## Release Notes

## LMC Software Release 1.00.191.0

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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 <a href="https://cloud.lancom.de">https://cloud.lancom.de</a> and is regularly updated with new features and bug fixes.

This document describes the new features of the LMC Software Release 1.00.191.0, as well as the improvements since the previous version.

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## 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 <a href="mailto:this Knowledge Base document">this Knowledge Base document</a>.





## 3. New features, changes, and history

## LANCOM Management Cloud 1.00.191.0 / 22.07.2025

### Improvements

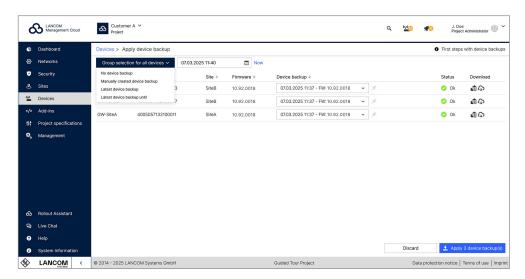
- → If a device is at the end of its lifecycle status, this is displayed in the device overview.
- $\rightarrow$  API keys can now be created at organization level (supports inheritance).
- → The option for unlimited API keys for cross-account keys has been removed for security reasons (these API keys are now valid for a maximum of 1 year).

- → A problem with licensing of Unified Firewalls in SPLA has been solved.
- → A problem with licensing LTA users has been solved.
- → A problem with the configuration of Internet access when using LTA Full Tunnel has been solved.



## LANCOM Management Cloud 1.00.190.0 / 01.07.2025

## **Device configuration backup**



Despite careful planning and technical support, configuration errors can never be completely ruled out and may lead to network disruptions. To quickly respond to such errors, the LMC now offers a backup and restore function for device configurations. This allows users to swiftly reset to a stable state, gaining valuable time for root cause analysis. By making precise comparisons between configuration versions, errors can be efficiently identified and corrected before rolling out the revised configuration to the device again.

Further details and instructions for use can be found in this tech paper.

#### Authentication Notice: Removal of Basic Auth from API Documentation

As part of our ongoing efforts to enhance security and maintain high quality standards, the Basic Authentication method has been removed from our API documentation.

**Please note:** Technical support for Basic Auth will remain available until June 30, 2026, to allow for a smooth transition of existing integrations.

We strongly recommend switching to the officially supported, user-bound API keys, which offer a more secure and flexible way to authenticate.

If you have any questions regarding the use of API keys, please read our <u>Knowledge</u> Base article.





### **Improvements**

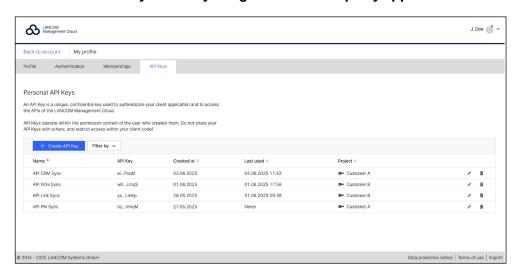
- → The scrolling behavior of the location and administrator tables has been improved
- → API keys can now optionally be given an expiration date
  Please note: All keys already created have been assigned an initial expiration date of one year from the date of creation.

- → L7 app detection is now being activated on LAN and Wi-Fi interfaces of Wi-Fi routers, if the app detection shall take place on the router
- $\rightarrow$  Switch templates on network level are now available for 12-port switch types
- → JSON variables used in Add-ins now also support to access data through numeric indices



#### LANCOM Management Cloud 1.00.189.0 / 20.05.2025

#### User-bound API keys for easy integration of third-party applications



You can now create user-specific API keys directly under "My profile > API Keys". These enable secure and flexible integration of third-party applications – without complex authentication procedures or additional configuration. The API keys operate within the access rights context of your user account, allowing all accesses and actions to be distinctly attributed to you. You decide whether access is project-related or cross-project. You gain more security and control through clear management of recent usage and transparent visibility in project and device logs.

