#### Security



## **LANCOM** vFirewall

Virtualized next-generation UTM firewall

The LANCOM vFirewall is a virtual next-generation firewall for versatile operations in conventional networks and cloud scenarios. While it offers the same functionality as hardware-based unified firewalls, it has no conventional hardware to take up space. It operates in a virtualized environment based on a hypervisor such as VMware ESXi, Oracle VirtualBox or Microsoft Hyper-V. The flexible licensing model allows your firewall to "grow" with your needs in terms of UTM performance and network size.

- > Virtual, software-based firewall for operation with VMware ESXi, Oracle VirtualBox or Microsoft Hyper-V
- > Protection against spam, viruses, malware, and complex cyber attacks
- > State-of-the-art security technologies such as R&S®PACE2 deep packet inspection
- > Protection against zero-day threats due to integrated sandboxing and machine learning
- > Integration into the LANCOM Management Cloud
- > Setup wizard for intuitive step-by-step initial setup
- > Intuitive network visualization enabling easy implementation of security and compliance policies
- > Detailed filtering and validation of applications and protocols
- > IT security "Made in Germany" and guaranteed without backdoors
- > Term-based license model (1 or 3 years)



#### Software-based firewall for virtualized environments

The LANCOM vFirewall is a software-based firewall for operation in a virtualized environment based on a hypervisor such as VMware ESXi, Oracle VirtualBox or Microsoft Hyper-V. It offers an easy way to implement state-of-the-art security and UTM features for modern infrastructures without requiring additional hardware.

#### Instant deployment anywhere

The LANCOM vFirewall is deployed with just a few clicks: At any location around the world, wherever a firewall is required, it is created automatically—without any shipping or hardware installation. Be it in a lab environment, in your own server room or data center, or in the cloud.

#### **Fast recovery**

The LANCOM vFirewall is easily and fully backed up to any storage medium at any time. This means that even in the event of server hardware failure, your firewall can immediately be restarted on another machine, so avoiding lengthy outages.

#### Easy to use, maximum security

The growing cyber risks are placing ever increasing demands on corporate security, data protection, and the availability of complex IT systems. The LANCOM vFirewalls are next-generation firewalls that offer all-round cyber security thanks to unified threat management (UTM). This includes the use of advanced cyber-security technologies such as sandboxing and machine learning.

#### Network & security "Made in Germany"

LANCOM vFirewalls are next-generation firewalls that are developed and programmed in Germany. Their UTM unctions ideally supplement existing LANCOM network infrastructures with new levels of IT security. This means future-proof protection for corporate networks, guaranteed free of any backdoors.



### **Comparison LANCOM vFirewall Licenses**

	LANCOM vFirewall - S	LANCOM vFirewall - M	LANCOM vFirewall - L	LANCOM vFirewall - XL
Cores	1	2	4	16
RAM	4	8	16	64
Rec. number of users*	Recom. for up to 20 users	Recom. for up to 100 users	Recom. for up to 200 users	Recom. for up to 500 users
VLAN	16	32	64	256

 $<sup>\</sup>ensuremath{^{\star}}$  At simultaneous usage of all UTM features by all users

Features	Basic License	Full License	Feature description	
Content Filter		<b>√</b>	URL and content filter Customizable rules for users Blacklists / whitelists Import / export of URL lists Category-based website blocking (individually definable) Online scan technology HTTP(S) proxy support Override function	
Proxies	HTTP VoIP	<b>√</b>	HTTPS, FTP, POP3/S, SMTP/S, SIP HTTP (transparent/non-transparent) Reverse proxy Supports Active Directory and local users Time-controlled	
LAN/WAN support	<b>√</b>	✓	Ethernet 10/100/1,000/10,000 Mbps Configurable MTU (Ethernet/DSL) xDSL Multi-WAN (weighted policy-based routing/failover) Load balancing Time restrictions for Internet connections Multiple, dynamic DNS support DHCP DMZ SNAT	
VLAN	✓	<b>√</b>	4096 VLANs per interface 802.1q header tagging (packet-based tagged VLANs) Compatible with bridging	
Bridge mode	<b>√</b>	✓	Layer-2 firewall Spanning Tree (bridge ID, port costs) Unlimited number of interfaces per bridge	
Monitoring 8 statistics	<b>√</b>	<b>√</b>	Statistics (IDS/IPS, application control, surf control, antivirus/antispam) Logging to external syslog servers Export as CSV and XLS files SNMP/v2c and v3 Connection tracking	
Administration	<b>√</b>	<b>√</b>	Object-oriented configuration Role-based administration Command-line interface (SSH) Saves desktop as PDF and HTML IP-based access restriction for SSH and web client	
Web interface	<b>√</b>	<b>√</b>	Self-explanatory functions Overview of the entire network Overview of all active services Browser-based, platform-independent View filtering based on custom tags	
QoS	✓	✓	Guaranteed QoS bandwidth configurable for Internet connections QoS with ToS flags QoS in VPN connections	
X.509 certificates	<b>√</b>	<b>√</b>	CRL (Certificate Revocation List) OCSP (Online Certificate Status Protocol) — network protocol for X.509 certificate status validation Multi-CA support Multi-host certificate support	



