

## Vyatta Network OS Highlights

- » Dynamic Routing (BGP, OSPF, RIP)
- » Stateful Firewall
- » IPSec and SSL-based VPN
- » Intrusion Prevention
- » Secure Web Filtering
- » DSL through 10Gbps performance
- » WAN Interface Support up to T3
- » Scalable x86-ready platform design

## Subscription Support Packages

### BASIC:

- » Vyatta Software Updates
- » Security Alerts & Patches
- » Bug Fixes
- » Proactive Notifications
- » Online Documentation
- » Knowledge Base Access

### ENTERPRISE:

#### Basic Features Plus

- » 5 X 12 Phone Support
- » Web-based Ticketing
- » Customer Hot Fixes
- » Case SLA - Severity Based
- » Vyatta University Training Getting Started Bundle

### PREMIUM:

#### Enterprise Features Plus

- » 7 X 24 Emergency Phone
- » Case SLA - Priority Response

## Flexible, Affordable, Software Routing and Security

The Vyatta Network OS delivers advanced routing and security functionality for physical, virtual and cloud networking environments. The Vyatta network operating system includes dynamic routing, stateful firewall, VPN support, threat protection, traffic management and more in a package that is optimized to take advantage of multicore x86 processing power, common hypervisor platforms and emerging cloud architectures. All features are configured through Vyatta's familiar, networking-centric CLI, web-based GUI or third party management systems using the Vyatta Remote Access API.

The Vyatta Network OS is designed to be installed on any standard x86 based system scaling from single core desktop units for SME and branch office needs to quad core plus for high-performance BGP routing or scalable VPN termination. Advancements in x86 processing power have proven that readily available multi-core systems can easily handle small packet processing and deep packet inspection up to 10Gbps.

All Vyatta subscription customers are delivered our exclusive enterprise-ready Vyatta Network OS software that includes ongoing engineering services to provide proactive notification of software updates, bug fixes and security alerts. Vyatta subscriptions are packaged with a choice of technical support to meet your business requirements and are eligible for optional add-on training and proactive engineering services that are designed to get your network up and running and maintaining optimal performance.

## The Vyatta Advantage

**Scalability:** Choosing a software-based networking solution delivers freedom that has never been available from a routing and security vendor. By offering a software-only option, Vyatta puts the freedom in your hands to right-size your network as needed using readily available off-the-shelf components and systems to drive as little or as much performance as your network requires today.

**Performance:** The performance scale available from x86 hardware is continually expanding. Today's multi-core servers have been proven to deliver up to 10Gbps routing throughput and faster processors are always on the horizon.

**Price:** Leveraging open standards in software and hardware allows us to deliver a feature competitive routing and security product for enterprise, government, education and service provider networks at a fraction of the price of common proprietary hardware-based vendor systems.

The Vyatta network OS is designed to be deployed on standard x86-based hardware. Use the chart below for basic guidance on building your Vyatta system using 3rd-party hardware.

## Basic Hardware Requirements

Design Considerations	Memory	Storage	Cores
1-4 100Mb Interfaces 1-4 T1/E1 Interfaces 1 Routing Protocol up to 100 Routes, Basic Firewalling	512MB	2GB	1 Core
2-6 Interfaces (combo of 1GBE - T3) Up to 2 Routing Protocols Up to 10,000 Routes Firewall, NAT	1GB	2GB+	1-2 Cores
6-10 Interfaces (combo of 1GBE - T3) 2 or more Routing Protocols Full Internet Routing Table Firewall, NAT, VPN, IPS	2GB	2GB+	2-4 Cores
10 or more 1GBE or T1/T3 Interfaces 10GBE Interfaces 2 or more routing protocols Full Internet Routing Table from Multiple BGP Peers Complex Firewall, NAT, VPN, IPS	4GB	4GB+	4-8 Cores

# Vyatta Network OS

## Network Connectivity

At the core of the Vyatta system is a complex routing engine with full support of IPv4 and IPv6 dynamic routing protocols (BGP, OSPF, RIP). Vyatta systems include support for 802.11 wireless, Serial WAN Interfaces and a wide variety of 10/100 thru 10Gb Ethernet NICs.

## Firewall Protection:

The Vyatta firewall features IPv4/IPv6 stateful packet inspection to intercept and inspect network activity and protect your critical data. Vyatta advanced firewall capabilities include zone and time-based firewalling, P2P filtering and more.

