

LANCOM

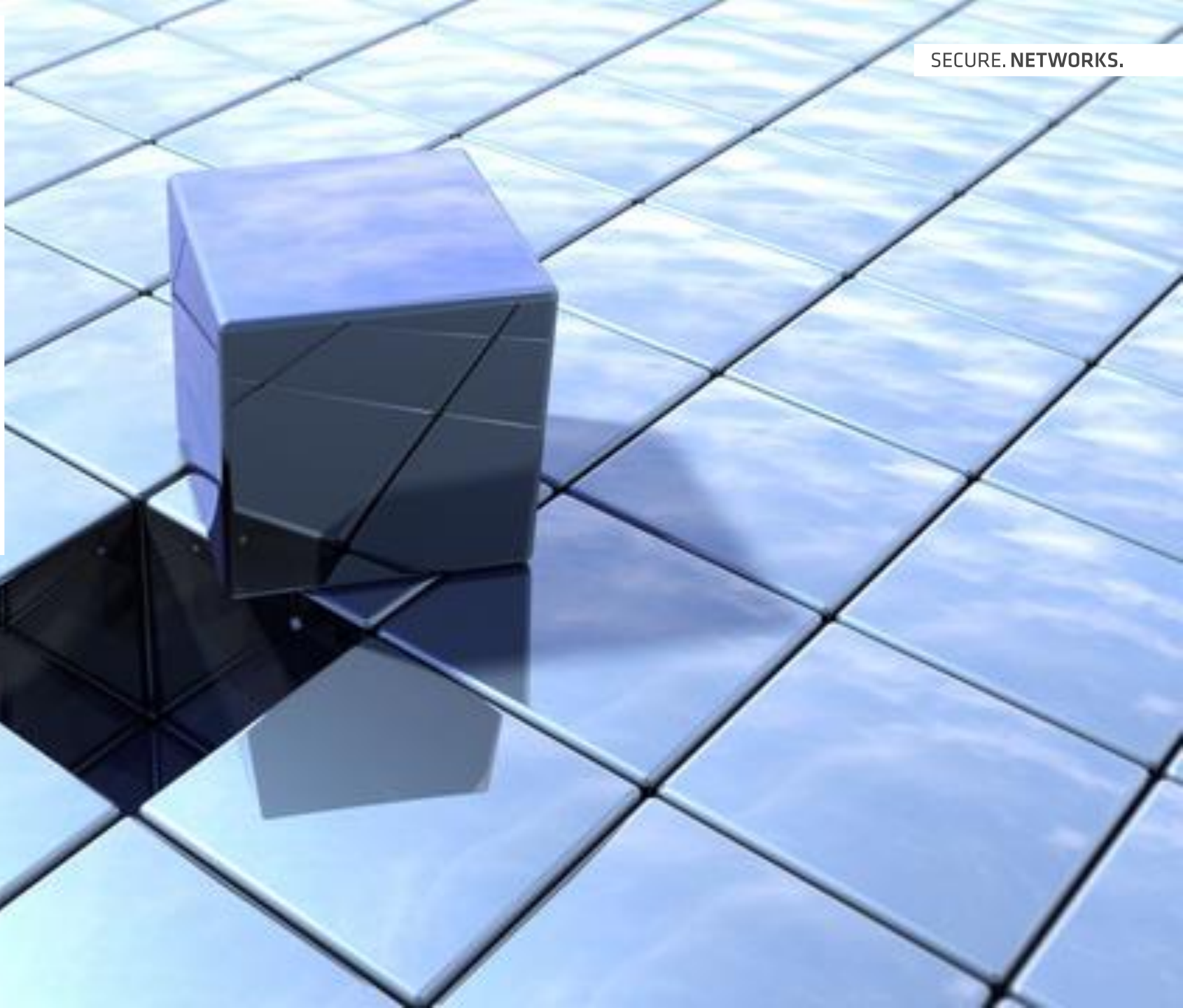
Systems

SECURE. NETWORKS.

