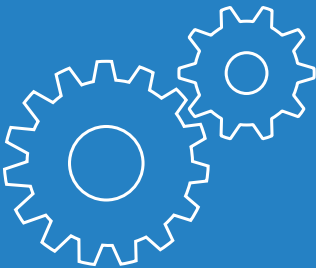


# LANCOM R&S<sup>®</sup> Unified Firewalls Migration Guide



## Copyright

© 2020 LANCOM Systems GmbH, Wuerselen (Germany). All rights reserved.

While the information in this manual has been compiled with great care, it may not be deemed an assurance of product characteristics. LANCOM Systems shall be liable only to the degree specified in the terms of sale and delivery.

The reproduction and distribution of the documentation and software supplied with this product and the use of its contents is subject to written authorization from LANCOM Systems. We reserve the right to make any alterations that arise as the result of technical development.

Windows® and Microsoft® are registered trademarks of Microsoft, Corp.

LANCOM, LANCOM Systems, LCOS, LANcommunity and Hyper Integration are registered trademarks. All other names or descriptions used may be trademarks or registered trademarks of their owners. This document contains statements relating to future products and their attributes. LANCOM Systems reserves the right to change these without notice. No liability for technical errors and/or omissions.

Products from LANCOM Systems include software developed by the “OpenSSL Project” for use in the “OpenSSL Toolkit” ([www.openssl.org](http://www.openssl.org)).

Products from LANCOM Systems include cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)).

Products from LANCOM Systems include software developed by the NetBSD Foundation, Inc. and its contributors.

Products from LANCOM Systems contain the LZMA SDK developed by Igor Pavlov.

This product contains separate open-source software components. These are subject to their own licenses, in particular the General Public License (GPL). If the respective license demands, the source files for the corresponding software components will be made available on request. Please contact us via e-mail under [gpl@lancom.de](mailto:gpl@lancom.de).

LANCOM Systems GmbH  
Adenauerstr. 20/B2  
52146 Wuerselen  
Germany

[www.lancom-systems.com](http://www.lancom-systems.com)

Wuerselen, February 2020

# Table of Contents

<b>Copyright</b>	<b>1</b>
<b>Introduction</b>	<b>3</b>
Target group	3
Chapter overview	3
<b>To be checked before the upgrade</b>	<b>5</b>
Supported devices	6
Removed functions	6
Manual settings	7
<b>Upgrade procedure</b>	<b>8</b>
Upgrading the LANCOM R&S®Unified Firewall from versions 9.6 and 9.8	9
Upgrading the LANCOM R&S®Unified Firewall from versions 9.4 and 9.5	10
Installing LCOS FX 10.4 from a USB-Stick	11
Upgrading the LANCOM R&S®Unified Firewall to version 9.6 followed by the upgrade to LCOS FX 10.4	12
Upgrading the LANCOM R&S®Unified Firewall prior to version 9.4	13
<b>First steps</b>	<b>15</b>
<b>Contact, Service, and Support</b>	<b>16</b>

## Introduction

This LANCOM R&S®Unified Firewall Migration Guide describes how to upgrade the software of your LANCOM R&S®Unified Firewall to LCOS FX 10.4 or newer.

### Target group

This document is intended for network and computer technicians who are responsible for installing and configuring the systems of the LANCOM R&S®Unified Firewall.

### Chapter overview

The contents of this document will assist you in upgrading your LANCOM R&S®Unified firewall and in the steps required after the upgrade.

This document contains the following chapters:

- Chapter “To be checked before the upgrade” on page 5  
*Steps to consider before the upgrade*
- Chapter “Supported devices” on page 6  
*Hardware supported by version LCOS FX 10.4*
- Chapter “Removed functions” on page 6  
*A list of functions that the LANCOM R&S®Unified Firewall does not provide in LCOS FX 10.4 and above*
- Chapter “Manual settings” on page 7  
*Settings that you must manually reconfigure after the upgrade*
- Chapter “Upgrading the LANCOM R&S®Unified Firewall from versions 9.6 and 9.8” on page 9  
*Upgrade information for versions 9.6 and 9.8 of the LANCOM R&S®Unified Firewall*

