

CENTRALINE NX Lonsock RNI Driver

User Guide



CENTRALINE NX

Lonsock RNI DRIVER

4.4.xx

USER GUIDE

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CONTENTS

ABOUT THIS USER GUIDE		6
SYSTEM REQUIREMENTS		6
INTRODUCTION		6
System Architecture / Usage Scenarios		7
INSTALLATION	.....	8
LONSOCK RNI DRIVER SETUP	.....	8
Initial Configuration of CLIF-CBUSLC on Webpage (A)	.....	8
Logout from CLIF-CBUSLC Webpage	.....	12
Final Configuration in Centraline NX Workbench (B)	.....	12
Adding and Configuring Lonsock Platform Service	.....	12
Adding and Configuring Lon Network	.....	15
Further Functions of CLIF-CBUSLC Webpages	.....	20
Login Page	.....	20
Executing Factory Reset	.....	20
Status Page	.....	21
Accessing Configuration Page	.....	22
Updating Firmware	.....	22
Reloading Status Information	.....	24
Configuration Page	.....	25
Resetting Form	.....	25
Changing Password	.....	25
Displaying Connection Diagram	.....	26

ABOUT THIS USER GUIDE

This user guide describes the configuration of the Lonsock RNI driver vers. 4.4.92.2.0.3 in combination with the CLIF-CBUSLC Interface ver. 1.00.03.02 in order to engineer Standard LON configurations using Niagara NX. It also includes the descriptions of the settings for physical C-Bus and virtual C-Bus over LON.

SYSTEM REQUIREMENTS

Niagara	Niagara 4.4.xx and higher
CLIF-CBUSLC	1.00.03.02
Lonsock RNI Driver Version	4.4.92.2.0.3
Platforms and Controllers	The Lonsock RNI driver can be used for the following platforms: • ARENA NX • EAGLEHAWK NX • HAWK 8000
Firmware and Software Downloads	The CLIF-CBUSLC firmware and the NX Lonsock RNI driver can be downloaded from the Centraline PARTNER web www.centraline.com.
Products, OS Numbers and Software Compatibility	For detailed information on the applicable controllers and CLIF versions including their OS Numbers and licenses, please download the corresponding product data, software release bulletin and/or the compatibility matrix at: Product Data http://products.centraline.com/en/ Software Release Bulletin https://www.centraline.com/partnerweb/index.php?id=847&route=article%2Findex&directory_id=47&direct_link=1 Compatibility Matrix https://clfaq.ge51.honeywell.de/?action=artikel&cat=70&id=1616&artlang=en

INTRODUCTION

The CLIF-CBUSLC Interface ver. 1.00.03.02 and its Lonsock RNI driver ver. 4.4.92.2.0.3 allows the parallel integration of mixed installations containing physical C-Bus, virtual C-Bus over LON and Standard LON for Niagara NX (see "System Architecture / Usage Scenarios", p. 7).

Standard LON installations can be engineered with COACH NX / ARENA NX for mixed architectures without the necessity of a separate LON interface.

The CLIF-CBUSLC Interface is based on Niagara ver. 4.4. and higher and supports architectures using any of the following platforms:

- ARENA NX
- EAGLEHAWK NX
- HAWK 8000

For further details of the CLIF-CBUSLC Interface, please refer to the CLIF-CBUSLC Interface product data, EN0Z-1026GE51.

The "standard LON" function of the CLIF-CBUSLC in combination with the IF-LON2 enables projects where a standard LON FTT connection is needed to be connected through TCP/IP to an ARENA NX supervisor. On the same physical LON connection, devices can also communicate through virtual C-Bus. In addition, the Lonsock RNI Driver allows the connection of local LON network interfaces of the PC to Niagara NX, in case the local Lonsock RNI driver is enabled, e.g. through CARE or EXCELON.

System Architecture / Usage Scenarios

CLIF-CBUSLC can handle up to two C-Busses, one via the serial isolated interface RS485 and one connected to the USB interface via IF-LON2.

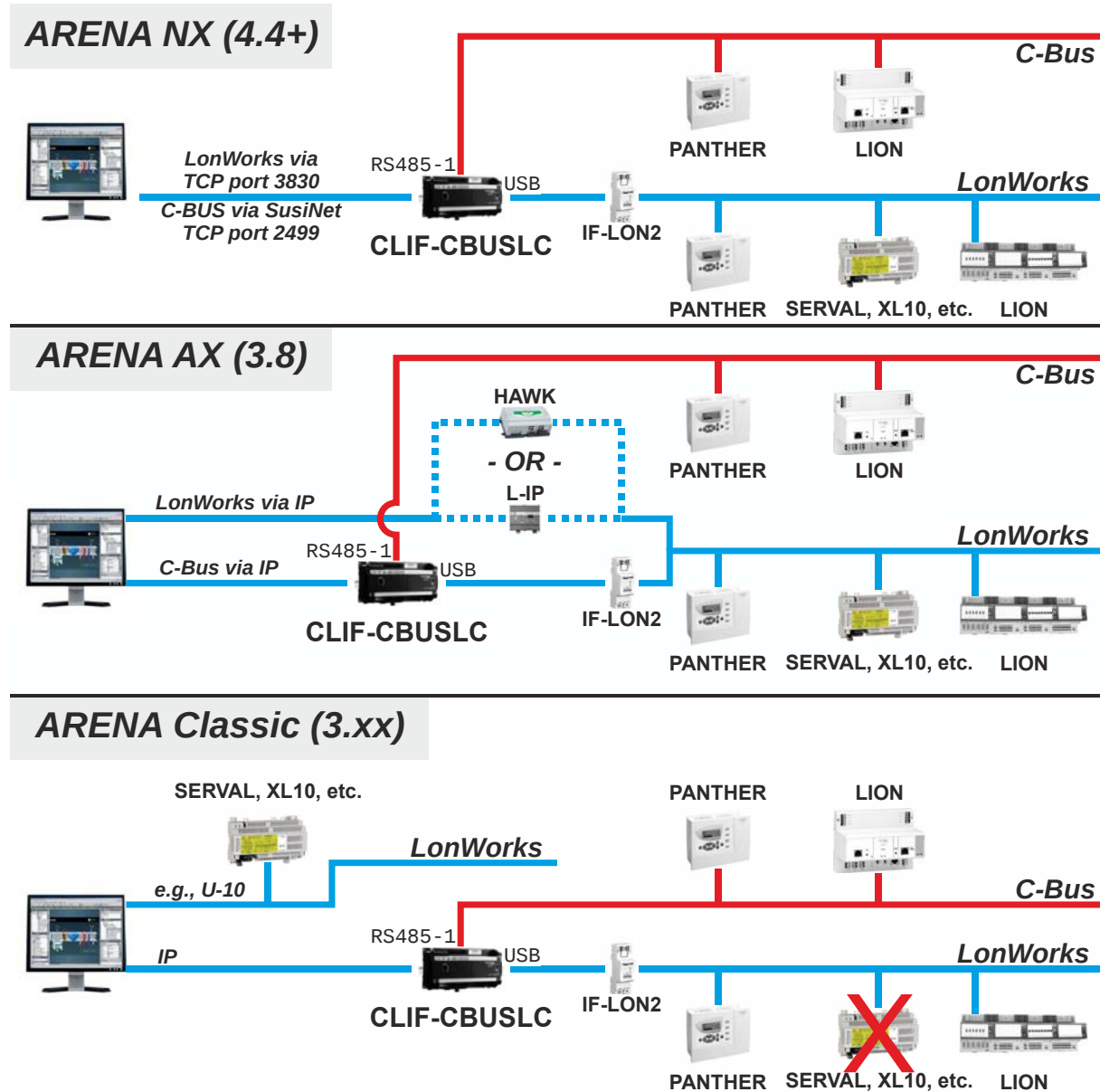


Fig. 1. System Architecture / Usage Scenarios for CLIF-CBUSLC

WARNING

For a safe operation of CLIF-CBUSLC do not:

- Use RS485-2 for the physical C-Bus connection
- Change the termination switch – leave it at mid position!
- A high number of C-Bus points and high bus-load can reduce the number of controllers

INSTALLATION

The Lonsock RNI driver is part of the ARENA NX / COACH NX installation package, version 4.6.xx and higher. For using the Lonsock RNI driver with ARENA NX / COACH NX version 4.4.xx, please download the driver from the Centraline PARTNER web www.centraline.com and copy it to the *Modules* folder.

LONSOCK RNI DRIVER SETUP

The Lonsock RNI driver usage is based on two parts:

- Initial configuration of the CLIF-CBUSLC via webpage (A)
- Final configuration of the Lonsock RNI driver in the Centraline NX workbench (B)

Prerequisites

Make sure that the following steps were done prior to the configuration of the Lonsock RNI driver in the Centraline NX workbench (B).

- If not already available in the current Centraline NX installation (e.g. in case ARENA NX / COACH NX version 4.4.xx is used) download the driver from the Centraline PARTNER web www.centraline.com and copy the following file to the *Modules* folder:

– lonsockClient-rt.jar

- Start Centraline NX
- Open the platform
- Create the station
- Start and connect to the station

Make sure that the CLIF-CBUSLC device, the IF-LON2 and the PC are properly connected (see CLIF-CBUSLC Installation and Commissioning Instructions, form no. EN1Z-1026GE51).

Initial Configuration of CLIF-CBUSLC on Webpage (A)

Purpose

To initially configure the CLIF-CBUSLC device according to the connected LON system. This includes the configuration of the following:

- General Ethernet Settings
- General LON settings such as domain Id, node and subnode
- Specific LON settings for standard LON, physical C-Bus, and or virtual C-Bus

Prerequisites

Connect the PC to the CLIF device via USB cable. The LAN port cannot be used for configuring the CLIF device.

Procedure

1. In the address field of your browser, enter the IP address 192.168.255.241 of the CLIF-CBUSLC device.



RESULT: Depending on when you will access the CLIF-CBUSLC, either the first time or after the first time, one of the following pages displays.

- *CLIF-CBUSLC Password* (at first access, continue with step 2)
 - *CLIF-CBUSLC Login* (after first access, continue with step 3)
2. If you setup the CLIF-CBUSLC for the first time, you must enter an administrator password. This administrator password must contain:
 - 8 or more (but not more than 31) characters
 - uppercase letters
 - lowercase letters
 - numerals

- no whitespace characters

CLIF-CBUSLC Password

you must specify a new password before you can use this device.

new password

repeat new password

Change Password

Back

Enter the administrator password in the **new password** and **repeat new password** fields on the *CLIF-CBUSLC Password* page, and then click **Change Password**. Continue with step 4.

3. If you have already setup the CLIF-CBUSLC, enter the issued password in the **Password** field on the *CLIF-CBUSLC Login* page, and then click **Login**.

CLIF-CBUSLC Login

Password:

Login

Factory Reset

Back

CLIF-CBUSLC Login

Password:

Login

Factory Reset

Back

NOTE: If you have forgotten the password, click **Factory Reset** and then define a new password and login as described in section “Executing Factory Reset”, p. 20.

RESULT: The *CLIF-CBUSLC Status* page displays and shows information about:

- Hardware boards
- Connected C-buses
- Event queues
- Time and timezone
- SUSI connection data
- Admin password changes
- CPU load

CLIF
Logout
CENTRALINE NX

CLIF-CBUSLC Status

Configuration
Firmware
Reload

SUSI Settings and Diagnostics:

```

Board:
Mode: CONFIGURATION 2
Max Outstanding Events: 1
Event Timeout: 20sec
Address: ""
Client: not connected
prev. Client IP Addr.:
connect time: Invalid time
disconnect time: 15:27:32 11/05/18

C-Bus1: unused
C-Bus2: unused

Event Queue:
queued events : 0 (of max 500)
outstanding events : 0 (of max 1)

Time: 15:40:23 11/05/18 Timezone: -3600sec

SUSI connects : 0
SUSI logins : 0
SUSI msgs received : 0 (0 rejected, 0 not supported)
SUSI msgs sent : 0
C-Bus1 msgs received : 0 (0 events)
C-Bus2 msgs received : 0 (0 events)
admin passw. changes : 0

CPU load:
SUSI server: 2.8% (2.7%)
total : 30.9% (25.8%)
          
```

4. Click Configuration.

RESULT: The *CLIF-CBUSLC Configuration* page displays.

Here you can configure the following connection options:

- General Ethernet Settings
These settings are valid in general for all the following options.
 - Physical C-Bus settings
 - General LON settings
 - Specific LON settings according to the connected LON system (C-Bus over LON (virtual C-Bus) or Standard LON)

CLIF
Logout
CENTRALINE NX

CLIF-CBUSLC Configuration

Ethernet settings

IP:

mask:

default gateway:

MAC:

SUSInet port: (default: 2499, must be ≥ 1024)

ssh port: (cannot be changed)

block SUSInet port: ☐ (only tunneled SUSInet communication)

disable ping: ☐

initial SUSInet timeout: (default: 30sec)

Physical C-Bus (RS485-1)

work as time master: ☐

default token: (may be overridden by supervisor)

passing mechanism:

termination resistors: The 3-position slide switch must always be in the position "MID". (See Connection Diagram)
If mounted at an end of a line, a 120 Ω termination resistor must be connected.

LON settings

subnet:

node:

domain: (1, 3 or 6 byte hex value)

neuron ID:

C-Bus over LON (USB/IF-LON2)

bus ID: (default: 1)

work as time master: ☐

Standard LON (USB/IF-LON2)

work as RNI server: ☒

Back
Reset form
Save Configuration
Change Password
Connection Diagram

5. In order to use the Lonsock RNI driver for standard LON configurations in any kind of mixed configurations, do the following:

Ethernet settings (mandatory for all configurations)

Enter the correct settings of the current configuration for:

- IP
- Mask
- Default gateway
- SUSInet port

If required, select any of the following options:

- Block SUSInet port
- Disable ping
- Initial SUSInet timeout

NOTE:

Do not check "Block SUSInet port" as this is needed only if you want to tunnel SUSInet communication over ssh.