## Content and Threat Protection

Vyatta systems offer an additional level of proactive threat protection with integrated secure web filtering and advanced intrusion prevention rules available as subscription-based Vyatta PLUS services.

## Secure Connectivity

Establish secure site-to-site VPN tunnels with standards-based IPSec VPN between two or more Vyatta systems or any IPSec VPN device. Or provide secure network access to remote users via Vyatta's SSL-based OpenVPN functionality.

## Traffic Management

The Vyatta system provides a variety of QoS queuing mechanisms that can be applied to inbound traffic and outbound traffic for identifying and prioritizing applications and traffic flows.

## High Availability

Mission critical networks can deploy Vyatta with the confidence that high availability and system redundancy can be achieved through a industry standard failover and synchronization mechanisms.

## IPv6 Compatibility

Vyatta Subscription Edition software is the only software-based routing and security solution with proven IPv6 functionality and interoperability, ensuring a future-proof investment in a solution that offers a simplified migration path from IPv4 to IPv6.

## Administration & Authentication

Vyatta systems can be managed through our familiar network-centric command line interface, web-based GUI or through external management systems using Vyatta's Remote Access API. All network management sessions can be securely managed using SSHv2, RADIUS or TACACS+.

## Monitoring and Reporting

Vyatta systems present complete logging and diagnostics information that can be monitored using in industry standard toolsets such as SNMP, Netflow, Syslog Wireshark and more.

## Vyatta Network OS Version 6.3

IPv4 / IPv6 Routing	» BGPv4, BGPv6 » OSPFv2	» RIPv2 » Static Routes	» IPv6 Policy » IPv6 SLAAC
IP Address Management	» Static » DHCP Server » DHCP Client	» DHCP Relay » Dynamic DNS » DNS Forwarding	» IPv6 DNS Resolver » IDHCPv6 Server, Client » DHCPv6 Relay
Encapsulations	» Ethernet » 802.1Q VLANs » PPP	» PPPoE » IP in IP » Frame Relay	» MLPPP » HDLC » GRE
Firewall	» Stateful Inspection Firewall » Zone-based Firewall » P2P Filtering	» IPv6 Firewalling » Time-based Firewall Rules » Rate Limiting	» ICMP Type Filtering » Stateful Failover
Tunneling / VPN	» SSL-based OpenVPN » Site to Site VPN (IPSec) » Remote VPN (PPTP, L2TP, IPSec)	» OpenVPN Client Auto-Configuration » Layer 2 Bridging over GRE » Layer 2 Bridging over OpenVPN	» OpenVPN Dynamic Client
Additional Security	» Network Address Translation » Sourcefire VRT Intrusion Prevention » VyattaGuard Web Filtering	» 3DES, AES Encryption » MD5 and SHA-1 Authentication » RSA, Diffie Helman Key Mgmt	» NAT Traversal » Role based access control
WAN / LAN Device Drivers	» WAN Device Drivers - T1/E1 » Intel 10/100Mbps - 10Gbps » Broadcom 10/100Mbps - 10Gbps	» IEEE 802.11 wireless » Drivers in 2.6.31 Linux Kernel	» Synchronous Serial - V.35, X.21, RS-422, EIA530
Performance Optimization	» WAN Link Load Balancing » Ethernet Link Bonding » Web Caching	» MLPPP » ECMP » Bandwidth Management	
QoS Policies	» Priority Queuing » Network Emulator » Round Robin	» Random / Weighted Random » Classful Queuing » Ethernet Header Matching	» VLAN Tag » IPv6 Address » Port Mirroring
High Availability	» Stateful Firewall / NAT Failover » VRRP » HA Clustering	» Configuration Replication » RAID 1	» IPSec VPN Clustering » Protocol Fault Isolation
Administration & Authentication	» Integrated CLI » Web GUI » Vyatta Remote Access API	» Telnet » SSHv2 / SSH Public Key » Binary Image Install » Image Cloning	» RADIUS » TACACS+ » X.509 digital certificate auth. » Single Configuration File
Diagnostics & Logging	» tcpdump » Wireshark Packet Capture » BGP MD5 Support	» Serial Loopback Commands » Netflow / sFlow » LLDP	» Syslog » SNMPv2c » SNMP for IPv6