LCOS 10.40

FEATURE NOTES

LCOS



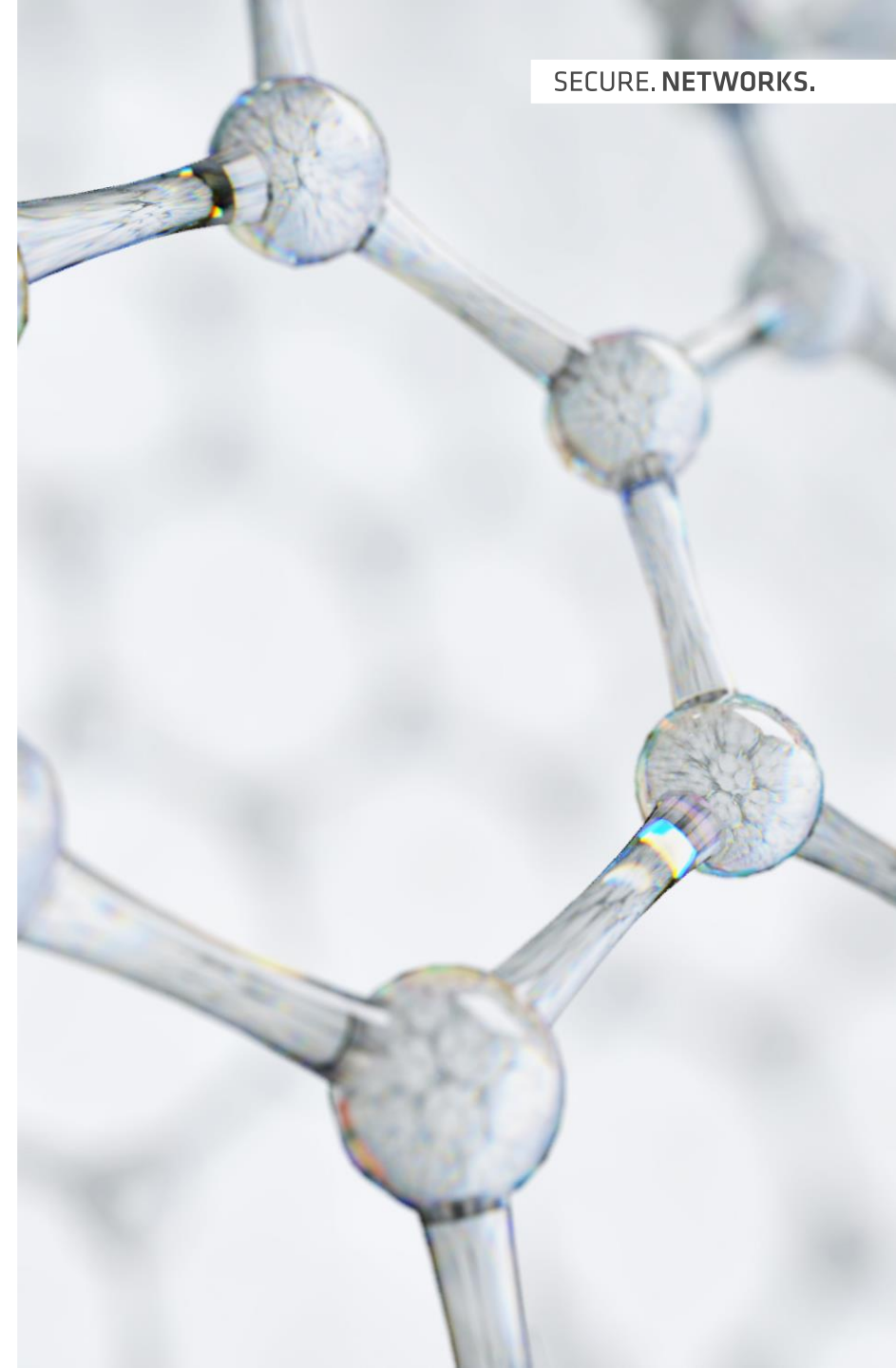
LCOS

10.40

TOP PERFORMANCE AND EFFICIENCY FOR YOUR SD-WAN

Benefit from:

- Next-generation SD-WAN – **LANCOM High Scalability VPN (HSVPN)** greatly improves efficiency as it requires fewer VPN tunnels
- A fresh look & feel – **WEBconfig has been completely redesigned** for an intuitive and modern appearance
- Multicast routing – **new possibilities with multimedia applications** in LANCOM infrastructures



LANCOM

Systems

SECURE. NETWORKS.

HIGHLIGHT FEATURES

IN DETAIL



NEXT-GENERATION SD-WAN

LANCOM HIGH SCALABILITY VPN (HSVPN)

