Driver Amit DB-Net/IP

Description

- Amit DB-Net/IP protocol implementation
- Automatic import of db.ini and hw.ini files
- Automatic import of aliases.csv files (unpacking WIDs to binary Bacnet objects)
- Reading arrays as individual Bacnet objects
- Optimized array reading
- Mathematical functions
- Ability to define WID as manual sign “outofservice” for other WID/Bacnet point
- Option to select type of Bacnet object for WID
- Description from WID (db.ini) will be automatically imported to Bacnet object
- Unlimmited number of Amit devices

Bacnet implementation

DB-Net/IP	Bacnet
Simple variable	AnalogInput
Simple variable	AnalogOutput
Simple variable	AnalogValue
Simple variable	BinaryInput
Simple variable	BinaryOutput
Simple variable	BinaryValue
Array	AnalogInput
Array	AnalogOutput
Array	AnalogValue
Array	BinaryInput
Array	BinaryOutput
Array	BinaryValue
Alias	BinaryInput
Timestamp	AnalogInput
Continuous reading	BinaryValue

Properties:

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

DB-Net/IP implementation

Timestamp

Value can be reversed as [long timeMs = hodnota * 1000000], time in ms from Unix Epoch e.g. starting 1.1.1970 UTC. Bacnet representation is readonly.

Simple variables

Generated Bacnet objects are read/write enabled.

