

# Manual

LET Report



# Table of Contents

- 1 RANGE OF FUNCTIONS AND LAYOUT .....2
- 2 CREATING A NEW DATA EXPORT .....5
- 3 CREATE A NEW EXPORT CONFIG.....6
- 4 CARRYING OUT A NEW DATA EXPORT ..... 17
- 5 SUMMARY ..... 19

These instructions explain how to create a limits, events and transients report in the Software GridVis Desktop.

#### Content

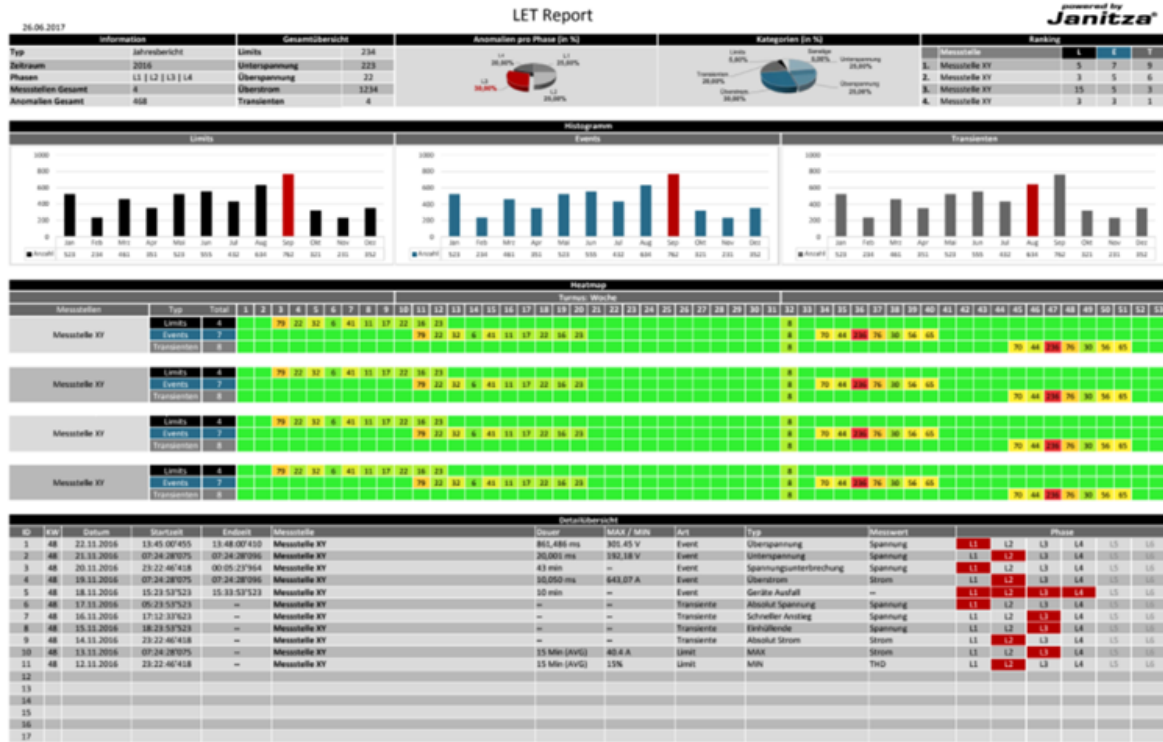
- ▪ Range of functions of the limits, events and transients report
- ▪ Configuration of the export
- ▪ Carrying out the export
-

# 1 Range of functions and layout

The limits, events and transients report (LET report) is specialized for the output of threshold value violations (limits), events and transients.

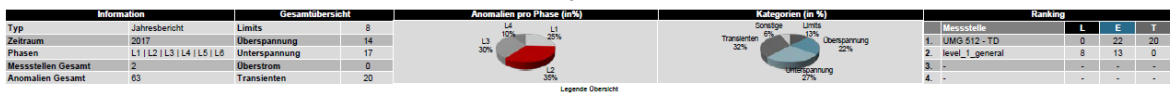
In addition to an area with general information, the report consists of the following four elements, which can be optionally integrated in the report:

- Histogram
- Heatmap
- Detail tabs
- Detail tabs per device
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18.07.2018

LET Report



Included in the general information is an overview of the measuring points included in the report, the reporting period, and number and type of anomalies that occurred. The distribution of the anomalies that occurred to the phases and the distribution of the categories are presented as pie charts.

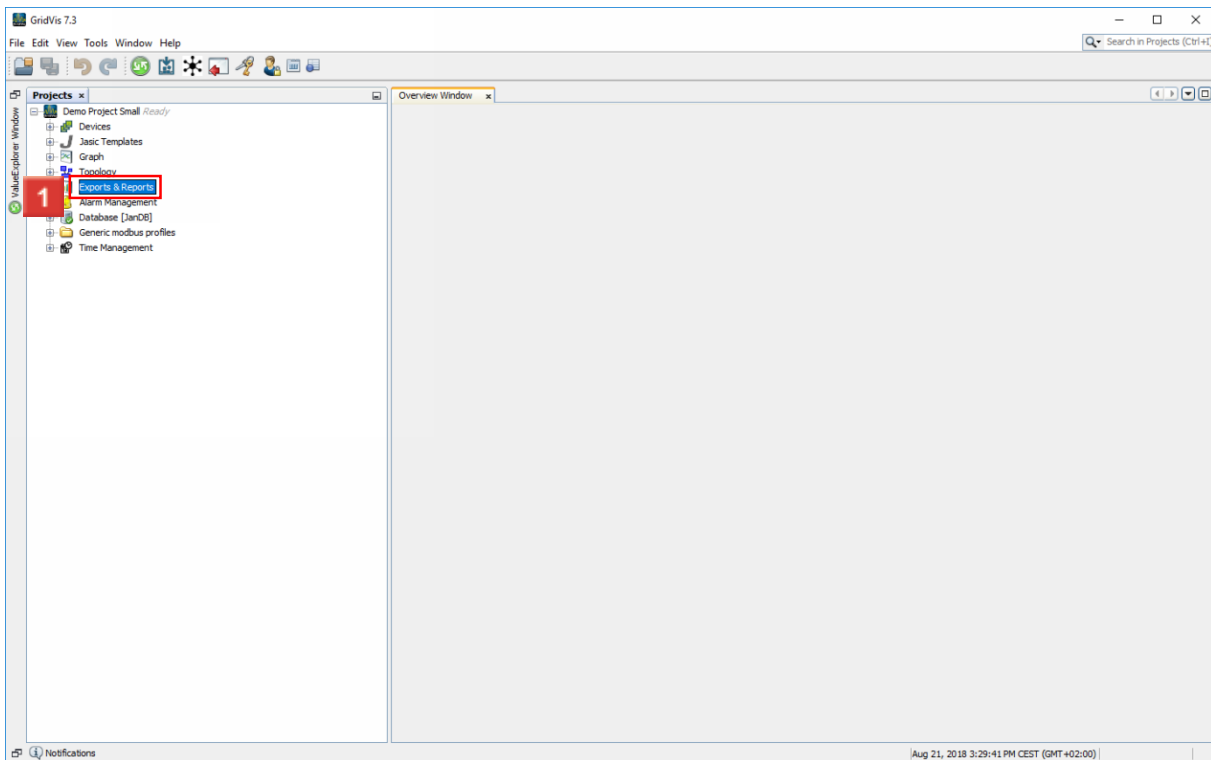
Up to four measuring points (devices) are sorted in descending order in the ranking, presented according to the number of anomalies that occurred. The weighting of the different anomaly types can be adjusted in the ranking.

