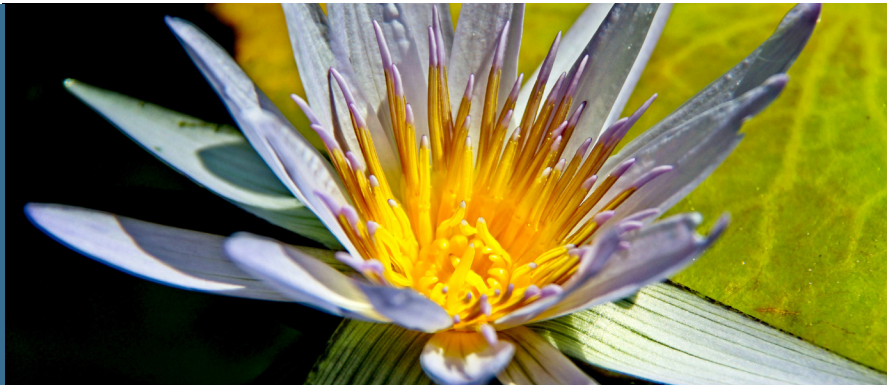


DATASHEET

ONEv600

Carrier Grade Virtual Router VNF (Virtual Network Function)



The ONEv600 is a carrier-grade virtual Router VNF (Virtual Network Function) which allows service providers and system integrators to deploy within an NFV environment value-added WAN services that include advanced application-aware routing, security and VPN services.

Through an additional license, the ONEv600 router also supports the capability for delivering highly scalable and performant SD-WAN services.

Optimized Software for Virtualization

The core of the ONEv600 is OneOS6, a carrier-grade router engine. It is optimized for the delivery of virtualized network services. The modular software isolates the control and data plane and is tuned to leverage DPDK, SR-IOV and VirtIO acceleration mechanisms. For demanding high-speed applications, the dataplane can also use several CPU cores, making wirespeed routing possible up to 10 Gbps. The management plane exposes rich, open APIs such as NETCONF and REST to accelerate the programming of networking services.

Field-Proven, Carrier-Grade Reliability

The OneOS6 routing engine of the ONEv600 is today at the core of over 2 million Ekinops routers around the world. Using proven and highly interoperable code it has been field-hardened at over 125 service providers. It includes today advanced network troubleshooting and monitoring options.

Easy Migration to NFV

Reflecting a long heritage of supporting service providers, the Ekinops router portfolio is designed to facilitate moving managed services to NFV in a smooth and consistent manner. End-users experience the same carrier-grade reliability, irrespective of whether the service is delivered using a physical or virtualized router. The Ekinops product portfolio offers a smooth migration path, rather than a complex rip'n'replace strategy. The productivity of technical staff is maintained thanks to the familiar CLI, and in parallel next-generation OSS can progressively implement the latest management interfaces on the VNFs and on physical devices as well. The impact of virtualization at the OSS level is transparent.

Rich Feature Set

The ONEv600 virtual router comes standard with a complete feature set which includes IPV4/IPV6 routing, Layer 2 functionalities, Quality of Service mechanisms, VPN and security functions, and much more.

SD-WAN Ready

The ONEv600 virtual router is fully SD-WAN ready. Through a simple license activation, it allows the delivery of a feature-rich and full fledge SD-WAN solution. The additional functionalities embedded in the SD-WAN Xpress license enable Service Providers to transform their existing business VPN, delivering highest value from the same infrastructure.

SD-WAN Xpress is a perfect fit for SMBs and companies in various verticals such as Retail, which, above all, look for a cost effective solution enabling them to quickly adopt digital transformation and leverage SaaS services (O365, Salesforce, etc.).

ONEv600



Optimized Footprint and Performance

OneOS6 technology is designed to function on traditional network processors and provides market-leading performance per vCPU and RAM footprint. Thanks to the compact nature of OneOS6 and its efficient use of CPU and memory resources, it frees up resources for other third party VNFs within the virtualization environment. This permits cost-effective sizing of the white box hardware and enables more advanced, revenue-generating VNFs to be deployed at lower cost points.

Today's and Tomorrow's Service Management

OneOS6 includes industry-standard CLI and monitoring (such as SNMP, Ethernet OAM). OneOS6 can also be concurrently accessed by NETCONF clients and through web services.



