

Cisco Systems uses Redis Enterprise as a Primary Data Store for IoT Solutions

Introduction

Cisco Systems is an American multinational conglomerate that develops, manufactures, and sells networking and telecommunications equipment and services. Since its founding in 1984, Cisco has grown to become the largest networking company in the world and a leading Fortune 500 company. Cisco relies on Redis Enterprise layer as its session store for its IoT solutions and Mobile Applications.



“Redis Enterprise has been amazing so far.”

Challenges

As the largest player in the networking solutions industry, high performance is crucial in all of Cisco’s solutions. It’s especially important for its IoT and Mobile applications, which connect hundreds of thousands of users, increasing operational effectiveness and optimizing their client’s communication channels. As a company that markets itself on its speed and real-time analytics / optimization, Cisco needed to find a database that could run at a high operational capacity. Some challenges that led Cisco to choose Redis Enterprise include:

- Values Redis Enterprise’s ability to provide:
 - Stable, high performance

Use Case

Cisco chose Redis Enterprise as its primary database after surveying other database solutions for its sub millisecond latency and reliability. With its IoT solutions, Cisco needed a system that can process transactions at high-speed so that it could deliver analytics to the users real-time. Additionally, Cisco chose Redis Enterprise’s speed for it mobile applications, which users depend on for real-time responsiveness. Here are some additional key features and functionalities of Redis Enterprise that Cisco uses:

- Has a > 1 TB dataset in Redis Enterprise.
- Uses Redis Enterprise for the following:
 - High speed transactions
 - User session store
- Is using Redis Enterprise in the following solutions:
 - Mobile applications
 - IoT

Results

Due to Redis Enterprise, Cisco saw a jump in their session’s performance capabilities, which was accomplished with less resources. The success of Redis Enterprise has prompted Cisco to have Redis cover more of their solutions and to shift additional data away from competing databases. Cisco has also achieved the following results with Redis Enterprise:

- Has seen the following improvements from choosing Redis Enterprise as their Redis deployment provider, compared to their previous state:
 - Reduced downtime: up to 30%
 - Fewer specialized resources: >90%
 - Higher and more stable performance: up to 30%
- Use Redis as their primary database
- Is increasing usage of Redis Enterprise for the following reasons:
 - They want to scale to multiple locations/sites
 - They are moving more data from RDBMS to Redis
- Would like to move additional data from the following databases into Redis Enterprise:
 - MongoDB

Company Profile

Company:
Cisco Systems

Company Size:
Global 500

Industry:
Computer Services

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.

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