Release Notes Archive Document

LMC Software Release up to 1.00.180.0

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1. Preface

As an intelligent network management and monitoring system, the LANCOM Management Cloud automates and centralizes the entire network architecture in terms of its WAN, LAN, WLAN, and Security. Even complex networking scenarios with a large number of network components can be easily controlled, managed, and optimized with the LMC, saving valuable resources such as money and time.

The LMC Public Cloud is available at https://cloud.lancom.de and is regularly updated with new features and bug fixes.

This document describes the complete history of LMC software releases up to version 1.00.180.0.
LMC Release Notes for versions newer than 1.00.180.0 can be found in the current LMC Release Notes document.

LANCOM Systems GmbH does not assume any warranty or liability for software not developed or produced by LANCOM Systems GmbH or distributed under the name of LANCOM Systems GmbH, in particular not for shareware and other third-party software.

2. Important notes

To ensure continued smooth operation with the LANCOM Management Cloud, LANCOM devices with an old firmware version must be updated to a newer version. The following firmware versions are the minimum requirement:
→ LCOS 10.12.0147 SU3
→ LCOS FX 10.4
→ LCOS LX 5.20 Rel
→ LCOS SX 3.30.0417 RU3

To use all the functions of the LANCOM Management Cloud, we recommend using the latest release version.

A list of the URLs and ports via which LANCOM devices communicate with the LANCOM Management Cloud can be found in this Knowledge Base document.

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3. New features, changes, and history

LANCOM Management Cloud 1.00.180.0 / 03.12.2024

Sustainable networks with LANCOM Active Power Control
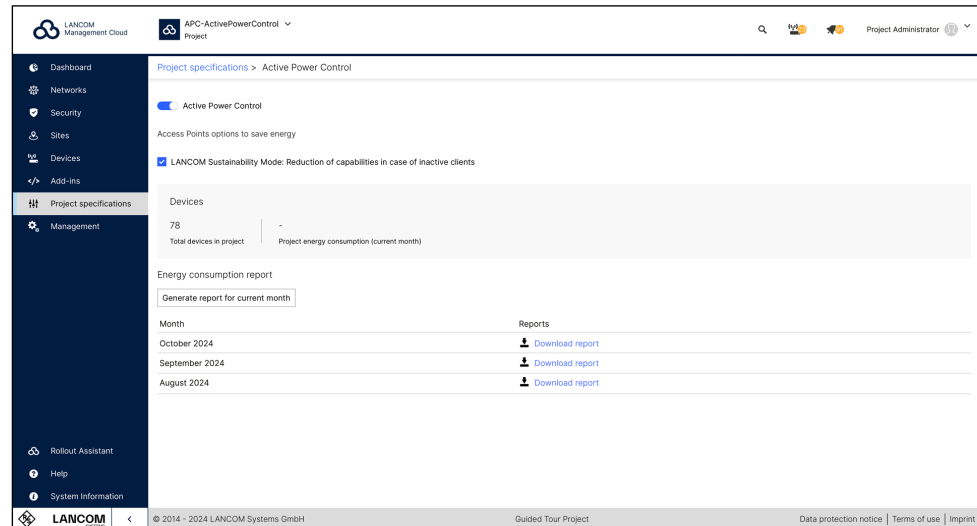
In the face of increasing demands on network performance, the associated rise in energy costs and the growing desire for CO2 neutrality, we present LANCOM Active Power Control (APC)—an intelligent solution for sustainable networks. This enables energy resources to be used efficiently, which is good for the environment and for the budget. With the launch of APC, you can take advantage of LANCOM Sustainability Mode and energy consumption reporting. Activation is carried out via the LANCOM Management Cloud (LMC) under Project specifications > Active Power Control.

LANCOM Sustainability Mode: Here, the capacity provided by the access points is reduced to the bare minimum during periods of low client activity. This reduces the power requirement and leads to energy savings without compromising performance. Once this option is enabled, all compatible access points in the project are flagged for LANCOM Sustainability Mode. Full activation occurs during the next rollout.

Energy consumption report: Gain detailed insights into the monthly energy usage of all LANCOM network components (access points, routers, firewalls, switches) within a project. Reports are downloadable as an Excel file under "Energy consumption report" and offer in-depth analysis at the project, device type, and location levels.

LANCOM Active Power Control is continuously evolving with new features. Look forward to additional energy-saving functionalities and enhanced monitoring tools to further optimize energy-efficient networks.

Preview: Have you been looking forward to planned configuration rollouts and firmware updates? Discover the new feature "Scheduled events" now in your device overview. Detailed information, including step-by-step instructions, will follow in the coming weeks.

Improvements
- → API keys for interacting with SIEM APIs can now be created under 'Project specifications / External services / SIEM'.
- → Within organizations, projects can now be opened in a new tab.
- → Sites can now be opened in a new tab.

Bug fixes
- → Fixed UI issues with an empty list of security profiles and disappearing filters in the device list.
- → Schedules in the project settings can be created correctly again.

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LANCOM Management Cloud 1.00.179.0 / 13.11.2024

Addition of the "Type" column in the device table

The clearer the overview, the easier the management! The newly added "Type" column in the device table of the LANCOM Management Cloud enhances this clarity. This small adjustment has a significant impact, as the "Name" and "Model" fields alone don't always intuitively reveal a device's category. With this addition, you can now immediately see whether your LANCOM network components are routers, access points, switches, or firewalls. Sorting and filtering by device type is, of course, also available.

Improvements
→ The revised area for user profiles can now be expanded to include new topics.
→ New function in the LMC console to remove 2-factor authentication for a user
→ The LMC now also forwards usage information (data consumption and connection time) to the configured external captive portal.
→ The default interval for DPS overlay warnings is now correctly displayed as 0 instead of 5 minutes.

Bug fixes
→ The handling of networks with duplicate names has been corrected.
→ A problem with low contrast in the device table has been fixed.
→ The link in the banner, which provides quick access to unlicensed devices, now works under all conditions.
→ An optional parameter in the Swagger documentation has been fixed: auth_service (two endpoints touched: a) accounts/{accountId} b) accounts/{accountId}?content=meta)

LANCOM Management Cloud 1.00.178.0 / 29.10.2024

Wi-Fi 7 in the cloud!
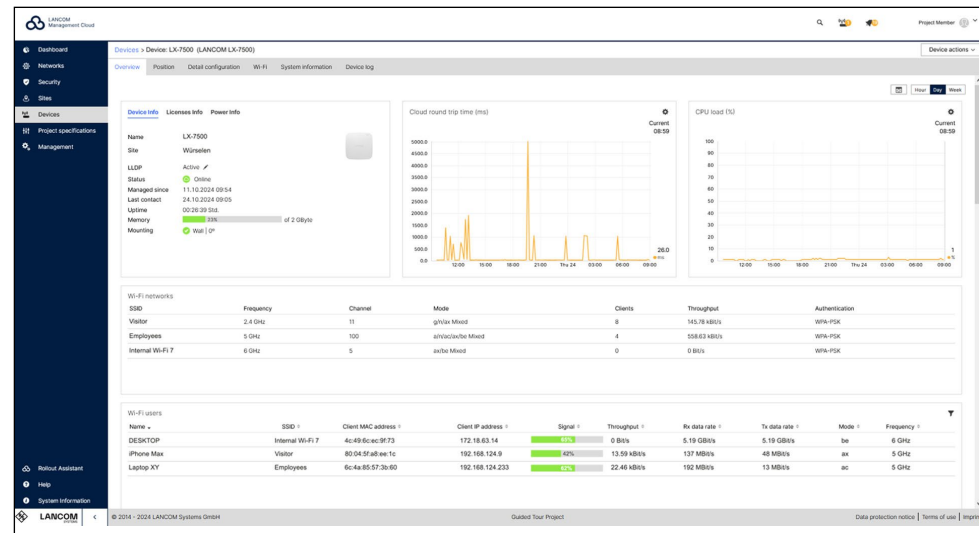
Discover the extended monitoring functions of the new Wi-Fi 7 access point
LANCOM LX-7500! The detailed view of the Wi-Fi 7 device now provides the
following new information:

1. Current power information: In the device overview, you will see the new
"Power Info" tab. Here all details regarding PoE mode, PoE standard, and power
consumption per Ethernet port are clearly summarized. In addition, you can see
under "Power status", for example, whether the access point is supplied with
sufficient PoE power for the full scope of functionalities or whether a fail-safe
hitless failover is guaranteed. The new "Power drawn" widget also provides a
graphical overview of the minimum, average, and maximum power consumption
over the last 24 hours.
2. Wi-Fi 7 in dashboard and device overview: The Wi-Fi 7 standard, also known
as IEEE 802.11be, has been integrated into the existing widgets, such as "Wi-Fi
networks" and "Wi-Fi users", in the "Mode" and "Data rate" sections.
3. Mounting information: The "Device Info" section now not only displays the
location, but also the type of mounting (e.g. Wall 0°). It clearly indicates, through
icons and tooltips, whether the installation was done correctly or if adjustments are
needed for optimal coverage.

Learn more about LANCOM Wi-Fi 7 or the Wi-Fi 7 technology to achieve secure,
sustainable, and automated network management with the LMC!

Improvements

→ Improved sorting in the table 'User profile → Memberships'

→ New language support for Hotspot

→ DPS overlay failure warning

Bug fixes

→ Some minor problems with the device table have been fixed.

→ The link to the firewall web interface in the device table has been corrected.

→ Adaptation of directives from the former UiCoreModule

→ Floor plans are now displayed correctly.

LANCOM Management Cloud 1.00.177.0 / 01.10.2024

More efficiency for hybrid teams thanks to LTA Multi-Domain Access
LANCOM Trusted Access (LTA) with Multi-Domin Access provides hybrid, decentralized teams with secure and seamless access to internal network segments. This significantly facilitates collaboration with external employees. Through external login domains, they receive temporary, secure access to the necessary network areas to retrieve relevant information for their tasks. User accounts of additional domains must be enabled in the Identity Provider (IdP), allowing the LTA client to permit logins from additional external domain users. The logged-in users can be viewed via Dashboards > LANCOM Trusted Access.

Improvements
→ Improvement on handling of not found (deep) links and URLs pointing to certain items
→ Improved visual differentiation between official and custom authorities / roles
→ Added an explicit confirmation on switching the central site role of a VPN network to a different site

Bug fixes
→ A problem with the sorting in the firmware dialog is fixed
→ A problem with the device status widget for new project was fixed
→ Update of the logo and background for the hotspot

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LANCOM Management Cloud 1.00.176.0 / 11.09.2024

More convenience and security for configuration comparison
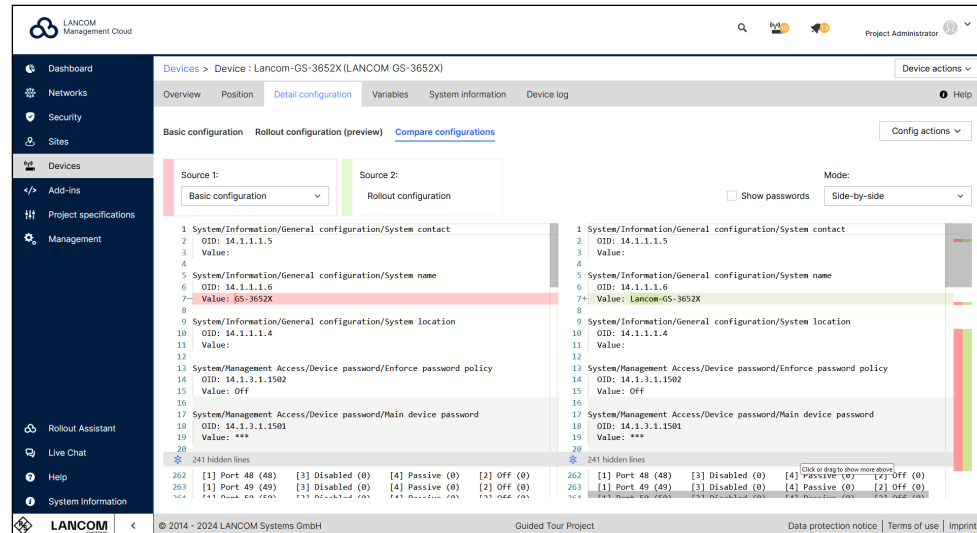
Customize the configuration comparison to suit your preferences: Changes between two configurations are highlighted not only with row markers but also in content, making it easier to focus. Simultaneous horizontal scrolling of both configurations and the ability to hide irrelevant rows improve the overall overview. You control the appearance of your interface: Hidden sections can be fully revealed with a click or by dragging and dropping them back in row by row. Additionally, your preferred display format – side by side, stacked, or inline – is saved for future access. To protect against unauthorized access, changed passwords are no longer displayed by default. Discover the new features of the configuration comparison by clicking on a router, access point, or switch under "Detail configuration."

Improvements
→ Only Public LMC: Implementation of secure access to the LMC by LANCOM Support for customer support (ISM-240205)
→ Uniform behavior in the device table when the mouse pointer is moved over an entry

Bug fixes
→ Corrected country selection for changing an address in the account management
→ A problem with the website import when setting a standard DHCP gateway has been fixed.

→ A problem with the display of new text content in the device overview has been fixed.

→ Automatically created device passwords with a length of 15 characters sometimes did not match the password restrictions of the device. The algorithm now always creates valid passwords.

→ The antenna gain is now set correctly in the SD-WLAN configuration for LCOS LX-based access points.

→ The syslog is now correctly deactivated on switches of the SX series if this has been configured in the LMC.

→ The network overview page now remembers the selected settings for the page length.

→ The behavior after editing and deleting a variable has been corrected.

→ The Polish translation of the hotspot has been revised.

→ After clicking on an entry in the device compact view, the compact view is no longer exited.

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LANCOM Management Cloud 1.00.175.0 / 20.08.2024

Integration of external hotspot providers
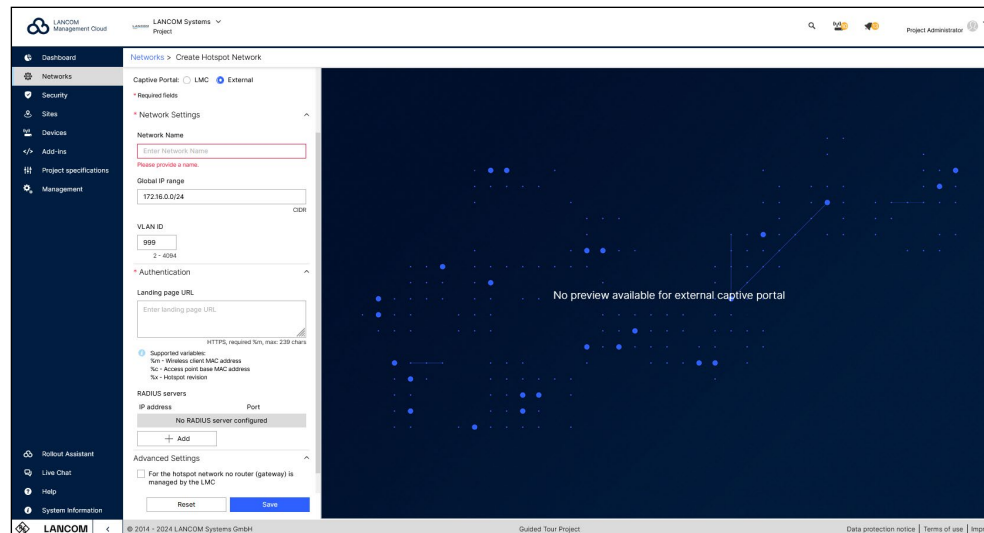
For more flexibility in hotspot provision via the LMC, you can now also integrate third-party hotspots that offer RADIUS interfaces for authentication and authorization. The centralized management via the LMC allows you to ensure uniform security policies for the entire network. To do this, create the hotspot under Networks > Add network > Hotspot network and select "External" for Captive Portal. In addition to the network name and IP range, enter the external URL and up to three RADIUS servers. Simply assign the new hotspot network to the desired locations. This way, hotspot users are forwarded directly to the portal of the external hotspot provider when they dial in.

Improvements
→ The 'Config Diff' feature is leaving beta status.
→ Add-in names can now be 64 characters long.
→ Passwords for devices that are configured globally in the project settings can now be up to 30 characters long. New, random, individual passwords will use this length by default.
Existing passwords are not changed. If a device does not support the new length, the password is shortened and this is indicated with a log entry.

Bug fixes

→ The exclamation mark in front of the beta label has been removed.

→ The loading spinner has been restored in the device table while a configuration rollout is taking place.

→ The licensing filter in SPLA projects has been removed from the device table.

→ Fixed a problem in the device table where the configuration column could jump when the configuration status changed.

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LANCOM Management Cloud 1.00.174.0 / 06.08.2024

Improved overview with color optimization of the device table

Reduced in color, optimized in function: the new, subtle appearance of the device table provides an even more user-friendly LANCOM Management Cloud. Now, only those areas are highlighted that could currently require action on your part. These include warning and error messages for the device status ("offline") and configurations ("outdated"). All other harmless messages are displayed in reduced form. This means you are automatically less distracted, can recognize changes to all devices more easily, and can therefore concentrate on the essentials more quickly.

Bug fixes

→ Problems with the new table design have been resolved.
→ If the selectable values of a variable type based on a string selection are changed and the selected value is not available any more, a meaningful error message will be generated.
→ An error in the generation bit field values was fixed in the add-in developer mode.
→ A link directing to the non existing detail configuration of a Unified Firewall in the logs is removed.
→ An error message that appeared when resetting the password of an unregistered user has been improved.
→ Improvement to avoid creating unnecessary network objects on the Unified Firewall when using LTA in Split Tunnel mode
→ Public LMC only: A problem with the usage data provided in the organization was solved. Please note that the data will be provided with a time delay of a few days in the coming months.

LANCOM Management Cloud 1.00.173.0 / 09.07.2024

SIEM integration service for cloud-managed LANCOM R&S®Unified Firewalls
Robust security management is essential, especially for larger organizations and managed service providers (MSPs). A centralized Security Information and Event Management (SIEM) system helps organizations detect, analyze, and respond to security threats quickly, preventing damage to business operations.

We invite you to enhance your SIEM with our integration service for cloud-managed LANCOM R&S®Unified Firewalls, ensuring comprehensive detection of attacks on your network infrastructure.

Compliance with market-leading SIEM systems
Our solution drastically simplifies integration with popular SIEM systems like Microsoft Azure Sentinel, Splunk, Enginsight, Wazuh, and Logpoint. The LANCOM Management Cloud (LMC) collects event logs from all managed Unified Firewalls in a network, providing a single endpoint for SIEM systems to retrieve all logs in standard JSON format. This setup ensures quick visibility of network infrastructure attacks, enabling rapid response to threats such as viruses, malware, and DDoS attacks.

Easy setup with the LANCOM SIEM integration service
Our experienced support team will assist you with an uncomplicated integration process:
1. **Create a ticket with the LANCOM support team:** Open a support ticket and submit the request for the SIEM integration service.
2. **LANCOM support contacts you:** Our team prepares the necessary configurations for the Unified Firewalls and the LANCOM Management Cloud.
3. **Receive a security token:** After setup, you will receive a security token for secure communication between the LMC and your SIEM system.
4. **Rollout of the configuration:** At a time of your choice, you roll out the configuration of your Unified Firewalls via the LMC and update their firmware if needed.
5. **Configure the interface in your SIEM:** If required, we provide all the necessary information to retrieve and analyze the logs.

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Technical prerequisites
- → Your LANCOM R&S®Unified Firewalls (all models) are managed in the LANCOM Management Cloud (LMC).
- → Minimum firmware version:
  - LCOS FX 10.13.6566 (REL) or higher
  - LCOS FX-I 1.0 or higher
- → The firewalls are assigned to a location and configured as a gateway
- → You have your Cloud ID or UUID at hand
- → You have access to the LMC to update the firewalls and roll out the configurations.

By integrating cloud-managed Unified Firewalls into your SIEM, you can optimize your security processes and safeguard your IT infrastructure. Our integration service ensures a smooth rollout.

Get in touch with us today!

Improvements
- → Some optimizations regarding the BETA function 'Compare configurations'
- → UX improvements when changing the role of administrators

Bug fixes
- → In some cases, there were discrepancies in the SPLA usage data for the month of May in the downloadable detailed report.
  The data has been corrected.
- → A problem with large tables on the Edge browser has been solved.
- → For project viewers, the 'License' tab and the 'Initial Rollout Firmware' section were displayed, even if they were not accessible.
- → Long project names in the membership table are now wrapped correctly.

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LANCOM Management Cloud 1.00.172.0 / 18.06.2024

Full transparency before rollout thanks to configuration comparison
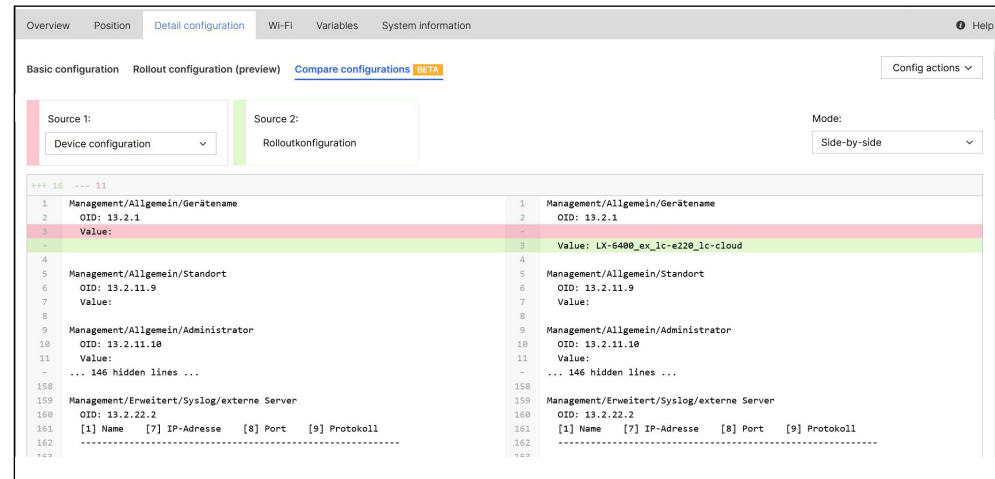
The practical configuration comparison gives you a detailed insight into the specific changes made by the rollout, particularly to the device configuration. This tool precisely shows you the sections in the device configuration that are overwritten by the LMC rollout configuration. The advantage: you get a clear overview of all changes in your device configuration before the rollout, minimizing risks from unforeseen results. Test this feature in the "Detail Configuration" tab of your routers, access points, or switches!

Improvements
→ Usage details on SPLA organizations can now be sent once a month.

Bug fixes
→ The DHCP settings at site level now check whether the configured default gateway belongs to the assigned network.
→ Project members can now browse through long add-ins.
→ A problem with the device and site tables on Edge browsers has been fixed.

LANCOM Management Cloud 1.00.170.0 / 15.05.2024

Trusted Internet Access: Mobile working as secure as in the office
LANCOM Trusted Access (LTA) now supports Full Tunnel operation ("Trusted Internet Access"), allowing all data traffic from connected LTA clients to be routed through the central LTA gateway. The advantage: activated security mechanisms on the gateway, such as Anti-Virus or Content Filter, are also applied to external web / cloud-based applications. Full Tunnel operation can be enabled under 'Security > LANCOM Trusted Access > Client configuration'. Security settings for LTA users can be adjusted in the "LTA users" profile under 'Security > Profiles'. Further information can be found in the FAQs or the tech paper LTA system architecture.
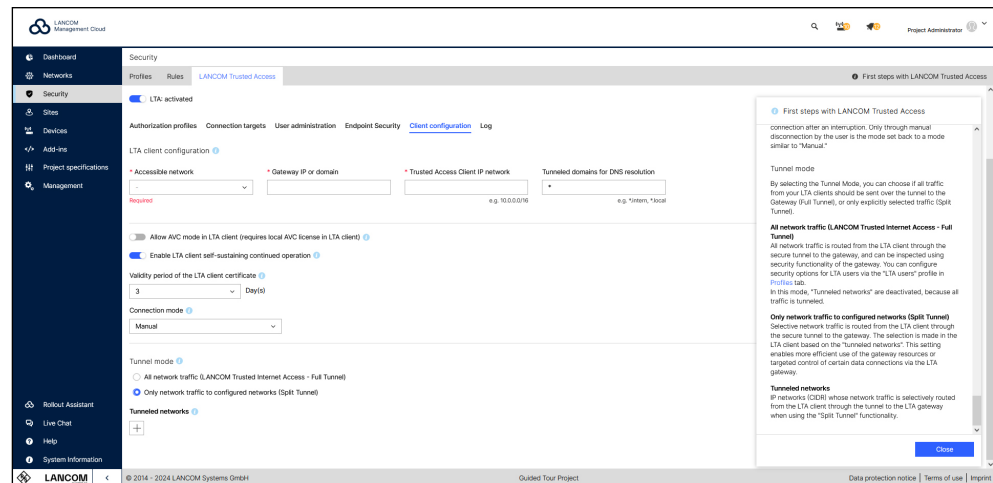
Improvements
→ The grouping of the firmware is now based on the model and the current firmware of the devices.
→ In the firmware dialog, you can now choose to exclude selected devices/ groups from the update.
→ The rollout assistant can now be used as a project member.
→ Extensions to the cloud hotspot
→ Packet filter: AH_ESP can now be used in connection destinations.

Bug fixes
→ A problem with the middle mouse button to quickly open devices in the device list has been fixed.
→ Spontaneous error "invalid destination" during LTA login fixed
→ The number of LTA users could be wrong.
→ Spontaneous exception in the site view
→ When editing a membership, the 'Technical administrator' role could not be selected.
→ When using 2FA, the terms of use could not be accepted.

LANCOM Management Cloud 1.00.169.0 / 16.04.2024

Customized device overview using savable table views

Focus more quickly on what you actually need: You can now customize your device view, including filter settings, to suit your needs using the "Create table view" button. The views you create are only visible to you and can be saved with an individual name so that you can access them again at any time. For example, move the table columns you are interested in using drag & drop, change the columns to be displayed under "Configure columns", or filter the view using "Filter by" to make your daily workflows even more efficient.

Improvements

→ The application templates for application management have been updated.

→ The device tunnel service now provides an endpoint to check whether the device has correctly initiated a tunnel session.

Bug fixes

→ Pressing the Enter key in the editing dialog of variables now saves the content instead of discarding it.

→ Spontaneous error messages during LTA login (invalid destination) have been fixed.

→ In the ‚Networks' area, the view of the ‚Sites' tab now also works if a large number of sites have been assigned to a network.

→ Updated the wording of the title in the log table regarding the LCOS restart in the event of a watchdog.

LANCOM Management Cloud 1.00.168.0 / 26.03.2024

More comfort with multi-language support for the cloud-managed hotspot

"Wifi en español? ¡Por supuesto!" – take full advantage of the language diversity when using the Wi-Fi hotspot via the LMC! Add translations of up to seven languages directly when creating a cloud-managed hotspot under Networks > Add Network > Hotspot Network > Translations. By selecting a default language, your hotspot users will see the preset language and the option to change the language. Simply assign the new hotspot network to the desired sites and your Wi-Fi hotspot will easily be available to visitors in different languages.
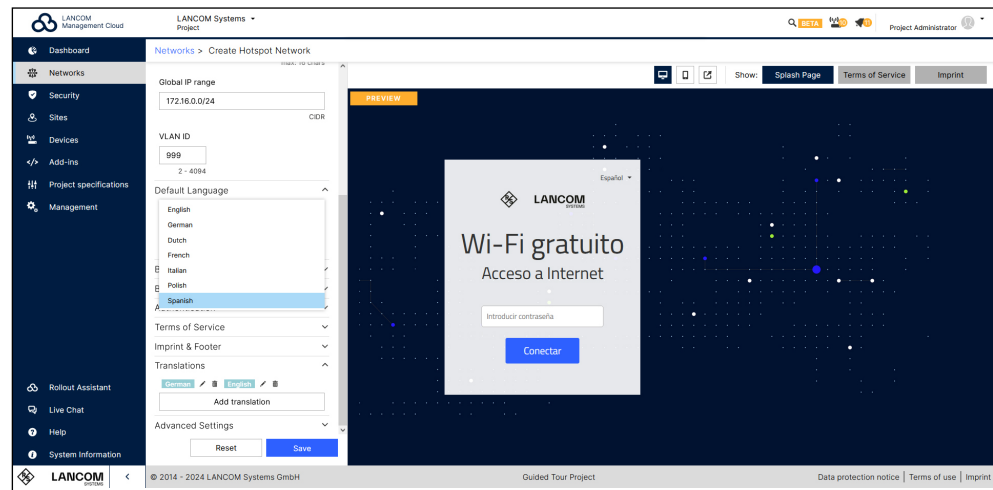
Improvements

→ Uplink mode is now also available for LAG ports.

→ The categories in the ‚Application Management' section have been updated.

→ All notifications can be closed at the same time.

Bug fixes

→ When creating new WiFi networks, the key field is correctly available if WPA2/3 is selected.

→ The actions configured in the action table are saved correctly in the detailed configuration.

→ New projects with special characters can now be saved correctly.

→ If a system variable UF_default_IF is set for a Unified Firewall, only the affected Unified Firewall is set to obsolete.

→ More clarity in the log message when administrator roles are changed

→ BPjM filter warnings on the security profile settings page are now always displayed correctly.

→ The tooltip information about active packet filter rules in the ‚Security / Profiles' table overview now shows the correct number of rules.

→ The ‚LMC Top Users' and ‚Top Applications' data were labeled as gigabytes and terabytes respectively, although they are actually gigabits and terabits.

→ Switching the monitoring from daily to hourly removed graphs on 5 unit stacks.

→ The monitoring diagrams were sometimes empty.

→ DPS Widget: Multiple networks with different central locations are not displayed.

LANCOM Management Cloud 1.00.167.0 / 05.03.2024

Precise troubleshooting with direct links to the source of the error

The time-consuming search is coming to an end: you can now benefit from optimized error notifications! For example, you can save yourself the laborious task of detecting errors in the event of invalid configuration parameters relating to object IDs (OIDs) in the device configuration. Clicking on the link displayed in the error report takes you directly to the corresponding point in the configuration preview in the detailed configuration of the device. This allows you to identify and localize the source of the error much faster!
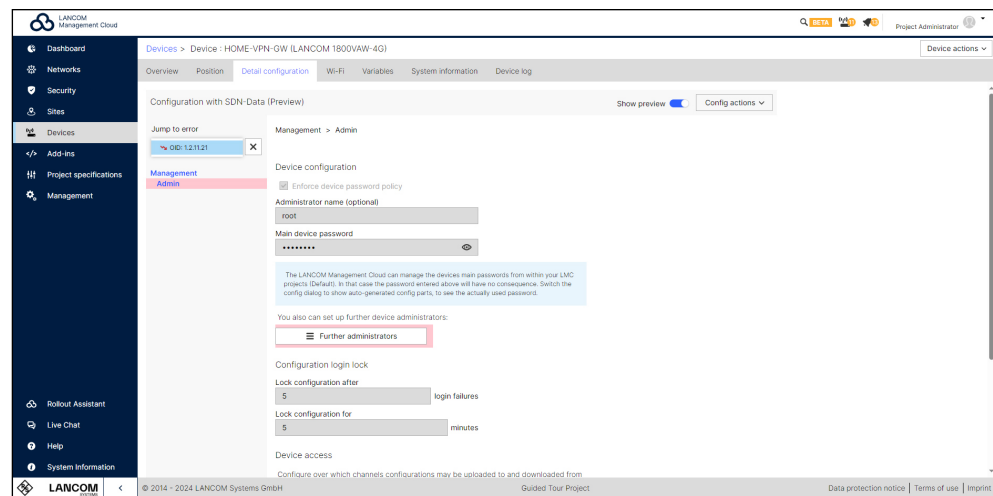
Improvements

→ Device tunnel log messages have been added to the device log if a dedicated tunnel could not technically be established after the tunnel was initialized.

