PreOr 2.1

Program description and user's guide

Program PreOr allows manipulation and management of TrailO competition data (PreO and TempO) with using the SportIDENT even without it (paper control cards). Especially is useful in building the several kinds of result with multiday competition support. Competition may consists with PreO races, TempO races and its combinations up to 5 stages. Program allows putting the results to the internet online.

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1.0 Data management

Data is stored according the given directory structure this way.

Main directory:

File *.PreOr

In this file there is a competition data. Data structure is prepared for 5 stages, each stage contains info about given stage (date, place, controls, SI, ...)

File *.zavodnici

Here is the competitors data.

Subdirectories E1-E5

Each stage directories. In these dirs are stored data of SI punching, Time controls data and all exports of the stage (*.htm, *.csv)

File *.si

Text file where the punching is stored. Name of the file correspond with ID in competitors table.

File structure:
INFO;SI-Card;CN;Mode;Source;DayOfWeek;PunchDate;PunchTime;No;Cnt
INFO - it could be a race ID setted in SIReader or a text "MANUAL" if the results were manually changed.
SI-Card - SI card number
CN - number of SI-unit
Mode - type of punched SI unit. It could be: STA = start; CLR = clear; CHK = check; FIN = finish; CN = control.
Source - usually RDO, no impact to anything
DayOfWeek - day of the week, , no impact to anything
PunchDate - race date
PunchTime - punching time
No - oder in punch list, no impact to anything
Cnt - sum of records, no impact to anything

File *.tc2

Text file where the Time controls data is stored.

Structure of the data: each cluster is on one line, first cluster=first line, etc.
One line structure: **answ1answ2answ3answ4answ5answ6answ7answ8answ9answ10;time;**
answ1-10 - single task answers (amount of answers is optional, if there is only one task, then there will be only one answer + time)
time - total time in cluster in seconds

In case of ID change in competitors table it is urgent to manually rename the *.si and *.tc2 files to keep the link of data to the correct competitor!

Subdirectory Flags

Contains a flags (or other graphics representations). All files must be the JPG files. This subdirectory is optional, PreOr works fine even without it.

If we want to use the flags, is necessary to copy this directory directly to the subdirs E1-E5. Files in it are used for HTM exports, where could be in column Flag dislayed. To make this happend, is necessary to keep the names of the files (excluding JPG extension) = if we want to display the flag of Czech Republic, we shall fill the column 'Flag' in competitors table with "CZE" (in dir Flags there is a file named CZE.jpg)

File preor.ini

Text file with several program settings. Each line represents one setted value. Data are stored in this order:

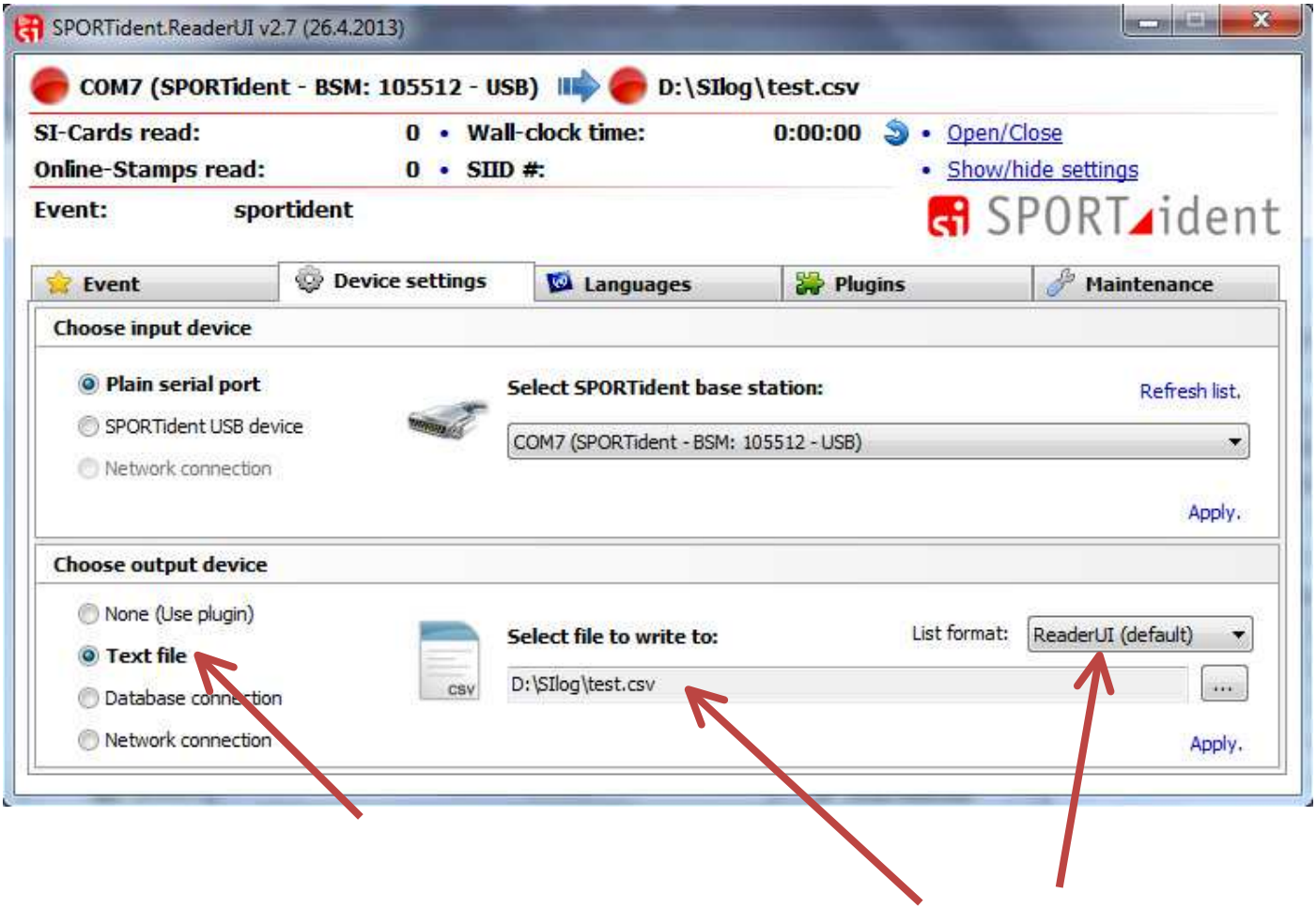
- language (CZE or GBR)
- path to SI-log file
- nothing
- FTP host
- FTP user
- FTP password (open)
- FTP local directory on server
- Zoom of print

