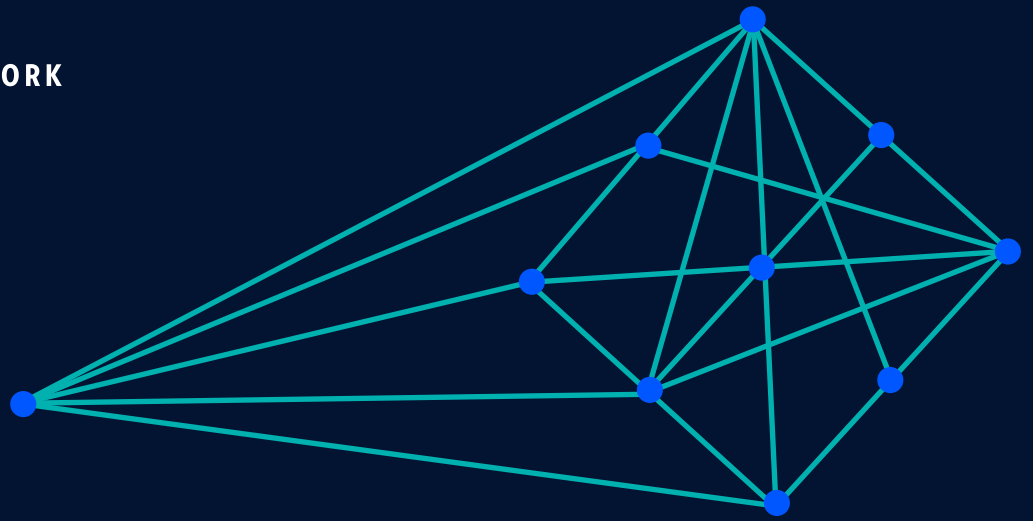




THE ELASTIC NETWORK

MERCURY vROUTER



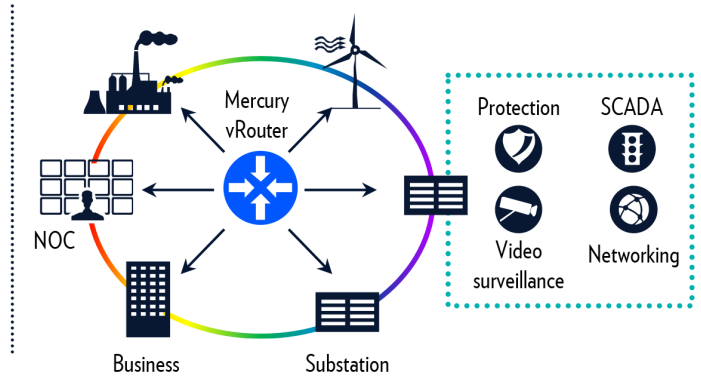
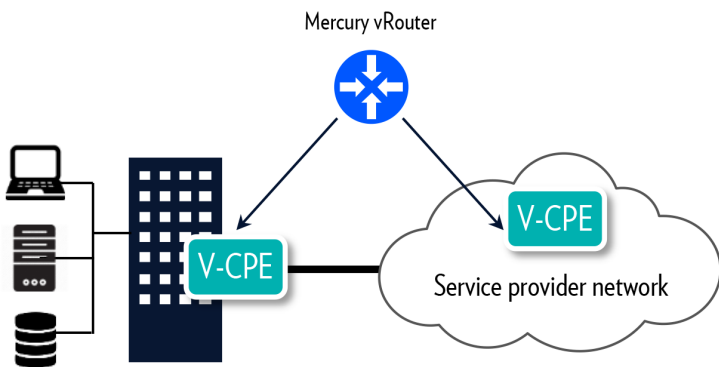
Mercury vRouter provides virtualized routing that outpaces traditional dedicated hardware solutions in performance, flexibility, and cost. It interworks with other Mercury Virtual Network Functions (VNFs) and extends the benefits of network virtualization to a variety of applications, such as virtual CPE and utility substation communications.

vRouter is an elastic, high-performance, ready-to-use software VNF that can be deployed in Mercury standalone or transport integrated NFVi platforms, or in a bare metal environment. It provides advanced networking functions, including routing, a stateful firewall, and IPsec VPNs with IKE, and comes with full management and configuration support. It is available for 1-, 2-, and 4-socket Intel x86-based servers.



Speedy turn-up
of software-based router
functionality

Service chaining
with other VNFs through
Mercury MANO

Virtualized (NFVi)
or bare metal
deployment



PERFORMANCE

Performance	
Router	 IP Forwarding performance: <ul style="list-style-type: none">• 9.6 Mpps per core, independent of packet size• Performance scales linearly with the number of cores
IPsec	 IP Performance: <ul style="list-style-type: none">• 5 Gbps per core• Performance scales linearly with the number of cores Scalability: <ul style="list-style-type: none">• Thousands of Virtual Routing and Forwarding (VRF) instances• Millions of routes

Test Platform: Quad Intel® Xeon® E7-4890 v2 @ 2.8GHz and 20x10G ports

FEATURES

Mercury vRouter features high performance I/O, and leverages Intel's DPDK to provide multivendor NIC support on the Mercury standalone NFV appliance, Neptune integrated x86 line cards, or any COTS server.

High-performance data plane:

- L2: Ethernet Bridge, VLAN, Link Aggregation
- Forwarding (IPv4 and IPv6) and Virtual Routing and Forwarding
- Tunneling (IPinIP), GRE
- Stateful Filtering (IPv4 and IPv6)
- NAT

High-scalability control plane:

- Dynamic Routing: RIP, RIPng, OSPFv2, OSPFv3, BGP, BGP4+
- Static Monitoring of Routes, BFD
- Virtual Router Redundancy Protocol
- DHCPv4 client/relay/server
- DNS proxy

Secure:

- IPv4 and IPv6 IPsec
- Security IKEv1, IKEv2 with Radius support
- VPN monitoring

Manageable:

- Sessions secured using SSH with Radius support
- Industry-standard networking CLI
- Standard Linux commands and tools: iproute2, iptables, ping, tcpdump, traceroute, telnet
- External management systems using remote XML-based API

Virtual environment:

- Virtio vNIC support enables benefits of virtual environments without the performance bottlenecks of a standard virtual switch (when combined with Mercury-accelerated NFVi)
- Pass-through and SR-IOV support

Mercury NFVi and virtual networking

Within the Mercury product line, the Elastic VNFs can be easily integrated with ECI's NFVi, which accelerates the virtual switching and networking infrastructure. For example, by combining the Mercury NFVi and vRouter, customers can achieve over 5x performance of a standard Linux router VM running on top of Open vSwitch, while saving 75% of the system's processor resources to run additional VMs.

Contact us to find out how Mercury can accelerate your NFV deployment

ABOUT ECI

ECI is a global provider of ELASTIC network solutions to CSPs, utilities as well as data center operators. Along with its long-standing, industry-proven packet-optical transport, ECI offers a variety of SDN/NFV applications, end-to-end network management, a comprehensive cyber security solution, and a range of professional services. ECI's ELASTIC solutions ensure open, future-proof, and secure communications. With ECI, customers have the luxury of choosing a network that can be tailor-made to their needs today - while being flexible enough to evolve with the changing needs of tomorrow. For more information, visit us at www.ecitele.com

