

# CASE STUDY – SD-WAN



## FEDERAL INTERNATIONAL

**Federal International, Inc.** provides waste paper, scrap plastic, and scrap metal recycling services in North America. It processes recycling commodities, such as EPS (Styrofoam), E-scrap (electronic scrap), electronic circuit boards, plastics, OCC (cardboard), fiber (papers and cardboard), and metals. The company also manufactures foam parts and products; and markets scrap foam as a raw material in carpet underlay worldwide. It conducts commercial recycling and waste stream evaluations for businesses, schools, and government organizations; and provides document destruction and paper



shredding services for businesses, schools, and government organizations. Federal also offers single stream recycling programs, product recycling and destruction, recycling support services, business recycling programs, shredding and office paper recycling programs, school recycling programs, and municipal recycling programs. It serves companies, school districts or universities, and government organizations. The company was founded in 1914 and is based in St. Louis, Missouri. It has foam division facilities in Minnesota, Wisconsin, Holland, Belgium, and Italy; sales offices in Minnesota and Texas; and recycling plants in Missouri and Texas. The company also has operations in England, Holland, Belgium, Denmark, Puerto Rico, Nigeria, Uganda, Italy, and Canada.

Federal International had a subset of sites in the southwestern US that were experiencing problems associated with inadequate bandwidth for WAN and Internet connectivity. Additionally, the old solution was expensive and out of term.

Federal International learned of the value of SD-WAN combining Cisco Meraki equipment with multiple high-speed / low cost Internet connections and Managed Network Service (MNS) from Entelegant, and decided to give them a try at thirteen (13) of its sites in Missouri and Texas. EnTelegant specified Cisco

Meraki MR33 devices, two (2) cable Internet or broadband connections and EnTelegent Managed Network Service to support the new network infrastructure at the sites. The solution came with project managed installation, easy provisioning, simplified troubleshooting, and network management.

Federal International could replace its old MPLS network with a faster, less expensive, and outage-resistant network at these sites. Before the conversion, each branch site had a single 1.5Mbps DS1 connection with no last-mile redundancy and little management visibility. After conversion, each site has two Internet connections with per-site bandwidth speeds averaging 25Mbps. With the built-in management tools in the Meraki dashboard, the team can easily monitor the traffic coming over the network, get a breakdown of the devices and applications in use, and adjust accordingly via a web browser.

Today, Federal International has a more reliable, faster and less expensive data solution for their sites in Missouri and Texas. This new network enabled them to deploy a new video monitoring system that gives them better visibility and control of the recycling and processing operations at these sites. Federal plans to implement similar solutions across its entire company in 2018.

***"The SD-WAN solution is delivering the cost savings and bandwidth increases we hoped for. We're very satisfied with EnTelegent's service delivery."***