- Chapter “Upgrading the LANCOM R&S®Unified Firewall from versions 9.4 and 9.5” on page 10  
*Upgrade information for versions 9.4 and 9.5 of the LANCOM R&S®Unified Firewall*
- Chapter “Upgrading the LANCOM R&S®Unified Firewall prior to version 9.4” on page 13  
*Upgrade information for versions of the LANCOM R&S®Unified Firewall prior to 9.4*
- Chapter “First steps” on page 15  
*First steps for using your LANCOM R&S®Unified Firewall with LCOS FX 10.4 after the upgrade*
- Chapter “Contact, Service & Support” on page 16  
*Contact points in case of difficulties during the upgrade*

## To be checked before the upgrade

Before upgrading your LANCOM R&S®Unified Firewall to the latest LCOS FX version, please note the following:

- Make sure that your hardware is supported. A list containing all supported devices is available in the chapter “Supported devices” on page 6.
- On devices with less than 4 GB memory not all UTM settings can be available at the same time.
- If you operate two LANCOM R&S®Unified Firewalls in high availability mode, note the following:
  - Disable the high availability mode before upgrading your LANCOM R&S®Unified Firewalls to LCOS FX 10.4.
  - You have to follow the upgrade instructions for both devices separately.
  - After the upgrade, configure the high availability settings of both devices as described in the LANCOM R&S®Unified Firewall user manual.
- As from LCOS FX 10.2, a centralized management of the LANCOM R&S®Unified Firewall is only possible via the LANCOM R&S®UF Command Center as from version 6.
- Make sure that your configuration does not need any mandatory settings described in the chapter “Removed functions” on page 6.
- Some settings are not automatically transmitted to LCOS FX 10.4 of the LANCOM R&S®Unified Firewall. See chapter “Manual settings” on page 7.
- If your configuration contains specific backend scripts created by the technical support, these are disabled on migration and have to be re-enabled again by the support after migration.

## Supported devices

LCOS FX 10.4 is supported by the following devices:

- > GPO150
- > GPA300/500
- > GPX850
- > GPZ1000/2500/5000
- > UTM+100/200/300/500/800/1000/2000/2500/5000
- > NP+200/500/800/1000/2000/2500/5000
- > GP-U 50/100/200/300/400/500
- > GP-E 800/900/1000/1100/1200
- > GP-S 1600/1700/1800/1900/2000
- > GP-T 10
- > UF-50/100/200/300/500/900/1000/1200/2000
- > UF-T10

## Removed functions

The following functions are not available in LCOS FX 10.4:

- > VPN connection via PPTP
- > LAN accounting
- > VPN SSL bridges
- > Desktop notes
- > Dynamic routing
- > Connection-specific DNS server
- > Centralized management of the LANCOM R&S®Unified Firewall via the gateprotect Command Center. Instead, use the LANCOM R&S®Unified Firewall Command Center.

## Manual settings

The following settings are not updated automatically when upgrading to LCOS FX 10.4. After the upgrade, reconfigure these settings according to your requirements.

- > High availability
- > Monitoring
- > Traffic shaping and QoS
- > Application filter - valid for version 9.6
- > Mailproxy certificates - valid for version 9.8
- > IDS/IPS
- > HTTPS proxy certificates
- > Reverse proxy

Detailed Information on how to configure the above settings can be found in the user manual of the current LCOS FX version.



## Upgrade procedure

In the following chapters you will find instructions for upgrading your LANCOM R&S®Unified Firewall to LCOS FX 10.4:

