

# Release Notes

# LCOS SX

## 4.20 RU2

### Table of contents

02	<b>1. Preface</b>
03	<b>2. The release tag in the software name</b>
04	<b>3. New features, improvements, and history</b>
04	LANCOM GS-3200 / 3600 series - LCOS SX 4.20.0235 RU2
07	LANCOM GS-3200 / 3600 series - LCOS SX 4.20.0126 RU1
08	LANCOM GS-3200 / 3600 series - LCOS SX 4.20.0074 Rel
10	<b>4. Common advice</b>
10	Disclaimer
10	Support notes & known issues



## 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.

LCOS SX 4.20 is the operating system for all LANCOM switches of the GS-3200 and GS-3600 series.

The LCOS SX 5.xx operating system is available for all LANCOM switches of the GS-4500 and XS series.

The LCOS SX 4.00 operating system is available for all LANCOM switches of the GS-3100 / GS-3500 series.

The LCOS 3.32 operating system is available for all LANCOM switches of the GS-1300 / GS-2300 series.

The release notes for these device series can be found as usual on the LANCOM website in the download area of the respective switch.

This document describes the new features of the LCOS SX software release 4.20 RU2 as well as the changes and improvements to the previous version.

Before upgrading your device to a new firmware it is essential to **backup your device's configuration**.

Due to extensive features it is **not possible to downgrade** to a previous firmware without using the backup configuration.

Please note that different firmware files might be available for your device.

## 2. The release tag in the software name

### **Release Candidate (RC)**

A Release Candidate has been extensively tested by LANCOM and includes new LCOS features. 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. New features, improvements, and history

#### LANCOM GS-3200 / 3600 series - LCOS SX 4.20.0235 RU2

##### New features

- Network access control: Change of Authorization (CoA) according to RFC 5176 has been implemented
- The length of the user passwords has been extended to 128, the SNMP-USM passwords to 128 and the RADIUS secret to 64.
- The default SSH RSA key length has been extended to 4096 bits (previous keys are not automatically updated, details can be found in the CLI manual).
- SSH and SSL algorithms can now be configured (details can be found in the corresponding CLI manual).
- The MAC address format for 802.1X MAC-based Auth to the RADIUS server is now configurable.
- The syslog server configuration now allows IPv6 addresses, too.
- The LMC client now also works behind transparent HTTP proxies and supports proxy authentication.
- SYSLOG messages now contain the host name instead of the IP address.
- MAB authentication can now be assigned globally per switch (CLI command "dot1x macbased-credentials identity/password").

##### Bug fixes

- The data field for the 802.1X identity could not hold enough characters. The length of the field has now been extended.
- When configuring several VLANs in an MST instance via the detail configuration of the LMC, only the last VLAN was taken over by the switch. This meant that Spanning Tree did not work on the other VLANs.
- If a name server was specified in the detail configuration of the LMC that contained a 4-digit IP address (e.g. 9.9.9.9), this was provided with an appended '0' (e.g. 9.9.9.90) in the configuration of the switch after it was rolled out by the LMC.
- If a configuration with a password that did not fulfill the password policy was uploaded to the switch via SCP, the password then remained empty.
- If a new user with the user name 'root' and access rights for Web & SSH was created for a GS-3200 series switch, this account could only access the switch via a web browser. A login via SSH was rejected with the message "Account denied".