→ The device tunnel API layer now only allows to initialize a tunnel to a device if the device is online; if the device is offline, the request is rejected.

→ Improved warning message that the network is still assigned to the location when the network is deleted

→ When switching between full tunnel and split tunnel mode, the tunneled networks of the split tunneling were removed, now they are retained and deactivated by the system when switching to full tunnel.

→ The configuration of static DHCP leases is now supported in the site-specific network settings.

Bug fixes

→ A problem with the location assignment in the device table has been fixed.

→ A problem with the visibility of device list filters has been fixed.

→ The network settings at site level were restricted if the network mode was set to "use the same network for each site". It is now possible to configure settings for gateway IP addresses.

→ The detail configuration now shows the correct values for the time base settings in the cron table.

→ The 'Description for networks' field now also accepts spaces.

→ The transmission power ranges have been corrected for 5 GHz WiFi settings.

→ In the device overview for switches, the 'Save' button is only displayed if the configuration has actually been changed.

→ The VLAN input field of the network configuration is now always active during the creation and editing of a network.

→ If the gateway IP of a site-specific network is changed, the changes are correctly forwarded to the front end.

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LANCOM Management Cloud 1.00.166.0 / 13.02.2024

Easy-to-view site assignment of a network

At which sites is a particular network used? How can networks be quickly removed from sites? Answers to these questions are now provided by the clear display in the „networks" menu entry. Under „Site count", you can see at a glance how many sites your networks are assigned to. Click on the number to go directly to the new detailed overview „Site" of your selected network. Here you can remove the network assignment of one or more sites at the same time if required. In addition, a warning now appears when you delete a network, informing you if the network is still assigned to at least one site.

Improvements

→ Errors in the LMC logs that refer to OIDs in the device configuration now contain a direct link that points to the corresponding part of the configuration to localize the source of the error.

→ There are now many smartphones that are equipped with more than one rear camera. Previously, the rollout assistant automatically selected a camera when scanning the serial number via barcode on a device, but this was not always the best one. Now it is possible to select the desired camera during the scan.

→ According to a recommendation by the German Federal Office for Information Security (BSI), RSA-based certificates should have a key length of at least 3072 bits. Therefore, the pairing service will generate pairing CA keys with a length of 3072 bits instead of 2048 bits during the next automatic annual CA update.
If devices are re-paired from now on or are already paired and are automatically re-paired within a year, they will also generate RSA keys with a length of 3072 bits for the device-client certificate in relation to the LMC-TLS communication.

A technical impact is that the devices will need a little more time during the pairing process to generate the longer key length.
→ Optimized display of error messages for invalid configuration parameters with a link to the configuration preview in the detailed configuration.
→ A filter can now be used to quickly search for countries for addresses.
→ The device CSV import no longer aborts when a device is imported again.
→ The new LMC scripting manual has been linked.

Bug fixes
→ The function ‚enableBitByOidAtPos‘ of the LMC add-in now works correctly.
→ The ‚*‘ character is now permitted in the configuration for RADIUS servers in the LMC.
→ A display error in the detailed configuration in the tariff selection for Wi-Fi has been corrected.
→ Sometimes the automatic selection for the DHCP start address selected an invalid network ID. This behavior has been corrected.
→ If there was a change for the WAN connections at site level, too many devices were set to ‚Configuration obsolete‘. The selection of affected devices is now more precise.

LANCOM Management Cloud 1.00.165.0 / 23.01.2024

Central administrator management at organization level

Reduce time-consuming, manual activities when adding or deleting LMC administrators: Activating administrator inheritance gives members of an organization access to the subordinate projects. As the organization administrator, you control this access by selecting a role that is inherited to all subordinate projects in the organization. If you want to give administrators access to all projects but do not want them to have the administrative rights of an organization administrator, simply assign them the new „organization viewer" user role under Management > Administrators. For projects in which administrator inheritance should not be activated, this can be excluded under Project specifications > Basic > Project access. All information on the LMC roles and rights can also be found in compact form in the Infopaper.
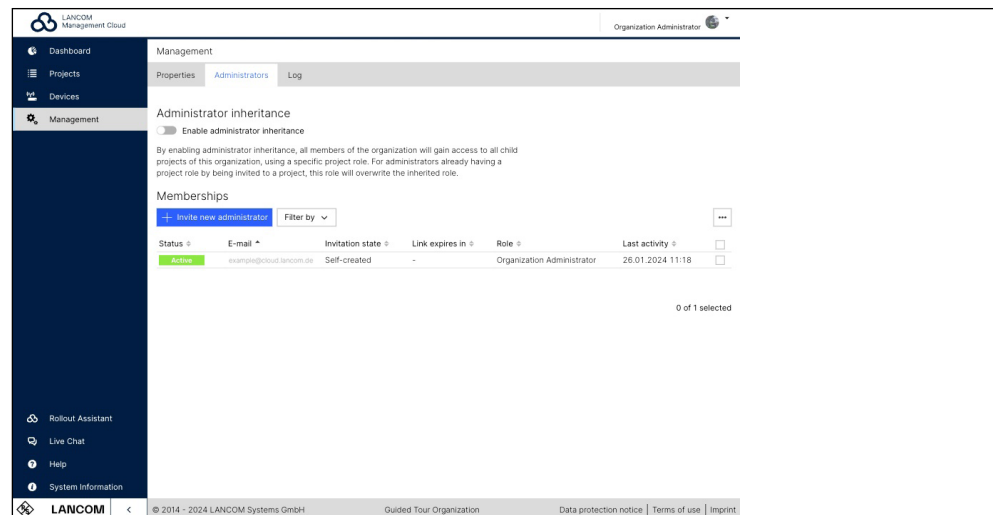
Improvements

→ Project administrators can now export device data for the project from within the device table (e. g. for inventory purposes).

→ Administrators can now assign devices to sites directly in the device table using an improved site filter.

→ If devices without a position or address are added to a site, they are now automatically assigned.

→ The ‚Device position' page has been redesigned and now allows larger images of the device installation to be uploaded.

→ In the Wi-Fi profile, the ‚Minimum supported transmission rate' is renamed to ‚Base rate (beacons, multi- and broadcasts)' and applied to all corresponding LCOS LX settings.
→ Support for additional languages in the hotspot menu
→ New design for the rollout assistant web application

Bug fixes
→ Sporadic LTA Idp synchronization errors have been fixed.
→ Incorrect logging of the LTA Idp synchronization status has been fixed.
→ The LTA main group was sporadically no longer displayed after synchronization.
→ The workflow for resetting the password did not work if the form was used a second time.

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LANCOM Management Cloud 1.00.164.0 / 02.01.2024

A look back at 2023

We would like to use the turn of the year to thank all administrators of the LANCOM Management Cloud. In 2023, many exciting projects with innovative solutions were realized with the LMC. At the same time, we continued to develop and drive forward the capabilities for the management of all network components. These key features are just a few examples:

→ **LANCOM Trusted Access – Cloud-managed Secure Network Access**
In addition to the central management of network components, the LMC also enables the secure connection of employees to the company network – from a single source! LANCOM Trusted Access (LTA) offers highly scalable remote access that protects hybrid working, whether as a cloud-managed VPN or based on the innovative Zero Trust principle. Start your onboarding today!

→ **Wi-Fi optimization with LANCOM Active Radio Control 2.0**
Best Wi-Fi at the touch of a button: LANCOM Active Radio Control 2.0 (ARC 2.0) predicts the optimization potential of the Wi-Fi network based on real usage data and automatically optimizes channels and channel widths. Discover the full power of ARC 2.0 on our topic page!

→ **Efficient switch rollout thanks to centralized port templates**
Network assignments to switch ports are simplified and assigned to the devices „zero-touch". A major efficiency gain, especially with different port assignments at different locations.

We have also modernized the design of the user interface with a new look. You can already look forward to the further innovations that 2024 has in store for the LANCOM Management Cloud. Thank you for your continued support and trust!

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LANCOM Management Cloud 1.00.163.0 / 12.12.2023

Your direct access to cloud-managed VPN
Centralized management of VPN users via the LANCOM Management Cloud (LMC) is also worthwhile for smaller installations. You do not need a user database (Active Directory), but can take immediate advantage of the remote access solution LANCOM Trusted Access: to do this, select the option „LMC-managed" under Security > LANCOM Trusted Access > User management. Then copy the unique identifier (TXT resource record) from the LMC and paste it into the DNS configuration of your domain. After a brief check, the LMC verifies the domain and once you have entered your users' e-mail addresses, you can immediately enable them to use Trusted Access. Discover the LTA tutorials and trial versions today!
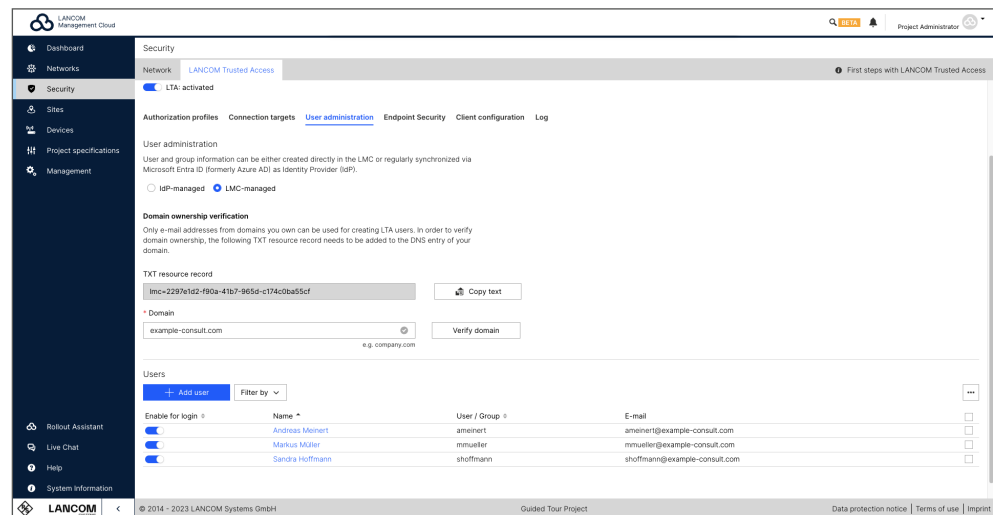
Improvements
→ It is now possible to choose between 3 connection modes for the connection setup of the LTA client in the configuration of the LTA client profile: Manual, automatic or variable connection establishment (the behavior is identical to the current standalone AVC client).
→ The add-in developer mode now supports values of the bitmask type.
→ WWAN firmwares are displayed under ‚System information'.

Bug fixes
→ The stability of the tunneled WEBconfig access to LCOS FX firewall devices has been optimized. The optimization is only active in conjunction with the upcoming firmware release LCOS FX 10.13 RU3 (or higher).
→ Error messages in the backend logs of the pairing service relating to cron jobs have been eliminated; however, the messages had no impact on functionality.

→ Incorrect firewall rules were created for certain combinations of DPS with manually created applications and assigned DPS categories other than BE. The resulting firewall rules are now shortened so that they are acceptable for the device.

→ A problem with the navigation on the page via the browser buttons has been fixed.

→ Some linked materials that were still based on the old design have been updated.

LANCOM Management Cloud 1.00.162.0 / 22.11.2023

LANCOM Trusted Access – Cloud-managed secure network access
With the LANCOM Management Cloud (LMC), you now not only manage your network components, but also secure the connection of your employees to the corporate network centrally. With the highly scalable remote access solution LANCOM Trusted Access (LTA) and the new LANCOM Trusted Access Client, you can protect hybrid work – regardless of whether you want to use LTA as a cloud-managed VPN solution or on the basis of the future-proof Zero Trust principle with granular network control. Find out which LTA level of integration is right for you, start your LTA training, and test LTA for free for 30 days on the LTA onboarding web pages.

Improvements
→ In the switch device overview, the port labels and information about assigned networks can now be exported as a CSV file.
→ If multiple ‚0'-tagged default routes with different administrative distances are created in the underlying detailed configurations, these are adopted for automatically created SmartConfig default routes. This mechanism is only available if the WAN connections are not explicitly specified in the project or at the location.
→ The displayed add-in console scripts from the configuration preview of the detailed configuration can now be copied without line numbers.

LANCOM
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Bug fixes

→ If an add-in is assigned to a network, only the associated device classes are set to ‚not current'.

→ After use, the button for copying the device password is no longer blackened.

→ Various visualization problems have been fixed.

LANCOM Management Cloud 1.00.161.0 / 31.10.2023

Refresh of the LANCOM Management Cloud user interface
Already noticed? The LANCOM Management Cloud now has a new LANCOM look.
With a contemporary color palette and intuitively designed controls, the Cloud
gets a breath of fresh air, while the features remain in the familiar place. Discover
new colors and subtle design adjustments for an even better user experience. We
welcome comments and feedback on the new Cloud design.
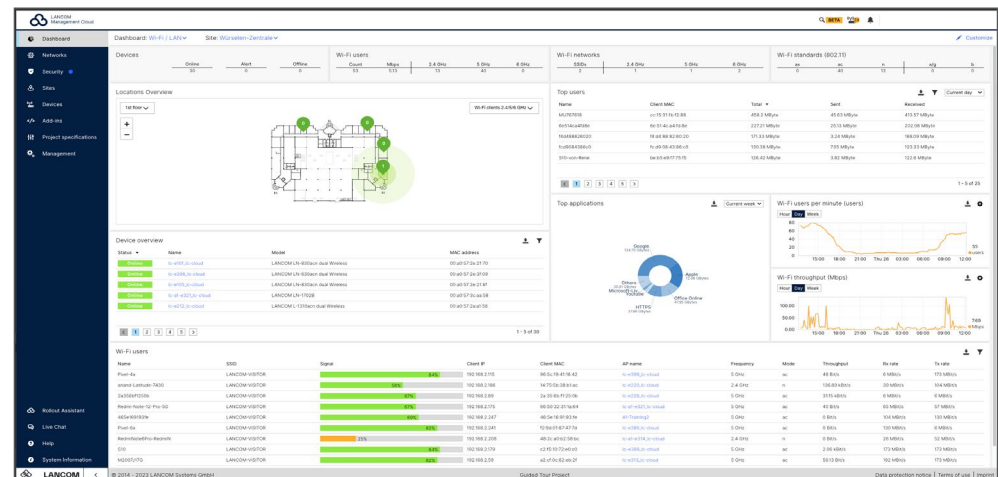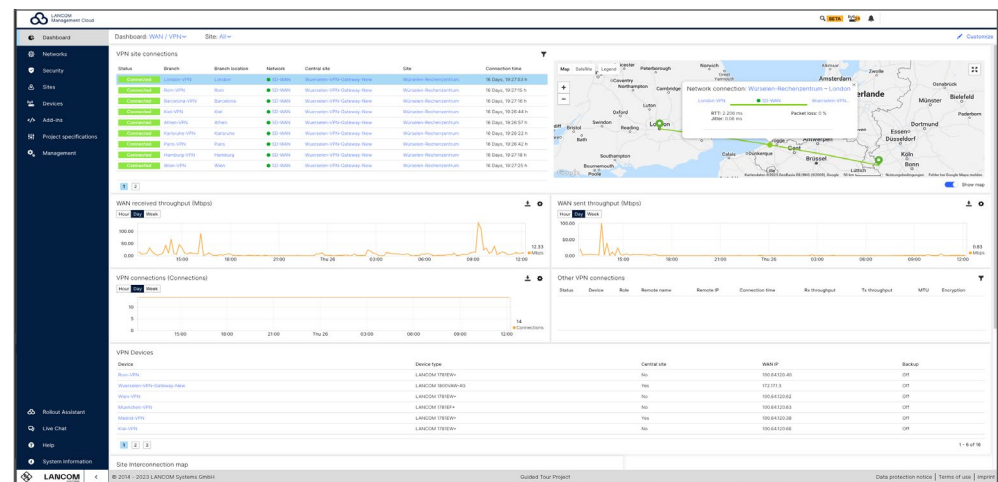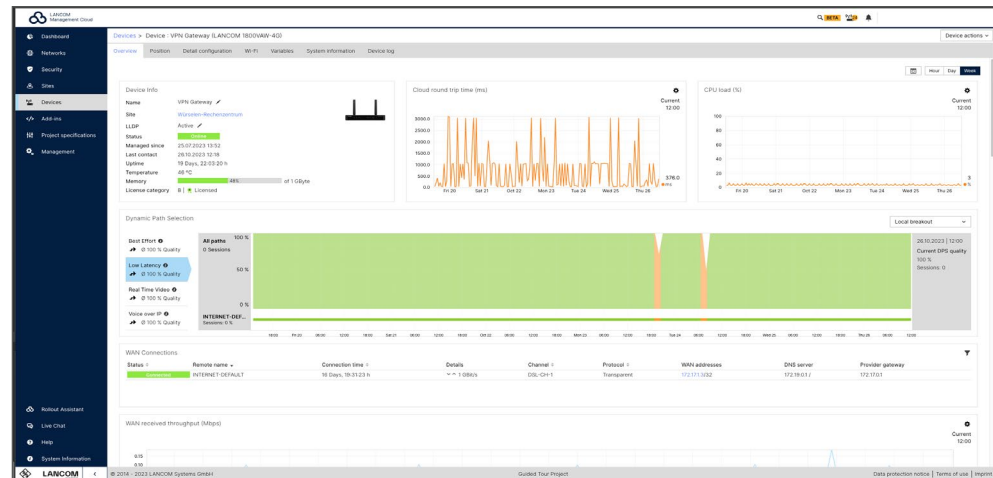
Improvements

→ In the port template groups it is now possible to define, if a selected port
should be operated in tagged mode or if an untagged operation is preferred.

→ In the switch overview, a new port mode "uplink" can be assigned to individual
ports. This operation mode causes every vlan of the site being assigned to the
port either in hybrid or fully tagged way.

→ Device list now optionally shows last contact time of offline devices.

LANCOM Management Cloud 1.00.160.0 / 13.10.2023

Simplified management and more overview for switch stacks
From now on, you can also benefit from convenient port management for switch stacks, so that individual and time-consuming port configurations of the stack units are a matter of the past. The central, cross-network port template groups are available for this purpose: Select one of your predefined port template groups for each unit of a stack to conveniently reuse your port configurations even for new stacks at different locations. The port template groups are assigned exclusively by your explicit selection in the unit overview of the stack and require the port mode „Network default for unit". For even more overview, you can now additionally assign individual names to your stack units.
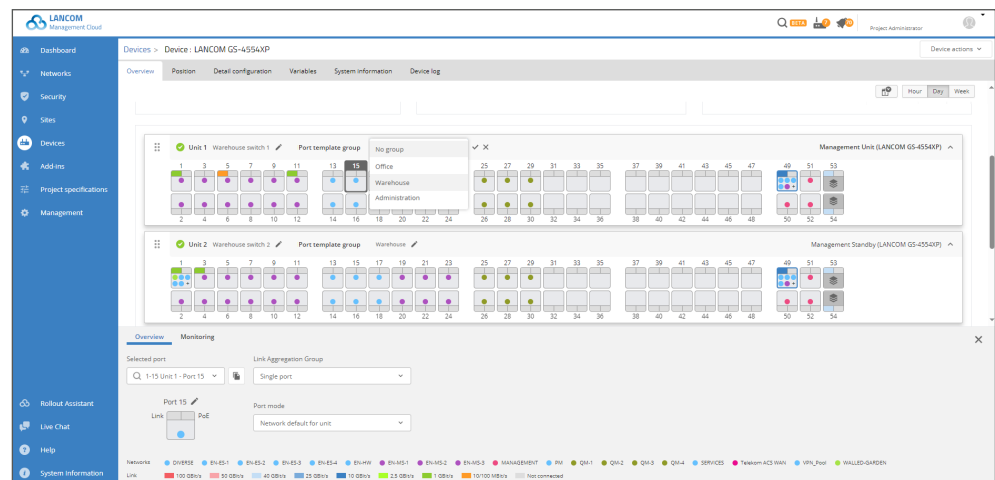
Bug fixes
→ The channels can be selected correctly again in the Wi-Fi settings.

LANCOM Management Cloud 1.00.158.0 / 29.08.2023

Centralized port templates for optimized switch rollout

Manual network assignments to switch ports could quickly become a challenge if you needed different port assignments for switches with the same number of ports at multiple locations. This is now remedied by extended, central templates, so-called port template groups. You can create, configure, and apply up to 50 different templates yourself for the networks and device models offered (e.g. 26-port model). Your previous port templates are initially assigned to the default group. You will find the port template groups under ‚Networks > Selection of a network > Switches' and can easily map them to your devices on the site level for even more „zero-touch".
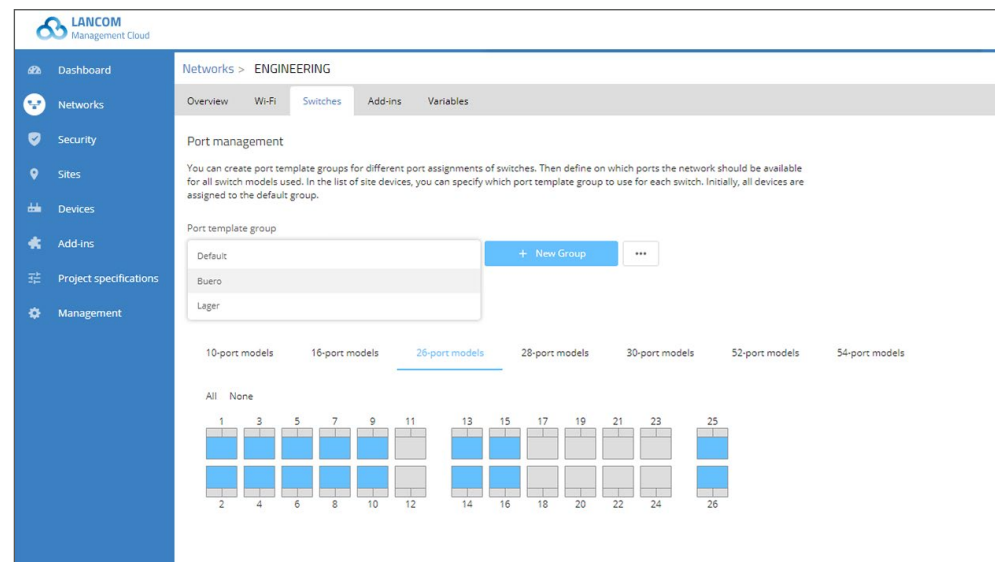
Bug fixes

→ The channels can be selected correctly again in the Wi-Fi settings.

LANCOM Management Cloud 1.00.157.0 / 09.08.2023

Inspiration for your projects: Discover the new LMC website
We are pleased that you are using the LANCOM Management Cloud (LMC). With it, you benefit from:

- **Maximum productivity:** Configuration adjustments, firmware updates, monitoring & rollouts are automated and efficient – you save an average of 75% in time.
- **More performance and security:** VPNs, VLANs, ports, and UTM rules are defined and rolled out centrally. You can also securely connect remote workstations in the shortest possible time.
- **Immediate return on investment:** Make efficient use of valuable resources such as manpower, time and money. You can deploy new applications or optimize Wi-Fi infrastructures at the click of a mouse without expensive on-site visits.

We have summarized these and many other benefits and functions as well as customer references and awards on our relaunched LMC website. We invite you to **use these benefits to win further projects** or to use the materials, customer references and use cases listed here as inspiration to further **develop your own network management concept**.

Bug fixes
→ Schedules can be edited and created again.
→ Variables with user-defined variable types can again be used correctly in the global add-in assignments.
→ Change detection for add-in assignments works correctly again. The buttons for saving or discarding are only displayed when changes are made.
→ The auto-correction of the input field for defining the IP network has been adjusted.
→ Optimizations of the ARC 2.0 algorithm

LANCOM
SYSTEMS

LANCOM Management Cloud 1.00.156.0 / 18.07.2023

Network extension & device setups within minutes
Are you already benefiting from „zero-touch deployment"? Minimize your workload, especially when integrating many new access points, as this is where the LMC really shows its strengths: activate the project-wide location allocation based on the device IP address and define an initial firmware for new devices under Project specifications > Device startup. You can already register and configure your devices in advance via serial number and PIN independent of location – the LMC will then take care of everything else for you: if an Internet connection is established, your access points are automatically identified, assigned to a location, and immediately equipped with their pre-configuration. You can find more tips for a fast, automated rollout in the techpaper LMC Rollout.

Bug fixes
→ Fixed a problem with rolling out the configuration just before the license expires.
→ CSV site and device imports were logged as system users.
→ The hotspot password in the site-specific hotspot settings did not work.
→ If the devices at a site have changed, the result of an ARC scan can continue to be used for the unchanged devices without a rescan.

LANCOM Management Cloud 1.00.155.0 / 27.06.2023

Efficient, automated workflows with webhooks
From monitoring and troubleshooting to deployment and upgrades: As an administrator, you rely on a holistic view of all network activities to respond quickly. Using webhooks in the LMC saves you valuable time by flexibly communicating alerts and notifications to messaging services and automation tools when an event occurs. Set up your webhooks for Slack or IFTTT, for example, under Project specifications > Alerts & Notifications > Webhooks and learn more in the Webhooks techpaper.
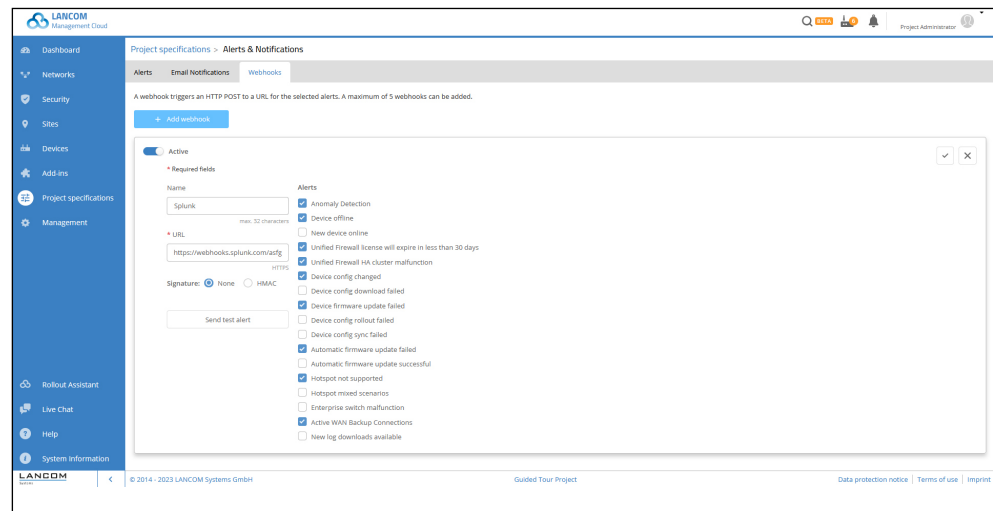
Bug fixes
→ In the device license assignment dialog the current license status was not shown.
→ A display issue in the project specification dialog after saving the settings has been solved.
→ An issue in the guided device replacement process has been solved.

LANCOM Management Cloud 1.00.154.0 / 07.06.2023

Improvements

→ In add-ins, the variable contents of particular devices can now be accessed specifically via their serial number in order to use them for the configuration of other devices.

Bug fixes

→ The sender interfaces for communication with the LMC and the firmware update server are now also set correctly in scenarios with the cloud-managed hotspot.

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LANCOM Management Cloud 1.00.153.0 / 17.05.2023

Two clicks to optimized Wi-Fi installations via the LMC
Scan, apply, and roll out – that is all it takes to make your Wi-Fi more efficient, even at sites with data-intensive applications, high user densities, or interfering third-party external networks. LANCOM Active Radio Control 2.0 (ARC 2.0) does exactly that job for you! After scanning the environment, the self-learning Wi-Fi optimization solution automatically takes into account the individual usage behavior of the Wi-Fi clients in your installation, predicts the expected Wi-Fi situation, and evaluates it using the ARC Index. Enhance your ARC Index and get the most out of your Wi-Fi installation! Find out your personal ARC Index potential now! Tips for custom settings are provided in the ARC 2.0 techpaper.

Further improvements
- → To better distinguish the LMC administrative roles from the network users, the menu item 'Management → Users' has been renamed to 'Management → Administrators'.

Bug fixes
- → The encryption settings for WPA3 wireless networks have been corrected.
- → The behavior of a rollout of linked Central Site devices when the VPN feature is disabled has been corrected.
- → Optimizations of the calculation algorithm for ARC 2.0.
- → Firmware updates and communication with the LMC could fail in certain scenarios due to incorrect settings of the source interfaces. The selection of source interfaces has been revised.

LANCOM Management Cloud 1.00.152.0 / 25.04.2023

Wi-Fi optimization with LANCOM Active Radio Control 2.0
Ensure optimal Wi-Fi for any network size at the push of a button – directly via the
LMC! With the self-learning automation solution LANCOM Active Radio Control 2.0
(ARC 2.0), you can forecast the optimization potential of your Wi-Fi network based
on learned usage behavior. For this purpose, ARC 2.0 analyzes existing multiple
channel occupancies, taking into account external networks and access point
densities. In this way, you receive a clear comparison of the actual radio field
situation with a preview of the expected network status after adjustment. Clicking
on „Apply optimization" sets the most suitable channels and channel widths to
automatically adjust transmitting powers and provide radio capacity where it is
needed. Detailed ARC 2.0 settings such as prioritization, reservation, or exclusion
of access points or channels can be made for access points as of LCOS LX 6.10 and
other devices as of LCOS 10.72 under Sites > Site selection > ARC 2.0. Learn more
about ARC 2.0 in this tech paper and try it out right away!
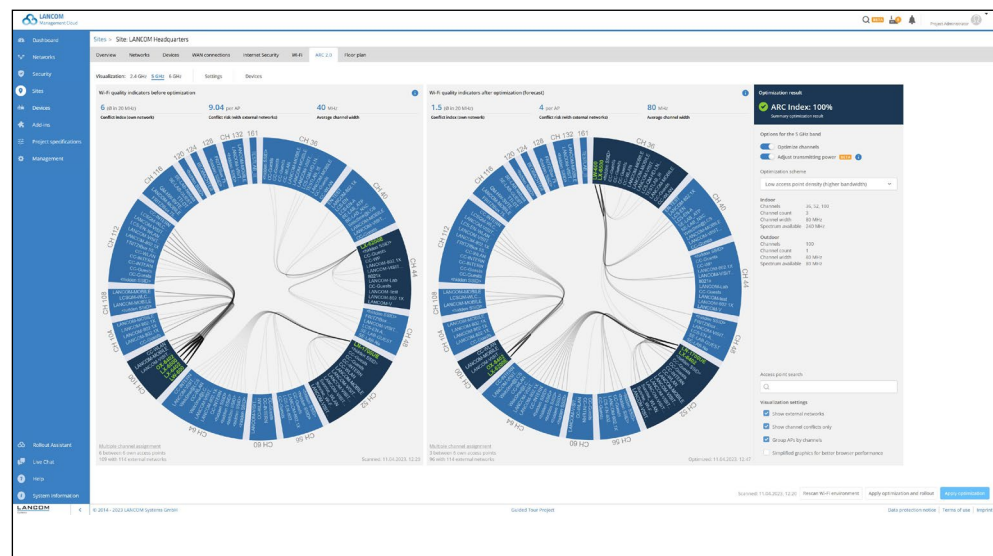
Further improvements
→ The landing page UUID of the cloud-managed hotspot can be set in add-ins
via a context variable (context.network.hotspotid).