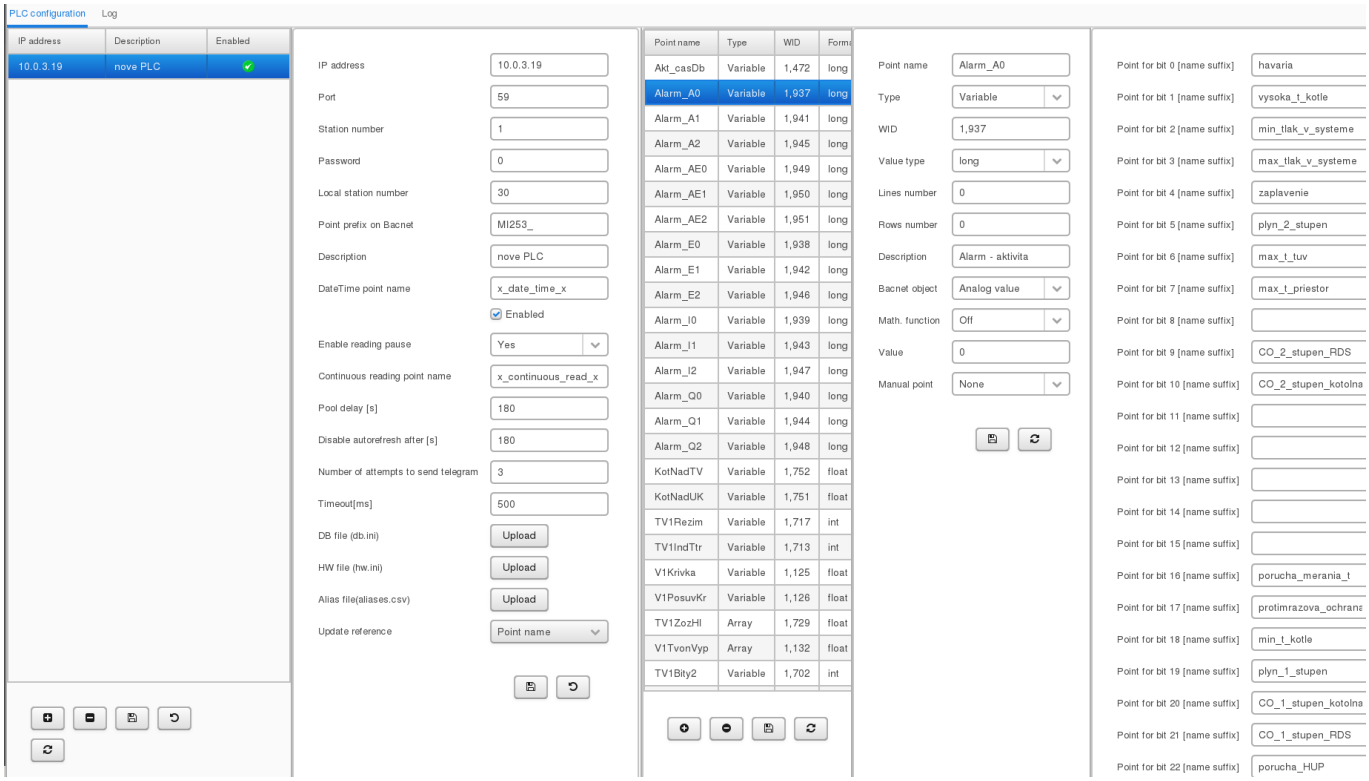
Arrays

Driver optimize arrays reading. With DB-Net/IP it is possible to read only limited number of array elements in one step.
On export to Bacnet, arrays are split to individual objects and their name contains suffix `_col_row`. Index order is inverse to order of DB-Net protocol. That means if we have array of size [1×5], last Bacnet point will have suffix `_4_0`. Generated Bacnet objects are read/write enabled.

Alias extraction

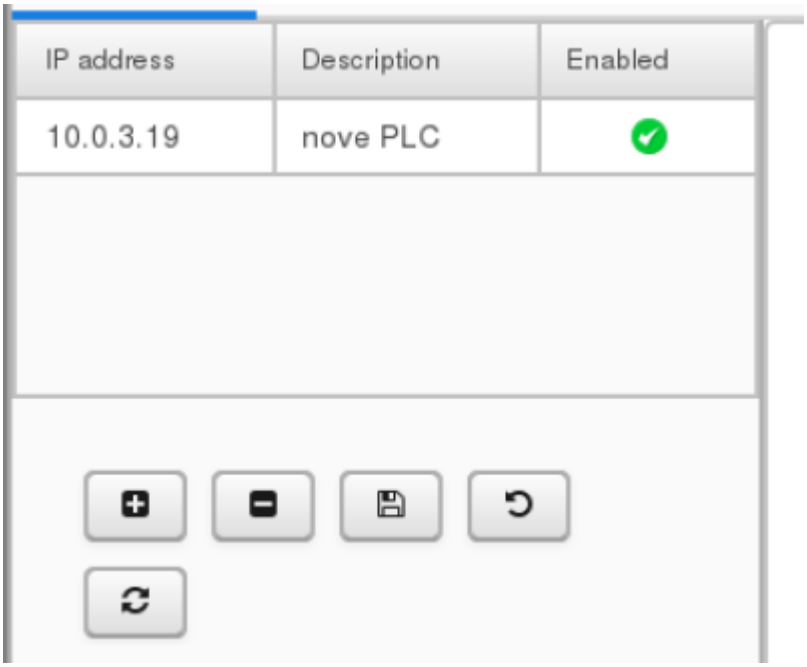
Variables of type int or long can be automatically extracted to binary aliases on Bacnet. Objects of individual bits are generated as binaryInputs and they are readonly.