Installed version	Chapter
≥10.0	Refer to the LCOS FX User Manual under “Update settings” for more information on upgrading your LANCOM R&S®Unified Firewall to LCOS FX 10.4 using the web client.
9.8	Chapter “Upgrading the LANCOM R&S®Unified Firewall from versions 9.6 and 9.8” on page 9
9.7	Note: Contact our sales department if your device is not listed under supported devices. Note: An upgrade of the LANCOM R&S®Unified Firewall to LCOS FX 10.4 is not supported by version 9.7. Instead, a complete reinstallation has to be performed. In the chapter “Installing LCOS FX 10.4 from a USB stick” on page 11 you will find information on the manual installation of LCOS FX 10.4.
9.6	Chapter “Upgrading the LANCOM R&S®Unified Firewall from versions 9.6 and 9.8” on page 9
9.5 / 9.4	Chapter “Upgrading the LANCOM R&S®Unified Firewall from versions 9.4 and 9.5” on page 10
< 9.4	Chapter “Upgrading the LANCOM R&S®Unified Firewall prior to version 9.4” on page 13

## Upgrading the LANCOM R&S®Unified Firewall from versions 9.6 and 9.8



If the upgrade process is interrupted, the LANCOM R&S®Unified Firewall can be damaged. Do not power off the device during the upgrade process. Only restart the device if you are explicitly requested to do so.

- If you are upgrading the LANCOM R&S®Unified Firewall from version 9.8, configure the external access to the Web client in advance (“Settings > Firewall > Security > Access”).
- If you are using a device with less than 4 GB memory, disable the UTM settings. Otherwise, the upgrade may fail.
- In the gateprotect administration client, open the update manager (“Settings > Updates”).
- Select “Upgrade from v9.x to 10.4”.  
Tip: If the upgrade is not listed, click on “Refresh”.

Note: Before upgrading, all patches have to be installed. To install some patches, the LANCOM R&S®Unified Firewall may have to be restarted. You can find out whether a restart is necessary in the description of the respective patches.

- Click on “Install”.
  - The upgrade is downloaded automatically.
  - The LANCOM R&S®Unified Firewall restarts after the download is complete.

Note: Depending on the device type, the integrity check of the upgrade can take some time.

The LANCOM R&S®Unified Firewall installs the upgrade automatically.

Note: The installation can take up to 30 minutes.

After the installation, the LANCOM R&S®Unified Firewall restarts automatically.

- Close the gateprotect administration client.

If the upgrade fails or the device reboots and the old version is still installed, please refer to the log files for further information.

For information on how to access the web client of the LANCOM R&S®Unified Firewall, refer to chapter “First steps” on page 15.



If you are using a device with less than 4 GB memory, re-enable the required UTM settings. Not all UTM settings can be active on these devices at the same time. For more information, refer to the LCOS FX user manual.

## Upgrading the LANCOM R&S®Unified Firewall from versions 9.4 and 9.5

For upgrading the LANCOM R&S®Unified Firewall from versions 9.4 and 9.5 the following options are available:

- > Option 1 (recommended): Installation of LCOS FX 10.4 from a USB stick.
- > Option 2 (not recommended): Upgrade of the LANCOM R&S®Unified Firewall to version 9.6 with a subsequent upgrade to LCOS FX 10.4.

## Installing LCOS FX 10.4 from a USB stick



If the upgrade process is interrupted, the LANCOM R&S®Unified Firewall can be damaged. Do not power off the device during the upgrade process. Only restart the device if you are explicitly requested to do so.

- Start the gateprotect administration client and create a backup of your configuration (“File > Create backup”).
  - Proceed as follows to create a bootable USB stick:
    - Connect the USB stick to your computer.
    - Open your browser and enter the following URL in the address bar:  
<https://www.mygateprotect.com>  
Navigate to “Downloads > Firewall (Full version)”.
    - For LCOS FX 10.4 download the following files:
      - The LANCOM R&S®Unified Firewall system image (ISO file)
      - The USB installer (EXE file)
    - Execute the USB installer.  
The USB installation wizard opens.  
The wizard guides you through the configuration. Please note:
      - On the page “Select the R&S Cybersecurity ISO file” select the ISO file you have downloaded previously.
      - On the page “Select a backup file (optional)” select the backup file you have created previously.
- When the message “Configuration successfully completed” is displayed, you have created a bootable USB stick for installing the new system image.
- Remove the USB stick from your computer.



Never connect the USB stick to a computer while booting. In this case, an unattended installation of the LANCOM R&S®Unified Firewall is executed. During this installation, the hard drives are formatted.

