

# 4

## Strategies for Architecting Modern Streaming Apps with YugabyteDB

To meet surging user demand, leading streaming platforms are choosing **distributed PostgreSQL-compatible YugabyteDB** to ensure scale, speed, and resilience.

### 1 Zero Downtime During Traffic Spikes

Modern platforms must dynamically scale up during live events, premieres, and virtual content surges and then scale back down to control costs.

- **Horizontal scaling** handles real-time traffic spikes
- **Automatic sharding** means faster dev cycles and lower operational overhead
- **Event-driven architecture** support enables elastic, real-time resource adjustments

### 2

### Reliable Subscription and Entitlement Management

Subscriptions, entitlements, and playback state must be processed instantly and accurately to avoid revenue leakage, access errors, and churn

- **ACID-compliant distributed transactions** for data accuracy
- **PostgreSQL isolation levels** to avoid duplicate charges or lost playback progress
- **Consistent read and write latencies** for complete data integrity

### 3

### Ultra-Low Latency

For live streaming, recommendations, and personalization, every millisecond counts. Ultra-low latency is necessary to deliver buffer-free, personalized viewing experiences.

- **Geo-partitioning** keeps data close to users for faster response times
- **Intelligent indexing and caching** reduce query times
- **Minimized data travel distances** ensures low-lag live streams and real-time personalization

### 4

### Global Expansion with Multi-Region Compliance

Live streaming platforms need a database that makes compliance effortless and meets constantly evolving data regulations.

- **Row-level geo-partitioning** ensures data stays in-region
- **Multi-cloud, multi-region deployments** avoid the need for separate databases
- **Built-in data residency controls** deliver simplified compliance

### Ready to Discover the Future of Live Streaming?

Schedule a [live demo](#), [chat with our experts](#), or [download open source YugabyteDB](#) today to discover how YugabyteDB can help your organization reach peak performance.