- If a WEBconfig tunnel was used to access a switch in the LMC, local authentication was always carried out, even if a different method was stored for HTTPS.  
If HTTP was deactivated for access, access via the WEBconfig tunnel in the LMC was not possible, although access via HTTPS was permitted.
- With the CLI command 'show running-configuration all-defaults', the default values for the entry 'event group link-status trap' were not checked against the values of the running configuration, which resulted in the output of inconsistent values.
- If the 'Config Change Notification' message from the LMC client in the switch to the LMC after a configuration change was not successful on the first attempt, the notification was not deleted after a successful message to the LMC. This resulted in the LMC client repeatedly sending the 'Config Change Notification' to the LMC.
- If an entry was added in the detail configuration of the LMC in the 'Security / ARP Inspection' menu, the configuration could no longer be rolled out to the switch.
- If IP addresses were entered in the 'Security / Management / Access Management' menu on an LMC-managed switch of type GS-3xxx, which should be allowed access to the switch, a web tunnel from the LMC to the switch no longer worked after activation.
- For GS-3xxx switches, a host name always had to begin with a letter.  
Hostnames beginning with a number or a special character were not accepted.
- An NTP server remained inoperable if it was configured with an IPv6 address.
- After deactivating HTTP for access via web interface, access via the WEBconfig tunnel in the LMC was not possible, although access via HTTPS was permitted.
- If 802.1X was configured on the switch, the LACP configuration could not be changed. This led to a rollout error when the configuration was rolled out via the LMC.  
The LACP configuration can now also be adjusted when 802.1X is activated, as long as LACP is not active.
- The RADIUS configuration for GS-3000 series switches with LCOS SX 4.20 was not implemented in the LMC. A function was implemented in LCOS SX to transmit the RADIUS secret as a hash to the LMC.
- 'Gratuitous ARP' was not supported. This meant that in a backup scenario with two servers connected via LACP, clients from another networks could not communicate with the backup server.

- The rollout agent remained in the status 'Device-Is-Configured: yes' after a reset, which is why the rollout agent was not reactivated.
- After restarting the switch, access via SNMPv3 no longer worked if an '\*' (asterisk) was stored in the 'OID subtree' in the 'SNMPv3 View Configuration'.

**LANCOM GS-3200 / 3600 series - LCOS SX 4.20.0126 RU1****New features**

- Switches can now be authenticated as 'Supplicant' at the RADIUS server
- Integration of the LANCOM switches GS-3628X and GS-3652XUP
- Implementation of 'SMTP event notifications'

**Bug fixes**

- The SFP-CO-10-MG module was not detected on any of the GS-3600 series switches. As a result, no link could be established with this module via the SFP uplink ports.
- It could happen when switching between menus in WEBconfig, even without configuration adjustments, that the disk icon in the upper right corner changed to red, indicating a configuration change.
- Detection of PoE power consumption signaled by the end device via LLDP-MED did not work, so the switch always reserved the maximum of the PoE class (e.g., 30 W PoE power on the port for a class 4 end device).
- Many events were not logged in the integrated syslog (e.g. login and logout in WEBconfig). In addition, the menu 'Event Notification / Event Configuration' was missing, so that no assignment of an event type to the severity of the event was possible and logging in the syslog could also not be activated or deactivated for individual event types.
- The 2.5 Gbps ports are always divided into a cluster of four ports. After disabling the first 2.5 Gbps port in a cluster, no communication was possible via the remaining 2.5 Gbps ports of a cluster after a cold start.
- If a network device with 1 Gbps was connected to a switch port with 2.5 Gbps, recurring link loss (flapping) could occur.
- The ACL (Access Control List) is always active for DHCP. DHCP packets are allowed. BootP packets without 'DHCP Message Type' set were not supported by the ACL and therefore discarded. This caused that additional parameters could not be transferred via BootP.  
BootP packets are now internally treated as DHCP request or DHCP ACK so that the packets are allowed by the ACL.

**LANCOM GS-3200 / 3600 series - LCOS SX 4.20.0074 Rel****New features**

→ Support for the LANCOM switches

- GS-3252P
- GS-3628XUP
- GS-3652X
- GS-3652XP



## 4. Common advice

### **Disclaimer**

LANCOM Systems GmbH does not take any guarantee and liability for software not developed, manufactured or distributed by LANCOM Systems GmbH, especially not for shareware and other extraneous software.

### **Support notes & known issues**

Latest support notes and known issues regarding the current LCOS SX version can be found in the download area of our website: [Common support tips](#)

