AT&T Vyatta vRouter

AT&T Business

Agile Networking and High Performance

Purpose-built for Software Networking and Network Functions Virtualization (NFV)

As the first virtual router for carrier-class networks, the AT&T Vyatta vRouter is the highest-performing software router in the industry. Achieving 10+ Gbps performance per physical core, the AT&T Vyatta vRouter delivers advanced routing, stateful firewall, NAT, and VPN capabilities in software without sacrificing the reliability and carrier class performance of hardware networking solutions.

Services can be scaled up and down as your business demands change, accelerating the time

to market of network services. The next generation platform architecture easily consolidates resources, maximizing utilization of the underlying hardware infrastructure and significantly reducing capital and operating costs.

With the AT&T Vyatta vRouter, organizations gain a comprehensive NFV solution for building high-performance, optimized, and highly secure networks in environments where agility and automation are critical.

Features

- Purpose-built for NFV
- Advanced IPv4 and IPv6 unicast and multicast routing, firewall, NAT, and VPN
- Intel DPDK support
- Supported on bare metal and popular hypervisors like VMware ESXi and KVM
- Stateful firewall
- IPsec VPN, OpenSSL, and DMVPN
- RESTful API, NETCONF/ YANG, CLI, Web GUI
- World-class AT&T support

PRODUCT BRIEF

AT&T Business

AT&T Vyatta Data Plane Technology

AT&T Vyatta Data Plane technology enables hardware-like routing performance in a software based network appliance.

Utilizing innovations from AT&T, this Data Plane technology is a Layer 3 forwarding plane that is architecturally separate from the AT&T Vyatta vRouter control plane. By allowing each forwarding plane to be allocated to multiple CPU cores, the AT&T Vyatta vRouter can deliver 10+ Gbps performance while eliminating resource contention.

Robust data protection

The system's firewall features robust IPv4/ IPv6 stateful packet inspection to intercept and inspect network activity and protect critical data.

Organizations can establish highly secure site-to-site VPN tunnels with a standards-based IPsec VPN between two or more AT&T Vyatta vRouters or any IPsec VPN device with support for Dynamic Multipoint VPN (DMVPN).

AT&T Vyatta vRouter Specifications

The AT&T Vyatta vRouter supports Suite-B for L3 IPsec, which includes strong encryption and authentication methods for next generation data security, and can provide highly secure network access to remote users with embedded SSL-based OpenVPN functionality.

High availability and redundancy options

Mission-critical networks can deploy the AT&T Vyatta vRouter with the confidence that high availability and system redundancy can be achieved through industry-standard failover and synchronization mechanisms, such as stateful firewall failover and VRRP.

Reduced operating costs

The AT&T Vyatta vRouter can help organizations eliminate or reduce single- purpose hardware, since routing, firewall, and VPN capabilities can be provided via a VM on existing servers. This helps reduce power and space requirements, allowing the customer to lower operating costs.

Addressing, Connectivity and Routing			
• Unicast and Multicast • VRF-Lite	• BGP, OSPF, RIP • Policy Based Routing	• DHCP/DHCPv6 client, server, relay	• Ethernet, 802.1Q, QinQ, LAG, ECMP
Firewall and Network Address Translation			
• Stateful Inspection • Zone Based Firewall	• IPv4, IPv6 Packet filter • DPI matching FW traffic	• 1:1, 1:Many, Many:1, and Many:Many NAT	• SNAT, DNAT, BiDir • ALGs
VPN and Security			
• IPsec site to site VPN	• Dynamic Multipoint VPN	• SSL-based OpenVPN	• RBAC, AAA (RADIUS/TACACS+)
Application Awareness and Monitoring			
• TWAMP / IP SLA • Syslog / SNMP • Netflow v9 & IPFIX	• SPAN, RSPAN, ERSPAN • TCPdump, Wireshark Packet Capture	• App matching for PBR, Firewall, QoS	• App rerouting based on link performance • App reporting with IPFIX
Administration, High Availability and Others			
• CLI, Web GUI, RESTful API, NETCONF/YANG	• Stateful FW/NAT Failover • ECMP and LAG	• VRRPv3, VRRPv3 and Configuration synch	• Bidirectional Forwarding Detection (BFD)