Landis+Gyr

manage energy better

Landis+Gyr G3-PLC Implementation

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Landis+Gyr Solution Overview

Enterprise Systems

IEC 61968 series for application integration between Enterprise Resource Planning Systems: (ERPS), MDMS, HES and other external systems

Meter Data Management System (MDMS)

Web services

Vending System

Head-end System (HES)

IEC62056 suite (dlms), IPV6, TCP/UDP

WAN (APN)

WAN (APN)

Point to Point

Network Gateway (Data Concentrator)

DC450 Data Concentrator

P160 CIU

E460 1ph BS (with modem)

E460 1ph BS (G3-PLC)

P160 CIU

E460 3ph (G3-PLC)

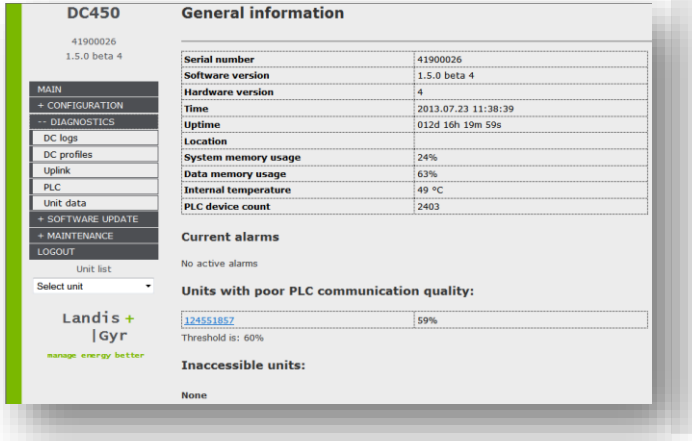
P160 CIU

E460 1ph DIN-Rail (G3-PLC)

P160 CIU

DC450, G3-PLC Data Concentrator – Web Interface

G3-PLC Alliance



Overview

The DC450 is a G3-PLC certified Data Concentrator, it offers a a powerful Web interface & remote visibility of the G3-PLC device

Main Functions

- G3-PLC Device configuration
- Evaluation of dlms communication statistics per device
- Send PING commands to individual or group of meters
- Monitor G3-PLC communication in real time
- Graphical view of the G3-PLC PAN topology
- Powerful Utility Engineer's tool to analyse communications

DC Web Interface – G3-PLC PAN Topology

DC450v2

45005821
1.13.0
PM Demo Stand #1

- MAIN
- + CONFIGURATION
- -- DIAGNOSTICS
  - DC logs
  - DC profiles
  - Uplink
  - PLC
  - Unit data
- + SOFTWARE UPDATE
- + MAINTENANCE
- LOGOUT

Unit list
Select unit

PLC statistics

STATUS | STATISTICS | UNITS SUMMARY | UNITS G3 SUMMARY | G3 EVENT HISTORY | G3 PATHS | ROUTE TABLE
NEIGHBOR TABLE | ACTIVE G3 NODES | DEVICE TABLE | G3 ADP BLACKLIST | G3 MAC IB | G3 ADP IB | G3 PAN TOPOLOGY

- [x] Animation
- [x] Hide minor links
- [ ] Keep Scanning (Causes traffic)
- [x] Show guides

Node color: Communication quality
Node shape: Unit type
Link color: Black
Link width: Average cost

