

8.3 Protocol Hub

Protocol HUB section stores configuration for every connected device. You can configure it by importing settings from an Excel file.

Configuration

CONFIGURATION IMPORTED SIGNALS EVENT LOG PROTOCOL CONNECTIONS SCRIPT-RUNNER

Protocol configuration

IMPORT PROTOCOL CONFIGURATION

Here you can import Excel configuration file. Up to 1000 signals are allowed. All previous signals will be replaced.

Configuration file: No file chosen

PLC (IEC-61499) Boot file: No file chosen

IEC61850 Client model file: No file chosen

IEC61850 Server model file: No file chosen

DOWNLOAD CONFIGURATION

Template configurations:

In this tab a user can:

- Import new configuration from Excel file (.xls, .xlsx formats). If any errors in the file are found, the device will not be imported, and importing process will be stopped.
- Import .fboot file for PLC.
- Import IEC61850 Server model file
- Import IEC61850 Client model file
- Download current configuration Excel file.
- Download a template configuration Excel file.

Imported Signals

CONFIGURATION **IMPORTED SIGNALS** EVENT LOG PROTOCOL CONNECTIONS

IMPORTED SIGNALS

Device	Signal	Value	State	Attributes	Time
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
WCCLite	CPU usage	100			2021-11-26 12:15:36.80
WCCLite	Fault LED	0			2021-11-26 12:13:47.51
WCCLite	GSM Total RX	0			2021-11-26 12:13:47.28
WCCLite	GSM Total TX	0			2021-11-26 12:13:47.28
WCCLite	GSM signal quality	-116			2021-11-26 12:13:47.94
WCCLite	Internet status	1			2021-11-26 12:13:47.94
WCCLite	LAN0 Total RX	0			2021-11-26 12:13:48.61
WCCLite	LAN0 Total TX	0			2021-11-26 12:13:48.61
WCCLite	LAN1 Total RX	35.838			2021-11-26 12:14:47.33
WCCLite	LAN1 Total TX	4.227			2021-11-26 12:14:57.49
WCCLite	RAM usage	44.68			2021-11-26 12:15:26.80
WCCLite	Relay output	0			2021-11-26 12:13:47.51

The imported signals section shows basic information about applied configuration. This section is used for viewing only.

Event Log

CONFIGURATION

IMPORTED SIGNALS

EVENT LOG

PROTOCOL CONNECTIONS

DEVICE EVENTS

Auto refresh ☒

Number of items:

Device	Signal alias	Signal name	Value	Timestamp
wcc	lan1_tx	LAN1 Total TX	5.768000	2021-11-26 12:23:47
wcc	lan1_rx	LAN1 Total RX	36.347000	2021-11-26 12:23:47
wcc	ram_usage	RAM usage	45.230000	2021-11-26 12:23:46
wcc	cpu_usage	CPU usage	64.000000	2021-11-26 12:23:46
wcc	lan1_tx	LAN1 Total TX	5.763000	2021-11-26 12:23:37
wcc	lan1_rx	LAN1 Total RX	36.342000	2021-11-26 12:23:37
wcc	ram_usage	RAM usage	45.380000	2021-11-26 12:23:36
wcc	cpu_usage	CPU usage	46.000000	2021-11-26 12:23:36
wcc	lan1_tx	LAN1 Total TX	5.756000	2021-11-26 12:23:27
wcc	lan1_rx	LAN1 Total RX	36.336000	2021-11-26 12:23:27
wcc	ram_usage	RAM usage	45.230000	2021-11-26 12:23:26
wcc	cpu_usage	CPU usage	82.000000	2021-11-26 12:23:26

Download events log archive:

Download

Event Log is the timestamped status data. It allows reviewing of the latest events and changes for devices state changes in chronological order. Newest events are shown at the top of the list. WCC Lite will timestamp the status data with a time resolution of one millisecond.

Initially, all breakers, protection contacts digital status input points in the WCCLite; events captured from IEDs (Intelligent electronic devices) shall be configured as Event Log points. It's possible to assign any digital status input data point in the WCCLite as an SOE point with an Excel template during configuration.

Each time a device changes state, the WCCLite will save it with timetag in internal storage. Event Log can also be downloaded by pressing the download button at the bottom of the page.

 Events are recorded only for devices that have the *log* field set to 1.

Protocol Connections

CONFIGURATIONIMPORTED SIGNALSEVENT LOGPROTOCOL CONNECTIONS

PROTOCOL CONNECTIONS

Device	Protocol	Host	Status	Timestamp
iomod	Modbus Serial master	PORT1	Disconnected	2021-11-26 12:13:36
scada3	DNP3 slave	PORT2	Disconnected	2021-11-26 12:13:32
iomod3	IEC 60870-5-103 master	PORT2	Disconnected	2021-11-26 12:13:31
scada2	IEC 60870-5-104 slave	192.168.1.10	Disconnected	2021-11-26 12:13:21
scada1	IEC 60870-5-101 slave	PORT1	Disconnected	2021-11-26 12:13:18

The protocol connections section shows configured devices and their respective ports, statuses