Read-out SI

Program itself **is not able to operate the read-out SI unit**. Because of this there is a need of installed SIReader produced by SportIDENT (it's been tested with version 2.7). SIReader can read-out the SI card and store the data in CSV file (with the same structure as the *.si file - ReaderUI list format)

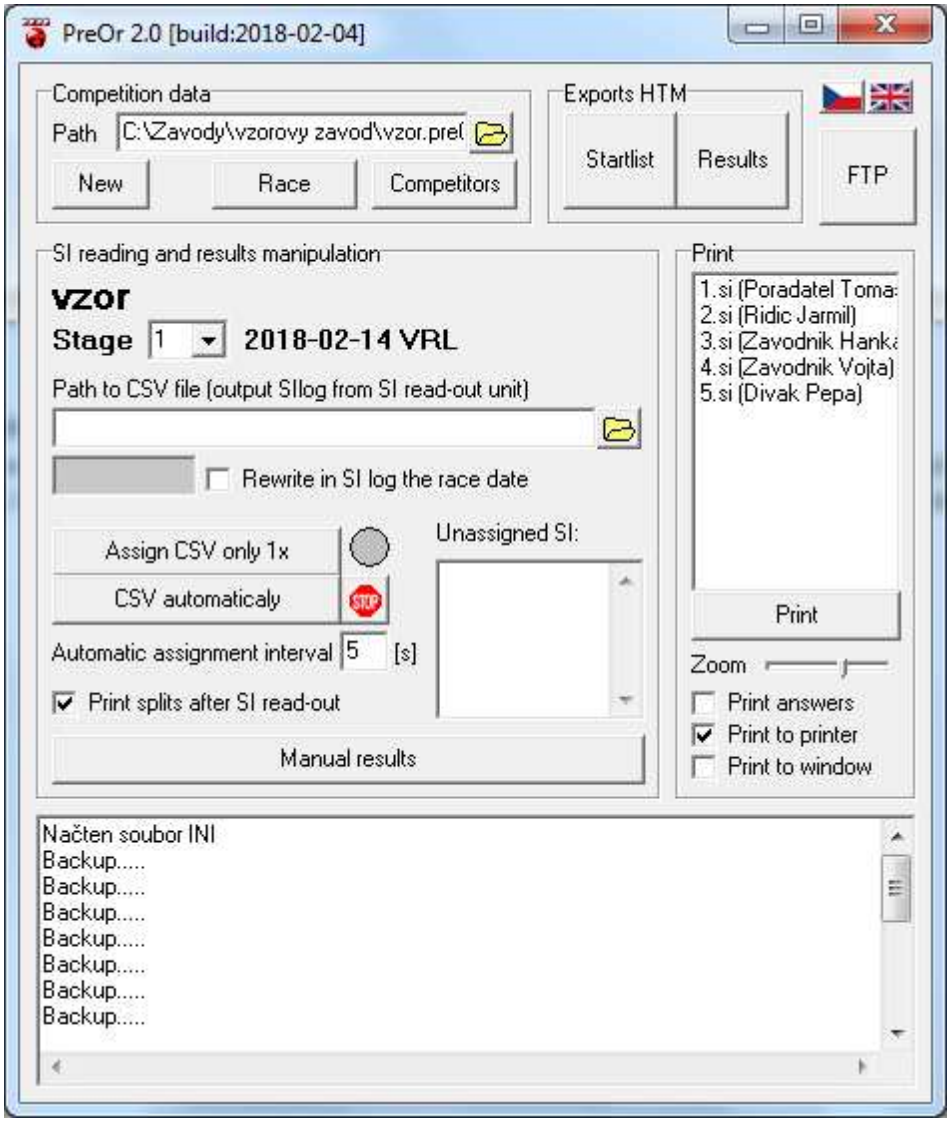
To reading-out the SI cards during the race you have to start SIReader and PreOr together. In both programs you need to set the same path to the generated CSV file. When competitor reads-out his SI card, this data are stored in CSV file. This file is then checked by PreOr.