Driver settings



Devices editor

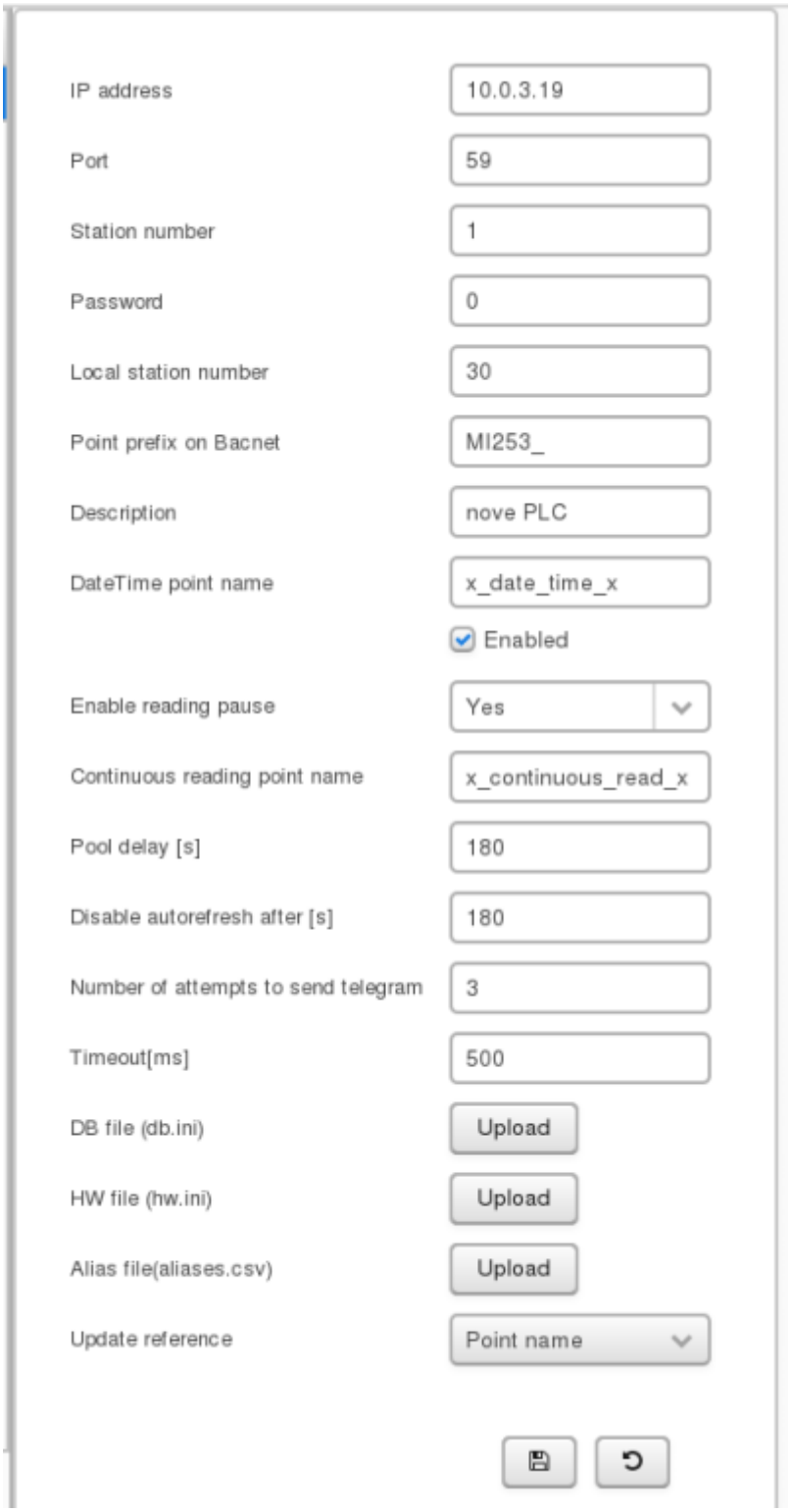
On top of the screen is located list of currently configured devices.



Button	Description
	Add new device
	Remove selected devices
	Save configuration.  Warning! This button saves changes permanently to file. Other buttons on this page are saving changes to configuration in memory. **Do not forget to press this button when you are done!**