Ex works, the weightings are as follows:

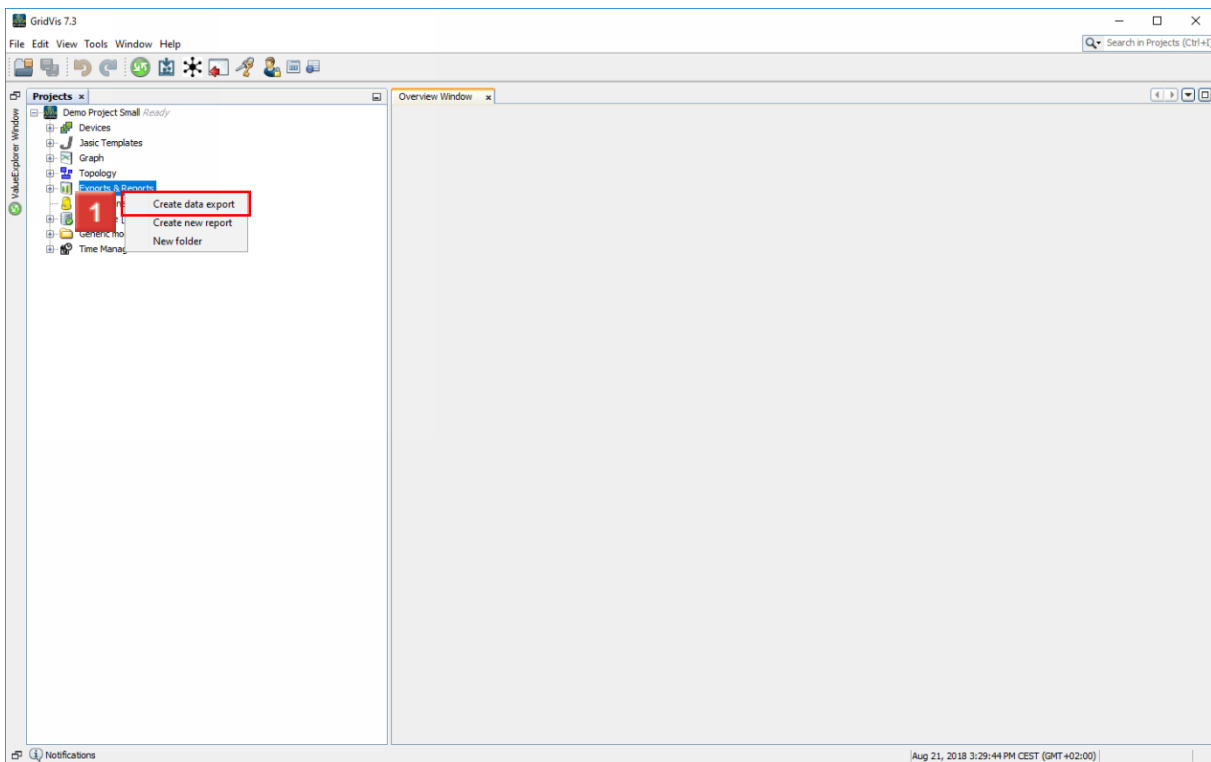
- Limits: 1
- Events: 0.5
- Transients: 0.1



