LANCOM SYSTEMS
NETWORK MEETS SECURITY

Christian Schallenberg
Member of the Board and CTO
NETWORK MEETS SECURITY

1. LANCOM, Rohde & Schwarz and Cybersecurity

2. HyperIntegration – the LANCOM Management Cloud

3. Cloud-based and Cloud-managed Security
LANCOM SYSTEMS AND ROHDE & SCHWARZ

NETWORK MEETS SECURITY

› Rohde & Schwarz and LANCOM Systems consolidate joint growth strategy
› Synergies in competence and technologies
› Highly integrated network and security solution from a single source—for conventional networks and cloud architectures.
## Business Units

<table>
<thead>
<tr>
<th>Test and Measurement</th>
<th>Broadcast and Media</th>
<th>Aerospace</th>
<th>Defense</th>
<th>Security</th>
<th>Networks and Cyber-Security</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Test and Measurement" /></td>
<td><img src="image2" alt="Broadcast and Media" /></td>
<td><img src="image3" alt="Aerospace" /></td>
<td><img src="image4" alt="Defense" /></td>
<td><img src="image5" alt="Security" /></td>
<td><img src="image6" alt="Networks and Cyber-Security" /></td>
</tr>
</tbody>
</table>

### Service
Networks & Cybersecurity

- 610 employees at 13 European sites
- Engineering and manufacturing in Germany and France
- Cloud services hosted in Germany
- 7,500 resellers and system houses
- More than 2.5 Mio products installed
- Over 100,000 customers & projects
WHAT THIS MEANS IS...

SUSTAINABLE STRUCTURES

› Holistic solutions in **networking & cybersecurity**

› The strategic orientation, our **distribution model**, our positioning on the market, and also our trust-based brand promise remain **unchanged**.

› We will **continue to act independently** as LANCOM Systems GmbH, and the management of the company remains in our hands

6 Network meets Security
**Certified Strong Security**
- SITline ETH – certified Layer 2 Encryption for up to 40 Gbps
- SITline IP – strong security Layer 3 overlay encryptors

**Desktop & Mobile Security**
- Desktop security: Browser in the Box, Trusted Disc, Trusted Desktop
- Mobile Security: Trusted Communicator (Messenger), Trusted Mobile Phone / Tablet
- Voice Security: ELCRODAT 6-2

**Web- & Cloud Security**
- Web-Application Firewalls & Cloud Protector to secure web server applications
- Highly-secured encrypted cloud storage solutions („Trusted Gate“)

**Network analysis**
- PACE2 Deep Packet Inspection Engine
- Realtime classification of network protocols
- Network analysis for CyberSecurity
Networks & Cybersecurity
Cloud-managed Network Infrastructure

**SD-WAN**
- Business and Enterprise IPsec VPN solutions
- Mobile / Remote Access
- SD-WAN & Cloud management
- VoIP / PBX / SBC integration
- Scalable >> 10,000 sites

**SD-LAN**
- Fully managed Switches
- Up to 10 Gbps
- Cloud / SDN managed

**SD-WLAN**
- Indoor Access Points
- Outdoor Access Points
- Industrial Access Points
- Wireless LAN Controller
- Cloud managed Wireless LAN

**SD-SECURITY**
- Unified Firewall / UTM portfolio
- Cloud Security / Zscaler
- Security & Compliance Dashboard
AGENDA

1. LANCOM, Rohde & Schwarz and Cybersecurity

2. HyperIntegration – the LANCOM Management Cloud

3. Cloud-based and Cloud-managed Security
WELCOME
TO THE LANCOM MANAGEMENT CLOUD!

The world's first hyper-integrated management system that intelligently organizes, optimizes, and controls your entire WAN, LAN, WLAN and SECURITY architecture.
HYPER INTEGRATION MEANS:
FULLY AUTOMATED CONFIGURATION

Complex network configurations reduced to just a few minutes and a few clicks!
HYPER INTEGRATION MEANS:
ROUTING, SWITCHING, WLAN, FIREWALLING

- It takes just a few clicks to integrate your devices into the LANCOM Management Cloud
- No matter: Be they new devices or in existing infrastructures
HYPER INTEGRATION MEANS:
CONTROL ANYTIME, ANYWHERE

All of this is centrally designed, rolled out and monitored – a web browser is all you need
HYPER INTEGRATION MEANS:
MANAGEMENT & MONITORING