#### **Improvements**

- → Support for LCOS 10.92 including the transition of filter categories from the LANCOM Content Filter Option to the LANCOM Security Essentials Option. An overview of the updated categories can be found <u>here</u>.
- → The individual port settings in the switches' device overview now support the configuration of the PoE operation mode.

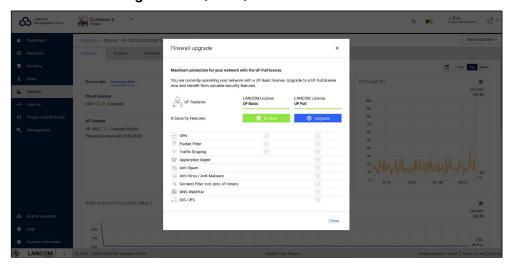
- → The Organization Administrator can change an inherited role of a project member to 'Project Administrator'.
- → DNS domains created from SmartConfig information no longer contain '\_'.





## LANCOM Management Cloud 1.00.188.0 / 20.05.2025

# Integration of LANCOM R&S®Unified Firewall licenses into your Service Provider License Agreement (SPLA)



Effective immediately, LANCOM R&S®Unified Firewall licenses can be billed monthly under your SPLA agreement, in addition to LMC licenses. This offers a simple and flexible way to manage licensing and costs – ideal for larger installations or tailored customer projects.

Activation takes place directly in the LANCOM Management Cloud, under the "License Info" tab of the respective device. There, the functionality of the Unified Firewall can be flexibly adjusted at any time by switching between license types (Basic or Full License). You can now also change the vFirewall variant as required (from S to XL).

**Note:** The monthly billing model requires a current SPLA contract with LANCOM Systems. Please contact your LANCOM sales team for further information.

### **Improvements**

- → Unused connection targets are not rolled out to Unified Firewalls as 'Desktop Objects' anymore.
- → Header and footer of the device table are now permanently displayed when scrolling.

#### **Bug fixes**

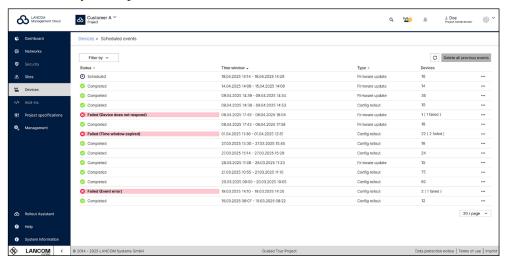
→ A problem with the automatic email delivery of the details report has been solved.





#### LANCOM Management Cloud 1.00.187.0 / 29.04.2025

#### More transparency for scheduled events



The new update makes your scheduled events even more transparent: planned configuration rollouts and firmware updates can now be filtered, managed, and optimized more precisely. An enhanced overview with additional details, along with a new, detailed results page for your planned events, gives you a comprehensive view of the status of each individual process and also simplifies error analysis and troubleshooting.

You can also learn more about the detailed "scheduled events" process in our tech paper.

#### **Improvements**

- → Added Irish/Gaeilge language for hotspot networks
- → The configuration of the automatic firmware updater is now available for switches with LCOS SX 4.30.
- → Variables for Add-ins can now be defined with type JSON to provide complex data into the JavaScript of the Add-ins.

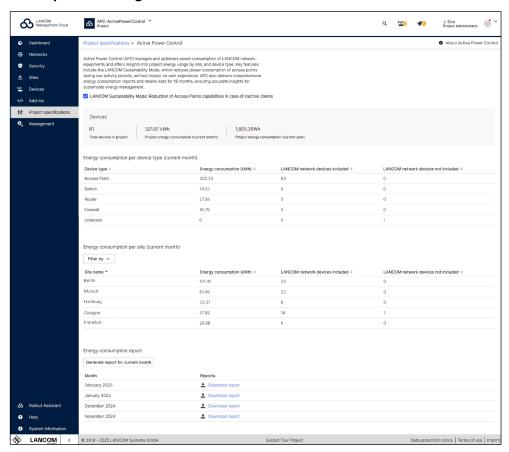
- → The WAN anomaly icon did not correctly disappear after the alert was closed.
- → Corrected the deletion process of variables.
- → Changes in Add-ins assigned to networks will not affect devices which are not assigned to the same network.