Physical C-Bus (RS485-1), (mandatory if physical C-Bus is used)

Enter the correct settings of the current configuration for:

- Work as time master
- Default token passing mechanism
- Termination resistors

NOTE:

If you want your interface to synchronize the time of your bus devices on an hourly basis, check "work as time master". Setting "default token passing mechanism" allows the selection "automatic, ring (for COV mechanism) or star (for polling mechanism)". This may be overridden by the Supervisor.

LON settings (mandatory for all configurations)

These settings are valid for the two LON options. Enter the correct settings for:

- Subnet
- Node
- Domain

You can retrieve this information from the engineering tool (CARE, COACH, etc.).

Setting "neuron ID" can't be modified. It is read from the LON interface IF-LON2.

The prerequisite for this is that the IF-LON2 LON interface has been connected to the CLIF-CBUSLC's USB 2.0 Host Device interface using the IF-LON2's micro USB cable.

C-Bus over LON (USB/ IF-LON2) (mandatory if virtual C-Bus is used)

If you are using this option, you must also enter the bus ID in **bus ID**. The bus ID must be the same for all devices connected to the C-Bus. The default is "1". If you want your interface to synchronize the time of your bus devices on an hourly basis, check "work as time master".

Standard LON (USB/ IF-LON2) (mandatory for Standard LON configurations)

For Standard LON, check the **work as RNI server** check box. This enables Standard LON access via the CLIF-CBUSLC.

Standard LON (USB/IF-LON2)

work as RNI server: ☒

6. Click .

NOTE: Regarding time master functionality, the CLIF-CBUSLC does not observe daylight saving time. If your controllers do observe automatic daylight saving time, we recommend that you not use the time master functionality. If there is a local workstation permanently on the bus, we recommend that this workstation should be responsible to synchronize date and time.

Logout from CLIF-CBUSLC Webpage

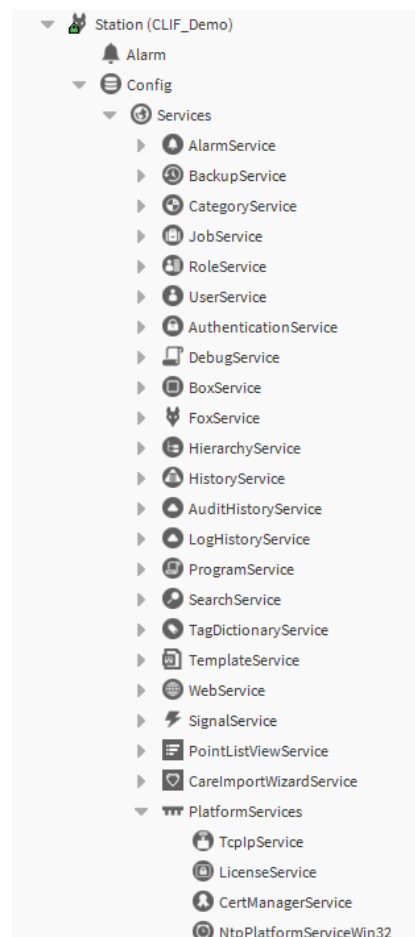
- Procedure**
1. To logout from the CLIF-CBUSLC webpage, click  on the top of the page.

Final Configuration in CentraLine NX Workbench (B)

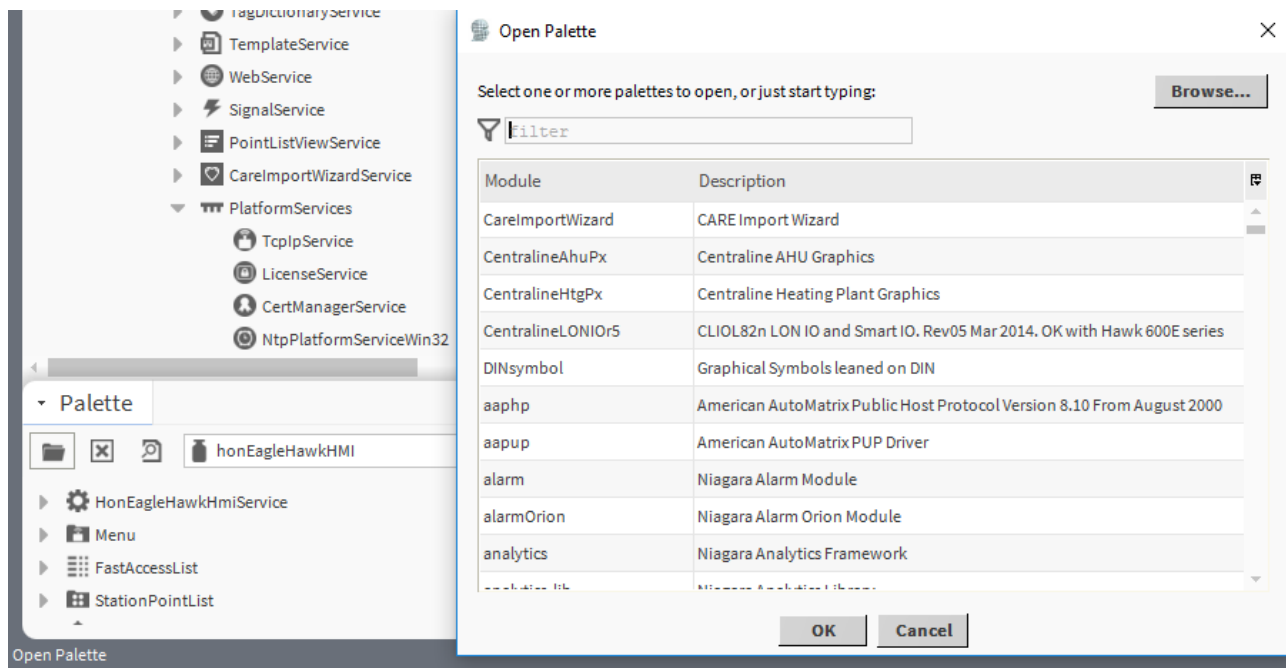
- Purpose**
- To finally configure the Lonsock RNI driver in the CentraLine NX workbench by the applying following steps:
- Adding and configuring the lonsock platform service (Services level)
 - Adding and configuring the Lon network (Drivers level)

Adding and Configuring Lonsock Platform Service

- Procedure**
1. In the *Nav* tree, expand the *Services* folder to display the **PlatformServices**.



