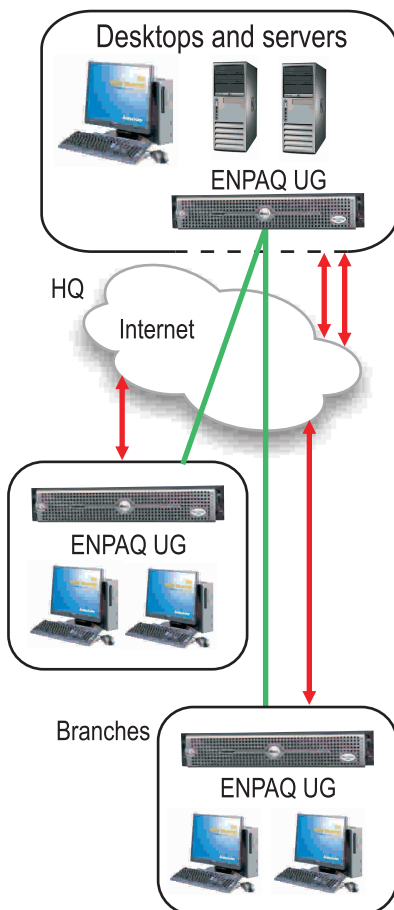


# ENPAQ Unified Gateway

The ENPAQ Unified Gateway is a networking and IT management solution that helps deliver business continuity and visibility to medium and large distributed business.

## CONNECT

Choose diverse connectivity for branch offices. ENPAQ Unified Gateway provides seamless, ISP-agnostic connectivity options with auto link failover, QoS and metering.



## SECURE

### Derisking Access

The UTM features of Unified Gateway include inline AntiVirus engine for HTTP, FTP and email access with Anti-SPAM engine for emails. Strong security measures like Stateful Packet Inspection and Intrusion Detection System keep intruders and hackers out. Site-to-site and nomadic VPN, using SSL, IPSec or PPTP allow remote users access relevant resources without any risk of data theft.

### Dynamic Content Filtering

Proxies enable restricted web access, bandwidth restrictions on upload and download and blocking of categorized websites. Coupled with built-in user management, authenticated access can be enabled only to trusted users.

### Authentication

User authentication via LDAP, external Active Directory and group management ensure that only privileged users can access external sites and resources.

### Remote Troubleshooting

Secure Remote Desktop functionality assists administrators to resolve problems remotely and minimize network downtime.

### Way beyond a UTM

With integrated applications and add-ons, it is easy to rollout secure, tested services, such as virtualization, Wifi hotspot or Windows PDC.



## MANAGE

### Detailed Usage Data

The Unified Gateway provides a comprehensive view of WAN usage, on a per application or host basis. For example, browsing, email or SAP usage per user can be categorized and scheduled reports can be sent to the network administrator. The usage data is stored on the appliance for a minimum period of six months.

### Monitoring

The built-in monitoring and management server can proactively monitor its network, business applications and connected network devices to generate reports that pinpoint either a bandwidth problem or an unauthorized user access to the Internet. Statistics are collected on the network devices like routers, switches, servers, network links, hosts, and other network devices using Ping or SNMP protocol. The administrator can analyze collected data traffic to prioritize business critical applications over other traffic to meet the SLA requirement.

### Configuration

The 3-D integrated network view of all monitored nodes and services presents a comprehensive picture of the network in a hierarchical format. The intuitive GUI helps the administrator configure complex network options remotely using a browser.

"With virtualized application support, strong security and Elina's management framework, we can now deploy our business critical applications and networking functions on a single off-the-shelf PC/Server, dramatically reducing costs and support personnel."  
Bhavesh Shah, CTO, Anand Rathi Group

- Unlimited scalability with Elina software solution.
- Zero-hardware cost networking with application co-hosting and virtualization.
- Simplify network and security management, with bundled management tools.
- Automatic configuration backup & restore function, simplifying administration.
- Easy rollout with customer specific configurations.
- Monitor the network, with alerts and reports on unauthorized usage.
- Troubleshoot network problems with utilities, historical usage and event data.