#### LANCOM Management Cloud 1.00.186.0 / 08.04.2025

# Update for Active Power Control: Smart power management for LANCOM devices



Active Power Control (APC) is an intelligent solution for sustainable network management. It offers a transparent view of the power consumption of LANCOM devices — broken down by project, location, or device type — and reveals energy-saving potential through the already integrated "LANCOM Sustainability Mode". The latest update expands the reporting capabilities and now provides new monthly and annual views of key energy consumption metrics, as well as detailed consumption reports in Excel format. Based on consumption data, device analyses, and clear visuals, APC helps you identify trends and uncover optimization potential.

A full overview of APC features is available in the corresponding <u>tech paper</u> or directly in the LMC information area under > Project specifications > Active Power Control.





### **Improvements**

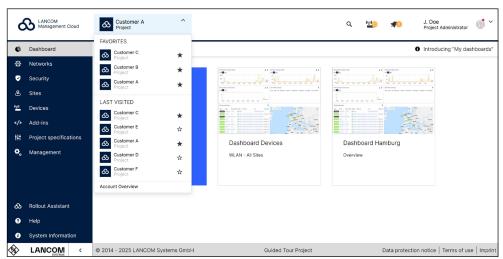
- → The display of the status of the Unified Firewall stack during synchronization has been optimized.
- → Improved views and help texts

- → The LMC now deactivates the 6 GHz band for access points that are operated in outdoor mode.
- → Reduced log messages when a configuration with LAGs is carried out for a switch.
- → Custom applications based on the DPS protocol do not create configuration objects that are not accepted by an LCOS device.
- → A problem with the display of project favorites after a name change has been fixed.



#### LANCOM Management Cloud 1.00.185.0 / 17.03.2025

## Increased efficiency through direct project navigation



Administrators managing multiple projects within their organization can now benefit from direct and seamless access to up to five favorite projects. These projects can be easily marked as favorites in the "account overview" or the account selection menu and remain accessible from there. The optimized navigation enables quick project switching, making daily workflows even more efficient.

#### **Improvements**

- → Improved error and status messages and a better overview on the 'scheduled events' page
- → Support for reduced animations on the main page of the user interface
- → It is now possible to use DynDNS domains with LTA.

- → If activated, 2-factor authentication is now also used for account deletion.
- → Existing masquerading settings are used in the routing table.
- $\rightarrow$  Several problems with the 'Site overview' widget have been fixed.

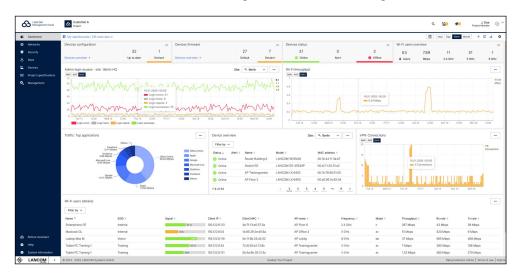




#### LANCOM Management Cloud 1.00.184.0 / 24.02.2025

## My dashboards:

#### A milestone for network monitoring and troubleshooting



With "My dashboards", you can design your monitoring according to your personal requirements. Customizable dashboards and practical monitoring tools allow you to keep an eye on network events, identify errors faster, and optimize workflows – for maximum productivity.

**Individual dashboards:** Create up to 11 custom dashboards per project, with flexible layouts, widgets, and filters for a personalized monitoring.

**Efficient troubleshooting:** The improved filter system enables you to perform targeted analyses at device or location level and hides information that is not required. New, time-synchronized diagram tooltips allow you to correlate events at a glance.