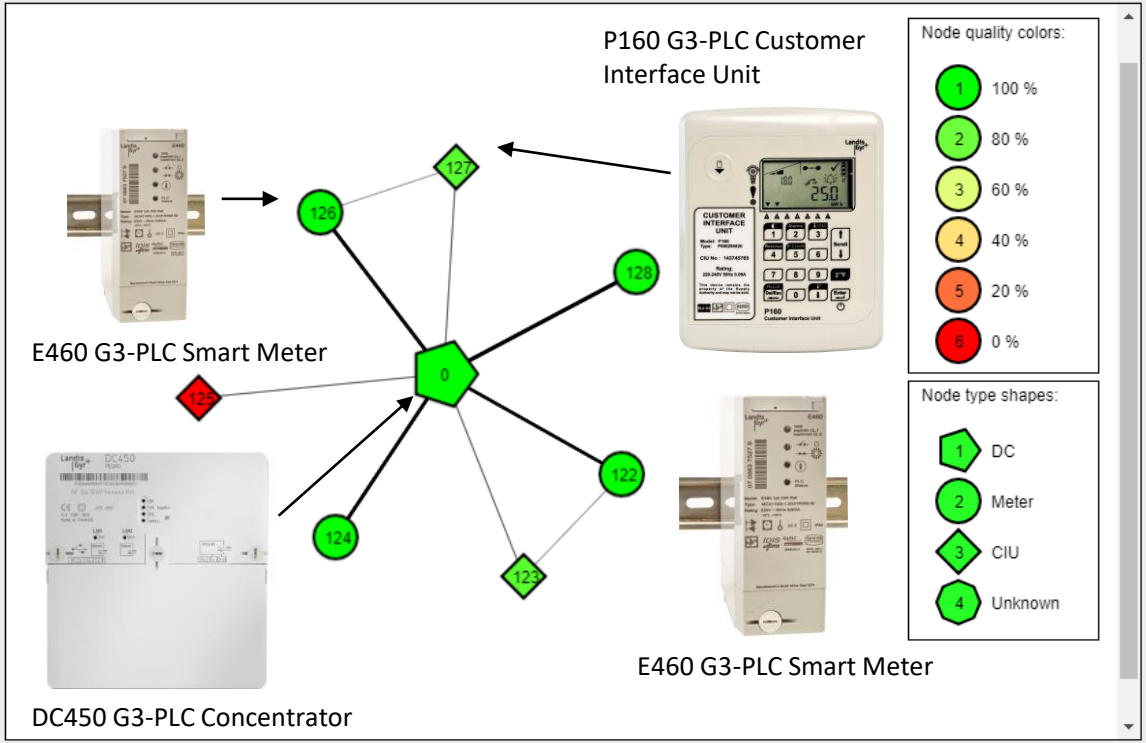
View image

Status:

Scanning completed

Units:

Unit Id	Short addr
4C475A3204948896 (LGZ-050-0-76843158)	125
4C475A3204948897 (LGZ-050-0-76843159)	123
4C475A3205163C38 (LGZ-050-0-85343288)	127
4C475A660393E7A8 (LGZ-102-0-60024744)	122



DC Web Interface – G3-PLC PAN Topology

DC450v2

46000397
1.9.1
63

- MAIN
- + CONFIGURATION
- -- DIAGNOSTICS
  - DC logs
  - DC profiles
  - Uplink
  - PLC
  - Unit data
- + SOFTWARE UPDATE
- + MAINTENANCE
- LOGOUT

Unit list: Select unit

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PLC statistics

STATUS | STATISTICS | UNITS SUMMARY | UNITS G3 SUMMARY | G3 EVENT HISTORY | G3 PATHS | ROUTE TABLE
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- [x] Animation
- [ ] Hide minor links
- [ ] Keep Scanning (Causes traffic)
- [x] Show color guide

