SET YOUR NETWORK FREE

The Ultimate Packet Processing Solution

CUSTOMER APPLICATIONS

Extreme speed. Orchestration managed. Open flexibility.
Are you ready to set your network free?

Open source software is demolishing the notion that high-speed packet processing applications require leviathan or specialty hardware for performance and scale. Netgate's TNSR™ leverages FD.io's Vector Packet Processing and other open source projects, creating commercial solutions that tackle a host of secure networking needs for enterprises and service providers.

Get a glimpse into how some of our customers are using TNSR in their environment to open the throughput firehose, enable fast scale up and scale out, and slash packet processing infrastructure costs.

SEE HOW OUR CUSTOMERS ARE HARNESSING TNSR

High-Speed Routing Over IPSec

High-Performance Cloud Traffic Mirror

High-Throughput Cloud On Ramp

Internet of Things (IoT)

Software Defined Perimeter Firewall

Have a unique application? Let us know.

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High Speed Routing Over IPSec



Company/Industry: Federal Government Defense Agency

Business Problem:

A major branch of the military has a campus where cyber warfare training is conducted. The campus network serves to connect buildings with high speed 10 and 100 Gigabit Ethernet links. Clearly, the information traversing these pipes has to be encrypted. Network engineers had built white box switches equipped with 100 Gbps NICs. But pfSense routing software on top was only able to push IMIX traffic at around 100 Mbps - putting a chokehold on the hardware. Question: What will it cost to equip each building with a router capable of doing 100 Gbps IPSec? Answer: Hundreds of thousands of dollars. And a full replacement of existing hardware.

Solution:

Enter TNSR. Upgrading the secure networking software stack from pfSense to TNSR was like taking the governor off of a high horsepower engine.

Results:

Now, high-speed traffic flows between campus buildings at line rate, fully encrypted. Fast. Safe. And at a fraction of the cost of vendor proprietary solutions.



High-Throughput Cloud On Ramp

Company/Industry: Large Technology Manufacturer

Business Problem:

A technology company has offices spanning the globe, and thousands of employees who work remotely - each needing fast access to cloud apps and data. CSPs offer rapid IaaS scale infrastructure level security assurances, but it's still the organization's responsibility to secure company applications and data.

The IT department created secure connections from each global office to multiple Virtual Private Clouds (VPCs) in both Amazon Web Services and Microsoft Azure. These VPCs each host key applications and data. IPsec VPNs were used to secure connections from corporate HQ and remote offices to each VPC in each cloud provider. This resulted in thousands of VPN connections. Having to manually connect to each site's routers, and invoke CLI commands site by site was both time-consuming and error-prone.

Solution:

TNSR in the data center secures connections to remote sites and to the cloud. TNSR in the cloud ensures secure connections between VPCs. TNSR's RESTful API enables automated orchestration of configuration changes and policies across multiple sites. And for those times when a specific site needs to be spot-checked, or if custom configurations are needed, TNSR's CLI provides admins the comfort and ease of traditional site access.

Results:

SD-WAN flexibility without the SD-WAN price tag. Every location is securely linked to both cloud-based applications and to the corporate network. Every VPC - in two separate clouds - is securely connected to the right resources as needed. Network admins can manage connections en masse rather than one-at-a-time. And all for a fraction of what the customer had been conditioned to expect.

High-Performance Cloud Traffic Mirror



Company/Industry: Managed Security Services Provider (MSSP)

Business Problem:

Securing applications in the modern data center means more than just putting up a firewall. This MSSP goes beyond just watching incoming traffic. They monitor the data that flows between users and applications, and between applications themselves. This level of enterprise monitoring requires direct access (often physical) to network infrastructure. When those data flows happen within the cloud, there is no physical network infrastructure in which to connect.

The only way the MSSP found to capture data flows between users and applications hosted on Amazon Web Services (AWS) was to instrument each and every application. In other words, they had to load an agent in every Amazon Machine Instance (AMI) to inspect bidirectional application traffic. This proved costly, complex, inflexible, difficult to deploy, and hard to maintain.

Solution:

The MSSP installed TNSR (available on AWS) as the router for each customer VPC on Amazon. Now, with all application traffic passing through TNSR, mirroring all traffic over a tunnel to their security monitoring solution (in another VPC) could be configured quickly and easily.

Results:

With TNSR, the provider's monitoring solution is completely transparent to end customers. No throughput or latency bottlenecks. No messy agent deployments. Sharply reduced security monitoring cost and complexity. Better security assurance for their customers.



Internet of Things

Company/Industry: Agriculture

Business Problem:

A global agribusiness organization developed a technology solution to help them understand livestock behavior. They deployed a network of sensors to each ranch which then collected data for analyses. VPN connections to each farm were the obvious solution, but most farms have slow, inconsistent Internet access, and no IT staff on site.

Automated multi-site configuration of security controls was the need here. Specifically, the organization needed a solution that could 1) be configured programmatically 2) secure the local network - even when connections back to the home office were unavailable 3) enable deployment to each additional ranch with minimal field rep hand-holding.

Solution:

TNSR solved all of these problems at once. VPN configuration and security policies can now be centrally provisioned from a corporate office. When clients are online, updates to security policies are implemented immediately. Manual intervention on a ranch by ranch basis has been eliminated.

Results:

Secure, stable networking – despite inconsistent internet connections – and dependable automation for unstaffed remote sites.

Software Defined Perimeter Firewall



Company/Industry: A Multinatonal technology company that designs, develops, and sells consumer electronics, computer software, and online services.

Business Problem:

When a company says they need tens of thousands of access controls to batten down who has access to its intellectual property - and under exacting conditions - where do you turn? Well, an NGFW, of course. But there are a couple of problems there. NGFWs are enormously expensive when you move up the performance and scale curve. Buyers are forced into paying for expensive software features that they don't want, don't need, or believe are fundamentally ineffective. Worse, to ensure wire speed and low latency traffic performance, they are led to believe the only way to achieve that is through expensive proprietary hardware - that will tether them to the vendor for years to come.

Solution:

TNSR changes the game. With its ability to manage tens of thousands of access controls, at gigabit, ten gigabit and higher link speeds - all via centralized orchestration over RESTful APIs, and all in software running on commercial-off-the-shelf (COTS) hardware - specialized network security needs can be met in an entirely new manner.

Results:

TNSR enables access control volume that hardware solutions cannot even achieve. TNSR eliminates the need to purchase bloated NGFW feature sets that this customer did not want or need. TNSR provides instantaneous user privilege activation or revocation, so that the moment a rogue contractor or employee needs to go, access controls are changed. No need for clunky perimeter boxes where no perimeter even exists anymore. Software defined firewall rules exactly where you need them. High scalability. Fast. Easy. Extremely cost effectively.

Ready to discuss one of these TNSR applications? Have another use case in mind?

SCHEDULE A MEETING

tnsr™

www.tnsr.com