# YugabyteDB Aeon

## Introduction

YugabyteDB Aeon is a PostgreSQL-compatible managed cloud database service designed for modern applications. It is fully distributed, multi-region, and multi-cloud. YugabyteDB Aeon automates the deployment, scaling, management, and recovery of YugabyteDB databases across AWS, Azure, and Google Cloud. With YugabyteDB Aeon, you can start quickly. Just create an account and spin up databases in minutes, all without worrying about operational complexity.

Built on top of YugabyteDB, YugabyteDB Aeon offers enterprise-grade RDBMS capabilities such as distributed ACID transactions, replication with strong consistency as well as the horizontal scalability and resilience of non-relational databases, all with the familiarity and consistency of PostgreSQL.

You get complete freedom from data infrastructure with full power, flexibility and scale of YugabyteDB. You can be up and running in a live environment in minutes and leave the day two operations and management challenges to Yugabyte. You can also deploy YugabyteDB Aeon on a choice of public clouds and experience exceptionally high performance and enterprise-class high availability.

Customers seeking infrastructure flexibility can use YugabyteDB Aeon BYOC (Bring Your Own Cloud), which enables the deployment of YugabyteDB clusters in any public, private, or hybrid cloud environment. This option allows you to leverage your existing cloud infrastructure, while benefiting from YugabyteDB managed services.

Industry-leading companies like Admiral, Scout24, and ValStream rely on YugabyteDB Aeon to power their critical transactional applications. They can deploy new databases with a few clicks across their preferred public cloud, and get the database support and services they need to realize their business outcomes.

### ↗ At a Glance

YugabyteDB Aeon delivers a fully-managed DBaaS to simplify the adoption of a cloud-native, distributed database.

By combining the industry's most PostgreSQL-compatible distributed SQL database, YugabyteDB, with intelligent automation and a world-class Yugabyte team to manage and operate, organizations of all sizes can focus on building innovative applications and spend less on data and infrastructure management.

**Key Capabilities:**

> PostgreSQL- and Cassandra-CQL compatible APIs

> Turnkey encryption for data at rest and transit

> High availability and horizontal scalability

> Geo-distribution supports over 70 regions in AWS, Azure and GCP

> Performance at scale with zero downtime

> Built-in security and resiliency

> Low TCO with advanced automation

> Unified real-time monitoring and alerting

> Tunable backups and restore

> Always on service and free from cloud lock-in

> Flexible deployment options

> No hassle upgrades

> 24/7 support

# The Benefits of YugabyteDB Aeon

YugabyteDB Aeon was designed to simplify operations and provide advanced automation on top of the core database features available in the open-source, enterprise-class YugabyteDB database.

In today's cloud-native world, companies of all sizes need a simple, flexible, and easily accessible database that lets them focus on growing their services and offerings.

YugabyteDB Aeon does this by helping organizations do the following:

### Accelerate Developer Productivity

YugabyteDB Aeon delivers the power of distributed SQL with the ease of use of a database-as-a-service. Developers can create and connect to this infinitely scalable, resilient Cassandra- and PostgreSQL-compatible database in minutes using existing skills and familiar tools, with zero operational overhead. YugabyteDB Aeon makes running YugabyteDB in any cloud or scaling up as your application grows, effortless.

### Increase Efficiency While Lowering Costs

YugabyteDB Aeon is designed to be easy to use and operate, with features like dynamic horizontal and vertical scaling, rolling upgrades, and 24/7 monitoring and support provided by the world-class YugabyteDB service team. This allows users to focus on their applications and data rather than worrying about the underlying infrastructure and operations of the database. Lower operational costs and a pay-as-you-go pricing model can reduce costs compared to traditional databases that require upfront licensing fees or long-term contracts.

### Build Inherently Secure Applications

YugabyteDB Aeon applies industry best practices to securely manage your infrastructure and database to build an always-on business. These include daily backups, non-disruptive software upgrades, continuous availability, database usage monitoring, logging, auditing, identity and access management, data encryption, and key rotation. This all means that you can build inherently secure applications, more easily.

> YugabyteDB is a solid technical choice that meets all of our key requirements, including massive scale, high performance, low latency reads, and cloud native out-of-the-box. In addition, the support team at Yugabyte is incredibly responsive, beyond what we've experienced with other vendors.