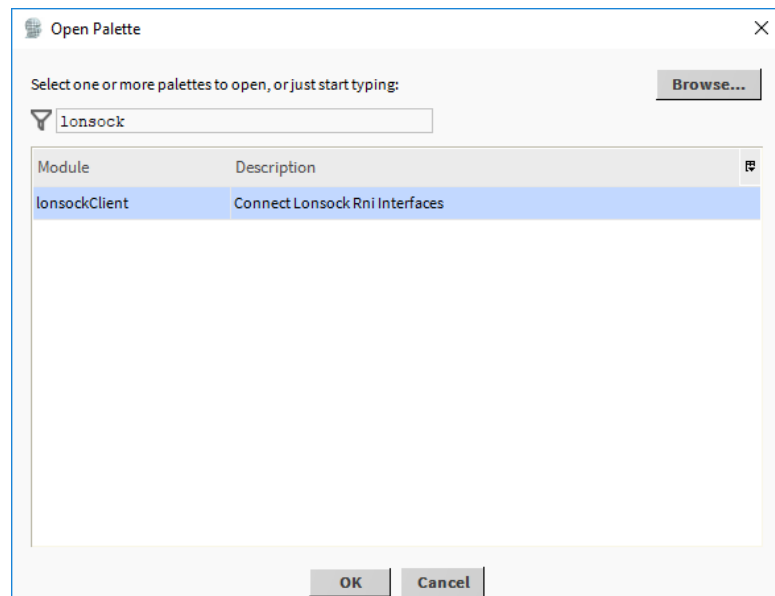
2. On the *Palette* side bar, click the **Open** icon.



RESULT: The *Open Palette* dialog box displays.

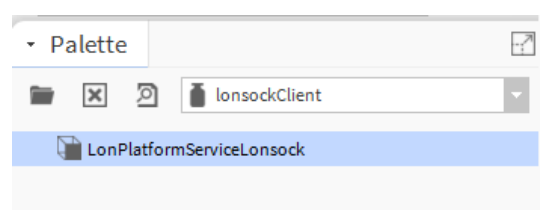
3. In the *Open Palette* dialog box, enter 'lonsock'.

RESULT: The **lonsockClient** module is displayed.

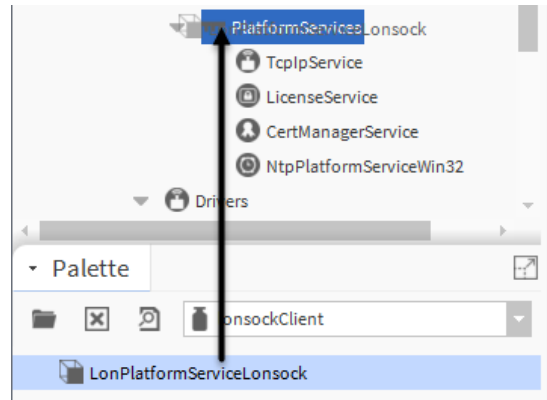


4. Click **OK**.

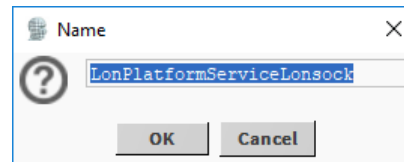
RESULT: The **LonPlatformServiceLonsock** service is added to the *Palette* side bar for selection.



5. From the *Palette* side bar, drag&drop **LonPlatformServiceLonsock** to the **PlatformServices** folder.

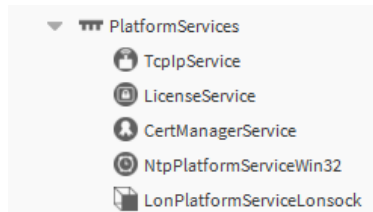


RESULT: The *Name* dialog box displays.



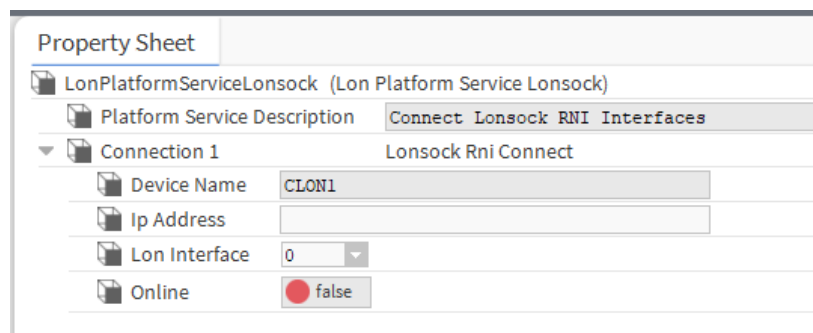
6. Change the name if desired, and then click **OK**.

RESULT: The **LonPlatformServiceLonsock** service is added to the **PlatformServices** folder.



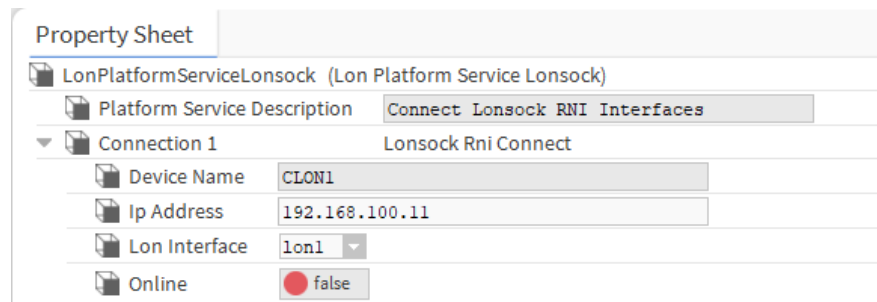
7. In the **PlatformServices** folder, double-click on **LonPlatformServiceLonsock**.

RESULT: The *Property Sheet* displays on the right.



- On the *Property Sheet*, expand **Connection1**, then enter the IP address of the CLIF-CBUSLC device in **Ip Address**, and then click the **Save** button at the bottom.

RESULT: The Lon interface is configured properly with the entered IP address and selected in the **Lon Interface** drop-down listbox.



Property Sheet	
LonPlatformServiceLonsock (Lon Platform Service Lonsock)	
Platform Service Description	Connect Lonsock RNI Interfaces
▼ Connection 1	Lonsock Rni Connect
Device Name	CLON1
Ip Address	192.168.100.11
Lon Interface	lon1
Online	☐ false

NOTES: The device is not online as indicated as 'false' in the **Online** field since the Lon network is not created and configured yet. Continue with the next steps described in the subsequent "Adding and Configuring Lon Network" section. p. 15.