LANCOM
SYSTEMS

Bug fixes

→ The detail configuration now allows the simultaneous deletion of multiple table rows.

→ Passwords can now be displayed again in the preview of the detailed configuration.

→ ToolTip display errors in switch port information have been corrected.

→ Devices are set to ‚not up to date' when variables are changed even if they are not assigned to a site or network, but globally assigned add-ins are used.

→ The commissioning process for devices with default configurations (manual or automatic assignment during commissioning) has been corrected.

→ For globally assigned add-ins, switch variables with user-defined variable type can be used correctly again.

→ Add-in developer mode outputs have been optimized for specific device types.

→ If VPN is disabled for a network, no rollout of the connected Central Site devices is performed.

LANCOM Management Cloud 1.00.151.0 / 04.04.2023

Maximum data, failure, and access protection with the LMC
While you protect your network via the LANCOM Management Cloud (LMC), we take care of protecting the LMC itself in the background. With regular security audits, encrypted data backups, and geo-redundant, certified, and sustainably operated data centers in Germany, we minimize risks such as cyberattacks, data loss, and service outages. For you, this means data sovereignty at the highest level. To find out which data protection standards our LMC hosting meets in detail, visit our Cloud security of the LMC website or read the LMC (Public) Data Protection and Data Security infopaper.

Bug fixes
→ A display problem with the help chat has been fixed.

LANCOM Management Cloud 1.00.150.0 / 14.03.2023

Secure WEBconfig access and CLI tunnel for GS-2000 switches
We are continuously expanding the management options of the switches for you via the LANCOM Management Cloud (LMC): Direct remote access to a device's WEBconfig or command line interface (CLI) through the LMC saves system administrators valuable time and greatly simplifies device access. With the securely encrypted sessions tunneled through the LMC, you combine individual and global management for GS-2000 series switches in one application as well. To do this, select one or more switches (from firmware version LCOS SX 3.34 RU3) in the device overview and click 'Open terminal' or 'Open WEBconfig' in the selection menu.
Please note that local configuration changes can be overwritten by a configuration subsequently rolled out by the LANCOM Management Cloud.
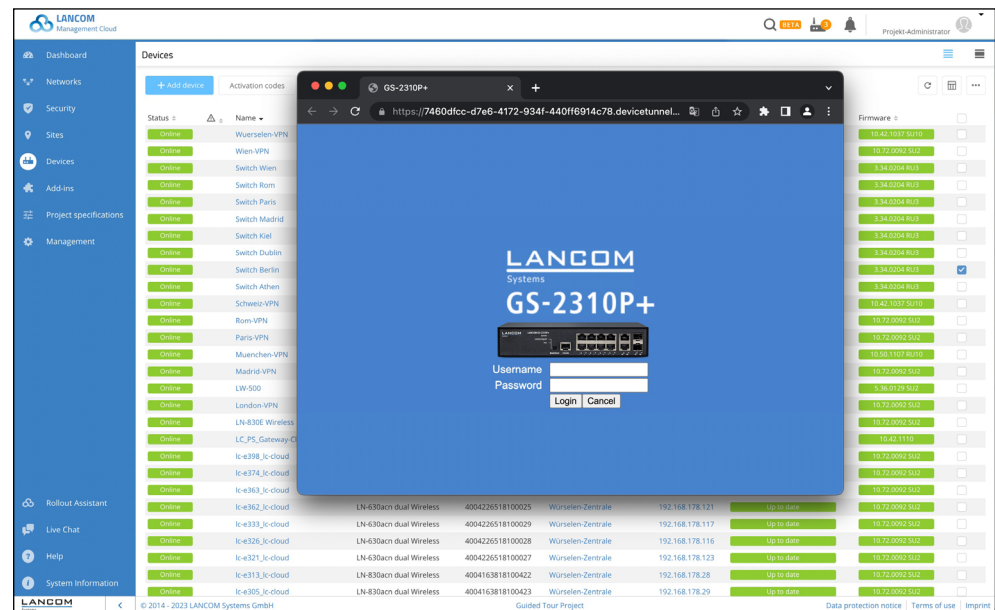
Further improvements
→ The structure of routing rules and tables rolled out to LCOS FX devices has been revised. This reduces the complexity of the routing configuration and the overall number of requests required to set up the device, thus increasing roll out speeds.

Bug fixes
→ An issue with the user support chat has been solved.

LANCOM Management Cloud 1.00.149.0 / 21.02.2023

Accelerated add-in extension with new developer mode
Individually created add-in scripts are particularly useful for flexibly adapting your LMC configuration to customer-specific network scenarios. Accessing configuration data based on their object ID (OID) from the LMC is now even more convenient: make your adjustments, e.g. for a switch, in the detailed configuration and activate the new add-in developer mode under config actions. The LMC automatically converts your configuration changes into an add-in-compatible format that you can insert directly into your add-ins, saving you a lot of time. Learn more about add-ins in the add-ins manual.
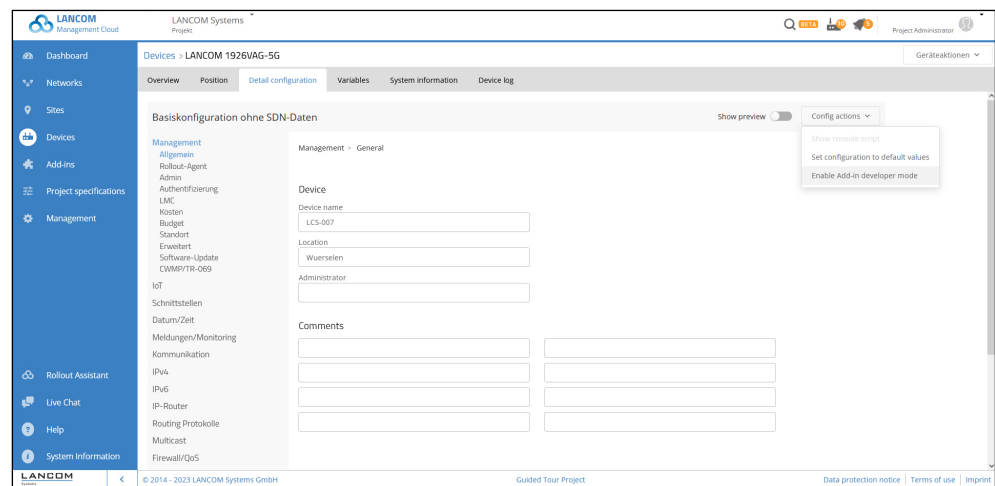
Further improvements
→ When a device in a project goes online for the first time, a notification is displayed.
→ The number of filtered locations is now displayed in the location overview.
→ Anomaly detection notifications can now be closed.
→ If a site's access point does not support the country assigned to the site, the device's configuration will not be written.

Bug fixes
→ Fixed an issue with a disappearing filter in the device overview.
→ Fixed an issue with a delayed status display (online / offline) in the device detail view.
→ Locations can be updated again via CSV import.
→ The automatic assignment of locations based on IP addresses works again.
→ The notation of MAC addresses in the detailed configuration has been corrected.

→ The date selection in the detail configuration works again.
→ The VLAN ID of a switch port that is part of an LAG is set correctly when the
   port is disabled in the individual port configuration.

LANCOM
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LANCOM Management Cloud 1.00.148.0 / 31.01.2023

Advanced security features in the LANCOM Management Cloud

We are further expanding the "Security" menu for you: For improved usability and a more efficient workflow, you can now generate packet filter rules directly from a security profile. Especially if you have a large number of security profiles and rules, the project-wide search function helps you to locate the profile or rule you are looking for more quickly in the LMC. To do so, simply use the keyboard shortcut "ctrl + K" (Windows) oder "cmd + K" (macOS). An overview of the continuously developed security features can be found in our tech paper.
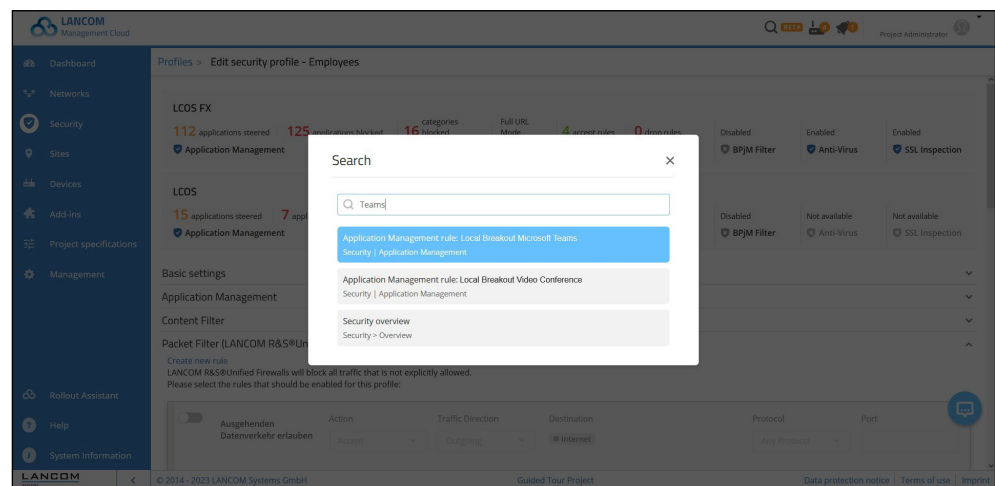
Further improvements

→ The design of the 'Administration → Licenses' section has been revised.

→ Improved overview within the security profiles

→ The maximum number of floorplans has been increased to 25.

Bug fixes

→ More robust error handling for the user's language setting

→ Added support for 6 GHz in the 'Wi-Fi Users' dashboard.

→ The SD-WLAN configuration now enables 802.11ax on 2.4 GHz for the LANCOM routers of the 1800 series.

→ The PoE status information for devices in a stack group has been corrected.

→ The rollout of the device configuration via the action menu in the detailed configuration now also offers to roll out Central Site locations if required.

→ Changes to variables now generate log messages.

→ If the setting of the default networks of the Unified Firewalls is changed in the project settings for commissioning, only Unified Firewalls are now switched to 'not up to date'.

→ If the device overview of a switch is called up several times, the order of the display of assigned networks remains unchanged.

→ The DECT settings have been corrected in the detail configuration.

LANCOM
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LANCOM Management Cloud 1.00.146.0 / 20.12.2022

Feedback button in the Public Cloud

Your opinion counts – as you know best what enriches your everyday work and what does not (yet): Which features of the LANCOM Management Cloud (LMC) are particularly helpful and understandable? Which ones can we optimize further? We ask questions like these not only to ourselves, but from now on to you as well: By clicking on a feedback button, you can participate anonymously in a survey on a specific function and contribute directly to improving the LMC. The blue buttons can currently be found, for example, at the menu item "Security" or in the hotspot portal. We are looking forward to your feedback!
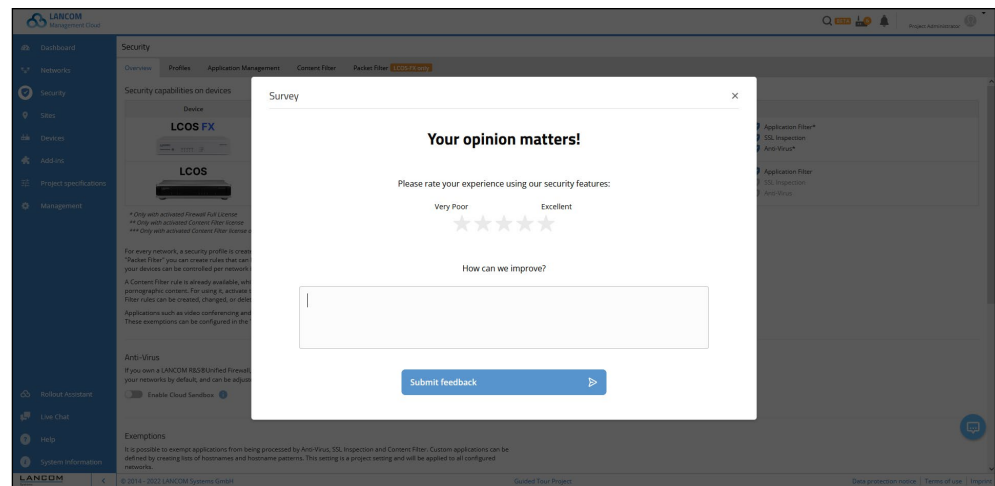
Further improvements

> → Microsoft Teams was added as an application for application management.
> → Packet filter rules can now be generated directly from a security profile.

Bug fixes

> → When notification is disabled, no alerts are issued for backup connections.
> → Backup connection alerts are now issued when notification is enabled.
> → A warning older than 365 days could neither be read nor deleted.
> → Improved validation of CSV files when importing locations.
> → The usability of dialogs has been improved.
> → In a few cases, the location column and the corresponding filter were no longer displayed. This misbehavior has been fixed.
> → When transferring multiple devices to a new project, an unnecessarily large number of success messages occurred. This misbehavior has been fixed.

LANCOM Management Cloud 1.00.145.0 / 29.11.2022

Improved usabilty with filtering in log tables

With transparent and complete logging, administrators always have a full overview of who made which change and when. Under 'Management > Log', you can therefore view the log messages and can filter them. Using the drop-down menu, you can either select from a list of predefined events and types or enter your individual search term to find them more quickly. For example, you can view when a license was assigned to which device and by whom. A click on the log entry will then give you further information.
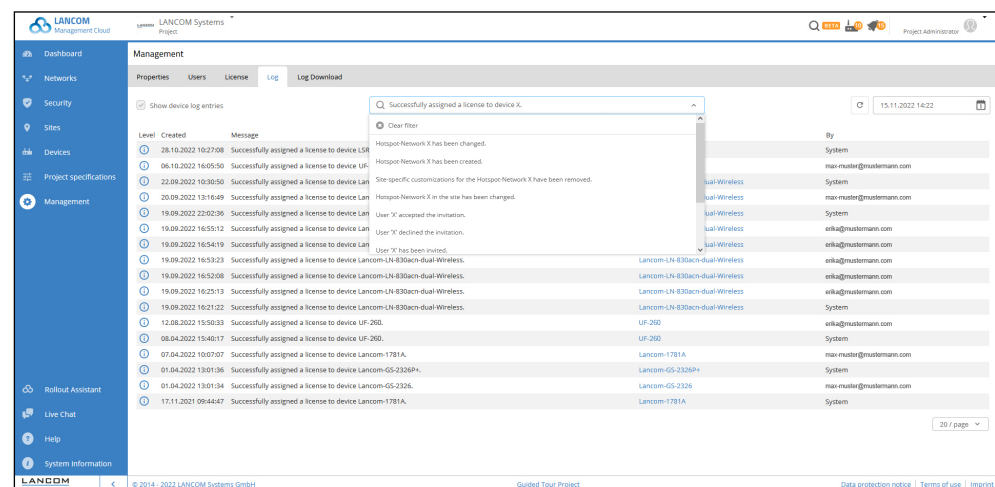
Bug fixes

→ Fixed a problem with searching for firmware files in preconfigurations.

→ The display of the expiration date for short-term expiring cloud licenses in the device table was incorrect.

→ After disabling the security functionality, the exceptions on LCOS FX devices were not removed.

→ In some cases, the configuration of a vRouter newly paired with the LMC could not be rolled out.

→ Uncritical security aspects of the terminal & webconfig tunneling endpoint of devices have been optimized.

LANCOM Management Cloud 1.00.144.0 / 08.11.2022

General improvements and bug fixes

Improvements
→ The country setting on site level is now automatically used for the country defaults of the WLAN settings if a country is set.
→ To correctly determine the Wi-Fi properties of an access point, an indoor or outdoor operating environment can now be specified.
→ From the network overview there is now a direct link to the security profile of the networks.
→ The search function now also supports searching for security profiles and rules.
→ The service overview now also displays the versions of the available description files (DSC) for different firmware states.
→ The user interface of the detail configuration has been fundamentally revised.
→ In the LMC log filtering can now be done according to a log type.
→ In the hotspot operator portal, it is now possible to revoke a voucher.

Bug fixes
→ A problem with the display of the license status in the device overview has been fixed.
→ The arrangement of Google Maps icons has been corrected.
→ Several problems with the display of licenses have been fixed.

LANCOM Management Cloud 1.00.143.0 / 18.10.2022

Central management of your network security

With the new menu entry „Security" you can now keep an eye on your security settings in one place. A security profile is automatically created for each network in your LMC project, or your existing settings and rules are migrated there. With just a few clicks, you can create rules such as those for Application Management, Content Filter, and Packet Filter globally for all networks and assign them to the corresponding security profiles. Under 'Security > Profiles' you can clearly see which security properties are effective in the respective network. Learn more about the cloud-managed security concept in our tech paper.
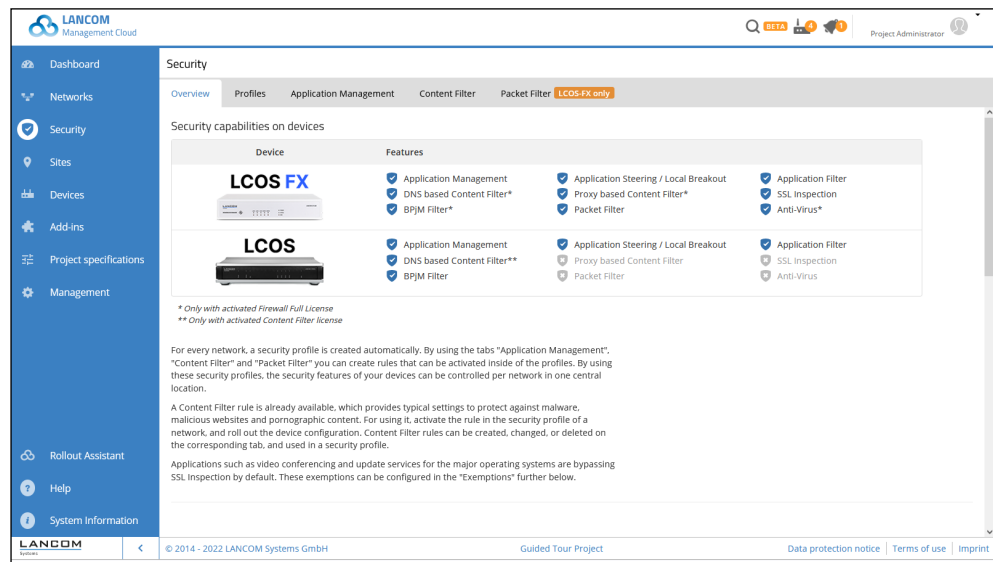
Improvements

→ Revised license assignment dialog

→ The display and assignment of a license is now also possible in the device overview.

Bug fixes

→ Preconfigurations for GS-4000, XS-5000 and XS-6000 series switches can be created again.

→ Hidden tabs are automatically shown again after assigning a license.

→ Corrections regarding firmware status output via API

→ When querying the site list via the API, sites that have already been deleted are no longer output.

LANCOM Management Cloud 1.00.142.0 / 27.09.2022

Blocking websites harmful to minors for LCOS and LCOS FX devices

Reliable and effective youth protection is a top priority, especially in schools and youth facilities. Therefore, the officially recommended website filter of the German Federal Review Board (BPjM) blocks content that is classified as harmful to minors in Germany. Continuous updates and extensions are guaranteed. You can activate the BPjM filter for all LANCOM R&S®Unified Firewalls with LCOS FX 10.8 onwards and now also for all LCOS devices with LCOS 10.70 under Networks > Content Filter.
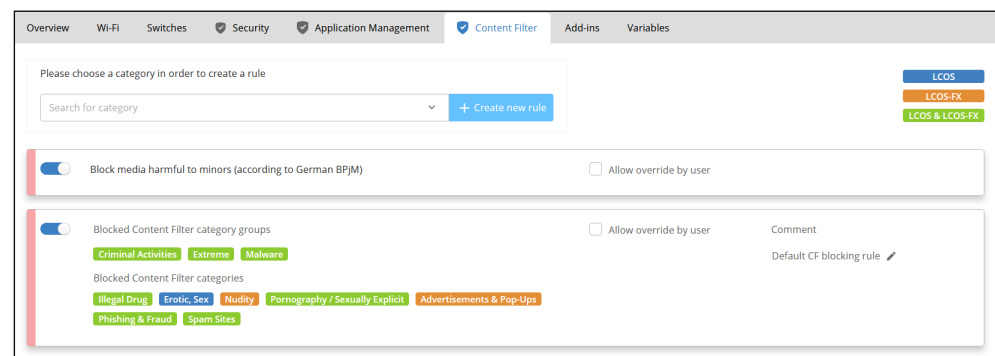
Blocking websites harmful to minors

Further improvements

→ Support for UF High Availability in the device table / system information

Bug fixes

→ A problem with the display of the status of (stacked) enterprise switches has been fixed.

Announcement

→ Please note that the license management in the LMC will change from 18.10.2022: The terms of multiple licenses assigned to a device will be added up and automatically combined into one license. In the future, a newly designed license dialog will be available for you to conveniently assign compatible licenses from your license pool.

LANCOM Management Cloud 1.00.141.0 / 06.09.2022

Wi-Fi 6E – The LMC is ready for the Wi-Fi VIP experience
Wi-Fi 6E uses the 6 GHz frequency band reserved exclusively for Wi-Fi and plays out its advantages to the full, especially in high-density environments. The LANCOM Management Cloud is perfectly prepared for this and provides a 6 GHz view in the Wi-Fi / LAN dashboard. Under Project specifications > SDN > SD-WLAN > 6 GHz band, you can make configuration settings for the entire project and customize them in the Wi-Fi settings at site and device level. With the Wi-Fi 6E-capable access point LANCOM LX-6500, you also benefit from 6 GHz Wi-Fi on the hardware side. Find out more on our Wi-Fi 6(E) technology page!
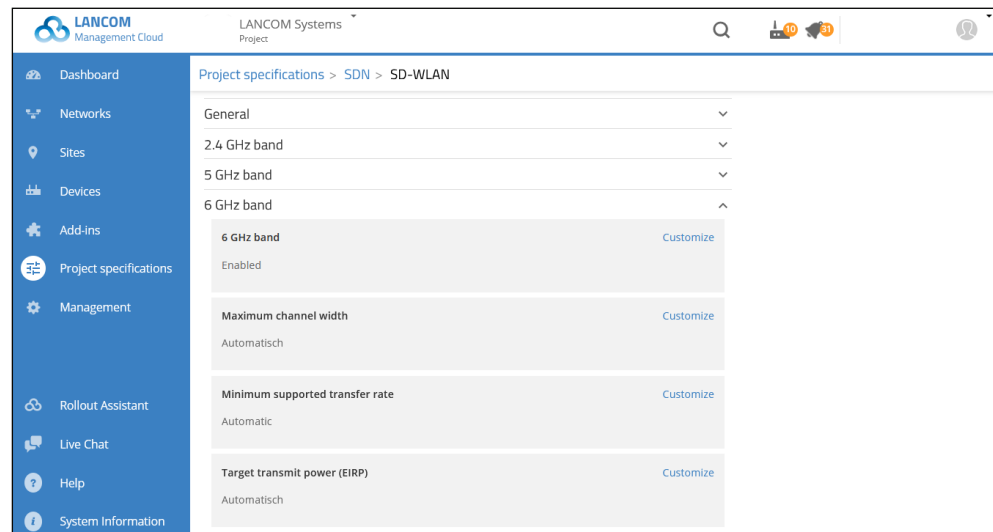
Wi-Fi 6(E) configuration at project level

Further improvements
→ Support for LANCOM ISG-5000
→ BPJM filter for LCOS
→ Device name resolution in the archive log
→ Metric name resolution in the archive log

Bug fixes
→ An error in the password repetition during user registration could prevent the registration.
→ Some minor adjustments in the sites overview dialog
→ Fixed a problem with updating the device table in new or empty projects when adding new devices.

LANCOM Management Cloud 1.00.140.0 / 16.08.2022

Sorting and filtering in tables

Do you manage large projects with a high number of devices and still want to have a clear overview? Sorting and filtering location, user, and project tables helps you find what you're looking for much faster. Click on the arrows in the table header to sort alphabetically in ascending or descending order. You can activate the filter feature by clicking on the filter icon and entering your search term. For example, you can quickly identify the users of a particular access point in long Wi-Fi user tables under „AP name".

Sorting and filtering in tables

Further improvements

→ The dialog for entering the location position has been revised.

→ Numerous endpoints have been adjusted according to the current Swagger OpenAPI specification. Please note that the endpoints marked as ‚deprecated' will be removed in one of the upcoming releases. You can see the customizations in chapter 4 "History of incompatible API changes".

Bug fixes

→ Corrected error handling when checking user input in the registration form

→ Improved error handling when registering users without memberships

→ When a new network is created, all switch ports are no longer incorrectly selected for it.

→ The configuration options of the HSVPN switch in the ‚Networks' dialog have been corrected.

→ The Layer-7 Detection settings in the ‚Networks' dialog have been corrected.

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SYSTEMS

LANCOM Management Cloud 1.00.139.0 / 26.07.2022

Search function in the LMC

Find networks, devices, locations, and LMC functions even faster: With the new search engine, you can search your entire project in a quick and easy way with just a few clicks – or, if you prefer, even without any clicks at all. Just use the magnifier icon in the top navigation bar or alternatively the keyboard shortcut 'ctrl + K' (Windows) or 'cmd + K' (macOS). For your given search term, a language-independent search is performed on project level. You can also narrow down the results list with three selectable filters in advance. Try it out right away!
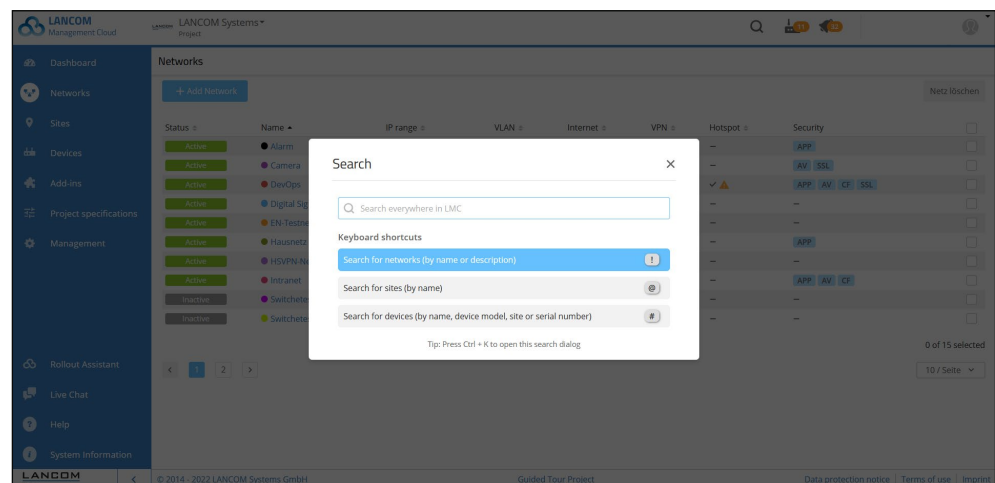
Search function in the LMC

Further improvements

→ The creation of an LMC organization is now also possible for partners outside the DACH region directly via the myLANCOM portal.

→ When exporting CSV time series on the dashboard, the times are now also given in Central European Time in addition to the Unix time format.

→ The Wi-Fi user table in the device overview can now be filtered and sorted.

Bug fixes

→ The DHCP widget on the device page did not show any linking for network names with special characters.

→ The ‚Create and Edit‘ page of a network did not correctly visualize that saving was prevented due to errors in the form.

→ The ‚Create and Edit‘ page of a network did not allow changing the subnet size per site.

→ The ‚Create and edit‘ page of a network did not allow changing Layer-7 application detection settings.

→ The ‚Create and Edit' page of a network incorrectly allowed spaces when specifying multiple VPN Central Sites.
→ The documentation regarding the add-in editor has been extended to allow the code suggestion window to be opened manually in the editor.
→ In the settings dialog for subnets (networks at the site), there was incorrectly the option to declare non-VPN networks as Central Site.

LANCOM Management Cloud 1.00.138.0 / 05.07.2022

General improvements and bug fixes

Announcements
- → When deleting a project, it is now explicitly pointed out that previously unused device licenses in the project expire.
- → To execute the action ‚Device exchange', the affected device must be offline. This is now indicated to the customer by a message if he wants to execute the action for a device that is still online.

Bug fixes
- → Fixed an error when moving a project to an organization with an identically named project.
- → Login failed if two-factor authentication was enforced for the account that was last accessed, but the user was not using two-factor authentication.
- → Disabling SD-WAN no longer hides the network name in the site.
- → An access point with LCOS LX could not take over a configuration from the LMC.
- → Correction of the interface configuration to the LL2M function.
- → When importing locations from CSV, the gateway ID of the network is now correctly taken over.

LANCOM
SYSTEMS

LANCOM Management Cloud 1.00.137.0 / 14.06.2022

Application Steering of the LANCOM R&S®Unified Firewalls

Increase the overall performance of your network by steering specific data traffic (Application Steering): Applications classified as trusted for your network, such as Microsoft 365, can be routed directly to the Internet via a Local Internet Breakout. With just a few clicks, central Application Management configurations of the LANCOM Management Cloud (LMC) are automated and securely applied to all sites. Create your own rules under 'Networks > Application Management > Steer traffic' now also with 'LCOS FX' marked applications and extend the benefits of the Unified Firewalls in combination with the LMC.
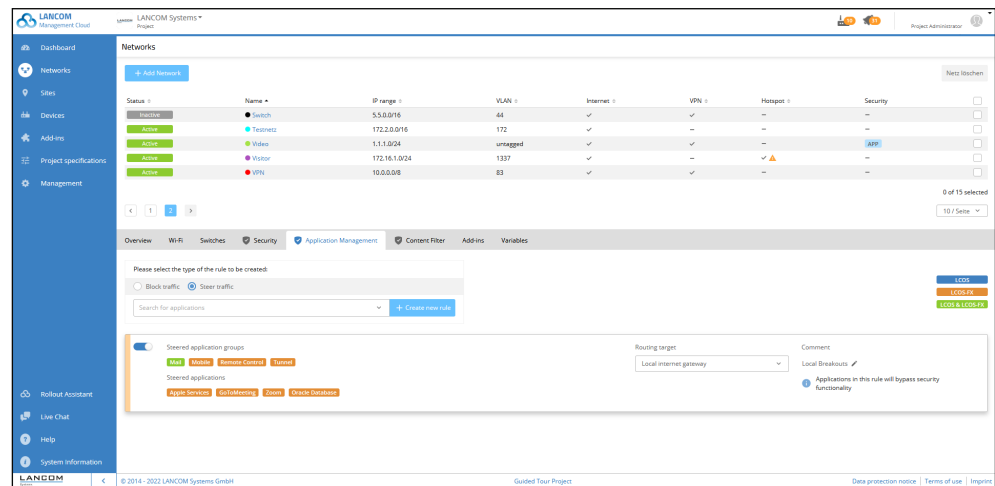
Application Steering of 'LCOS FX' marked applications

Announcement

→ The RSS feed is now available via a new subscription link:
www.lancom-systems.com/lmc-rss

Further improvements

→ The maximum number of networks per project has been increased to 256.

