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## CASE STUDY

# SA Recycling accelerates branch transformation to deliver operational efficiency and performance

An industry leader in metal recycling trusts Palo Alto Networks to provide fast, secure, and reliable connections while reducing costs and streamlining network administration.



## IN BRIEF

### Customer

SA Recycling

### Industry

Recycling

### Country

United States

### Products and services

Metal recycling services

### Organization size

120+ locations  
3,000 employees

### Website

[www.sarecycling.com](http://www.sarecycling.com)

### Challenge

A company with widely distributed operations faced disruption due to outdated network infrastructure.

### Requirements

Improve bandwidth and resiliency while reducing cost and administrative overhead.

### Solution

Prisma® SD-WAN

SA Recycling, a recognized leader in its industry, processes millions of tons of metal each year in more than 120 recycling centers across 15 states. To keep material moving through the system, the company depends on an extensive IT infrastructure. To keep its systems running, the company depends on Victor Ludick, Director of IT Infrastructure and Cybersecurity.

Ludick's job is to make sure that the company's branch offices have consistent and secure network connectivity while reducing operational complexity. By optimizing the company's IT resources, he and his team improve business agility and performance.

To achieve these goals, Ludick uses Prisma SD-WAN from Palo Alto Networks, enabling SA Recycling to increase bandwidth availability and dramatically improve network uptime, keeping the business operating at optimum efficiency. Prisma SD-WAN has also simplified network operations, allowing the team to deploy and integrate newly acquired branches with ease.



When IT is working well, it's in the background and almost invisible. When there are problems, it becomes visible—because then it impacts the business.

— Victor Ludick, Director of IT Infrastructure and Cybersecurity, SA Recycling

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## CHALLENGE

### Upgrade remote sites with poor connectivity

When people think “recycling,” they don’t automatically think “information technology.” According to Ludick, the attitude of many at the company is, “When IT is working well, it’s in the background and almost invisible. When there are problems, it becomes visible—because then it impacts the business.” Without secure and responsive network connections, everything from business functions to operational processes can be disrupted or delayed. Simply put, lost connectivity means lost money.

Recyclers can’t accept stolen material, and numerous preventative processes are in place. For example, when a car comes in to be recycled, the recycler must validate that the seller has legal title, which depends on access to outside data sources. There are similar processes for other types of recycling, all designed to ensure that the seller has a legal right to sell the materials. Without a reliable network, verification would be time-consuming, slowing the business to a crawl.

Network connectivity is equally important for processing the metal. Materials need to be sorted and directed to the correct machines at each stage of the process. Each machine needs to be configured in real time for the type of metal being processed. And everything needs to be tracked as it moves through the system.

Even physical security—including video surveillance and remote access control—depends on high network reliability. In addition to the bandwidth demanded by video surveillance, other applications, like automatic updates on Office 365 and Windows 10, kept increasing bandwidth demands.

All this presented a big challenge. Many SA Recycling locations are in remote areas where obtaining high bandwidth broadband is either expensive or impossible.

When Ludick came on board, the organization was relying on low bandwidth T1 or MPLS connections. Simple upgrades, like adding broadband connections to improve bandwidth, didn’t help as these WAN links couldn’t be used to control, prioritize, and shape application traffic. The administrative overhead of managing legacy quality of service (QoS) configuration was overwhelming Ludick’s team.

One additional hurdle: SA Recycling recently made multiple acquisitions and faced the challenge of integrating different systems into a single network.

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## REQUIREMENTS

### Improve bandwidth, resiliency while reducing costs

Ludick’s first priorities were to decrease costs and improve redundancy by moving from T1 to multiple broadband connections, and to reduce the IT workload and staff hours for managing the system by automating more basic tasks.

The team also needed to improve network reliability and reduce downtime while increasing bandwidth to accommodate rising traffic demands. Visibility of operations in physical facilities, along with complete visibility into application and network performance was yet another priority. And the team needed to provide third parties (like support teams monitoring equipment for maintenance and warranty purposes) limited access to the network without compromising security.

With all these requirements, Ludick wanted to work with a product team he could trust. He investigated several possible solutions based on an ability to support complete visibility, improve app performance, and provide consistent connectivity. With more core system applications accessible from the cloud, the team needed the ease of cloud management, with granular metrics for application performance. They were also determined to protect their infrastructure—including branches, applications, and users—to maintain system integrity and ensure customer confidence.