# SPECIFICATIONS

## Maximum Performance and Capacity (1)

Firewall performance (Large packets)	Wire speed
Firewall performance (IMIX)	Wire speed
Firewall packets per second (64 bytes)	1380K PPS
AES 256+SHA-1 VPN performance	400 Mbps
3DES encryption +SHA-1	400 Mbps
Concurrent sessions	1 Million +
Sessions per second	30,000 +
Firewall rules and policies	Unlimited

## Interfaces

Ethernet 10/100/1000 ports	Upto 9
ISDN, T1/E1, V.35 interfaces	Upto 2 each
Dialup ports, including CDMA dialup	Upto 2
Serial console port	Yes

## Networking

PPPoE/Static/DHCP client	Yes
WAN Encapsulation: PPP/MLPPP, HDLC	Yes
VLAN support	Yes, 4096
DHCP, DNS support on per VLAN and zone basis	Yes
Policy-based routing	Yes
Multi-ISP auto-failover	Yes
Load balancing	Yes
Static routing	Yes
Multicast routing	Yes
Internet Group Management Protocol (IGMPv1, v2)	Yes
PIM single mode	Yes
Multicast inside VPN tunnel	Yes
Network Address Translation (NAT)	Yes
Port Address Translation (PAT)	Yes
Virtual IP (VIP)	Yes
Dynamic DNS support per WAN interface	Yes
Public DNS server	Yes

## Firewall

Firewall zones (WAN, LAN, DMZ etc)	8
Access policies and rules on per zone basis	Yes
DoS and DDoS protection	Yes
Port/service blocking, forwarding and load balance	Yes
Block TCP/UDP flood, WAN/LAN ping	Yes
Brute force attack mitigation	Yes
SYN cookie protection	Yes
Zone-based IP spoofing	Yes
Malformed packet protection	Yes
Proxy ARP for transparent firewall	Yes
Time and schedule based rules	Yes

## Unified Threat Management

Protocol anomaly detection	Yes
Stateful protocol signatures	Yes
Intrusion Detection and Prevention System (IDS/IPS)	Yes
Proxy support for HTTP/S, mail, FTP, IM	Yes
Inline Anti-virus/Anti-spam	Yes
Automatic scanning of HTTP, FTP, SMTP/POP/IMAP	Yes
Optional Kaspersky AV Engine integration	Yes
Integrated URL filtering, including for HTTP/S	Yes

Object filters-Malware, Cookies, Java Applets	Yes
Mime based object filters	Yes
Built-in Web cache, with cache clear option	Yes
Bypass proxy and AntiVirus scans	Yes

## Virtual Private Network (VPN)

VPN types: SSL, IPsec, and PPTP (simultaneous)	Yes
Split and Full tunnel support, with validity period	Yes
Key management and certification authority	Yes
Encryption: DES, 3DES, AES, Blowfish	Yes
Message integrity: MD-5 and SHA-1	Yes
Key Exchange: Manual, IKE, PKI	Yes
VPN clients for Windows, Linux and MAC	Yes
DNS and route push for VPN clients	Yes
IPSec Network Address Translation (NAT) traversal	Yes

## User Authentication and Access Control

Built-in (internal) database - user limit	Unlimited
Integrated service management for users	Yes
User self-service	Yes
External LDAP, ADS integration	Yes
Web-based authentication	Yes

## Traffic Management - Quality of Service (QoS)

Guaranteed bandwidth	Yes
Maximum bandwidth and bandwidth management	Yes
Incoming load balance	Yes
Outgoing load balance	Yes
Ingress traffic policing	Yes

## Administration

Role based administration access	Yes
Automatic and scheduled backup of configuration	Yes
SNMP support	Yes
Elina VirtualPresence single console administration	Yes
Automatic patch, signature and software updates	Yes
ElinaCare remote administration	Yes

## Monitoring & Reporting

Multi-function dashboards with live reports	Yes
Self monitoring (links, services, usage)	Yes
Third-party device monitoring (agent)	Yes
Event history and database search	Yes
Alerts on events (SMS, Email, RSS)	Yes
Daily digest email reports (unlimited users, schedule)	Yes
Web usage history, with group and no-report support	Yes
Port, interface and application level usage history	Yes
Live system status reports, with network map	Yes
XML API for all reports and status	Yes
Live logs and historical log access	Yes
Live network statistics	Yes
History of configuration changes	Yes

## High availability

VRRP support	Yes
Interworking with third-party VRRP capable devices	Yes
Load-balancing and failover for incoming traffic through DNS	Yes

(1) Parameters tested with Intel Quad Core Xeon processor 2 GHz, with 4096MB RAM

# ADD ON MODULES

## IT Inventory Management

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Support for hardware inventory with make and manufacturer names, ports, add-on cards

Software inventory with name and version

Separate ID per subnet for each - easy tracking / reporting

Duplicate entry check and elimination

Alert on change in configuration in the PCs / Servers

Auto tracking of hardware / software across the network

Manual entry of IT assets for warranty tracking

Multiple OS support: Win/Linux/Solaris/Mac OS

## Mail server

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Multiple domain support

Anti-virus /Anti-Spam:

Anti-spam with Bayes/Pattern/SPF/FuzzyOCR/pyzor/RBL/RHSBL.