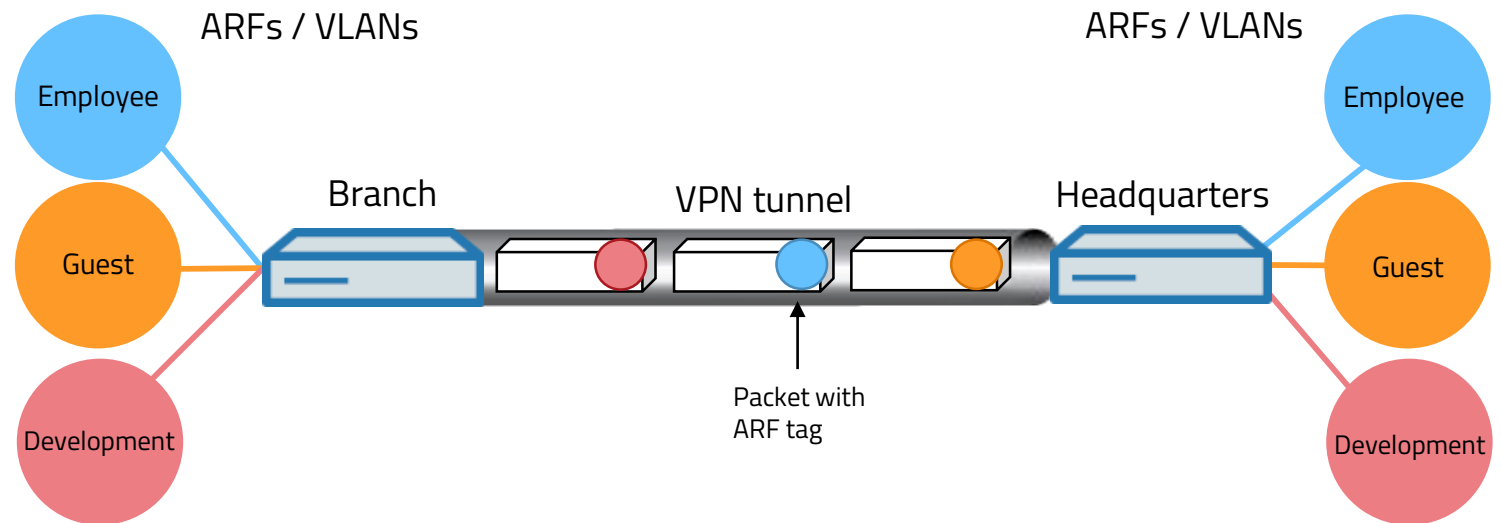
High Scalability VPN significantly improves the extensibility and efficiency of your SD-WAN architecture. Previously each individual application needed its own individual VPN tunnel, but HSVPN now transports any number of networks on a single VPN tunnel to the remote site. Networks remains secure and strictly separated from one another.



LANCOM HSVPN (HIGH SCALABILITY VPN)

NEXT GENERATION SD-WAN VPN

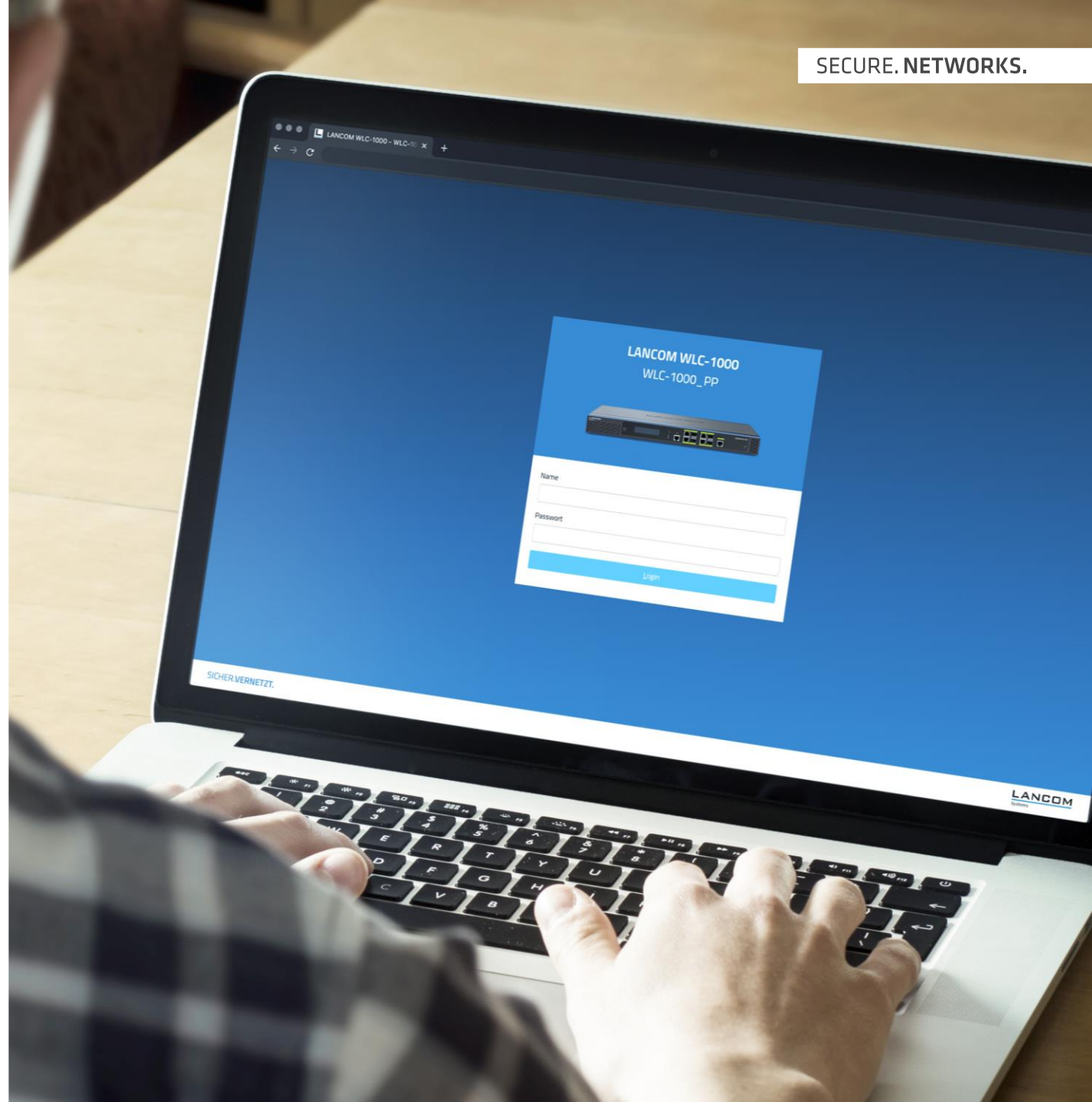
- Secure network separation in the VPN tunnel
- Highest scalability, due to only one VPN tunnel per site ↔ headquarter
- Overall faster tunnel establishment or failover, as the number of tunnels to be established is reduced
- Ideal for large SD-Branch scenarios