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## SOLUTION

### A faster, more resilient network

Ludick's team first tried to address the company's IT needs by adding high bandwidth broadband connections. They planned to secure and connect these WAN connections to data centers with DMVPN from a legacy vendor. They found, however, that the DMVPN architecture could not deliver performance optimization. The SD-WAN solutions they were looking at were complex and had limited security.

As Ludick was trying to find an alternative to these inadequate solutions, he learned about Prisma SD-WAN. Not only was the solution more versatile than he expected, but the Palo Alto Networks team behind it earned his trust by being more open and responsive than other vendors he had worked with.

Ludick found that Prisma SD-WAN actually did what all previous products had promised to do. "I saw what it could do with a single pane of glass and point-and-click configuration that was so intuitively seamless that I could jump in on day one and start making changes," he says. "It wasn't a steep learning curve."

One of the shortcomings with previous setups was an inability to handle active/active connections, where data was shared across two WAN connections. Prisma SD-WAN was the first product Ludick found that could manage this setup well, enabling him to route traffic efficiently over multiple WAN connections, significantly improving bandwidth and overall performance.

Ludick's motto is, "We don't want to have to work so hard to do the simple stuff." Once he chose Prisma SD-WAN, he and his team were able to roll out SD-WAN to the first 30 SA Recycling sites, two IONs, and a data center in only four months. With zero touch deployment and API support, they could automate most of the deployment, streamlining the process considerably and substantially reducing the overhead to set up each additional site.



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– Victor Ludick, Director of IT Infrastructure and Cybersecurity, SA Recycling

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## BENEFITS

### Simplified management, stronger security

#### Simplified operations

Prisma SD-WAN has simplified operations for SA Recycling. The ease of use means that it's a force multiplier for administration and management, enabling Ludick's team to do a lot more work in the same amount of time. It has entirely changed the dynamic and amount of effort needed to deploy, configure, and tweak new installations. For example, per-application business policies that are defined once and automatically provisioned to all branches simplified deployment by eliminating the tedious site- and device-specific configurations required by legacy routers. This means that a deployment that would have taken months using the legacy systems now takes just minutes, with far fewer operational errors.

## Reduced support costs, greater uptime

“The obvious advantage of Prisma SD-WAN is to leverage multiple connections to provide intelligent traffic engineering based on performance SLAs for all apps,” Ludick observes. “A lot of the business policies are defined on a global level and are easily provisioned across branches without end users noticing.” Support costs have been reduced, there’s greater uptime, fewer network disruptions, and the network runs smoother. This has dramatically reduced time the team has to devote to dealing with urgent problems. “We reduced our support tickets by 97 percent,” Ludick confirms. This allows network teams to shift more resources into long-term strategic projects and has eased the team’s workload at a time when increasing staffing is difficult.

## Great user experience

Prisma SD-WAN also provides an exceptional user experience. With efficient dashboards and command line tools, it’s easy for administrators to quickly understand the state of the system and update policies. The solution provides intuitive visibility of full network architecture, as well as end-to-end analytics to ensure that SA Recycling can improve performance and comply with app SLAs. Video monitoring applications now run uninterrupted to provide enhanced safety and security across the company’s facilities.

## Improved security

Security is a high priority for SA Recycling, and Prisma SD-WAN has improved the organization’s security posture and outcomes. Prisma SD-WAN fabric gave SA Recycling an overlay VPN that’s simpler to use and easier to customize than the legacy DMVPN it had been using. In addition to automatically creating overlay connectivity between all SD-WAN sites, the IT team could easily connect to non-standard resources in a few clicks. This eliminated the operational complexity of managing the access control lists required to connect such resources in case of DMVPN mesh connections.

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## Looking ahead

SA Recycling is currently partway through deployment of the remaining 95 SD-WAN appliances that will bring all of its locations up to the new standard. When this process is complete, the solution will extend the benefits the company has already realized at the initial upgrade sites to the entire company.

One of the most important challenges the company has met is improving cybersecurity. Hybrid work introduces a whole new set of security challenges, and geopolitical instabilities have intensified cyberthreats. Prisma SD-WAN provides advanced tools for meeting these evolving security needs.

Palo Alto Networks has proven to be a trustworthy partner for SA Recycling. Prisma SD-WAN has delivered robust, seamless, and secure networking across 120+ sites. It’s reduced operational disruption for the whole company, while simultaneously reducing administrative effort for the IT team.

*Find out more about how Palo Alto Network’s best-in-class security solutions can help accelerate opportunities for your organization. Additional information about Prisma SD-WAN is [here](#).*



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