There is a possibility that sometimes can meet the SI-reading with CSV checking interval. In this case the SIReader stops with an error. Just click to OK and read-out the SI again.



2.0 Main window

Main window shows up after the program is lunched. You can swith between czech and english by clicking on desired flag. Just after the program starts there is not many things operable, because there is no open race yet.



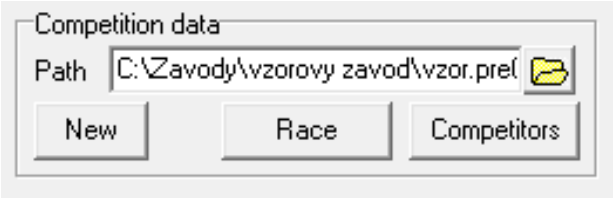
Main window consists of several boxes:

2.1 Competition data

You can acces a previously stored competition data with standart Windows open dialog where you pick given *.PreOr file. This file is then each 5 minuted copied to file BACKUP_*.PreOr (the file *.zavodnici is backup too).

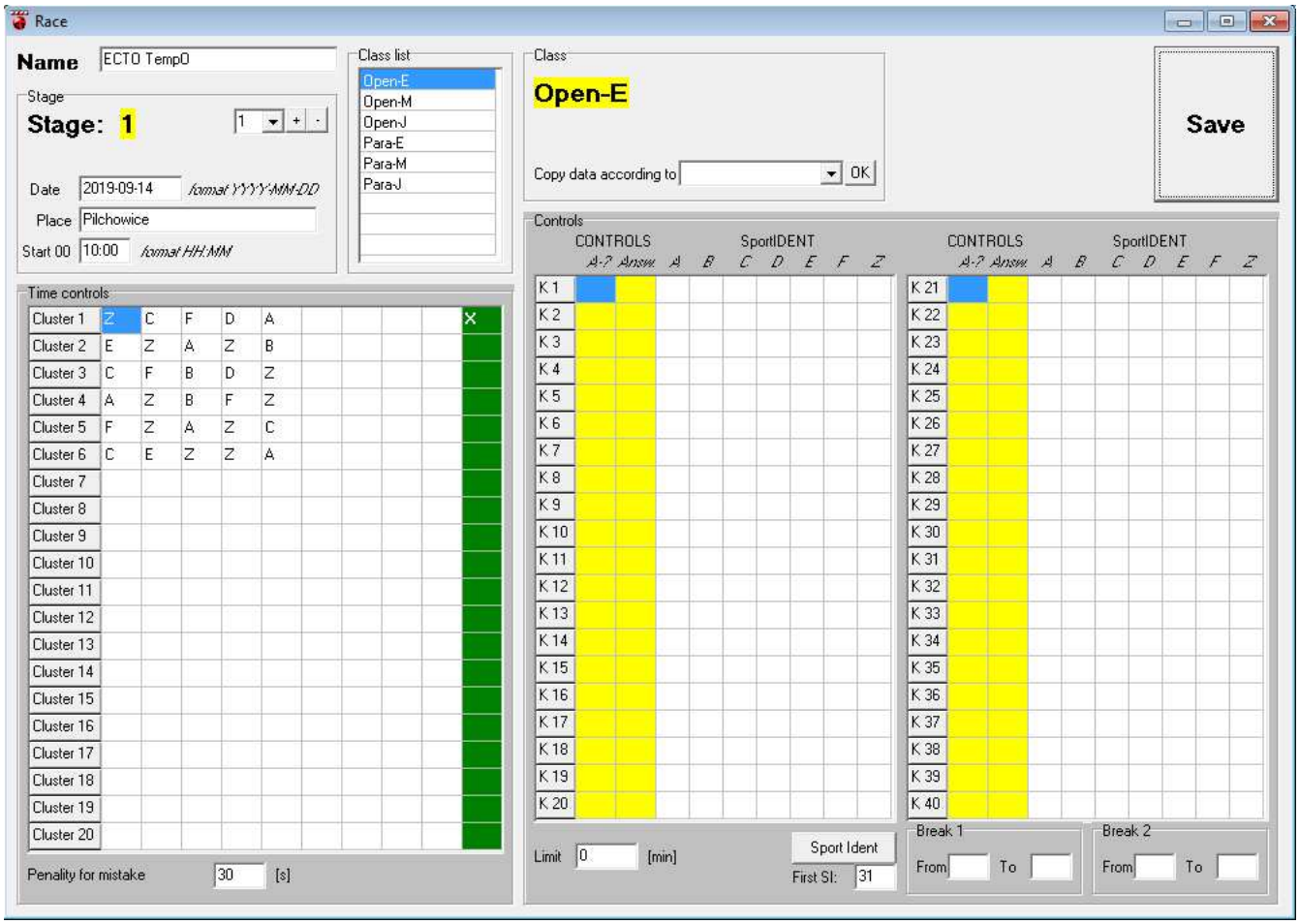
If you need to open a brand new file, use button „**New**“ and to dialog SaveAs fill a name of your file. This name must be written without extension *.PreOr. Only this way the program knows that you want to create this new file.

