Release Notes

LCOS FX 10.13 RU2

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1. Preface

The LANCOM family of operating systems—LCOS, LCOS SX, LCOS LX, and LCOS FX—forms the trusted basis for the entire LANCOM range of products. Within the scope of the hardware specified by the products, the latest firmware version is available for all LANCOM products and is offered by LANCOM Systems for download free of charge.

This document describes the innovations within software release LCOS FX 10.13 RU2.

2. The release tag in the software name

Release Candidate (RC)
A Release Candidate has been extensively tested by LANCOM and includes new LCOS featurses. It is suitable for testing and is not recommended for use in productive environments.

Release Version (REL)
The release version has been extensively and successfully tested in practice. It contains new features and improvements over previous LANCOM operating system versions and is therefore recommended for use in productive environments.

Release Update (RU)
A release update is a further development of an initial release version in productive environments and contains minor improvements, security fixes, bug fixes and smaller features.

Security Update (SU)
Contains important security fixes for the respective LANCOM operating system version and ensures that your security level remains very high on an ongoing basis in your productive environment.

3. Supported hardware

Version 10.13 RU2 supports the following hardware appliances:

- → LANCOM R&S®Unified Firewalls
  UF-50/60/60 LTE/T-60/100/160/200/260/300/360/500/760/900/910
- → R&S®UF-50/100/200/300/500/800/900/1000/1200/2000
- → R&S®UF-T10
- → R&S®UTM+100/200/300/500/800/1000/2000/2500/5000
- → R&S®NP+200/500/800/1000/2000/2500/5000
- → R&S®GP-U 50/100/200/300/400/500
- → R&S®GP-E 800/900/1000/1100/1200
- → R&S®GP-S 1600/1700/1800/1900/2000
- → R&S®GP-T 10

Version 10.13 RU2 supports the following virtual appliances:

- → LANCOM vFirewall S, M, L, XL
- → R&S®UVF-200/300/500/900

Version 10.13 RU2 supports the following hypervisors:

- → VMware ESXi
- → Microsoft Hyper-V
- → Oracle VirtualBox
- → KVM

4. History LCOS FX

LCOS FX improvements 10.13 RU2

Bugfixes

→ When using an IPSec connection and port forwarding at the same time, packets sent via the IPSec connection for the ports used in port forwarding were sent to the port forwarding destination instead of the actual destination. This led to restricted communication via the VPN connection.

→ If the mail proxy was activated in the configuration of the Unified Firewall after an update to LCOS FX 10.13 Rel or 10.13 RU1, a mail server (e. g. Microsoft Exchange) could no longer receive e-mails. If the inbound proxy (SMTP-IN) was deactivated, e-mail reception worked again.

→ After logging in with read authorization on the web interface of the Unified Firewall, connections between desktop objects were no longer displayed.

→ An update to the Squid proxy has fixed a vulnerability in the web proxy that allowed attackers to smuggle data through the proxy using request/response packets in HTTPS 1.1 or ICAP.

→ If a curl command with POST data was entered as a heartbeat via the web interface, the Unified Firewall did not assemble the command correctly. As a result, the command was not executed and was instead acknowledged with error messages.

→ When using the UTM features ‘Antispam and Contentfilter’, it could happen that the responsible process (bdamserver) utilized a CPU core to 100 %. This resulted in websites being opened very slowly.

→ With the VPN service (xipsecd), it could happen that duplicate instances were displayed for a VPN tunnel configuration.

LCOS FX improvements 10.13 RU1

Note

Due to an adaptation of the REST API, the LMC add-ins must also be adapted accordingly.

Bugfixes

→ After an update to LCOS FX 10.13 REL, it could happen that the rules for IPSec connections could no longer be written. As a result, communication via IPSec connections was only possible to a limited extent or not at all.

→ After installing an LCOS FX 10.13 Rel ISO file and importing a backup file with an error-free DNS configuration, the DNS name resolution of the Unified Firewall no longer worked. As a result, anti-virus signatures, for example, could no longer be updated.

LCOS FX improvements 10.13 Rel

Bugfixes

→ After configuring an IPSec connection via the LMC, it could happen after some runtime that monitoring information was not always transmitted to the LMC. This resulted in the monitoring information in the LMC being incomplete.