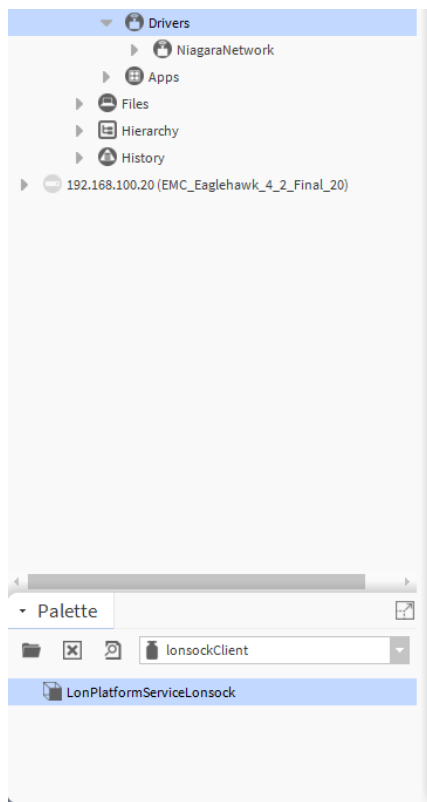
The LonPlatformServiceLonsock service allows defining up to 8 logical Lon interfaces with individual IP addresses of each device. To each Lon Interface a predefined name (e.g. "CLON1", "CLON2", ...) is assigned which can then be used as interface name for the standard Niagara Lon driver.

The particular Lon interface can be selected from the **Lon Interface** drop-down listbox.

Adding and Configuring Lon Network

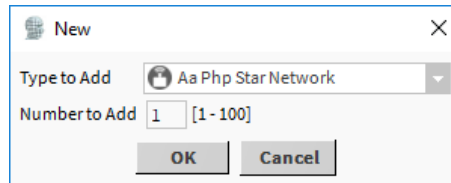
Procedure

- In the *Nav tree*, expand the *Station* folder, and then double-click on **Drivers**.

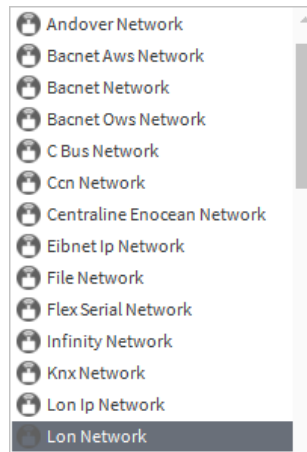


- On the right pane, click the **New** button.

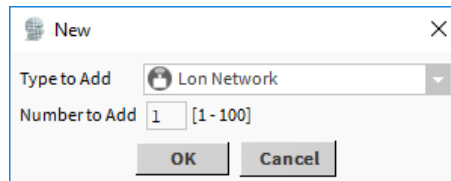
RESULT: The New dialog box displays.



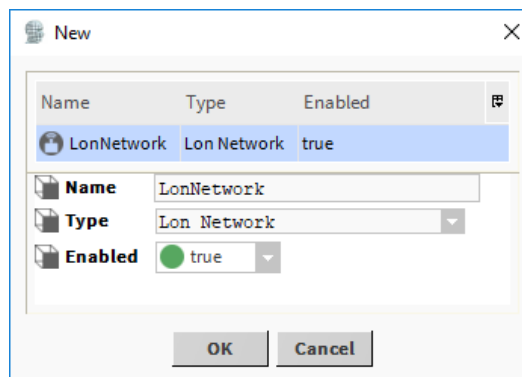
- In **Type to Add**, select 'Lon Network'.



RESULT: The New dialog box redisplay with the Lon Network selected.



- Click **OK**.



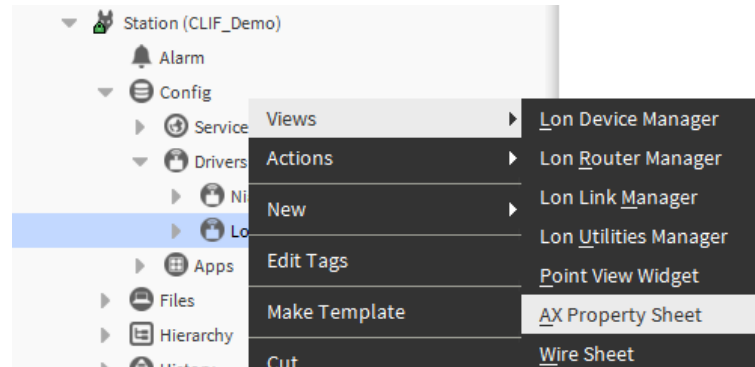
- In **Name**, change the name of the network if desired, and then click **OK**.

RESULT: The Lon Network is created and added to the *Driver Manager*.

Driver Manager				
Name	Type	Status	Enabled	Fault Cause
NiagaraNetwork	Niagara Network	{ok}	true	
LonNetwork	Lon Network	{fault}	true	Unable to initialize local lon port {LON1}

NOTE: The Lon Network is in 'fault' state and unable to initialize the local Lon port since the name of the Lon interface and/or the domain setting are not correct. To match the settings, please continue with the next step.

6. Display the property sheet for the Lon Network by right-clicking **Lon Network** in the Nav tree, then selecting **Views**, and then selecting **AX Property Sheet** in the context menu.



RESULT: The Lon network properties are displayed on the *Property Sheet* on right pane.

Property Sheet

LonNetwork (Lon Network)

Status	{fault}
Enabled	☒ true
Fault Cause	Unable to initialize local lon port {LON}
Health	Fail [null]
Alarm Source Info	Alarm Source Info
Monitor	Ping Monitor
Lon Comm Config	Lon Comm Config
Device Name	LON1
Link Debug	☒ false
Repeat Timer	Milli Sec96
Receive Timer	Milli Sec384
Transmit Timer	Milli Sec96
Retry Count	3
Poll Service	Lon Poll Service
Lon Netmgmt	Lon Netmgmt
Domain Id	Length: 0
Authenticate	☒ false
Authentication Key	ff ff ff ff ff ff
Link Descriptors	Descriptor Table
Non Group Timer	4
Channel Priorities	0
Debug	☒ false
Verify Nv Dir	☒ false
Service Pin Wait	300 s
Use Lon Objects	☒ false
Always In Zero Length Domain	☒ false
Tuning Policies	Lon Tuning Policy Map
Local Lon Device	Local Lon Device

7. Expand **Lon Comm Config**, and then change the device name from 'LON1' to 'CLON1'.

Lon Comm Config

Device Name: CLON1

8. For using the CLIF-CBUSLC as a Standard LON interface for Niagara, expand **Lon Netmgmt**, and then set the domain Id to the same domain Id as issued in the engineering tool (CARE, COACH, etc.) and configured on the *Configuration* webpage of the CLIF-CBUSLC device.

Lon Netmgmt

Domain Id: Length: 0

Authenticate: ☒ false

Authentication Key: ff ff ff ff ff ff

9. To do so, select the byte length from the **Length** drop-down listbox to display the **Id** field. Changing the default value of length from 0 to 1, 3, or 6 causes the **Id** field to appear.

Lon Netmgmt	
Domain Id	Length: 1 Id: 00
Authenticate	false

10. Enter the domain Id in the **Id** field.

Lon Netmgmt	
Domain Id	Length: 1 Id: CE
Authenticate	false

11. Click **Save** button at the bottom

RESULT: The Lon network properties are updated.

