



DSHIP V3

User Manual

WER-PLFDSH-SUM-00020

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Version 1.10

5 DSHIP Extraction

5.1 Overview

Data which has been collected and archived by DSHIP can be extracted by using the Web application **DSHIP Extraction**. An extraction can be executed for the collected data or for ActionLog entries.

Users can create a data extraction order and save the order as user template to be used again, later. The administrator can also provide default templates that can be used by all users.


For an order, the user can individually select the data source, the combination of selected data (parameters), the method of value compression (see next paragraph), the time periods and intervals (grids) as well as a multitude of settings for the output format.

Data can be compressed during extraction, if it is not necessary to output each single value; instead data are delivered in defined intervals. It is possible to deliver minimum, maximum and average values, variances and standard deviations in addition to spot values (grids). The method for averaging depends on the used parameters.

Orders are processed by DSHIP in the sequence they have been created. Because orders can be very extensive, it may take some time until results can be provided. If accordingly set during order creation, an e-mail informs the user after the order has been executed.

Extraction results are presented in ASCII format, i.e. in readable format and in tabular form. Each line lists all the values of the selected parameters for a respective time. The values of each line are separated by a separator (e.g. tabulator) which can be defined by the user. Thus, further processing of data by means of evaluation tools (e.g. Excel) is facilitated.

5.2 Extraction start page

The DSHIP Extraction start page is called via the Web-GUI menu entry **DSHIP Extraction** .

The following figure shows the DSHIP Extraction start page:

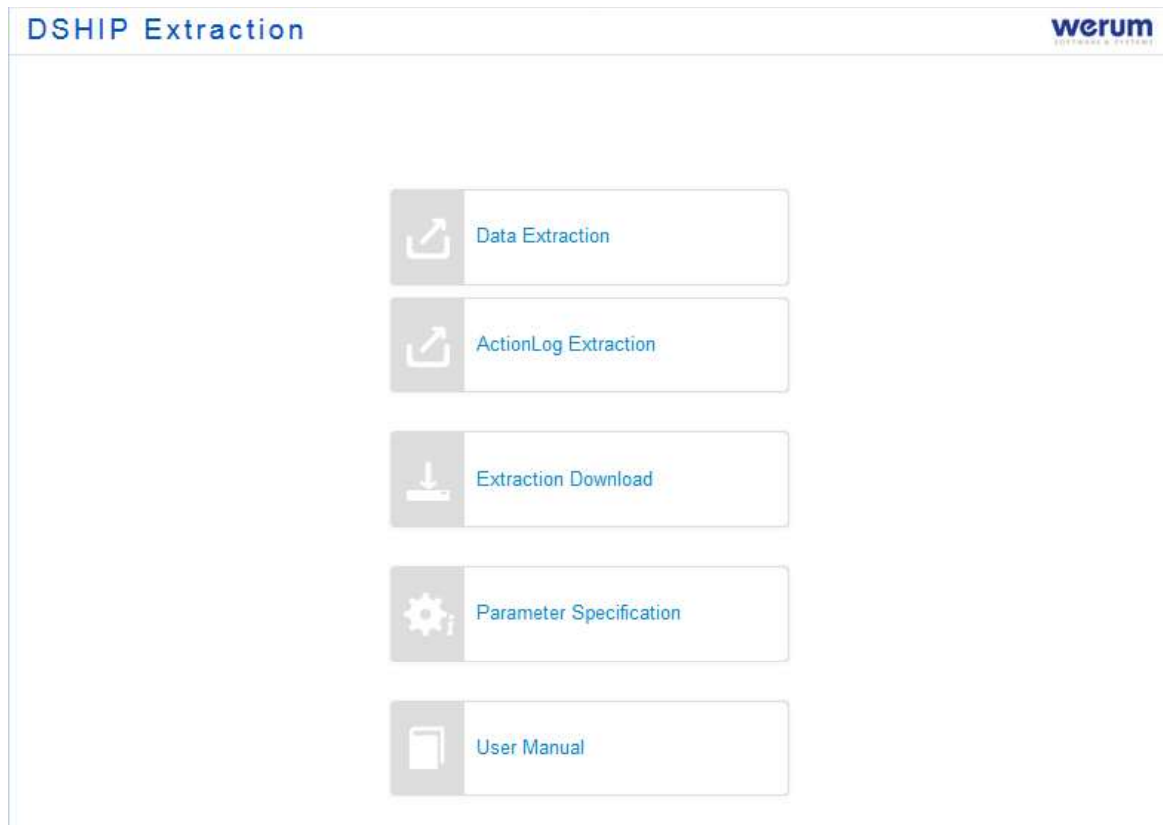


Figure 120: DSHIP Extraction – Start page

Data Extraction	Leads to the Data Extraction page where the user can order a data extraction.
ActionLog Extraction	Leads to the ActionLog Extraction page where the user can order an ActionLog extraction.
Extraction Download	Leads to the page where the user can download extraction files (the "output" of the ordered extraction).
Parameter Specification	Leads to the view of the current parameter definition.
User Manual	Leads to the user manual of DSHIP

5.3 Data Extraction page

On the **Data Extraction** page, the user can order a data extraction.

The following figure shows the general layout of the start page for a data extraction.

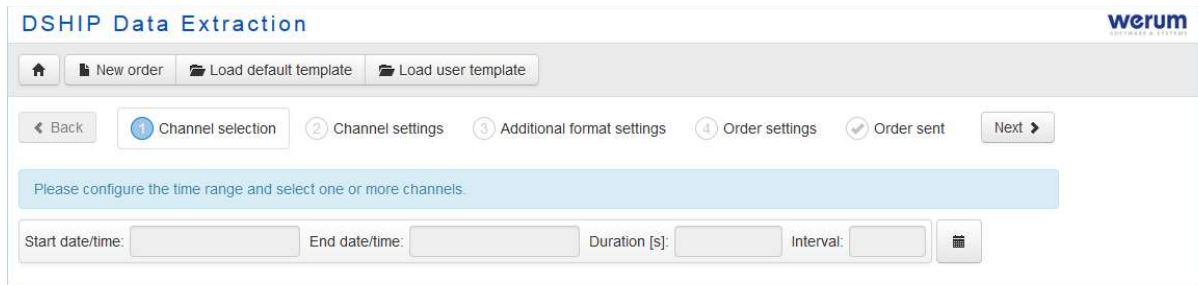


Figure 121: Data Extraction – start page



Leads to the Extraction start page.

