BreakerVisu

Energy Reporting Tool

Main controls

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BreakerVisu Energy Reporting Tool

Main controls

Control	Action
Reporting	Select and run a defined report
Get All Data	Download data from all configured instances of BreakerVisu
Add Breaker Visu	Add BreakerVisu instance to the reporting tool
Settings	Configure the reporting tool
Report Settings	Add new report definition to the list of reports

Delivered files, directory structure example

BVRT_xxx.xlsm	BreakerVisu reporting tool, number xxx can vary according to actual version of the tool
bvdata.accdb	Empty template of **data file**. The template is used during configuration of the reporting tool. Data downloaded from configured BreakerVisu instances are stored to data files created from the template.
	An example of directory structure. Template of **data file** has to be located in Local data directory.
BV_energy_h.csv	An example of BreakerVisu energy data file that can be used for the reporting tool testing. The file consists of simulated hourly data and covers period from 2014.09.08 11:00:00 to 2016.11.25 18:00:00.

How to configure the reporting tool

	Report heading — Energy Management Report; Company name — Company name; Address Line 1 — Address 1; Address Line 2 — Address 2; City — City; Postal Code — Postal code; Country — Country	Enter texts you want to have in report headings.
	Report directory — D:\BV_DATA\reports	Enter name of the directory where pdf reports will be stored to.
	Data values — 15 mins	Select data granularity for reports and charts. Keep 15 mins (i.e. use all available data).
	Local data directory — D:\BV_DATA\devices	Enter name of the root data directory. Each configured BreakerVisu instance will have its directory created here. Copy bvdata.accdb file to this directory.
	Keep data in BV — Yes	Choose **No** if you want to move data from BreakerVisu panel to local data directory. Choose **Yes** if you want to keep data on both places.

	Offline mode No	Choose **No** if you want always download data from BreakerVisu panel. Choose **Yes** if you want to work with already downloaded data only.
	Language English	Choose user interface language : English or German

How to add BreakerVisu instance

Add Breaker Visu	BV Name BV1	Enter name of BreakerVisu instance.
	BV IP address 10.130.39.254	Enter name IP address of BreakerVisu instance.
	BV Data Directory \StorageCard	Keep \StorageCard here. It is a location where data reside in BreakerVisu panel.
	Local directory D:\BV_DATA\devices\BV1	The directory of BreakerVisu instance data. Pre-defined according to 'Settings' configuration and entered name of BreakerVisu instance.
OK	OSDisk (D:) / BV_DATA / devices / BV1 / BV3 / reports Name ▲ BV1.accdb	Click **OK** to perform the following: • Creating BV1 directory in Local data directory • Copying data template to the created directory and re-name it according to name of BreakerVisu instance • Creating new worksheet with the name of BreakerVisu instance • Link data file to the worksheet

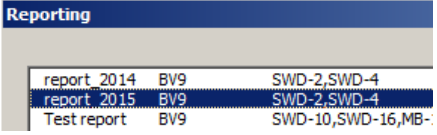## How to get data from one instance of BreakeVisu

▶│ Home / BV1 **BV2** R	BV Name BV2 Da BV IP address 10.130.39.254 BV Data Directo \StorageCard Local Directory D:\BV_DATA\devices\BV2	Go to the sheet of respective BreakerVisu instance.
Get Data		Click Get Data button.
	location n location n 3sw [kWh] [kWh] [kW Date ▼ SWD-1 ▼ SWD-2 ▼ SW	Data part of the sheet is updated with location names.
	location n location n 3swd [kWh] [kWh] [kWh Date ▼ SWD-1 ▼ SWD-2 ▼ SWD 30.10.14 11:30 N/A N/A N/A 30.10.14 11:45 N/A N/A N/A	If data are not present click right mouse button to data area (e.g. Date) and run **Refresh** from the context menu.

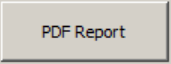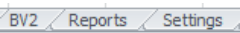## How to define new report

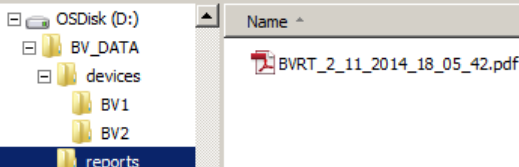|		
Report Settings	Report name BV1_report	Enter name of the new report
	Breaker Visu BV1 BV2	Choose a BreakerVisu instance

	Breaker Visu Devices
	BV1 MB-2 location name
	BV2 MB-3 3mrtu
	            MB-4 location name
	            MB-5 location name
	            MB-6 location name
	            MB-7 location name
	            MB-8 8mrtu
		Choose one or more devices to have their data in the new report (to select more devices from the Devices list keep Ctrl key pressed while clicking by mouse).

	From 31.10.2014 12:00 · **To** 2.11.2014 23:59	Select a date range for the new report.
	Report period ▼	As an alternative to defining date range you can choose some of pre-defined periods (Last day, week, month, year). From, To dates are then calculated automatically at the time of report generating.
	Low limit 3.3 **High limit** 12.5	Optionally define Low and High limit for energy consumption. If energy consumption between two measured values is below/above the defined limit, numbers in report are highlighted by blue/red color.
	Device prefix Y12	Date prefix is used for denotation of devices in the case the data from the same devices are used more than once in the same report (e.g. comparison of the energy consumption in different periods of time).
	Report content chart, summary, data	Choose the content of the report: Chart, summary and data section.
	Number format 0.00	Format of numbers in report. Use Excel number format convention. If not set the default 0.00 is used.
	Data conversion period values	Select the type of data conversion in the report: Counter values (no conversion), period values (energy consumption between two consecutive values), counters from zero (counter values re-calculated to start from 0 in the beginning of the reporting period).
	Data values Hourly	Select what data values will be used in the report: 15 minutes, Hourly, Daily, Weekly, Monthly. Data in the report are filtered accordingly.
Save & Close	BV2 **Reports** Settin	Data from the Report Settings form are appended to the Reports sheet.

