

# Information regarding

# LCOS Software Release 10.00 RC1

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# 1. Preface

LCOS ("LANCOM Operating System") is the operating system for all LANCOM routers, wireless LAN access points and WLAN controllers. In the context of the hardware given by the products the at a time latest LCOS version is available for all LANCOM products and is available free of charge for download from LANCOM Systems.

This document describes the innovations within LCOS software release 10.00 RC1, as well as the improvements since release 9.24.

## Warning hint - Backing up the current configuration

Before upgrading your device to a new LCOS version it is essential to backup the configuration of your router. Due to extensive features it is not possible to downgrade to a previous firmware without using the backup configuration.

Please see the reference manual for instructions on how to backup the router configuration.

If you want to upgrade devices which are only accessible via router connections or WLAN bridges, please keep in mind to upgrade the remote device first and the local device afterwards.

#### Advice

LANCOM 178x 4G: To avoid delayed connection establishments within mobile radio (eg in case of backup) it is recommended to use the latest firmware version 3.5.24 for the LTE mobile modem (Sierra MC-7710). Please refer also to the following Knowledgebase article: <u>Link</u>

#### Upgrading central site components

We strongly recommend updating productive systems only after internal tests in client environment. Despite intense internal and external quality assurance procedures possibly not all risks can be eliminated by LANCOM Systems.

#### Using converter firmwares

To use any firmware from version 8.8 in your LANCOM 1722 1723, 1724 and in the L-320agn, L-321agn and L-322agn (less than hardware release E), enough space must be available in the memory of your device.

Due to the implementation of several new features within the current build of the firmware, it is no longer possible to store two main firmware versions side by side. To gain more free space for the current version, it is now necessary to upload a converter firmware into your device. The converter-firmware has a much smaller size, so that it is now possible to store the main release of the firmware besides the converter-firmware.

This setup is only necessary once for a single device and is done with the so-called converterfirmware (see readme.pdf of the affected devices).

After having flashed the converter-firmware the firmsave function of the LANCOM device is available only on a limited scale. The update to a newer firmware is furthermore possible. However, in case of an update failure the LANCOM will only work with a minimal-firmware which allows just local access to the device. Any extended functionality, in particular remote administration, is not possible when running the minimal-firmware.





#### **Dynamic VPN registration**

By reason of patent you have to register the functionality "Dynamic VPN" with IP address transmission over ISDN. This operating mode is usually required when you configure a VPN tunnel with dynamic IP addresses on both sides without dynamic DNS services.

Any other Dynamic VPN operation mode (e.g. transmitting the IP address via ICMP, provoking a callback etc.) does not require registration.

The registration process is fully anonymous - no personal or company data will be transmitted.

The registration of the Dynamic VPN option requires administrator rights on the LANCOM device.

#### Device specific support of the current LCOS version

As from LCOS 8.84 support for the following devices is discontinued:

- Telekom R800+
- LANCOM 821+
- LANCOM 1611+
- LANCOM 1711
- LANCOM 1821n

As from LCOS 9.00 support for the following devices is discontinued:

- Telekom R1011
- LANCOM 1823 VoIP
- LANCOM L-54 Wireless
- LANCOM 1751 UMTS
- LANCOM 8011
- LANCOM 7111
- LANCOM C-54ag

As from LCOS 9.04 support for the following devices is discontinued:

- LANCOM 1711+ VPN
- LANCOM 1721+ VPN
- LANCOM 1722 VoIP
- LANCOM 1723 VoIP
- LANCOM 1724 VoIP
- LANCOM 1811n Wireless
- LANCOM 1821+ Wireless ADSL
- LANCOM 3850 UMTS
- LANCOM 800+
- LANCOM DSL/I-10+
- LANCOM L-315agn dual Wireless
- LANCOM OAC-54-1 Wireless
- LANCOM OAP-310agn Wireless
- LANCOM OAP-54 Wireless
- LANCOM WLC-4006
- LANCOM WLC-4025
- LANCOM XAC-40-1
- Swyx 1722 VoIP
- Swyx 1723 VoIP
- Swyx 1724 VoIP

As from LCOS 10.00 support for the following devices is discontinued:

- LANCOM L-320agn Wireless (less than Hardware Release G)
- LANCOM L-320agn Wireless (white) (less than Hardware Release G)
- LANCOM L-321agn Wireless (less than Hardware Release G)
- LANCOM L-322agn dual Wireless (less than Hardware Release G)

**Hint:** The LANCOM access points of the L-32x series with the name addition R2 (LANCOM L-32x R2 or equal or above Hardware Release G) are not affected by this and continue to receive current LCOS versions.

**Note:** Even if devices do not support the latest LCOS version, they will still be maintained with LCOS Release Updates including bugfixes and general improvements on a regular basis.

The latest LCOS version overview can be found on our website under <u>https://www.lancom-systems.com/products/lcos/version-overview/</u>.

# 2. Known Issues

Latest support notes and known issues regarding the current LCOS version can be found in the support area of our website <u>https://www.lancom-systems.com/service-support/instant-help/common-support-tips/</u>

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# LCOS improvements 9.24.0153 RU3 > 10.00.0063 RC1

## **New Features:**

## **Network Connectivity:**

- Support for the LANCOM Management Cloud
- IPv6 support within the Voice Call Manager
- Support for SIPS and SRTP on the client's side in the Voice Call Manager
- Support for tunnel password- and LCS routing tag attribute by the internal RADIUS server
- Support for layer 7 application detection
- SIP line extension for the VoIP+10 option by additional 10
- The number of default SIP lines is increased from 20 to 25 lines
- New status table for recent admin logins
- SIP trunk support within the LAN
- Incoming requests for SIP-PBX lines can be restricted

## WLAN:

Support for RADIUS CoA within the WLAN

## **Bugfixes / Improvements:**

## Network Connectivity:

- RADIUS authentication via VPN works again if WAN access is configured to "only via VPN"
- End marker for unencrypted LCF/LCS files
- The Outbound proxy parameter was removed and is set automatically now

## WLAN:

- The firmware version can be optionally used within the WLC script management
- The first comment entry in the LANCOM device can be set from a WLC

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# LCOS improvements 9.24.0076 RU2 ► 9.24.0153 RU3

## Important notice to the update:

By default, SNMP access is disabled via WAN interface. If WAN access for SNMP was activated manually by configuration, access to SNMPv1 / SNMPv2 must be activated manually after the firmware update. The previous configuration setting for SNMP is retained for SNMPv3.

## **Bugfixes / Improvements:**

#### **Network Connectivity:**

- Fixed an issue which led to noise interference on clearmode connections
- Fixed an issue with noise interference on incoming SIP calls
- WLC script rollout works again
- Improved IKEv2 re-keying
- IKEv2 VPN connections are established reliably

#### WLAN:

The confirmation page after a successful login is hidden earlier



# Comments

If you want to upgrade the firmware of your device to a new version, please install the latest LCMS version first. **Before running the firmware-upload you should save the router configuration to a file**. After that you can use LANconfig to load the latest LCOS-version into the device.

In principle, we suggest upgrading the firmware of your device only if you are in need of the latest features.

Please note that different firmware files might be available for your device. Further information can be found in the file README.PDF in the download area of our homepage.