New order

Discards any entries that have been made and starts with the first step for a new order (This function is useful when you first have a look at an existing user template but the parameter of interest has not been considered in the template).

Load default template

Loads a default template if existent.

Load user template

Opens a dialog from which a template can be selected that has been saved as user template (by the user in step **4 Order settings**).



Jumps to the next (resp. the previous) step of the order process.



Shows the number of steps and the current step of the order.

Below the step information, the order information for an extraction is entered.

5.4 Ordering a data extraction

1. On the DSHIP Extraction start page, click **Data Extraction**.
As default, the page starts with the first step to create a new order.
2. If you
 - want to create a new order, continue with chapter 5.4.3 *Setting date and time*.
 - want to load a default template, continue with the instructions in chapter 5.4.1 *Loading a default template*.
 - want to load a user template, continue with the instructions in chapter 5.4.2 *Loading a user template*.

5.4.1 Loading a default template

1. On the tool bar, click on **Load default template**.

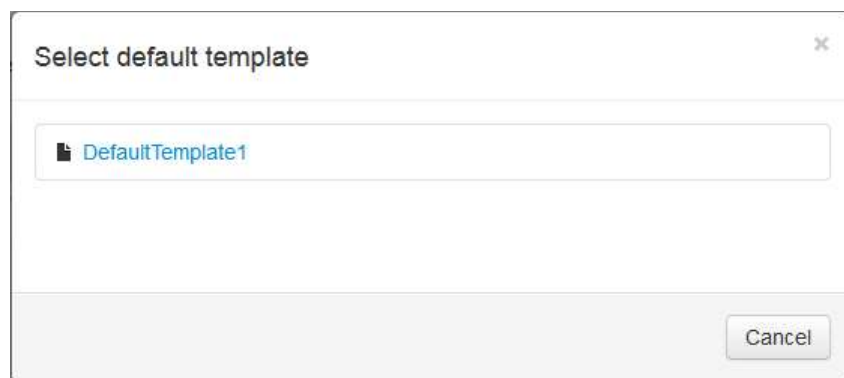


Figure 122: Selection of a default template

2. Click on the template that you want to use.
After you have clicked on the template, the template data and the parameter list is loaded.
3. Proceed with the instructions in chapter 5.4.4 *Selecting* .

5.4.2 Loading a user template

1. On the toolbar, click **Load user template**.

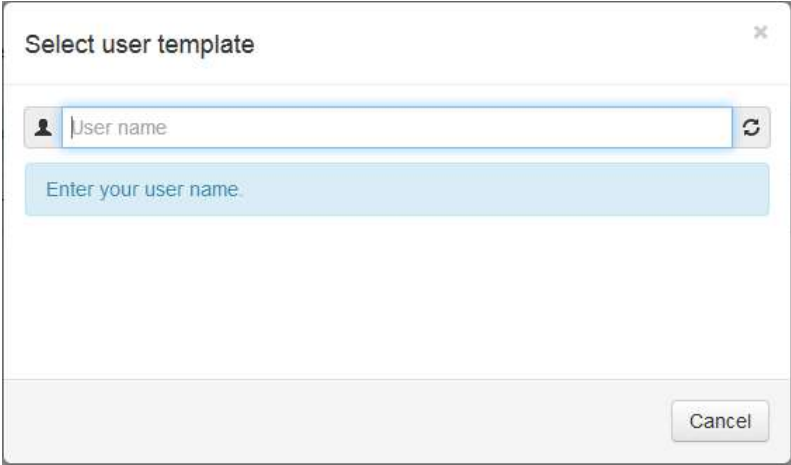




Figure 123: Selection of a user template

2. In field **User name** , enter your user name.
The name has to be the one that you have entered when you saved an order as user order.
3. Click **Load...**  .
The templates for the user are displayed.

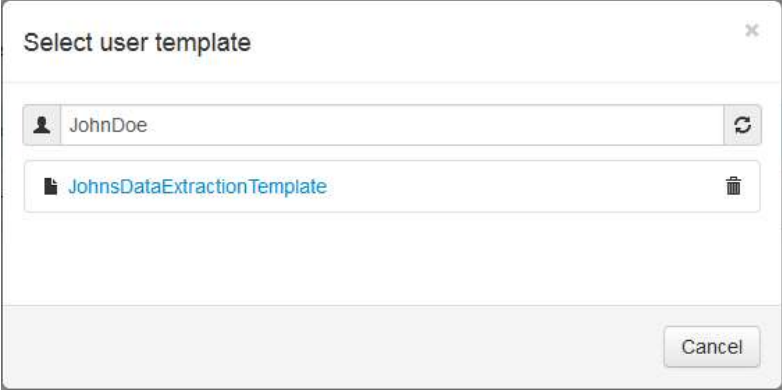



Figure 124: Loaded user templates

4. If you want to delete a user template, click on the bin  to the right of the entry, and then confirm the appearing dialog with **OK**.
5. If you want to use a user template, click on the name of the template.
After you have clicked on the name, the template data and the parameter list is loaded.
6. Proceed with the instructions in chapter 5.4.4 *Selecting* .

5.4.3 Setting date and time

For a new extraction order, you need to configure the time range and the interval, before you select the parameters of interest.