- Benefit from around-the-clock monitoring, diagnosis, and troubleshooting
HYPER INTEGRATION MEANS:

PUBLIC OR PRIVATE CLOUD

- The Public Cloud: For any scale of installation, hosted centrally and securely in Germany
- The Private Cloud: For system integrators, service providers, and large enterprise installations
SOFTWARE-DEFINED TECHNOLOGY

SD-WAN  SD-LAN  SD-WLAN  SD-SECURITY
SD-WAN
SOFTWARE-DEFINED WIDE AREA NETWORK

› Use automatically and dynamically any type of wide-area network (WAN) for your site connectivity

› New locations are installed automatically, securely networked with one another

› New applications are created and rolled out with just a few clicks
SD-WAN – SCENARIO
SOFTWARE-DEFINED LOCAL AREA NETWORK

- Enables the automated, dynamic, and secure provisioning of any type of multi-service network on switch ports
- The error-prone configuration of individual switches is now fully automated and if desired, across locations
SD-LAN – SCENARIO

Network virtualization

Selection
Port labeling
Graphical VLAN assignment

Details - Video camera

Connection
PoE

Network profiles

Port VLAN ID

Connection 10/100 Mbps 1/10 Gbps Deactivated Not connected
PoE Active Deactivated No PoE devices connected

Network profiles Alarm Intranet Internet Digital Signage ERP Voice

Untagged network

Internet (VLAN 1)
Digital Signage (VLAN 10)
ERP (VLAN 5)
Voice (VLAN 12)
SOFTWARE-DEFINED WIRELESS LOCAL AREA NETWORK

- Combines the features of conventional WLAN controllers and cloud-managed WLANs and supplements these with maximized automation and agility
- Further access points or new applications such as hotspots are easily integrated into the network
SD-WLAN – SCENARIO
WLAN MONITORING

- WLAN single device monitoring with WLAN quality indicators and usage statistics
EASY CUSTOM HOTSPOTS

- Configuration and management of the hotspot via LMC
- Significant simplification of the device set up
- Versatile customization to the individual requirements and individual customer requirements
SD-SECURITY
NETWORK-CENTRIC SECURITY SETTINGS
AGENDA

1. LANCOM, Rohde & Schwarz and Cybersecurity

2. HyperIntegration – the LANCOM Management Cloud

3. Cloud-based and Cloud-managed Security
SOFTWARE-DEFINED SECURITY

Hybrid approach for Security

LANCOM SD-WAN Security Gateway
(Layer-7 Firewall for all Routers / Gateways / APs)

Software-defined Security
central Security configuration

Cloud & UTM Security
(Proxies, Scanning, Filtering, Sandboxing, ...)
- for Public and Private Cloud -

Next-generation Firewall
SD-WAN Dynamic Path Selection

Central Security Management,
Security & Compliance Monitoring

Central Anti-Malware Protection
Cloud-based & Cloud-managed
CLOUD-BASED SECURITY

- Already available for Enterprise Customers
- Offering for global Enterprises and Multi-Nationals
- Separate Zscaler account required
- LMC integration already available

**New:** Availability for SMB customers

- First products together with Deutsche Telekom / T-Systems
INTERNET PROTECT PRO
PRODUCT-BUNDLES LANCOM & IPP

IPP Entry 25 User
IPP Entry 50 User

1793VA-4G
1905VA-4G
R883+

LANCOM BUSINESS ROUTER & INTERNET PROTECT PRO
ECHTZEITSSCHUTZ FÜR IHRE UNTERNEHMENSDATEN

Herzlichen Glückwunsch zu Ihrem neuen LANCOM Router! Ab sofort machen Sie keine Abstriche bei der Performance Ihres Netzwerkes.

Ihr LANCOM Router ist für die Nutzung von Internet Protect Pro powered by Zscaler vorbereitet. Mit Internet Protect Pro schützen Sie Ihre Unternehmensdaten in Echtzeit gegen bekannte und unbekannte Bedrohungen beim Zugriff auf das Internet.

Nutzen Sie diese Leistungsmerkmale:
• Anti-Virus und Anti-Spyware
• Advanced Threats Protection
• Cloud Sandbox mit APT Schutz
• Logging und Reporting
• Anbindung an die Internet Protect Pro Cloud
• Content-Filter (URL-Blocker)

Sie haben Fragen? Kontaktieren Sie uns unter 0800 32 04444 (kostenlos) oder Ihren persönlichen Kundenberater.