## 2 Creating a new data export

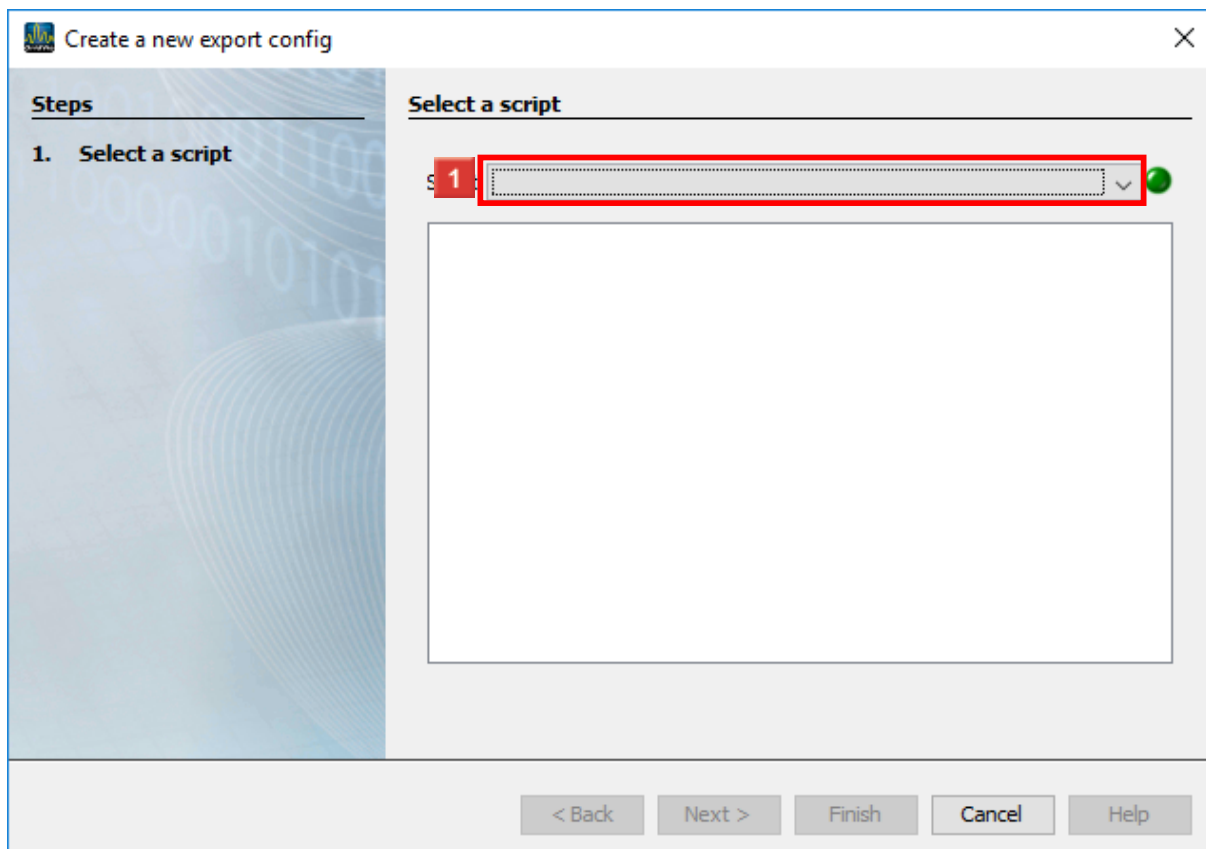


**1** Right-click the **Exports & Reports** tree item.



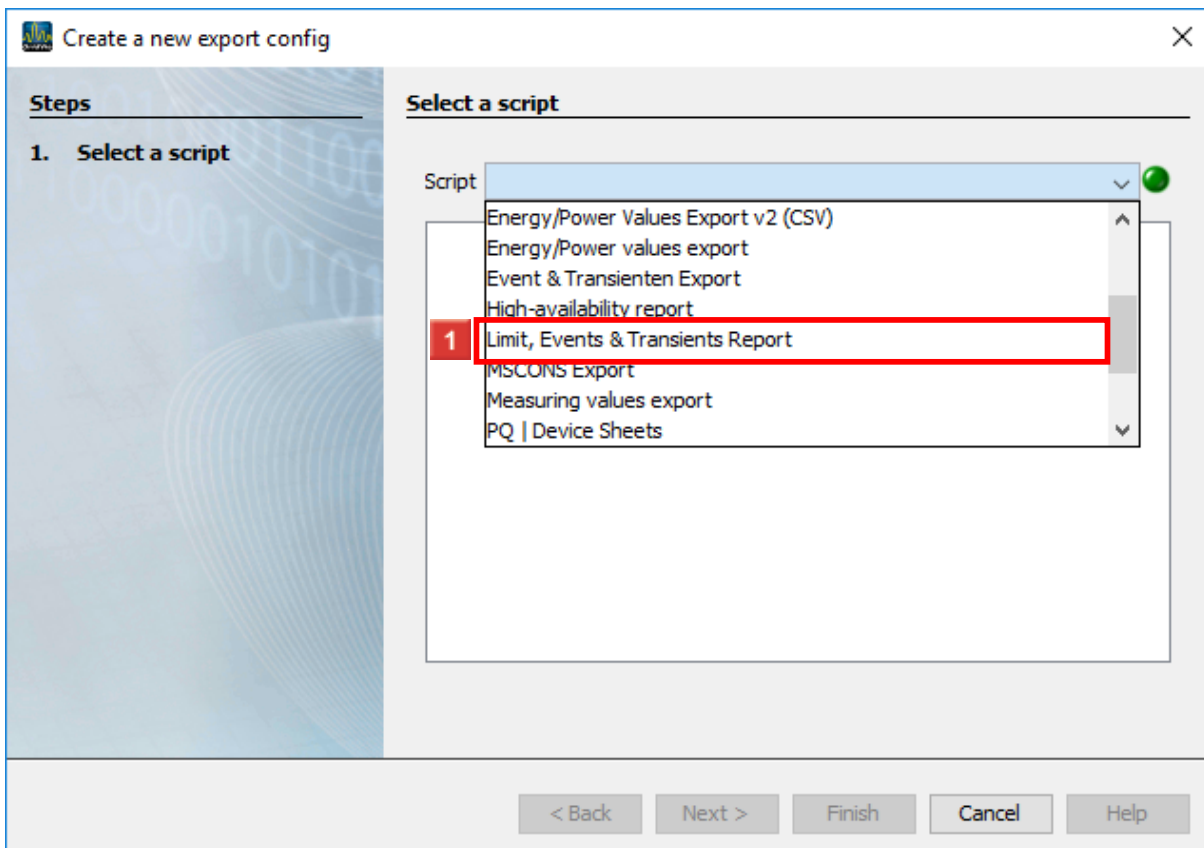
**1** Click the **Create data export** menu item.

### 3 Create a new export config

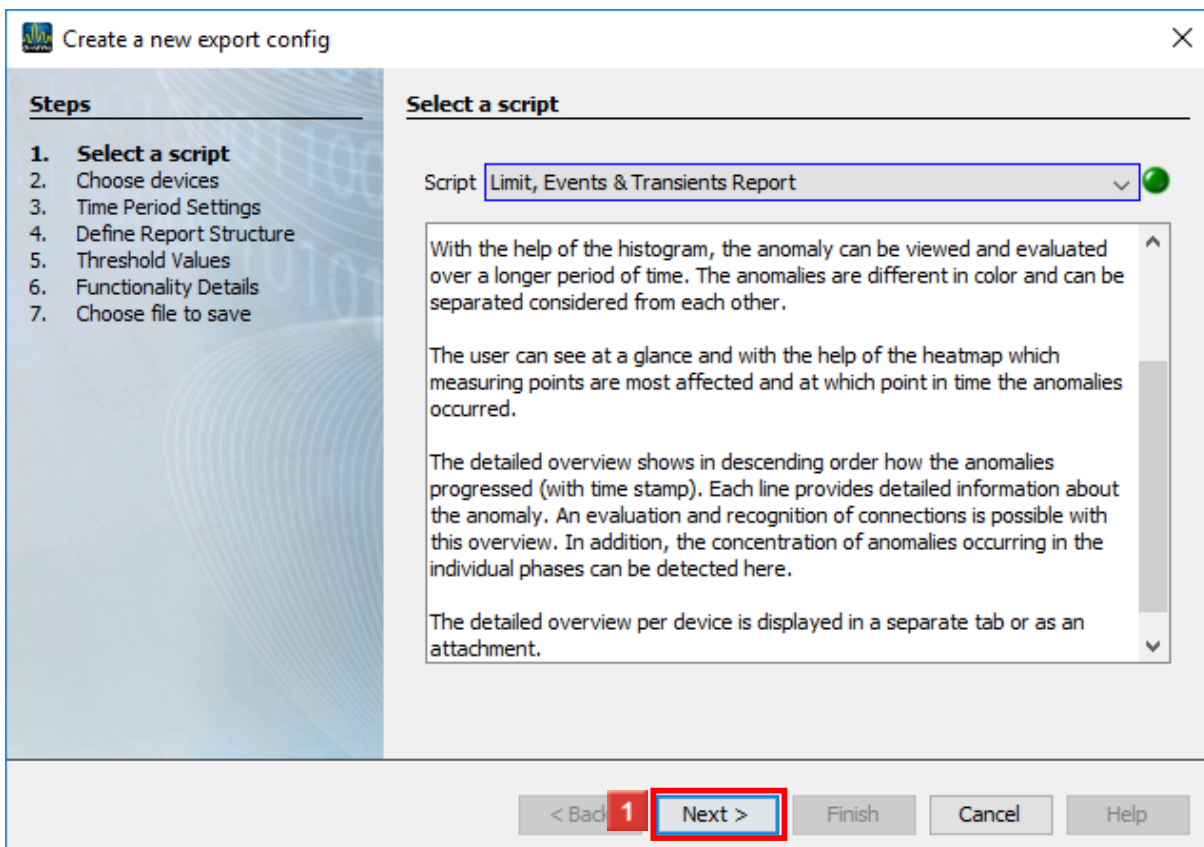


- 1 Click the **Script** dropdown button.