1. Click on the time picker icon  to open the **Date/Time** dialog.

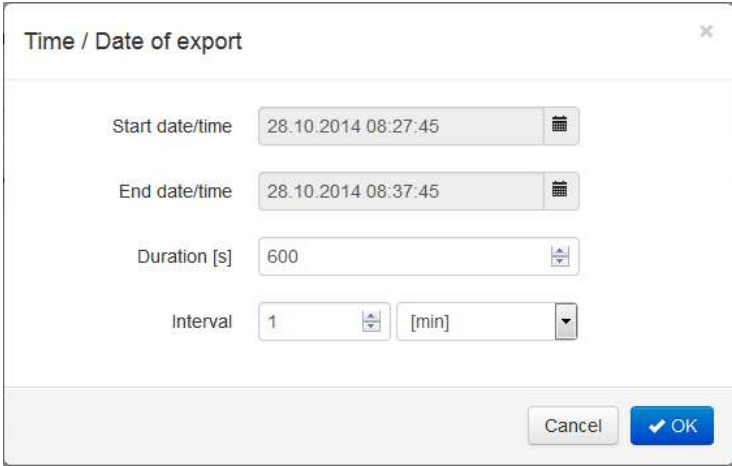


Figure 125: Data Extraction – Date/Time dialog


Start date/time, End date/time Shows the Start date/time and End date/time, and by this, the time period for which the extraction shall be executed.



Opens a dialog to enter date and time.

Duration The duration is indicated in seconds. The choice whether you specify End date or duration (time slot) is optional. The respective other value is adjusted automatically.

Interval The content in this box specifies the period for which the data are compressed (e.g. averaging, Min/Max). One data line is written to the output file for each interval step. The interval may be stated in hours, minutes, seconds or milliseconds. When choosing the unit milliseconds, only the input values 50, 100 and 200 as well as all values divisible by 1000 are allowed.

2. Click on the time picker icon  next to the field **Start date/time**, and then select the date.

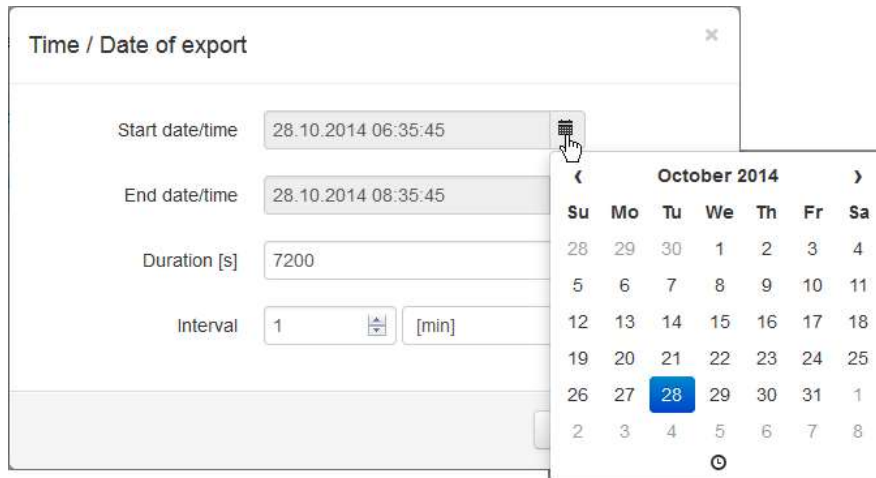


Figure 126: Data Extraction – Entering the start date

- To select another month or year, click on the displayed year. (See figure below).

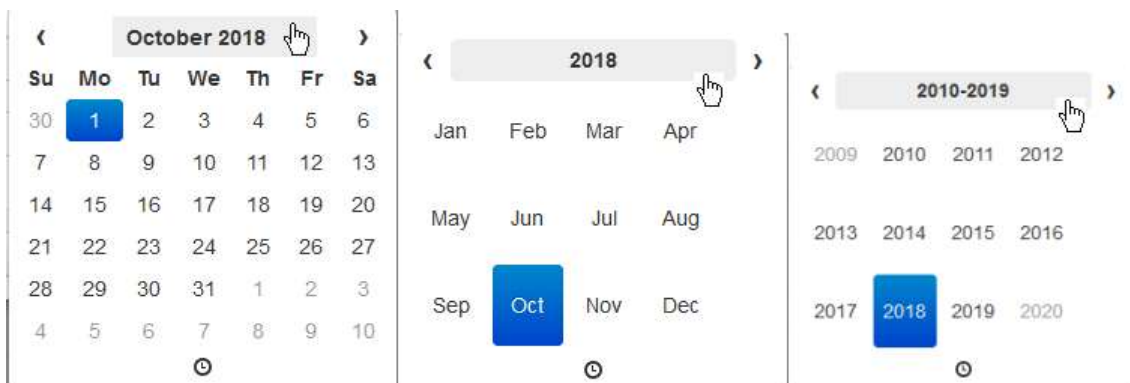


Figure 127: Date picker

- In the Date picker, click .

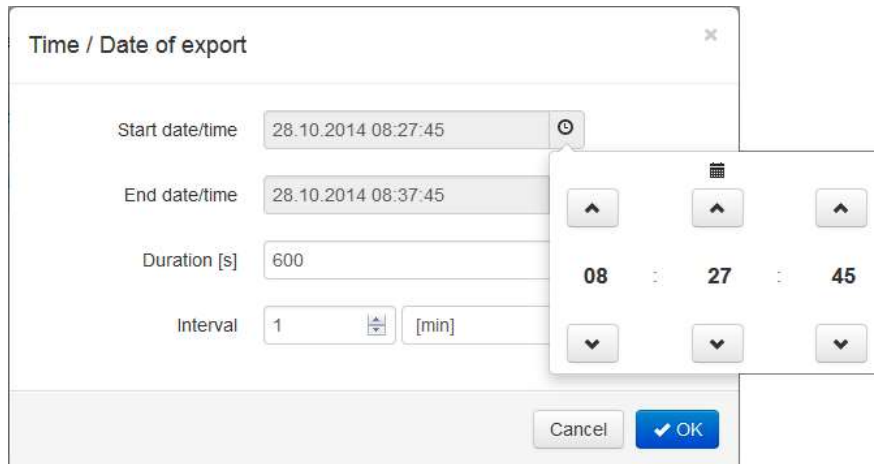




Figure 128: Data Extraction – Entering the start time

The time dialog shows the time in hours, minutes, and seconds.