**James Hartig**
Co-Founder, Admiral

# Expanding Core YugabyteDB Capabilities

YugabyteDB Aeon combines the highly resilient, scalable, and open-source distributed SQL database, YugabyteDB, with a cloud-native orchestration engine that delivers the operational excellence capabilities required of a fully-managed DBaaS.

The additional benefits delivered by YugabyteDB Aeon include:

**1. Lower Cost Operations:**
Get started with YugabyteDB Aeon on a cloud of your choice with no set-up charges and flexible pricing options. You can further optimize it for unused clusters, all without the overhead of managing day-to-day database operations.

**2. Extreme Global Availability:**
Deploy YugabyteDB Aeon across the globe on over 65 supported global regions in AWS, Azure and Google Cloud. Build always-on, highly-performant applications with low latency and horizontal and vertical scalability supporting availability zone, node, and region-level fault-tolerance.
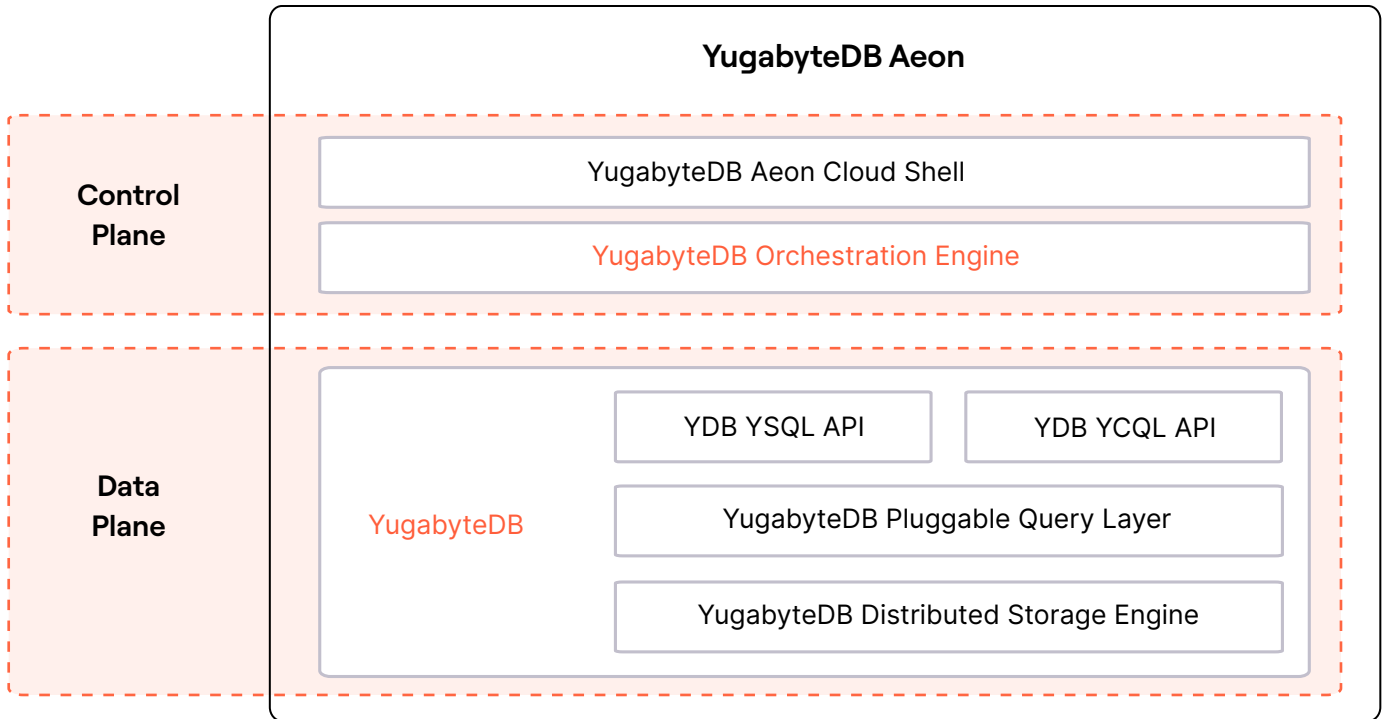
**3. Intrinsic Database Security:**
Protect your clusters and cloud infrastructure by automatically employing highly secure encryption in transit and encryption at rest, with additional features such as identity and access management, database access logging, auditing, and role-based access control, to obtain best-in-class data security via intuitive administrative controls.