Bug fixes

→ Switching from the account overview to a project occasionally did not work.
→ A predefined GoToMeeting security exemption update could not be cloned.

LANCOM Management Cloud 1.00.136.0 / 24.05.2022

Cloud-managed hotspot vouchers
In the new hotspot portal of the LANCOM Management Cloud (LMC), you can create any number of vouchers for Wi-Fi access in no time at all and set individual device and time limits for them. You can access the hotspot portal when creating a cloud-managed hotspot under ‚Networks/Add network/Hotspot Network/Authentication/Voucher' or even more easily using the new LMC role ‚Hotspot Operator'. With the help of a simple user interface, for example, receptionists can also export vouchers for their hotel guests quickly and easily in CSV or PDF format. Learn more about the vouchers and their design customizations in this Knowledge Base article.

Creating hotspot vouchers

Announcement
→ Before transferring a device with an active license to an organization, it must first be deposited in the license pool.

Further improvements
→ The help text for the auto-updater has been optimized.

Bug fixes
→ An issue with the breadcrumb navigation of project defaults has been fixed.
→ In the Wi-Fi user table, the filter options for the frequency band have been corrected.
→ Added the missing translation for disabling the Internet connection.
→ An error in the WAN dashboard when displaying the average values of the VPN connections has been corrected.
→ PoE information is now displayed for the GS-4554XP switches.
→ For the stacking switches, the port default ‚Auto' (Auto Negotiation) is now correctly displayed.

LANCOM
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→ An error in sorting by IP addresses in the device list has been corrected.
→ Optimizations in the evaluation of changes in add-ins regarding the display of the configuration status.

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LANCOM Management Cloud 1.00.135.0 / 03.05.2022

Firmware updates and device replacement of LANCOM R&S®Unified Fire-walls via the LMC

LANCOM Management Cloud (LMC) and LANCOM R&S®Unified Firewalls grow further together: From now on, you can manage firmware updates for your firewalls as of LCOS FX 10.8 centrally via the LMC and conveniently keep an eye on the firmware status in the device table. And there is even more: You can also easily replace your firewalls, including the complete configuration. Simply select the device to be replaced in the device table and enter the serial number of the replacement device under Menu > Transfer – done!
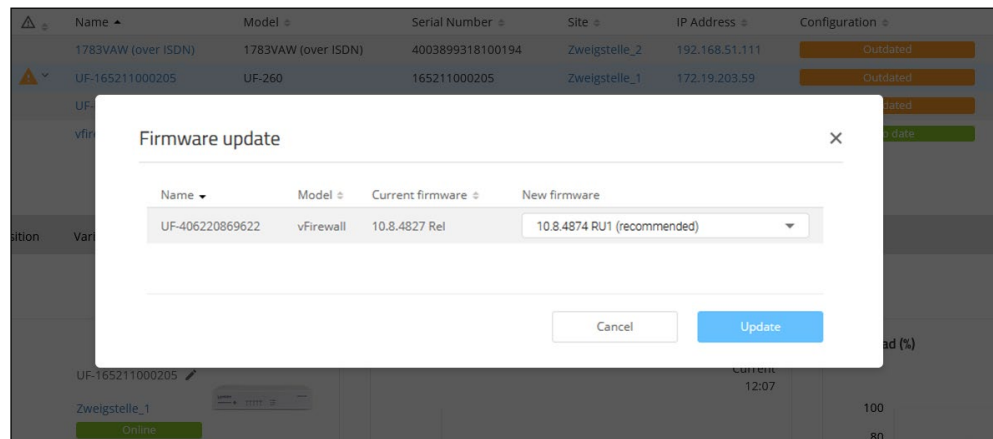
Firmware update via LMC

Further improvements

→ The endpoint GET /account/{accountId}/sites has been changed to streaming.
→ Navigation to an assigned floor plan is now possible from the device overview directly from the ‚Position' area.

Bug fixes

→ In rare cases, a timeout did not redirect to the login page.
→ Fixed a problem with CSV location import when adding new networks afterwards
→ Fixed a problem with a filter criterion in the device table
→ When setting the serial number of a preconfiguration, the tooltip was partially not closed.

LANCOM Management Cloud 1.00.134.0 / 12.04.2022

Protection of minors according to German BPjM filter
With the recommended website filter of the German Federal Review Board (BPjM),
you can now protect children and adolescents even more reliably: For example,
schools or youth facilities benefit from a constantly updated list of blocked URLs
that are classified as harmful to minors in Germany. You can activate the BPjM filter
as an extension of the Content Filter for your LANCOM R&S®Unified Firewalls with
Full License and LCOS FX 10.8 under Networks > Content Filter.
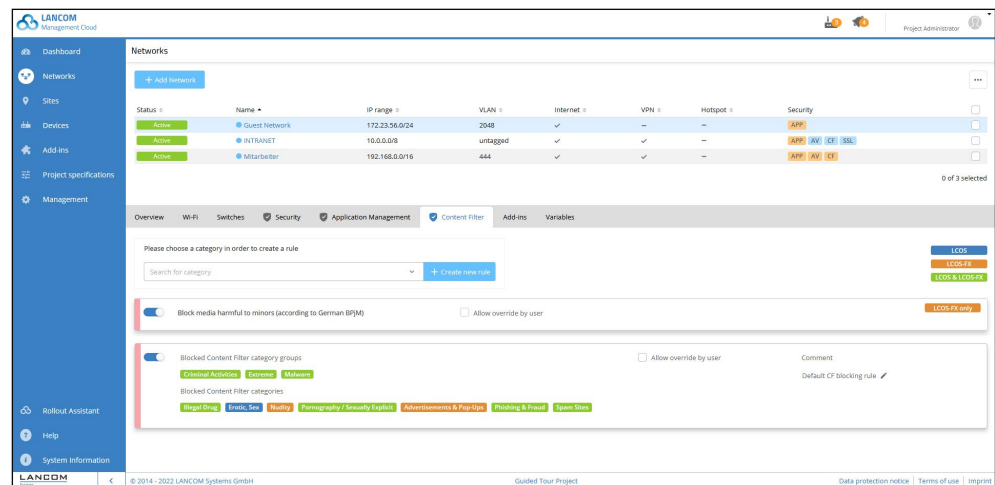
Further improvements
→ As of LCOS 10.60 Rel, a boot process and its cause are displayed in the LMC
device log for LCOS devices after a device has reestablished the connection
to the LMC.
→ In the add-ins, the gateway IP addresses can be used at the location level via
the new variable ‚context.location.gatewayIps‘.
→ In the add-ins the device serial number and MAC address are available via
the variables ‚context.device.serialNumber‘ and ‚context.device.macAddress‘.
Existing devices must reconnect to the LMC once, e.g. by rebooting, so that
this information is available.

Bug fixes

→ In rare cases, a user was logged out before the set timeout.

→ An error in retrieving deep links has been corrected.

→ Setting the configuration status to ‚outdated' in connection with add-ins has been optimized.

→ A misbehavior in the environment of re-sorting stack units has been fixed. In the affected cases, all units are now displayed again.

→ Disabled DHCP server settings are now also correctly displayed as inactive in the networks at the site.

→ If no SD functions are activated in a project, the add-ins are not supported and are no longer displayed.

→ In the dialog for creating preconfigurations, form fields were sometimes not updated.

LANCOM Management Cloud 1.00.133.0 / 22.03.2022

LAG support for stackable switches
Setting up LAGs (Link Aggregation Groups) for stackable switches of the GS-4500 and XS series is easy with the LMC! LAGs are used to realize link aggregation and load balancing: As soon as one active link fails, all other links of the group remain active and share the load of the data traffic among each other. You can set this up conveniently using the graphical interface in the device overview.

Further information is available in the tech paper LANCOM fail-safe stacking.
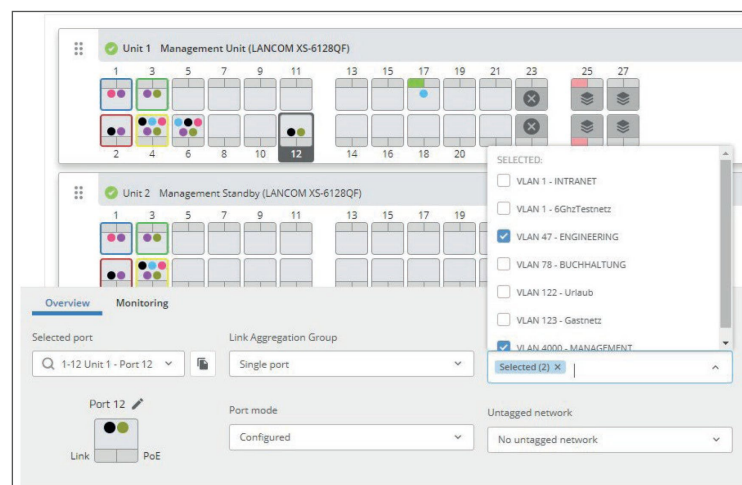
LAG setup for stackable switches

Announcement
→ The URL for future firmware downloads will be changed to **my**.lancom-systems.com on 24.03.2022 / 18:00 CET. Existing firewall entries must be adapted or supplemented in advance.
→ Prior to a device transfer to an organization, assigned licenses are stored in the project as of one of the next releases. Commissioning licenses then lose their validity when transferred to an organization. Projects are not affected by this.

Further improvements
→ An API endpoint for device data (/accounts/{accountId}/devices) has been optimized for large data sets (> 1500 filter results).
→ API to change hotspot timeout for a specific MAC address

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Bug fixes

→ The sorting of IP subnets in the network overview has been corrected.

→ The change of the variable type is now applied without reloading the variable page.

→ If a variable of the ‚Selection field' type is used to assign a global add-in, the associated values can now be selected correctly.

→ Variables can only be assigned to a location if at least one network has been assigned.

→ Changing the user language now immediately updates the content of a Content Filter rule.

→ Error handling when creating exceptions in SD-SECURITY project defaults has been improved.

→ The RAM size for ISG routers is now displayed correctly.

LANCOM Management Cloud 1.00.132.0 / 01.03.2022

Notification on active WAN backup connections

More transparency of your WAN connectivity: If a router switches to a backup connection, you are directly notified via an alert. In the device table, you can see at a glance whether and which routers are in backup status. This allows you to take early action through targeted troubleshooting and possibly avoid high costs or the consumption of a limited data contingent. Best of all: this feature is now enabled for all LCOS-based routers under Project specifications > Alerts & Notifications.

Notification and solution methods with active WAN backup connections

Further improvements

→ To perform a rollout with firewall rules (app filter, AV, etc.) on LANCOM R&S®Unified Firewalls with LCOS FX as of 10.6 Rel, the WAN object on the desktop no longer necessarily has to be named 'WAN'.

→ If variables with a user-defined type are used to assign global add-ins, the type definition is now also used at this point. For example, if the variable is defined as a selection box, this selection is available in the assignment dialog.

Bug fixes

→ Corrected the display of the date and timestamp in the history graphs.

→ Fixed a display error in the widget selection for dashboards.

→ Responsive view (e.g. for mobile devices) has been corrected.

→ Fixed a bug in the 'close' function of some dropdown elements (e.g. add-in assignment).

→ Fixed broken links in the 'VPN site connections' widget.

→ A display error in the menu of floor plans of locations has been fixed.

→ Fixed a display error on the 'Application Management' and 'Content Filter' tabs.

→ Fixed misleading log messages for users with access to multiple projects.

→ A bug with the display of very long open warnings has been fixed.

→ A DynDNS WAN connection name (peer) with a first character not equal to A-Z resulted in an error.

→ When assigning switch ports in the network configuration, the 'Save' function

was not offered in certain situations.

→ The add-in page is now displayed correctly when the page is reloaded in the browser.

→ A configuration rollout is now performed correctly even if associated central-side devices are not up-to-date.

→ The full screen mode of the Add-In editor now hides the side menu bar again.

→ If the central site is to be deleted for a network that is assigned to further sites, a corresponding note appears again.

→ If an add-in is deleted, it can now be created again under the same name without having to reload the page.

→ The filtering in the add-in overview now behaves correctly.

→ If VPN is disabled for a network, no DPS data is now collected for the VPN.

→ Various display errors in the help texts have been corrected.

→ If the still open detail configuration is edited further after a configuration rollout, it is now possible to save it correctly again.

LANCOM Management Cloud 1.00.131.0 / 08.02.2022

Cloud-managed switch stacking

Flexible, scalable, highly available: Stacking maximizes reliability and switch capacity in your LAN. Via the management switch ("Management Unit") and just one device license, the entire preconfigured stack can be conveniently paired with the LANCOM Management Cloud. The cloud independently detects which and how many switches belong to the stack. Further management and monitoring of the switch units can then be done in the device overview of the corresponding switches. For professional network integration and configuration, a design guide is also available in the help portal.
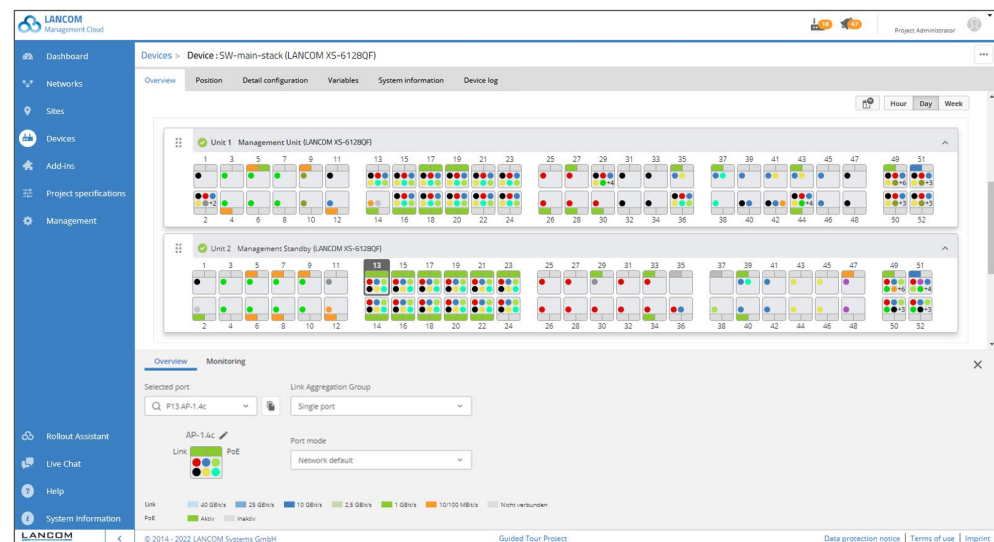
Further improvements

→ LAG support is now also available for XS and GS-45xx switches.

→ In the port templates for switches, 30- and 54-port models are now available at the network level.

→ If an LCOS device reports errors when executing addScriptLine commands from add-ins, these are now displayed in the LMC device logs.

→ If, when creating a DPS (Dynamic Path Selection) configuration, it is determined that none of the specified WAN connections exist on the device, the LMC aborts the configuration with a warning. This prevents the creation of a non-functional LoadBalancer configuration.

→ For new projects, the saving of local configuration changes on the devices in the LMC is activated by default.

→ Cloud-managed hotspot: configurable timeout

→ Cloud-managed hotspot: Wallpapers and logos can be reset to default settings.

Bug fixes

→ Fixed various texts in the LMC where HTML control characters were displayed.

→ With automatic password assignment by the LMC, the password policy check on GS-3xxx series switches works again.

→ If a device is not assigned a role at the site, the VLANs are no longer created.

→ Cloud-managed hotspot: A redirection issue has been fixed for devices with iOS operating system.

→ A display error in the maps of the device overview has been fixed.

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LANCOM Management Cloud 1.00.130.0 / 18.01.2022

Custom fields at organisational level

Organization administrators can now manage multiple projects more easily with custom fields: Additional data can be added, edited, sorted, and filtered for each project to keep workflows efficient as the number of projects grows. To do this, add custom fields in the project overview under Project > Configure columns > Add new column. Learn more about the user roles and rights system in the LANCOM Management Cloud in this infopaper.

Further improvements

→ Omitted information from the switch overview has been added again.

→ The Wi-Fi 6E view for the map view on the Wi-Fi/LAN dashboard has been added.

→ The contents of new DSC parameters are reloaded from the devices as required, provided that the parameters were already present on the devices in earlier versions.

→ If changes are made in add-ins that are assigned to specific devices via an assignment variable, only the assigned devices are set to 'not up to date'.

→ The robustness of WEBconfig and terminal tunneling via the LMC has been optimized.

Bug fixes

→ Fixed the infinite spinner issue when logging in after resetting the password.
→ A problem with saving a device image under 'Devices / Position' has been fixed.
→ Several bugs in the VPN dashboard have been fixed.
→ Log messages for automatic site selection by transmitting the location information have been added.
→ The VPN site overview in the WAN/VPN dashboard can again be filtered and sorted by remote site location.
→ Pagination in the add-in overview has been corrected in connection with filtering.
→ The input set for switch port descriptions in the new switch overview has been corrected (spaces and special characters).
→ The display of the new switch overview has been corrected for browser displays with zoom (port link and PoE display).
→ The display and filtering of the new switch overview again takes into account the names of connected devices learned via LLDP.
→ The 'untagged' network can be set correctly again in the configuration for single ports.
→ If a new network is created, the switch ports assignment is displayed correctly again.
→ The setting of LMC DHCP options when site assignment is enabled has been corrected.

LANCOM Management Cloud 1.00.128.0 / 07.12.2021

Custom redirection of the Cloud-managed hotspot
Customize your Cloud-managed Wi-Fi hotspots: After successfully logging into the
Wi-Fi hotspot, an immediate redirection to a website of your choice is now possible.
To do this, simply add the desired URL directly when setting up the hotspot network
under Networks > Add Network > Hotspot Network > Advanced Settings.
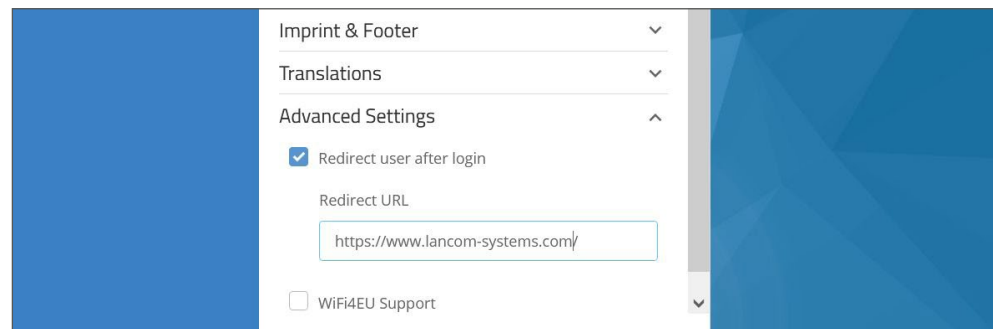
Further improvements
> → The Switch device overview page has been revised.

Bug fixes
> → Performance optimization for user name queries
> → The link to the device overview page from the floor plan has been corrected.
> → When the DPS category of predefined targets changes, the page is updated
>   correctly.
> → If a device is not assigned to a network, LLDP is not configured by the LMC.
> → Various problems with the filter settings in the device overview have been
>   fixed.

LANCOM Management Cloud 1.00.127.0 / 16.11.2021

Link to external syslog servers
More overview in larger projects: You can now define an external syslog server for each project. After a configuration rollout, devices managed in the project report relevant system information to this server for central processing and storage (current exception: LANCOM R&S®Unified Firewalls). You activate the desired syslog server via Project defaults > External services > Syslog.
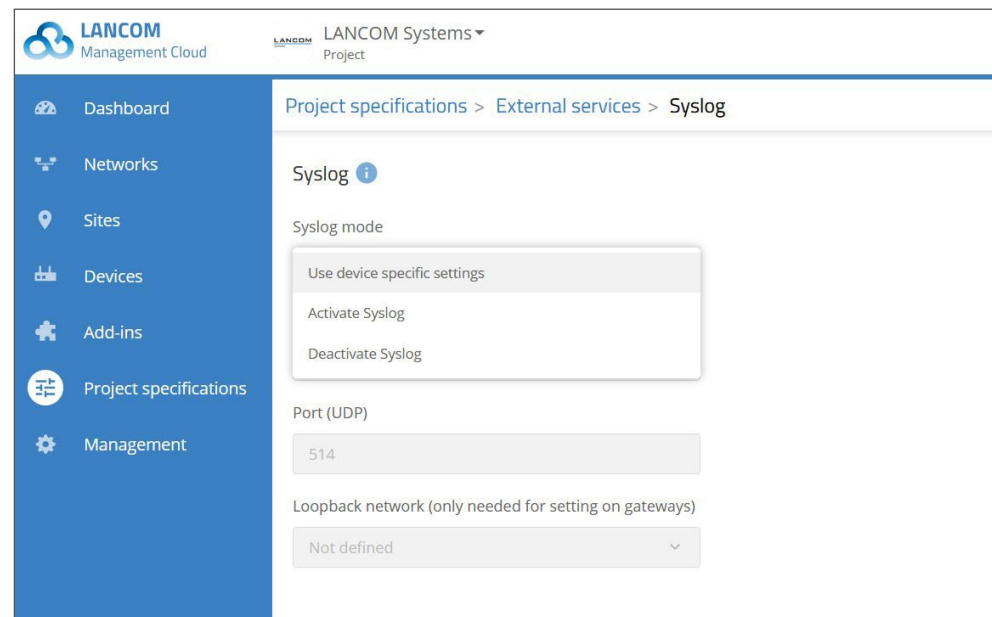
Bug fixes
→ For sessions tunneled through the LMC to the Webconfig interface of devices, the transport path for HTTP responses has been optimized. Files are now transmitted to the browser in multiple smaller data packets. This solves the timeout problem that can occur with browser requests when accessing a device's webconfig interface if devices are connected to the LMC via a slower or heavily loaded WAN line and the transmission of a complete HTTP response takes an untypically long time.
→ In case of repeatedly failed login attempts, the login prompt was displayed instead of the correct error message.
→ A problem with linking the WebConfig of R&S®Unified Firewalls from the device table has been fixed.

LANCOM
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LANCOM Management Cloud 1.00.126.0 / 25.10.2021

Anti-Virus for secure e-mail traffic
Even more cloud-managed Security: Thanks to advanced setting options in the LANCOM Management Cloud, this enables the use of the LANCOM R&S®Unified Firewalls' Anti-Virus engine to scan e-mail traffic for malware. With the Anti-Virus engine enabled, the LANCOM R&S®Unified Firewall automatically analyzes unencrypted e-mail protocols (SMTP, IMAP, POP3). In addition, enabling SSL Inspection ensures maximum security even for encrypted data. Under Networks > Security you will find an overview of the current security settings of your gateways as well as buttons for activating the Anti-Virus engine and SSL Inspection.

Further Improvements
→ Static IP Tolerance: In the Project Preferences > Base Configuration area, it is possible to define that a static IP configuration on access points and switches within this project is maintained by the LMC.

Bug fixes
→ The internal performance of the devicetunnel service for webconfig sessions tunneled through the LMC has been optimized.
→ Add-ins can no longer be deleted by project members.
→ The switch for disabling Wi-Fi frequencies works correctly again for LCOS LX access points.
→ A display problem when removing access points from floor plans has been fixed.
→ Missing widgets for WAN throughput are displayed again.
→ Fixed sporadic hiding of widgets in the device overview.

LANCOM
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LANCOM Management Cloud 1.00.125.0 / 05.10.2021

Cloud-managed Firewalls & SD-WAN
Use LANCOM R&S®Unified Firewalls as fully-fledged SD-WAN gateways: The LANCOM Management Cloud takes over the time-consuming, manual firewall configuration as well as the automatic setup of VPN connections between all sites (Auto-VPN). Configurations of the content filter, anti-virus functionality, SSL inspection, and application management are performed centrally and applied automatically to all desired sites. Discover the new possibilities on our Cloud-managed Security topic web page.

Further Improvements
→ The configuration of a device can now be rolled out directly via the configuration status display in the device list.
→ Further device-specific functions such as configuration and firmware rollout can be called up directly from the device view.
→ In the device overview, the assigned location is displayed as a link.
→ The dashboard widget for displaying additional VPN connections can now be filtered.

Bug fixes
→ If a device is removed from a site, it is now also correctly deleted from the floor plan.
→ The absolute expiration time for RADIUS user entries can now be set via the detailed configuration.

LANCOM
SYSTEMS

LANCOM Management Cloud 1.00.124.0 / 14.09.2021

Vimium support for barrier-free keyboard control
The LANCOM Management Cloud supports the browser extension Vimium for Google Chrome, which enables keyboard control of web pages. Vimium allows experienced users a significantly faster navigation and control, fits seamlessly into the workflow, especially for power users, and thus offers enormous time savings when operating the LMC. In terms of barrier freedom, operation without a mouse is also made possible. Learn more about setting up and using Vimium in this Knowledge Base article.

Further Improvements
→ Opening the WEBconfig of a device can now also be done via the actions in the device list, if the device supports this feature.
→ Opening the WEBconfig and the terminal of a device as well as the device reboot can now also be done directly in the device detail view, provided that the device supports these features. The actions can be found on the right side of the screen via a now displayed '3-dot button'. Accordingly, the previous tab 'WEBconfig remote access' is no longer available in the device detail view.
→ The LMC disables all insecure configuration protocols on the managed devices. This feature can now be optionally disabled.
→ The error messages in case of a problem with the AFU (Automatic Firmware Updater) now provide more details.
→ Long variable names in the add-ins assignment are displayed by 'mouse over'.

Bug fixes
→ A problem with device import via CSV has been fixed.
→ The sorting of the firmware version in the device list was not correct in individual cases.

LANCOM
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→ LCOS LX access points are now correctly presented with the Access Point and HotSpot Gateway functions.

→ If an LCOS access point is operated as a cloud-managed hotspot, the management network (INTRANET) is now used as the sender for LMC and RADIUS communication.

→ Load balancers for DPS are now correctly created by the LMC even if an entry with the same name already exists in the device.

→ The warning when assigning networks with the same VLAN tag to a site is now also displayed when all networks are selected.

→ After reloading the LMC in the browser by pressing F5, the language is no longer set to German.

→ Device names for switches and unified firewalls can be set correctly again.

→ LLDP can be configured correctly again at the device level.

→ Fixed a bug with the display of the DPS graph.

→ Fixed the display of incorrect gateways and networks for site connections in the VPN dashboard.

→ Correction of the configuration rollout for cloud-managed hotspots.

→ Fixed a white screen when switching between accounts.

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LANCOM Management Cloud 1.00.123.0 / 24.08.2021

Dynamic DNS Service for upstream provider routers

With the Dynamic DNS function, you simply assign a fixed, self-selected subdomain (mycompany.dyndns-lmc.de) to the gateways used there in the site settings. This practical function can now also be used on connections with an upstream provider router. To do this, select the option "Externally detected public WAN IP" under Sites > WAN Connections > IP Source, and the LANCOM gateway (from LCOS 10.50) uses the usually dynamic WAN IP address of the provider router for the DNS update.
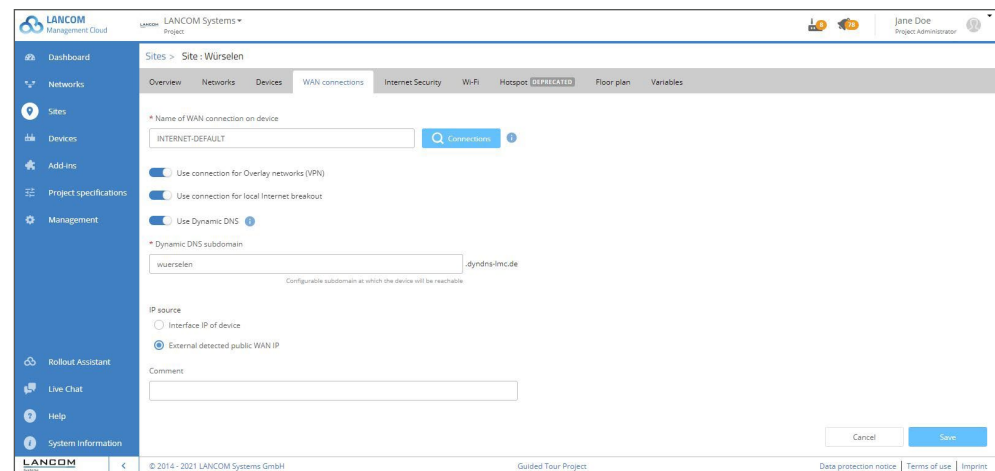
Further Improvements

→ The Notifications and Alerts page contains a variety of configuration options. This section has been redesigned and the configurations for e-mail notifications have been moved to a separate tab. The design of the new tab corresponds to the 'Webhooks' tab in 'Alerts and notifications'.

→ The list of projects and organizations in the account overview is now sorted by name.

Bug fixes

→ Some areas that were previously not controllable by keyboard via the Vimium plugin have been added.

→ In the VPN dashboard, several errors in the display of VPN gateways have been fixed.

→ Fixed an error in the display of networks for site connections in the VPN dashboard.

LANCOM Management Cloud 1.00.122.0 / 03.08.2021

Secure Terminal Access in a separate browser window
Secure Terminal Access provides direct access to the command line of LANCOM
devices (CLI tunneling) — securely encrypted and directly from the LMC interface.
A new feature is that the terminal now opens in its own uncoupled browser window.
The user can continue working in the LMC window in parallel. In this way, several
terminal windows can be used in parallel, individually scaled and moved.

Further Improvements
> → The LMC now supports the browser extension Vimium, which also enables
>   keyboard-only and barrier-free control of web pages.
> → A firmware update can now be performed model-wide via the device
>   selection.
> → The DynDNS status interface now displays an info if a device does not have a
>   license.
> → DynDNS can now be configured in the LMC to automatically detect the WAN
>   IP address by an external service; this way the WAN IP address of an upstream
>   third-party gateway can also be detected (requires LCOS 10.50 Rel).
> → Support for LCOS LX 5.34
> → The signal color for successful admin logins has been adjusted from red to
>   orange.
> → Notifications are not sent to unlicensed devices.

