ADARA

aws partner network

ADARA CUSTOMER SPOTLIGHT:
Mobile Fixture leverages SD-WAN to eliminate latency and loss of revenue

Executive Summary

Mobile Fixture is a full-service commercial supplier of restaurant equipment and supplies. The company was founded in 1927 and is currently headquartered in Mobile, Alabama. Mobile Fixture serves customer orders through its e-commerce website or directly at one of the six branch locations located throughout the southeastern region of the United States.

Customer Challenges

The core of Mobile Fixture's commercial operations is managed through a Microsoft Dynamics Enterprise Resource Planning (ERP) NAV solution. This solution manages the backend ordering system for point-of-sale (POS) systems in stores and the e-commerce website. Once payment is complete, orders are processed into the ERP database and executed. This system is central to operations and interacts at several company levels including supply chain, financials, and customer service.

Problems arose when sales transaction completion times started to slow. Performance on point-of-sale systems degraded to a point where both customers and sales representatives were unhappy. Extended customer wait times at branch locations resulted in out-the-door lines. Sales representatives, unable to fulfill their job duties, fielded complaints to management. Not immune to the problem, website ordering times were trending upward, resulting in abandoned transactions and lost sales.

The cause of the delays originated from network latency between the Mobile Fixture Microsoft Dynamics ERP NAV server in their Amazon Web Services (AWS) environment in northern Virginia, headquarters, and store locations. Latency over 200 milliseconds and sales transaction completion times over 150 seconds was common. A 1GB circuit connected each location to the AWS environment, a distance over 900 miles.

SD-WAN Installation

In an effort to address the latency issues, ADARA teamed with Mobile Fixture to install SD-WAN on a virtual instance in the AWS cloud. Using Amazon CloudFormation technology, the ADARA SD-WAN was installed on a hypervisor, housed on a physical host for ingress and egress networks. Traffic from the POS systems would enter the ADARA SD-WAN on the ingress interface and exit on the egress interface to a security gateway. Traffic from the security gateway would exit the data center over the internet to the Microsoft Dynamics ERP system in the AWS cloud.

About Mobile Fixture

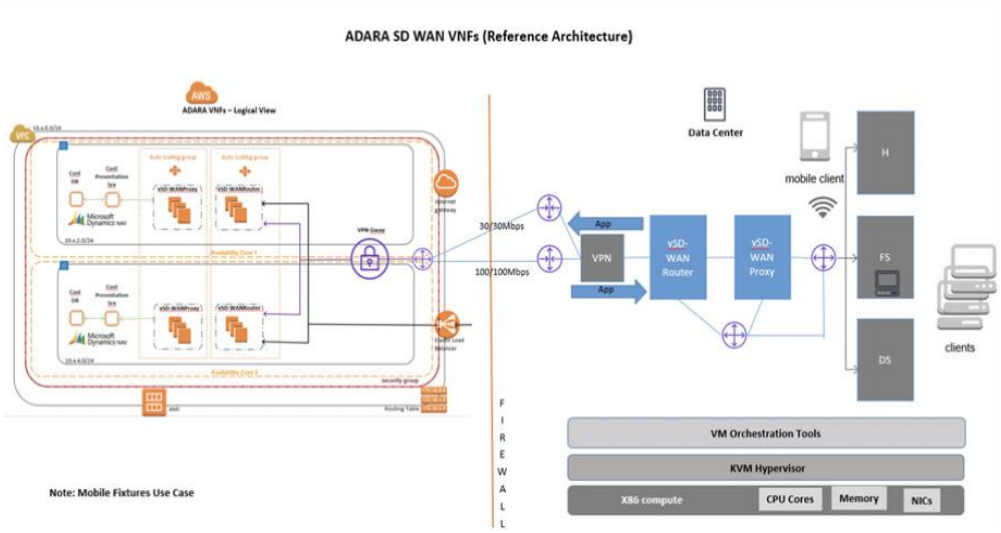
Mobile Fixture is a complete, full-service source for new and used commercial restaurant equipment and supplies. Founded in 1927 in Mobile, Alabama, Mobile Fixture has locations in Alabama, Florida, Georgia, and Tennessee. They offer a wide variety of products and services, from custom installs, commercial kitchen appliances and everything in between.

"We experienced immense benefits in cost-savings and performance. ADARA Networks SD-WAN addressed our latency issues, enabling us to complete customer transactions quickly, while reducing circuit bandwidth to 1/10th of the original"

Chris Roberts
Director of IT

Key Points

- ADARA SD-WAN improves performance and reduces loss of revenue
- Eliminating latency allowed Mobile Fixture to reduce operations cost by scaling down circuit bandwidth from 1GB to 100MB
- Installation of ADARA SD-WAN was simple and stable since inception
- By reducing latency from 200 milliseconds to under 1 millisecond, sales transaction times were reduced from 150 seconds to under 30 seconds



The Issue of Latency

Although latency is associated with poor network performance, its reasoning is commonly misunderstood. TCP/IP, the language of the Internet, was not designed with performance in mind. TCP/IP lacks features that provide insight into network conditions, slow start, and drastic back off in transmission rates. Each of these adds to a collective problem of poor bandwidth utilization, packet loss, and network slowness.

ADARA SD-WAN eliminates the inherent latency issues of TCP/IP. ADARA's proprietary Distributed Link State Protocol (DLSP) measures link metrics and calculates network state in real time, allowing for maximum bandwidth utilization. ADARA eliminates delays that cause low performance using a continuous feedback mechanism based on dynamic network conditions.

Business Impact

Mobile Fixture witnessed immediate benefits in performance, cost savings, and customer satisfaction as a result of introducing ADARA SD-WAN into the network. ADARA reduced overall network latency from 200 milliseconds to under 1 millisecond. The company was able to reduce circuit cost by scaling down bandwidth from 1GB to 100MB. Time to reconcile POS and e-commerce sales transactions dropped from 150 seconds to under 30 seconds.

Customer satisfaction improved as wait times at sales locations dropped, eliminating long lines and wait times. Sales representatives are able to address customer needs and complete transactions, free of slow POS systems. Website engagement times increased while dropped orders due to slow performance were virtually eliminated.

Eliminating latency with ADARA SD-WAN allowed Mobile Fixture to unleash the full potential of the Microsoft Dynamics ERP NAV solution.

ADARA
1731 Technology Drive
San Jose, CA 95110