Property Sheet	
LonNetwork (Lon Network)	
Status	{ok}
Enabled	true
Fault Cause	
Health	Ok [14-Sep-18 3:59 PM CEST]
Alarm Source Info	Alarm Source Info
Monitor	Ping Monitor
Lon Comm Config	Lon Comm Config
Device Name	CLON1
Link Debug	false
Repeat Timer	Milli Sec96
Receive Timer	Milli Sec384
Transmit Timer	Milli Sec96
Retry Count	3
Poll Service	Lon Poll Service
Lon Netmgmt	Lon Netmgmt
Domain Id	Length: 1 Id: ce
Authenticate	false
Authentication Key	ff ff ff ff ff ff
Link Descriptors	Descriptor Table
Non Group Timer	4
Channel Priorities	0
Debug	false
Verify Nv Dir	false
Service Pin Wait	300 s
Use Lon Objects	false
Always In Zero Length Domain	false
Tuning Policies	Lon Tuning Policy Map
Local Lon Device	Local Lon Device

On the *Driver Manager* pane, the **Status** column shows 'ok' indicating that the network is properly working.

Driver Manager				
Name	Type	Status	Enabled	Fault Cause
 NiagaraNetwork	Niagara Network	{ok}	true	
 LonNetwork	Lon Network	{ok}	true	

On the *Database* pane, the **State** column shows ‘Config Online’ indicating that existing Lon devices can be discovered.

Database											
Name	Type	Exts	State	Subnet	Node	Fault Cause	Manufacturer	Program Id	Neuron Id	Enabled	Lon Xml File
 Local Lon Device	Local Lon Device		Config Online	255	127		unknown	00 00 00 00 00 00 00 00	00 00 00 00 00 00	true	null

Further Functions of CLIF-CBUSLC Webpages

Beside the configuration function, the CLIF-CBUSLC webpages provide the following additional functions in order to operate the device:

- Factory reset
- Firmware update
- Status information reload
- Page reset
- Password change
- Connection diagram display

These functions are available on the Login, Status and Configuration pages.

Login Page

After you have invoked the CLIF-CBUSLC by entering the IP address, the *Login* page displays.

On the *Login* page, you can:

- Login to the CLIF-CBUSLC webpages (see section “Initial Configuration of CLIF-CBUSLC on Webpage (A)“, p. 8)
- Execute a factory reset

Executing Factory Reset

A factory reset is recommended e.g. if you have forgotten your password. Please note that the device must then be configured again.

- Procedure**
1. On the *CLIF-CBUSLC Login* page, click **Factory Reset**.

RESULT: The *CLIF-CBUSLC Reset to factory settings* page displays.

CLIF**CLIF-CBUSLC Reset to factory settings**

ATTENTION! If you really want to reset the device, press the RESET button. Otherwise press CANCEL.

The device will reboot with factory settings. IP communication is switched off. You need to configure your device again: define a password, configure IP and LON communication.

It will take two minutes until the web pages are available again. Please reconnect with your browser.

Factory Reset **Cancel**

2. To start the factory reset, click **Factory Reset** again.

RESULT: The *CLIF-CBUSLC Password* page displays.

CLIF

Logout

CLIF-CBUSLC Password

you must specify a new password before you can use this device.

new password

repeat new password

Change Password

Back

3. Enter the password twice in the **new password** and **repeat new password** fields and then click **Change Password**.

NOTE: The password must contain:

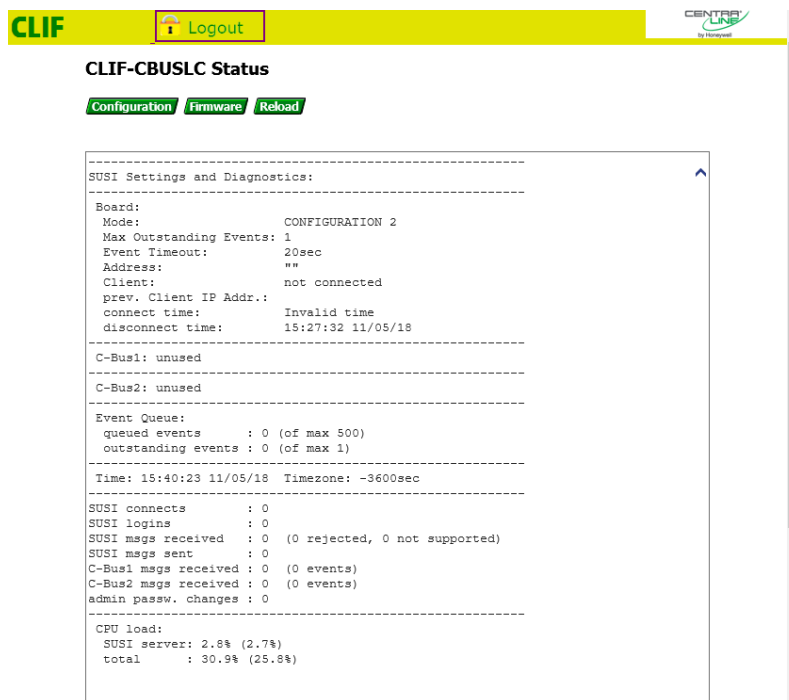
- 8 or more (but not more than 31) characters
- uppercase letters
- lowercase letters
- numerals
- no whitespace characters

RESULT: The following page displays showing the actions and results that will happen in case of a factory reset.

Status Page

After you have logged in, the *Status* page displays. On the *Status* page, you can:

- Access the *Configuration* page (see section "Configuration Page", p. 25).
- Update the Firmware
- Reload the *Status* information



CLIF [Logout](#)