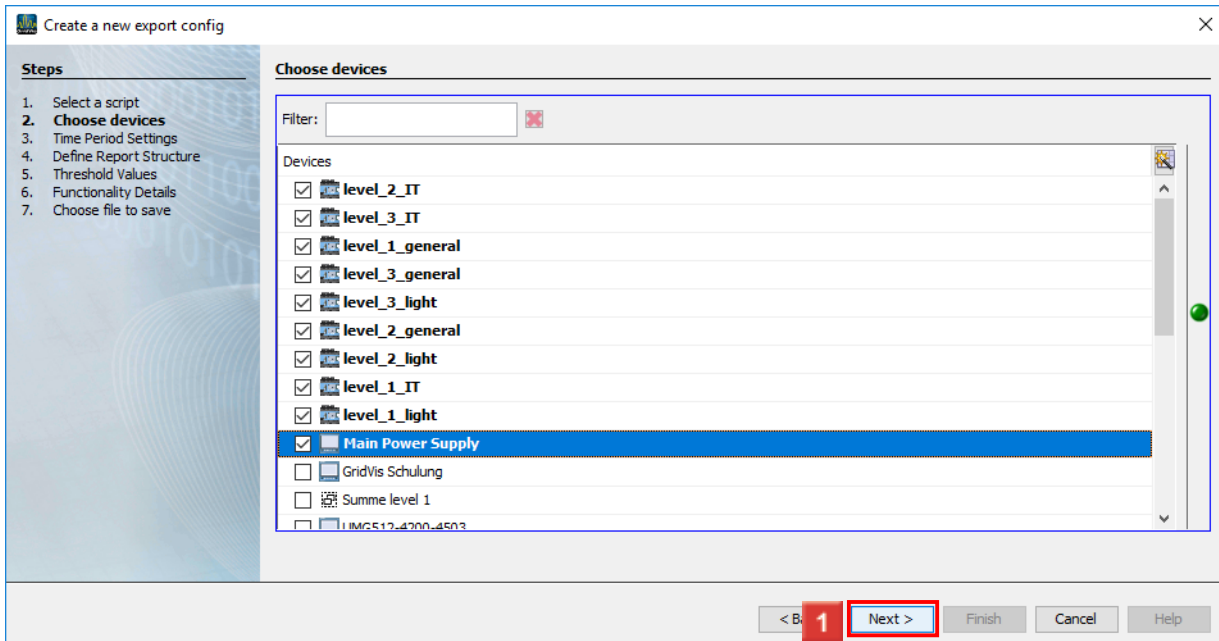




1 Click the **Limits, Events & Transients Report** list item.

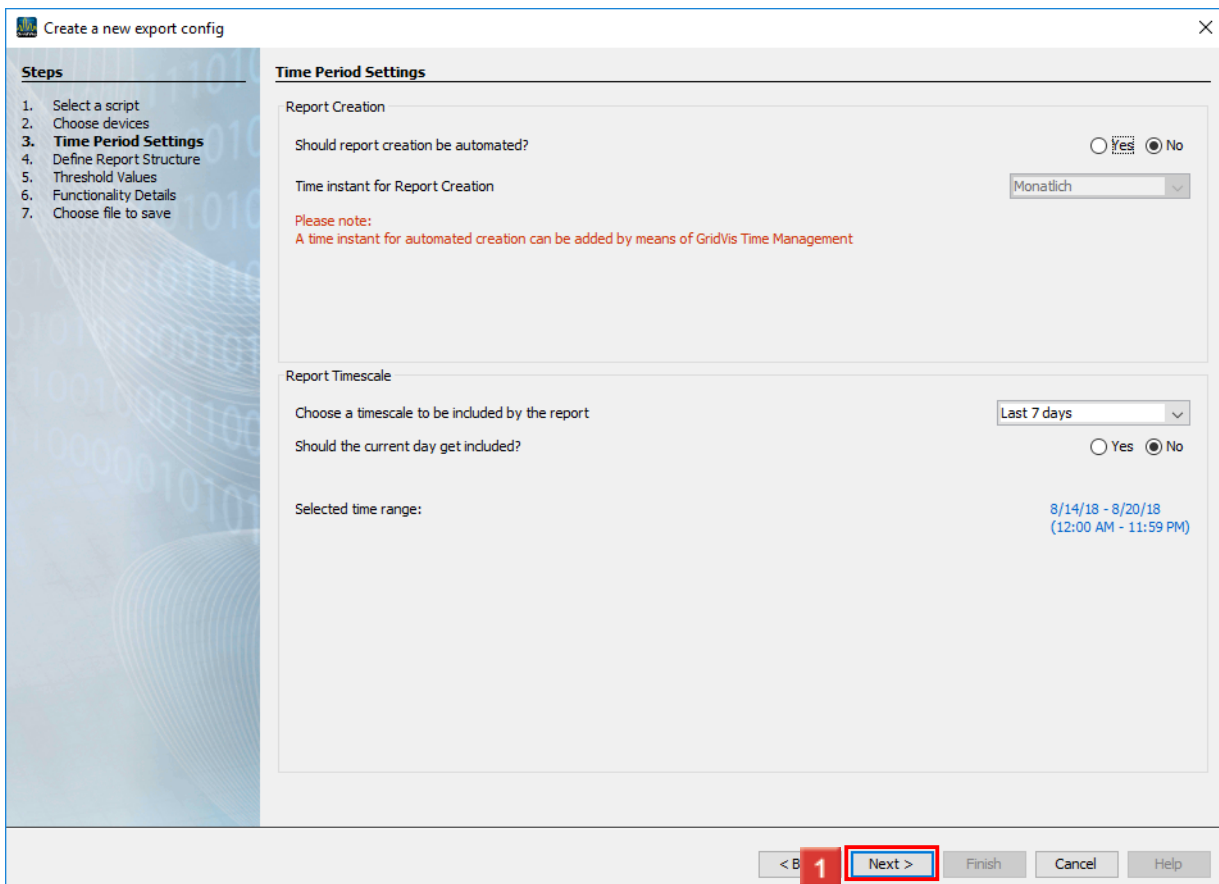


1 Click the **Next** button.



**1** In this step, the checkboxes are used to select any number of measurement devices that are to be included in the report.

Click the **Next** button.



**1** In the **Report Creation** area, you can have the report created automatically.

In the **Report Timescale** area, you can select time periods from a list over which the report will be created.

Click the **Next** button.

**2** Click the **sort devices alphabetically** dropdown button.

**3** Click the **Device Order** list item.

**Steps**

1. Select a script
2. Choose devices
3. Time Period Settings
- 4. Define Report Structure**
5. Threshold Values
6. Functionality Details
7. Choose file to save

**Define Report Structure**

Report Title  
LET Report

Headline of Report

Layout Settings

Device Order  
sort devices alphabetically

Logo  
Select Logo  
No Image selected

Show Date  
 Show Page Number  
 Show Links  
Link from Device

The devices are provided with a link to their device homepage or a global link.

Deviation Types

Limits  
 Events  
 Transients

Report Functionality

Histogram  
Statistical evaluation of the number of deviations occurred

Heatmap  
Color representation of the deviations that have occurred

Details  
Extensive overview of all deviations  
 Show Calendar Week

Detail Tabs  
For each measuring point, a separate tab (Excel report) is created

Relevant Phases for Report

L1  L2  L3  L4  L5  L6

Nominal Values

Voltage L-N 230.0 V Frequency 50.0 Hz  
Voltage L-L 400.0 V

< Back Next > Finish Cancel Help

**1** Click .

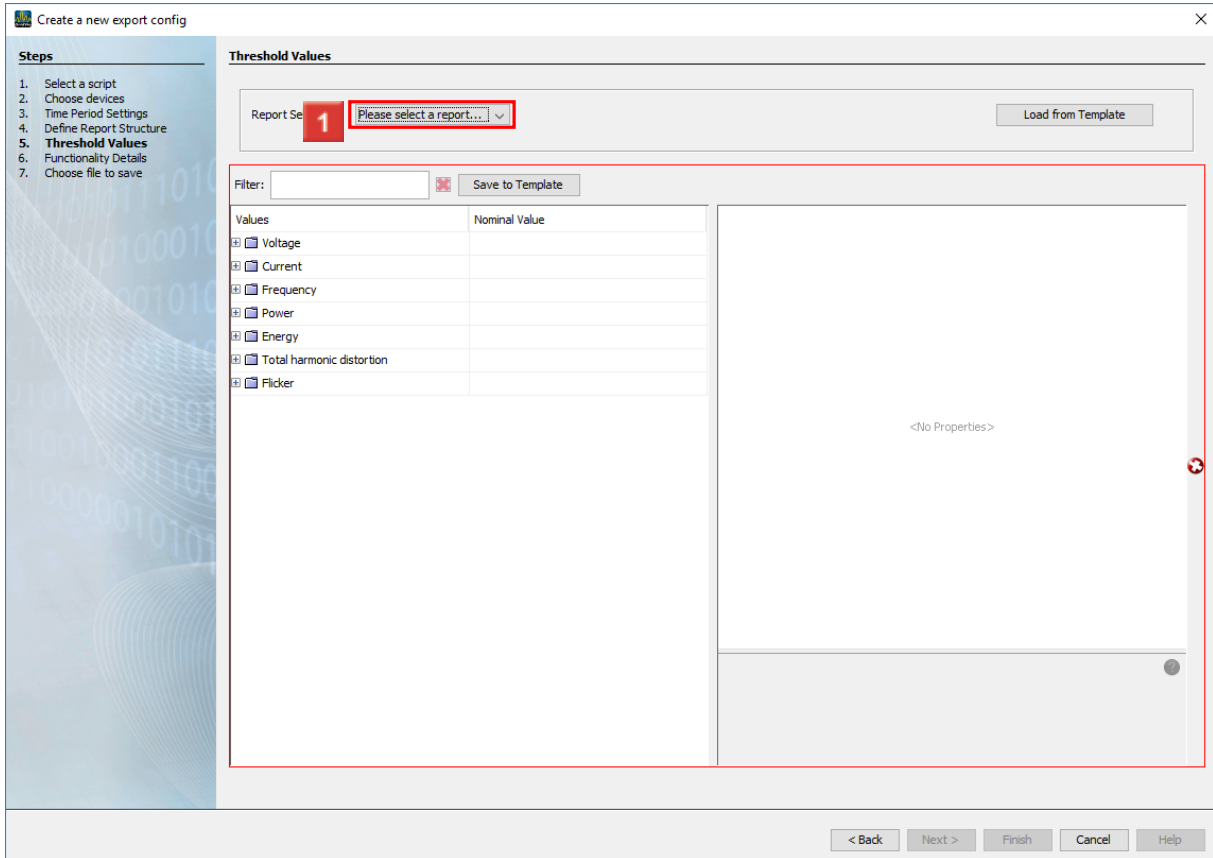
**i** Use the checkbox **Show Links** to add hyperlinks to the names of the measuring points.