- Proceed as follows to install the system image from the bootable USB stick:
  - Power off the device.
  - Connect the USB stick with the new system image to any USB port of the device. Power on the device to start the unattended installation of the system image. The device switches off automatically when the installation process has completed successfully.
  - Remove the USB stick after the device has powered off.



We recommend that you reformat the USB stick after having completely installed the latest software version of the LANCOM R&S®Unified Firewall. This prevents accidental installation of the system image, which would result in formatting the hard disks and data loss.

After installation, reconfigure those settings that were not automatically transferred during the upgrade. See chapter “Manual settings” on page 7.

If the upgrade fails or the device reboots and the old version is still installed, please refer to the log files for further information.

For information on how to access the web client of the LANCOM R&S®Unified Firewall, refer to chapter “First steps” on page 15.

## **Upgrading the LANCOM R&S®Unified Firewall to version 9.6 followed by the upgrade to LCOS FX 10.4**

- Repeat the steps in the chapter “Upgrading the LANCOM R&S®Unified Firewall prior to version 9.4” on page 13, until you reach version 9.6.
- Perform the upgrade of the LANCOM R&S®Unified Firewall to LCOS FX 10.4 as described in chapter “Upgrading the LANCOM R&S®Unified Firewall from versions 9.6 and 9.8” on page 9.

## Upgrading the LANCOM R&S®Unified Firewall prior to version 9.4



If you operate a gateprotect Firewall or a LANCOM R&S®Unified Firewall older than version 9.4, you first have to upgrade the device software to version 9.4.



If the upgrade process is interrupted, the LANCOM R&S®Unified Firewall may be damaged. Do not power off the device during the upgrade process. Only restart the device if you are explicitly requested to do so.

- In the gateprotect administration client, open the update manager (“Settings > Updates”).  
Tip: If the upgrade to the next higher version is not listed, click “Refresh”. Before the upgrade make sure that all patches are installed. To install a patch. To install a patch, follow the steps described below.
- Select the next higher version.
- Select “Install”.  
The upgrade will be downloaded and installed automatically.  
Note: The installation can take up to 30 minutes.
- After the installation has completed, close the gateprotect administration client. In the logout window, select the option “Restart”.  
Tip: For some patches, a device restart is required. Please refer to the corresponding patch description for further information.
- Each software version of the LANCOM R&S®Unified Firewall requires a particular version of the gateprotect administration client. This can be downloaded under <https://mygateprotect.com>.
  - Go to “Downloads > Management Tools”.
  - Download the installer for your LANCOM R&S®Unified Firewall version.
  - Install the gateprotect administration client.
  - Start the gateprotect administration client.

- If your current software version is still older than version 9.4, repeat the above steps from step 2.

As soon as you have upgraded to version 9.4, you can continue with the steps in the chapter “Upgrading the LANCOM R&S®Unified Firewall from versions 9.4 and 9.5” on page 10.

If the upgrade fails or the device reboots and the old version is still installed, you will find further information in the log files.

## First steps

After having installed LCOS FX 10.4, you can access the LANCOM R&S®Unified Firewall as follows:

- > Open your browser.
- > In the browser's address bar, enter <IP address>:3438.  
Replace here <IP address> by the current IP address of your LANCOM R&S®Unified Firewall.
- > Create an exception for the certificate warning.  
The login page of the LANCOM R&S®Unified Firewall appears.
- > Enter the same credentials that you have previously used in the gateprotect administration client.
- > Click on "Login".
- > After login, you will be asked to agree to the End User License Agreement (EULA).
- > To agree to the EULA, select "Accept & Login".  
The web client will be opened.

For information on the first steps with LCOS FX 10.4 on the LANCOM R&S®Unified Firewall, refer to the operating manual. You can find the operating manual under "Help" in the upper right corner of the screen. It provides a general introduction to the software and detailed descriptions of the configuration dialogs.



## Contact, Service & Support

You can get support from the following sources:

- LANCOM R&S® Unified Firewall operation manual
- Our distribution partners
- LANCOM Support (<https://www.lancom-systems.com/service-support/support-garantie/support-kontakt/>)