Button	Description
	Undo
	Restart driver and apply saved settings

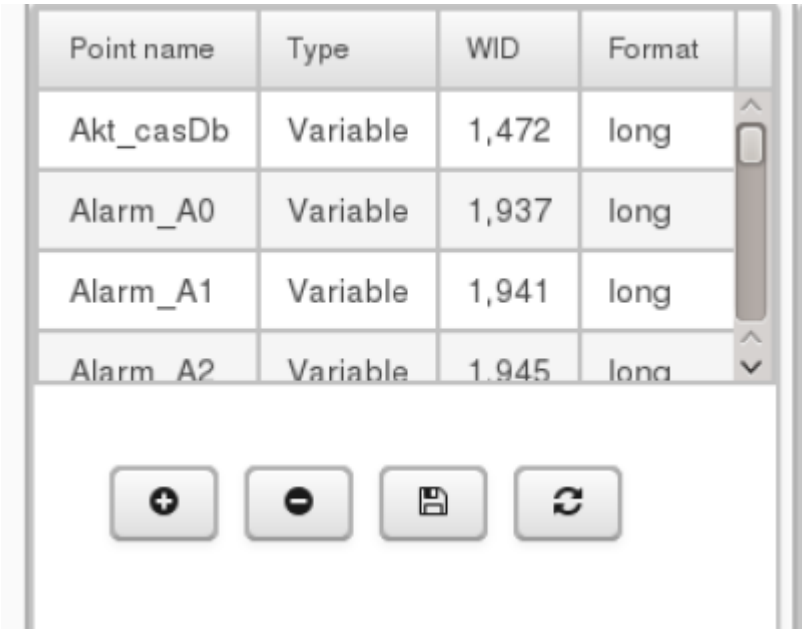
Device editor



IP address	IP address of Amit device

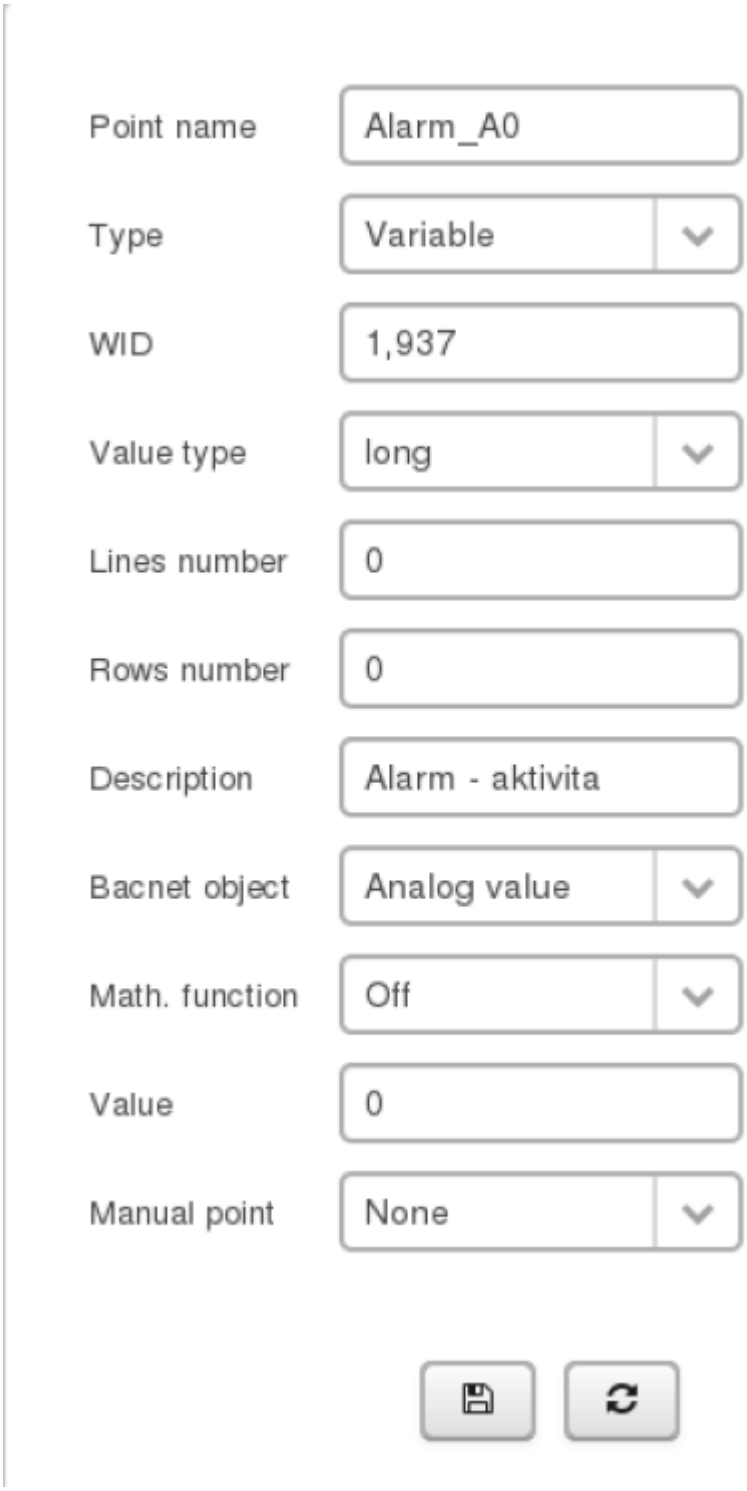
Port	UDP port of Amit device
Station number	Number of DB-Net station
Password	Password to DB-Net
Local station number	Number of Local DB-Net station
Bacnet points prefix	Prefix used for Bacnet points name
Description	Users description
Timestamp point name	Name of timestamp point in Bacnet
Enabled	Start driver and export points to Bacnet
Enable delay between point readings	Enables delay between individual readings of points
Continuous reading point name	Name of Bacnet point used for enabling continuous reading
Delay between poolings [s]	Duration of delay between individual readings of points in seconds
Cancelation of continuous reading after [s]	Continuous reading will be disabled after specified time has elapsed.
Number of telegram sending retries	Maximum number of attempts to send telegram when error occurs.
Timeout[ms]	Waiting duration for reply fomr Amit
DB file (db.ini)	Uploads file DB.ini
HW file (hw.ini)	Uploads file HW.ini
Alias file (aliases.csv)	Uploads file aliases.csv
Update reference	On DB.ini reload updates point parameters with given name or with WID.
	Save changes
	Undo

