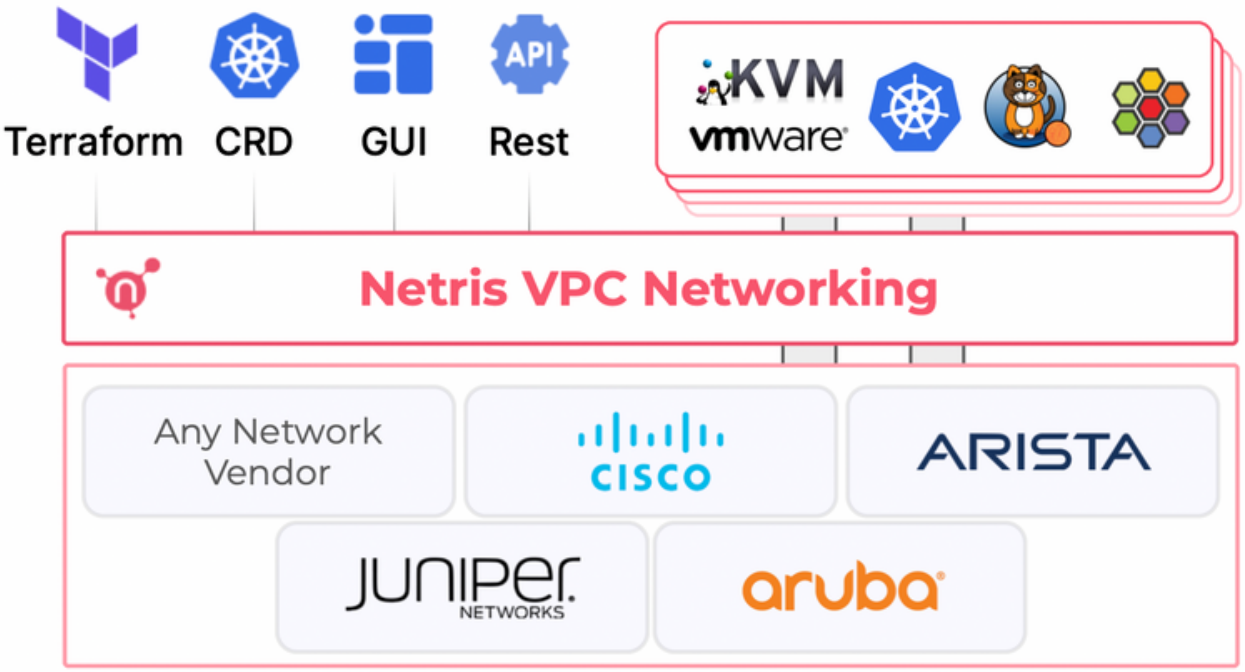
VPC Anywhere for On-Premises, Colocation, and Edge

DATASHEET



Netris Architecture

Netris delivers a VPC experience for any type of network by automatically managing and configuring network services – through Intuitive GUI, Terraform, API and Kubernetes. A Netris system is comprised of two types of managed devices, softgates (the VPC gateway) nodes and controllers.

Netris Controller can be hosted either on-prem as a VM, a standalone server, or a Kubernetes application.

Netris SoftGate is an optimized, Linux-based, and self-operating network gateway. Automatic configuration software and reference software architecture for enabling border routing, Layer-4 Load Balancing, Network Address Translation (NAT), and site-to-site VPN services.

The main job of a softgate is not to move packets but to automatically configure the pieces to make your network work for you.

Netris Operator is an optional software application that provides integration with the Kubernetes API. The Operator is deployed via a Helm Chart or with regular Kubernetes manifests.

Features

- On-Prem VNET Management
- Automatic Service Delivery
  - Load Balancer
  - Firewall
  - Site-to-Site VPN
  - NAT (SNAT, DNAT)
- Border Router (BGP)
- Network ACLs (Access Control Lists)
- DHCP
- Kubernetes Operator
  - Type: Load Balancer Provisioning, Load Balancer Health Check, Calico/Cilium BGP Scaling
- Automatic Switch and Gateway Configuration
- Fabric Monitoring and Detailed Telemetry
- Management: Web console, Terraform, REST API, Kubernetes CRDs

Workflows & Operations

- High Availability (HA)
- Controller Maintenance Mode
- Role-based Access Control
- Tenant-based Resource Management
- BGP peers management
- Network Services provisioning (V-NET, LB, NAT, DHCP, Firewalls)
- SoftGate Monitoring (CPU, Memory, Disk, Port, NTP, Services)
- Advanced Troubleshooting through interactive CLI Output (Looking Glass)
- Netris Controller Backup & Restore

Supported Protocols

- IPv4 & IPv6
- Border Gateway Protocol (BGP)
- DHCP
- ECMP
- Ethernet (1-100 Gigabit)
- 802.1q VLAN
- Layer-4 Load Balancing w/ probes
- IP Packet Filtering (src/dst/port)
- SNAT, DNAT, Masquerade

Minimum Requirements

Netris Controller

Virtual Machine

- Core/vCPU - 8
- RAM - 16 GB
- Disk - 100GB HDD
- Network - 1 virtual NIC, Layer-3 connectivity to management interfaces of network devices

Containerized Deployment

- Kubernetes 1.12+
- Helm 3.1+

SoftGate (VPC Gateway)

Softgate

- 8 CPU cores
- 16 GB RAM
- 100 GB HDD
- Ubuntu 22.04

Softgate Pro

- 2 x Intel Xeon Silver CPU* (BIOS settings documented on netris.io/docs)
- 128 GB (64 GB RAM per socket) in multichannel configuration
- Disk - 300 GB HDD
- NVIDIA Connect-X 5/6/6Dx SmartNIC card
- Ubuntu 22.04

Netris Operator (Optional)

- Kubernetes 1.18+
- Helm 3.1+ (optional)