- Use the arrow buttons "up"  and "down"  to adjust the time, or click on a number, and then select the desired hour, minute or second from the offered "time sheet".

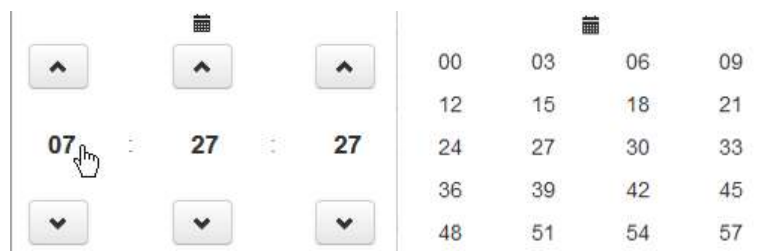


Figure 129: Time picker

- To determine the duration, either enter an end date and time, or enter the duration in seconds in field **Duration[s]**.
- In box **Interval**, enter the interval, and then select the time unit.
- Click **OK**.
The parameter list is loaded and displayed.
- Continue with the instructions in chapter 5.4.4 .*Selecting Parameters*

5.4.4 Selecting Parameters

In the parameter selection list, the parameters appear grouped below the parameter (or process) they have been assigned to.

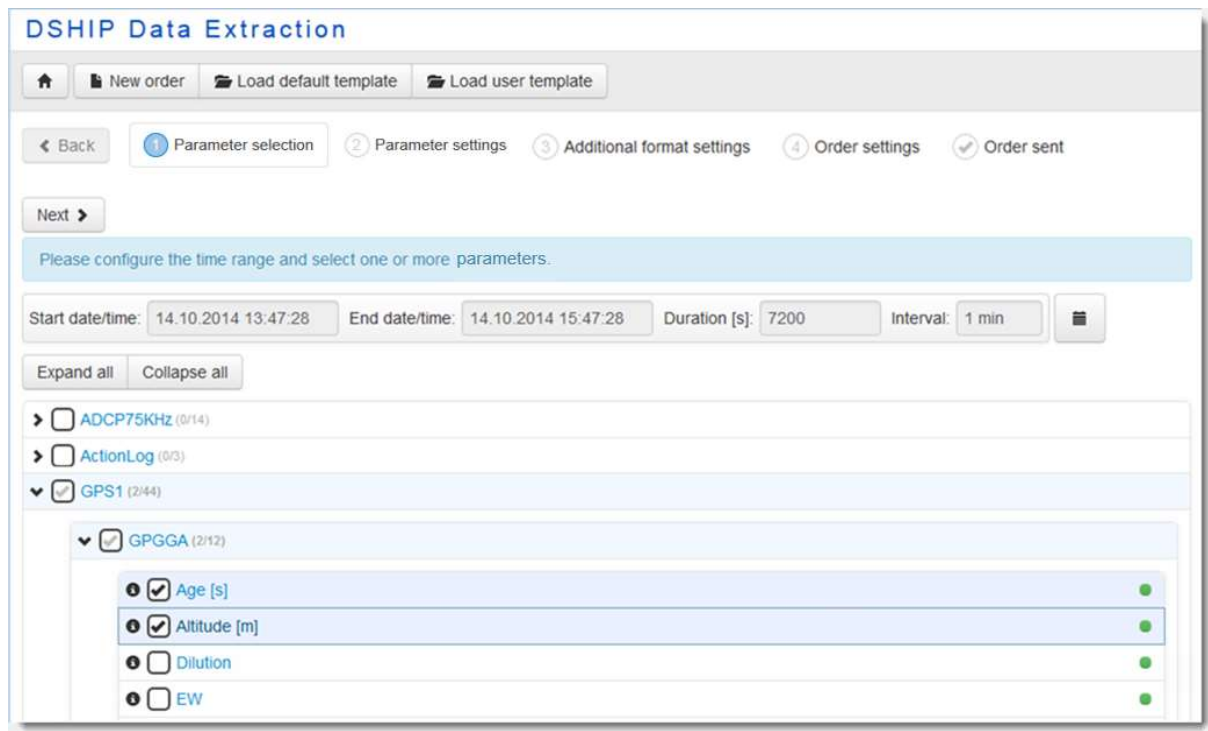


Figure 130: Data Extraction – Parameter selection (Part 2)



Opens a dialog to enter the time range for the extraction (as well as duration and interval).



An active ("not dimmed") info icon indicates that additional information is available for this parameter.



Expands or collapses the parameter tree.



Check boxes to select the parameters of interest.



Indicates whether data is available (green) for this parameter or not.

The parameter list shows all parameters that can be selected.

1. Expand the parameter tree to navigate to the actual parameters, select the parameters of interest, and then click **Next**.

The view for the parameter settings is displayed:

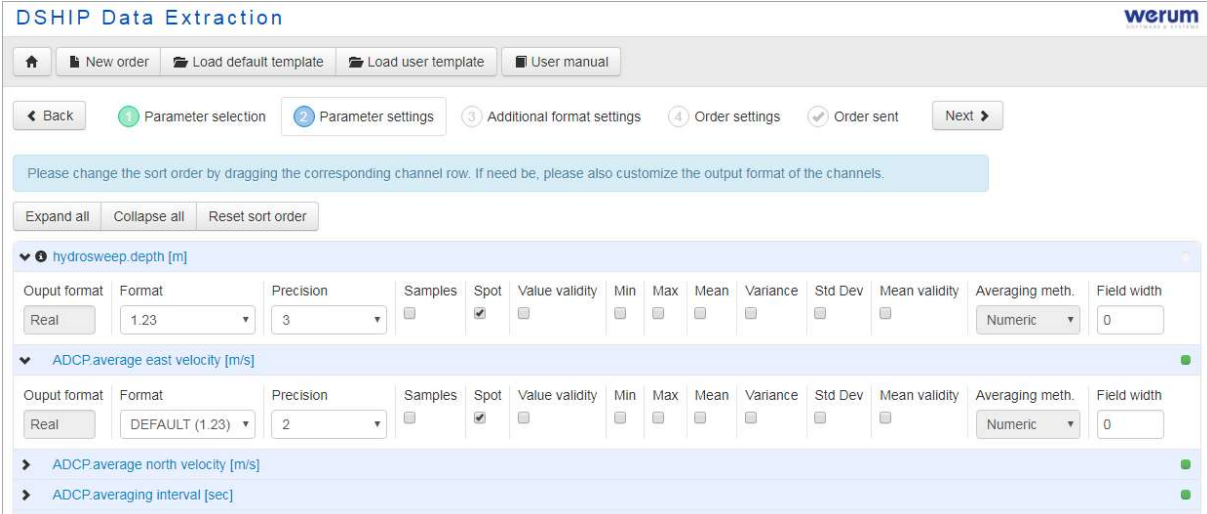


Figure 131: Data Extraction – Output settings

2. Expand the view for the selected parameters to see the parameter-specific settings.

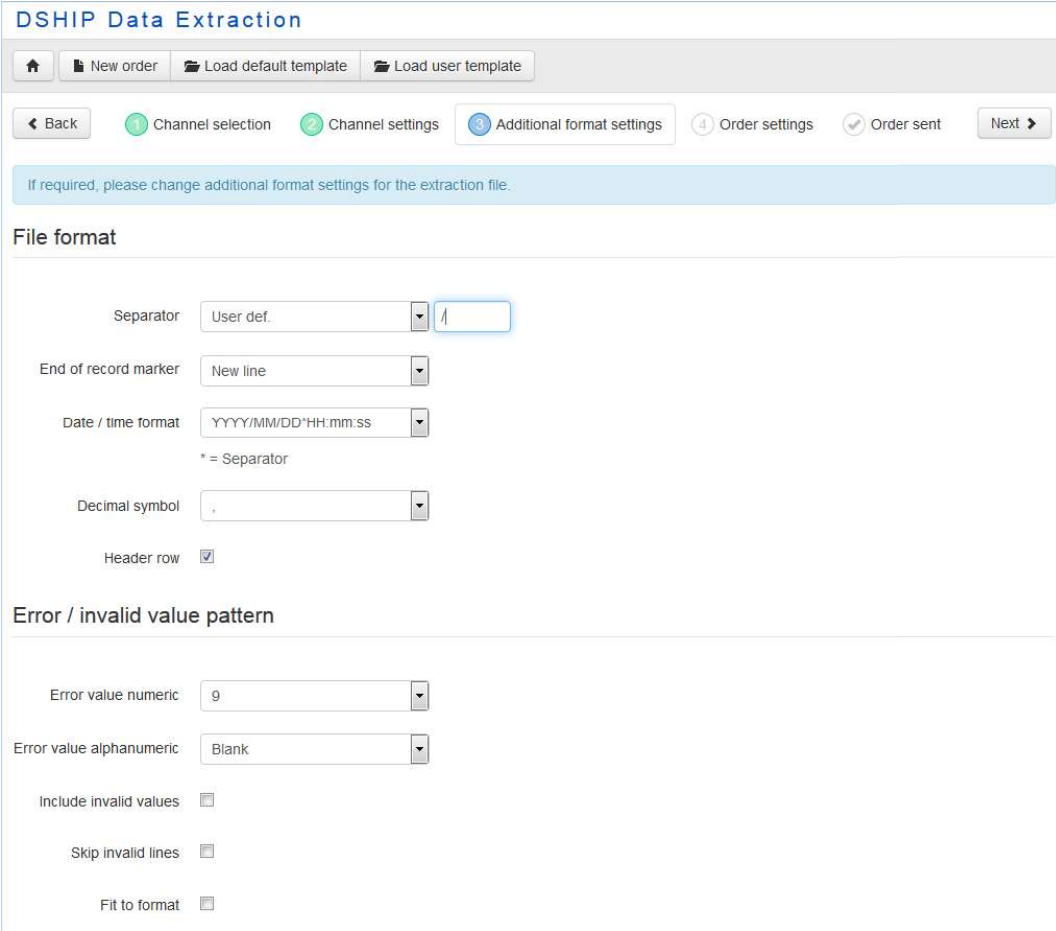
Each parameter offers a parameter-specific set of setting values. The pre-selected values for each parameter either result from the chosen template (if they have been edited by the user) or are default values from the parameter description in the database (if they have not been edited by the user).

The selections made in this dialog determine the content and the format of the output file.

Format	Format selection for the parameter.
Precision	Precision for output of floating point numbers (number of significant numbers).
Samples	Output of number of measurement data compressed in each interval
Spot	Output of first value of an interval.
Min	Minimum value of an interval.
Max	Maximum value of an interval.
Mean	Average value for the interval.
Variance	Variance for the interval.
Std dev	Standard deviation for the interval.

Value validity	Validity flag for Spot, Min, Max (I=invalid / V=valid).
Mean validity	Validity flag for Mean, Variance, Std dev (I=invalid / V=valid).
Averaging meth.	Averaging method. If you select Min, Max, Mean, Variance, Std. Dev or Mean validity, this drop-down list box becomes active and you can select the desired averaging method.
Field width	Number of possible output characters, including algebraic sign and decimal separator, if any. (If set to 5 and only 3 characters are needed, the remaining character places remain empty. If set to 2, and 3 characters are needed, the field length is extended automatically.

3. Edit the output settings as required.
 4. If you
 - want to change the order, drag-and-drop a parameter (row) to the desired position.
 - want to return to the initial sort order, click **Reset sort order**.
 5. Click **Next**.
- In the next step, you will define the file format and the handling of erroneous or invalid values.



DSHIP Data Extraction

[New order](#)
[Load default template](#)
[Load user template](#)

[Back](#)
1 Channel selection
 2 Channel settings
 3 **Additional format settings**
4 Order settings
 5 Order sent
 [Next](#)

If required, please change additional format settings for the extraction file.