NEW WEBCONFIG

MODERN LOOK & FEEL

You can look forward to the completely new look and feel of LANCOM WEBconfig. Based on the modern and bright design of the LANCOM Management Cloud, WEBconfig has been completely redesigned to offer you an attractive and fresh appearance.



NEW WEBCONFIG

MODERN LOOK & FEEL

- Analogous to the user interface of the LANCOM Management Cloud
- Enables intuitive and easy user navigation

The image displays three screenshots of the LANCOM WebConfig interface, demonstrating its modern look and user navigation.

Screenshot 1: Syslog

Idx.	Zeit	Quelle
1	2019-11-07 09:23:36	AUTH+PRIV
2	2019-11-07 09:19:43	LOCAL3
3	2019-11-07 09:16:43	LOCAL3
4	2019-11-07 09:13:43	LOCAL3
5	2019-11-07 09:10:43	LOCAL3
6	2019-11-07 09:07:43	LOCAL3
7	2019-11-07 09:04:44	LOCAL3
8	2019-11-07 09:01:42	LOCAL3
9	2019-11-07 08:58:42	LOCAL3
10	2019-11-07 08:55:42	LOCAL3
11	2019-11-07 08:52:42	LOCAL3
12	2019-11-07 08:49:40	LOCAL3
13	2019-11-07 08:48:37	LOCAL3
14	2019-11-07 08:46:00	KERN
15	2019-11-07 08:45:37	LOCAL3

Screenshot 2: Dashboard

Schnittstelle/Port	Status/Modus	Information
CPU-Last	Aktuell: 3.11%	
Speicher	Gesamt: 442.9 MBytes Frei: 267.2 MBytes	
VDSL	Leitungszustand: SHOWTIME Standard: G.Vector VDSL-Profil: 17a Leitungstyp: over-SDN	Index: 9 Sync Zeitpunkt: 05.11.2019 20:59:18 DS-Datenrate: 63679 US-Datenrate: 12736 DS-SNR: 26.5 US-SNR: 24.4
ISDN	SO-1: Inaktiv (FO) SO-2: Inaktiv (FO)	
Mobilfunk-Modem-Schnittstelle	Aktiv: nein Zustand: Deaktiviert	
ETH-1		
ETH-2		
ETH-3		Zuordnung: LAN-1 Privat-Modus: nein Verbindung-aufgebaut: ja Anschluss: 100 Mbit Full-Duplex Auto-Verhandlung: Abgeschlossen Flusssteuerung: nein MDI-Modus: MDI Remote-Fehler: nein Downshift: nein Takt-Rolle: Keine Energie-sparend: nein
ETH-4		
WLAN-1	Aktiv: ja Betriebsart: Access-Point	Anzahl-Stationen: 1 Sendeleistung: 16 dBm Rauschpegel: -81 Modem-Last: 1 Band: 5GHz Radio-Modus: 11n-mixed Funk-Kanal: 48 Durchsatz: 10.1 KB
Index	MAC-Adresse: 00a0572d7e17	

Screenshot 3: IPv4: Allgemein

IP-Netzwerke
Netzwerkname: INTRANET
IP-Adresse: 192.168.1.1 (max. 15 Zeichen)
Netzwerkmaske: 255.255.255.0 (max. 15 Zeichen)
Netzwerktyp: Intranet
VLAN-ID: 0 (mögliche Werte: 0 bis 4094)
Schnittstellen-Zuordnung: BRG-1
Adressprüfung: Flexibel
Schnittstellen-Tag: 0 (mögliche Werte: 0 bis 4094)
Kommentar: local intranet (max. 64 Zeichen)

Screenshot 4: Grundeneinstellungen

Fortschritt

Wie soll der Name Ihres Gerätes lauten?