**i**

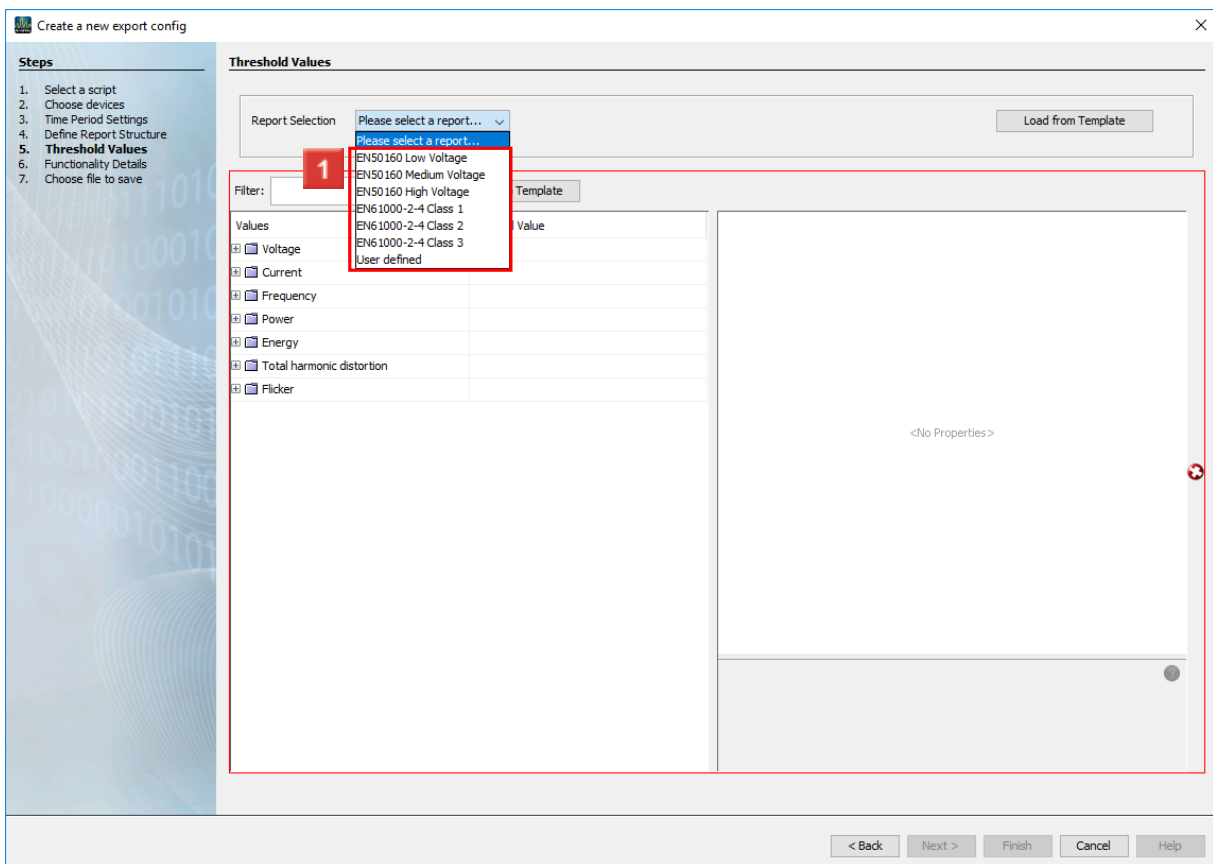
**i** The **Link from the selected measuring point** option automatically links each measuring point with the respective device homepage.

**i**

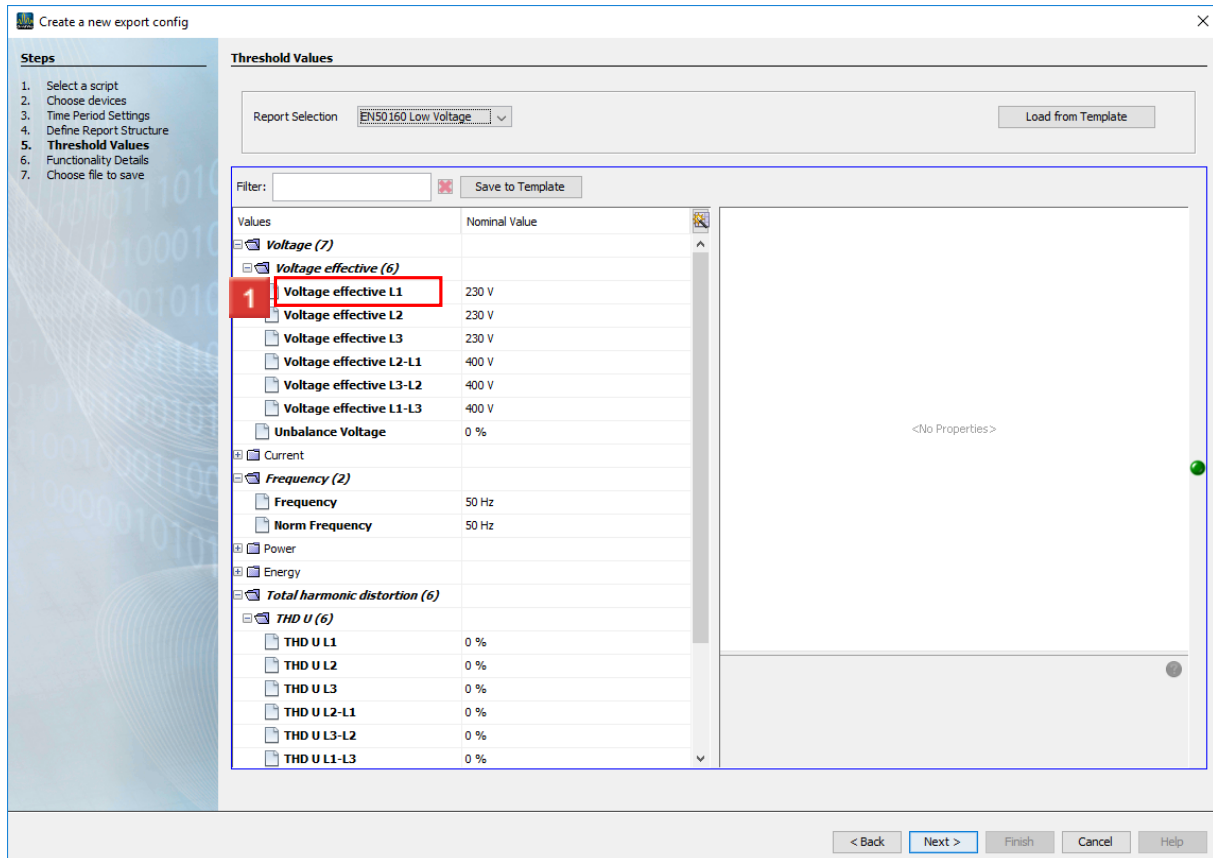
**i** The **Global link** option links each measuring point with the address entered in the text field.



**1** Click the **Report Selection** dropdown button.



**1** Select a template from the list, or create a new template under the entry **User defined**, which can also be saved.



