



# LCOS

## 10.90

### More operational security and future-proofing for your SD-WAN

LCOS 10.90 makes your SD-WAN even more powerful and secure. With the ability to configure up to eight Quality of Service queues (QoS queues), business-critical services will always receive the necessary bandwidth. At the same time, you're taking the first steps toward protecting against future threats from quantum computers: post-quantum preshared keys for IKEv2 help safeguard your VPN connections against potential attacks today. Additionally, MOBIKE for IKEv2 ensures seamless VPN stability when switching networks—without the need to reconnect. And VRRPv3 for IPv6 enables reliable router redundancy and guarantees maximum fail-safety even in mixed operation with IPv4 and IPv6.

- Ensuring business-critical applications with support for eight QoS queues
- MOBIKE in the VPN for accelerated roaming
- Proactive against quantum computers: future-proof VPNs with post-quantum preshared keys
- Maximum reliability with VRRPv3 for dual-stack networks



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## LCOS 10.90 Highlights

### Ensuring business-critical applications with support for eight QoS queues

This feature allows you to configure up to eight different queues (service classes) with corresponding priority levels for network applications (e.g., „VoIP“, „Gold“, „Silver“, or „Best Effort“). Your data packets are assigned to the appropriate Quality of Service (QoS) class through DSCP markings or firewall rules. The gateway then sorts the packets into the correct priority level and ensures that the respective services only use as much upload bandwidth as you have pre-configured for their class, either as a percentage or in Mbps. In this way, it is ensured that important services like VoIP or video calls always receive sufficient bandwidth, even when the network is heavily utilized.

### MOBIKE in the VPN for accelerated roaming

With the MOBIKE extension for IKEv2, VPN clients can seamlessly switch between different networks (e.g., from Wi-Fi to cellular) without having to re-establish the VPN tunnel. The LANCOM Advanced VPN Client or LANCOM Trusted Access Client sends an update message with its new IP address to the SD-WAN gateway when switching networks. For you, this means no interruptions during VPN roaming—the connection remains stable.

### Proactive against quantum computers: future-proof VPNs with post-quantum preshared keys

The ongoing advancement of quantum computers presents fundamental challenges for traditional encryption technologies, including VPNs. This makes it even more important to prepare accordingly. With post-quantum preshared keys (PQ-PSK or PPK) for IKEv2, you can take the first steps toward enhancing security. This technology adds additional security mechanisms to protect VPN encryption against potential quantum-computer attacks.

Looking ahead, future LCOS versions will successively provide more features to further secure your networks—ensuring full protection even if quantum computers should become capable of breaking traditional encryption methods.

### Maximum reliability with VRRPv3 for dual-stack networks

VRRPv3 for IPv6 enables you to implement router redundancy in IPv6 networks or in dual-stack environments (simultaneous use of IPv4 and IPv6). This increases operational security, as if one router fails, another can automatically take over. This function is ideal for modern networks that support both IPv4 and IPv6, as it ensures seamless redundancy in both protocols.

## Further features

With LCOS 10.90, the router can dynamically assign VLANs via RADIUS to IEEE 802.1X clients on the LAN. Complex physical infrastructure, such as dedicated switches, is not required to perform VLAN separation and assignment. Since the router handles the entire LAN security structure, this feature is ideal for small locations.

Many other improvements for the administration and operation of modern networks