Points list editor



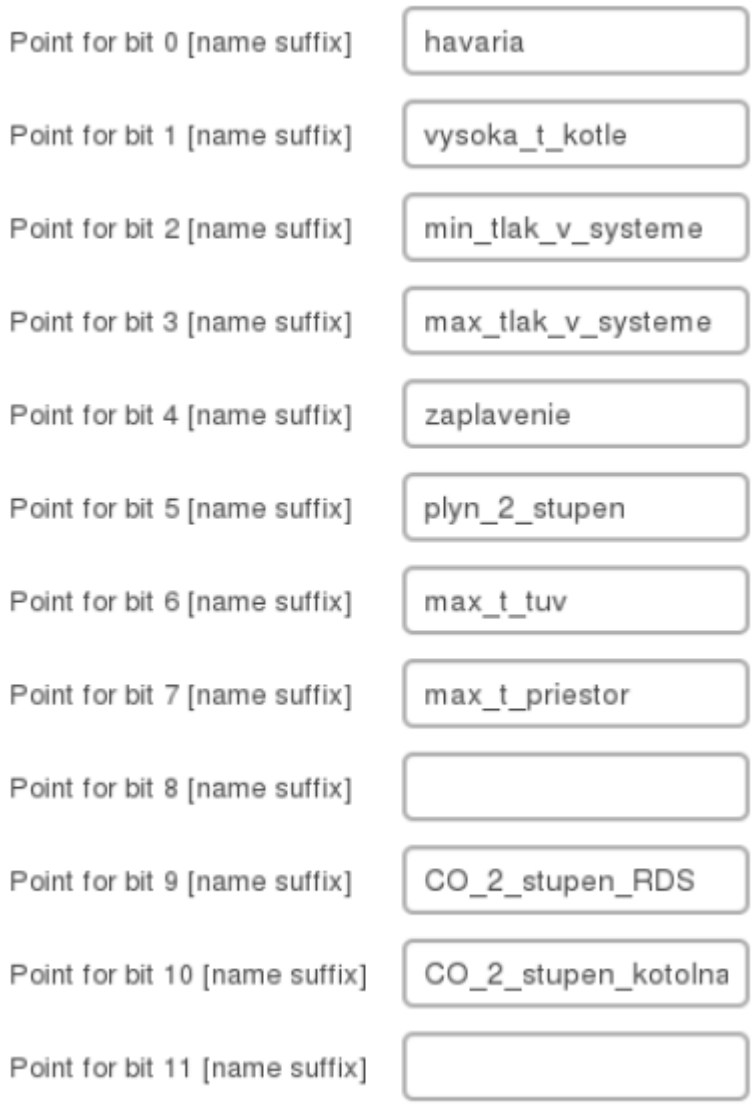
Button	Description
	Add point
	Remove selected points
	Save changes
	Undo

Point settings



Point name	Name of point in Bacnet
Type	Variable/Array
WID	WID number
Value type	int/long/float
Lines number	Number of array lines
Rows number	Number of array rows
Description	Bacnet property description
Bacnet object	Type of Bacnet object
Mat. function	Type of mathematical function
Value	Input value of mathematical function
Manual point	Assigned point aut/man, as Bacnet property outOfService
	Save changes
	Undo

Editor aliasov



Imported alias names. Alias names are readonly. Name of Bacnet points is generated as `mainPoint_alias`

LOG

Amit

Here are displayed read and write errors of DB-Net/IP communication.