How to generate a report

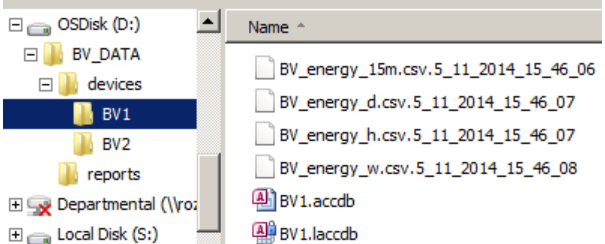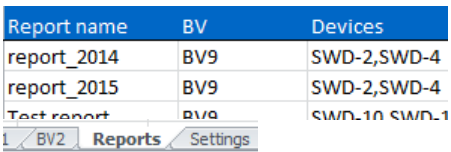|		
Reporting	**Reporting** report_2014 BV9 SWD-2,SWD-4 report_2015 BV9 SWD-2,SWD-4 Test report BV9 SWD-10,SWD-16,MB-:	Push Reporting button to select an already configured report. You can select one or more pre-defined reports that will be compiled to one report. This way the same data from various periods of time can be compared.
Report	BV2 Reports Settings	Push Report button to generate report that will be available in Report worksheet.
Chart	Report Chart ✷	Push Chart button to generate chart that will be available in Chart worksheet.

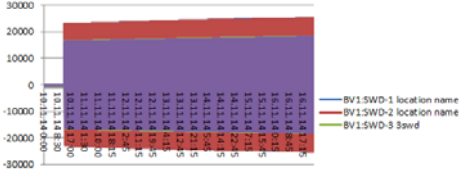|		
PDF Report	BV2 / Reports / Settings	Push Report button to generate report that will be available in Report worksheet. The report will be converted to a pdf file and stored to the Report directory.

Automatically generated reports

BVRT AUTO REPORTING		To start generating of pdf report automatically, define a shortcut or batch file according to the following rules:
"file name of Excel executable" bvrt_file_name /e/report_1[/report_2][.../report_n]	`"C:\Program Files (x86)\Microsoft Office\Office14\EXCEL.EXE" BVRT_064.xlsm /e/report_1/report_2`	Use file name of the reporting tool as command line parameter of Excel. Add parameters that start with /e followed by one or more pre-defined report names (e.g. /report_1/report_2/…/report_n).
	OSDisk (D:) / BV_DATA / devices / BV1 / BV2 / reports — Name ▲ — BVRT_2_11_2014_18_05_42.pdf	The automatically generated report will be available in Report directory.

FAQ

What happens during BreakerVisu energy data download to the reporting tool.	FTP protocol is used to download BreakerVisu energy data in the form of csv files to the respective **Local directory**. If **Keep data in BV** is configured to **No** the data file is deleted from BreakerVisu panel after download. The content of energy data file is then merged to the respective **data file**. The name of the downloaded csv file is then extended with timestamp of its processing.
OSDisk (D:) / BV_DATA / devices / BV1 / BV2 / reports — Departmental (\\ro... — Local Disk (S:) — Name ▲ — BV_energy_15m.csv.5_11_2014_15_46_06 — BV_energy_d.csv.5_11_2014_15_46_07 — BV_energy_h.csv.5_11_2014_15_46_07 — BV_energy_w.csv.5_11_2014_15_46_08 — BV1.accdb — BV1.laccdb	
What can be Offline mode used for?	**Offline mode** determines the way how the reporting tool process BreakerVisu energy data when **Get Data** button is used.
	Import of test data: The reporting tool in **Offline mode** doesn't download data from BreakerVisu panel and works with data stored in respective **Local directory**. In the case there is a csv file without timestamp in the **Local directory** (e.g. delivered example data file) then such file is merged to the respective **data file**.
	Restore of respective **data file** content: If timestamp extensions are removed from csv file names and **data file** is replaced by accordingly named data file template then the content of the **data file** is restored with the content of csv data files.
Can be **Report Settings** button used to edit existing reports?	No. **Report Settings** form always creates new records in Reports worksheet. The new record is located at the end of the list of reports regardless of the defined report name. Use common Excel functionality to manage the content of the list (edit, remove, sort etc.).
Report name — BV — Devices — report_2014 — BV9 — SWD-2,SWD-4 — report_2015 — BV9 — SWD-2,SWD-4 — Test report — BV9 — SWD-10,SWD-1 — BV2 / **Reports** / Settings	

How to remove a BreakerVisu instance from the reporting tool?	Remove the entire Excel worksheet (click right mouse button to respective worksheet and select Delete from the context menu. At the same time, remove respective directory and all its content from the **Local data directory** structure.
There is only one value in generated report that is out of defined date range. Report summary contains different data range than what is in the report settings.	No data for the chosen reporting period are available.
Reports or charts contain strange data, summary part of report contains '?' instead of expected values. 	Switch data conversion for given report to 'Counter values' and run report again. Check your data for consistency, e.g. no missing values in defined time period. Be sure you use data conversion to consistent data only. Consider change of 'Data values' of the report to work with consistent data only.