Erfahren Sie mehr unter:
https://cloud.telekom.de/de/magenta-security/internet-protect-pro

ERLEBEN, WAS VERBINDET.
INTERNET PROTECT PRO BUNDLES
LAUNCHED AT #CSTSE2019!
NEW: LANCOM R&S® UNIFIED FIREWALLS
CLOUD-MANAGED SECURITY
LANCOM R&S® UNIFIED FIREWALLS

NETWORK SECURITY BY DESIGN

- Intuitive network visualization for easy implementation of security and compliance requirements
- Detailed filtering and validation of applications and protocols
- Protection against spam, viruses, malware, and complex cyber attacks
- Security with R&S® PACE2 deep packet inspection
- Preventive security against zero-day threats through integrated sandboxing and machine learning
# OVERVIEW OF MODELS – DETAILS

<table>
<thead>
<tr>
<th>R6S® Unified Firewalls</th>
<th>R6S®UF-100</th>
<th>R6S®UF-200</th>
<th>R6S®UF-300</th>
<th>R6S®UF-500</th>
<th>R6S®UF-900</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Network interfaces</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ports</td>
<td>4x GE copper</td>
<td>4x GE copper</td>
<td>8x GE copper</td>
<td>14x GE copper</td>
<td>8x GE copper (for 8x GE copper, include 2x GE copper and 2x GE SFP fiber)</td>
</tr>
<tr>
<td><strong>System performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPS/IDS throughput (Mbps)</td>
<td>550</td>
<td>635</td>
<td>1,295</td>
<td>3,780</td>
<td></td>
</tr>
<tr>
<td>Firewall throughput (Mbps)</td>
<td>3,800 (UDP)</td>
<td>7,700 (UDP)</td>
<td>13,400 (UDP)</td>
<td>60,000 (UDP)</td>
<td></td>
</tr>
<tr>
<td>VPN throughput (Mbps)</td>
<td>430 (IPSec)</td>
<td>620 (IPSec)</td>
<td>1,260 (IPSec)</td>
<td>4,280 (IPSec)</td>
<td></td>
</tr>
<tr>
<td>Concurrent sessions</td>
<td>1,000,000</td>
<td>1,000,000</td>
<td>1,000,000</td>
<td>2,000,000</td>
<td>16,700,000</td>
</tr>
<tr>
<td>New sessions per second</td>
<td>11,000</td>
<td>11,000</td>
<td>13,000</td>
<td>33,000</td>
<td>130,000</td>
</tr>
<tr>
<td>Number of users</td>
<td>5-30 concurrent users</td>
<td>5-30 concurrent users</td>
<td>30-100 concurrent users</td>
<td>100-200 concurrent users</td>
<td>100 concurrent users, extendable in steps of 100 to max. 500</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input voltage (V)</td>
<td>100-240</td>
<td>100-240</td>
<td>100-240</td>
<td>100-240</td>
<td>100-240</td>
</tr>
<tr>
<td>Power consumption (W)</td>
<td>36</td>
<td>36</td>
<td>150</td>
<td>150</td>
<td>2 x 300</td>
</tr>
<tr>
<td><strong>Operating environment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature (°C)</td>
<td>0-40</td>
<td>0-40</td>
<td>0-40</td>
<td>0-40</td>
<td>0-40</td>
</tr>
<tr>
<td>Relative humidity (%)</td>
<td>5-90</td>
<td>5-90</td>
<td>20-90</td>
<td>20-90</td>
<td>5-90</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WxHxD (mm)</td>
<td>220 x 44 x 176</td>
<td>220 x 44 x 176</td>
<td>438 x 44 x 292</td>
<td>431 x 44 x 305</td>
<td>431 x 44 x 468</td>
</tr>
</tbody>
</table>
NEW IN OS 10.2
MAJOR REDESIGN OF SECURITY SW-MODULES

› NEW Sandboxing
› NEW Machine learning
› NEW Deep packet inspection
› NEW SSL inspection
› NEW Intrusion detection
› NEW Intrusion prevention
› NEW Antivirus
› NEW Application layer firewall and control
› Content filter
› VPN
SUMMARY

NETWORK MEETS SECURITY
SUMMARY
NETWORK MEETS SECURITY

› Two leading German brands join forces
› Full integration of the R&S®Unified Firewalls
› LANCOM Management Cloud provides a trustful Central Security & SDN Management Platform
THANK YOU
VERY MUCH!