Scan based on subject prefix and disable scanning for selective users. Option to quarantine/delete/forward/alert postmaster/notify sender for infected mail.

Block mails based on attachments type/name/size/number of attachments and message size.

Custom rules, Black-list, White-list and Grey-list support.

Performance Tuning:

Configure response delay time, error count for delay & rejection for remote SMTP client. Limit concurrent connections and number of delivery requests from clients.

Relay support:

Relay Transport/Fallback Transport/ User Relay Restrictions

Security:

Reject mails with noncompliant SMTP HELO, non-FQDN and invalid/unknown hostname

Web Mail with user configurable display/folder & auto-response and forward-to option

User Management:

User based Transparent Mail Forwarding (BCC) and distribution list

## Virtualization support

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Run Windows/Linux based virtualized applications

Virtual OS can be locked down and remotely managed

Automatic updates, backup and restore of data

Uniform environment across branches

No migration, training issues

## FTP Server

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Supports FTP, FTP over SSL/TLS (FTPS) and SSH FTP

Powerful Site Manager and transfer queue. Supports resume and transfer of large files over 4GB

Built-in user management with access control at user and group level

## Wifi Hotspot

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Multiple usage plans - Pre-paid / Post-paid / Data Usage.

Usage / time based voucher and invoices.

Detailed bandwidth and browsing usage.

Monitor & report WiFi and internet links for uptime

Alert administrator when WiFi access points go down

User management: WPA/RADIUS based authentication and accounting and browser based authentication

VPN bypass supported

Invoice generation support

Walled garden support

Multiple internet connections with seamless failover and load balance

Multiple login pages for different SSIDs

JSON based custom login interface

Hotel Management System (HMS) integration

## Windows Primary Domain Controller

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Nt4 compatible (Win XP & above)

Control spreading of virus via USB drives in the network by applying policies for users/groups in a domain

Multiple user profiles support with different security profiles

Custom "ADM" file support

## Voice-over-IP

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Support for E1 (PRI) and POTS interfaces

Answer, transfer, remote pickup, operator console & voice mail functions

Support for all commonly used codecs

Intelligent call routing, with user based controls

Built-in user management with extension/voice mail

Support for soft and hard IP phones

Comprehensive reporting and tracking

Distributed PBX support, with centralized dialing plan

## VRRP - Hardware redundancy support

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Supports LAN & WAN interfaces, interworks with third-party equipment.

Tracks active node, with passive taking over on failure.

## Chat Server

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User management with AD/LDAP integration

Profile and nickname support

Multi-user chatrooms with moderator and admin control

Comprehensive chat logging & archiving

Based on standard XMPP protocol

Supports Windows, Linux, and Mac

### CustomerSpeak



"Spencer's Retail needed a reliable store network, secure and controlled Internet access, and remotely manageable store IT. With Elina's solution, Spencer's got all this with less Capex, at an ROI higher than other products we evaluated."

**Alagappan, RPG Spencer's Retail.**

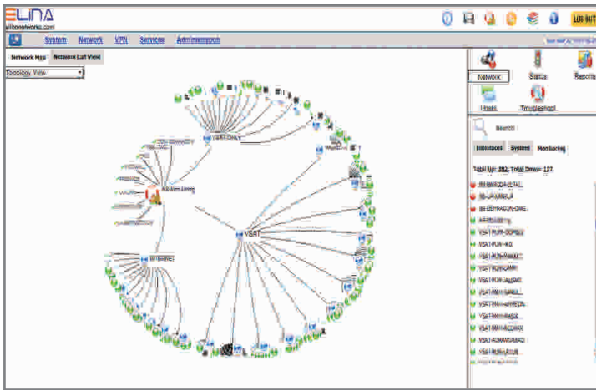
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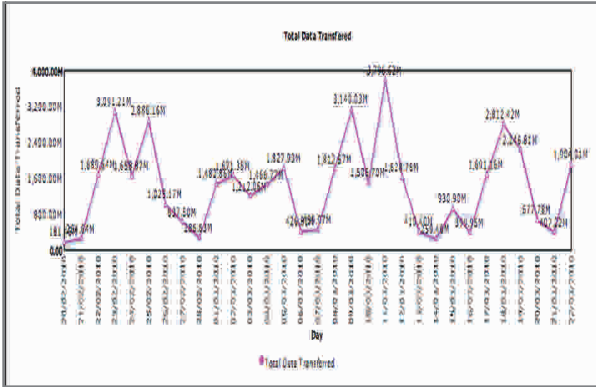
## Vertical Solutions

