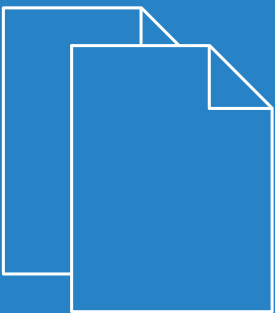


LCOS LX 5.32

Addendum



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LANCOM Systems GmbH
Adenauerstr. 20/B2
52146 Würselen, Germany
Germany
www.lancom-systems.com

1 Addendum to LCOS LX version 5.32

This document describes the changes and enhancements in LCOS LX version 5.32 since the previous version.

2 WLC layer-3 tunnel

Layer-3 tunneling involves the extended application of the CAPWAP protocol (control and provisioning of wireless access points) as used by WLAN controllers (WLC) to manage WLAN access points. It allows WLAN data to be fed into the LAN via a central WLAN controller by establishing a direct data tunnel between the WLAN controller and the access point. For configuration, one of the available WLC tunnel interfaces has to be set in the logical network profile of the WLC under **WLAN Controller > Profiles > Logical WLAN networks (SSIDs) > Connect SSID to**. The data traffic from that SSID is now directed to the selected WLC tunnel interface of the WLC. The WLC tunnel interface can now be used for an ARF network or in the LAN bridge of the WLC.

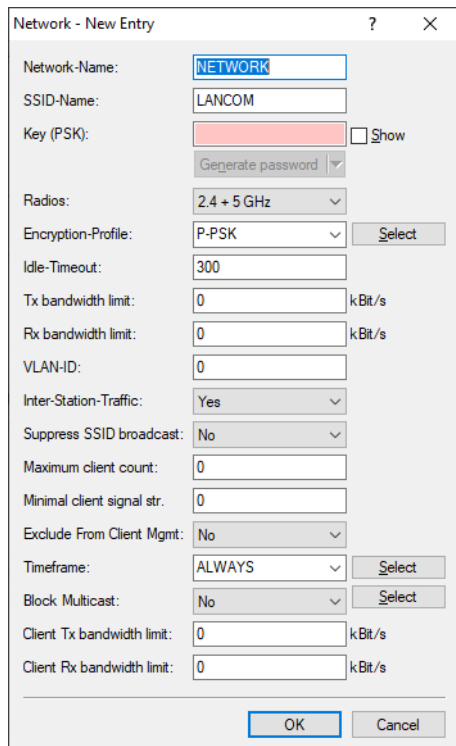
Layer-3 tunneling is ideal for environments operating unmanaged switches or where no further VLAN configuration of the switches is possible. This allows data tunnels to be set up very quickly and easily without needing a VLAN infrastructure between the WLAN controller and access point to isolate the data traffic of individual SSIDs from one another. A VLAN infrastructure is only required at the transfer point between the WLAN controller and the local networks because data from the individual SSIDs is transported in a layer-3 tunnel between the access point and WLAN controller. Alternatively, the WLAN controller can use its router function to route data delivered via the tunnel to other IP networks or to the Internet.



To use this feature, the LANCOM WLAN controller requires LCOS 10.42 RU3 or higher.

3 Bandwidth limitation per WLAN client

From LCOS LX 5.32 the bandwidth used by WLAN clients can be limited in the send and receive directions. Configure this under **Wireless-LAN > WLAN-Networks > Network**.



Client Tx bandwidth limit

Here you limit the bandwidth used by WLAN clients in the send direction.

Client Rx bandwidth limit

Here you limit the bandwidth used by WLAN clients in the receive direction.

3.1 Additions to the Setup menu

3.1.1 Client-Tx-Limit-Kbit/s

Here you limit the bandwidth used by WLAN clients in the send direction.

SNMP ID:

2.20.1.26

Console path:

Setup > WLAN > Network

Possible values:

Max. 10 characters from [0-9]

3.1.2 Client-Rx-Limit-Kbit/s

Here you limit the bandwidth used by WLAN clients in the receive direction.

SNMP ID:

2.20.1.27

Console path:

Setup > WLAN > Network

Possible values:

Max. 10 characters from [0-9]

4 Buffering the BLE messages via the LBS API

From LCOS LX 5.30 BLE messages can be forwarded to external servers in the JSON format via the LBS API. From LCOS LX 5.32 you can now configure how long these messages are buffered on the AP before being forwarded to the external server.

Configure this under **Miscellaneous Services > Location Based Services > HTTP-Server**.

Buffering Timeout

After the configured time (in seconds) is reached, all BLE messages buffered up to that point are sent to the server.

Buffer Size

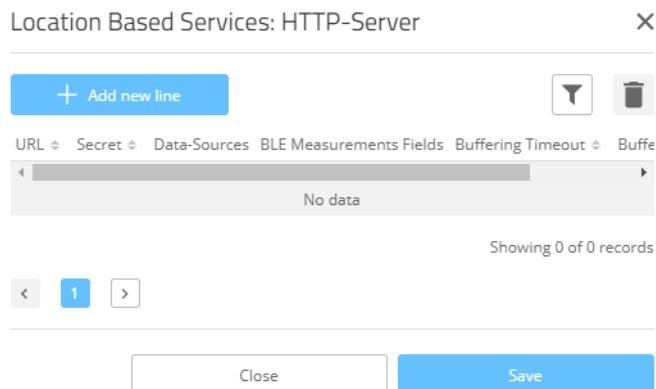
After the configured data quantity (in bytes) is reached, all BLE messages buffered up to that point are sent to the server.



With the value for **Buffering Timeout** and **Buffer Size** both set to 0, the messages are sent to the server as soon as possible.

Configuration by WEBconfig

The settings of the HTTPS server in WEBconfig are located under **System configuration > Location Based Services > HTTP-Server**.



Buffering Timeout

After the configured time (in seconds) is reached, all BLE messages buffered up to that point are sent to the server.

Buffer Size

After the configured data quantity (in bytes) is reached, all BLE messages buffered up to that point are sent to the server.

i With the value for **Buffering Timeout** and **Buffer Size** both set to 0, the messages are sent to the server as soon as possible.

4.1 Additions to the Setup menu

4.1.1 Buffering-Timeout

After the configured time (in seconds) is reached, all BLE messages buffered up to that point are sent to the server.

i With this value and [2.99.1.6 Buffer-Size](#) on page 10 both set to 0, the messages are sent to the server as soon as possible.

SNMP ID:

2.99.1.6

Console path:

Setup > LBS > HTTP-Server

Possible values:

Max. 4 characters from [0-9]

Special values:

0

The value "0" means that no limitation is active.

4.1.2 Buffer-Size

After the configured data quantity (in bytes) is reached, all BLE messages buffered up to that point are sent to the server.



With this value and [2.99.1.6 Buffering-Timeout](#) on page 9 both set to 0, the messages are sent to the server as soon as possible.

SNMP ID:

2.99.1.6

Console path:**Setup > LBS > HTTP-Server****Possible values:**

Max. 4 characters from [0-9]

Special values:

0

The value "0" means that no limitation is active.