

## USE CASE | CONTENT COLLABORATION

## About Merrill Corporation

Today, mergers and acquisitions happen on a global scale. If an organization wants to operate in that sphere, particularly if it wants to provide the platform that enables and facilitates transactions, geography cannot be a limiting factor. A worldwide presence is mandatory.

Merrill Corporation operates worldwide, with 3,000 people in 34 locations, and it's a force in the M&A world. Some 25 percent of the world's M&A activity runs through Merrill's technology and services, and the company is dedicated to delivering optimal performance for its clients wherever they are.

Merrill finds tremendous opportunities for growth in China, where the appetite for deals in the Americas and in Europe is as robust as the appetite for APAC transactions. The volume and size of deals, especially cross-border engagements, is continually growing.

The Chinese market is a key part of Merrill's global strategy - the definition of an opportunity not to be missed. But the Chinese market presented a troublesome problem.

Merrill Corporation  
opens up the China  
M&A market with  
Teridion's Internet  
Overlay Network

## The Challenge

Merrill had already deployed DataSite, the company's original virtual data room platform, in China. The platform worked well in North American and Europe, and Merrill expected performance in Beijing to match the standards in London, New York and other financial capitals.

Unfortunately, DataSite experienced performance speeds that were not up to expectation as China's network infrastructure -- including its "Great Firewall" -- dragged Internet throughput down. Load times for Word documents of five or ten megabytes, very common in M&A transactions, were not measured in milliseconds or even in seconds. They were measured in full minutes.

Time is always of the essence in the M&A world, and this difference in performance created a disappointing experience for Chinese customers.

Merrill was 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.

Merrill DataSite used TCP. TCP 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 throttling throughput to ensure packets can make it to their destination. This aggressive throttling of throughput in response to congestion is common with TCP and results in application performance slowing to a crawl, resulting in users getting frustrated.

*For a deeper discussion of how these Internet Backbone inefficiencies impact SaaS providers like Egnyte, check out our [Internet Backbone whitepaper](#).*

## The Situation

While speed was the core need, Merrill had a set of stringent requirements that needed to be met:

- The solution had to be able to accommodate multiple users - sometimes more than 100 - collaborating in real time on a single project.
- Security was paramount. The solution couldn't add a new burden for users and it had to coexist with customers' existing security measures.
- The solution had to respect data sovereignty, a principle that invokes its own country-specific compliance requirements, especially in a highly regulated field like finance.
- Speed of implementation mattered. Delays would hamper Merrill's existing business and make it more difficult to attract new business.
- With transactions measured in billions of dollars, reliability was absolutely critical.
- The solution ideally would not require major regulatory review or auditing, which always involves expense and delay.
- Cost was, of course, as much a factor here as in any business decision.

Among the alternatives was the one that generally comes first to mind when dealing with similar problems: the possibility of standing up data centers in locations closer to the customers Merrill wanted to reach. While physical distance of the user from the server isn't the only determinant of performance, it's a big factor.

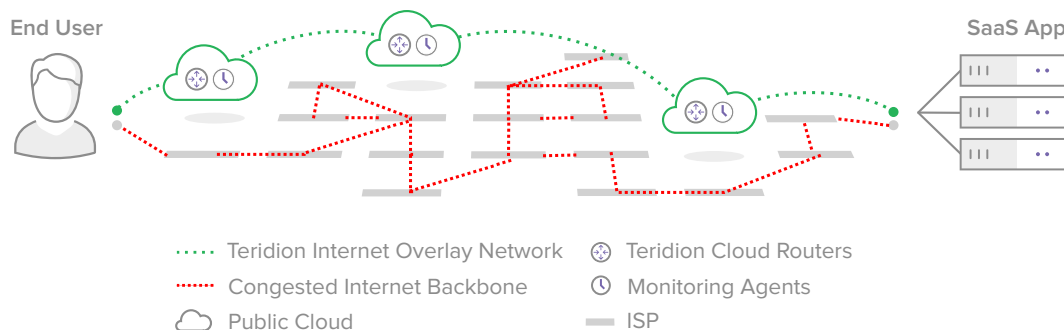
Cost, however, can be a prohibitive issue. In addition to hardware, software, and network costs, operational costs are high. Customer onboarding, software patches, upgrades, monitoring, maintenance, and problem resolution all take their toll on profitability. China is an environment that brings government regulatory involvement which adds complexity and cost, and costs must be measured in terms of both time and money.

## Why Teridion?

Merrill needed to find a solution that would deliver performance to DataSite users in China consistent with the experience their users had come to expect elsewhere, and do it quickly, economically, and securely. During their search, they discovered that Teridion was particularly well-suited to meet their needs.

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.



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.

As a true turnkey service, Teridion was easy to deploy - only requiring a DNS CNAME change - and since Teridion is entirely subscription based it required no capex outlay. Selecting Teridion eliminated a mountain of complexity and cost for Merrill in one motion. And unlike a network of private data centers, Teridion is scalable on demand, in terms of both geography and throughput.

## Results

Deploying Teridion reduced latency by at least 75 percent. Load times that previously were measured in minutes were reduced to seconds, with China averaging latency of under 100 milliseconds.

- Performance standards were maintained at full simultaneous user scale.
- No changes were required to the security profiles of Merrill or their customers.
- Data sovereignty was respected. Teridion does not cache or decrypt any data. Data-in-motion stays in motion.
- Deployment was simple and was completed in a day.

Teridion didn't just deliver the kind of incremental improvements that are visible to speed tests but invisible to users. This was a case of dramatic improvement, one that made China a viable market for Merrill without ramping up costs or burdening customers.

Merrill summarizes its business as one that "securely connects and manages the full lifecycle of complex, regulated information for the world's leading companies."

Implicit in that summary is Merrill's ability to deliver a consistent service worldwide, and Teridion enabled Merrill to provide to the Chinese market the speed and usability on which Merrill's global customers rely.

"Teridion has really changed the ROI model for me at Merrill. It has affected both my top line and bottom line opportunities. Where I was not able to sell things before, I now can. Because performance is acceptable, it has helped us grow our top line. The fact that I need fewer data centers and their associated costs has also improved my bottom line. So the ROI was something that was quickly proven out."



**BRAD SMULAND**  
CIO  
Merrill Corporation

### ABOUT TERIDIION

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](http://teridion.com)

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