Is good if you prepare yourself some directory, where your data will be stored later.



2.1.1 Race

Here is a table with all race data. Data should be stored right during editation, but still if you want to close the window and not to lose the data in it, click to button Save.



Name – text field, name ot the competition

Box **Stage**

combobox near *Stage* with buttons „**+**“ and „**–**“

When start, the file includes only one stage. More stages can be added by clicking on button „+“, or stages could be puttet out by clicking on button „-“. The maximum amount of stages is 5.

Date, Place: textfield, input here a date and place of the race. Date **must** be in format YYYY-MM-DD.

Start 00: Start in given stage. It's a textfield, format HH:MM should be kept. In case that you won't start by punching SI unit Start, the time stored here + starttime in startlist is taken as a daytime start for a given competitor

Box **Class list**

Program allows to operate up to 9 different classes. Here you can fill in their names Be precise, for the right function the names shall be filled from up to down without leaving any line empty.

Box **Class**

Highlighted class is active and its data are ready to be edited. If **no class is highlighted**, you still can edit TC and controls, but **the data won't be stored** anywhere!

Is possible to copy the class data to another class. Highlight the class you want to copy the data into and in combobox "Copy data according to" pick the class you want to get the data from. By clicking on button OK the data will be copied.

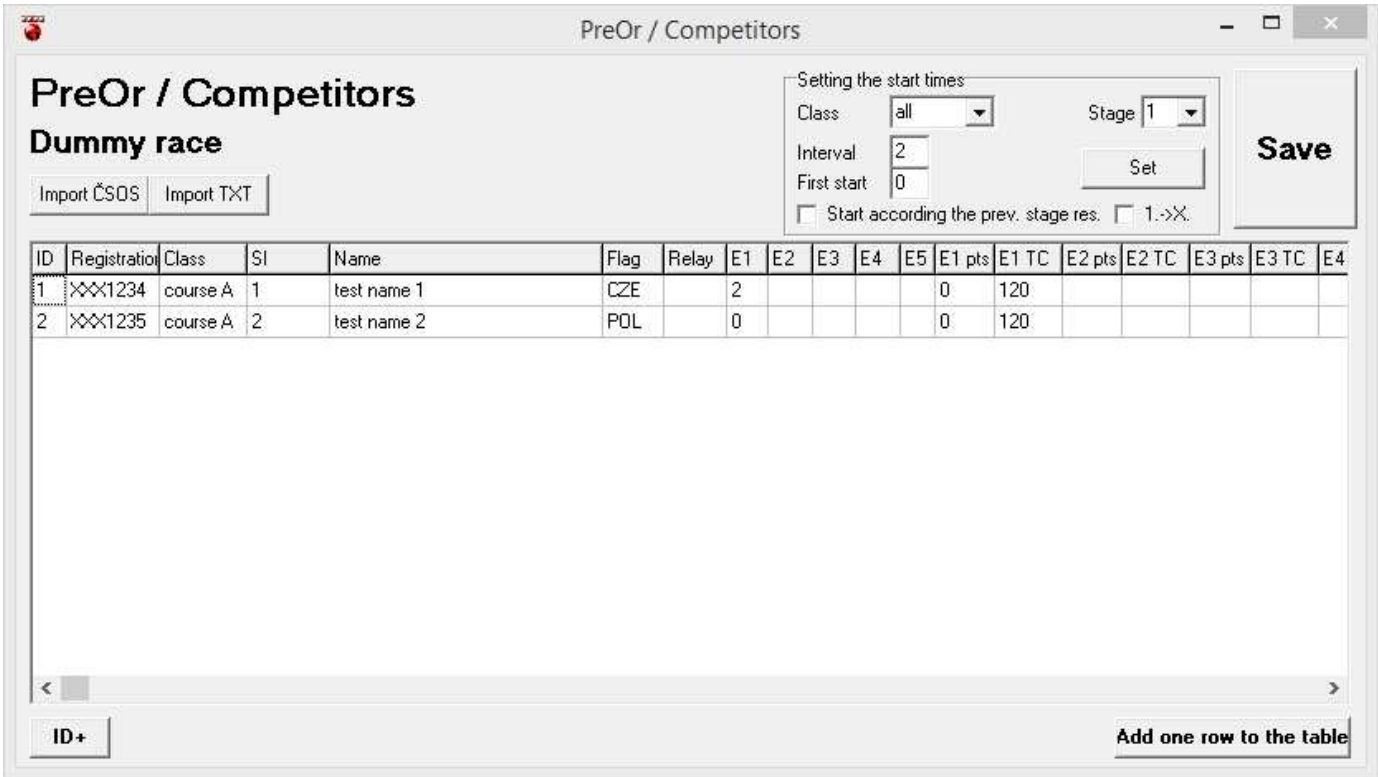
Time controls
Program allows to have in one race up to 20 clusters, each with up to 9 tasks. In this table you shall fill in the right answers of the clusters. Start with Cluster 1, then 2, etc. **Don't start** with Cluster 2 or higher and don't left any empty cluster between already filled!
Green column at the end of the table is used in case when you need to cancel one time cluster from the race during the race. If you want to do so, just write to canceled cluster capital „**X**“. This cluster will not be counted into the final results.