CLIF-CBUSLC Status

[Configuration](#) [Firmware](#) [Reload](#)

```

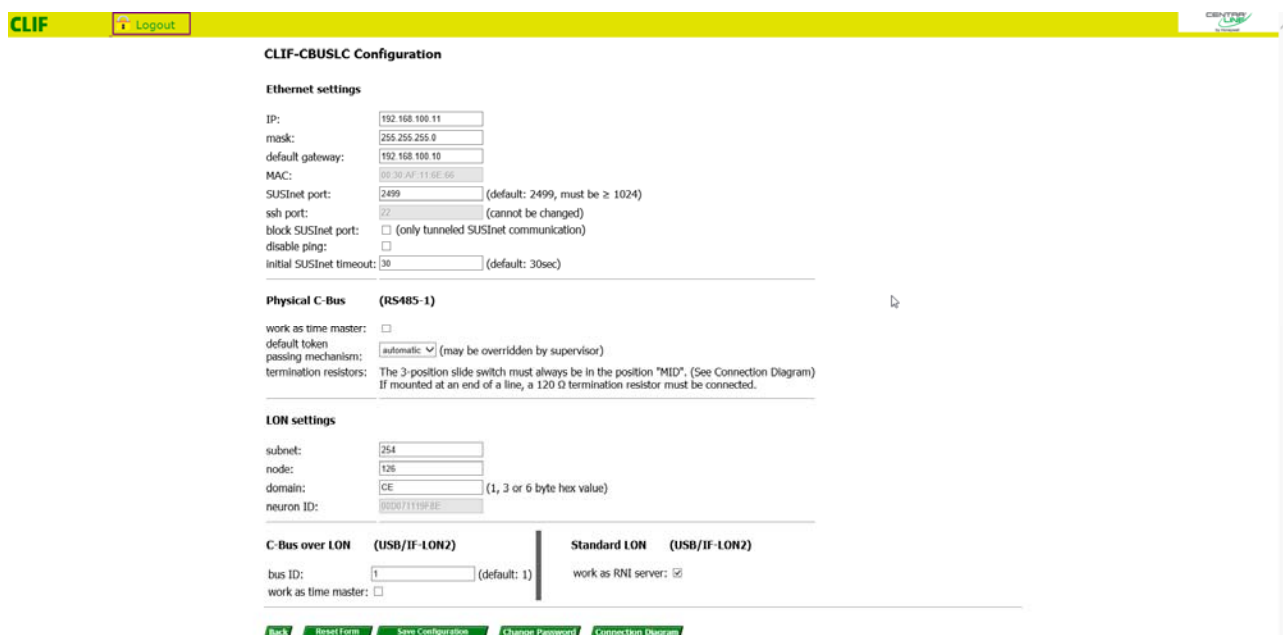
-----
SUSI Settings and Diagnostics:
-----
Board:
Mode: CONFIGURATION 2
Max Outstanding Events: 1
Event Timeout: 20sec
Address: ""
Client: not connected
prev. Client IP Addr.:
connect time: Invalid time
disconnect time: 15:27:32 11/05/18
-----
C-Bus1: unused
-----
C-Bus2: unused
-----
Event Queue:
queued events : 0 (of max 500)
outstanding events : 0 (of max 1)
-----
Time: 15:40:23 11/05/18  Timezone: -3600sec
-----
SUSI connects : 0
SUSI logins : 0
SUSI msgs received : 0 (0 rejected, 0 not supported)
SUSI msgs sent : 0
C-Bus1 msgs received : 0 (0 events)
C-Bus2 msgs received : 0 (0 events)
admin passw. changes : 0
-----
CPU load:
SUSI server: 2.8% (2.7%)
total : 30.9% (25.8%)
-----

```

Accessing Configuration Page

Procedure 1. On the *CLIF-CBUSLC Status* page, click **Configuration**.

RESULT: The *Configuration* page displays (see section “Initial Configuration of CLIF-CBUSLC on Webpage (A)”, p. 8 for description of main configuration settings and section, “Configuration Page” p. 25 for additional functions).



CLIF [Logout](#)

CLIF-CBUSLC Configuration

Ethernet settings

IP:
 mask:
 default gateway:
 MAC:
 SUSInet port: (default: 2499, must be ≥ 1024)
 ssh port: (cannot be changed)
 block SUSInet port: ☐ (only tunneled SUSInet communication)
 disable ping: ☐
 initial SUSInet timeout: (default: 30sec)

Physical C-Bus (RS485-1)

work as time master: ☐
 default token: (may be overridden by supervisor)
 passing mechanism:
 termination resistors: The 3-position slide switch must always be in the position "MID". (See Connection Diagram)
 If mounted at an end of a line, a 120 Ω termination resistor must be connected.

LON settings

subnet:
 node:
 domain: (1, 3 or 6 byte hex value)
 neuron ID:

C-Bus over LON (USB/IF-LON2) **Standard LON (USB/IF-LON2)**

bus ID: (default: 1) work as RNI server: ☒
 work as time master: ☐

[Back](#) [Reset Form](#) [Save Configuration](#) [Change Password](#) [Connection Diagram](#)

Updating Firmware

The firmware function allows displaying the current firmware version and updating the firmware via download.

- Prerequisites** The following prerequisites must be fulfilled:
- Connect PC to CLIF device via USB cable. The LAN port cannot be used for firmware update
 - Open browser and enter network address 192.168.255.241
 - Login with your password

- Procedure** 1. On the *CLIF-CBUSLC Status* page, click **Firmware**.

RESULT: The *CLIF-CBUSLC Firmware* page displays showing the following information:

- current firmware version
- xwssystem
- uboot
- linux
- sku number
- serial number



CLIF-CBUSLC Firmware

```
firmware_version=BNAC_1-00-03-01

xwssystem_version=2-00-01-08 (29-06-2018)
uboot_version=UBC_UBOOT_2-00-02-00
linux_version=UBC-Linux_2-00-05-15

sku_number=CLIF-CBUSLC
serial_number=00136485
```

Select

Firmware .xwa

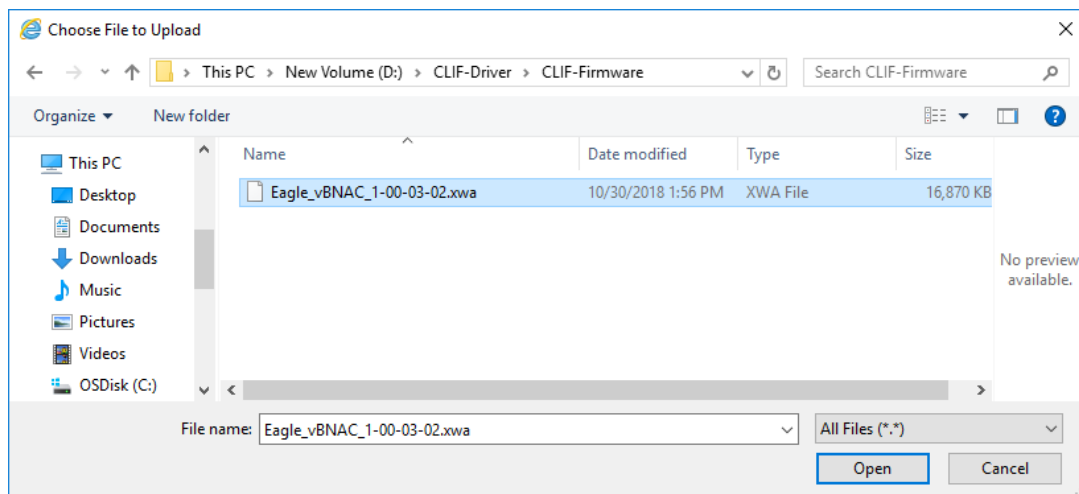
Browse...

File:

Load Firmware

Back

2. Click **Browse...** and select the firmware in the *Choose File to Upload* dialog box.



3. In the *Choose File to Upload* dialog box, click **Open**.

CLIF-CBUSLC Firmware

```

firmware_version=BNAC_1-00-03-01

xwssystem_version=2-00-01-08 (29-06-2018)
uboot_version=UBC_UBOOT_2-00-02-00
linux_version=UBC-Linux_2-00-05-15

sku_number=CLIF-CBUSLC
serial_number=00136485

```

Select Firmware .xwa File: D:\CLIF-Driver\CLIF-Firmware\Eagle_vBNAC_1-00-03-02.xwa

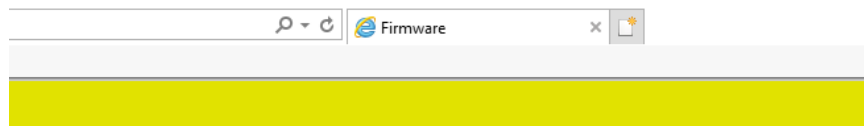
Browse...

