REDIS LABS CASE STUDY

Redis Labs Helps Jelly Button Games Deliver its Applications Faster and More Reliably

Introduction

Jelly Button Games Ltd. designs and develops multiplayer free-to-play games. Based in Tel-Aviv, Israel, the company was founded in 2011 and is behind popular multiplayer game Pirate Kings, which hosts 80 million users. Jelly Button uses Redis Enterprise to manage its social functionality and session store with greater reliability and higher speed.

> "Redis Enterprise' high performance, versatility, and quality support has helped us deliver applications faster and with greater reliability than ever before."

Challenges

Jelly Button Games has produced many smash hits, but Pirate Kings is bar-none their biggest title. Pirate Kings has had 100 million installs overall with about 50,000 new installs every day. A viral hit like Pirate Kings posed challenges for Jelly Button Games: The operations staff was overwhelmed by the increase in daily active users from 1,000 to 3.5 million in less than a month, which translated to 1 million requests per minute. Players of Pirate Kings are "always online" and all interactions are in real-time. If one pirate attacks another, the defendant will receive a push notification to her phone notifying her about the attack. This feature allows for an engaging and interactive experience but requires fast read & write capabilities. In addition, here are some other challenges Jelly Button faced:

- Jelly Button Games values Redis Enterprise's ability to solve the following challenges:
  - High availability- persistence, auto-failover and cross-zone/multi-region/multi-datacenter in-memory replication
  - Seamless scaling & clustering
  - Monitoring and management: alerting and dashboards
  - 24×7 support for mission critical Redis layer
  - Stable, high performance
  - Deep operational and technical expertise

Use Case

Jelly Button uses Redis Enterprise as their Swiss Army Knife: for caching, leaderboards, as a persistent database, pub/sub, and timeseries database. It helps keep the latency less than 25 milliseconds per operation. Below are some key features and functionalities of Redis Enterprise that the Jelly Button Games uses:

- High-speed transactions
- User session store
- Timeseries data
- Use sorted sets to manage their leader boards

- Use Redis Enterprise in the following solution:

- Mobile applications

Results

Thanks to Redis Enterprise, Jelly Button can store 13 million keys of player data and manage 20k operations per second effortlessly, all with an average latency of .06 milliseconds. With player leaderboards, Jelly Button can instantly locate a player globally or within friend's leaderboards. Jelly Button saw better performance for lower operational costs and decided to use Redis as their primary data storage.The following are a few other results with Redis Enterprise:

- Has seen the following from choosing Redis Enterprise as your their Redis deployment provider, compared to their previous state:
  - Cost savings: up to 30%
  - Faster time to market: 50-70%
  - Reduced downtime: >90%
  - Fewer specialized resources: 70-90%
  - Higher and more stable performance: >90%
- Jelly Button Games uses Redis Enterprise as their primary database
- Jelly Button Games is increasing usage of Redis Enterprise for the following reasons:
  - Their data size is increasing and processing needs are increasing
  - Their application usage and user count is growing
  - They want more pieces of our application to be served faster
- Jelly Button Games would like to move additional data from the following database into Redis Enterprise:
  - MongoDB

Company Profile

Company:
Jelly Button Games

Company Size:
Small Business

Industry:
Computer Software

About Redis Labs

Redis Labs, home of Redis, the world's fastest in-memory database platform, provides Redis Enterprise as a cloud service and as downloadable software to over 7,000 enterprise customers. The high performance, true high availability and seamless scaling of Redis Enterprise, are top-ranked by industry analysts, and power use cases such as high speed transactions, queuing, user session stores, and caching, in e-commerce, social, personalization, IoT, metering, fraud detection and other real-time applications.

Learn More:

Redis Labs

Source: Meir Shitrit, VP R&D, Jelly Button Games

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