

# Netgate TNSR

Secure Networking Software Platform

TNSR™ is a open-source based packet processing platform that delivers superior secure networking solution performance, manageability, and services flexibility.



## Traditional performance, service, and management flexibility barriers — shattered with Netgate TNSR.

Secure networking applications from 1 Gbps to 100+ Gbps - at a fraction of the price of proprietary alternatives.

Netgate TNSR provides:

### FREEDOM TO SCALE PERFORMANCE

1 Gbps, 10 Gbps, 25 Gbps, 40 Gbps, 100 Gbps, or more.  
Small packets. Large packets. Fully encrypted traffic. Tens, hundreds or thousands of sessions.

### FREEDOM TO DEPLOY AS YOU EVOLVE

Every modern organization is in some state of transition to virtualization and/or cloud migration. Whether your secure networking requirements are premises, cloud, hybrid, or native cloud, TNSR can be deployed as you need.

### FREEDOM TO SCALE MANAGEMENT

Managing networking and security functions is complex. Each organization has a preferred approach that best meets their needs. CLI or API-based orchestration across tens, hundreds or thousands of instances - controlled from within your existing or planned management infrastructure

### FREEDOM TO ADAPT SERVICES

From routing to network firewalls, to advanced packet monitoring, inspection, and policy enforcement - get the freedom to easily insert new secure networking functions - without expensive software upgrades or complex licensing schemas. No limits.

Based on FD.io™'s Vector Packet Processing (VPP) and Data Plane Developer Kit (DPDK), TNSR can route up to 1Tbps (14+ Mpps) in software running on commercial-off-the-shelf (COTS) hardware, and can be managed by 3rd party orchestration platforms via a RESTCONF API.

## Technical Specifications

| FUNCTIONALITY                                    | DESCRIPTION   |
|--|---|
| <b>Deployment</b>                                | Initially as an hourly or annual Amazon Web Services AMI subscription.  |
| <b>Firewall, VPN, Routing</b>                    | <p>L2 MAC IP/ACLs, L3 ACLs, L4 ACLS.</p> <p>Routed IPSec site to site.</p> <p>Free Range Routing (FRR) Zebra and BGP.<br/>IPv4/IPv6 dual stack sessions, ECMP, Static IPv4/IPv6, Static ARP.</p> <p>Network Address Translation: Port Forwards, 1:1 NAT, Outbound NAT, NAT 44</p> |
| <b>Data Plane, Network Interfaces, Tunneling</b> | <p><a href="#">FD.io</a> Vector Packet Processing (VPP) and Data Plane Developer Kit (DPDK).</p> <p>Ethernet, 802.1q VLAN.</p> <p>Bridging, QinQ, ERSPAN.</p>   |
| <b>Encryption</b>                                | <p>IPSec configuration, Pre-shared Key.<br/>MAC algorithms: MD5, SHA-1, SHA-256, SHA-384, SHA-512.<br/>AES-128-CBC, AES-192-CBC, AES-256-CBC.<br/>AES-ICV16-GCM-128, AES-ICV16-GCM-192, AES-ICV16-GCM-256.<br/>DH Groups 1-24.<br/>ike-v1, ike-v2.</p>                            |
| <b>System Management</b>                         | <p>CLI (ssh, serial).<br/>RESTCONF API.<br/>LLDP, SSHD, ping.<br/>Interface configuration, loopback interfaces, show system settings, operational control, database manipulation, administration via CLI, administration via RESTCONF/CLI access controls.</p>                    |

### ABOUT NETGATE

Netgate is dedicated to developing and providing secure networking solutions to businesses, government and education institutions around the world. Netgate's pfSense, one of world's most trusted open-source firewalls, has an installed base of over one million firewall users. The company is extending its open-source leadership and expertise into high-performance secure networking firewall and router solutions – capable of delivering compelling value at a fraction of the cost of proprietary solutions. For more information visit [netgate.com](https://netgate.com).