Bug fixes
> → Fixed a problem with displaying many projects in the map view of the
>   organization dashboard.
> → WEBconfig access did not work with a large number of cookies generated by

the browser.
→ Fixed a problem with DynDNS and multiple WAN ports.
→ The Secure Terminal Access content can now be exported as a text file, even after the connection to the device is lost.
→ Editing the address in the account properties no longer leads to a gray page.
→ The timer for automatic logout is no longer displayed as '15 min'.
→ Corrected display of the VPN connection duration if the connection is established for more than one month

LANCOM Management Cloud 1.00.121.0 / 13.07.2021

The LMC help portal - clearly arranged and just a one-click away
In the new portal, all helpful information for operating the LMC is easy to find and centrally accessible: information such as basic documentation, tutorial videos, knowledge base articles, FAQ, license information, and the latest features. For this reason, help and system information have been split into two separate areas, creating additional clarity. This makes the LMC even more user-friendly.
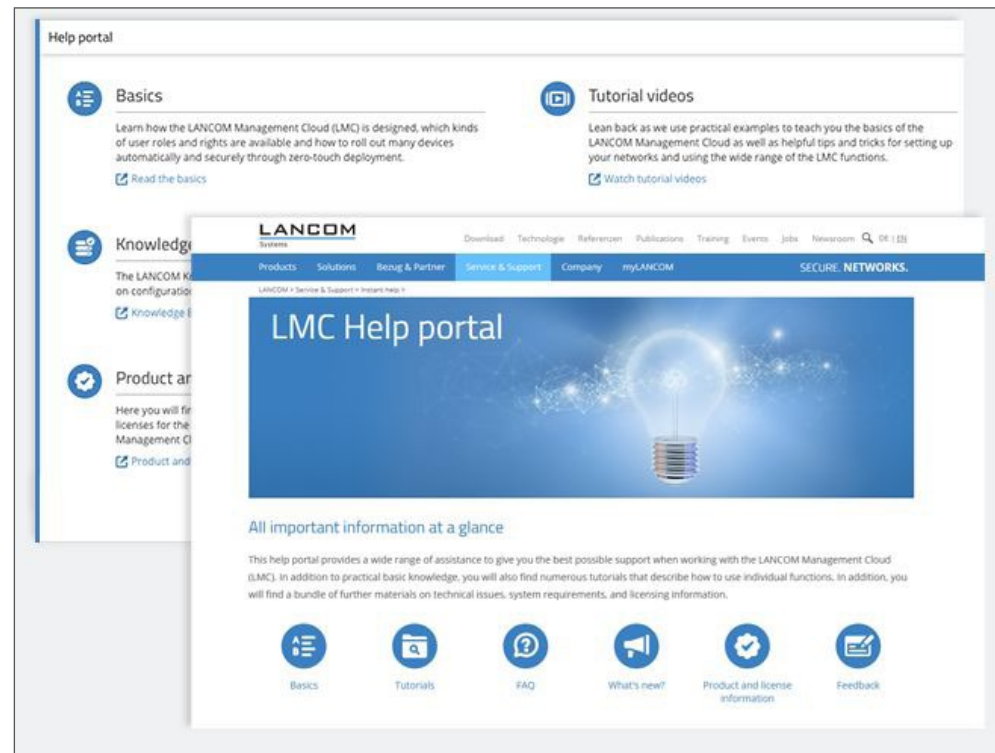
Further Improvements
→ The Wi-Fi channel width can now also be specified at project and site level.
→ Firmware updates for individual devices can now be done directly via a link in the device table.

Bug fixes
→ If supported by access points, the channel widths of 80+80 and 160 MHz can now also be selected in the Wi-Fi device settings.
→ A user with the role 'Project member' could previously only open the WEBconfig, but not the device terminal. Now both is possible.

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LANCOM Management Cloud 1.00.120.0 / 22.06.2021

Convenient development environment for add-ins
Using add-ins in the LANCOM Management Cloud is now much easier: The new add-in editor offers context-based suggestions for code completion with existing functions and OIDs. In addition, you benefit from practical support for code formatting as well as for synchronizing variables used in the script and assigned to the add-in. A full-screen view is now available for a better overview when working with add-ins.

For more information please see the add-ins manual.
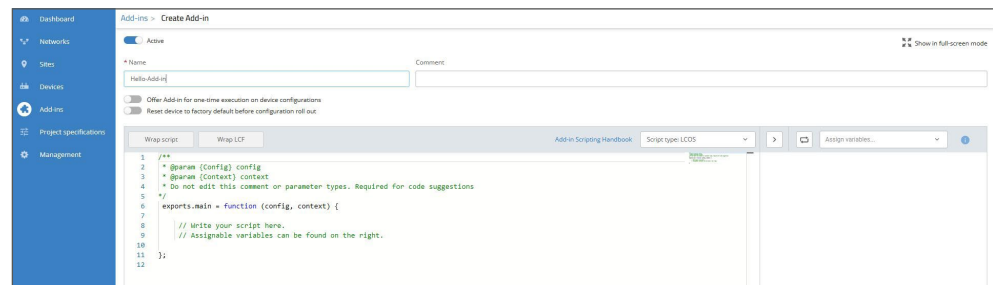
Further Improvements
→ The sender of the LMC emails will be changed from 'noreply@cloud.lancom.de' to 'noreply@mailing.cloud.lancom.de'. The invitation, notification and license summary emails will have a different sender address from now on.
→ The firmware update dialog has been revised.
→ If there are multiple problems when updating a device with an initial firmware, the customer is now notified manually and can commission the device manually.
→ The webhook user data can now be signed with HMAC.

Bug fixes
→ The defaults for variables in add-ins are used correctly again.
→ For configurations created with the given default, the correct WLAN country default is now set instead of the country 'unknown'. In addition, the field is now writable.
→ A pagination error in the user table has been fixed.
→ Performance optimization and reduction of requests when calling floor plans in the dashboard
→ Fixed the issue that a device could be partially disconnected from the cloud after being added to and removed from a project.
→ A problem with the use of commissioning licenses has been fixed.

LANCOM
SYSTEMS

LANCOM Management Cloud 1.00.119.0 / 01.06.2021

Open Notification Interface
To be able to react early, administrators need to be notified immediately when a network event occurs. Thanks to the Open Notification Interface, collected alerts about various events can now be forwarded to any recipient service, such as Slack, Jira or Splunk, that enables communication with the LMC based on Webhook technology. This allows users to flexibly integrate notifications into their usual work environment and also merge them with alerts from third-party systems.

Further Improvements

→ New <u>LMC help portal</u> is available.

→ The former "Info area" has been split into "System information" and "Help".

→ The color coding of the networks is now also used in the network assignment at the site level.

→ The help chat has been revised.

→ Automatic license assignment for expiring licenses is enabled by default for new projects.

→ The performance of the device list has been optimized.

Bug fixes

→ If the WLAN country setting for a WLAN access point is set to "unknown", it is set to the device default.

→ Variables used as conditions for globally assigned add-ins can now be deleted again correctly at the device level.

→ A WLAN base data rate set to "automatic" no longer causes a configuration rollout error for individual devices.

→ The configuration of VLANs on XS-6128QF switches has been corrected.

→ The column header for the channel of WLAN networks has been corrected.

→ Error in displaying data in the device overview after manual page reload has been fixed.

→ The "WLAN transmit quality" widget now shows the correct values again.

→ The widget selection in the dashboard now shows through a scroll bar that there are more items to choose from.

→ Fixed a bug in the Dynamic Path Selection widget when there are more than four WAN connections in the statistics.

LANCOM
SYSTEMS

LANCOM Management Cloud 1.00.118.0 / 11.05.2021

Extended Wi-Fi settings

Even more control and time savings in your Wi-Fi projects! With the extended settings options, you can define project-wide, site-specific, and device-specific Wi-Fi configurations such as frequency bands to be used, channel allocation, or channel width with just a few clicks. The settings in the project defaults are conveniently inherited by the site settings, which in turn are inherited by the individual devices. Start right away under Project specifications > SDN > SD-WLAN.
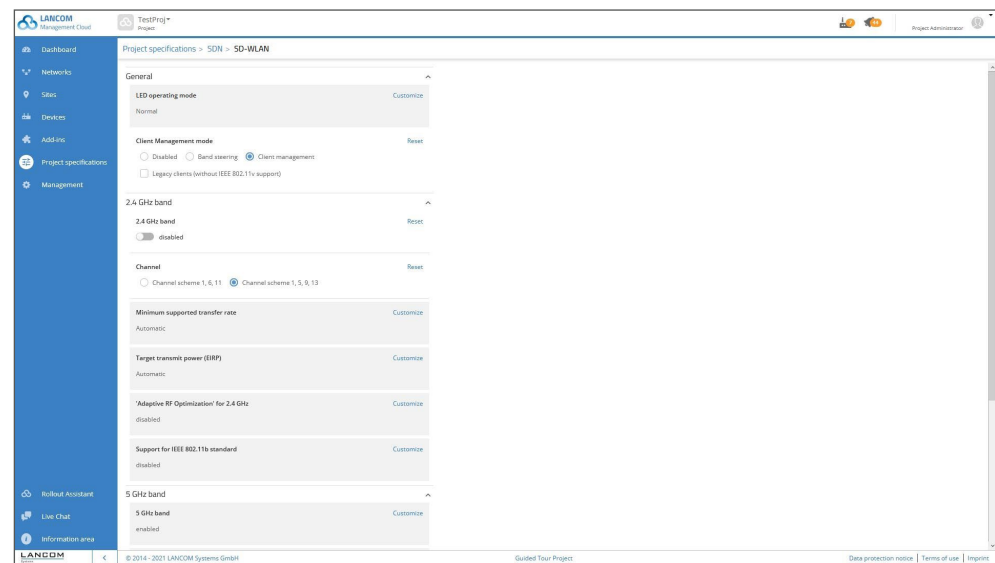
Further Improvements

→ The hotspot function based on a hotspot gateway, which is being phased out, was reactivated in response to numerous customer requests.

→ Improvement of the Add-In editor (syntax highlighting, auto completion, general IDE functions) as well as synchronization of Add-In context variables

→ The configuration of Dynamic Path Selection (DPS) has been extended by the 'Session Switchover' function and is available with LCOS 10.50.

Bug fixes

→ The configuration converter for IEEE 802.1X has been corrected.

→ If a fixed channel is assigned to a Wi-Fi device, other Wi-Fi settings are now correctly inherited from the parent layers.

→ The visibility of the user-defined columns was not permanent.

→ A display error of the tooltips in the dashboard has been corrected.

→ The Unified Firewalls graphs on blocked content now show the difference values per time range instead of the absolute counters.
→ The widget selection in the dashboard now shows a scrollbar in all supported browsers.
→ Fixed a misrepresentation when there are more than 4 WAN connections in the Dynamic Path Selection graph.
→ Improved signal strength formatting for Wi-Fi clients.

LANCOM Management Cloud 1.00.117.0 / 20.04.2021

Automatic license assignment

The LANCOM Management Cloud automatically carries out the especially in large projects time-consuming relicensing for you three weeks before the devices' licenses expire. To do this, activate automatic license assignment in the Project settings > Basic > Automatic license assignment area and select whether relicensing should be carried out using licenses with the shortest or longest term. If there are no compatible licenses in the license pool, you will be notified directly and can add additional license keys.
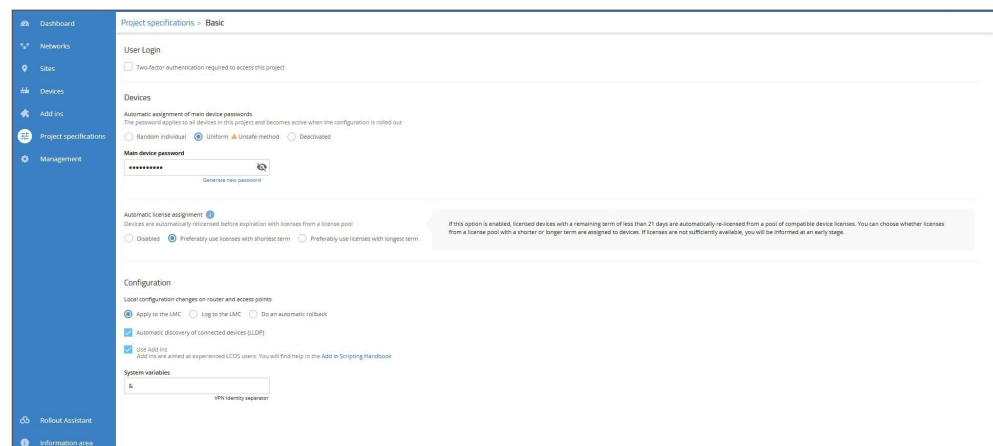
Activation of the automatic license assignment in the Project specifi-cations > Basic area

Further Improvements

→ WEBconfig access from the LMC to an LCOS device is possible in combination from LCOS firmware 10.42 RU3. Access takes place in the device detail view via the 'WEBconfig remote access' tab.

→ WEBconfig access to a Unified Firewall can also be found under the 'WEBconfig remote access' tab, and no longer under 'Detailed configuration'.

→ The target projects when transferring devices to other projects (or to the parent organization) are now sorted by name.

→ Optimization of the category display of device actions in the device table

Bug fixes

→ Fixed a problem with saving the main device password for the 'Uniform' method.

→ The counter for out-of-date devices on the Security and Compliance dashboard has been corrected.

→ Fixed an issue in the dashboard with linking devices with active alarms.

→ Fixed a problem with saving long device descriptions.

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LANCOM Management Cloud 1.00.116.0 / 30.03.2021

Add-ins — for tailor-made networks

Use the Add-ins to customize the configuration data of all devices managed in the LMC or make versatile detail modifications to existing standard concepts for SD-WAN, SD-LAN, SD-WLAN and SD-Security.

Activation: Project specifications > Basic > Configuration > Use Add-ins

Add-in Management: Add-ins (new one in the menu bar) > Create new Add-in opens the integrated script editor.

Requirements: Knowledge of Java scripting and LANCOM operating systems

Additional materials: Information area > Further reading > Add-in Scripting Handbook (incl. numerous practical examples)

Activation of the add-ins in the project specifications area
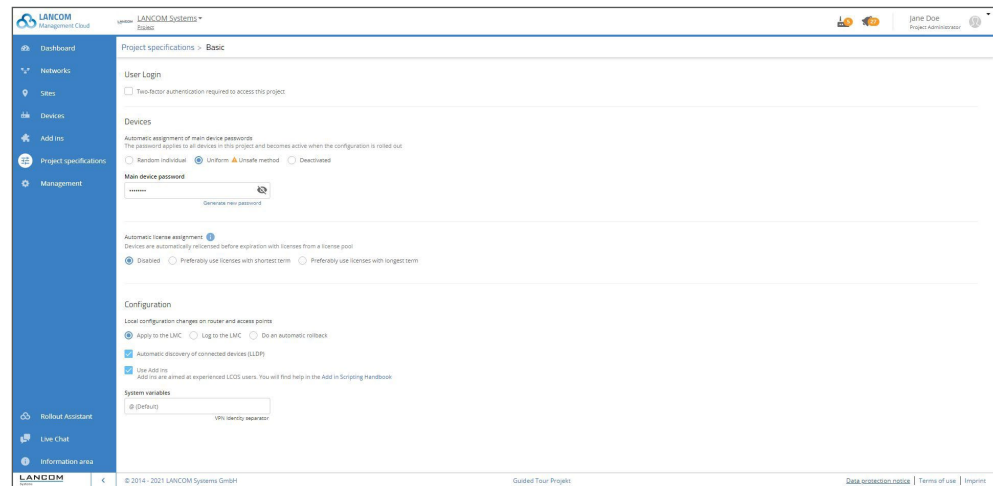
User interface add-ins with sample script

Notice: The discontinued hotspot feature no longer allows any changes. Existing hotspots can be operated further for a transitional period.
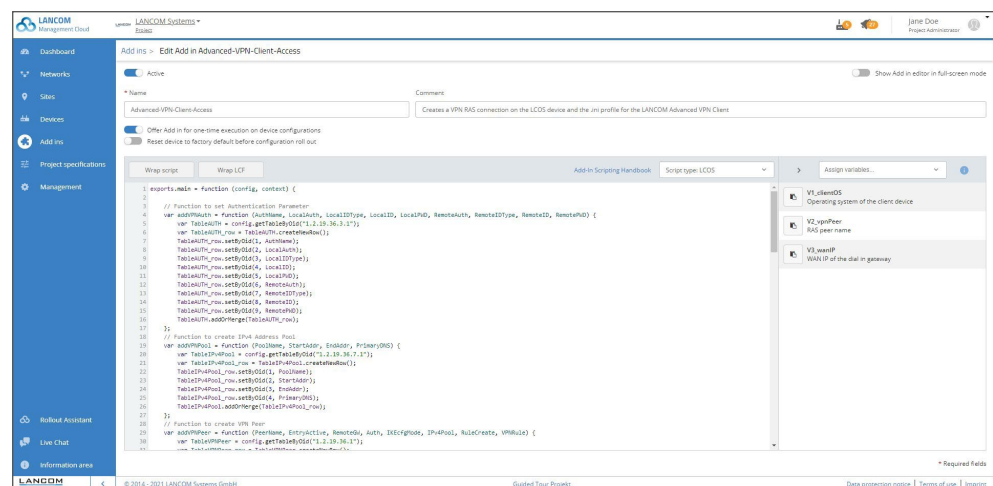
Further Improvements

→ Devices with pending configuration changes are permanently in view via an info element and can be called up in a filtered manner via a direct link.

→ The Add-in Editor can be switched to full screen mode.

→ The 'Basic' section of the 'Project specifications' has been revised.

→ Activation of the configuration test mode has been moved to the 'Device startup' section.

→ In the firmware update dialog, there is now an option to exclude already selected devices from the update.

→ The stability of the WEBconfig tunneling service has been optimized.

→ Optimizations in DPS rule generation

Bug fixes

→ If a router is not assigned to a site or is not selected as a gateway, the configuration no longer contains DPS relics.

→ The configuration converter for changes to the IEEE 802.1X authenticator table in LCOS 10.42 has been corrected.

→ The license category of the devices LANCOM 1926VAG & 1926VAG-4G has been corrected.

→ A problem with uploading floor plans with a file size larger than 1MB has been fixed.

→ The causeless triggering of alarms for disabled Wi-Fi interfaces has been fixed.

→ Corrected memory display for some switch models

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LANCOM Management Cloud 1.00.115.0 / 09.03.2021

SD-WAN of the highest quality with Dynamic Path Selection
At sites with multiple WAN connections, Dynamic Path Selection ensures that business-critical applications, for example, are always routed over the highest-quality line. The feature continuously monitors your WAN links for load, packet loss, latency, or jitter, and dynamically decides the optimal path for specific applications based on the current link quality. Enable best SD-WAN quality in the 'Project Preferences > SDN > SD-WAN > Dynamic Path Selection' section.
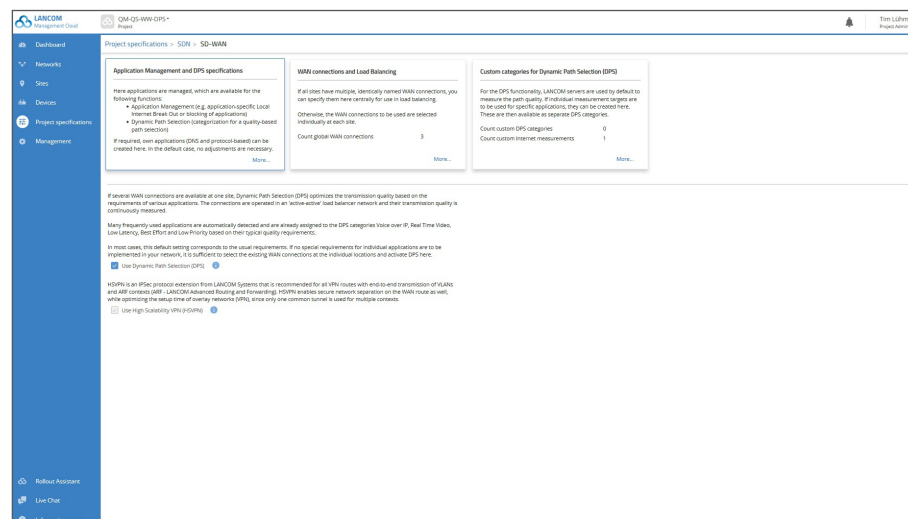
Dynamic Path Selection - Activation

Dynamic Path Selection can be enabled by checking a box. Policies, categories, and definitions for common applications and protocols are already predefined in the DPS configuration. This means that Dynamic Path Selection is applied immediately after activation and rollout of the devices. Additional applications can also be assigned quality criteria and individual settings can be made.

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The monitoring widget provides high transparency about the overall quality as well as the quality of individual lines. A graphical interface allows to historically track the connection quality and the preferred lines for specific applications.

Further improvements

→ Warning dialog with control query when selecting a different VPN Central Site location

→ Individual notification / alerting per device

→ The action list of the device table has been divided into categories for a better overview.

→ In case of a failed firmware update, the firmware target version is now stored in the log file.

→ The maximum image size of floor plans has been increased to 2 MB. The upload of *.jpg and *.png image files is allowed.

→ Configuration rollouts are now only possible for devices with valid licenses.

Bug fixes

→ When activating the initial configuration rollout without test mode, the test mode remained inactive until the device reconnected to the LMC. Test mode is now only disabled for the first automatically initiated configuration rollout after commissioning.

→ Fixed a problem in the confirmation dialog when removing devices from the organization.

→ When working in the compact view, it could happen that the device selection changed to the first filtered device.

→ Error in the configuration of the WIFI4EU

→ Minor cosmetic fixes on the hotspot configuration page

LANCOM Management Cloud 1.00.114.0 / 16.02.2021

Full SD-WAN power: HSVPN and Load Balancing

LANCOM High Scalability VPN (HSVPN) ensures maximum scalability and efficiency for your SD-WAN architectures! Numerous VPN connections is combined in just one data tunnel, but without sacrificing the strict separation of routing contexts and the security of a modern IPSec VPN. You can now enable this in the area Project specifications > SDN > SD-WAN.

Furthermore, if multiple WAN connections are defined for a site, they will now automatically operate in active/active mode (Load Balancing), thereby increasing the total available bandwidth.

Activating High Scalability VPN
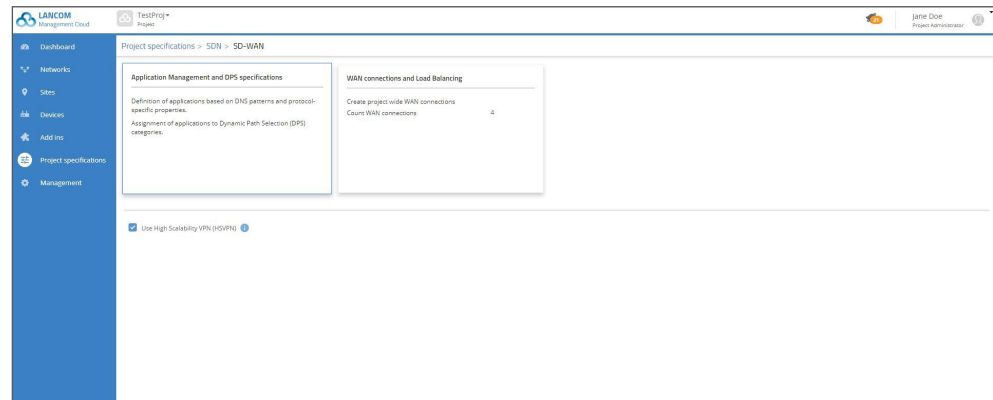
Configuring
Load Balancing

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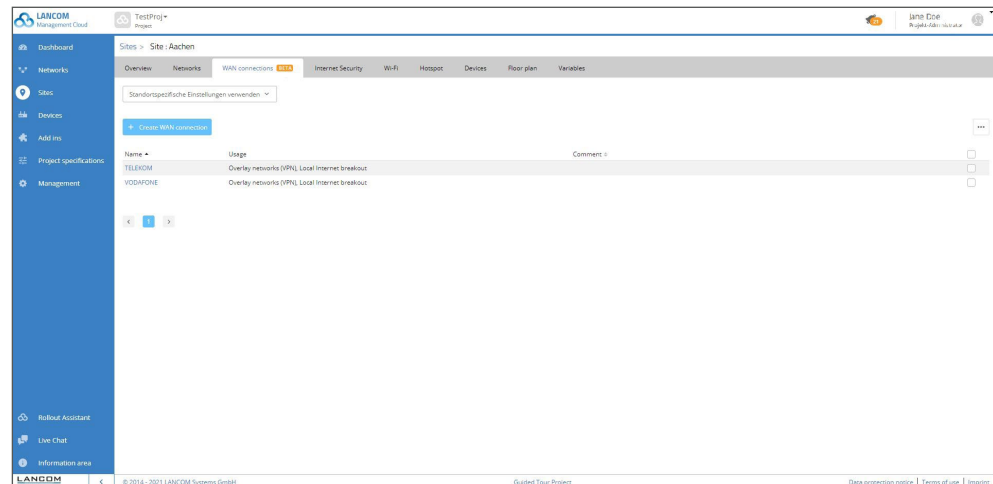
Further improvements
→ Support for WIFI4EU
→ The 'Device Licenses' widget in the 'Security & Compliance' dashboard now displays the number of all unlicensed devices.

Bug fixes
→ A problem with missing firmwares in the device commissioning defaults has been fixed.
→ Missing log entries when creating and deleting preconfigurations have been added.
→ Fixed an error where the configuration could not be written to some device types due to WLC-TUNNEL-AUTOWDS settings in the '/Setup/LAN-Bridge/Port-Data' table.
→ WAN connections whose names start with a number can now be included in the configuration of 'WAN Connections and Load Balancing'.
→ Changes to inactive networks no longer cause associated devices to be set to 'not up to date'.
→ Changes to assigned add-ins now cause associated devices to be set to 'not up to date'.
→ If SD-WAN is disabled and device assignment based on IP addresses is enabled in the project, newly created networks can be correctly assigned to sites.
→ Subsequent changes to the name of the WAN connection at DynDNS will no longer cause DynDNS to stop working.

LANCOM Management Cloud 1.00.113.0 / 28.01.2021

Cloud-managed Hotspot

Create a simple Wi-Fi hotspot with a few clicks – directly from the LMC. No additional gateway or WLAN controller with LANCOM Public Spot Option is required. Intuitive menus provide you with the opportunity to customize your hotspot welcome screen with your logo and corporate colors and integrate important information such as imprint and usage guidelines for your hotspot users. Afterwards you can assign the new hotspot to the respective location and it will be available to your visitors.
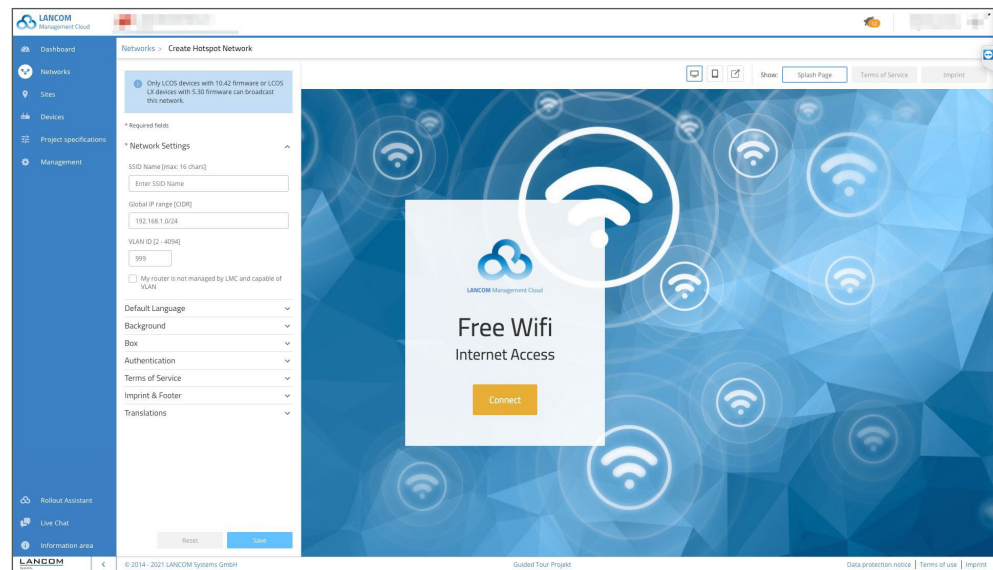
Further improvements

→ The firmware type (Rel, RC, …) is now displayed in the firmware update dialog.

→ Stabilization of the rollout process with initial device firmware using retries

→ Hotspot users are authenticated for 24 hours.

→ The list of authenticated clients is stored for 5 days.

Bug fixes

→ Fixed an issue related to closing notifications in case of offline acknowledgements.

LANCOM Management Cloud 1.00.111.0 / 15.12.2020

Dynamic DNS Service for the Public Cloud (Beta)
The LANCOM Management Cloud becomes a DynDNS provider! Simply assign a fixed, self-selected subdomain (mycompany.dyndns-lmc.de) to the gateways implemented there in the sites settings. This subdomain can then be stored in VPN remote stations such as the LANCOM Advanced VPN Client. This way, gateways (from LCOS 10.42 RC3) with dynamic WAN IP addresses remain accessible at all times via this domain name.
This feature is exclusively available in the Public LMC.

Further improvements
> → For switches of the GS-3xxx series WEBconfig tunneling from the LMC is possible from firmware 4.00.0254 (RU3).

→ The Rollout Assistant can be accessed via the 'Add device' function in the device table.
→ The device table has been optimized for displaying many devices on slower systems.
→ Cloud-managed hotspot support (beta) available for devices running LCOS 10.42 RC3 or later

Bug fixes

→ The user profile image can be changed again.
→ A problem with the display of many devices in the firmware download dialog has been fixed.

LANCOM Management Cloud 1.00.110.0 / 24.11.2020

New user role 'Technical Administrator'
In network infrastructures with several administrators, differentiating between rights for technical and organizational tasks is necessary to implement compliance requirements. An LMC user with the new role 'Technical Administrator' can configure location, network, and device details. In contrast to the 'Project Administrator', however, the Technical Administrator is not allowed to manage or invite new users and cannot modify project information.

Further improvements
- → If the Add-Ins are activated in the project, user-defined variables with a definable input set can now be created.
- → If command line calls (addScriptLine) are used in the add-ins, the LMC now displays possible error messages of the configured devices in the log.
- → The tables of license keys or pools are now sortable.
- → The page size setting of the device table is now saved.
- → E-mail addresses of users are now changeable.
- → In e-mails the English text is now displayed first.

Bug fixes

→ When removing the assigned schedule on an SSID, affected Wi-Fi devices are now correctly marked as not current

→ The configuration options of the RADIUS server definition were corrected.

→ If a display name is assigned to a variable that is created as a selection list in the Add-In area, the selection list is displayed correctly again.

→ If a variable is marked as password, the display name is now correctly resolved in the once executed Add-Ins.

→ If several similarly tagged networks are assigned to the same location, a warning message is generated.

→ Send and receive direction of the data for the top users in the dashboard are now shown from the client's perspective.

→ Added missing throughput graphs for the ports.

→ Removed suggestions for completing entries in explicit confirmation dialogs.

→ Fixed a problem with the color indicator for the firmware status in the device table.

→ Fixed display errors with Firefox on the device overview page of switches when editing port properties.

→ For the Wi-Fi user name, the name transmitted by the RADIUS server is now displayed preferentially.

→ The access performance to the web interface as well as to the terminal of the devices from the LMC was improved, a temporary instability of the corresponding service was fixed.