**In-depth analysis:** Quickly selectable data values (minimum, average, maximum), customizable time intervals, and extended data storage (up to one month) help you make precise and well-founded decisions.

**Optimized visualization:** Add widgets and customize metrics, visualization types, filters, sizes, and positions according to your needs. Alternative chart types and dynamic layout adjustments enhance clarity, making complex data easier to interpret.





**Risk-free testing:** "My dashboards" are only visible to you. Take advantage of the opportunity to try out new configurations without affecting your colleagues' workflows.

Of course, the regular dashboards remain available and can still be used as usual.

You can find a detailed overview of your options and instructions for creating your personal dashboards directly in the LMC, in the dashboard's information area, as well as in this <u>techpaper</u>.

#### Improvements

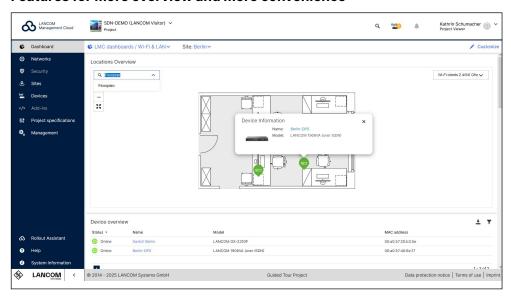
- → Support for reduced animations in the help slider depending on the OS setting.
- → Administrators can now use the system variable ROLLOUT\_ENABLED to temporarily disable the rollout for specific devices or locations.

- → The handling of fields with hashed passwords in the detailed configuration of switches has been corrected.
- → BPjM content filter rules are now supported for devices with LCOS FX-I.
- → A problem with switching sites in the 'Site overview' widget has been fixed.
- → Fixed an issue where the drop-down menu for swapping floor plans did not respond when maximized.



#### LANCOM Management Cloud 1.00.183.0 / 04.02.2025

#### Features for more overview and more convenience



In addition to developing new features, we continuously work on optimizing user-friendliness to make workflows more efficient and intuitive. Two recently implemented improvements are:

#### → Optimized use of floor plans:

In the "Location Overview" dashboard widget as well as under "Locations" → "Floor plans", you can now use full-text search to quickly find the desired floor plan for a selected location. The new full-screen view option gives you an improved overview—especially for highly detailed floor plans. The devices marked on the floor plan are now linked, so you can see the device details in the device view with just one click.

#### → Improvements in browser history and tab management:

The new, descriptive tab names improve clarity and also make it easier to navigate your browser history. Furthermore, individual locations and projects can now be opened in separate tabs (e.g., via the "Locations" menu: right-click on the desired location  $\rightarrow$  "Open in new tab"). Ideal if you want to keep an eye on multiple networks at the same time.

Do you have any further suggestions for improving the user-friendliness of the LANCOM Management Cloud? <u>Feel free to let us know!</u>





#### **Improvements**

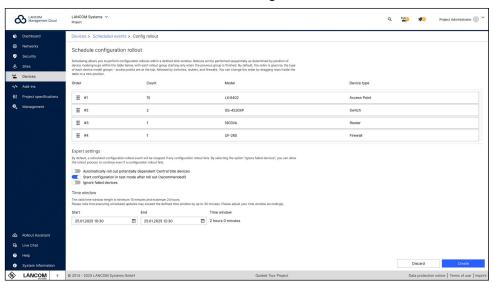
→ When filling in form fields, error messages regarding unfulfilled input requirements are no longer displayed immediately.

- → Fixed a display error in the organization dashboard when more than 20 projects were listed.
- → The member list is now loaded correctly regardless of the number of users.
- → After starting and ending an ACR 2.0 scan, the ARC 2.0 device page now displays the correct text for an offline device.
- → The error message "Not accepted" after updating a LANCOM GS-3510XP from LCOS 4.30 RU3 to LCOS 4.30RU4 and subsequent reboot has been fixed.
- → The WPA3 Enterprise configuration is now also possible for a LANCOM LN-630acn dual Wireless.
- → If many VLANs are stored for a switch, these are no longer cut off in the switch port configuration.