**4. Intelligent Database Management:**
Focus on building great applications while programmatically automating critical cluster operations, deploying cloud-native Infrastructure-as-Code (IaC) via an enhanced Terraform Provider, fine-tuning cluster performance, managing alerts, and monitoring performance.

**5. Accelerate Developer productivity:**
Increase rate of innovation and competitiveness by bringing news ideas to production within hours/days. Accelerate expansion with frictionless scale and modernization of existing apps with the most Postgres-compatible distributed SQL database. You can eliminate the tradeoffs of legacy databases and accelerate developer productivity – whether building new microservices or modernizing existing applications. Retain top talent by focusing them on rewarding, growth initiatives.

## YugabyteDB Aeon

**Control Plane**

YugabyteDB Aeon Cloud Shell

YugabyteDB Orchestration Engine

**Data Plane**

YugabyteDB

YDB YSQL API

YDB YCQL API

YugabyteDB Pluggable Query Layer

YugabyteDB Distributed Storage Engine

## Deploy Across a Choice of Clouds

Microsoft Azure | aws | Google Cloud

"As a leader in world-class advertising and marketing services, Genxlead needed to match our innovative, data-driven services with a modern data layer that could seamlessly adapt to a rapidly evolving industry. As a fully-managed distributed database-as-a-service, YugabyteDB Aeon was selected as it exceeded our expectations around scalability, performance, and operational simplicity."

**Madhan Kumar**
Founder, Genxlead

# Key Features of YugabyteDB Aeon

| Core YugabyteDB Features | |
|---|---|
| **Distributed SQL Database** (open source) | » PostgreSQL- and Cassandra-compatible APIs<br>» Horizontally scalable database with automatic sharding, replication, and load balancing<br>» Synchronous and asynchronous replication<br>» Multi-row ACID transactions<br>» High throughput and low latency in a geo-distributed environment<br>» Security and Compliance<br>» Integrations with the DevOps ecosystem<br>» Data migration tools<br>» Incremental backups and point-in-time recovery |

| YugabyteDB Aeon Features | |
|---|---|
| **Lower Cost Operations** | » No set-up charges or commitments<br>» Elastic pricing with pay-as-you-go and annual subscription pricing options<br>» Detailed cost insights and easy billing charges management<br>» VPC networks to help reduce network data transfer costs<br>» Pause and Resume functionality to help reduce costs on unused clusters<br>» Perpetual access to a Free Sandbox tier, perfect for learning, testing and non-production use cases<br>» Full-featured time-limited trial backed by enterprise-grade SLA<br>» No cloud vendor lock-in |
| **Extreme Global Availability** | » Supports over 70 AWS, Azure and Google Cloud regions worldwide<br>» Zero-downtime rolling upgrades on live universe deployments<br>» Availability zone, node and region-level fault-tolerant clusters<br>» Multi-node, highly available production-ready deployments with single-region dedicated clusters<br>» Multi-region sync backed by region-level fault-tolerance<br>» Dynamic horizontal and vertical scalability to support increased workload needs with just a few clicks<br>» Low-latency reads with easy-to-configure Read Replicas |

| YugabyteDB Aeon Features continued | |
|---|---|
| **Intrinsic Database Security** | » App and database infrastructure security with VPC networks that accepts connections from trusted IP addresses only<br><br>» Self-service geo-partitioning to address dynamic Compliance requirements<br><br>» Highly secure encryption in transit and encryption at rest<br><br>» Role-Based Access Control (RBAC) manages database access and authorization<br><br>» Automatic application layer protection and protection from volumetric DDoS attacks<br><br>» Support for TLS/SSL support, DB encryption at rest, self encrypting drives and key rotatio<br><br>» Compliance to achieve regulatory requirements – GDPR, CCPA, SOC 2 Type 1 & Type 2, SOC 3 |
| **Intelligent Database Management** | » Enterprise SLA backed effortless distributed DBaaS 24 hours a day, 7 days a week<br><br>» Customizable backup schedule and intuitive restore process<br><br>» Performance advisor intelligently detects areas to optimize performance<br><br>» Built-in alerts and monitoring help fine-tune performance and track slow queries and live queries<br><br>» Planned maintenance windows and exclusion periods<br><br>» Admin controls to invite users, change roles and manage login methods |
| **Accelerate Developer Productivity** | » Connect to Cassandra and PostgreSQL- compatible databases in minutes using existing and familiar tools, with zero operational overhead<br><br>» Run YugabyteDB in any cloud and effortlessly scale applications<br><br>» Self-paced courses, virtual training and builder workshops available on Yugabyte University for developers<br><br>» Terraform Provider for cloud-native Infrastructure-as-Code |

