reduces costs by as much as 85% compared to self-managed Apache Cassandra.

- Pay-as-you-go pricing model enables users to pay only for what they consume, thereby further reducing the TCO.

- 3X the performance across all use cases compared to alternative solutions.

DataStax: Real-Time Data Stack

Astra DB Key Features

Operations

Multi-cloud	AWS, GCP, Azure
Multi-region	Multiple regions in AWS, GCP, Azure Multi-region databases
Network Security	PrivateLink, IP Access List, Custom Domains
User Security	Single Sign-On (SSO), RBAC, Token Based Endpoints, Astra DB plugin for HashiCorp Vault for token management, Multi-tenancy
Data Encryption	Customer-Managed Keys (Bring Your Own Key), Data-at-rest encryption, Data-in-transit encryption
Auto-scaling	Fine-grained scaling with cloud-native serverless architecture
Monitoring & Observability	Database, keyspace usage metrics
	Performance metrics (read/write requests, latency, errors)
	Export metrics to 3rd party observability tools such as Prometheus, open-source Apache Kafka, Confluent Kafka, Splunk, Pulsar, and Datadog
Backup & Restore	Automatic back up once an hour
	Backups stored for 20 days
	Restore from backups via DataStax support

Developer Features

Stargate Data API Gateway	Supported APIs: REST, Document (JSON), GraphQL, gRPC API with equivalent performance as drivers, CQL API
	Supported Languages: Java, Node.js, C#, Python, Go
	Supported Data formats: Tabular (Column-family), Document (JSON), Key-Value
Storage Attached Indexing (SAI)	Highly-scalable, globally-distributed column-level indexes to any column
	Faster at writes and requires significantly less disk space
Change Data Capture (CDC)	Enabled with a few simple clicks
	Real-time propagation of Astra DB updates to Astra Streaming topics
	Wide range of connectors via Astra Streaming to the broader data ecosystem including ElasticSearch, Kafka, Snowflake and others

Industry Leaders Choose Astra DB for Their Modern Applications

Use-cases range from real-time financial service transactions, fraud detection, IoT data processing and data aggregation, gaming, supply chain management, transportation & logistics, customer personalization and recommendation engines, to application communication and data connectivity.

FINN.no - Moving to the cloud to deliver real-time personalization

FINN.no moved its 800 apps and 145 database instances to the cloud to concentrate on developing its strategy rather than managing infrastructure.

"Personalization can be hard, but it is essential for our team and for our business. Getting it right takes a mix of data science, infrastructure, and customer value. DataStax Astra DB supports our performance and availability needs from our Cassandra clusters, and helps us deliver recommendations that our customers think are valuable."

Espen Amble Kolstad, Senior Developer at FINN.no

Titanium - Making enterprise IoT platforms smarter

Titanium reliably serves clients worldwide, with superb flexibility and speed, with real-time monitoring, control, and analytics across disparate IoT endpoints.

"Astra DB is key to powering dynamic AI capabilities for making decisions based on model outputs, then getting this information back to the edge devices so action can be taken immediately."

Ara Bederjikian, President at Titanium Intelligent Solution

DataStax Astra DB Availability & Pricing

Get Astra DB up and running in a few clicks and use for free with a generous monthly credit. Or choose an elastic consumption pay-as-you-go plan or an annual commitment plan for additional savings.

Sign up at: https://astra.datastax.com/register

SIGN UP

Disclaimer: DataStax makes no warranties based on the information contained herein.