#### LANCOM Management Cloud 1.00.182.0 / 13.01.2025

#### Scheduled events in the LANCOM Management Cloud



Configuration rollouts and firmware updates can now be planned in advance and executed automatically, eliminating the need for active administrator involvement. All that is required is to define the time window and select the respective devices beforehand.

By default, the LANCOM Management Cloud organizes the selected devices by model type and updates them one after the other to ensure smooth operation—from access points and switches to firewalls and routers.

Scheduling new events is simple: In the "Devices" menu, select the desired components in the table, choose the desired action (configuration rollout or firmware update) via the three-dot menu under "Scheduling", and customize additional details and options for smooth operation.

For a clear overview, the "Scheduled events" button in the device table view provides a complete list of all upcoming and previous updates at a glance.

If you need detailed information on "scheduled events", please take a look at our

You can also look forward to continuous improvements and even more new features in this area. We will keep you updated.





techpaper.

#### **Improvements**

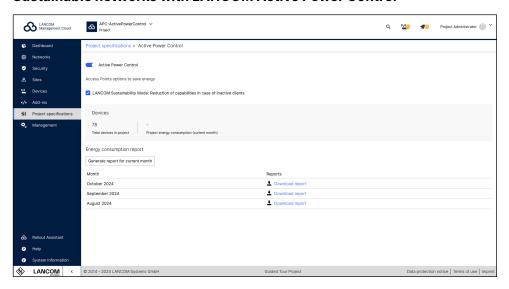
- → Users can now open projects and sites in new tabs by right-clicking.
- → Floor plans can now be displayed in full screen mode in the widget 'Site overview'.
- ightarrow The list of floor plans in the 'Site overview' widget can now be filtered.
- → Improved table of floor plans in the site management section.

- → A problem with the site list in the dashboard when switching between projects has been fixed.
- → A problem with the display of an offline secondary device in an HA cluster in the cluster view has been fixed.
- → Improved consistency of SSID / Wi-Fi network names containing a space in the add-ins.
- → Protocol-based applications for DPS can be created and edited correctly again.
- → In the detail configuration, when switching between basic and rollout configuration, the row selection is reset.
- $\rightarrow$  SNMPv3 users can be set correctly in the detail configuration of the GS-3xxx switches.
- → DHCPv6 reservations are handled correctly in the LCOS detail configuration.
- ightarrow The weighting of an access point for ARC 2.0 is taken into account again.



#### 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**

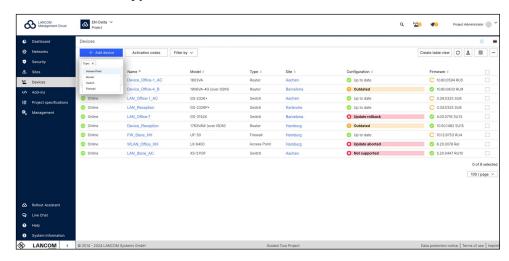
- → API keys for interacting with SIEM APIs can now be created under 'Project specifications / External services / SIEM'.
- → Within organizations, projects can now be opened in a new tab.
- → Sites can now be opened in a new tab.

- → 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.



#### 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.
- ightarrow 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.

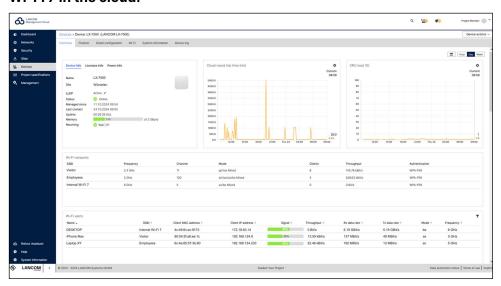
- → The handling of networks with duplicate names has been corrected.
- → A problem with low contrast in the device table has been fixed.
- → The link in the banner, which provides quick access to unlicensed devices, now works under all conditions.
- → An optional parameter in the Swagger documentation 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 <u>LANCOM LX-7500</u>! 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.