# Explore Free Options to Get Started Today

## Create Cluster

### Sandbox  Free  Limit of one per account

**Single node** YugabyteDB cluster
Use this as a sandbox for learning and non-production use cases.

**Forever Free**. No credit card information is required.

**Cluster size**
Up to **2** vCPU , **4GB** RAM , **10GB** Storage

Max **500** Tables or **12.5M** Objects | Max **10** DB Connections

**Features**
✓ Cloud shell to run SQL queries from the browser
✓ Data encryption at rest and in transit
✓ IP Allowlist to prevent unauthorized access
✓ Automated software upgrades

[ Choose ]

### Dedicated

**Multi-node, highly available** YugabyteDB cluster
Use this for product evaluation and production-ready use cases.

**Price**  Starting from $0.50/hr   ⚡ Request a Free Trial

**Price**
Starting from $0.50/hr

**Cluster size**
Size the cluster for your workload

**Features**
Everything from Free tier plus:
✓ Scale your cluster on demand
✓ Automated and on-demand backups
✓ Dedicated VPC for network isolation
✓ Enterprise SLA

[ Choose ]

**Try the Full Feature Trial Today**

## Comparison: Free Tier vs Free Trial

| Item | Free Tier | Free Trial |
|------|-----------|------------|
| Fully-Managed Experience | ✓ | ✓ |
| Explore Postgres compatibility | ✓ | ✓ |
| Try out horizontal scalability | ✗ | ✓ |
| Try out fault-tolerance | ✗ | ✓ |
| Try out multi-region cluster | ✗ | ✓ |
| Time duration | Free forever | Time limited |
| Ideal persona | Vocational Builders, Students | Partners, Evaluators, POCs |

"Our mission is to lead in cloud-native database security. We embed security and privacy in all aspects of our company and product development process to address modern compliance requirements for our customers."

**Karthik Ranganathan**
Co-Founder & CTO, Yugabyte

# Accelerate end-to-end Migration with Voyager

Migrating to YugabyteDB Aeon has never been easier. YugabyteDB Voyager accelerates cloud-native adoption by enabling the safe and easy migration of application data from your legacy databases and single-cloud databases to YugabyteDB, the cloud-native distributed SQL database for your business-critical applications.
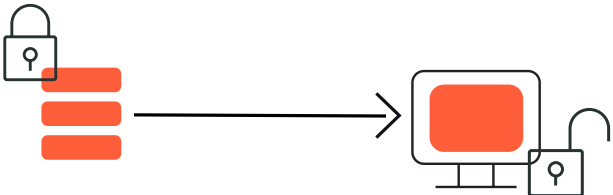


YugabyteDB Voyager encompasses the entire lifecycle of the database migration cycle within a single product. This includes assessment, migration, and optimization with the YugabyteDB Performance Advisor.

A key component of YugabyteDB Voyager is a powerful data migration engine that easily and safely migrates data to a distributed data fabric that can be deployed on public, private, or hybrid clouds. It supports moving data to YugabyteDB Aeon, and the core open-source database, YugabyteDB.

## About Yugabyte

Yugabyte is the company behind YugabyteDB, the open source, high-performance distributed SQL database for building global, cloud-native applications. YugabyteDB serves business-critical applications with SQL query flexibility, high performance and cloud-native agility, thus allowing enterprises to focus on business growth instead of complex data infrastructure management. It is trusted by companies in cybersecurity, financial markets, IoT, retail, e-commerce, and other verticals.

Founded in 2016 by former Facebook and Oracle engineers, Yugabyte is backed by Lightspeed Venture Partners, 8VC, Dell Technologies Capital, Sapphire Ventures, and others.

www.yugabyte.com

> **Get Started Today**
> Sign up for a full feature trial today and discover the great benefits of YugabyteDB Aeon
> https://cloud.yugabyte.com/

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