**1** To customize the report, select the respective measured value from the list.

Create a new export config

**Steps**

1. Select a script
2. Choose devices
3. Time Period Settings
4. Define Report Structure
5. **Threshold Values**
6. Functionality Details
7. Choose file to save

**Threshold Values**

Report Selection: EN50160 Low Voltage Load from Template

Filter:  Save to Template

Values	Nominal Value
<b>Voltage (7)</b>	
<b>Voltage effective (6)</b>	
<input type="checkbox"/> Voltage effective L1	230 V
<input type="checkbox"/> Voltage effective L2	230 V
<input type="checkbox"/> Voltage effective L3	230 V
<input type="checkbox"/> Voltage effective L2-L1	400 V
<input type="checkbox"/> Voltage effective L3-L2	400 V
<input type="checkbox"/> Voltage effective L1-L3	400 V
<input type="checkbox"/> Unbalance Voltage	0 %
<b>Current</b>	
<b>Frequency (2)</b>	
<input type="checkbox"/> Frequency	50 Hz
<input type="checkbox"/> Norm Frequency	50 Hz
<b>Power</b>	
<b>Energy</b>	
<b>Total harmonic distortion (6)</b>	
<b>THD U (6)</b>	
<input type="checkbox"/> THD U L1	0 %
<input type="checkbox"/> THD U L2	0 %
<input type="checkbox"/> THD U L3	0 %
<input type="checkbox"/> THD U L2-L1	0 %
<input type="checkbox"/> THD U L3-L2	0 %
<input type="checkbox"/> THD U L1-L3	0 %

**Threshold Set 1**

Nominal Value	230 V
Reference (MIN/MAX)	in %
Threshold Min	10 %
Threshold Max	10 %
Significance %	95 %
Measure Type	AVG

**Threshold Set 2**

Nominal Value	230 V
Reference (MIN/MAX)	in %
Threshold Min	15 %
Threshold Max	15 %
Significance %	100 %
Measure Type	AVG

Voltage effective L1

< Back Next > Finish Cancel Help

**i** Threshold value violations that are not relevant due to the set significance do not appear in the heatmap and histogram and are marked in gray in the detail tabs.

Create a new export config

**Steps**

1. Select a script
2. Choose devices
3. Time Period Settings
4. Define Report Structure
5. Threshold Values
- 6. Functionality Details**
7. Choose file to save

**Functionality Details**

**Configure Heatmap**

**Limits (Thresholds)**  
At what percentage of the measured values must the limits be exceeded in order to be marked with the respective color?

0 10 30 50 70 90 99 100

**Events**  
How many events must have occurred at least to be marked with the respective color?

0 2 4 6 8 10 12 100

**Transients**  
How many transients must have occurred at least to be marked with the respective color?

0 2 4 6 8 10 12 100

**Configure Ranking**

The ranking table shows the individual deviations, sorted by their severity in the upper area of the LET Report. Please indicate how the individual deviation types should be weighted.

Limits  Events  Transients

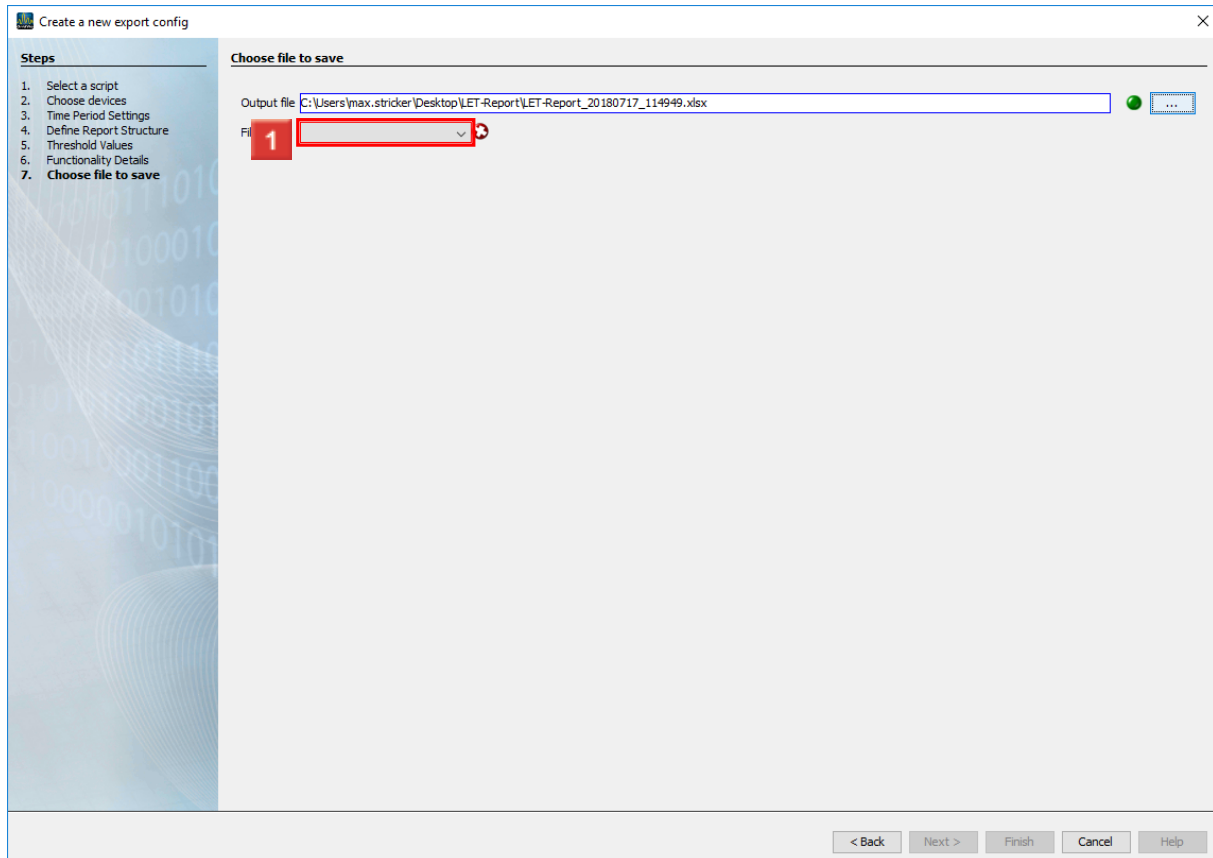
< **1** **Next >** Finish Cancel Help

**1** In this step, the threshold values for the color highlighting in the heatmap is configured by entering the desired threshold value in the respective shaded text field.

If desired, the weighting for the ranking is adjusted here.

Click the **Next** button.

**i** The standard values for the weighting for the deviation types (anomaly types) are based on the average length of the respective anomaly.

