



Symantec Case Study



Executive Summary

Summary

When Symantec, a world leader in consumer and data protection, was looking to secure and provide consistent access to business-critical data, a top requirement was to accommodate for the company's future data growth. Fibre Channel was able to provide all the answers.

Challenges:

- Ensure secure and reliable access to business-critical data
- Meet scalability demands of Symantec's continued expansion
- Capitalize on advancements in virtualization and flash storage technologies

Fibre Channel

Benefits:

- Flat, simple network architecture increases security, stability, and availability
- Optimal and simplistic scalability
- Features performance-enhancing NPIV virtualization, segregation and dynamic bandwidth provisioning capabilities
- Accommodates different service requirements between multiple groups

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Customer

One of the world's largest software companies, Symantec specializes in information protection and operates one of the largest global data-intelligence networks in existence. It's this network where security, backup and availability solutions are developed that consumers and organizations rely on to protect their critical data. The network spans scores of secure, interconnected data centers across five continents with petabytes of data that must be consistently available to Symantec employees.



Symantec SAN Responsibilities

Symantec's IT infrastructure is responsible for ensuring that business-critical data is available to all Symantec employees when it is needed—making it imperative that the Symantec storage environment is capable of both storing massive quantities of data and retrieving that data reliably. As Symantec continues to expand they require a storage infrastructure that is capable of fluidly adapting to their growth. Symantec is currently seeing a 15 percent increase of data annually, and consequently, their storage network has been experiencing annual growth rates of over five percent. In addition to meeting the necessary demands of high-scalability, the Symantec SAN must also support file sharing, database, and online transaction processing applications, while consistently achieving the highest availability.

The Need for a Purpose-Built SAN Solution

Symantec's continuing expansion prompted company executives to look for a more reliable and scalable storage solution that was capable of both accommodating the company's growth and ensuring that Symantec employees have the most secure, consistent access to business-critical data possible. After implementing several Ethernet-based storage solutions and finding them unable to meet the company's stringent security and reliability requirements, Symantec decided to increase their reliance on Fibre Channel and provisioned it across critical data paths. The new Fibre Channel SAN has since allowed Symantec to realize increased system utilization, higher availability, improved efficiencies, and enabled them to capitalize on the latest advancements in flash storage technologies.



Symantec

Quotes:

"Fibre Channel has a great record from an availability and reliability standpoint, and it allows us to scale on demand as our business grows."

"On time, on target and on budget—Fibre Channel helps us maintain all three of these business requirements."

Kevin Tan,
Symantec
Infrastructure
Architect



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Business Results

As a company that specializes in security, the protection of end-user data is of paramount importance to Symantec. Leveraging standard Fibre Channel features like deterministic bandwidth provisioning and NPIV (N_Port ID Virtualization) to segregate multiple fabrics, Symantec is now assured that end-user data is optimally secure and available. Fibre Channel also allows Symantec to accommodate different service requirements between multiple groups, securing data as well as preventing I/O floods between groups.

Fibre Channel has allowed Symantec's IT department to capitalize on new technologies like virtualization—which has increased system utilization, improved efficiencies, and enabled Symantec to take full advantage of SSDs. Fibre Channel has enabled Symantec to further virtualize connectivity, improving server-to-storage attach rates from 1:10 to 1:15 and securing data flows through NPIV segregation.

Providing consistent, sustained performance, Fibre Channel has allowed Symantec to achieve the absolute best performance from their Solid State Drives, which now operate at the height of performance. Fibre Channel's integrated diagnostics, monitoring and simplified management functionality has enabled seamless and progressive expansion along with an increased resiliency.

Simply put: Fibre Channel's flat network architecture and bandwidth provisioning capabilities have been instrumental in increasing security, stability and service-availability for Symantec.

The following were among the advantages Symantec realized by deploying Fibre Channel:

- **Consistent Reliability**

With a global workforce that spans five continents and many time zones, Symantec IT needs to ensure that access to data is available to employees at all times. Fibre channel's credit-based flow control allows for consistent delivery without dropped frames or lost data and deterministic performance. Fibre Channel has allowed Symantec IT to provide consistent connectivity with sustained availability. The results, business-critical data is highly available to employees when it is needed around the clock, enabling production schedules to stay on track.

- **Scalable to Accommodate Growth**

Fibre Channel has long been a valued addition to Symantec's data retention plan, most recently providing access to critical data through natural and acquisition growth of 15 percent most recently. In the midst of its next growth phase, Symantec is adopting next-gen technologies such as expanding virtual machine deployments and migrating to flash based storage. Fibre Channel has proven it can easily scale up and down in response to Symantec's past needs and is designed with generational feature enhancements that unleash the full potential of evolving technologies.

- **Secure**

Fibre channel offers many security features that help ensure Symantec's data is protected. Hosting pertinent data on Fibre Channel reduces vulnerability from outside attacks since it is a segregated network isolated from Ethernet. The use of NPIV insures segregation of internal data deposit and accommodates for different service requirements between groups. As an information protection company, Symantec takes advantage of Fibre Channels security feature to ensure data, the life blood of the company, is protected.

A Closing Note on Fibre Channel

In considering the benefits above, one begins to understand why Symantec trusts Fibre Channel for their critical storage needs. These enterprises realize that data connectivity doesn't stop at performance and must include consistent reliability, scalability, and security capabilities as well as data integrity, operational simplicity, and manageability.

No matter who's consuming your data, Fibre Channel proves it offers superior value and consistently demonstrates why it is the purpose-built storage solution you can trust.