

USE CASE | CONTENT COLLABORATION

About Egnyte

Egnyte delivers enterprise grade collaboration, protection and modernization through a single SaaS platform. By providing a single source of truth for all business content, Egnyte transforms the workplace for companies in multiple industries, without ever compromising security.

Egnyte's hybrid approach to content collaboration automatically provides users with the fastest route to their content. They also provide centralized control and security over content wherever it's stored. This approach, which allows IT to incrementally modernize content without interruptions, is particularly well-suited for global enterprises with highly distributed employees and offices.

As a result, Egnyte maintains a strong position in the blossoming content collaboration market, which is growing at an impressive 32% annually. The industry is expected to reach over \$9.2 billion by 2021, spreading significantly outside the US and Western Europe.

Egnyte's strong vision, rich offering, and powerful customer partnerships (maintained through onboarding, implementation and support) landed them firmly in the Leaders quadrant of Gartner's 2017 Content Collaboration MQ.

Egnyte Optimizes
Their Global
Performance with
Teridion

The Challenge

More than 14,000 businesses expect a consistently high level of service performance from Egnyte, regardless of user location. Unfortunately, some global customers saw a drop in performance for users positioned furthest from Egnyte's DC, particularly those in areas like Asia, South America, and Australia where Internet bandwidth can often be constrained

As their business grew, Egnyte became scrupulous in choosing quality ISP partners and planned to ensure generous bandwidth, but performance issues continued. They and their customers were experiencing a fundamental problem with Internet Backbone performance. In short: the Internet didn't care about their traffic.

Internet Backbone providers use least-cost routing, which is the process of selecting the path traffic will take along the Internet Backbone based on the lowest cost, with no regard to performance. Border Gateway Protocol (BGP), the routing protocol of the Internet, dictates that traffic between two networks will always take the same path regardless of network congestion.

Egnyte's has TCP-based applications. TCP is optimized for reliable delivery. It is a very conservative protocol as it provides reliable delivery at the expense of high throughput. As it encounters any congestion in the Internet, it reacts strongly, shrinking packet sizes and chopping throughput to ensure packets can make it to their destination. This overreaction to congestion is common with TCP and results in application performance slowing to a crawl, and to users getting irritated and frustrated.

In addition to performance issues associated with the Internet Backbone, Egnyte lacked visibility into the middle-miles and last-mile of data transit to customers. This prevented them from effectively identifying and helping customers troubleshoot problems. The first indication of performance issues often came from customer support calls.

The Situation

Egnyte had a few options to consider to address their performance issues.

Tactic #1: Use a CDN

Egnyte discarded this option out of hand. CDN-based solutions were fundamentally a bad match to Egnyte's requirements:

1. Upload performance: Upload and download speeds are equally critical for Egnyte. While content caching offered potential improvements in file download times, CDN dynamic site acceleration techniques only offered margin improvements to uploads.
2. File security concerns: CDNs intermingle files from multiple customers in regional caches around the globe, raising the risk that a hacker who gained admin privileges on a single cache node could access all files cached there.
3. SSL certificate sharing: CDNs require access to Egnyte's SSL certificates, creating potential security risks for Egnyte and breaking the "chain of custody" for documents stored in the Egnyte SaaS platform.

Tactic #2: Build out a network of PoPs

Egnyte elected to build out a series of regional network acceleration points of presence. Although this custom solution mitigated local performance issues wherever it was deployed, it came with high operating costs and the burden of increased operation and business complexity.

Each network PoP was expensive. They each had hardware, software, and network costs, and required a significant amount of internal planning and implementation resources, and there was the thorny issue of cost efficiency. Egnyte's global customers naturally expected a consistent level of service for all their users, and so a small volume of users in a particular region could require the deployment of a new PoP if those users represented a high-value Egnyte customer. This in turn inflated Egnyte's capital outlay and operational cost per user. Egnyte's network ops team was saddled with an ever-increasing maintenance overhead as the high number of PoPs required to serve global enterprise customers were deployed.

Not only was it a big investment in time to bring up a new PoP, but customer deployment was cumbersome too. Each new Egnyte customer that used a distributed PoP required several hours of setup time when their service was initiated.