Controls
Program allows to operate the race with up to 40 controls with flags A-F. In yellow columns fill in the amount of flags on each control by standart form (A, A-B, A-C, ...) and the right answer (A,B,Z,...). In case that some control is cancelled, just rewrite the correct answer to X and recompute the results.
The rest columns are for corresponding SI units numbers. You can fill them automatically by clicking on button "Sport Ident". You can set a first number on SI you want to use. The next one are increased by one.

Box **Break 1** and **Break 2**
The race (the course time) could be interrupted. You can arrange it by punching SI unit (for example) "Break" and continue by punching the "Continue" SI unit. Numbers of these SI units shall be filled in a propriete fields. Time between "From" and "To" will be deducted of the finish time.

2.1.2 Competitors

Competitors data table. You can edit all, just be careful with your edits to not put the program to some unstadart condition. Otherwise there could be some cases that you will need manually update the data.



New line (new competitor) you add to the table by clicking on **"Add one row to the table"** placed under the table.

Table can import a textfiles. Button "Import ČSOS" imports the file exported from czech entry system ORIS. You can import in fact any TXT file by clicking on "Import TXT". You need then keep the projected order and widths of each column in entry dialog (model line is over the table). **DO NOT USE a tabelator!** For a free space use a space bar!

Lines can be deleted by clicking the right mouse button over the line you want to put away. Pick then the first Pop-up menu line "Delete line...". Deleting is final, no undo function is implemented!

ID – unique competitor's number, is forbidden to use one ID for more then one competitor (program allows it, but consequences are on operator's responsibility). ID's can be automatically filled in by clicking on button „**ID+**“ under the table.
Registration – text field (length 7) with no influence on functionality. It's just putted to HTM exports
Class – class in where given competitor compeete. It is very suitable to keep the class name the same as it is defined in Race dialog (Case sensitive). If you fill the class wrong, the competitor should not be recognised in SI-reading process.
SI – SI card number. Same situation as at the ID, this SI can't be used more then ones in one competition. If you don't use SI for the results (using paper competition cards instead), still it is good to set at least any imaginary SI numbers.
Name – competitor's name
Flag – you can fill with a 3-letter abbreviation of the country whose flag you want to use. It has influence to nothing but displaying in HTM exports. As alternative you can use some club symbols (if you have them). Still you use a 3-letter code and in Flags you need the same named JPG files
Relay – relay number. Relays can have up to 5 members. Filled number identificate the competitors in one relay. It is used only when the relay race is setted. If the race is not a relay race, it is possible to let it free.
E1-E5 - Start times, it is possible to generate them automatically
E1 pts, E1 TC, E2 pts, E2 TC, … - Each stage results. Results are filled in automatically when you once generate the HTM results. Is possible to manually overwrite them, but they are rewrited again when you again generate the results for given stage.
May have effect when you need add some results to the race and you have no data of this race. Then you write this data to the table as the E1 (or any other unused E?).
Box **Setting the start times**

Stage – for what stage you want to set the start times
Class – pick a class for which you want to set the starttimes. You can pick all or just one...
Interval – start interval (in minutes). Is possible to set any interval, for example 1,5 minutes
First start – since when the given class starts
Checkbox „**start according the prev. stage**“ – doesn't set the start randomly but according to the previous stage results. The best starts at the end. If the checkbox „**1.->X**.“ is checked, the order is opposite = the best starts first.

Data should have been saved right after the edit, but still before you close the dialog, save your data by click on button Save.

2.2 Start lists

By click on button „Start lists“ the operator is asked to enter the stage for which he wants to generate the start list. The HTM file consists of the startlist is generated for given stage.