Node color: Communication quality
Link color: Black
Link width: Average cost

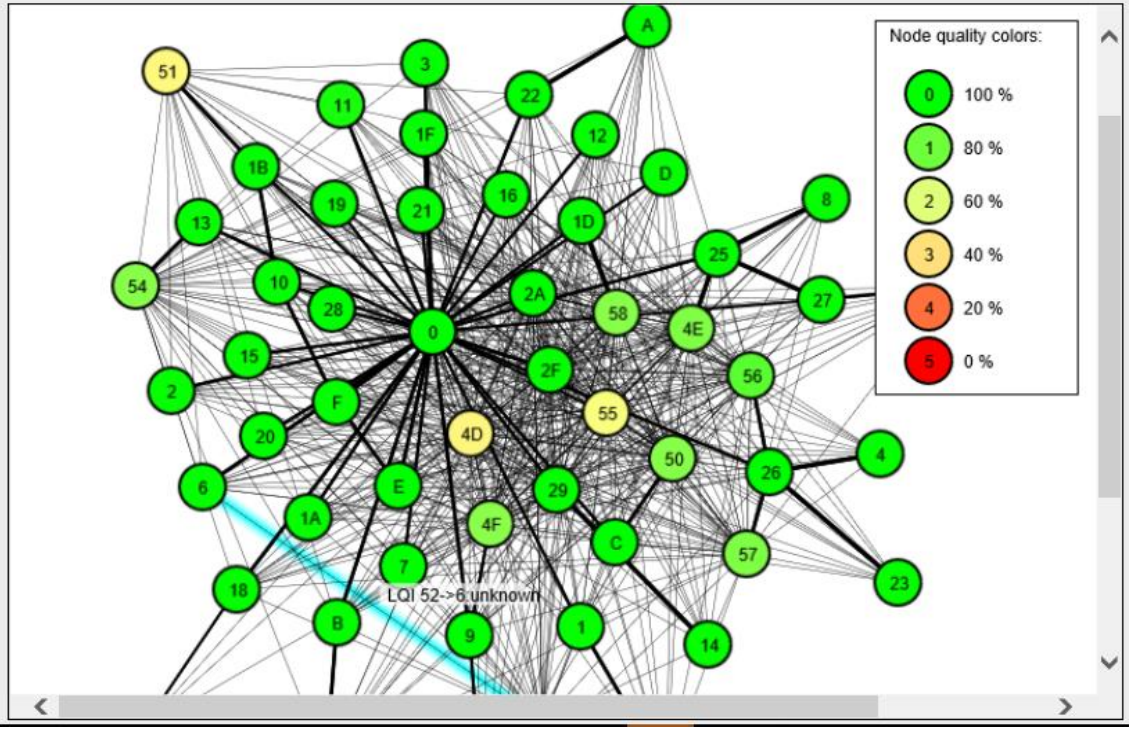
View image

Status:

Asking neigbors list from
4C475A6733939501

Units:

Unit Id	Short addr
4C475A3204938A68 (LGZ-050-0-76778088)	4E
4C475A3204938BE0 (LGZ-050-0-76778464)	4F
4C475A320493A802 (LGZ-050-0-76785666)	51



Typical Installation - E460 G3-PLC Smart Meter

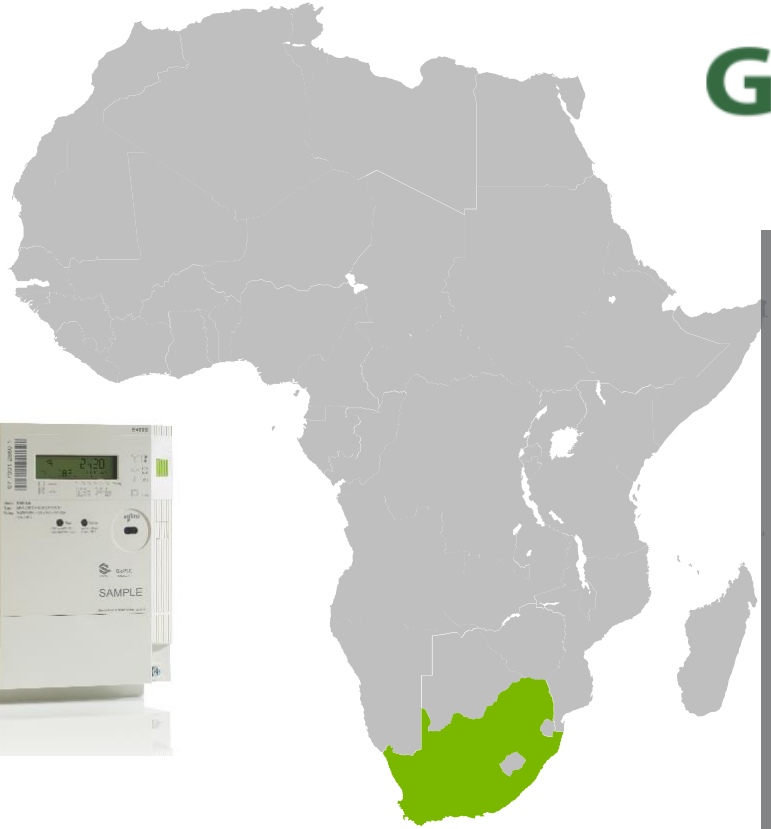
Landis+Gyr G3-PLC Implementation

Highlight

G3-PLC offers the latest generation robust PLC communications

The G3-PLC meter acts as a repeater

G3-PLC is an open international standard and offers a FUTURE PROOF solution and peace of mind for the utility



G3-PLC Alliance

G3-PLC Benefits

Open standard PLC communications for a future proof solution and for utility peace of mind

Using Data Concentrator with Web interface

-- Remotely view and analyse the G3-PLC network and communications quality of each device

-- Visibility of the meter and CIU pairing

-- Utility Engineers can PING devices from DC to check their status on the network

G3-PLC Smart Meter Portfolio Overview

G3-PLC Alliance

Enabling the smartest grid... Together.

Thank you for your attention

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