scopely gets the high scores with redis labs

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" redis labs has all the key features we look for in an infrastructure-as-a-service product: automated scalability, automated failover and recovery, reliability, and superior performance. "

ankur bulsara
co-founder and cto at scopely

about scopely

Scopely is a rapidly growing mobile gaming company that is trailblazing a new publisher model. In just three years, Scopely has more than quadrupled in size and launched an unprecedented six consecutive Top-5 games in the Apple and Google App Stores.

With their own internal gaming studio, Scopely makes first-party games, where the majority of the ideas are battle-tested to gain insights into efficient scaling techniques. This knowledge has been analyzed from technical, marketing and distribution standpoints, then aggregated to form a publishing business aimed at helping developers effectively grow a substantial user base whilst boosting monetization. What's more, with sophisticated user acquisition, proprietary channels, as well as deep relationships with Google and Apple, Scopely significantly increases developers' odds of achieving quality visibility. On the publishing side, their rigorous product management practice ensures that metrics are being met for the entire lifecycle of all games. Furthermore, Scopely is involved in a first, second and third-party diversified strategy for IP licensing, working with outside developers to externally build games, while keeping the design process internal.

Their platform has been designed to build internal games, and handle in-app purchases, communication flows, monetization, in-app currency, virtual economy, content handling, friend networks, and the infrastructure tools necessary to support a game.

the lifecycle of a scopely's game

At any given time, there are several franchises and games at various stages of Scopely's 'green light' process. Development typically ranges between 6-12 months before global release. Akin to the Agile-Waterfall Hybrid, Scopely's strategy involves completing a significant number of tasks prior to production, including monetization and game design loops. Additionally, tests are performed throughout various stages of development, such as small market tests, or 'allies tests', to calculate baseline metrics before a decision is made regarding a game's future. The global release is by no means the final step. The vast majority of work is performed in the 'live ops' phase, where content cadences, uptime cadences, update cadences and new features are constantly being developed. Games are like any other online service, requiring maintenance, incremental updates, features and changes.

why redis

Scopely uses Redis for a variety of needs, including leaderboards, API management, and utilizing sets and sorted sets in queue workload management to ensure that events are not processed twice. One of the biggest use cases for Redis, however, is in Scopely's social functionality, such as tournaments. Due to game development demands, as well as the need for reliable caching with their ever-growing database, Scopely was in need of impeccable Redis management. Delivering top performance in a highly-available, infinitely scalable, predictable and stable manner, Redis Labs offers enterprise-class Redis for developers. Being able to host and monitor Redis is imperative for Scopely, along with Redis Labs' highly-resilient multi-zone support, which significantly minimizes downtime.

challenges and solutions

challenge 1: stable, top performance

As an active player in the mobile social gaming industry, Scopely is faced with many of the same performance challenges as any other service offered on the web with millions of users across the globe. While they initially turned to Amazon's Elasticache for Redis management, Scopely became aware of the fact that the level of self monitoring that the approach required from them was not realistic for the long haul. What's more, with the company's business depending on its continuous online presence, high availability was an absolute must. As response times decrease, engagement increases. Consequently, data storage systems, like Redis, that do not "touch disk", or are at the very least, touching disk very efficiently, with sub-millisecond response times, have an impact on a whole slew of very high frequency actions.

solution

From the context of mobile users, who are on their phones with a limited amount of time, sub-par performance in conjunction with service interruptions are the cause of instantaneous switch-overs to other applications. Redis Labs' proven outstanding performance - handling any volume of requests within a few milliseconds - along with their infinitely scalable database, have granted Scopely the peace of mind needed to grow from their current capacity of dozens of gigabytes, at any rate and to any size. Now Scopely benefits from steady operational management as well as performance gains.

challenge 2: consolidated efforts

Company efforts are generally focused on a specific game offering. If that offering is not infrastructure related, more times than not, those services are outsourced to save time and money. Scopely is no different in this thought process, specializing in technology innovation so as to advance their gaming platform. With minimal staff dedicated to operations, the developers who work on the system are also responsible for resolving gaming and application issues. As a result, Scopely does not want to burden their modest sized ops team, or developers who already have their hands full, with the task of managing Redis, let alone becoming Redis experts.

solution

While Redis is highly responsive, and practically works out-of-the-box, Scopely's tournaments are real-time features that require extremely low response times and confidence in the Redis handler. It is no coincidence that Scopely turned to Redis Labs for all of their Redis needs. Managing over 50,000 Redis instances, Redis Labs' numerous developments and high level of experience enable them to administer the best possible Redis performance. With their best practices prioritizing responsiveness and support, regardless of the circumstances, Scopely quickly learned that they were in safe hands with Redis Labs.

challenge 3: scalability

With the rapid rate of expansion successful businesses encounter now-a-days, having the right coping mechanisms put in place to endure sudden growth is vital to survival. Scopely's constant climb up the app charts with games that have skyrocketed from having several thousand users to several hundred thousand users in the span of 24 hours, requires the ability to scale their Redis databases efficiently and quickly.

solution

Fortunately, Scopely's stable Redis backbone is managed by Redis Labs, effectively scaling regardless of the amount of memory that is consumed. Database scaling happens instantly, with no downtime or interruption to the service, allowing Scopely to react immediately to changes in the demand of their applications. This important use case provides a level of mental freedom to the gaming company, allowing them to keep their focus on other issues at hand, such as customer support and application development.

about redis cloud

Redis Labs, the leading commercial Redis provider, powers cutting edge applications with blazing fast enterprise-class Redis. Our Redis Labs Enterprise Cluster and Redis Cloud solutions are trusted by thousands of developer and enterprise customers for high performance, infinite scalability, true high availability, and best in class expertise and enhance popular Redis use cases such as real time analytics, fast high-volume transactions, in app social functionality, application job management and caching. Redis Labs is a contributor to Redis, an open-source, in-memory NoSQL database, benchmarked as the fastest database available today. Redis is also ranked among the top three NoSQL databases and #12 among all developer tools & services.