Load Firmware

Back

4. Click **Load Firmware**.

RESULT: The update process takes a few minutes. After a while the red LED at the device will light up. When the red LED at the device goes off, the update is finished.



CLIF-CBUSLC Firmware

```

Downloaded file: Eagle_vBNAC_1-00-03-02.xwa
Size: 17274875 bytes
Temp name: /mnt/data1/web/download/phpNVv1Md
Error: 0

The System will now perform a firmware update. This may take some
time. Please reload web page after two minutes

```

5. Now you can login again by clicking **Refresh** in the browser.

Reloading Status Information

- Procedure** 1. On the *CLIF-CBUSLC Status* page, click **Reload**.

RESULT: The status page is refreshed with the current status information.

Configuration Page

- Procedure**
1. When clicking **Configuration** on the *CLIF-CBUSLC Status* page, the *Configuration* page is displayed.

On the *Configuration* page, you can:

- configure and save the configuration of the *CLIF-CBUSLC* (see section “Initial Configuration of CLIF-CBUSLC on Webpage (A)”, p. 8 for details)
- reset the current form
- change the password
- display the connection diagram

CLIF-CBUSLC Configuration

Ethernet settings

IP:
 mask:
 default gateway:
 MAC:
 SUSInet port: (default: 2499, must be ≥ 1024)
 ssh port: (cannot be changed)
 block SUSInet port: ☐ (only tunneled SUSInet communication)
 disable ping: ☐
 initial SUSInet timeout: (default: 30sec)

Physical C-Bus (RS485-1)

work as time master: ☐
 default token: (may be overridden by supervisor)
 passing mechanism:
 termination resistors: The 3-position slide switch must always be in the position "MID". (See Connection Diagram)
 If mounted at an end of a line, a 120 Ω termination resistor must be connected.

LON settings

subnet:
 node:
 domain: (1, 3 or 6 byte hex value)
 neuron ID:

C-Bus over LON (USB/IF-LON2)

bus ID: (default: 1)
 work as time master: ☐

Standard LON (USB/IF-LON2)

work as RNI server: ☐

Back **Reset Form** **Save Configuration** **Change Password** **Connection Diagram**

Resetting Form

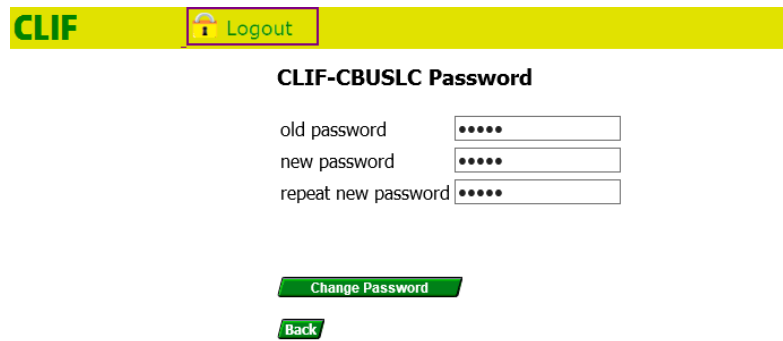
With this function, you can discard the entered inputs and reset to the original state as long as you have not saved the configuration.

- Procedure**
1. On the *CLIF-CBUSLC Configuration* page, click **Reset Form**.
- RESULT: All inputs are discarded and the original state is established.

Changing Password

With this function, you can change the current password.

- Procedure**
1. On the *CLIF-CBUSLC Configuration* page, click **Change Password**.
- RESULT: The *CLIF-CBUSLC Password* page displays.



CLIF Logout

CLIF-CBUSLC Password

old password

new password

repeat new password

Change Password

Back

2. Enter the current password in **old password** field and the new password twice in the **new password** and **repeat new password** fields.

The password must have:

- 8 or more (but not more than 31) characters
- uppercase letters
- lowercase letters
- numerals
- no whitespace characters

3. Click **Change Password**.

RESULT: The password will be changed.

Displaying Connection Diagram

With this function, you can display the connection diagram in order to check the proper connections of the *CLIF C-BUSLC*.

- Procedure**
1. On the *CLIF-CBUSLC Configuration* page, click **Connection Diagram**.

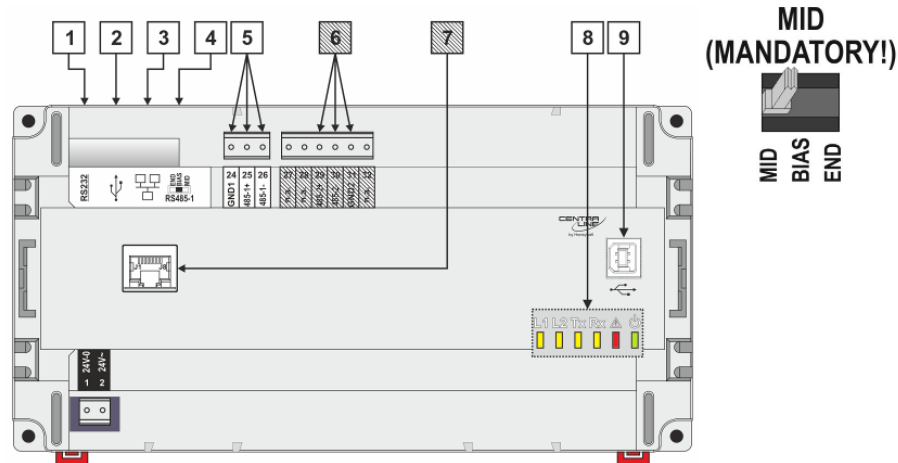
RESULT: The *CLIF-CBUSLC Connectors* page displays.

CLIF-CBUSLC Connectors

1. RS232 / RJ45 socket (for factory debugging)
2. **USB 2.0 Host Interface (for connection of the LON interface for virtual C-Bus over LonWorks); max. 500 mA, high speed**
3. Ethernet / RJ45 socket (for IP communication); 10/100 Mbit/s; 1 "link" LED and 1 "activity" LED
4. **Three-position slide switch (for setting bias and termination resistance of RS485-1. Should always be set to "MID"-position)**
If mounted at an end of a line, a 120 Ω termination resistor must be connected to terminals 25/26.
5. **RS485-1 (isolated; for C-Bus communication. RS485-2 cannot be used.)**
6. RS485-2 (unused)
7. HMI (unused)
8. LEDs (Tx, Rx: for C-Bus, L2: showing active SUSI connection)
9. USB 2.0 Device Interface (for connection to web browser; device setup)

For details, refer to the Installation and Commissioning Instructions (EN1Z-1026GE51).

[Back](#)



[Back](#)

2. Check if the device is connected according to the displayed connection diagram. If not connected properly, correct the false connections.

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