

# Information regarding

## LCOS Software Release 10.10 RU2

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## 1. Preface

LCOS ("LANCOM Operating System") is the operating system for all LANCOM routers, wireless LAN access points and Wi-Fi 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 10.10 RU2, as well as the improvements since release 10.10 Rel.

## 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 Wi-Fi 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: Link

#### 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 converter-firmware (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 minimalfirmware.





#### **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 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)
- > LANCOM 1681V
- > LANCOM 1781EF
- > LANCOM 1781EW
- > LANCOM 1780EW-3G
- > LANCOM 7100
- > LANCOM 9100
- > LANCOM OAP-382

**Note:** 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:** LCOS release updates including bugfixes and general improvements are available on a regular basis for devices which do not support the latest LCOS version. You can find an overview of the latest supported LCOS version for your device under

https://www.lancom-systems.com/products/lcos/lifecycle-management/product-tables/

## 2. Known Issues

Latest support notes and known issues regarding the current LCOS version can be found in the support area of our website

https://www.lancom-systems.com/service-support/instant-help/common-support-tips/

## 3. New Features, improvements, and history

Devices delivered with LCOS 10.00 or higher automatically connect to the LANCOM Management Cloud (LMC). This functionality provides zero-touch installation for new devices. In case you do not want to use the LMC, this feature can be disabled while running the default setup wizard for the initial configuration, or at any time from within LANconfig under Management > LMC. You can manually re-enable the usage of the LMC whenever you want.

## LCOS improvements 10.10.0102 RU1 ► 10.10.0133 RU2

### **New Features**

## General

> Support for the LANCOM vRouter

## **Bugfixes / improvements:**

#### General

- > The power LED of a LANCOM access point does not show the status of the LANCOM Management Cloud if the device is managed by a LANCOM WLAN Controller.
- > The table /Status/VPN/LMC will not get empty while the configured VPN connections are still active.
- If two networks of the types "DMZ" and "Intranet" are allocated to the same LAN interface / VLAN, a new LAN interface lookup won't allocate the DMZ to the received packet. Thus, a DHCP client offer will not be ignored.

## Wi-Fi

- > If the 802.11ac module of a LANCOM LN-86x is configured in client mode, the displayed Phy signal does no longer alternate.
- > If it comes to an unexpected error while initializing the Wi-Fi modules of a LANCOM LN-86x/LN-17xx, the Wi-Fi modules can be accessed accessed, though.
- > Corrected display of the waterfall view in the spectral scan of the LN-1702





## LCOS improvements 10.10.0092 Rel ► 10.10.0102 RU1

### **Bugfixes / improvements:**

#### Wi-Fi

> Even after having received a static intranet IP address or VLAN ID by a WLAN controller the appropriate accesspoint is still available per IPv4 without a restart.

#### LCOS improvements 10.10.0092 Rel

Initial firmware release with support for the new LANCOM devices LN-1700, LN-1702, LN-862, and LN-860

## Comments

If you want to upgrade the firmware of your device to a new version, please install the latest LANtools 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.