Excel C-bus

Description

Supported PLC:

- XL50
- XL80
- XL100
- XL500
- XL600
- XL800 / Lion
- Q7750A Zone Manager

Time Programs

Time schedules C-bus have a different structure as a BACnet / IP.
The program consists of so-called. daily programs, their number is not limited and include records at the time hh: mm set value.
Subsequently, to every day of the week assigns the daily program.
The converter converts the structure compatible with Bacnet and the first store to Excel will create daily programs Bacnet1 … Bacnet7 and they are assigned each day. Time programs are updated once an hour, or you can export the BACnet BV entry point into it and run the update program from the attached Excel.

implementation Bacnet

Excel	Bacnet
Analog Input	AnalogInput
Analog Output	AnalogOutput
Pseudo Analog	AnalogValue
Digital Input	BinaryInput
Digital Output	BinaryOutput
Pseudo Digital	BinaryValue
CounterInput	AnalogValue
Pseudo Counter	AnalogValue
XRegister	AnalogValue
YRegister	AnalogValue
FlexiblePoint	AnalogValue
Universal	AnalogValue

Properties:

- objectName
- objectType
- presentValue
- statusFlags
- outOfService
- covIncrement
- priorityArray
- relinquishDefault

😎 If is the point in manual mode indicates this property outOfService.

⚠️ When exporting name of points to Bacnet all characters except ''
0123456789abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ -_! ~% & @ # $% ^
'Discarded.

Protocol Implementation

supported data rates:

- 4800
- 9600
- 19200
- 38400
- 76800

Driver when you start, examine the PLC connected to the c-buse and download a list of their points and time programs. This list remains active even after you disconnect the transmitter from the line to restart the controller / transmitter. The loss of connection to the PLC / C-bus, the points are Bacnete fault flag set.
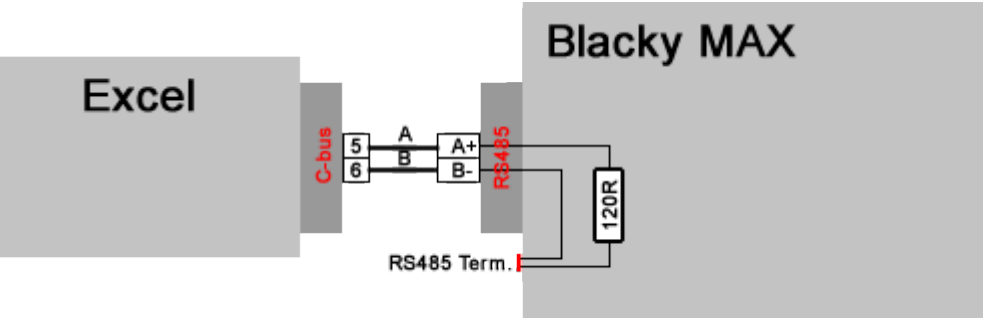The driver can operate the sequential read mode or a COV Protocol.
When COV protocol is activated PLC transmit measurement values only when changing their values.
When the power fails on connected PLC may take a few minutes to re-sign COV assigment from the PLC.
Change Log for the specific item activated in the configuration file xlxs.

Wiring Diagram

Involvement

Configuration

C-bus COM port:
The selection of the communication port for the C-bus.
Data Rate C-bus:
Baud rate communication port
Address C-bus:
C-bus address converter
The number of parallel read by points:
Parallel reading points accelerates the read points, the value should be between 1-5
Allow change the time Excel BACnet:
Export time C-bus Excel to point to bacnete:
Name of the point in time:
These options allow you to export date and time of all connected Excel to BACnet analog value points.
The value can be re-calculated as [long timeMs 1000000 * = value] is the time in ms from midnight
UTC 1.1.1970. Name the point @ is replaced CBUS address and # is replaced with the name Excel.

Export connection status on Bacnet:
Name status item:
Exports AnalogValue point where the current connection status.
0 - Disconnected
1 - Initialization
2 - The connection is OK
Enable reading time programs:
Allow time writing programs BACnet:
Export point reading time programs:
Name of point of reading time programs
Controls reading and writing time programs. Time programs from Excel updated once an hour, or can be exported to Bacnet BinaryValue point. Registration of any value to that point will start updating time programs.

Summary of connection status

It displays the current status of the driver.

The nice part is an overview of connected devices:

- **green** - device is active
- **orange** - address of Blacky Max
- **gray** - no device
- **blue** - the device was attached after discorery of points

Configuration reading points

The converter allows you to export the current list of items on the Excel file xlxs. The exported file includes for each attached excel one tab with a list of points. Point can rename the file and set the priority of reading.

. You can change the column **D** under this name will then export the item to Bacnet.
Column **E** priority reading. If Prority zero point is not exported to Bacnet and off his reading. If the value is greater than zero, at every reading point, the value is reduced by one if the resulting value of zero starts his reading and the value is set to the original value of xlxs file.
8) Value **255** turns reading the value of a rolling point protocol
Columns F..XXX you can use for your comment ..

From:
<https://wiki.apli.sk/> - **Wiki**

Permanent link:
https://wiki.apli.sk/doku.php?id=en:blacky-cbus

Last update: **2018/02/23 21:29**