Geräte-Name: vRouter1 (max. 64 Zeichen)

Der Geräte-Name ist ein hilfreiches Identifikationsmerkmal, insbesondere wenn Sie mehrere Geräte des gleichen Typs verwalten, da ansonsten der Geräte-Name standardmäßig mit dem Gerätetyp belegt ist.

Zurück zur Seite Weiter Zurücksetzen Diesen Assistenten abbrechen

MULTICAST ROUTING

FOR MULTIMEDIA APPLICATIONS

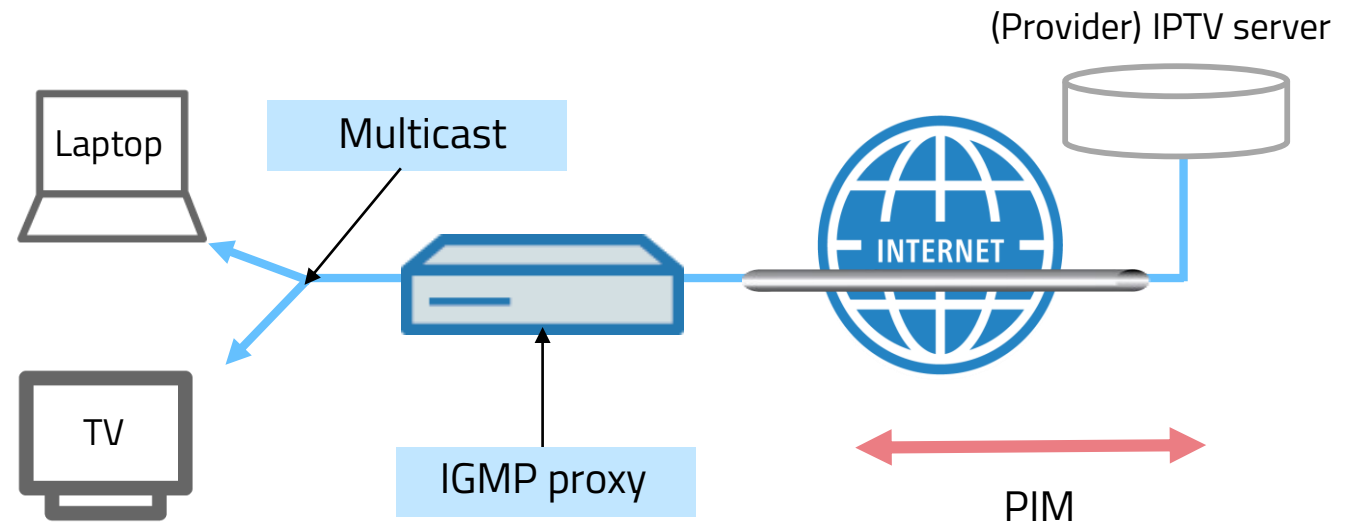
Multicast data such as IPTV is now transmitted efficiently to multiple devices. Previously, separate data packets had to be sent to each receiver, whereas the use of multicast now allows one IP stream to be transmitted to several recipients. This reduces the load on the router and makes better use of available routing capacity.



MULTICAST ROUTING

FOR MULTIMEDIA APPLICATIONS

- Enables routing of multicast services, such as IPTV
- IGMP proxy (Internet Group Management Protocol) for receiving IPTV
- PIM (Protocol Independent Multicast) for multicast on the backbone or in VPN infrastructures



