

# Growing Business Leverages Internet to Achieve Enterprise Class Wide Area Network

## Challenges

Provide a flexible, cost-effective network system connecting the head office, and 51 manufacturing branches to support more than 2,400 employees and countless systems and processes.

## Solution

Combine multiple readily available low-cost Internet connections to provide security, redundancy, and optimal Network performance at each branch site.

## Results

- Network consistency that meets corporate WAN targets (ex. security, speed, scalability, etc.)
- Feature-rich network
- An overall reduction in network costs of \$21,000 per month (\$405 per site/mo)



A large integrated manufacturer finds that there is a better way to connect their distributed organization – with Bonded Internet.

A growing Company, striving to be one of North America's largest integrated manufacturer of recycled paperboard products finds an alternative to its costly MPLS Network.

### The challenge: Find a better way to control costs

The Company was at a crossroad regarding their network infrastructure. Many years earlier, like most multi-branch enterprises, the Company decided to build a private network using a Multi-Protocol Label Switching (MPLS) data service. Their MPLS Wide Area Network (WAN) needed to connect more than 2,400 employees at 51 manufacturing branches and Corporate HQ.

The Company's MPLS network, while tolerable, struggled to keep up with the Company. For instance, when new branch

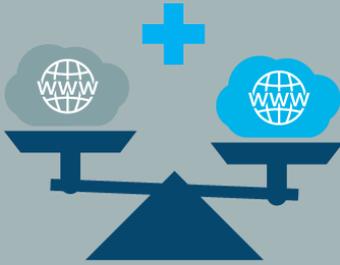
facilities were added, getting the branch's MPLS network operational took months due to coverage issues at remote sites. Adding to the frustration, MPLS was cost prohibitive: the price to connect some sites was up to ten times the price of typical Internet connections.

As a result, four of the branch facilities weren't actually MPLS – they were connected over the public Internet. Thus, these sites didn't adhere to corporate WAN policies. It was clear they had to find a different approach to connect the organization.

## How We Do It:



Point To Point VPN



Packet Level Link Balancing



Network Connection Monitoring

## Why Bonded Internet?

Today, savvy network administrators are looking for creative ways to get all the benefits of MPLS, but control costs and maintain uniformity across the WAN. To satisfy these requirements we offer a technology used to create a consistent network platform that enhances communication and coordination – and to include the troublesome sites that are left out of their private network. Multapplied's cutting edge technology allows enterprises to combine multiple low-cost Internet connections into a single, faster and more reliable connection onto which we layer a centralized firewall, end-to-end Quality of Service (QoS), and WAN monitoring and management.

## The Result: A Robust Feature-Rich Wide-Area-Network

The new private WAN leverages the Internet to deliver a robust feature-rich WAN while also reducing costs – a key driving force for change. By combining low-cost ADSL and Cable connections from two different providers, the Company cut total WAN spend by more than 53 per cent and gained the following features:

- Bandwidth bonding to increase speed by simultaneously using multiple connections
- Seamless failover to eliminate downtime
- Site-to-site Quality of Service allowing for crystal-clear voice calls
- Secure private network ensuring protection of valuable digital information

In total, by creating a robust feature-rich WAN that is faster, easier to manage and scale, the Company is now better prepared for the future.

## Benefit #1: Speed

Getting a faster WAN was a clear win for the Company. Bonded Internet outperforms a T1-based MPLS in terms of download speed by more than 330 per cent, while matching the minimum upload requirements of each site. For sites requiring significant increases in upload bandwidth, Bonded Internet scaled to meet those needs as well – either through the addition of more connections, or by turning on Bonded Internet's compression feature.

### Bandwidth Comparison:

BEFORE: Avg. MPLS Down & Up Speed (per site)	AFTER: Avg. Bonded Internet Down (per site)	AFTER: Avg. Bonded Internet Down –Compressed (per site)
1.73 Mbps	7.42 Mbps	11.13 Mbps

Benefit: When employees get the information they need right away, it accelerates knowledge distribution. By having a faster network, the Company now better serves their customers with accuracy and speed by improving business processes that use real-time databases.

