Customer Case Study

Hydrite Chemical Company Engineers Compound Benefits

with a Talari SD-WAN

Hydrite Chemical Co. is the fifth largest chemical company in the US, headquartered in Wisconsin, with offices throughout the upper Midwest.

Executive Summary

Company
Hydrite Chemical Company

Location
Headquartered in Wisconsin with offices across the upper Midwest

Key Applications
ERP (Enterprise Resource Planning), VoIP

Challenge
Improve network response time in the event an MPLS link went down

Solution
Talari SD-WAN

Results
- Seamless failover
- Traffic prioritization
- Full link utilization
- Lower WAN costs
- Demonstrable ROI

As with many organizations, whether for efficiency, compliance, cost control, security, or all of the above, a centralized resource model of services is utilized with the IT structure of the company. As branch offices became more dependent on network access to the centralized data center, Hydrite Chemical Co. needed to provide improved network response time. Each office's primary WAN line was a single MPLS T1 line. Each office also had a DSL line connected through their Cisco routers for backup over which they could use a private VPN. When the MPLS link went down, the Cisco routers would switch to the DSL lines but it could take up to 30 seconds to make the switch.

Hydrite Chemical Company's Challenge

Hydrite Chemical Company's WAN architecture was a one-size fits all strategy, not taking into account the actual size of the office. Some offices might have seven people and some might have 90, and the network requirements differed for each one, but the same WAN infrastructure was implemented at each office.

One approach to improve application performance was to increase MPLS bandwidth at each site. However, the cost of additional MPLS lines at each site was a very expensive way to improve network performance.

The backup DSL line in each office was paid for 100 percent of the time, but it was only used a small fraction of time when the MPLS lines were down.

> *"With Talari, we have a more flexible, and more resilient, network architecture than we had before."*
>
> **Bob Fourness**
> **Computer Operations Manager**
> **Hydrite Chemical Company**

While it took a relatively short period of time to switch to the DSL backup once the routers detected that the MPLS line was down, this period was still long enough that all active sessions were dropped – causing users to have to log back in to the network and restart processes.

Talari Solution

Hydrite Chemical Company initially installed Steelhead WAN Optimization appliances in all its sites. This achieved performance improvements, particularly in the small offices, by reducing the amount of traffic carried across the WAN. Plus Steelhead allowed them to remove local servers and go to a more centralized server architecture. This decision meant they could use a single line longer than they would have otherwise at their smaller offices. But their larger sites still required more bandwidth.

When Hydrite Chemical Company added Talari to the network, they continued to use Steelhead, since the two technologies complemented one another. While Steelhead reduced the amount of traffic through

compression and local caching, Talari increased the bandwidth available to those applications by allowing them to take full advantage of their previously unused backup links and prioritize the applications to alleviate congestion during high traffic times. Talari's ability to increase Hydrite's WAN resilience also complemented the Steelhead equipment, as the centralized server architecture facilitated by the WAN optimization emphasized the importance of conducting business operations without regard to carrier network outages.

Results

Hydrite Chemical Company saw Talari as a solution to increase their bandwidth to the branch offices by allowing them to actively utilize their DSL lines which had previously been used only for backup. They first tested Talari at a number of their larger sites and then made the decision to install the solution at all remote offices.

Talari provided the additional bandwidth that Hydrite Chemical Company needed, accomplishing their initial goal to increase bandwidth without paying high MPLS costs for new lines and the benefits did not stop there.

Benefits of Using Talari

As Hydrite Chemical Company began to use Talari, they were able to take advantage of capabilities provided by Talari's appliances including:

- **Seamless failover** - Before Talari, an MPLS outage caused a noticeable disruption as the routers took time to fail over to the DSL line. This caused telnet sessions to drop and users to complain. With Talari, there is no disruption in service and much less involvement from the IT staff.

- **Traffic prioritization** - Traffic from applications that were core to their business or requiring optimal response times were prioritized high with Talari, while backup storage traffic was prioritized low, ensuring optimal user experience.

- **Full link utilization** - Talari was able to use all the available bandwidth at Hydrite Chemical Company's offices. By doing away with backup links, they immediately increased the amount of bandwidth they were using.

- **Lower WAN costs** - With Talari in their network, Hydrite Chemical Company is now free to pursue other WAN options, such as using high capacity fiber to replace some of the DSL lines and potentially even to replace MPLS in some smaller sites.

With the visibility and reports provided by Talari, Hydrite Chemical Company was able to negotiate higher capacity MPLS lines at lower costs, resulting in immediate reduction in WAN costs.

A Demonstrable ROI

Hydrite Chemical Company identified three clear areas where they achieved a positive ROI from deploying Talari:

Increased productivity because their offices no longer have downtime when the carrier network goes down and their applications remain responsive even when line quality is poor.

In some cases, Hydrite Chemical Company had budgeted for MPLS line upgrades, but were able to use broadband at a significantly lower cost instead.

Because Talari makes it possible to use dual-broadband connections instead of MPLS, Hydrite Chemical Company's MPLS provider had an incentive to offer additional bandwidth while lowering their price.

"We have a more flexible, and more resilient, network architecture than we did before using Talari. We are very happy with Talari's appliances. It has allowed us to make our network more robust and less costly than our previous network design. Within three months of installing Talari, we saw a response from our MPLS provider that will result in actual cost savings, and we anticipate one year or less to fully recoup the investment we've made," stated Bob Fourness, Hydrite Chemical Company's Computer Operations Manager.

About Talari Networks

Talari Networks, the trusted SD-WAN technology and market leader, engineers the internet and branch for maximum business impact, delivering superior application reliability and resiliency, while unlocking the benefits of branch consolidation. Incorporating years of innovation into five generations of product, Talari is deployed across thousands of sites in 40 countries.

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