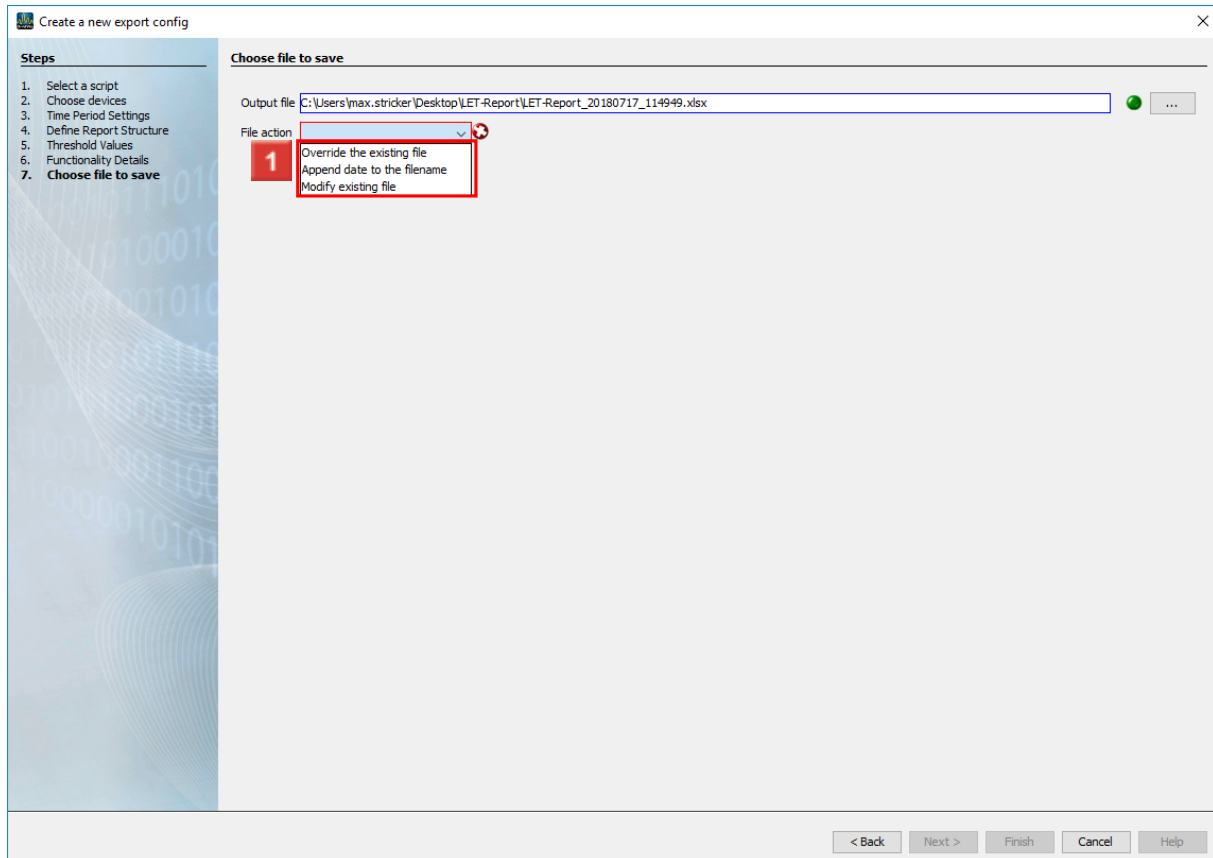


**1** Enter the storage location and name at this point.

The possible output formats include xls,xlsx and pdf.

Click the **File action** dropdown button.





**1** Select a file action that will be executed if the specified file already exists.

**i** **Attach a date to the file name:**

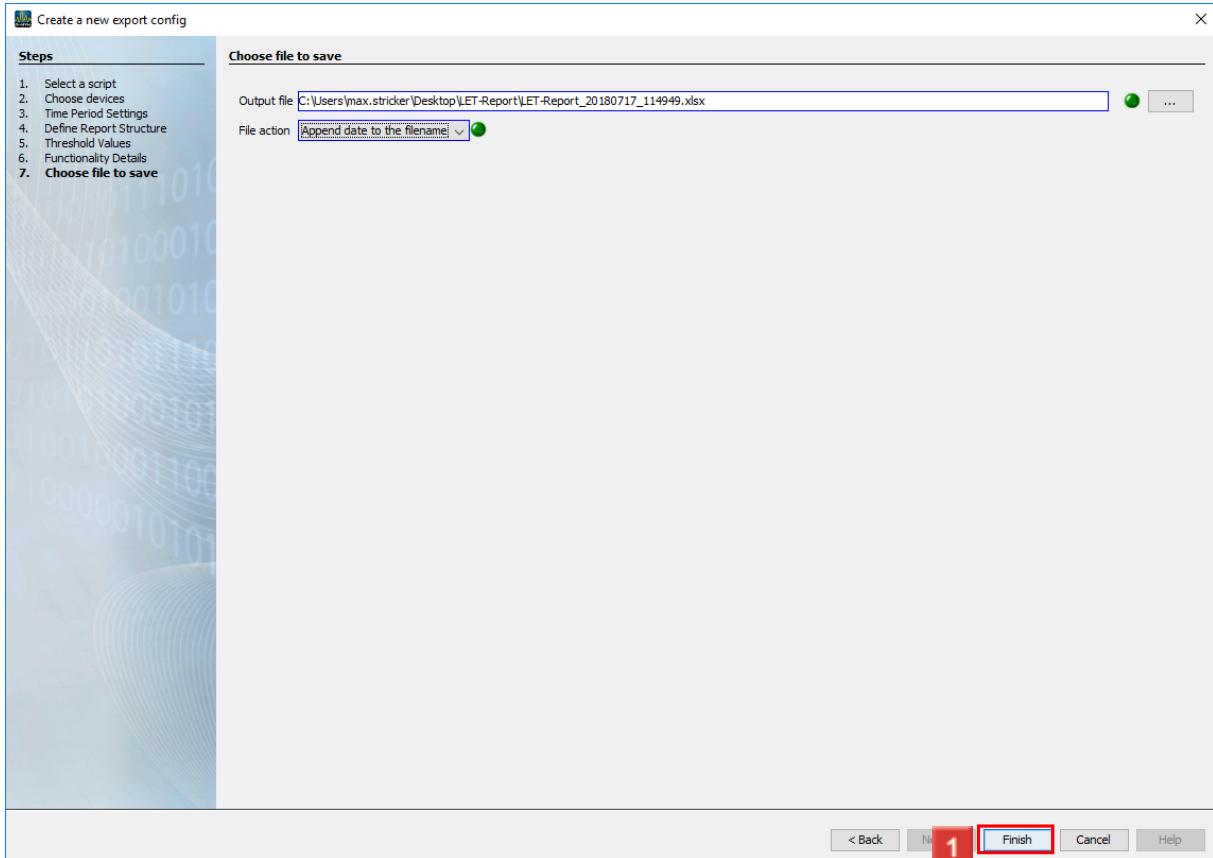
**i** Creates an additional file and attaches the execution date of the report to the file name.

**i** **Overwrite existing file:**

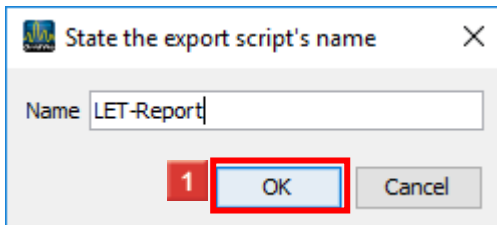
**i** Overwrites an existing report. Edits made by a user in the document are lost.