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





### **Improvements**

- $\rightarrow$  Improved sorting in the table 'User profile  $\rightarrow$  Memberships'
- → New language support for Hotspot
- → DPS overlay failure warning

- $\boldsymbol{\rightarrow}$  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

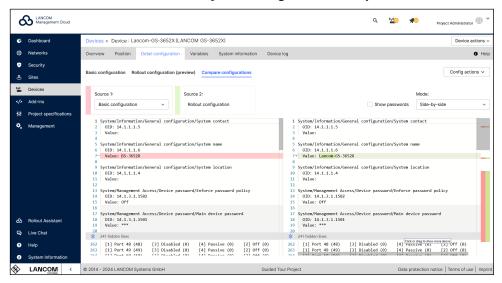
- → A problem with the sorting in the firmware dialog is fixed
- → A problem with the device status widget for new project was fixed
- → Update of the logo and background for the hotspot





#### 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)
- ightarrow Uniform behavior in the device table when the mouse pointer is moved over an entry

- → 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.



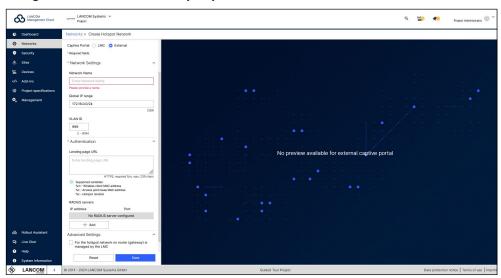


- → A problem with the display of new text content in the device overview has been fixed.
- → Automatically created device passwords with a length of 15 characters sometimes did not match the password restrictions of the device. The algorithm now always creates valid passwords.
- → The antenna gain is 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.



#### 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**

- $\rightarrow$  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.



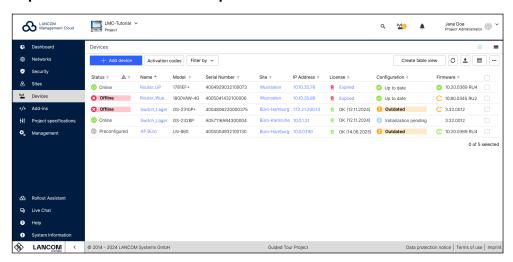


- → The exclamation mark in front of the beta label has been removed.
- → The loading spinner has been restored in the device table while a configuration rollout is taking place.
- ightarrow The licensing filter in SPLA projects has been removed from the device table.
- ightarrow Fixed a problem in the device table where the configuration column could jump when the configuration status changed.



#### 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.

- → 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:

- Create a ticket with the LANCOM support team: Open a support ticket and submit the request for the SIEM integration service.
- 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.





#### **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**

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

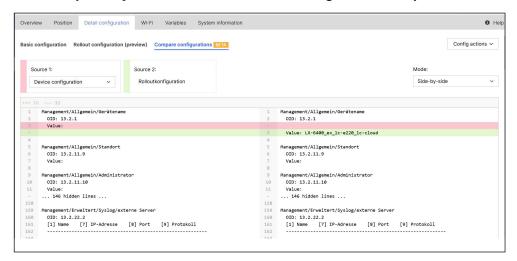
- → In some cases, there were discrepancies in the SPLA usage data for the month of May in the downloadable detailed report.
  - The data has been corrected.
- $\rightarrow$  A problem with large tables on the Edge browser has been solved.
- → For project viewers, the 'License' tab and the 'Initial Rollout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





#### 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.

- → 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.
- ightarrow A problem with the device and site tables on Edge browsers has been fixed.