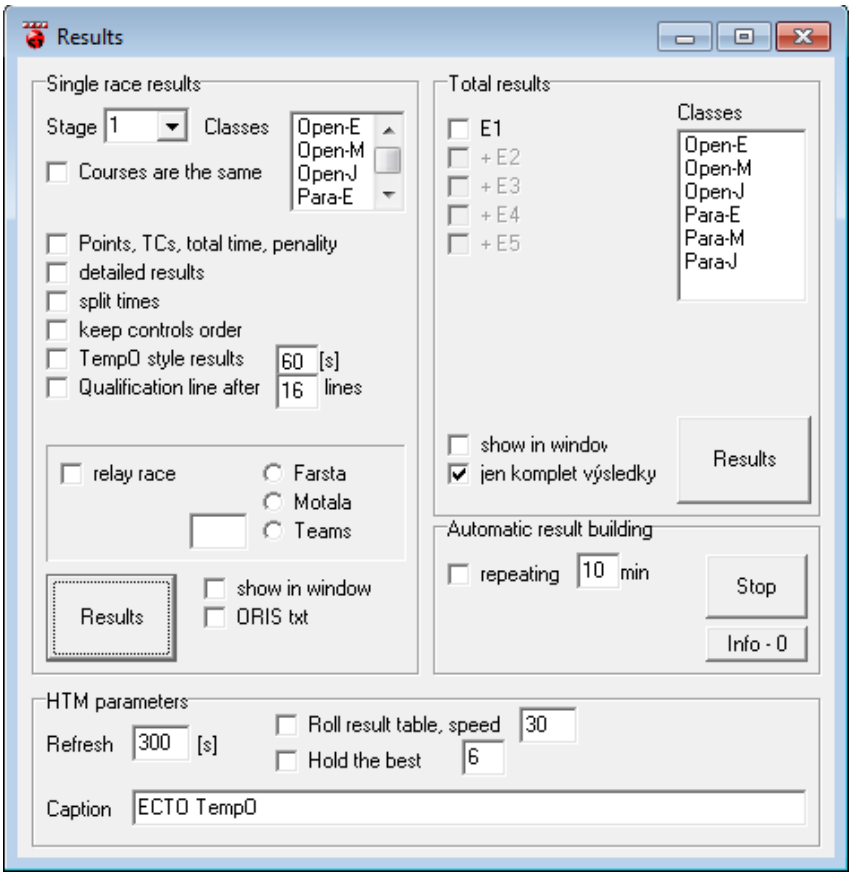
Sorting the start list is not automatic, it used to be managed by operator. It can be done manually in dialog „Competitors“.

When you click right mouse button over the table, the pop-up menu raised. There are several variants how to order the table (according E1, E2, ..., name, ID, ...). Just ckick on one of those and the table will be sorted. Combining of this sorting you can reach sorting for example by class and the start time together.

The start list is always published for every competitor in the table (even with empty start).

2.3 Results

By click on the button „Results“ the dialog window Results raised. There you can set the results output format.



Is possible to generate results for single classes or for all classes together (according which classes are selected). According the checked checkboxes you can make results with names and result order only (nothing checked), with basic details (points, TCs, total course time and penality), extended detail (answers of each control) with possibility to add a split times (how long each competitor solving a control).

There is possible to check the punching order. If controls are not punched in right order, they are not counted into the final score (in detailed results are these answers marked green).

For multiday event, where the part of the competition is a TempO race so you need to merge the results somehow, you can represent the PreO results as a TempO style with accorded penality (you can set the value next to a propriet combobox).

For relays is the result generating a little bit complicated. In fact it is necessary to have the data correcty setted (each leg assigned to right course, all relays have the same amount of legs, personal data, ...). If everything is fine, you need to pick the right relay system. Program name these three systems actually used in TrailO as a Farsta, Motala and Teams. It is not exact, but I don’t know that anybody named these systems yet.

Farsta = each competitor has his own given course. Usually the race is setted the way that there are several clusters, each leg solve each cluster, but with different answers. For results you should pick from the classes list all “legs” (each leg is represented by one “class”). Program then calculate the results automatically.
Beware, there is a lot of possibilities how to produce a fake results (you miss to pick all the legs in class list,...). Always check the results, if they contain all you want!
Limit for this relay should be set for each leg as for the whole relay! It means if you have 3 legs and limit for whole relay is 100 minutes, don’t fill into a “Race” dialog the limit is 33.3, but fill there a 100.

Motala = there is only one setted course and competitors on each leg are picking up from all the controls several of them to solve. Results of the relay is in fact merging these answers to one for whole course.
For results you pick only one course from the class list.

Teams = simple merge of results of all members of the relay.

Each results recalculation is written and saved to a „Competitors“ table. No matter what kind of HTM files you want to do.

Overall results – Works as a simple merge of selected one stage results. HTM file is then saved to a root (where is the *.PreOr file saved)