## Benefit #2: Lower Cost

Previously, the Company increasingly expended valuable resources on MPLS. Now, Bonded Internet eases a lot of management headaches by providing a new cost-effective solution that cut overall WAN cost by 53 per cent.

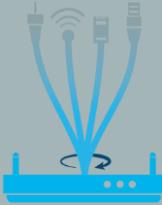
### Cost comparison:

	BEFORE: MPLS	AFTER: Bonded Internet
Avg. Monthly Cost per site	\$755.42	\$350.81

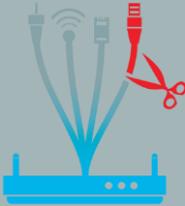
**Overall Annual Savings = \$252,477**

## Key Features:

Bandwidth Bonding



Lossless Failover



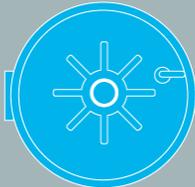
Site-to-Site QoS



Data Acceleration



Transmission Security

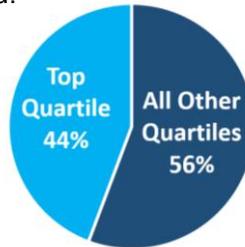


## About Us

Multapplied Networks provides cost-effective solutions for businesses seeking to integrate voice, video, and wired/wireless data networks. We specialize in end-to-end solutions that allow our customers greater flexibility and functionality in the way they communicate

## Additional Cost Benefit

In addition to the cost savings of over \$250K per year, the Company eliminated the cost disparity that existed between sites. Previously, the Company's branches with the highest WAN costs significantly ate-into the overall WAN expenditure. For example, the top quartile of branches accounted for over 44 per cent of total WAN spend:

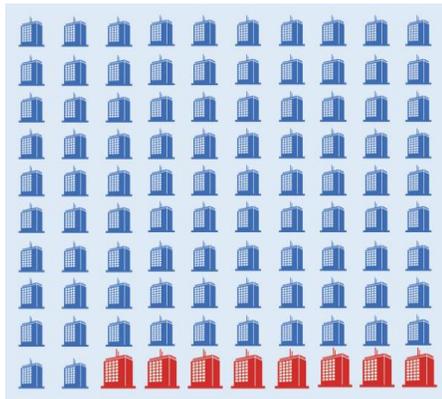


Now, the WAN cost-per-site is the same without sacrificing performance.

## Benefit #3: Network Consistency

MPLS has been around for fifteen years – a long time in the technology world. During this time, MPLS has not evolved to meet the growing connectivity needs of businesses.

We conducted a survey to understand the prevalence of this problem for enterprises. We found that the average MPLS WAN had only 92% of branch sites linked to the MPLS network meaning 8% were left out.



**8%** are missing out

Bonded Internet addresses the lack of uniformity by giving the Company a more versatile and cost-effective way to connect all their branches while still providing fully dedicated and secure links over which they can comfortably send mission-critical data.

Now, the Company has a consistent network platform that enhances communication and coordination – across 100% of the sites.

## Next Steps

Having in place a Speedy, Scalable and Secure WAN allows the Company to align their WAN with their business strategy for growth. With no dependence on carrier limitations, the Company can reap the benefits of having an easily adaptable WAN they can scale up or down on-the-fly. Furthermore, the move to Bonded Internet prepares the Company for migration to the Cloud by having a consistent network enterprise-wide that adheres to corporate WAN policies, and easily scales to meet changing bandwidth requirements.

## For More Information

Multapplied Networks was founded in order to bring network technology to the global marketplace and provide improved MPLS alternatives. We are committed to building strong partner relationships that actualizes the distribution of our technology. To find out more please visit: [www.multapplied.net](http://www.multapplied.net)