File format

Separator: User def. /

End of record marker: New line

Date / time format: YYYY/MM/DD*HH:mm:ss

* = Separator

Decimal symbol: .

Header row

Error / invalid value pattern

Error value numeric: 9

Error value alphanumeric: Blank

Include invalid values

Skip invalid lines

Fit to format

Figure 132: Data Extraction – File format and error handling

File format

Separator

Separates the columns from each other. It can be selected from a given set of separators. Additionally, it is possible to set a user-defined separator as entry in the field at the bottom of the list.

Tabulator
;
User def.

End of record marker

A marker indicating the end of a record can be chosen here.

New line
User def.

Date / time format

Each line of the table starts with an indication of the respective time. The selection for Date / time format determines the contents and the form of this entry. Possible variants are stated in the drop-down list box. The option "None" deactivates the output.

**Decimal symbol**

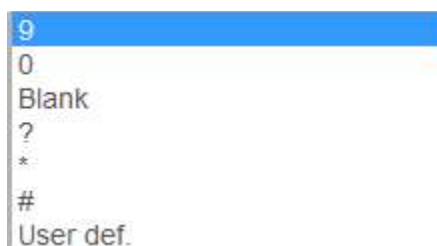
Drop-down list box to choose between comma and point as decimal separator for floating point numbers.

Header row

Option to select whether column headers are to be displayed at the beginning of the file containing the values.

Error / invalid value pattern
**Error value numeric/
Error value alphanumeric**

These substitute values are set up according to the selections for the output format. The characters to be set for the substitute values depend on the data type (numeric, alphanumeric). They can be selected from drop-down list box. Additionally, you may also state a user defined character "User def." () as entry in the field at the bottom of the selection list.

**Include invalid values**

Check box to select whether to include invalid data. Invalid values will then be treated as if they were valid.

Skip invalid lines

Check box to select whether to omit invalid data.

Fit to format

Check box to select whether a constant line length in the output file shall be used. For values that do not fill the field width stated for the parameter selection, leading blanks will be inserted.

6. Configure the additional format settings as required, click **Next**, and then continue with the instruction in chapter 5.4.5 *Adding order information and placing the order*.

5.4.5 Adding order information and placing the order

In this step, you will add information to identify the order, and finally you place the order.

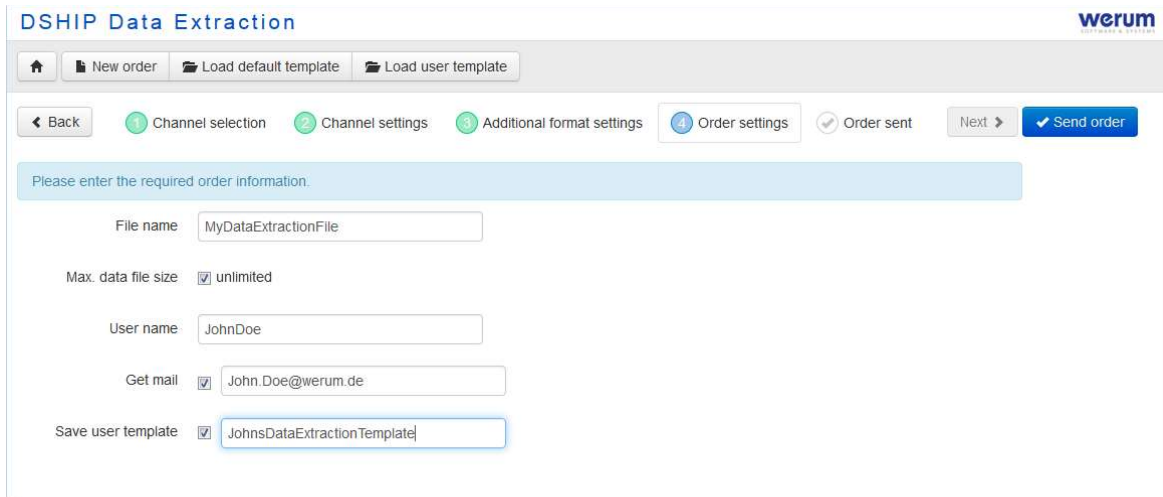


Figure 133: Data Extraction – Order settings

File name Text box for the name that is used as file name for the supplied results. (Spaces are not allowed.)

Max. data file size With the entry field Max. data file size, you may state a maximum file size in megabyte, if required. If the data volume exceeds this value, an according number of files are generated automatically to cope with the entire data.



User name Field for the user name. Under this name, the file(s) do be downloaded can be found (see chapter 5.6 *Downloading Extraction Data*). (Spaces are not allowed.)

Get mail When creating an extraction order, the user can activate this check box and enter his e-mail address in the appearing text box. By this, he defines that he will receive an e-mail after the order has been completed.

Furthermore, the system might have been configured to send an e-mail when the order has been registered by the system. (It might is possible that this function has not been configured on board.)

Get mail

Save user template

To save the export order, you can select this check box and type the name under which you want to save the order in the appearing text box next to it.

Save user template

1. Fill in the fields.
2. Click **Send order**.

The order is now placed.

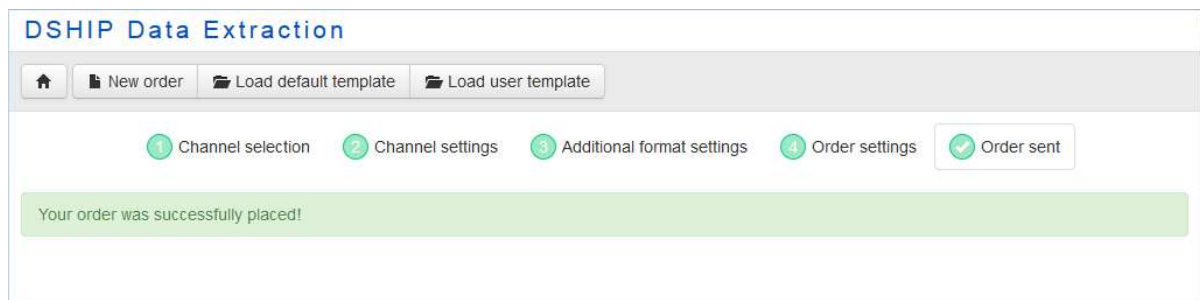



Figure 134: Data Extraction – Order confirmation

3. If you want to download the extraction file(s), click on the home button  to call the DSHIP Extraction start page, and then continue with the steps described in chapter 5.6 *Downloading Extraction Data*.