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LANCOM Management Cloud 1.00.109.0 / 03.11.2020

Easy generation of new VPN passwords

If the VPN keys (IPSec PSK) of a VPN connection could be compromised – whether it is due to an administrator leaving the company or a VPN gateway being serviced – it is advisable to change these VPN passwords. The LANCOM Management Cloud allows VPN passwords of individual sites to be conveniently changed with just a few clicks: In the 'Sites' section you simply mark the affected sites, trigger the generation of new VPN passwords and then roll out the configurations of the gateways involved.
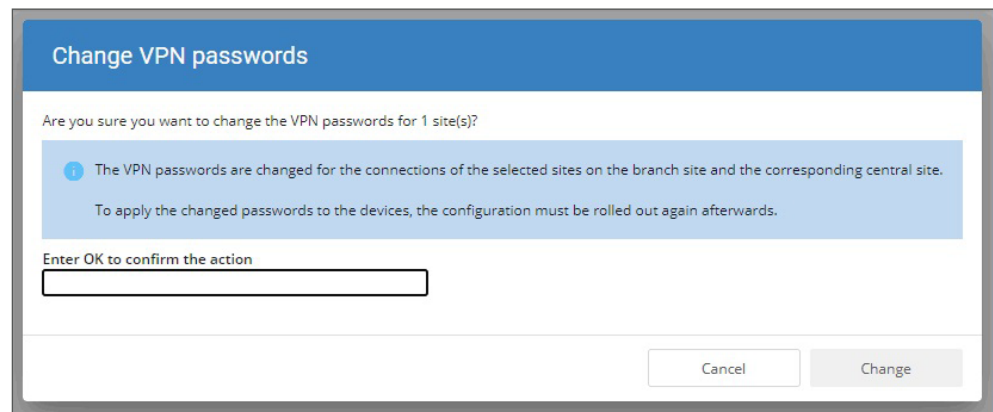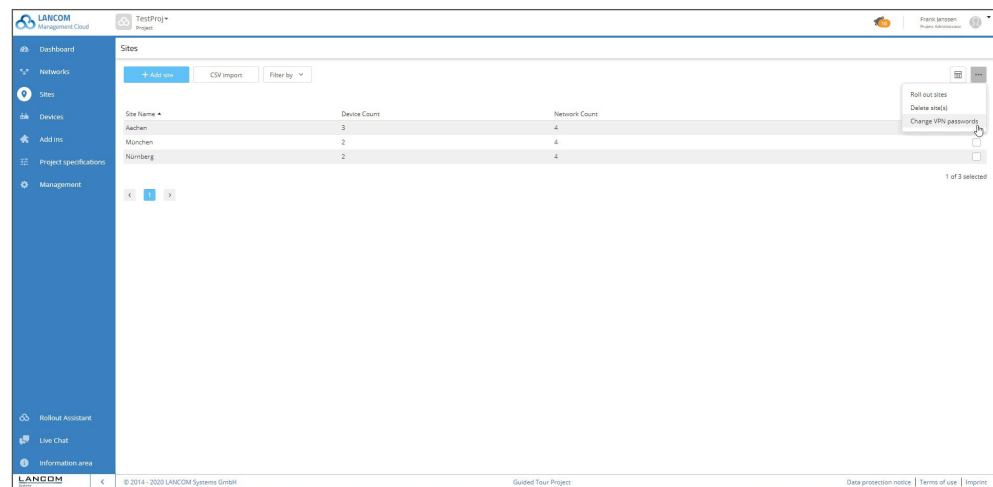
Further improvements

→ In the device and location table, only entries visible to the user can now be selected.

Bug fixes

→ A problem with assigning new devices to a location has been fixed.

LANCOM Management Cloud 1.00.108.0 / 12.10.2020

Fully automatic device commissioning
The multiple zero-touch / auto-config features of the LMC for automatic commissioning of cloud-managed devices are now extended by the possibility of early detailed configuration without the physical presence of the device. The advantage: The devices only need to be connected at the operating site and are immediately ready for operation! Under „Devices > Add Device" you can create „preconfigurations". You can assign the serial number directly in the device table. Then add the device as usual using the activation code or PIN.

Step-by-step instructions for the feature "Fully automatic device commissioning
→ Switch to the device overview.
→ Press the "Add Device" button and select the menu item "Create Preconfiguration".
→ Follow the steps and name the device, select the device model, make a selection regarding the target firmware and define a location if necessary.

→ Then press the "Create" button and the preconfiguration is created.

→ Once you have the device physically available,

→ please click in the line of the previously created pre-configuration in the column 'Serial number'.

→ An editable field opens.

→ Enter the serial number of the physical existing device in this field.

→ Now click on the check mark next to this field and accept the entry.
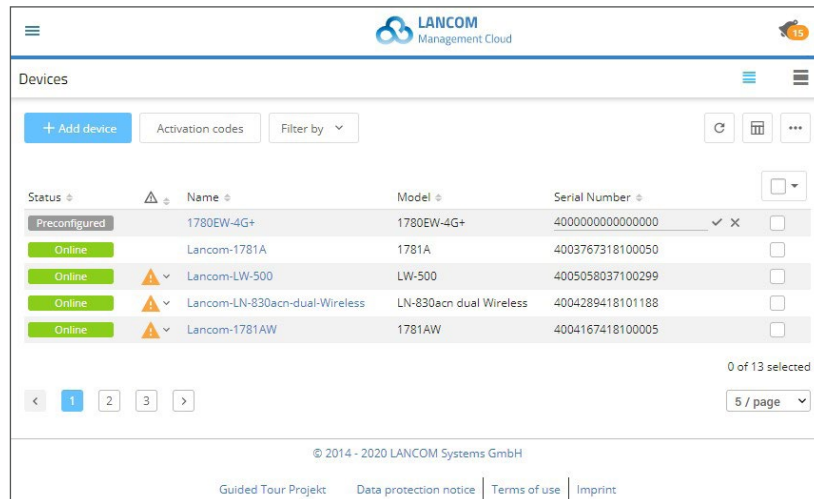
→ Now create a new Preclaiming entry via "Add Device > With Serial Number and PIN".

→ The process is now complete.

As soon as the power supply and Internet connection of the device are established at the later location, it automatically connects to the LMC and receives the settings of the preconfiguration.

Bug fixes
→ Anomaly detection error that caused blocked 5 GHz channels to be reported unreliably was fixed.
→ An error causing VPN connections to be displayed twice in the dashboard was fixed.
→ Secure Terminal Access for devices sporadically stopped working after a UI auto logout, problem was fixed.
→ The handling of the password policy in the details configuration of GS-3xxx switches was corrected.
→ On LCOS LX access points a time unlimited SSID can now be configured even if the default ALWAYS schedule does not exist in the device.
→ Optimization in handling DHCP ranges during CSV import (import failed for certain subnet constellations).
→ Added error message when creating nets with already existing "internal configuration name".
→ Correction of the configuration conversion when switching to LCOS 10.42 in the 802.1X settings environment.

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LANCOM Management Cloud 1.00.107.0 / 22.09.2020

Automatic firmware assignment
With this feature, you can control the automatic assignment of a preferred firmware version during the initial setup of different devices. If you connect a device to the LANCOM Management Cloud (LMC), the firmware corresponding to the specification is automatically rolled out to this device. In this way, for example, all devices in a project can be adapted to a uniform software version that corresponds to the project specifications, regardless of the factory delivery status.
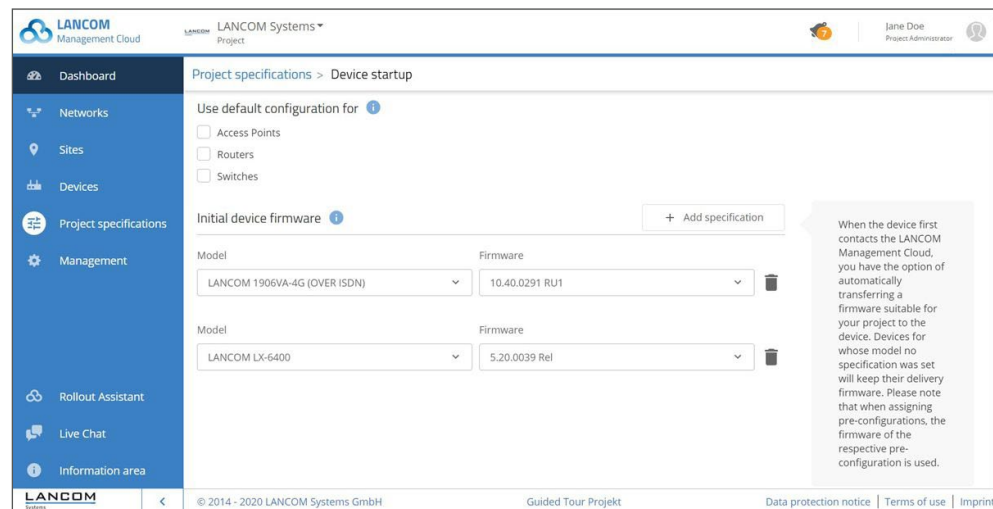
Further improvements
→ Additional confirmation is now required for critical delete operations for multiple entries.
→ The limit for CSV imports has been increased to 1,000 entries.
→ The LMC now offers the possibility of conveniently renewing VPN passwords manually per site.
→ In the application management, IP address targets can now be created without restriction to specific ports.
→ In addition to the technical variable name, the add-in variables can be given a more readable plain text name for the user dialogs.

Bug fixes
→ A problem that prevented CSV imports in certain situations has been fixed.

LANCOM Management Cloud 1.00.106.0 / 01.09.2020

Wi-Fi scheduling

The 'Wi-Fi scheduling' function enables the time-controlled activation and deactivation of SSIDs in the wireless network. Ideal for wireless networks that should only be available at certain times, such as hotspots or Wi-Fi in educational institutions. You can individually determine the times and duration of Internet availability. The scheduling specifications are created under 'Project Specifications / Time schedules'.

Further improvements

→ New role 'Technical Administrator'
The technical administrator can make network and device settings, but has no authority to manage project users. The technical administrator thus helps

to implement compliance requirements in the enterprise environment, where technical and organizational rights should be separated.

→ If a device is in up-to-date configuration state before an update with a major release, a rollout to affected devices is now automatically performed after conversion to the new configuration.
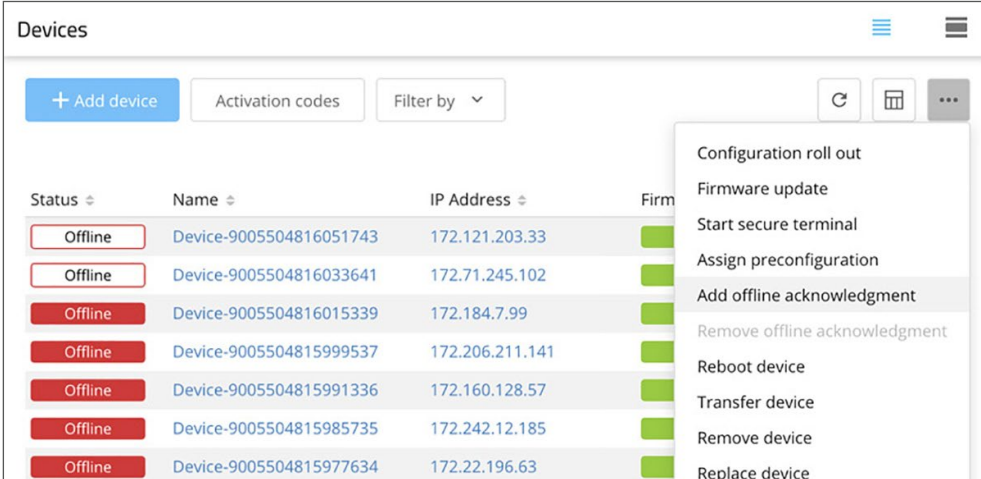
Bug fixes

→ In the device detail view, the selected tab is now retained when selecting another device.

→ Warnings are now displayed in the floor plans.

→ In the context of exceeding allowed claiming failures, a problem with the display of the lockout time has been fixed.

→ LEPS can be switched on correctly in the detail configuration for LCOS LX devices.

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LANCOM Management Cloud 1.00.105.0 / 11.08.2020

Offline Acknowledgement - New device status for an improved overview
If devices are known to be offline for a long time, or if they are intended to be offline for a longer period of time, or if work is already in progress on troubleshooting, simply assign them an 'offline acknowledgement' from now on, which enables clearer incident management. You can still identify all devices that are offline unplanned by the red filled out display, known faults are only outlined in red. The 'offline acknowledgement' is automatically removed as soon as the device is back online; devices marked as known are not included in the offline statistics of the dashboards.

Further improvements
→ Monitoring in the LMC for switches of the XS series
→ WEBconfig access from the LMC to the switches of the XS series, e.g. XS-5110F (from firmware 5.00.0053)
→ Terminal access from the LMC to the switches of the XS series, e.g. XS-5110F (from firmware 5.00.0053)
→ The technical administrator can now configure two-factor authentication for a project.

LANCOM Management Cloud 1.00.29.2.0.0 / 30.06.2020

Audit logs

Changes in the LMC are now logged in a standardised way. These log messages comply with the requirements of PCI conformity and thus create a complete, non-manipulable tracing of events by containing all information about who made which change and at what time. This happens in accordance with data privacy standards. Only project administrators receive the complete information and can download it once a month as a new log archive on the 'Log Download' tab. The logs remain stored for one year before being deleted.

Further improvements

→ Reset of the two-factor authentication without deactivation
Previously, if the second factor was lost, the two-factor authentication had to be deactivated and set up again using the 'Forgot password' dialog. If only the second factor was lost, it can now be reinstated via the 'Forgot password' dialog without having to deactivate the two-factor authentication.

Bug fixes

→ Problems with the live chat when loading external scripts have been fixed.

LANCOM Management Cloud 1.00.29.1.1.0 / 09.06.2020

WLAN Anomaly Detection

Best Wi-Fi at all times—that is what users expect! However, WLAN is a complex transmission medium and has to deal with many potential sources of interference such as overcrowded channels, foreign, interfering WLANs or other interfering frequencies or disturbances caused by structural surroundings. Therefore, for the best Wi-Fi experience, a fast and targeted troubleshooting is essential, which is guaranteed by the new Wi-Fi anomaly detection.

To reach this goal, the LANCOM Management Cloud (LMC) evaluates data from the managed WLAN devices using various "metrics" and compares it with previously defined threshold values. As soon as this threshold value is repeatedly exceeded in a certain interval, the affected device is marked accordingly in the LMC and the administrator receives an alert.

Further improvements

→ Support of WLAN time control from LCOS 10.40 and LCOS LX 5.20.

→ CPU resource allocation for device tunnel service (CLI and WEBconfig tunneling) has been reduced to 1/4 by default.
→ The logs of the last 31 days can now be downloaded.
→ Dialogues for deleting devices and locations are displayed as a warning.
→ The e-mail address of the user performing the import process is now displayed in case of errors.
→ New user role in the LMC: Technical Administrator
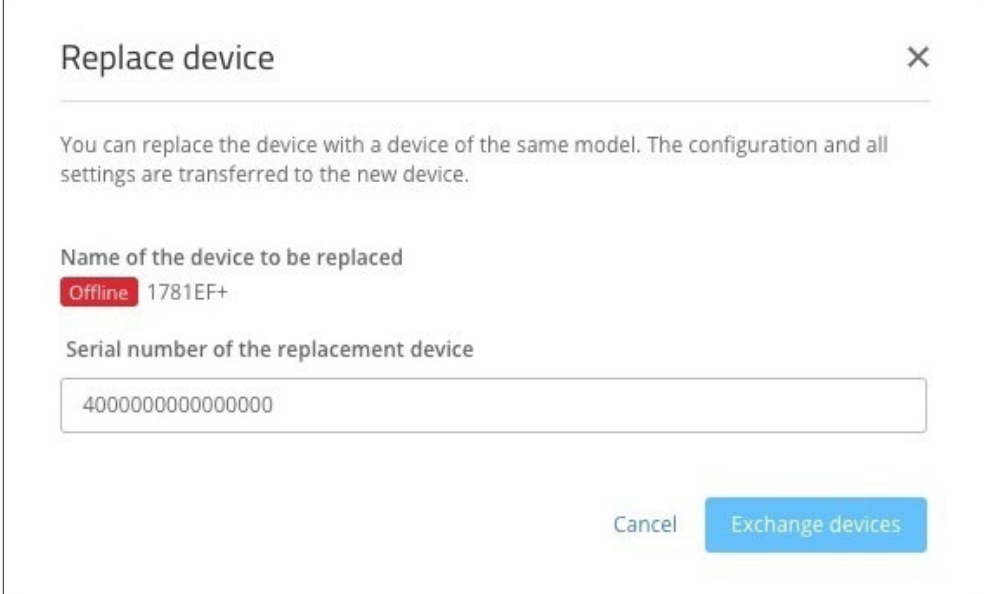
Bug fixes

→ Fixed a problem with the port view for GS-3528XP switches.
→ The list of activation codes in the LMC did not display the selected number of activation codes.
→ The correct number is not displayed when displaying activation codes.
→ Fixed inconsistencies in UI behavior:
→ Sidebar reopens after reload
→ The maintenance banner reappears after closing it
→ Content does not grow with compressed sidebar
→ items per page dropdown issues
→ When filtering and sorting locations, the selection of locations in the table was not removed.
→ The cloud enables LMC-specific DHCP options even if the project only enables location assignment based on location information provided by the device.

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LANCOM Management Cloud 1.00.28.0.0.0 / 19.05.2020

Device replacement & pre-configuration

Device replacement has never been easier: With this new feature, you can transfer the complete configuration from an existing device to a new device of the same model with just a few clicks. Simply select the device to be exchanged and enter the serial number of the replacement device—done!

In addition, you now have the possibility to completely prepare a configuration for numerous LCOS devices—even before the device is connected to the LMC. Ideal for preparing your infrastructure for the least amount of effort during commissioning.

Further improvements

→ Logs are now archived monthly as CSV files.

→ New API for the user data storage service

Bug fixes

→ The device images for the GS-3528 series are now correct.

→ The incorrect display of the blocking time in case of too many incorrect claiming attempts has been corrected.

→ The 'Device Warranty' widget has been removed from the 'Security & Compliance' dashboard. The default layout of the dashboard will be adjusted accordingly.

→ When copying the device password from the device overview, no space is appended.

→ The setting of Wi-Fi channels via the floor plans was corrected.

LANCOM Management Cloud 1.00.26.2.2.0 / 27.04.2020

Redesigned management & device log overviews
The logging of all events in the LMC is now even more comfortable and clearer. Keep the overview at all times thanks to the clear layout. This applies equally to the events of your network management and to the logs at device level.
All events are sorted chronologically by date and time, starting from the most recent event in reverse order and going back up to one year in the past. If you are interested in a previous event, you can jump directly to the corresponding time at any time using the date search field.

For each line, information such as the date and time, a short summary of the event and the name of the user who performed the event are available. By clicking on the checkbox, additional events of individual devices in the network can be displayed. Information relating to locations, devices or an action in the "Notification settings" area is displayed as hyperlinks. This allows direct navigation to the named units. The structure of the event log for the individual network components is similar to the management log view. In the device logs, either only warnings and errors can be displayed or the entries of the log level "Info" can be displayed additionally via checkbox.

The line entries can be selected individually by mouse click. This opens a field with more detailed information that is clearly structured and understandable. So you don't spend your valuable time anymore with searching and resolving cryptic entries. If, for example, a LANCOM employee asks you for essential information in a support case, this can be transmitted quickly.

The newly designed protocol overviews provide a practical, well-organized and time-saving way of keeping a constant eye on your network events.

Bug fixes

→ The LMC no longer disables LANconfig's TFTP-based search on managed
devices.

LANCOM Management Cloud 1.00.26.0.0.0 / 06.04.2020

Promotion Switch2Cloud – LANCOM switches including free 3-year license
LANCOM fully managed switches are 100 % cloud-ready and can be managed automatically via the LANCOM Management Cloud (LMC). Start into the cost- and time-saving cloud management and receive a free 3-year LMC license (if activated until September 30, 2020) for every newly purchased LANCOM fully managed switch until June 30, 2020.

Further improvements
→ User-defined columns in the device overview can now be deleted.

Bug fixes
→ The location filter in the project dashboard now works reliably for the map again.
→ The VPN connection times in the individual device monitoring are now displayed correctly.
→ The VPN connection throughputs in the individual device monitoring are now displayed in more easily readable units.

LANCOM Management Cloud 1.00.25.0.0.0 / 24.03.2020

Further improvements
→ The LMC now supports the use of add-ins for one-time, persistent execution directly in the detailed configuration.
→ Support for WPA3 for access points with LCOS LX 5.10
→ Further improvements in management and device logs

Bug fixes
→ Correction of the output data in the 'VPN Connections' widget in single device monitoring.

LANCOM Management Cloud 1.00.24.0.1.0 / 25.02.2020

Rollout Assistant - the quick and easy way to onboard new LANCOM devices in the LANCOM Management Cloud
The initial commissioning and inventory of new LANCOM devices in the LMC is straightforward with the new Rollout Assistant and takes just a few clicks. The web app, which was specially designed for mobile use on tablets and smartphones, enables you to perform onboarding to the LMC directly on site after the physical device installation. The only requirement is that your smartphone or tablet can access the Internet (LTE, WLAN, etc.). During the inventory using the Rollout Assistant, you can monitor the current device status live and thus find out during the installation whether the device has the final status 'online' in the LMC.
In the future, a new user role 'Service Technician' will be introduced for the LMC. This role is specifically for users of the Rollout Assistant web app and only gives the designated persons the authorization to inventory new devices within the LMC.
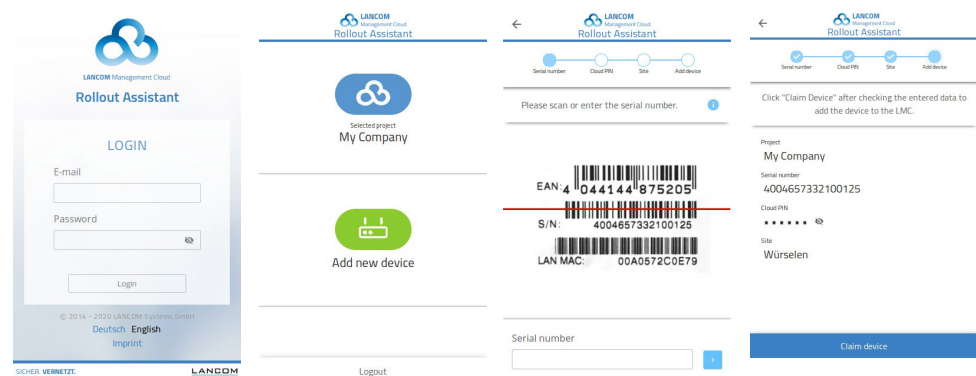
Further improvements
→ Improved data access
→ History graph for the number of VPN tunnels in the individual device monitoring
→ Table of all VPN tunnels in the individual device monitoring
→ Optionally, the management date of the devices can now also be displayed in the device table (sorting possible).

Bug fixes
→ The initial device name did not always contain the LANCOM prefix.

LANCOM Management Cloud 1.00.23.0.0.0 / 03.02.2020

Further improvements
→ It is now possible to access up to one year old log entries.
→ The initial name of devices claimed with serial number and PIN has been shortened for a more compact view in the device table.

Bug fixes
→ The button 'Hide log entries for devices' does now an accurate filtering.
→ Fixed an issue with the display of expired warranties in the Security & Compliance dashboard
→ The link in an invitation e-mail now leads to the account overview.
→ The tab 'Latest activity' in the user management does no longer show the status 'Never', despite user activity.
→ The switch port status for 'disabled' and 'not connected' is now displayed accurately again.

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LANCOM Management Cloud 1.00.22.0.0.0 / 13.01.2020

Secure WEBconfig Access
The new highlight feature "Secure WEBconfig Access" allows direct and secure access to your LANCOM R&S®Unified Firewall device's WEBconfig – securely encrypted and above all usable from within the cloud interface. By this direct remote access to the device's WEBconfig the complete Unified Firewall configuration becomes accessible to a system administrator. A convenient added value which does not only save time, but particularly unifies the global and individual firewall management in the LANCOM Management Cloud.

You can access the LANCOM R&S®Unified Firewall's WEBconfig in the LMC via the tab "Detail configuration" in the device's detail view.
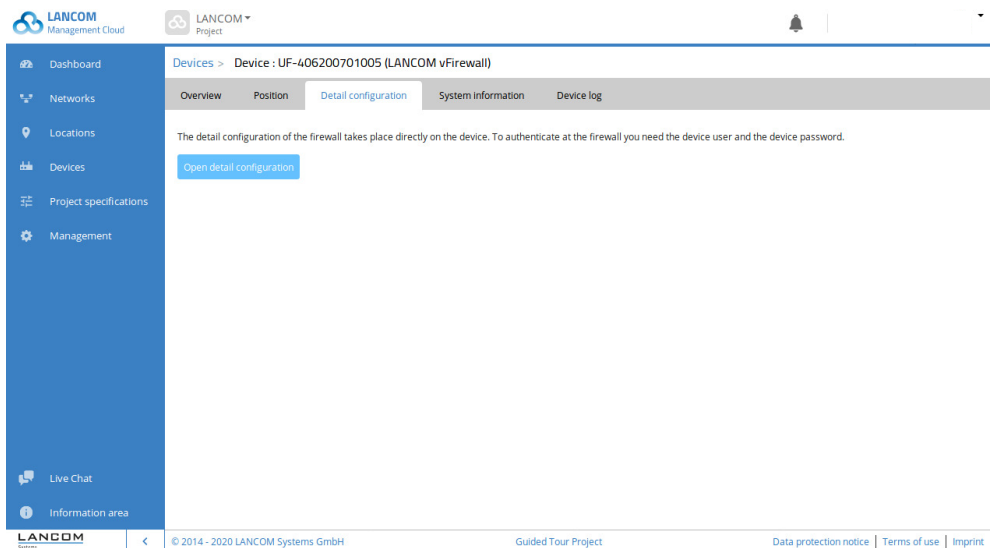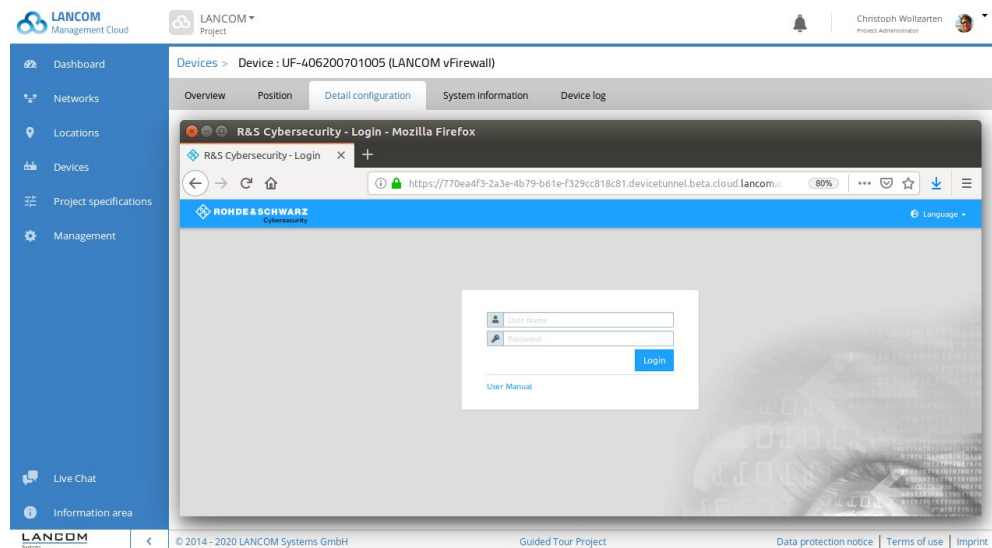
One WEBconfig session is supported per device. A previously initiated session is thereby closed.

Important information for LMC Private installations:
For the subdomain *.devicetunnel under a Private LMC domain (e.g. *.devicetunnel. customer.tld) the customer needs a wildcard certificate in addition to his LMC domain certificate.

Further improvements
→ Customer-defined columns and views in the device list can be saved per project.
→ The maximum number of devices in the license allocation dialog has been extended to 100.
→ When modifying the cloud connectivity settings for single devices the device name is now displayed in the subject.
→ An initial device name can now be allocated when claiming cloud-ready devices via API.
→ The device services have been extended by TFTP sysinfo and TFTP config.
→ While initial access, device configurations can be set to to default values manually or automatically.

Bug fixes
→ The "previous contact" was shown faulty in the "site overview" widget.
→ The switch port throughput graph does not change with a new port selection.
→ An issue with processing monitoring data under heavy load has been resolved.

LANCOM Management Cloud 1.00.21.2.0.0 / 03.12.2019

User-defined columns in the devices overview
It is now possible to extend die devices overview page with additional columns. These columns are freely configurable and can include values which enable the user to sort and filter the overview by further criteria, for instance to find a certain device faster.
Examples for user-defined columns:
→ Contact person
→ Location (e.g. „Room 4")
→ Customer number (beneficial in large-scale / individual customer installations)

User-defined columns in the locations overview

In the locations overview, as well, user-defined columns can now be added.
Just like in the devices overview, you have the option to sort the overview by all columns.
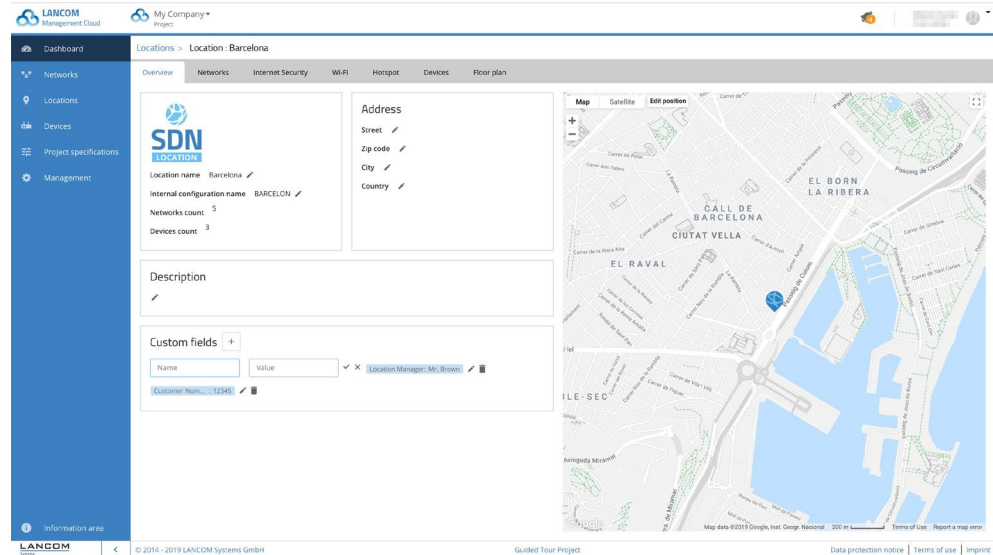
Further improvements

→ The LMC now supports the option to choose whether the layer-7 application detection is applied to access points or gateways.

→ Support of LCOS 10.40

→ As from LCOS 10.40 LMC-managed devices can be found via the LANconfig search tool.

→ LLDP can now be configured individually on a device level.

Bug fixes

→ If an access point is offline, Wi-Fi channels can be configured via the floorplans nonetheless.

LANCOM Management Cloud 1.00.20.0.0.0 / 12.11.2019

Cloud-managed firewall

The LANCOM R&S®Unified Firewalls are now cloud-ready! Devices are connected to the LANCOM Management Cloud (LMC) by a simple yet secure PIN- or activation code-based pairing procedure. They then appear in the device overview, which offers clearly structured monitoring of the device status and also features an alerting function. On top of that, having a firewall in your network all applications tagged with „LCOS FX" within the feature „Application Management" can be provided with rules.

Note: The support for the web-based configuration interface of the LANCOM R&S®Unified Firewalls, as well as the support for the LANCOM R&S®Unified Firewall UF-50 follows in one of the next LMC releases.

Further improvements

→ It is now possible to hide / unhide columns in the device- and location overview.

Bug fixes

→ An issue has been fixed for the device list and location overview in the location filter of the LAN-/Wi-Fi dashboard.
→ The "Further VPN connections" display has been corrected in the WAN-/VPN dashboard.
→ Cancelling a page change in the project presets does no longer result in a loss of all previously changed settings.
→ The speed limitation for an SSID is now set on a LANCOM LW-500, too.
→ Wi-Fi channel allocation now works on the LANCOM LW-500, too.

LANCOM Management Cloud 1.00.19.0.0.0 / 21.10.2019

Application Management — Convenient control over all applications in your network

Now you can control even more conveniently which applications you allow or block in your networks in the LANCOM Management Cloud.

