



Fortune 100 Technology Company Uses Supermicro Servers to Handle Trillions of Events and Messages, without any Data Loss

Modular design of Supermicro's FatTwin Servers allows company to rapidly scale to support growing business needs



INDUSTRY

Technology company that develops and manufactures computer software, hardware, and services.

CHALLENGES

- Support the company's billions of events and messages
- Ensure that the solution would not have any loss of data
- Utilize a modular design, allowing the company to support multiple use cases with the same basic chassis

A global Fortune 100 technology company has deployed Supermicro FatTwin servers to support its social media platform that tracks events, messages, and signal reliability, without any data loss, to drive its database and its analytics software. Initially starting with just a few servers, the company has now scaled to over 100,000 hyper-converged server nodes over the past decade, deployed in multiple global locations.

Challenges

In 2010, the company started to experience hyper-growth and the number of users on its platform was growing exponentially. Millions of users each generate their own set of interactions, which turned into billions of events and messages each day. When the company's engineers saw this growth trend, they created a platform that could reliably handle the billions—and over time trillions—of events and messages.

In order to run this platform, the engineers needed to find a hardware solution that solved two important guidelines. First, the solution had to ensure there would not be any loss of data. Second, the solution had to be modular, with each node having a highly flexible disk drive architecture, allowing the company to support a large number of use cases with the same basic chassis.

SOLUTION

Supermicro's FatTwin Servers

BENEFITS

- Compact and modular design leverages a shared redundant power chassis
- Server nodes have their own individual set of up to 10 disk drives, which are RAID-capable
- Each node is easily replaceable and hot-swappable

The company's engineers calculated they would need thousands of these servers. Because of the extremely large quantity of servers, they wanted the compute nodes to be compact so that all of their servers could fit in their data center rooms.

Solution

After evaluating several hardware solutions, the company found that Supermicro's FatTwin servers were the best option to satisfy their requirements. FatTwin servers are designed to be compact and modular by leveraging a shared redundant power chassis. And each server node has its own individual set of up to 10 disk drives, which are RAID-capable.



Supermicro FatTwin SuperServer F629P3-RC0B

ABOUT SUPERMICRO

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Each node is easily replaceable and hot-swappable—when a node fails or its disk drives fail, the node could easily be replaced by another one.

These unique features allow the engineers to setup a prototype system in a single rack. They tested their software platform, generating data traffic to and from the FatTwin nodes. When the engineers demonstrated their system, everyone cheered, as they saw their overall system improved for the entire social media site.

Over the course of the last decade, the company has scaled its software system to over 100,000 Supermicro FatTwin server nodes. Initially, they were running in a single data center, then to data centers all over the world, with failover between locations.

The modularity, compactness, and replaceability of the FatTwin made the operations of this software system easy to maintain and easy to deploy to new locations. The company continues to deploy FatTwin for this software platform and other applications.

Benefits

The company has been impressed with the scalability, robustness, and reliability of the Supermicro FatTwin platform. With unprecedented growth over the past six years, the company continues to add more nodes across all global data centers to keep up with business demands.