FURTHER FEATURES



SD-WAN ZERO-TOUCH DEPLOYMENT

FOR DSL ROUTERS

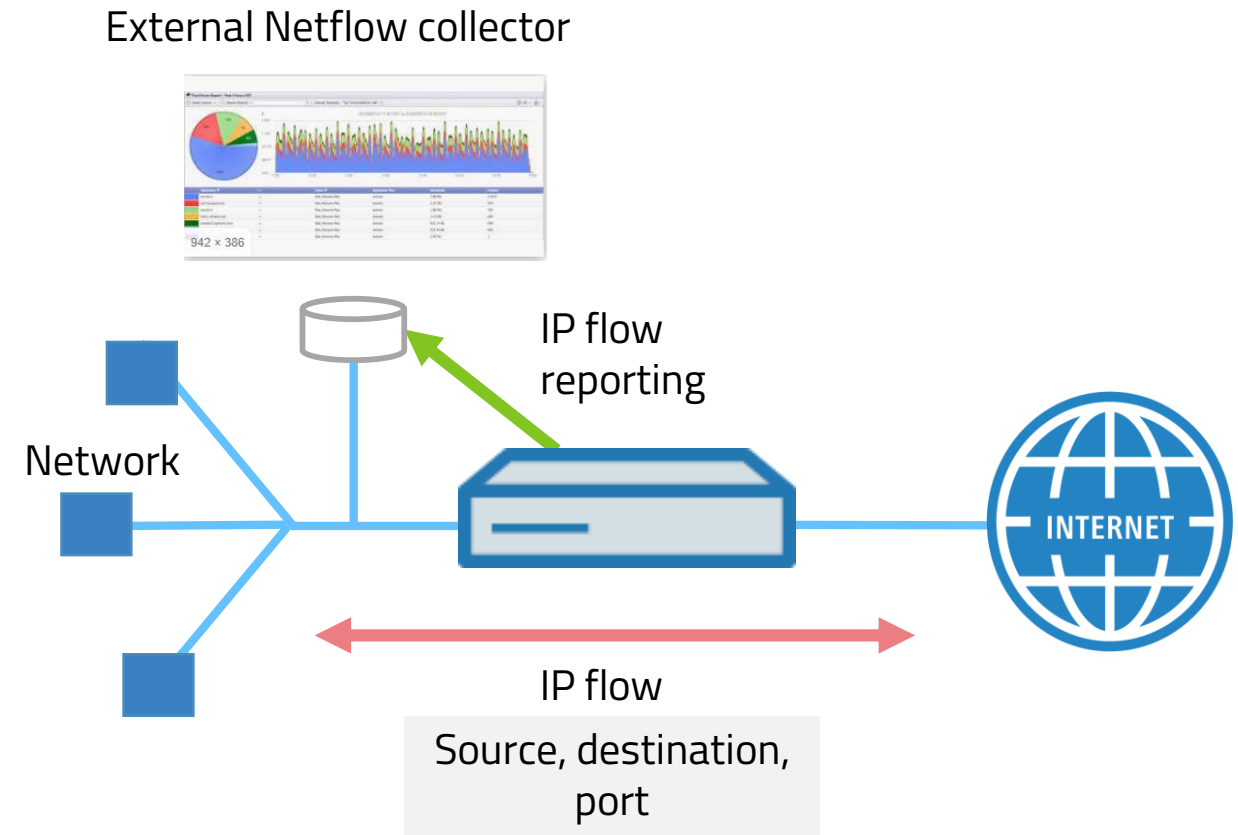
- Automatic installation of DSL routers at BNG Telekom connections with the LANCOM Management Cloud
- The time-consuming configuration of DSL access data on the router is no longer necessary



NETFLOW

NETWORK ANALYSIS

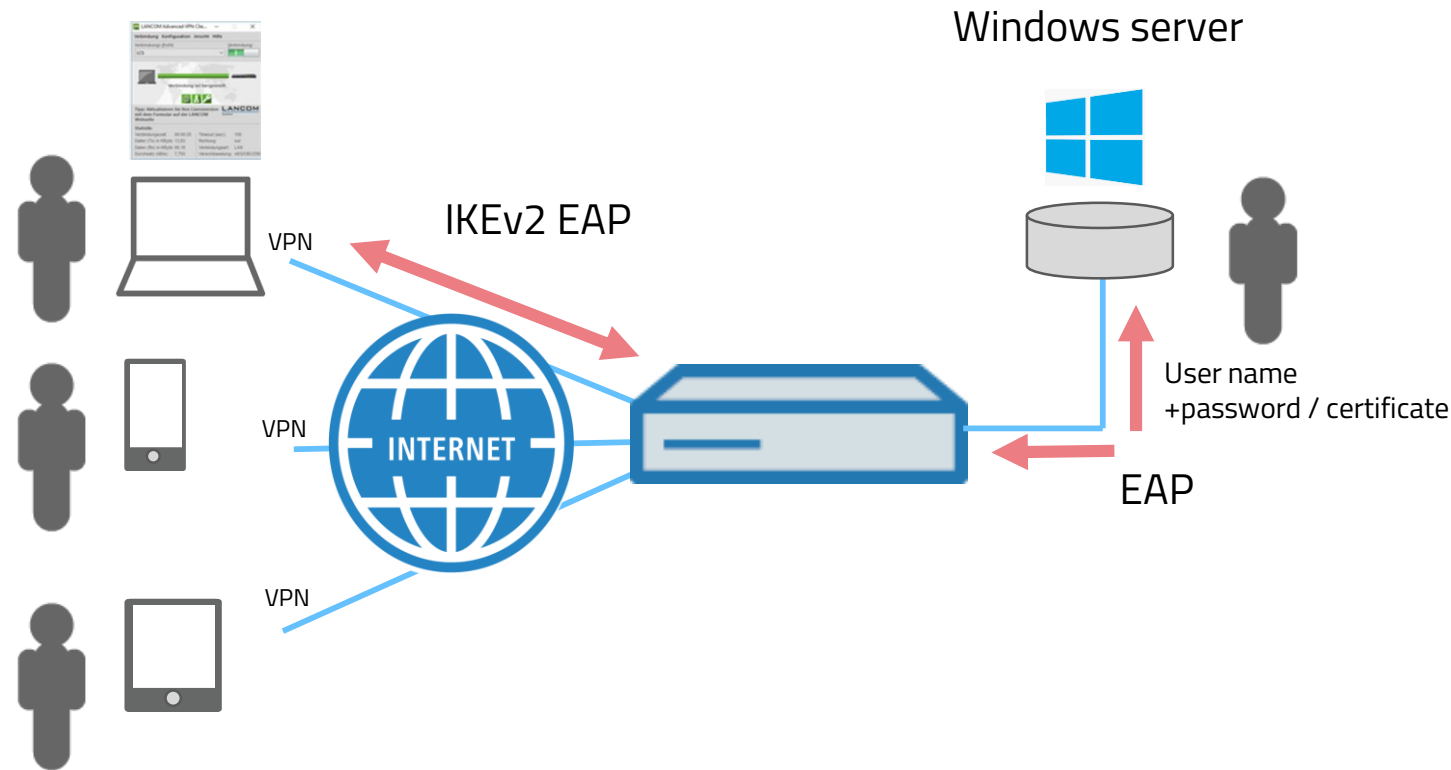
- With Netflow, network analysis information about the router's incoming and outgoing IP traffic (source, destination, ports, etc.) can be sent to a central collector for evaluation
- This connection information can be stored and analyzed on the collector
- Ideal for network analysis



