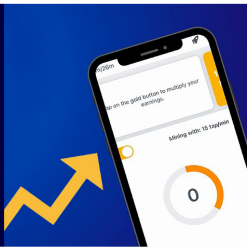
yugabyteDB

Midoin migrated to YugabyteDB Managed to deliver a more accessible and environmentally-friendly digital currency.



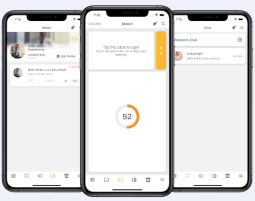
AT A GLANCE

Midoin is the first digital coin that can be mined on any mobile device. These digital coins are mined by clicking inside of an app without requiring expensive, energy-inefficient servers. This makes Midoin more accessible and environmentally friendly than cryptocurrencies.

Midoin's development teams were having frequent problems scaling writes with their legacy solution, PostgreSQL deployed on Heroku. They needed a write-scalable, PostgreSQL-compatible database with minimal operational overhead, so they could spend more time building the application.

Midoin switched to YugabyteDB Managed because it gives them the peace of mind to scale writes to accommodate almost any amount of traffic – both now and in the future – without the effort required by monolithic databases such as PostgreSQL.

Midoin is money, reinvented. It's the first digital coin that can be mined on any mobile device.



Users mine Midoins in the Midoin app on their Android or iOS devices. Mining is as simple as tapping a button – no special technical knowledge or expensive equipment is required. As a result, Midoins are more fair and accessible than cryptocurrencies. And even better, users don't have to invest a lot of money to get started.

Mining Midoins is much more energy efficient, too. Cryptocurrencies are intentionally inefficient to mine as servers consume enormous amounts of energy. And since Midoins are mined by tapping in the app, value is given to human effort and time instead of electricity consumption.

The app not only lets users mine Midoins, but also connect and socialize with other members of the Midoin community as well as send Midoins to each other instantly. It makes digital currency fun, fast, and easy to use.

KEY DATABASE REQUIREMENTS

Midoin's application is write-heavy. The development team managed to scale the reads on their original PostgreSQL database on Heroku by adding read replicas, but they were unable to scale it horizontally to accommodate the increasing number of users. As a result, Heroku would hit a vertical scale wall at the highest number of nodes whenever a rapid increase in database writes per second occurred.

Midoin was looking for a highly available, PostgreSQL-compatible database that could scale writes to keep up with the aggressive needs of their application.

Key requirements included:

- High availability
- Write scalability
- Compatible with PostgreSQL
- Hosted solution
- Minimal operational overhead
- Integration with Hasura preferred

YUGABYTE SOLUTION

Fully managed YugabyteDB cluster comprised of 4 nodes with 4 xlarge cores/node

Single availability zone (AZ)

Deployed on AWS

TECHNICAL RESULTS

8 BILLION
operations per day

1TB
dataset size

< 20MS
read/write latency

> *It's not easy to explain how much more relaxed I am having the ability to scale fast with YugabyteDB Managed. When I was using Postgres on Heroku, I could scale up to a point but no more than this. I had a barrier in front of us that I couldn't overcome. I just couldn't. I don't have that barrier with YugabyteDB Managed. I am much more relaxed now.*

Petros Ninos
Founder,
Midoin