# **5G Edge Partner Program**

## HarperDB: Distributed Applications for the Network Edge

Moving application logic to the edge isn't enough to improve user experience. Leaving data in the cloud results in increased latency, cost, and development time.

To improve end-user experience, data-intensive applications need to avoid the latency-ridden public Internet as much as possible. To simplify the process of migrating applications to Verizon 5G Edge, HarperDB provides a unified development platform that integrates APIs, database, and distribution – moving business forward without delay.

## It Just Makes Sense

For businesses that use Verizon mobile devices on Verizon's network, leveraging Verizon 5G Edge just makes sense. However, developing a backend to make this possible has been cost-prohibitive, risky, and expensive – until now.

## **Atomic Nodes**

HarperDB's unifying technology makes developing on Verizon 5G Edge easy. It uses an innovative atomic node structure that combines application logic and data storage into one seamless solution. Additionally, HarperDB synchronizes data across 5G zones in real-time, ensuring that every user has up-to-date information.

## **Universal Deployments**

Universal deployments across cloud, 5G, edge, and on-prem servers let enterprises leverage 5G data storage and compute without compromising out-of-network activity, making everyone happy.







### How it Works

#### **Document Store Database**

Innovate freely with a flexible data structure that auto-indexes and supports SQL out of the box.

#### Embedded API Server

Skip complexity and leverage one of the world's fastest web frameworks, Fastify, without any setup.

#### NATS Connective Technology

Deliver low latency and resilience globally, with guaranteed exactly once replication across your infrastructure.

#### HTTP/S API

Juggle less with a simple, fast, and ready-to-go HTTP/S API that makes interacting with your data easy.

#### HarperDB Studio

In addition to a fully featured API and CLI, manage your 5G and global deployments with an intuitive point-and-click interface.

## Key Benefits Make Every Experience Instant

#### → Low Cost of Ownership

Centralized, monolithic databases are expensive to operate, maintain, and scale. Increasing RAM or CPU follows an exponential cost model, and egress charges can destroy any business model. By scaling horizontally, you can do more with less, and control the budget as well as user experience.

#### → Performance at Scale

App performance is often at the mercy of database performance. To operate efficiently anywhere, HarperDB has reimagined database architecture to ensure that reads and writes are highly performant no matter where data is stored. HarperDB is ideal for enterprise use cases that need high throughput and low latency.

#### → Go-to-Market Fast

Developing and delivering complex applications with a unified platform ensures that developers move quickly and can focus their time on creating customer value rather than managing infrastructure.

#### → Scalable on Day One

Atomic nodes are built for horizontal scale and global distribution. As demand grows, accommodating load is simple no matter your scale.

#### → In Network AI

Connected and autonomous decision-making is inherently dependent on data. HarperDB gives AI/ML applications instant access to data without needing to leave 5G networks.

#### → Resilient by Nature

API and data redundancy across different network zones is critical for delivering near-zero millisecond experiences to every user. It also ensures that if a zone goes down, system load is instantly distributed to other locations so user experience remains uninterrupted.

#### → Elevated Security

Isolating applications and their data to the mobile network reduces risk, keeping your business safe.





## About the 5G Edge Partner Program

The 5G Edge Partner Program aims to accelerate 5G Edge adoption and development by partnering with best-in-class, cross-industry application providers and developers who will change how we live, work and play. Verizon was the first in the world to launch 5G mobility service for customers in 2019 and continues to work with key partners to lead the development of the 5G ecosystem.

## Why Verizon and HarperDB

Verizon's 5G network and edge infrastructure, combined with HarperDB, delivers a fast, flexible, and scalable application solution that developers love. Apps that leverage HarperDB and Verizon deliver data to mobile devices with near-zero latency, making "instant" the new standard.

#### With Verizon, you can count on:

• **Superior coverage.** Our 4G LTE network covers 327 million people; that's over 99% of the U.S. population

• **5G innovation.** Verizon 5G Ultra Wideband gives you ultrafast speeds, with low lag and massive capacity

• **Trusted security.** Managing over 500,000 security network and hosting devices gives us valuable insights into the digital landscape

• Easy integration. We've certified 900+ machine-to-machine (M2M) chipsets, modules and devices