Please keep in mind that the extraction may take some time (depending on the amount of data to be processed) until the data can be offered for downloading.

5.5 ActionLog Extraction page

On the **ActionLog Extraction** page, the user can order an ActionLog extraction

The following figure shows the common layout of the start page for the ActionLog extraction:

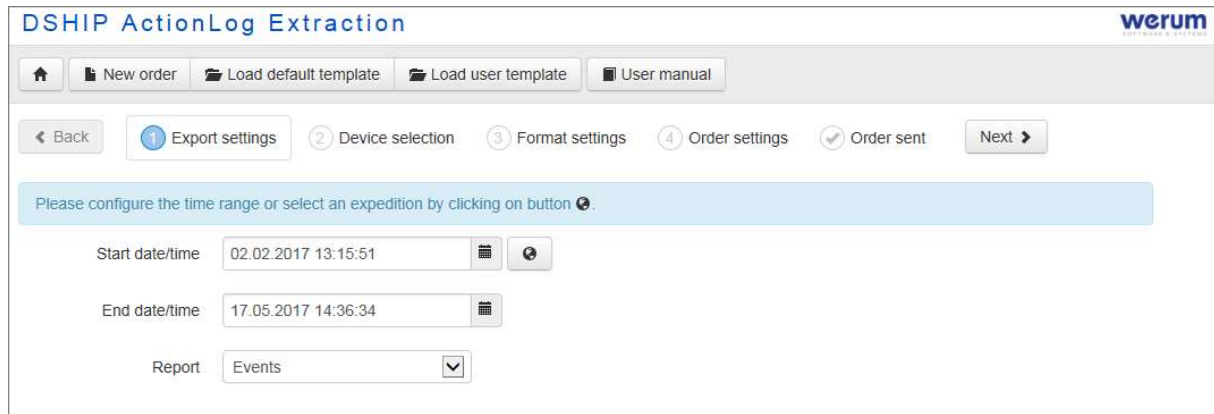


Figure 135: ActionLog Extraction – start page

The ActionLog extraction differs in some points from data extraction, as for an ActionLog extraction, no parameters have to be selected and different formats can be chosen for export. The differences are described in the following chapter.

5.5.1 Ordering an ActionLog extraction

1. On the DSHIP Extraction start page, click **ActionLog Extraction**.

The display for Step 1 **Time range** appears:

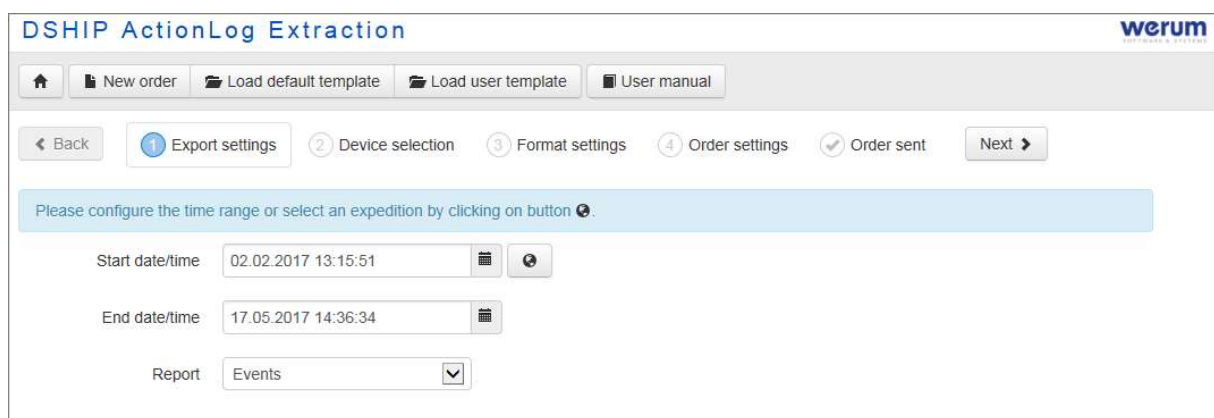
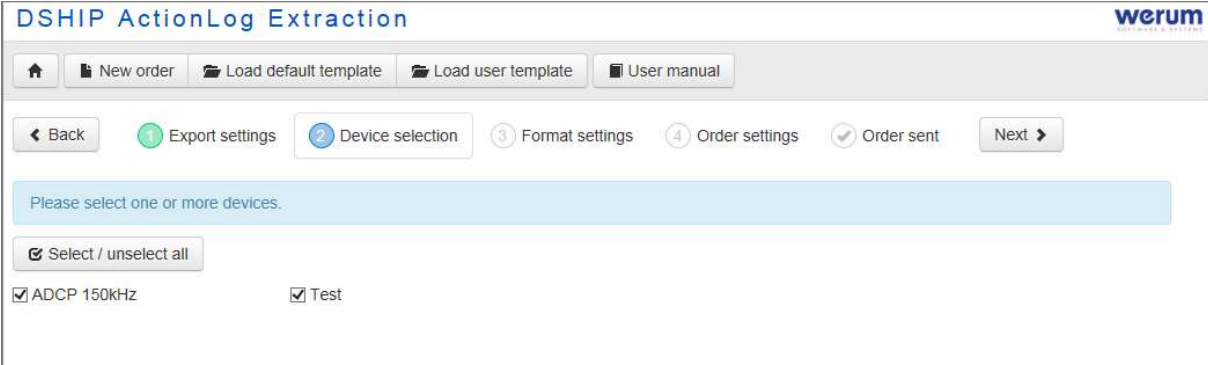


Figure 136: ActionLog extraction

Enter the needed period of time using the fields **Start date/time** and **End date/time** (for entering the period of time see also chapter 5.4.3 *Setting date and time*).