Specifications

Performance and Sizing (*)

- Up to 10 Gbps bidirectional routing performance with services (IMIX409)
- Up to 100 VRFs
- Up to 1.000.000 IPv4 Routes
- Up to 200.000 IPv6 routes
- Up to 500.000 NAT sessions

Virtualization Environments

- VNF delivery format: Qcow2
- Support for DPDK, Direct access, SR-IOV, Virtio
- Support for Cloud-init based on ISO configuration disk

Management Protocols

- NETCONF server compatible v1.0/v1.1
- Industry-standard Command Line Interface (CLI)
- Telnet, SSH, HTTPs server
- Telnet, SSHv2 client
- REST API
- SNMP v1/v2c/v3
- Embedded Event Manager (EEM)
- FTP/TFTP, SFTP, SCP upload/download configuration and binaries
- Syslog client
- Traceroute, ping
- Global statistics screens
- Event and trace buffering
- Embedded Event Manager (EEM)

IPv4/IPv6 Routing

- IPv4 and IPv6
- NAT/NAPT: static/dynamic NAT, NAPT, selective NAT, ALGs
- DHCP client, server, relay
- DNS client, proxy
- Routing protocols: RIP v1/v2/ng, OSPF v2, BGP v4, BFD
- Multicast Routing: PIM-SMv1/v2, IGMP v2/v3
- Policy-Based Routing
- VRRP, VRF
- Load balancing

IPv4/IPv6 Management

- IPv6 Neighbor Discovery (ND) and SLAAC (Stateless Address Auto-Configuration)
- IPv4 DHCP client / relay / server
- IPv6 stateless and stateful DHCP server
- IPv6 prefix delegation
- DNS client / server, dynamic DNS (DynDNS)

IP Quality of Service

- IP Classification and priority (DiffServ)
- Class-Based Queuing (CBQ), CB-WFQ on LAN/WAN interfaces
- Low Latency Queuing, fragmentation and interleaving
- Policing and remarking
- RED, WRED, ECN
- QoS measurement probe
- Deep Packet Inspection
- Advanced Deep Packet Inspection (SaaS applications) **
- Netflow

Specifications



Security

- Standard and extended access lists
- Zone Based Firewall **
- Session monitoring and limiting
- User authentication locally, via RADIUS and TACACS+
- TACACS+ Authorization and Accounting

IP VPN

- IPsec, GRE, IPIP, L2TPv2
- L2TPv3 **
- IPsec encryption: AES CBC
- IPsec ESP hashing: SHA-1 and MD5
- IKEv1 & IKEv2 with pre-shared keys & certificates
- IPsec tunnel and transport modes
- NAT traversal
- Easy VPN client / server **
- Dynamic Virtual Tunnel Interfaces **
- IPsec Group Mode **

Bridging and VLANs

- Bridging & Integrated Routing and Bridging (IRB)
- STP, RSTP, MSTP
- VLAN tagging and un-tagging
- Multiple VLAN IDs per port
- 802.1p priority tagging. ToS/CoS and CoS/ToS mapping
- Ethernet OAM
- 802.1x authentication

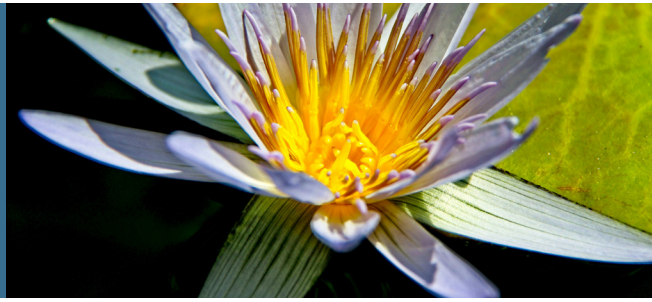
Minimum Resource Requirements

- 1x vCPU at 1000 MHz
- 1024 MB RAM

(*) Performance and sizing depends on the license, CPU and memory allocation

(**) Subject to additional license

About **EKINOPS**



Ekinops is a leading provider of open and fully interoperable Layer 1, 2 and 3 solutions to service providers around the world. Our programmable and highly scalable solutions enable the fast, flexible and cost-effective deployment of new services for both high-speed, high-capacity optical transport networks and virtualization-enabled managed enterprise services

Our product portfolio consists of three highly complementary product and service sets: Ekinops360, OneAccess and Compose.

- Ekinops360 provides optical transport solutions for metro, regional and long-distance networks with WDM for high-capacity point-to-point, ring and optical mesh architectures, and OTN for improved bandwidth utilization and efficient multi-service aggregation.
- OneAccess offers a wide choice of physical and virtualized deployment options for Layer 2 and Layer 3 access network functions.
- Compose supports service providers in making their networks software-defined with a variety of software management tools and services, including the scalable SD-WAN Xpress.

As service providers embrace SDN and NFV deployment models, Ekinops enables future-proofed deployment today, enabling operators to seamlessly migrate to an open, virtualized delivery model at a time of their choosing.

A global organization, Ekinops (EKI) - a public company traded on the Euronext Paris exchange operates on 4 continents.

EKINOPS360
Dynamic Optical Transport

ONEACCESS
Fast Network Virtualization

 **COMPOSE**