**i** **Modify existing file:**

**i** Edits the data in an existing file. Adjustments that were made in the file are kept.

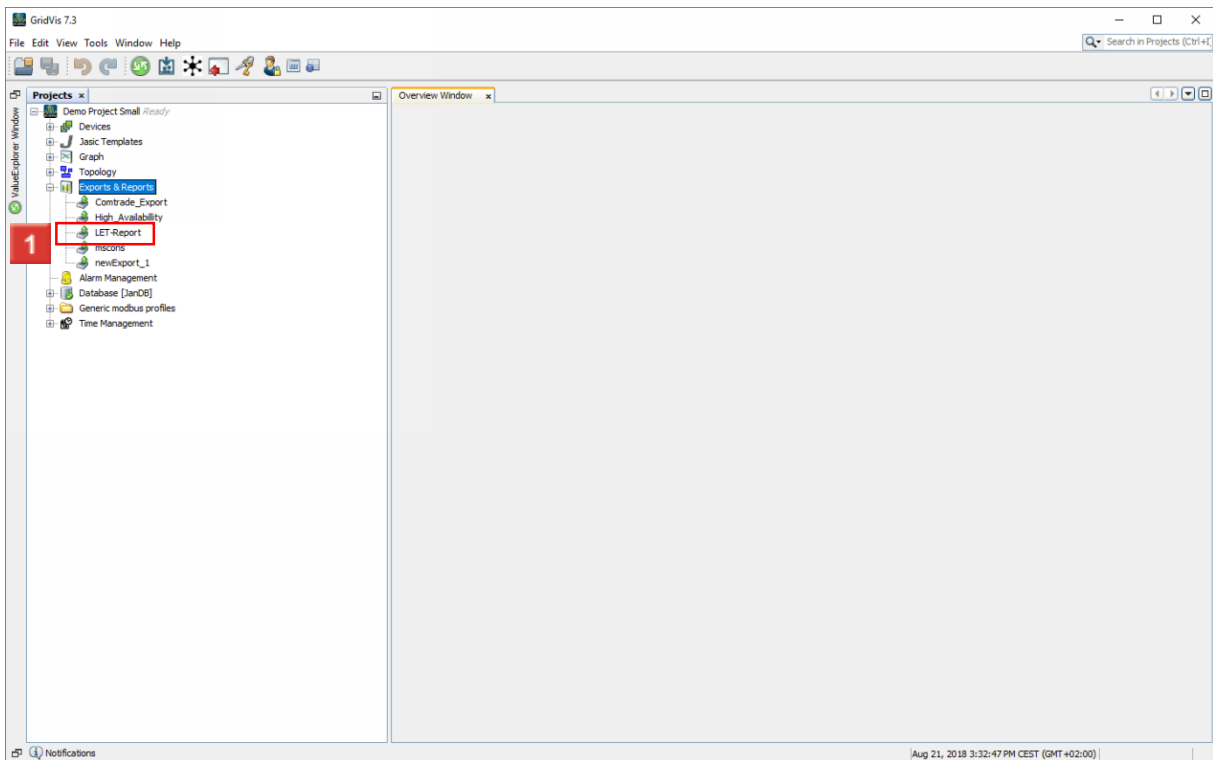


**1** Click the **Finish** button.

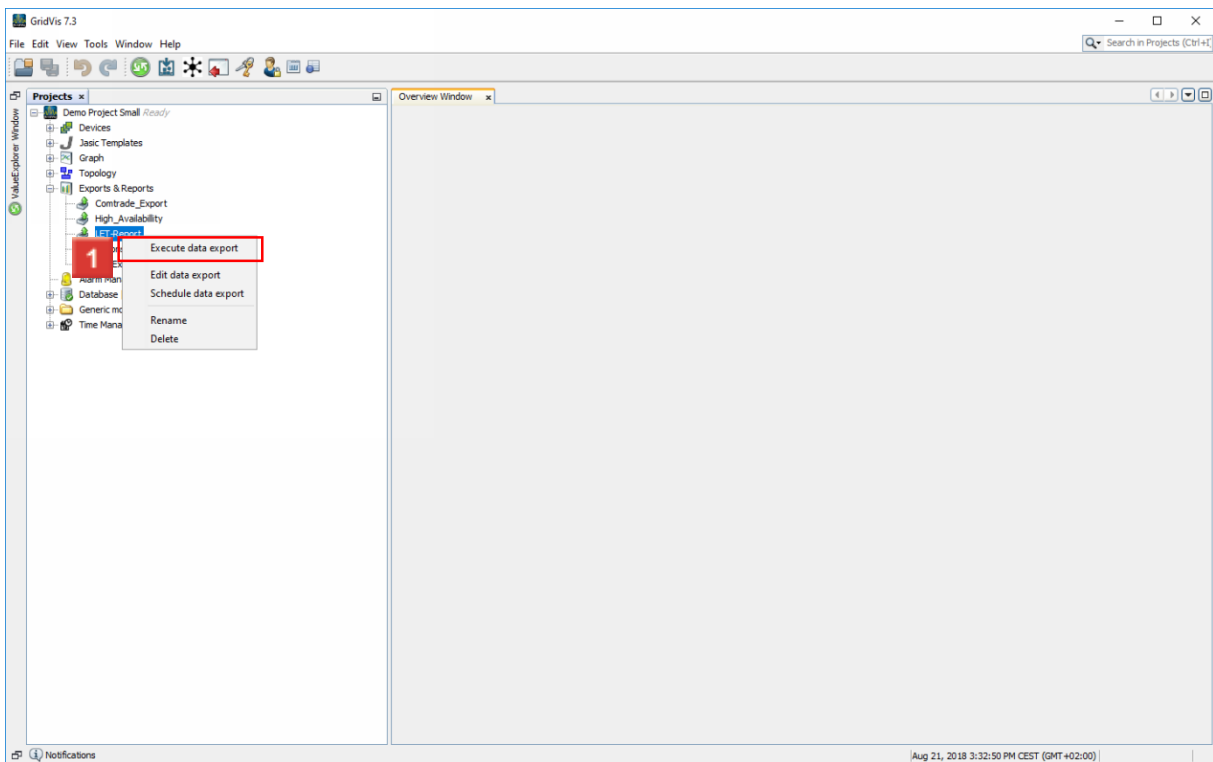


**1** Click the **Ok** button.

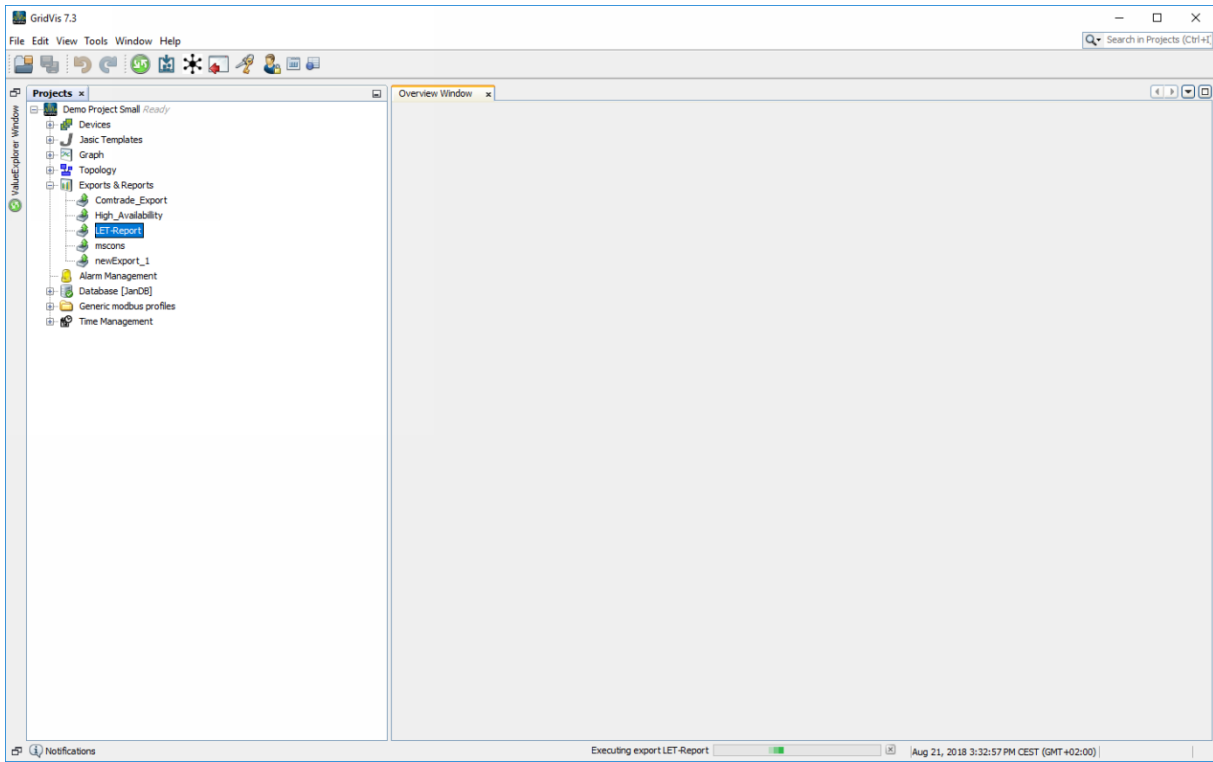
## 4 Carrying out a new data export



**1** Right-click on the newly created export.



**1** Click the **Execute data export** menu item.



## 5 Summary

Please enter your text here.

### General information

The LET report presents threshold value violations, events and transients recorded in GridVis in various graphics.

### Histogram

The histograms provide a rough overview for each of these three anomaly types of the distribution of the anomalies over the entire reporting period.

### Heatmap

All measuring points considered and the number of anomalies that occurred there are recorded in the heatmap.

A color highlighting with threshold values can be configured here.