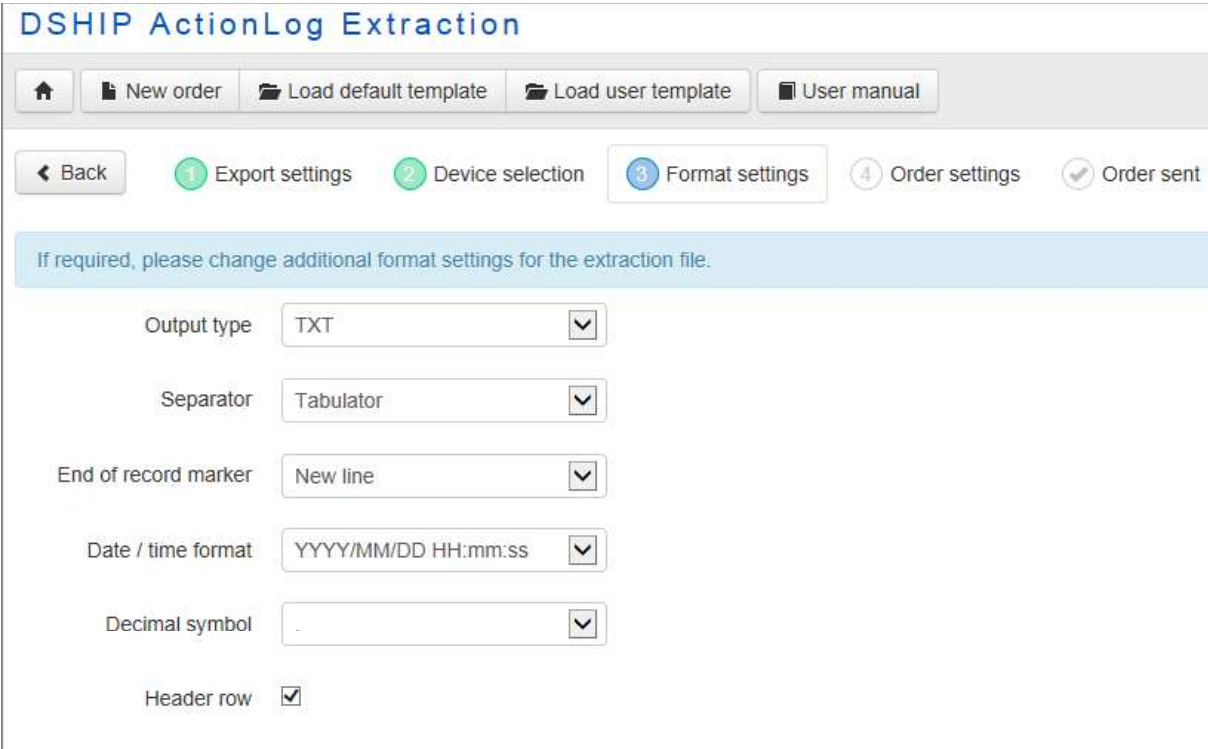
2. In field **Report**, select the desired report type (Events, or Device operations).

3. Click **Next**.


The screenshot shows the 'DSHIP ActionLog Extraction' web interface. At the top right is the 'werum' logo. Below it is a navigation bar with buttons for 'New order', 'Load default template', 'Load user template', and 'User manual'. A progress bar below the navigation bar shows five steps: 'Export settings' (1), 'Device selection' (2, highlighted), 'Format settings' (3), 'Order settings' (4), and 'Order sent' (5, with a checkmark). A 'Next >' button is to the right of the progress bar. Below the progress bar is a light blue instruction box: 'Please select one or more devices.' Underneath is a 'Select / unselect all' button. At the bottom, there are two checked checkboxes: 'ADCP 150kHz' and 'Test'.

Figure 137: ActionLog Extraction – Device Selection

4. Select the devices, of which you need data.
5. Click **Next**.



The screenshot shows the 'DSHIP ActionLog Extraction' web interface at the 'Format settings' step. The progress bar now highlights 'Format settings' (3) and shows 'Order sent' (5) with a checkmark. A light blue instruction box says: 'If required, please change additional format settings for the extraction file.' Below this are several settings: 'Output type' (TXT), 'Separator' (Tabulator), 'End of record marker' (New line), 'Date / time format' (YYYY/MM/DD HH:mm:ss), and 'Decimal symbol' (.), each in a dropdown menu. At the bottom, the 'Header row' checkbox is checked.

Figure 138: ActionLog Extraction – Format settings

Output Type As output type, you can choose between TXT and XML.

If you choose XML, no further changes are required and the fields for TXT settings are not needed, and therefore, not displayed.

6. If needed, adapt the format settings using the offered fields.
7. Click **Next**.
8. Proceed with the instructions in chapter 5.4.5 *Adding order information and placing the order*.

5.6 Downloading Extraction Data

1. On the DSHIP Extraction start page, click **Extraction Download**.



Figure 139: DSHIP Extraction Download

2. On the **DSHIP Extraction Download** page, enter your name.

This should be the name that has been entered as user name when creating the extraction order in step "Order settings" (see chapter 5.4.5 *Adding order information and placing the order*).

3. Click **Load user extraction results** .

The extraction files for the user are displayed.



Figure 140: DSHIP Extraction Download – Files

4. If you want to see all files of the extraction, click **Expand** ➤.
 5. If you
 - want to download all file(s) of an extraction, click **Download** ⬇️ next to the extraction order.
 - want to download a single file of an extraction, expand the shown entry, and then click on the desired file.
 6. In the appearing dialog, select **save file**, and then click **OK**.
- ✓ The file is downloaded into the browser's default directory for downloads.