

CASE STUDY

SD-WAN and Circuit Aggregation

Improving Application Performance and Reducing Costs
for a Leading US Freight and Logistics Company



Executive Summary

A renowned logistics company in the United States faced bandwidth constraints and latency issues across their nationwide operations. These challenges adversely affected application performance and delivery as they relied on sending traffic directly over the internet without proper controls or measures. Managing internet connectivity sprawl across their 45+ branch locations, including isolated geographical areas, posed significant difficulties and expenses. In Balance, leveraging their partnerships with Fortinet and Granite, implemented a centralized control function to securely and intelligently steer traffic across the WAN. They also increased redundancy and productivity while substantially reducing costs through circuit aggregation.

Introduction

A leading logistics company in the United States struggled with inadequate performance and delivery of their primary revenue-generating application. This application played a critical role in their operational competitive advantage within the logistics industry. Managing connectivity, downtime, and administrative tasks related to internet infrastructure consumed valuable resources and hindered their ability to focus on revenue generation.

Challenge

The company's traditional WAN infrastructure, designed around router-centric architecture, could not fully support cloud-bound traffic. All traffic, including cloud-bound traffic, was backhauled from branch offices to a central hub or headquarters data center. This backhaul delay significantly impaired application performance, resulting in a poor end-user experience and loss of productivity and revenue.

Summary

Company

Freight and Logistics Company

Type

Freight and Logistics

Challenge

A leading logistics company in the United States struggled with inadequate performance and delivery of their primary revenue-generating application.

Solution

After conducting interviews with key stakeholders and assessing solution requirements, In Balance IT and the customer agreed that implementing the industry-leading Fortinet Secure SD-WAN, in conjunction with Granite's comprehensive analysis, measurement, building, and management capabilities,

Results

Within a year of implementation, the customer experienced increased productivity, enhanced redundancy, and superior application performance, surpassing the originally projected return on investment by six months.

Moreover, the company faced challenges due to multiple ISPs, contracts with varying end dates, and labor-intensive processes required to manage ISP invoices. A circuit aggregation solution was necessary to reduce ISP vendor sprawl, enhance circuit redundancy, and decrease costs.

Alternatives and Decision Criteria

After conducting interviews with key stakeholders and assessing solution requirements, In Balance IT and the customer agreed that implementing the industry-leading Fortinet Secure SD-WAN, in conjunction with Granite's comprehensive analysis, measurement, building, and management capabilities, would address their application performance issues and reduce costs.

Solution

In Balance partnered with a leading SD-WAN manufacturer to steer traffic based on predefined rules, ensuring optimal application performance under any network condition, including congestion and impairments. Leveraging their extensive partner network, In Balance deployed security systems, networking infrastructure, and SD-WAN appliances across all 45 locations. The solution involved site surveys at each location, offering three different options to maximize circuit redundancy and availability. Additionally, the solution took responsibility for circuit aggregation, billing, and management, adhering to a strict and cost-effective timeline.



Results

Within a year of implementation, the customer experienced increased productivity, enhanced redundancy, and superior application performance, surpassing the originally projected return on investment by six months. Notably, they achieved significant improvements in network traffic and zero downtime since deploying the solution. Moreover, the customer's networking team's productivity increased significantly, and their monthly recurring ISP circuit expenditure reduced by \$120,000.