As the successor to the previous Application Routing, the new Application Management allows you to group several applications into one rule. The respective rule is assigned an action. In addition to routing applications, as it has already been possible in the Application Routing, the "Block Applications" function is now available.

These rules are created with just a few clicks. The corresponding input field allows you to find known applications quickly by name, and also a convenient selection of predefined application categories such as gaming, streaming, business or messaging, in which several similar applications are grouped.

This feature significantly increases the security of your network by allowing you to block the use of particular services within your network. You can also increase performance because you can allow a local breakout for secure applications so that their Internet traffic no longer has to be routed over your central site.

Note: The shown support for LCOS FX in the screenshot is available from version LCOS FX 4.0

Further improvements

→ Passwords for LANCOM R&S®Unified Firewalls can now be set from within the LMC.

Bug fixes

→ Channel settings correction for Wi-Fi devices via floorplans

→ The rollout with central site via the info popup window works again.

→ Added meaningful error messages on addln length exceedance

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→ Executed addIns are now listed in the log by order of execution.

→ Correction when trying to type a device name containing blank characters

→ Corrected site filter in the Wi-Fi dashboard for site- and device overview

→ Corrected DNS display for Wi-Fi connections

→ Corrected security rating for device services

→ Corrected dashboard display for devices with safety-critical services

→ The checkbox for disabling emailing if notifications have been closed automatically has been removed.

Miscellaneous

→ The number of variables has been reduced to 250 per project.

LANCOM Management Cloud 1.00.17.2.0.0 (1.20.0) / 10.09.2019

SD-WAN performance at a glance

The LANCOM Management Cloud provides a simple overview of your SD-WAN setup and thus of all VPN connections in a network.

For even more control of your SD-WAN, it is now possible to display performance values for a selected VPN connection on the map in addition to a tabular view. This enables end-to-end quality monitoring, e.g. up to VoIP- or application servers in the SD-WAN.

The widget 'Site Interconnection Overview' in the WAN / VPN dashboard shows current performance values such as throughput, packet loss, delay, and jitter for all VPN connections.

Performance monitoring can be activated in the configuration dialog for each network. The monitoring target for the measurement is also defined there, allowing individual and flexible quality monitoring.

Note: Performance monitoring is supported by all LANCOM VPN Gateways as of LCOS 10.30.
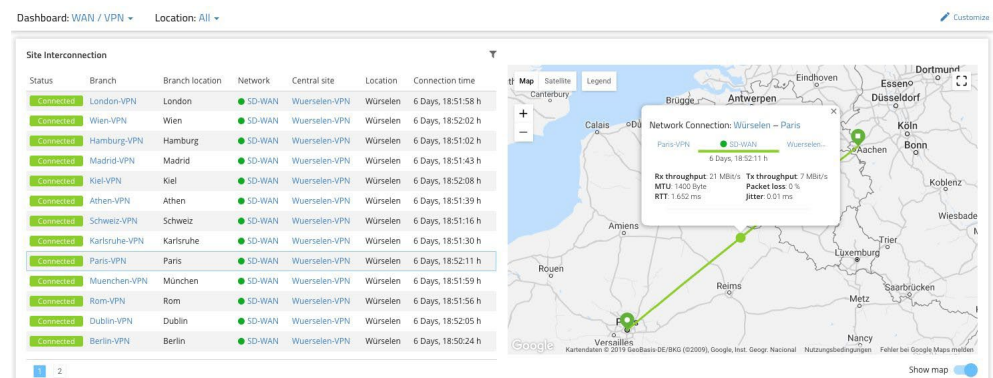
Further improvements

→ The device table can be filtered and sorted by configuration status.

Bug fixes

→ A faulty default value for miscellaneous Wi-Fi router types running LCOS 10.30 has been fixed. The configuration roll out for these devices is possible again without manual editing.

→ In the detail configuration dynamic tables with more than 100 entries are spread across multiple pages, so tables with more than 999 entries can now be displayed correctly.

→ Application Steering creates firewall objects only as individual entries if these were not part of the configuration before. This behaviour prevents duplicate entries when editing firewall rules with LANconfig.

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LANCOM Management Cloud 1.00.17.0.2.0 (1.19.1) / 20.08.2019

Secure Terminal Access - Device access directly from the cloud
The new highlight feature Secure Terminal Access allows you direct access to the command line of your LANCOM device ("CLI tunneling") - securely encrypted and above all without leaving the cloud interface.
Whether "Trace" and "Ping" commands for fast troubleshooting, access to low-level configuration parameters and detailed statistics of the LCOS operating system or secure remote access to external devices in the local network via the integrated SSH client - Secure Terminal Access provides you with expert functions as well as extensive diagnostic and troubleshooting commands for LCOS-based devices.
A practical added value for all system administrators that not only saves time, but above all combines global and individual device management in the LANCOM Management Cloud.

Note: To use Secure Terminal Access, the devices to be configured currently require the LCOS firmware 10.30 RU1 or higher. Administrator rights are required for use in the LMC. Support of the Secure Terminal Access function for the operating systems LCOS LX and LCOS SX is already in preparation.

VPN Performance Monitoring

The LANCOM Management Cloud allows for a simple overview of all VPN connections within your network.

Now it is possible to monitor the performance values for throughput, MTU, packet loss, roundtrip time, and jitter in the detail view on the map, too.
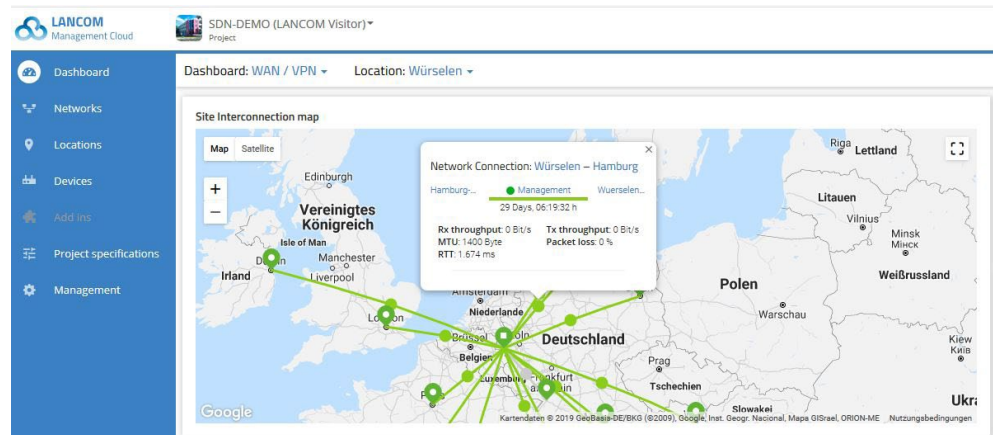
For this, VPN Performance Monitoring can be enabled per network in the network configuration, and the endpoint for the measurement can be specified. A firmware version LCOS 10.30 or newer is required.

Further improvements

→ The loading time for project dashboards with many sites and devices has been optimized.

LANCOM Management Cloud 1.00.16.2.0.0 / 01.08.2019

Two-factor authentication – Double the security now also for individual projects!
With the extension of the two-factor authentication feature, you now not only safeguard your cloud access, but also individual projects against unauthorized access. Thus, project administrators can specify that users can only access or work with this project if they use two-factor authentication when logging in.
For this purpose, the self-chosen access password is supplemented by a time-based one-time password which can be generated on the mobile phone using an authentication app (e.g. Google Authenticator). The ideal solution if the project customer has to meet certain compliance and security requirements regarding data security or if the main administration wishes to enforce a higher security level.
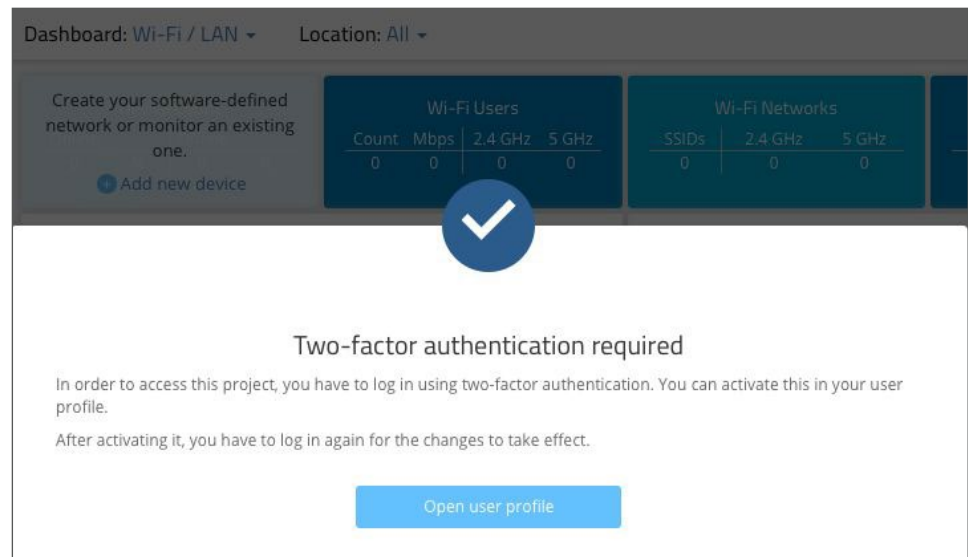
Further improvements
  → New filter option in the device list for devices in pre-claimed status
  → New filter option in the device list for device firmware
  → Performance improvements in the device list, especially when switching tables

Bug fixes
  → Corrected throughput graphs for switches
  → Improved error messages for two-factor authentication
  → Fix for an issue which erroneously caused an error message while registering a new user
  → Corrected a display error on the VPN tab in Microsoft Edge

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→ Corrected projects device count on the organization dashboard

→ Miscellaneous bug fixes in the device list

→ Runtime limitation for API-generated pairing tokens to a maximum of one year

→ Corrected API for request of device data and -statistics

LANCOM Management Cloud 1.00.16.1.0.0 / 18.07.2019

SD-WAN Application Routing – The shortcut to more efficiency!
Benefit from significant performance gains when you operate modern cloud applications (e.g. Office 365, SalesForce, etc.). SD-WAN Application Routing detects cloud-based applications and routes them directly to the Internet (local break-out). This boosts your cloud applications and relives the VPN path to the headquarters as well as the headquarter's Internet line.

LANCOM Management Cloud 1.00.16.0.0.0 / 09.07.2019

Announcement
In the next sprints, the APIs for authentication will change to be fully RFC-7617 com-
pliant. This may affect users which are directly interacting with the APIs.

Two-factor authentication

Two-factor authentication secures your LMC access. Besides your password, you will be asked for an additional factor. This factor is a time-based one-time password based on RFC-6238, using a 160-bit key.

This process can be activated individually for each user. Scan the QR code with an authenticator (e.g. Google Authenticator) or enter the key manually. At the next login, enter your username and password as usual. Subsequently, you will be asked to additionally enter the currently valid one-time password.

You can disable this process at any time by entering your password and current code. Should you have lost your device, you can reset your password as usual - as a consequence, the two-factor authentication will be disabled, too.

In one of the further releases, this functionality will be extended: You can then specify that your projects require a two-factor authentication: Each user who wants to enter the project has then to be authenticated with two-factor authentication.

Simply activate this functionality in your user profile.

Improvements

→ Write access is now disabled by default on switches which are managed by
the LMC.

Bugfixes

→ Several issues fixed with the CSV export of monitoring data
→ Optimizations when adding and deleting multiple networks at a site

LANCOM Management Cloud 1.00.14.0.3.0 / 06.05.2019

What's new dialog
Innovations in the LANCOM Management Cloud are now displayed via a What's new dialog. It will be displayed once for each new version and inform you about the most important news. Of course, you can always deactivate or reactivate this dialog.

Improvements
→ Support for the LANCOM LW-500
→ The organization dashboard has been optimized for large-scale projects.
→ Locations now have an address and a comment function.
→ Wi-Fi inter station traffic is now switchable in the SD-WLAN configuration.

Bugfixes
→ When new filters have been applied to the device list, the previous selection remained active for the user.
→ The operation "Select all" did not select all devices from the device list.
→ Issues occured when displaying the organization overview under Google Chrome.
→ Miscellaneous issues solved related to the determination of the heartbeat condition of devices
→ An "HTTP 404 - Resource not found" error could occur in the device list in some cases.
→ Prevention of a DNS forwarding misconfiguration when using multiple central-site VPN gateways
→ Wi-Fi country settings are no longer set to Europe by default.

LANCOM Management Cloud 1.00.13.0.1.0 / 15.04.2019

Online / offline status for devices in the location overview
The map in the location overview now shows the proportional online and offline status of all devices in all locations. Previously, the whole location was tagged as offline when at least one device was offline.
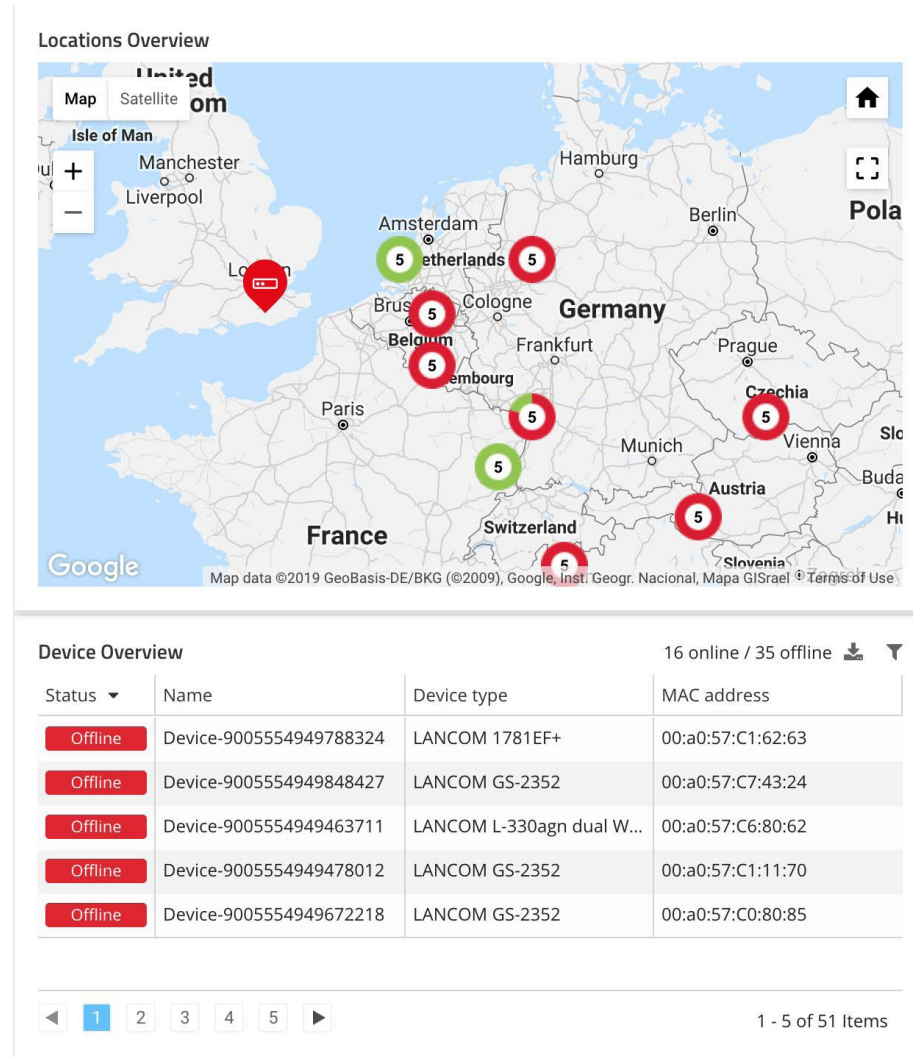
Bugfixes

→ Fixed an issue which caused the non-appearance of log messages, e-mails etc.
→ The switch port speed settings, particularly for the SFP/SFP+ ports, are no longer set fixed to "auto", but are now applied from the detail configuration.
→ The download of QR codes for the Wi-Fi SSID is working again.
→ Devices can be removed from locations again when using the Firefox browser.
→ Display issues have been fixed which caused a missing "save" button in particular situations in the detail configuration and the switch overview.
→ Update procedures of full configurations are now displayed on the device information overview page.

Miscellaneous

→ The dialogue for adding devices to locations has been optimized.

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LANCOM Management Cloud 1.00.13.0.0.0 / 25.03.2019

Notifications
The notification feature is leaving beta. Along with that, the following changes have been implemented:
→ For many event types only one notification is open at a time. A new notification is created only if the previous issue has been solved, or has been closed by the administrator.
→ You receive a message for an open notification if the system status subsequently gets worse: if only one device is affected initially, but more devices become affected later, you will be notified.
→ As before, some notifications are grouped: if multiple devices fail at the same time, only one notification is generated and you will get only one e-mail Handling and visualization have not changed.

Improvements
→ The sorting of columns in the device table is now saved.
→ The claiming process for adding new devices to the LMC has been stabilized.
→ It is now possible to re-enter the location- and device overviews from the CSV import dialog box.
→ The LANCOM IAP-4G+ is now supported by the LMC.

Bugfixes
→ Issues when centering map sections of projects and locations have been solved.
→ It is possible again to navigate to the menu items of the LMC after opening an invitation link.

Miscellaneous
→ Changes to the license service API

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LANCOM Management Cloud 1.00.12.2.0.0 / 04.03.2019

Announcement
The notification feature will soon be ready for leaving beta status. Along with that, all open and already closed notifications will be deleted at this particular time.

Improvements
→ Updated license notes for CLA licenses
→ The device table now supports filtering by device status.
→ The location device table now supports sorting and filtering by various columns.

Bugfixes
→ A behavior which prevented log messages for status changes has been corrected.
→ An issue which prevented the display of Wi-Fi clients on a floorplan has been fixed.
→ The throughput indicator for VPN site connections on the dashboard has been fixed.
→ An issue regarding the reuse of device connections to the LMC in private cloud installations has been fixed.
→ Mails about expiring licenses are now sent to all project administrators.

LANCOM Management Cloud 1.00.12.0.0.0 / 11.02.2019

Announcement
The notification feature will soon be ready for leaving beta status. Along with that, all open and already closed notifications will be deleted at this particular time.

Improvements
→ Improvements in account selection and account overview. Now the five previously opened projects are displayed.
→ Improved LMC loading times
→ Performance improvements in various dashboard widgets
→ Improved navigation in the VPN connection table
→ Improved device log display for mobile Internet connections
→ Improved alert display for mobile Internet connections
→ The sorting of the device table has now effect on the complete database.

Bugfixes
→ Correct DNS forwarding rules when Internet access is provided via the VPN central site.
→ Access points and switches can be assigned even if a subnet on that location has no IP addresses available.
→ Fixed sorting of the voice call routing table in the detail configuration
→ If the password policy "randomly individual" is selected when creating a new project, this setting is applied accurately.
→ Fixed display for the LANCOM 1906VA-4G (over POTS)
→ Improvements and bugfixes for logging and firmware status display in conjunction with the auto updater
→ The live chat is working completely again.
→ Fixed some issues regarding temporary connection loss of LCOS devices, resulting in false online/offline alerts. An update to LCOS 10.20 RU3 is mandatory for this.

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LANCOM Management Cloud 1.00.10.3.0.0 / 13.12.2018

Complete Auto Updater Support

For LCOS devices with activated Auto Updater an Auto Updater icon is now displayed in the firmware column of the device table. If there are updates available for one or more devices based on their Auto Updater settings, the user receives a summarizing notification and an optional e-mail about this event. As is usual, the user is made aware of available firmware updates for devices without activated Auto Updater visually in the device table, too. These firmware updates can then be installed manually.

Further improvements
→ Offline notifications for individual devices do now include the device name in the e-mail subject.
→ The location's network overview offers a survey of the allocated IP ranges.

Bugfixes
→ The selection "device-specific settings" works again in the project defaults.
→ On managed gateways the correct sender interface for the LCOS Auto Updater is now set if the LCOS Auto Updater has been activated via project defaults.
→ Changing the device name on the device overview page works again.

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LANCOM Management Cloud 1.00.10.0.0.0 / 21.11.2018

Alerts that reassure

The LANCOM Management Cloud automatically informs you when your system is malfunctioning. The practical notification center in the LANCOM Management Cloud helps you keep track of important network events at all times: Be informed on device- and other failures and notice once a problem has been solved. You can individually configure which events are notified to whom at what time. Furthermore, related events are consolidatedly displayed — without the risk of spam.

This feature is currently in beta status. More functionality is yet to come.
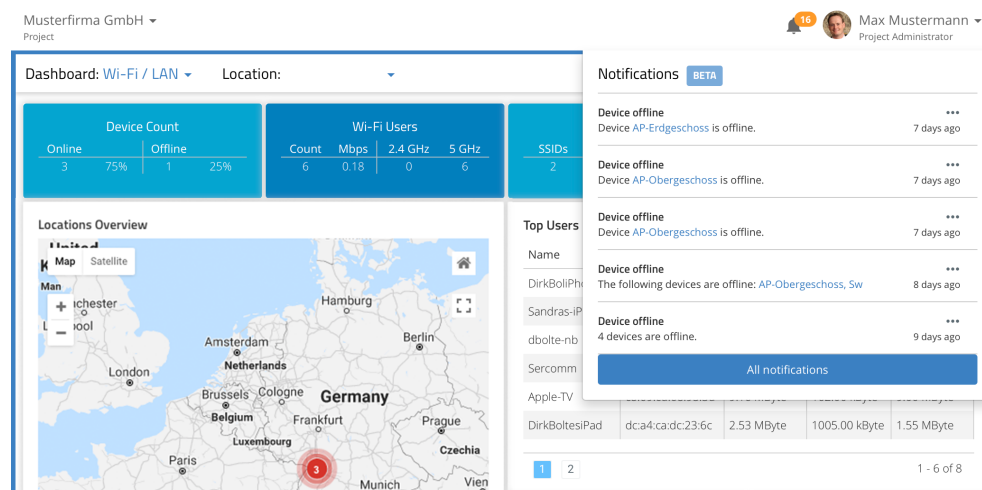
Further improvements

→ In the switch device overview settings for a selected port can simply be copied to other ports. Using this function, the similar configuration of many ports gets much easier and faster.

→ In the switch port masks of the network definition all ports can now be selected or deselected in common.

→ The CSV location import allows reading of Zscaler authentication data.

→ Tables with explicit sequence, e.g. the action table, now can be sorted within the detail configuration.

→ In the Security & Compliance Dashboard login names of admin logins are now shown under details.

→ In the device inforrmation of the device overview the prorated uptime for a device in the is shown for the last 7 days.

Bugfixes

→ The Wi-Fi 5 GHz indoor-only mode can be properly activated on LCOS 10.20 access points again.

→ Location-specific settings for Zscaler and LCOS Auto Updater can be set

accurately again

LANCOM Management Cloud 1.00.9.5.0.0 / 29.10.2018

Security & Compliance Dashboard
The new Security & Compliance Dashboard shows at a glance whether the devices in the network are configured according to corporate security policies. Furthermore, the dashboard keeps you up to date regarding the remaining device warranty and license terms. Intuitive, color-coded status information makes it easier than ever to meet security and compliance requirements in cloud-managed infrastructures.
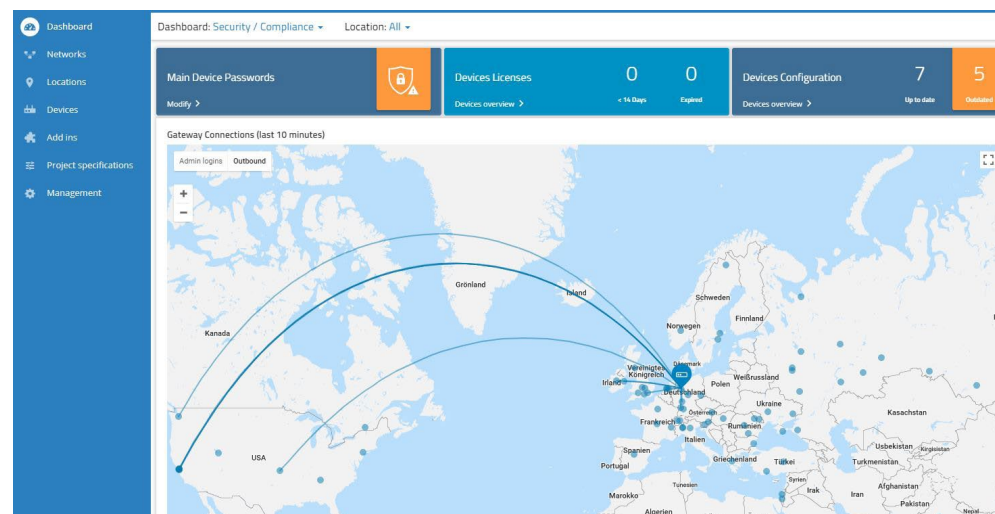
Further improvements
- → Added a link to the device list for direct location access
- → Added a link for direct access to the individual device overview in a location's device allocation

Bugfixes
- → If SD-WAN is disabled in the LMC, lately created networks can be allocated to locations accurately again.
- → The conversion of VoIP configurations for analog users has been corrected when switching over to LCOS version 10.20.
- → The device name of managed switches is now set accurately.
- → Miscellaneous display bugfixes

LANCOM Management Cloud 1.00.9.4.1.0 / 15.10.2018

Bulk import: Time savings on a large scale
In large-scale scenarios, the creation of sites, the allocation of networks or the addition of new devices can be laborious. Instead, prepare your large scenario with a spreadsheet program and import the information via CSV into the LANCOM Management Cloud.

New features
→ The SD-WLAN function of the LMC now supports WPA3-secured wireless networks.
→ The LMC can specify for each project how the LCOS Auto Updater is to be operated so that the devices are automatically kept up to date with the latest LCOS.
→ The SD-WAN function of the LMC supports the decoupling of individual networks via the secure Internet access products of Zscaler.

Improvements
→ The unencrypted management protocols (SNMP1/2, Telnet, HTTP, and TFTP) are automatically disabled on devices managed by the LMC.

Bug fixes
→ When networks are created while SD-WAN is deactivated, they can be correctly assigned to a location again. Networks that were created incorrectly can be corrected by saving the network settings again.
→ When a VPN network is removed, the corresponding devices are set to "Outdated".
→ The display of the checkbox selection in the detailed configuration has been corrected.

LANCOM Management Cloud 1.00.9.0.2.0 / 17.09.2018

Searching, sorting, and filtering in lists

You are managing multi-site projects? As a Managed Services Provider, you are managing a big amount of projects? The new functions for page-spanning sorting and filtering in lists make it easier and much more comfortable to find the desired entry.

This convenient function is available for site-, user-, and project lists.

Mobile quality indicator

As known from mobile radio devices, the WAN connection table in the individual device monitoring offers now a quality indicator for mobile WAN connections. See and evaluate at a glance every important detail of any mobile connection.

Further new features

→ With activated add-ins: One script part can be executed per branch office on Central Site devices.

Improvements

→ In the service table you can now categorize the available device services by criticality.

→ The global time range selection in the individual device monitoring is now always visible.

→ Useful user feedback for the brute force protection for claiming

→ When specifying the location ID for rollout the underscores at the end of the ID can be dropped.

→ Miscellaneous internal improvements

Bug fixes

→ An issue with sorting by „Remote IP" or „Connection time" in the „Further VPN connections" table has been fixed.

→ Additional interface bindings can be allocated to the untagged network (default VLAN) via detail configuration.

→ Miscellaneous bugfixes for the UI

LANCOM Management Cloud 1.00.6.1.1.0 / 08.08.2018

New features
→ The password management of the LMC can optionally allocate individual passwords to the managed devices automatically.
→ Variables with a pre-defined selection can be created for usage associated with add-ins.
→ Mouse zoom function for history graphs on the individual device monitoring page.
→ It is now possible to sort for e-mail addresses in the user table.

Improvements
→ For WLAN SSIDs the roaming optimization 802.11r can be activated in a compatibility mode, which allows the operation of not 802.11r capable Wi-Fi clients, too.
→ The LMC can set an explicitly configured sender network for communication with the RADIUS server with WPA Enterprise (802.x) on Wi-Fi routers.
→ The LMC location ID is applied to the DHCP server for automatic location determination for appropriately configured networks.
→ Automatic defaults when selecting a date for the history graphs in the individual device monitoring.

Bug fixes
→ Issues in the VPN dashboard with deactivated SD-WAN have been fixed.
→ An issue in the location overview of the VPN dashboard for locations without position has been fixed.
→ The missing display of the WAN throughput for LANCOM 7100 and 9100 series devices has been fixed.
→ A faulty display in the graph tooltip with missing data has been fixed.
→ The editing of DHCP forwarding settings in the network properties has been corrected.
→ The display of the page for editing ground plans has been corrected.
→ If creating an allocated add-in for a device aborts with activated add-ins functionality, the entire configuration will not be uploaded.

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LANCOM Management Cloud 1.00.5.2.0.0 / 19.07.2018

New features
→ Detail information is shown in the history graphs when clicking and hovering with the mouse.
→ User-defined time range selection for history graphs in the individual device monitoring
→ The rollout can now be performed based on the location information the managed device passes to the LMC (allocation possible via DHCP option and rollout wizard as from LCOS 10.20).
→ Support for WLAN client management (preliminary for LCOS 10.20)
→ Support for new device types

Improvements
→ The device name can now be edited on the device overview page.
→ Optimization of requests in the location table with performance optimization in scenarios with many locations
→ The clustering of neighbored devices in the location overview map has been optimized for bigger projects.
→ If interfaces are already allocated to a VLAN which is managed by the software-defined function, these are added from the detail configuration to the resulting interface allocation.

Bug fixes
→ The allocation of location groups in the monitoring with direct device allocation was corrected.
→ The display of the number of Wi-Fi clients in the 5 GHz band has been corrected in the floor plans.
→ The content of the top user table in the Wi-Fi dashboard has been corrected after a location change.
→ The configuration for 28-port switches has been corrected.
→ If cloud-ready devices are allocated to a project and location using their serial number and PIN, the correct function is now assigned.
→ The function of the checkbox in the function assignment for devices at a location has been corrected.
→ The target for forwarded DNS suffixes at the branch site is now set to the corresponding IP address of the central site device.
→ VPN tunnels are displayed accurately at the branch site, even if the defined IP address range of the related network is completely covered by a manually created, additional route.

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→ Automatically generated configuration parameters (by the software-defined function) can be displayed by a project viewer again.
→ With activated add-In functionality
- the dedicated add-in variables are now sortable on network- and device level
- the script editor is again available write-protected for project members
→ Miscellaneous internal bug fixes and improvements

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LANCOM Management Cloud 1.00.4.4.2.0 / 08.06.2018

New features
→ The project view can be focused on the desired intended use SD-WAN, SD-LAN or SD-WLAN. For this, all not needed elements are disabled.

Improvements
→ The device status of the gateway can be easily viewed by selecting a location on the VPN dashboard map.
→ A combined status from registration and line status is displayed in the telephony service table.
→ Functions with contextual help texts are now marked by a blue "i". The help text is displayed by clicking the blue "i".
→ Support for the LANCOM 1640E
→ In the dialogue for the network settings management the tab can be changed even if not all necessary settings have been made.
→ Reworked license pool and -key view
→ Networks (VLANs) without SSIDs are allocated exclusively to LAN interfaces on access points.
→ The default project location contains the default network, too.
→ When adding a device, a location can be optionally selected.