IKEv2 VPN

WITH WINDOWS LOGIN

- Central management of all clients in Windows Active Directory
- Mobile VPN clients using IKEv2 EAP can now authenticate against a central database such as Microsoft Active Directory or RADIUS
- Comfortable login with Windows access data



BACKUP SCENARIOS

MORE FLEXIBILITY

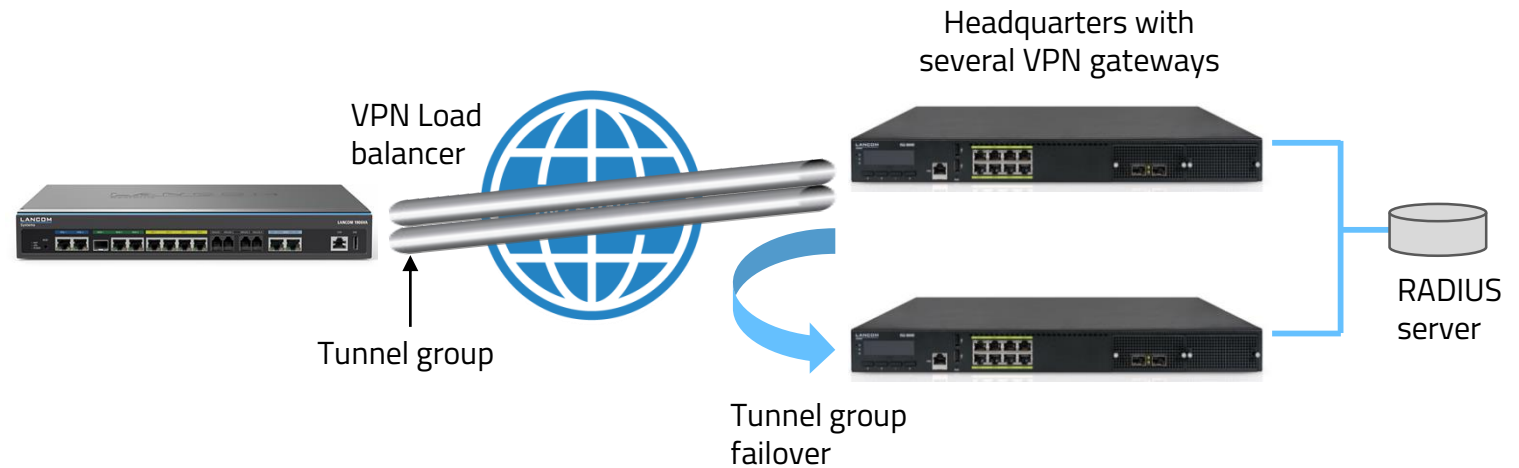
- Route prioritization offers new levels of flexibility for backup scenarios



NEW SD-WAN FUNCTIONS FOR THE LOAD BALANCER

MORE FLEXIBILITY

- On central-site gateways, VPN load balancers can be generated automatically with the help of RADIUS
- Multiple VPN channels are aggregated into tunnel groups, so that even in the case of failover, the VPN connects to a common gateway



WI-FI SCHEDULING

INTERNET ACCESS ON YOUR TERMS

- Enables time-based activation and deactivation of SSIDs in the wireless LAN
- Ideal for Wi-Fi networks that should only be available at specific times, such as hotspots or Wi-Fi in educational institutions

Logical WLAN settings - WLAN interface 1 - Network 1

Network Encryption Transmission Alarms

Interface: WLAN interface 1 - Network 1

☒ WLAN network enabled

Network name (SSID): Class-WiFi

Suppress SSID broadcast: No

☒ MAC filter enabled

Maximum count of clients: 0

Minimal client signal strength: 0 %

Client Bridge Support: No

TX bandwidth limit: 0 kbit/s

RX bandwidth limit: 0 kbit/s

Client TX bandwidth limit: 0 kbit/s

Client RX bandwidth limit: 0 kbit/s

Timeframe: CLASS Select

☐ RADIUS accounting activated

RADIUS accounting server: Select

Accounting start condition: Connected

☐ RADIUS CoA activated

☐ Enable LBS tracking

LBS tracking list:

Direct traffic between stations: Allow for this SSID

☐ (U-)APSD / WMM powersave activated

☐ Transmit only unicasts, suppress multicasts and broadcasts

OK Cancel



FURTHER FEATURES

› More security in the VPN

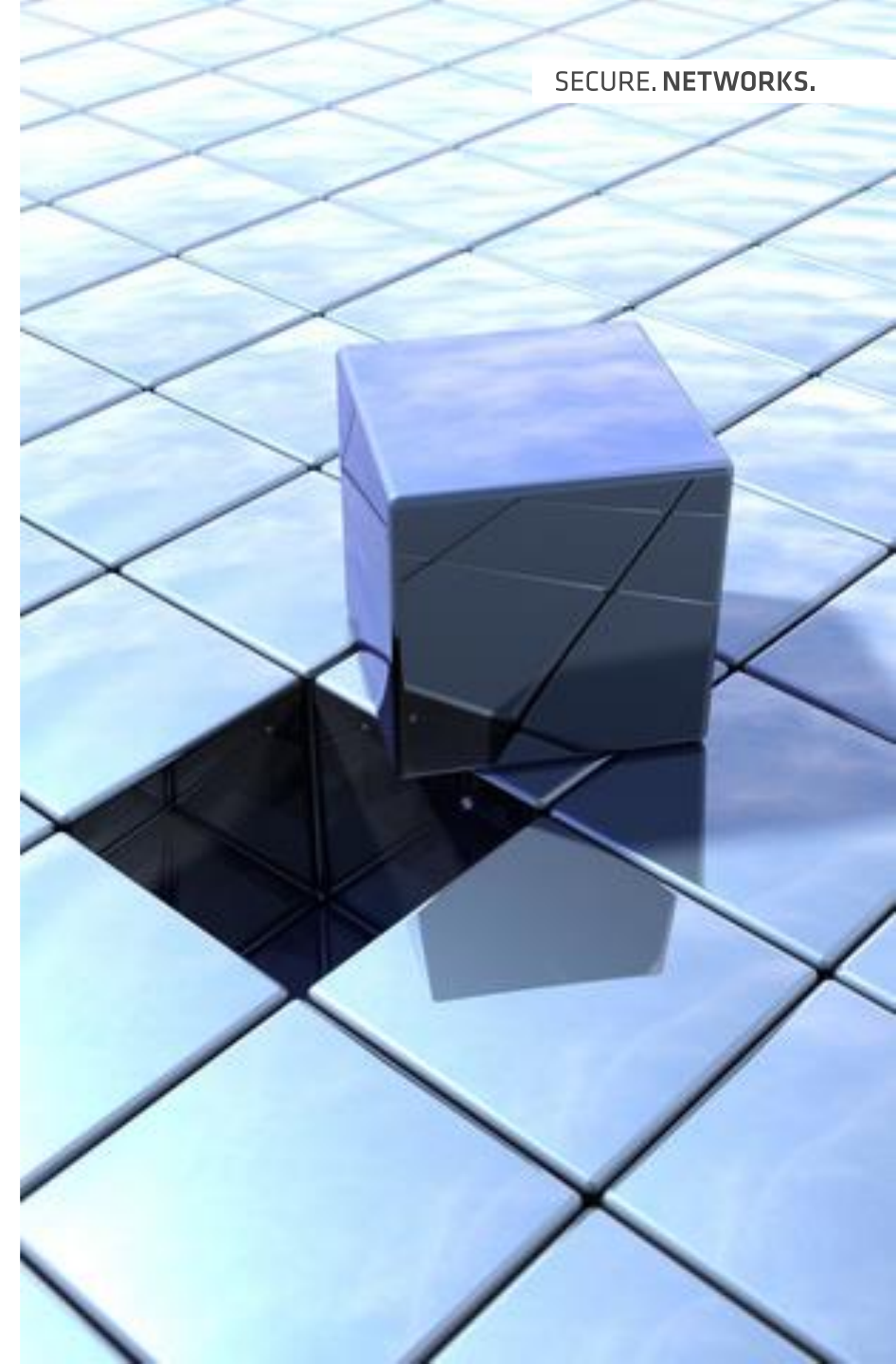
Support for new and modern encryption algorithms such as Chacha20-Poly 1305, digital signature with ECDSA, and new Diffie-Hellmann groups.

› TLS 1.3 client mode

Support for the new TLS 1.3 protocol improves security for router accessing web services.

› New filters for individual notifications

Configurable filter lists for SNMP traps and SYSLOG enable individualized monitoring notifications to be received.



THANK YOU
VERY MUCH!