Features (continued)	Basic License	Full License	Feature description	
VPN	<b>√</b>	<b>√</b>	User authentication High availability Wizards for VPN and certificates Site-to-site and client-to-site Client configuration packages	
IPSec	<b>√</b>	<b>√</b>	Full-tunnel mode IKEv1, IKEv2 PSK (pre-shared key) / certificates DPD (Dead Peer Detection) NAT-T XAUTH, EAP Port configuration	
SSL-VPN	<b>√</b>	<b>√</b>	Routing mode VPN Bridge mode VPN TCP/UDP Specification of WINS and DNS servers	
Backup and restore	<b>√</b>	<b>√</b>	Local or remote access Automatic import during installation Automatic and scheduled backups Automatic upload (FTP, SCP) Disaster recovery from USB drive	
User authentication	<b>√</b>	<b>√</b>	Active Directory import Local user administration Authentication via web or client Single sign-on (Kerberos) Multiple logins Captive portal Terminal Server Support (via Remote Desktop IP Virtualization)	



Licenses (Basic)		
LANCOM vFirewall-S — Basic License (1 Year)	License for activating the firewall functions of the LANCOM vFirewall (max. 1 core, 4 GB RAM), incl. Support & Updates, ru 1 year Item No. 55186	
LANCOM vFirewall-S — Basic License (3 Year)	License for activating the firewall functions of the LANCOM vFirewall (max. 1 core, 4 GB RAM), incl. Support & Updates, runtime 3 years Item No. 55187	
LANCOM vFirewall-M — Basic License (1 Year)	License for activating the firewall functions of the LANCOM vFirewall (max. 2 cores, 8 GB RAM), incl. Support & Updates, runtime 1 year Item No. 55192	
LANCOM vFirewall-M — Basic License (3 Year)	License for activating the firewall functions of the LANCOM vFirewall (max. 2 core, 8 GB RAM), incl. Support & Updates, runtime 3 years Item No. 55193	
LANCOM vFirewall-L — Basic License (1 Year)	License for activating the firewall functions of the LANCOM vFirewall (max. 4 cores, 16 GB RAM), incl. Support & Updates, runtime 1 year Item No. 55198	
LANCOM vFirewall-L — Basic License (3 Year)	License for activating the firewall functions of the LANCOM vFirewall (max. 4 cores, 16 GB RAM), incl. Support & Updates, runtime 3 years Item No. 55199	
LANCOM vFirewall-XL — Basic License (1 Year)	License for activating the firewall functions of the LANCOM vFirewall (max. 16 cores, 64 GB RAM), incl. Support 8 Updates, runtime 1 year ltem No. 55204	
LANCOM vFirewall-XL — Basic License (3 Year)	License for activating the firewall functions of the LANCOM vFirewall (max. 16 cores, 64 GB RAM), incl. Support 8 Updates, runtime 3 years   Item No. 55205	
Licenses (Full)		
LANCOM vFirewall-S — Full License (1 Year)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 1 Core, 4 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 1 year Item No. 55189	
LANCOM vFirewall-S — Full License (3 Year)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 1 Core, 4 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 3 years Item No. 55190	
LANCOM vFirewall-M — Full License (1 Year)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 2 Cores, 8 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 1 year Item No. 55195	
LANCOM vFirewall-M — Full License (3 Year)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 2 Core, 8 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 3 years Item No. 55196	
LANCOM vFirewall-L — Full License (1 Year)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 4 Cores, 16 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 1 year Item No. 55201	
LANCOM vFirewall-L — Full License (3 Year)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 4 Cores, 16 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 3 years Item No. 55202	
LANCOM vFirewall-XL — Full License (1 Year)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 16 Cores, 64 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 1 year Item No. 55204	
LANCOM vFirewall-XL — Full License (3 Year)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 16 Cores, 64 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 3 years Item No. 55208	