Bug fixes
→ Under certain circumstances connections in the WAN connection table were displayed twice and with different status.
→ The linking of IPv6 addresses in the WAN connection table has been fixed.
→ Successively modifying and saving within the detail configuration could lead to errors when saving the entire configuration.
→ An issue has been fixed which could cause Wi-Fi clients learning the VLAN 1 IPv6 prefix (even if they should not be part of this VLAN).
→ If the only one configured VDSL connection of a router is broken, the WAN connection table is still displayed in the individual device monitoring.
→ An issue has been fixed which could cause the status of the VPN connections in the VPN dashboard switching between green and orange infrequently.
→ The display speed of the project- and device logs has been improved dramatically.

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LANCOM Management Cloud 1.00.4.1.1.0 / 15.05.2018

Improvements
→ Follow-up licenses can now be allocated to devices. These licenses are used automatically after the current licenses have expired.
→ Opting-in to the LMC Newsflash can now be done from within the user profile.
→ The time range selection (hour / day / week) in the individual device monitoring applies now to all widgets on this page.
→ For map zooming you now have to additionally press the CTRL key to prevent zooming when scrolling through the page.

Bug fixes
→ The displayed number of devices of a location has been corrected.
→ If no SSID was allocated to the network with the default VLAN 1, a faulty VLAN configuration could lead to IPv6 connection issues.
→ A blocked route generated needless routing entries at the branch offices.
→ Miscellaneous internal bug fixes and improvements

LANCOM Management Cloud 1.00.3.28.2.0 / 12.03.2018

New features
→ Setup of redundant central site VPN gateways

Further improvements
→ The device list of a location now shows the function of every device, e.g. "Gateway", "AP" or "Switch".
→ Added an option to the location's device list to define which networks of the current location should be applied to each device's configuration.
→ On the overview page of a device the "WAN connections" table shows the negotiated speed of the respective connection.
→ Information about cellular connections is available on the overview page of a device.
→ On the overview page of a device the table "Phone services" shows a detailed line status.
→ Selecting a single line in the graphs for single devices is possible directly via the legend.
→ In the detail configuration of a device existing lines of dynamic tables can be copied as template for new entries.

Bug fixes
→ Particular street types were not displayed in map view.
→ The map position was not saved accurately in map view.
→ Firmware updates can only be triggered when the previous firmware update has been finished.
→ Incorrect links to the Guided Tour videos have been fixed.
→ When setting or unsetting the mark for "Set main device passwords globally" the configuration status of the devices is set to "outdated", because these changes are applied only after writing the configuration back again.
→ The device icons on the floor plan are the same size now.
→ Device logs can now be viewed by project administrators and project members. Project logs can still be viewed only by project administrators.
→ The device filter in the device list works correctly again when using Firefox.

LANCOM Management Cloud 1.00.3.23.1.0 / 12.03.2018

New features

→ All WAN connections at a glance: A new table gives you a clear comprehension of the working status of configured WAN connections. This information is available under "Project > Devices > Individual device > Overview".

Further improvements

→ A user gets an additional warning now when trying to change a network's central site, because massive VPN configuration changes will occur by this.
→ For deleting a project, a password has to be specified now. Furthermore, a message pops up, if devices and / or licenses are still allocated to the project.
→ Throughput for multiple WAN connections of the same type is separately displayed within graphs.
→ Essential internal improvements on processing monitoring data

Bug fixes

→ After adding license keys, the dialogue closes now and the user gets a notification that the action was successful.
→ In the DHCP table you can now filter by type.
→ The DHCP table contains a link to the network with the appropriate client.
→ The call routing table is displayed accurately again. In certain scenarios an empty table was mistakenly displayed in the individual device configuration. However, configuration data was not affected by this.
→ Devices on the map dashboard were not always displayed at the correct position.
→ The calculation of the Wi-Fi users within projects has been improved.

LANCOM
SYSTEMS

LANCOM Management Cloud 1.00.3.19.3.0 / 20.02.2018

New features

→ The active and inactive services (e.g. SSH, HTTP, SNMPv2) of a device are now shown in the individual device monitoring, including additional information about the ports and interfaces on which the services are accessible. It is possible to filter and sort for all properties.

→ The DHCP clients table is now shown for devices with enabled DHCP server in the individual device monitoring. It is possible to filter and sort for all properties.

→ Devices which are added to a project can now be allocated to a site, depending on their internal IP address. Provided that a unique IP subnet has been allocated to each site, the device's site can be determined by its allocated IP address.

Further improvements

→ On the site selection dashboard it is now possible to search for a particular site.

→ The selected site on the dashboard is now saved when leaving the dashboard.

→ The selected map view (street / satellite) is now saved when leaving the dashboard.

→ The name of a network can now be changed.

→ The name of a site can now be changed.

→ Miscellaneous detail improvements for the user interface

Bug fixes

→ Miscellaneous internal performance- and stability improvements in the monitoring section

→ Inconsistencies between the dashboard widgets for Wi-Fi users and Wi-Fi throughput have been fixed.

→ The VPN dashboard displayed an inaccurate number of VPN connections in particular cases.

→ The selected amount of devices which have to be shown in the device list is now stored properly.

→ After having successfully added a license key to the license pool, the corresponding dialogoue closes without problems.

→ An issue with the display of the automatic port labeling in the individual device monitoring for switches has been fixed.

LANCOM
SYSTEMS

LANCOM Management Cloud 1.00.3.15.5.0 / 30.01.2018

New features
→ Local configuration changes on the devices are now reported to the LMC (as from LCOS v10.12 RU4). From within the LMC there are options to apply these changes to the configuration, to inform about the changes, or to actively reset the changes on the device.
→ The management of subnetworks at each location now allows the manual specification of networks of your choosing in addition to the subnets that are assigned from the central pool.

Further improvements
→ Devices can now be restarted from the LMC.
→ Installing a new firmware version no longer leads to an automatic rollout of the configuration.
→ The display of the previous week's monitoring data on the dashboard has been modified.
→ Responsive design and optimizations for the detailed configuration of devices
→ Members and viewers can now see whether devices in the device list are operating the current firmware.
→ Improved user feedback when too many attempts were made to add a device with the wrong PIN.
→ Users can now remove themselves from an organization/project, unless they are the last-remaining administrator.
→ If an individual device configuration has been set with a sender interface for communications with the LMC, this is no longer overwritten by the Smart Config.

Bug fixes
→ Modified site locations are stored accurately again.
→ An issue was solved which caused the device configuration status in the device list to remain on "updating".
→ Miscellaneous bugfixes for dashboard and device monitoring

LANCOM
SYSTEMS

LANCOM Management Cloud 1.00.3.11.0.0 / 14.12.2017

New features
→ Comfortable configuration of a simple hotspot via the LMC
→ In the new area "Project specifications" general settings can be configured project-wide (e.g. main device password, band steering, hotspot, …).
→ A new color marker in the device list shows if the device is running the current firmware, or if a new firmware is available.
→ A link to the LANCOM knowledgebase was placed In the info area.

Further improvements
→ The "add device" dialogue has been reworked and shows now where to find the needed information (S/N+PIN).
→ A message is now saved to the device log, if a device could not retrieve a new firmware from the LMC successfully.
→ VPN dashboard: VPN connection lines are now selectable and show the connection status and containing networks.
→ VPN dashboard: Reworked information overview when selecting a location.

Bug fixes
→ The device detail view on the floor plans shows the picture of the device in correct size again.
→ In some cases device remained on the floor plan after deleting them from the location.
→ The 5-GHz Wi-Fi coverage is only shown on the floor plan for devices which do actually broadcast a
→ 5-GHz network.
→ An issue when configuring dual radio 11ac access points has been fixed.
→ Issues when configuring LANCOM 883 and LANCOM 884 devices have been fixed.
→ Several internal bug fixes and performance improvements

LANCOM
SYSTEMS

LANCOM Management Cloud 1.00.3.8.0.0 / 29.11.2017

New features
→ Direct graphical network assignment on switch ports in the switch overview

Further improvements
→ Upload of up to 15 floor plans per location (previously 5)
→ The login process has been speeded up.

Bug fixes
→ A problem with the PoE configuration of the GS-2352P has been fixed.
→ Miscellaneous internal bug fixes and stability improvements

LANCOM Management Cloud 1.00.3.6.3.0 / 12.10.2017

New features

→ Custom Fields – Administrators for organizations or projects are now free to define own properties for their organizations / projects.
Example: an organization administrator can create a property named "customer number" for his organization and the included projects. This property can then be updated with the corresponding numbers.

Further improvements

→ 28-port switches do now have their own mask for port determination within the network.
→ The LANCOM Management Cloud can now allocate multiple centralized addresses to the branch office routers as alternative VPN endpoints.
→ Partner ID and partner status are now shown in the organization management.
→ A table with all ports including their designation was added to the single monitoring view for switches.
→ The user is informed by e-mail if a device license is about to expired or has already expired.
→ When creating networks, a pre-defined color palette is now available.

Bug fixes

→ Only the visible devices were filtered in the device list, and not the complete list.
→ Picture upload for organizations, projects, and devices was fixed.
→ When using the firefox browser one connection was missing in the VPN connection table of the WAN dashboard.
→ Error messages could occur when deleting a location, even though the location was deleted successfully.
→ LLDP was not always activated on the switch, although it was activated in the project settings (LLDP monitoring requires switch firmware 3.30.0324 RU2).
→ Fixed problems with the floor plan display in the safari browser.
→ An issue which prevented the pairing of new devices was fixed.
→ Miscellaneous internal stability improvements

LANCOM Management Cloud 1.00.3.1.0.0 / 12.09.2017

New features
→ Exclusively for LANCOM partners: As of now, all devices that are newly
   integrated into the LANCOM Management Cloud get an automatic start-up
   license valid for 30 days. After the 30 days have expired, a simple online /
   offline status monitoring is available via dashboard and device overview.
→ Exclusively for LANCOM partners: As of now, a live chat with direct access
   to LANCOM Cloud experts for all questions about the LANCOM Management
   Cloud is available (accessible via the menu bar).
→ Floor plans of buildings can be uploaded for particular locations to place
   devices exactly on these plans ("Locations > Floor plan"). For placed Wi-Fi
   devices a rough coverage overview is available on the map incl. channel load
   and reception quality (dashboard under "Wi-Fi / LAN" > widget "Locations
   overview").
→ Device filter in the Devices overview (name, device type, serial number, IP
   address, site)
→ Particular location information can be filtered on the dashboard.

Further improvements
→ Support for the 28-port switches in the "network" area
→ Automatic e-mail notification on expiring device licenses

Bug fixes
→ Issues while activating the layer 7 application detection have been fixed. For
   a successful activation the configuration has to be rolled out again to the
   appropriate Wi-Fi devices.
→ License management issues have been fixed
→ Config service issues have been fixed

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LANCOM Management Cloud 1.00.2.5.2.0 / 18.08.2017

New features
→ Automatic switch port marking per LLDP

Further improvements
→ The logging records if users were deleted from the organization / project.
→ Devices can now be deleted directly from the LMC from within the project (previously, there was a transfer to an organization necessary).
→ The license column in the device list now shows the expiration date, and not the remaining days.
→ In the compact device view the selected tab (e.g. detail configuration) is now stored, even if a device from another site is selected.

Bug fixes
→ Fixed an issue with unconfigurable switches after claiming.
→ Fixed an issue with the automatic logout, if there were unsaved changes left.
→ Fixed an issue with writing configuration data to LN-630 devices.
→ The current value in history graphs is now consistent (hour/day/week).
→ No VPN devices were shown in the WAN dashboard under certain circumstances.
→ Fixed an issue with the dashboard widgets for Wi-Fi networks and Wi-Fi standards.

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LANCOM Management Cloud 1.00.2.3.5.0 / 04.08.2017

New features
→ As of now, the Wi-Fi optimization functions Adaptive RF Optimization and Band Steering can be activated under "Management > Settings" (globally for the whole project) and under "Locations > Overview > Wi-Fi Defaults" (per location) for Access Points and WLAN routers in a project.
→ From now on, a Wi-Fi SSID which is defined under "Networks > Wi-Fi > Create new SSID", can be activated and deactivated.
→ From now on, the roaming optimization functions Opportunistic Key Caching (OKC) and IEEE 802.11r Fast Roaming can be activated while defining a Wi-Fi SSID under "Networks > Wi-Fi > Create new SSID".
→ From now on, the SSID broadcast can be suppressed while defining a Wi-Fi SSID under "Networks > Wi-Fi > Create new SSID", so that the respective SSID is no longer automatically visible for clients in the list of the available SSIDs.

Further improvements
→ Project IDs and license algorithms are now shown in the organization's project list.
→ Single switch ports can be manually labeled in the switch monitoring.
→ The current throughput is graphically shown in the switch monitoring for the selected switch port.
→ The last known port status is shown in the switch monitoring for switches with "offline" status.

Bug fixes
→ Deleting locations failed under certain circumstances
→ Miscellaneous bug fixes within the switch configuration
→ When rolling out configurations to a bigger amount of devices, these configurations were partially not accepted.
→ Log entries for deleted devices were showing a wildcard instead of the device ID.
→ Further general issues fixed

LANCOM Management Cloud 1.00.170710 / 10.07.2017

Notice
For this LMC release we recommend a firmware update for switches to at least LAN-COM Switch OS 3.30 REL (Build 3.30.0204). Without, the monitoring data will not be accepted by the LMC anymore, due to a security check. A later update is always possible in case the monitoring data is already missing.

New features
→ When generating a new project the admin is asked if the global password distribution should be used.

Further improvements
→ The admin table can now be edited when using the individual configuration of switches.
→ The reliability of the online/offline status view has been improved.

Bug fixes
→ A support problem of the devices L-321agn Wireless R2 and 730-4G has been fixed.
→ In the compact view of large projects all devices were listed but only the first four had a configuration status displayed.
→ In new projects the area location could not be entered under specific circumstances.
→ An unexpected error when deleting a location has been fixed.
→ Variables were not resolved correctly for specifc log entries.

LANCOM
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LANCOM Management Cloud 1.00.170620 / 20.06.2017

New features
→ Networks are displayed per port within the switch monitoring.
→ A cloud answer time diagram was added for switches.
→ A CPU load diagram was added for switches.

Further improvements
→ The information area was extended by further information sources.
→ The LMC can now create an offline configuration for cloud-ready devices.
→ Internal improvements for tracking calls between micro services

Bug fixes
→ Firmware files are now available for "(over ISDN)" and "(over POTS)" routers, too.
→ The URL which is sent to the device for upgrading the firmware is no longer compiled wrong, so firmware updates can be done reliably.
→ Sorting of the license categories is now alphabetical within the license pool.
→ The VPN dashboard's info popover shows always the selected outpost, and not the central site.
→ Changes to a site cause the status display of the central site gateway to change to "outdated".
→ The VPN dashboard's connection table shows again all VPN connections.
→ All variables are now resolved for the log file.
→ Status changes are now displayed accurately for recently added devices.
→ Some user interface issues were fixed.
→ Issues were fixed for the group aggregation of the dashboard monitoring data.
→ Fixed an issue in the WAN dashboard's VPN device table.

LANCOM
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LANCOM Management Cloud 1.00.170529 / 29.05.2017

New features
- → Guided tour for organizations
- → Added an info section with FAQ, hints & tricks, and tutorial videos

Further improvements
- → Significantly faster loading and displaying of device detail configurations.
- → License icons in the device list are gray if the project works in license mode "NONE".
- → In pairing state, the LMC public can now redirect devices to another private cloud.
- → Device-related information can now be hidden from the project log.
- → If WLAN SSIDs are defined via smart config, only these are applied to the device. There is no mix of smart config and single device configuration in this case.

Bug fixes
- → Fixed an issue where in some cases the time zone was missing when transferring a timestamp. As a consequence, the date was misinterpreted at the recipient.
- → No more missing display of device networks and configurations due to failed validation
- → Even if DHCP is enabled, gateways with Wi-Fi feature (e.g. LANCOM 1783VAW) won't stop allocating IP addresses.
- → Correct license categories are shown for LANCOM LN-17xx and LN-86x.
- → Fixed an issue when transferring devices from within an organization.
- → Miscellaneous internal bug fixes

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LANCOM Management Cloud 1.00.170509 / 09.05.2017

New features
→ Licensing of cloud-managed LANCOM devices
→ 1-click port configuration for particular switches

Further improvements
→ When adding devices to sites, the first router is set as a gateway automatically.
→ The centralized device password allocation can be disabled by the project administrator.
→ Devices can be passed from the LMC public to the LMC private.
→ Support for the new switch models GS-2328*
→ Extended switch parameter: SNMP communities
→ Improvements for the WAN dashboard
→ Improved display of the Layer-7 top applications
→ The WAN throughput is now shown separately for up- and downstream.
→ Display for multi VPN within the WAN dashboard
→ The Switch LMC operation was extended by TRY settings with "try 24h" by default.
→ Added support for LMC handover before pairing on the device.
→ Device information and monitoring was merged to one single tab for better viewing experience.
→ The selection of Wi-Fi frequency bands is now possible during network configuration.

Bug fixes
→ When using the auto fill function of a Web browser, the user's LMC login data is no longer entered for Wi-Fi SSID and PSK in some cases.
→ The CSV export of the top applications now contains the complete data.
→ The timeline of the history graphs now stops moving if a device does not send any data.
→ Fixed an issue with aggregating monitoring data.
→ Corrected display of the VPN connection state within the WAN dashboard.
→ Client names are now displayed similar within the Wi-Fi client table and the top users table.

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→ Fixed an issue with deleting sites.

→ The window for adding devices is now displayed on the iPad, too.

→ Fixed an issue with the LMC blink mode on WLC-managed accesspoints

→ Optimized DNS request count for accesspoints, routers and WLCs, and DNS caching was added for LMC connectivity on the device.

→ Automatically generated Wi-Fi PSKs now consist of 16 characters (previously 8).

LANCOM Management Cloud 1.00.170410 / 10.04.2017

New features
→ Centralized allocation of device passwords to all devices of a project
→ Display of failed login attempts for:
  • Device login
  • SNMP login
  • WLAN SSID login

Further improvements
→ Display of Internet backup connections within the single device monitoring of routers
→ Scripting feature variables can be defined as confidential and are masked on the user interface.
→ Immediate activation of new network specifications for all LANCOM devices when changing the IP address range

Bug fixes
→ An issue which prevented the configuration of the vRouter was fixed
→ General text improvements
→ Proper name resolution for top users
→ Fixed an issue with a wrong status display within the device list after a location rollout
→ Fixed an issue which lead to disabled networks being still active
→ If multiple configuration change have been made while a device was offline, all changes are now saved when the device is online again.
→ Fixed an issue with a faulty free memory display for switches
→ Fixed an issue with editing the VoIP line table
→ LTE routers do no longer lose their mobile connection after a configuration rollout.
→ Fixed miscellaneous issues within the single device configuration

LANCOM Management Cloud 1.00.170316 / 16.03.2017

New features
→ For sorting and filtering purposes, the device location is now shown in the device list
→ The routes which should be accessed via central site can be defined per network
→ WAN throughput is now shown in the single device monitoring
→ Access LMC using a mobile device

Further improvements
→ The automatic inactivity logoff timer can be configured in the user profile
→ Improvements for transmitting table contents of the device- and user list
→ VPN connections are now initialized with green dotted lines on the WAN dashboard
→ Additional messages added for the account- and device log
→ Further general performance improvements

Bug fixes
→ The SDN configuration is rolled out accurately to routers with activated WLC option
→ Fixed some issues which led to erroneous device status display
→ Fixed the VPN connection status display on the WAN dashboard
→ Messages in the account- or device log are shown accurately
→ Fixed several issues in the VoIP Call Router area for single device configuration
→ Further general issues fixed

LANCOM Management Cloud 1.00.170224 / 24.02.2017

New features

Config test mode
→ After a new configuration is uploaded, the device checks that it can still reach the LANCOM Management Cloud. If not, the device falls back to the previous configuration.

Simplified operation through predefined default settings:
→ When you create a project, a site with the name of the project is created by default
→ When you create a project, the network "INTRANET" is created by default

E-mail integration
→ When you invite previously unregistered users, an invitation e-mail with instructions is sent automatically to their e-mail address.
→ When inviting users to organizations and projects, an e-mail with an invitation link is sent automatically to their e-mail addresses.

Password reset
→ The user now has the option to reset the password, if forgotten. For this, a link is sent to the relevant e-mail address.

Further improvements
→ Immediate language switching (DE|EN) for login/registration/password reset
→ The Layer-7 application detection can now be turned on and off for each SSID/VLAN in the SDN-Configuration.
→ Devices now need just one URL to connect to the LMC. All you have to enter is the LMC domain (e.g. cloud.lancom.de).
→ LMC and LCOS now use the same policies for secure passwords.
→ The gateway at a site now no longer needs to have the first address on the corresponding network.
→ The invitation link sent by e-mail is now valid for 5 days.
→ A change of network IP is now displayed in the overview.
→ Performance improvements
→ A number of improvements have been made to the dashboard display.

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Bug fixes

→ A display issue with the top Wi-Fi applications has been fixed.
→ Some naming inconsistencies between the "Cloud" and "LMC" have been
   fixed.
→ An issue with the display of the current Wi-Fi throughput on the dashboard
   has been fixed.
→ The Cloud operating mode "only-without-wlc" is now available only for Wi-Fi
   devices.
→ An issue with setting the DNS forwarding has been fixed.
→ An issue with the map zoom level on the dashboard has been fixed.

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LANCOM Management Cloud 1.00.170213 / 13.02.2017

New features
- → Guided tour of the LANCOM Management Cloud
- → Widgets in the Wi-Fi dashboard now optionally display the data over the last hour, the last day or the last week.
- → For sites, it is now possible to select the router that is to act as the gateway.

Security
- → Users are now logged out automatically after 30 minutes (can be configured for longer).

Improvements & bug fixes
- → The overview page for a device now shows when it was incorporated into the organization/project.
- → Just one LMC domain is required for pairing and claiming. Operators of a Private Cloud are required to ensure that the prefixes pairing.* and control.* are available at their domain.
- → Organizations and projects now have an ID.
- → Performance improvements
- → Individual device configurations have now been furnished with entries that were missing so far.
- → Bugs fixed in the SDN-Configuration
- → It is now no longer possible for delegated invitations to accidentally create dead organizations and projects.
- → Issues with project observers entering the areas "Networks", "Sites" and "Devices" have been fixed.
- → Implausible entries in the Wi-Fi dashboard
- → "Ghost devices" appeared in empty projects
- → The WAN dashboard occasionally stops updating.
- → An issue with the device and account log has been fixed.
- → Arrangement of the dashboard widget is now back to normal

4. History of incompatible API changes

LANCOM Management Cloud 1.00.178.0 / 29.10.2024
→ Removed endpoints (deprecated note June 2022)
GET/POST /cloud-service-auth/accounts/{accountId}/custom-fields
GET/POST/DELETE /cloud-service-auth/accounts/{accountId}/custom-fields/
{fieldId}
GET /cloud-service-auth/custom-field-targets
GET /cloud-service-auth/custom-field-targets/{targetId}

LANCOM Management Cloud 1.00.175.0 / 20.08.2024
→ Deprecated POST /cloud-service-auth/actions (ACCOUNT_DELETE and
USER_PROFILE_DELETE)
→ **New:** POST /cloud-service-auth/user/self/delete
→ **New:** POST /cloud-service-auth/accounts/{accountId}/delete

LANCOM Management Cloud 1.00.168.0 / 26.03.2024
→ Deprecated GET /cloud-service-devices/meta/firmware?type=all
New: GET /cloud-service-devices/accounts/{accountId}/meta/firmware

LANCOM Management Cloud 1.00.160.0 / 11.10.2023
→ Removed GET+PUT /cloud-service-logging/accounts/{accountId}/rules/
configuration
Existing alternative:
GET+PUT /cloud-service-logging/accounts/{accountId}/alerts/settings/
ruleconfig

LANCOM Management Cloud 1.00.157.0 / 08.08.2023
→ Removed GET /cloud-service-devices/accounts/{accountId}/devices/licenses
Existing alternative:
GET /cloud-service-licenses/licenses
GET /cloud-service-licenses/licenses/ids

LANCOM Management Cloud 1.00.156.0 / 18.07.2023
→ Removed GET /cloud-service-notification/accounts/{accountId}/notifications
Existing alternative: GET /cloud-service-notification/accounts/{accountId}/
alerts

LANCOM Management Cloud 1.00.153.0 / 18.05.2023

The following APIs are deprecated and will be phased out in 3 months:

→ Deprecated GET /cloud-service-devices/accounts/{accountId}/devices/licenses
New: GET /cloud-service-licenses/licenses/ids
New: GET /cloud-service-licenses/licenses

LANCOM Management Cloud 1.00.142.0 / 27.09.2022

→ Deprecated GET /cloud-service-licenses/accounts/{accountId}/allocations?select=id
New: GET /cloud-service-licenses/accounts/{accountId}/allocations/ids

→ Deprecated GET /cloud-service-licenses/licenses?select=id
New: GET /cloud-service-licenses/licenses/ids

→ Deprecated GET /cloud-service-licenses/blacklist/records?select=id
New: GET /cloud-service-licenses/blacklist/records/ids

→ Deprecated GET /cloud-service-licenses/accounts/{accountId}/records?select=id
New: GET /cloud-service-licenses/accounts/{accountId}/records/ids

→ Deprecated POST /cloud-service-licenses/keys?type=decrypted
New: POST /cloud-service-licenses/keys/decrypted

→ Deprecated GET /cloud-service-licenses/accounts/{accountId}/pools?select=id
New: GET /cloud-service-licenses/accounts/{accountId}/pools/ids

LANCOM Management Cloud 1.00.140.0 / 16.08.2022

The following APIs are deprecated and will be phased out in 3 months:

→ Deprecated: GET /cloud-service-devices/accounts/{accountId}/devices/{deviceId}?type=compatibles
New: /cloud-service-devices/accounts/{accountId}/devices/{deviceId}/compatibles

→ Deprecated: GET /cloud-service-devices/accounts/{accountId}/devices?select=id
New: /cloud-service-devices/accounts/{accountId}/devices/ids

→ Deprecated POST /cloud-service-devices/accounts/{accountId}/devices?type=shadow
New: /cloud-service-devices/accounts/{accountId}/devices/preconfig

→ Deprecated: PUT /cloud-service-devices/accounts/{accountId}/devices/{deviceId}?type=preconfig
New: /cloud-service-devices//accounts/{accountId}/devices/{deviceId}/preconfig

→ Deprecated DELETE /cloud-service-devices/devices/serial/
{serial}?type=redirected
New: /cloud-service-devices/devices/serial/{serial}/redirected

→ Deprecated GET /cloud-service-devices/internal/meta/
models?type=blacklisted
New: /cloud-service-devices/internal/meta/models-blacklisted

→ Deprecated POST /cloud-service-devices/accounts/{accountId}/
devices?type=confirm-current-firmware
New: /cloud-service-devices//accounts/{accountId}/firmware/
preferences-confirmed

→ Deprecated GET /cloud-service-devices/accounts/{accountId}/sites?select=id
New: /cloud-service-devices/accounts/{accountId}/sites/ids

→ Deprecated POST /cloud-service-devices/accounts/{accountId}/firmware/
preferences?content=list
New: /cloud-service-devices/accounts/{accountId}/firmware/preferences

→ Deprecated GET /cloud-service-devices/accounts/{accountId}/
devices?type=table
New: /cloud-service-devices/accounts/{accountId}/devices-table

→ Deprecated GET /cloud-service-devices/accounts/{accountId}/
devices?select=id&type=table
New: /cloud-service-devices/accounts/{accountId}/devices-table/ids

→ Deprecated GET /cloud-service-devices/accounts/{accountId}/
devices?type=dashboard
New: /cloud-service-devices/accounts/{accountId}/devices-dashboard (only
for LMC User Interface)

→ Deprecated GET /cloud-service-devices/accounts/{accountId}/
devices?type=all[1-6]
New: /cloud-service-devices/accounts/{accountId}/devices-all[1-6] (only for
LMC User Interface)

→ Deprecated GET /cloud-service-devices/accounts/{accountId}/
sites?type=table
New: /cloud-service-devices/accounts/{accountId}/sites-table

→ Deprecated GET /cloud-service-devices/accounts/{accountId}/sites?type=all1
New: /cloud-service-devices/accounts/{accountId}/sites-all1 (only for LMC
User Interface)

→ Deprecated GET /cloud-service-devices/accounts/{accountId}/
sites?type=dashboard
New: /cloud-service-devices/accounts/{accountId}/sites-dashboard (only for
LMC User Interface)

→ Deprecated GET /cloud-service-licenses/accounts/{accountId}/
allocations?select=id
New: /cloud-service-licenses/cloud-service-licenses/accounts/{accountId}/
allocations/ids
→ Deprecated GET /cloud-service-licenses/licenses?select=id
New: /cloud-service-licenses/licenses/ids
→ Deprecated POST /cloud-service-licenses/keys?type=decrypted
New: /cloud-service-licenses/keys/decrypted
→ Deprecated GET /cloud-service-licenses/accounts/{accountId}/
pools?select=id
New: /cloud-service-licenses/accounts/{accountId}/pools/ids

LANCOM Management Cloud 1.00.136.0 / 24.05.2022
The following APIs are deprecated and will be phased out in 6 months:
→ Deprecated GET /cloud-service-auth/dpa/unaccepted

LANCOM Management Cloud 1.00.135.0 / 03.05.2022
→ Filter property subnetGroupId on Endpoint GET /account/{accountId}/sites
does now accept a list of site ids

LANCOM Management Cloud 1.00.130.0 / 18.01.2022
→ Deprecation of endpoint GET /cloud-service-devices/accounts/{accountId}/
devices?type=table
→ Deprecation of endpoint GET /cloud-service-devices/accounts/{accountId}/
devices?select=id&type=table

LANCOM Management Cloud 1.00.128.0 / 07.12.2021
→ Deprecated GET/POST /cloud-service-auth/accounts/{accountId}/
custom-fields
→ Deprecated GET/POST/DELETE /cloud-service-auth/accounts/{accountId}/
custom-fields/{fieldId}
→ Deprecated GET /cloud-service-auth/custom-field-targets
→ Deprecated GET /cloud-service-auth/custom-field-targets/{targetId}

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LANCOM Management Cloud 1.00.123.0 / 24.08.2021

The following APIs are deprecated and will be phased out in 6 months (end of February 2022):

→ Deprecated GET /accounts/{accountId}/alerts/settings

→ Deprecated PUT /accounts/{accountId}/alerts/settings

→ Deprecated GET /accounts/{accountId}/notifications/rules/settings

→ Deprecated PUT /accounts/{accountId}/notifications/rules/settings

→ Deprecated GET /accounts/{accountId}/notifications/settings

→ Deprecated POST /accounts/{accountId}/notifications/settings

→ Changed GET /accounts/{accountId}/metrics/alerts/device/{deviceId}/value

→ Changed GET /accounts/{accountId}/metrics/configurations

→ Changed POST /accounts/{accountId}/metrics/configurations

LANCOM Management Cloud 1.00.118.0 / 11.05.2021

→ Changed GET /cloud-service-monitoring/accounts/{accountId}/processing

LANCOM Management Cloud 1.00.115.0 / 09.03.2021

→ Deprecated GET /users

LANCOM Management Cloud 1.00.113.0 / 25.01.2021

→ Changed GET /accounts/{accountId}/firmware/update

→ Changed POST /accounts/{accountId}/firmware/update

→ Changed PUT /accounts/{accountId}/condition

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5. General advice

Disclaimer
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