The ENPAQ's power as a software solution shows with flavours which target specific industry-vertical needs. For BFSI, Retail, and Education, the ENPAQ Unified Gateway has enhanced vertical-specific packages. For Broking, the Secure Trading package provides increased redundancy options. The Education package bundles IT Inventory Management, Wifi Hotspot with ERP API, and extensive VLAN manageability. The ENPAQ Retail package has Virtualization for Zero-hardware cost networking at outlets.

## Browser based Single Console Management



## Bandwidth Usage- Daily Snapshot



## Web Access Report

Destination	Total Users	Connect	Bytes Downloaded*	Bytes Uploaded*	Bytes Transferred
www.google.com	15	24792	4.217 B	4.217 B	8.434 B
www.yahoo.com	10	19711	2.894 B	2.894 B	5.788 B
www.facebook.com	47	891	2.275 B	2.275 B	4.550 B
www.twitter.com	44	2485	789.82 B	789.82 B	1.579.64 B
www.linkedin.com	11	231	122.52 B	122.52 B	245.04 B
www.instagram.com	10	1619	584.25 B	584.25 B	1.168.50 B
www.pinterest.com	11	4	393.83 B	393.83 B	787.66 B
www.youtube.com	6	889	3.362.39 B	3.362.39 B	6.724.78 B
www.spotify.com	23	4229	289.22 B	289.22 B	578.44 B
www.spotify.com	10	28886	201.82 B	201.82 B	403.64 B
www.spotify.com	11	1299	490.92 B	490.92 B	981.84 B
www.spotify.com	11	4	388.62 B	388.62 B	777.24 B
www.spotify.com	11	11	155.77 B	155.77 B	311.54 B
www.spotify.com	12	29831	133.0 B	133.0 B	266.0 B
www.spotify.com	10	41286	252.61 B	252.61 B	505.22 B
www.spotify.com	14	9576	137.82 B	137.82 B	275.64 B
www.spotify.com	11	729	132.85 B	132.85 B	265.70 B
www.spotify.com	11	2295	89.96 B	89.96 B	179.92 B
www.spotify.com	11	1	84.87 B	84.87 B	169.74 B
www.spotify.com	11	9559	81.91 B	81.91 B	163.82 B
www.spotify.com	11	2319	80.19 B	80.19 B	160.38 B
www.spotify.com	11	42295	12.38 B	12.38 B	24.76 B
www.spotify.com	11	9559	12.38 B	12.38 B	24.76 B

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With the ENPAQ Unified Gateway, enterprises are free to choose the hardware and interfaces that they need. With practically unlimited choice on x86 based PCs and servers, enterprises can easily choose hardware that meets their price and performance requirements. Enterprises can now manage scaling and hardware AMCs, with the freedom of reusing hardware and reducing spares by using established hardware vendors.

## Recommended hardware (up to 100 users)

Processor	AMD/Intel single core processor
Memory	1GB
Disk	80 GB
Network interfaces	1 (minimum), 2(recommended)
Peripherals	No (mouse, keyboard, monitor)
Operating System	Elina Linux based OS (ELBOS)

Hardware sizing depends on the number of users, WAN bandwidth and add-ons enabled.

## ENPAQ Unified Gateway at a Glance

ENPAQ Unified Gateway is available in 3 different editions. Enterprises can choose the edition depending on the usage scenario. Add-ons are available for all editions. For example, an enterprise with multiple branch locations, HQ and a data centre would choose the Branch edition for all its branch locations, Enterprise edition for the HQ and Professional edition for the data centre.

Features	Branch	Professional	Enterprise
Policy Routing, WAN Failover, Load Balancing, QoS, VPN client	✓	✓	✓
User management	✓	✓	✓
AntiVirus/AntiSpam, Content Filters, Stateful Packet Inspection	✓	✓	✓
VPN Server (IPSec/SSL VPN) and VPN client for nomadic users		✓	✓
Secure Remote Desktop for administrators		✓	✓
Intrusion Detection		✓	✓
Daily Digest Reporting		✓	✓
Alerts (SMS)			✓
Monitoring of servers, hosts and services			✓
Network dashboard & single console mgmt.			✓