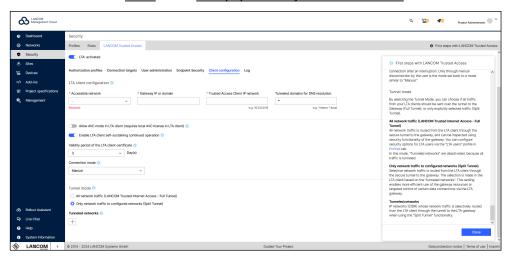




## LANCOM Management Cloud 1.00.170.0 / 15.05.2024

#### 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.

- → 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.

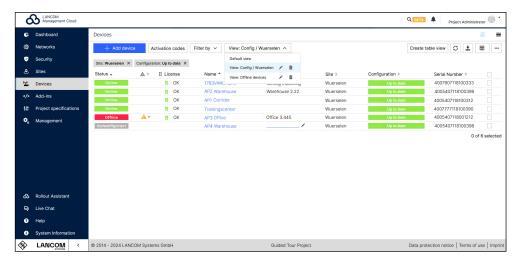




#### LANCOM Management Cloud 1.00.169.0 / 16.04.2024

### 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.

- → 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.

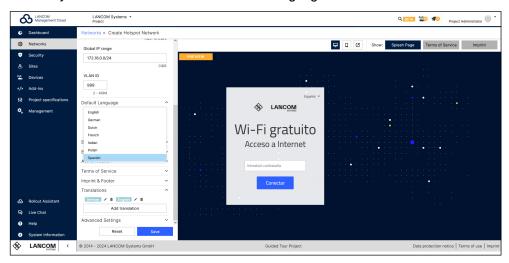




#### LANCOM Management Cloud 1.00.168.0 / 26.03.2024

# 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.

- → 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.





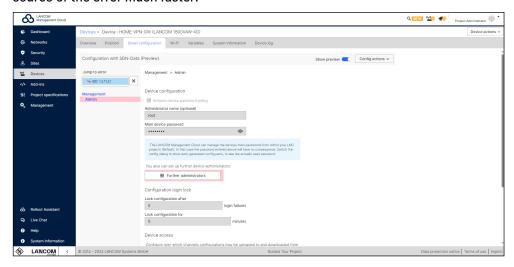
- → The tooltip information about active packet filter rules in the ,Security / Profiles' table overview now shows the correct number of rules.
- → The ,LMC Top Users' and ,Top Applications' data were labeled as gigabytes and terabytes respectively, although they are actually gigabits and terabits.
- $\rightarrow$  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.





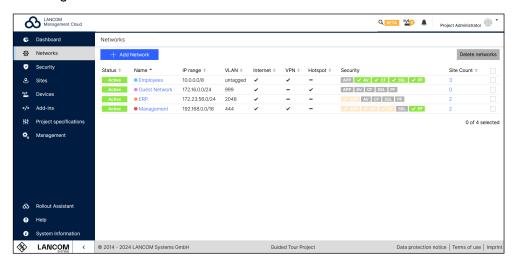
- → A problem with the location assignment in the device table has been fixed.
- ightarrow A problem with the visibility of device list filters has been fixed.
- → The network settings at site level were restricted if the network mode was set to "use the same network for each site". It is now possible 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.



## 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.

- → 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.

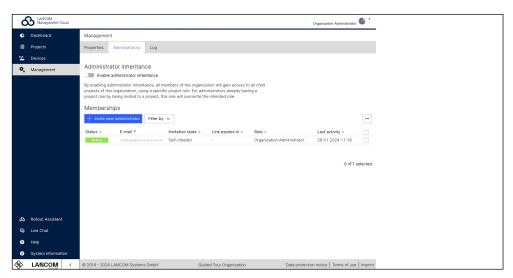




## LANCOM Management Cloud 1.00.165.0 / 23.01.2024

#### 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
- ightarrow New design for the rollout assistant web application

- ightarrow 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.



#### 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. <u>Start your onboarding today!</u>
- → 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!





## 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





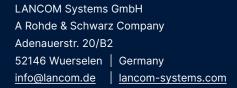
### 5. General advice

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