Finally, lack of visibility into the "last mile" to troubleshoot customer issues was still a pain point.

Why Teridion?

Egnyte needed an alternative to their PoP strategy that did not compromise security, offered acceleration for both file upload and download, worked globally, and was cost effective.

During their search, they discovered Teridion. Teridion's Internet overlay network makes your SaaS applications faster and more reliable by radically improving public cloud Internet performance up to 15x, anywhere in the world.

Teridion's Internet overlay network is optimized for dynamic content, including bidirectional data in Motion, content collaboration and large file transfers. In addition, Teridion's overlay network is ideal for organizations that must deliver a global service, including China and other Asian countries, as well as Brazil and other South American countries.

"One of our largest customers has offices in over 145 countries. With Teridion I can now confidently tell the customer that I can deliver optimal performance at all of their locations."



KRIS LAHIRI
VP Operations, CSO, Co-
Founder Egnyte

Teridion delivers these results by continually analyzing the performance of the global Internet backbone and predictively routing traffic around congestion, outages, and high loss paths. Thousands of monitoring agents are located globally throughout all leading public cloud providers feed real-time performance data to an orchestrator that uses the insights to construct and optimize Virtual Backbone Networks. A VBN is a dynamically generated, per-customer Internet overlay network that routes traffic using three key metrics, throughput, latency/end-to-end delay, and packet loss.

Beyond the improvement in performance that Teridion offered, Egnyte identified several additional advantages:

- Combined with their internal monitoring, Teridion's diagnostic capabilities allowed the identification of middle and last-mile issues, such as informing a customer that a performance issue was localized to a specific ISP.
- Teridion's scale was far beyond what they could have reached with network PoPs, exponentially increasing the locations they could optimize.
- New customers could be on-boarded quickly and easily as Teridion did not impose any client or business process changes, which also helped customer acquisition.
- As a turnkey service, Teridion required virtually zero ongoing management or maintenance.
- Teridion's DNS-High Availability capabilities ensured that a DDoS attack against the primary DNS provider was mitigated with no action required on the part of Egnyte or their customer.

The Results

Egnyte's position was that any solution had to meet or exceed the performance they could get from their internal custom network PoPs, and Teridion met the challenge.

In an extensive beta, Teridion was compared quantitatively end-to-end with the existing network PoP environment and qualitatively through continual engagement with Egnyte's global customers. The results more than satisfied their performance requirement

Moving to full production, Egnyte realized these advantages:

“One of the biggest advantages we've seen in adopting Teridion is the reduction of performance related support tickets”



DON DAVID
Sr Director Technical Services
Egnyte

- Performance: Matched or exceeded the performance of Egnyte customers using Egnyte's own Network PoP network, giving Egnyte a competitive advantage in file upload and download speeds while maintaining control and end-to-end encryption
- Operational Costs: Setup times were reduced from several man-hours per customer to five minutes per customer, and network PoP maintenance and operational costs disappeared
- Customer Satisfaction: Fewer support tickets and average resolution time for customer issues dropped by 50%

The most compelling proof point is that Teridion's Internet overlay network gives Egnyte a competitive advantage in the content collaboration market. IDC completed a benchmark in 2016 that identified Egnyte as having best in class performance, despite the fact that several of the competitors in that benchmark have more than ten times higher investment in regional data center infrastructure.

Ultimately, Teridion enables SaaS companies like Egnyte to better leverage the global cloud footprint to deliver a superior customer experience across the globe; and all through a turnkey service.

ABOUT TERIDION

Teridion empowers SaaS providers to deliver a user experience uncompromised by internet congestion, without additional infrastructure.

Teridion's internet overlay network uses the surface area of multiple cloud providers around the world to dynamically set up an optimized internet connection to any user around globe. It elastically scales up and down depending real time traffic requirements, providing instant capacity where you need it, when you need it.

Learn more at teridion.com

TERIDION OFFICES

USA

300 Brannan St Suite 101
San Francisco, CA 94107
1-844-TERIDION

ISRAEL

Bazel St 25, 1st Floor
Petah Tikva, Israel
+972 77-220-0077