→ When the Content Filter was used in DNS web filter mode, it could happen that DNS requests from devices in the local network were blocked. As a result, the requested resources could not be accessed by the devices.

→ In individual cases, it could happen that the route of a WAN connection with transfer network was not written to the associated routing table. In such a case, access from the transfer network to the Unified Firewall was not possible, because the Unified Firewall sent the response to the default gateway in the transfer network instead of to the requesting device.

→ If a configuration menu was called whose feature was not included in the license used (e.g. IDS/IPS on a UF-60 Unified Firewall), the menu was displayed in read mode with missing write permissions.
For corresponding configuration menus, a message is now displayed that the feature is not supported by the license.

→ Apple devices with iOS 17.0.3 could not establish an IPsec VPN connection via default iOS profile to the Unified Firewall, because the security profile of the Unfied Firewall did not match. The encryption profile ‘AES-GCM 256 bit with 128 bit ICV’ has now been added to the firewall configuration so that VPN connections can be established again.

→ If the web client certificate was replaced in the ‘Firewall / Firewall access / Web client’ menu, the new certificate was retained until the firewall was restarted. After the restart, the certificate was reset to the default LCOS FX certificate.

→ It could happen that firmware updates were executed although they were supposed to be installed at a different time according to the configured schedule. This behavior occurred especially when a configuration was rolled out from the LMC to the Unified Firewall.

LCOS FX improvements 10.13 RC1

New features

→ **New dialog for connecting desktop objects**

The redesigned dialog for connecting desktop objects provides an optimized overview for complex firewall rules including inheritance. The new feature includes the display of rules defined between parent objects in the table view. This enhanced view allows you to see the entire hierarchy of rules at a glance, while taking into account both selected services and the rules between parent objects.

Further improvements

→ For route-based IPSec connections, the MTU can be set to solve packet size issues in some scenarios.
→ For monitoring WAN connections, tcp_probe can be used with hostnames.
→ Curl can be used to monitor WAN connections.

Bugfixes

→ Due to a change in the encryption algorithms of the OpenVPN client as of version 2.6.0, it was not possible to establish VPN connections to the Unified Firewall. The OpenVPN client from version 2.6.0 can now be used.
→ A WEBconfig tunnel established between the LMC and a Unified Firewall lost connection to the device when a desktop object was clicked in the configuration interface.
→ The line monitoring of a WAN connection via ‘tcp_probe’ did not work correctly. In a backup scenario, this resulted in the Unified Firewall not detecting a failure of the main line and not switching to the backup connection.
→ After a firmware update to LCOS FX 10.12, an activated notification function was deactivated and had to be reactivated manually.
→ In a load balancer scenario, IP packets were sent to a WAN connection even if it was offline.
→ It was not possible to use SNMPv3 with the 3DES privacy protocol. The selection for 3DES has now been removed from the configuration.
→ Exception rules could also be created for IDS/IPS if a user profile had ‘read-only’ permissions or if the Unified Firewall license had expired.

→ When using a backup connection, it could happen that traffic from an IPsec connection was sent to the backup connection even though it was not established.

→ For ‘Multi-WAN weighting’, values between 1 and 256 could be assigned, although the kernel only allows a maximum value of 253. If a value between 254 and 256 was stored, the Internet connection did not work.
Now only values between 1 and 253 can be assigned.

→ Re-keying with the hash algorithm SHA1 led to a connection termination and subsequent reestablishment for an IPSec connection.
Furthermore, the Unified Firewall selected the worse algorithm for an IPsec connection with multiple hash algorithms (e.g. SHA-256 when using SHA-256 and SHA-512).

→ In individual cases it could happen that the service ‘suricata’ generated a lot of error messages and stored them on the hard disk until it was full.

Additional information

→ SHA1, MD5, and 3DES have been removed from all IPSec default profiles. If you use IPSec connections with deprecated remote peers, SHA1, MD5, and 3DES can still be used with custom profiles. For security reasons, the use of SHA1, MD5, and 3DES is strongly discouraged!

5. Further information

→ Backups of versions 9.6, 9.8 und 10.X are supported.
→ Devices with less than 4 GB of RAM can not execute all UTM features simultaneously.

6. Disclaimer

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LANCOM Systems GmbH
Adenauerstr. 20/B2
52146 Wuerselen | Germany
info@lancom.de
www.lancom-systems.com