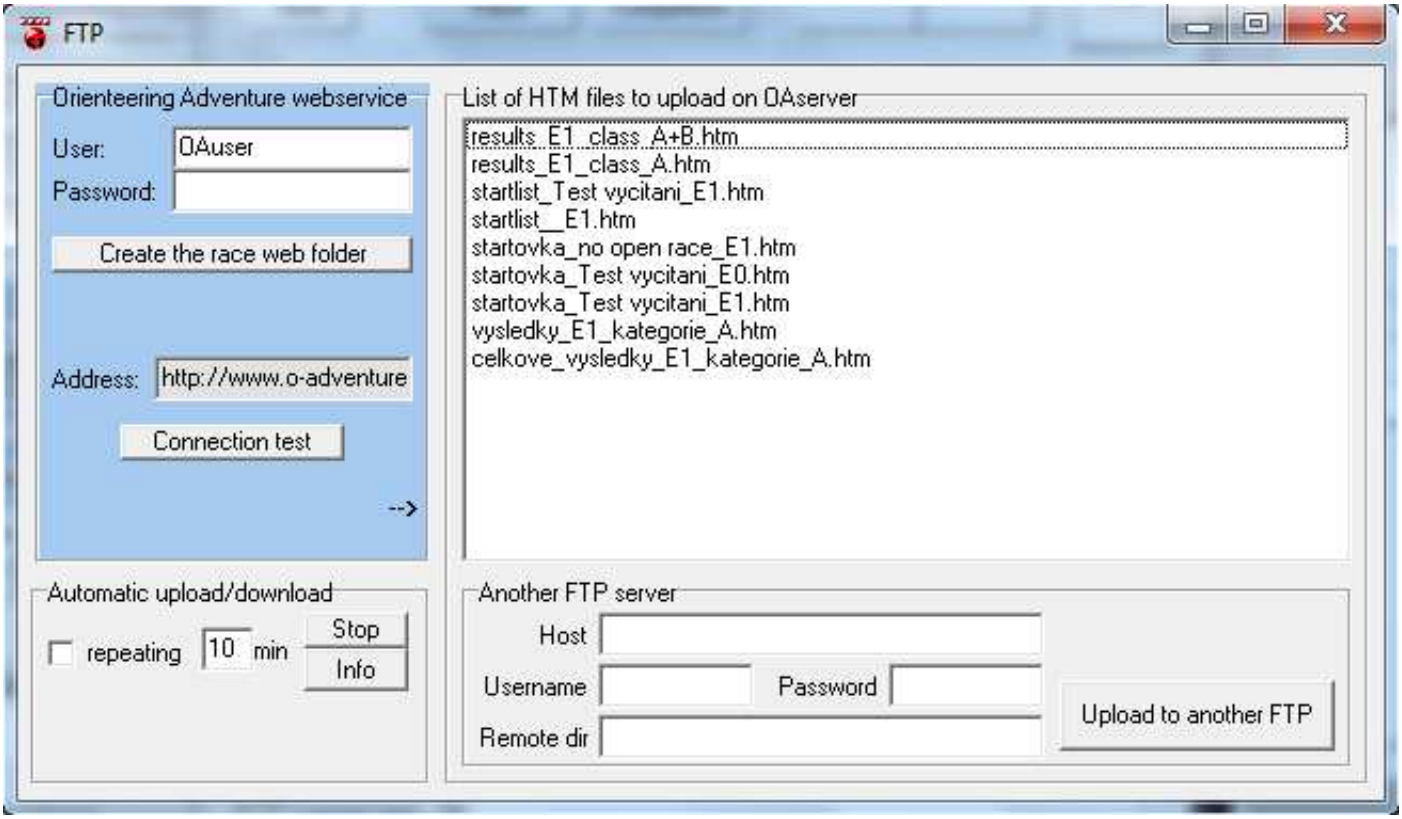
Automatic result generation – It is useful in case that there is any device where you want to display the actual results. Generated HTM file should be updated in the Webbrowser window automatically, no need of additional personal to manage it. All you need is to generate the results again and again.
If the checkbox „**repeating**“ is checked and you click on button „**Results**“, this action would be saved and will be recalled in interval you can set there. Is possible to generate multiple kinds of results (one stage only, total results, one class only, basic results for one class and detailed results for other one, ...). What result shall be generated you can check by click on button „Info“. On main window in information area are then displayed information about all these actions.
All actions are canceled by click on button „**Stop**“

2.4 FTP

Program can sending the data on internet. This is because of online results. No internet=no online results. The idea has been this: Program in offline mode generate the HTM result file and conditionally it can upload the files to some server. And because it’s quite simple operation, it can be done automatically.

Previous version PreOr 2.0 operate with stable connection to any server. Because making the program dumbproof is in this case quite rough, especially when you need automatic and stable transfers (with access rights checking, user settings, etc.), I decided to leave this idea with any server and I provide my own one.

PreOr needs to connect to the internet (specificly to server www.o-adventure.cz) for upload the time controls from the web service (more about it at 3.0 TempO station web service). Data are stored in specific data structure. To be sure about it, there should be several things setted:



2.4.1 Orienteering adventure webservice

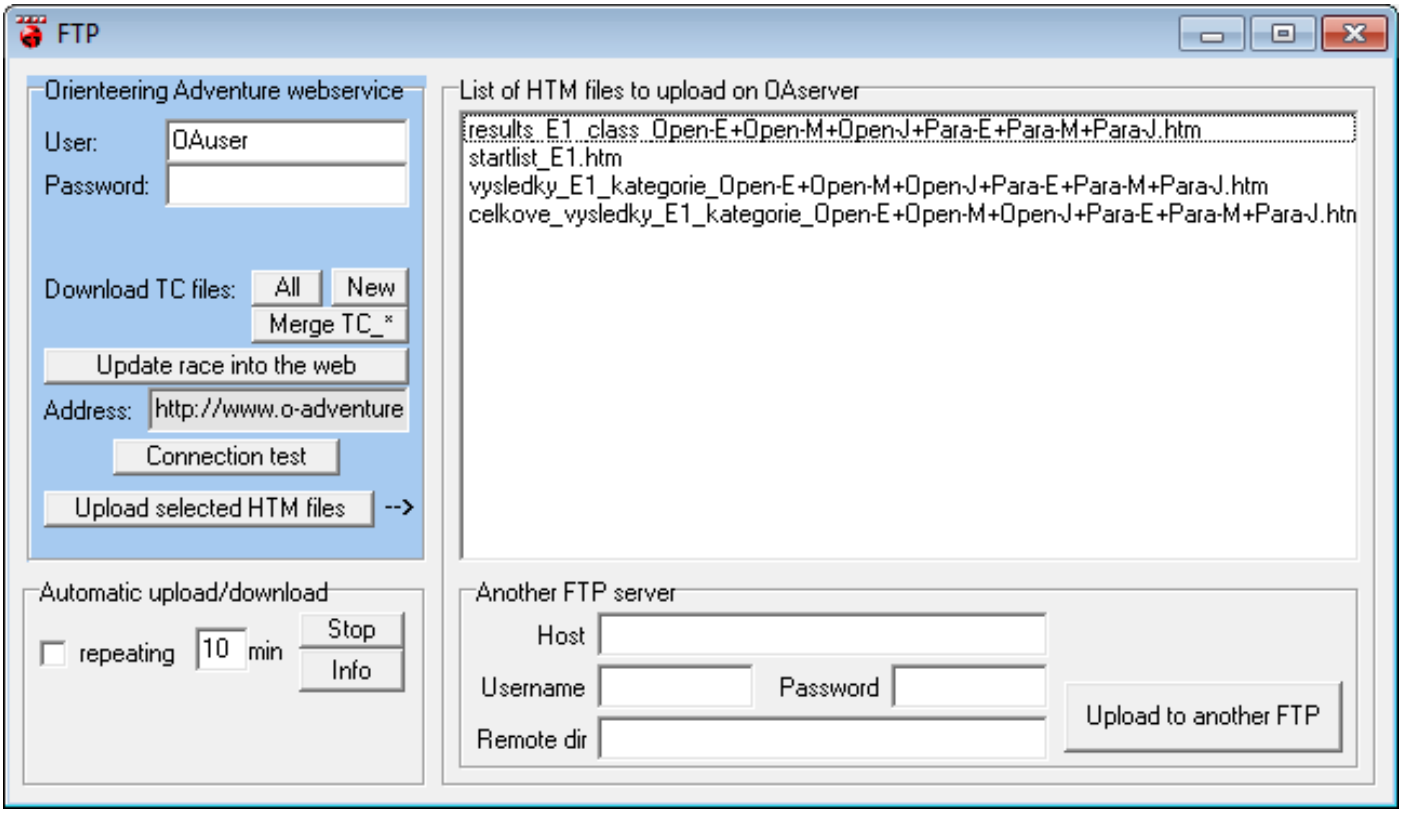
Fill in the User and the Password. User can be the „OAuser“, what is a public account, where everybody can make whatever he wants (in PreOr app of course = creating the race directories and fill it by race data). If you want your oun account, mail me at tomas.lestinsky@atlas.cz and I’ll make it through as soon as possible.

Personal account is good to have in case that in one date there is more competitions and you don’t want data from another competition fit into yours. Nobody can access your own account. All functionalities are the same.

In textfield „User“ you fill the name of your account. Password is for protection of your data. Of course you don’t need it, but consequences are up to you. The same password is then used for enter to TempO Station. In PreOr the password has no impact for anything.

If there is no dir structure for the race on the server (you are trying to access it for the first time), PreOr offers in FTP dialog window in blue field „OA webservice“ only one button „Create the race web folder“. Clicking on it you create on the server the data structure for the race. Race data needed for TempO Station are saved there too. These data include competitors IDs, names, amount of clusters and tasks in it. No right answers are saved on the server! Only the counts.

When this happend, PreOr hides the button „Create the race web folder“ and shows buttons for Downloading Time Controls files („All“, „New“ and „Merge TC_*“) and „Update race into the web“.



2.4.2 Downloading TC files

To download the TC files from TempO Staton click on one of two buttons „All“ or „New“. Difference between them is obvious. „All“ always downloads all the TC data. It coud take some time according to connection speed, but usually when you have more then 50 competitors, you can wait in minutes. And it is very long time when the PreOr is technically blocked.

„New“ button downloads only the data which are new, it means since last download. It’s much faster... of course it is when you download only a few data.

Technically it works this way: PreOr tries to connect to server and check out the directory where it expect the TC data. If the data are there (named „CompetitorID_ClusterNo.tc2“). PreOr downloads them, merge them to one *.tc2 file and save it to PreOr data structure together with *.si files.

When TC is downloaded, you can work with it in Manual results, print it for competitor, ...
TC data stays on server. If you make any manual changes in already downloaded data and after that you download all the data again, your manual changes will be gone.

If you make any changes in race or competitors data, you should update them to web to make it accesable for TempO Station. For this here is the button „Update race data into the web“.

In the blue field there is a textfield Address. It is the internet address where you can find the HTM files for publishing.

Button „Connection test“ is here if you have suspicion that internet connection doesn’t work properly. Click on it and on PreOr main window the result of the test is displayed.

Last button there is an „Upload selected HTM files“. It does what it says. HTM files in PreOr directory are displayed on the right in list. Select some of them and click to this button. Selected files will be uploaded to server.

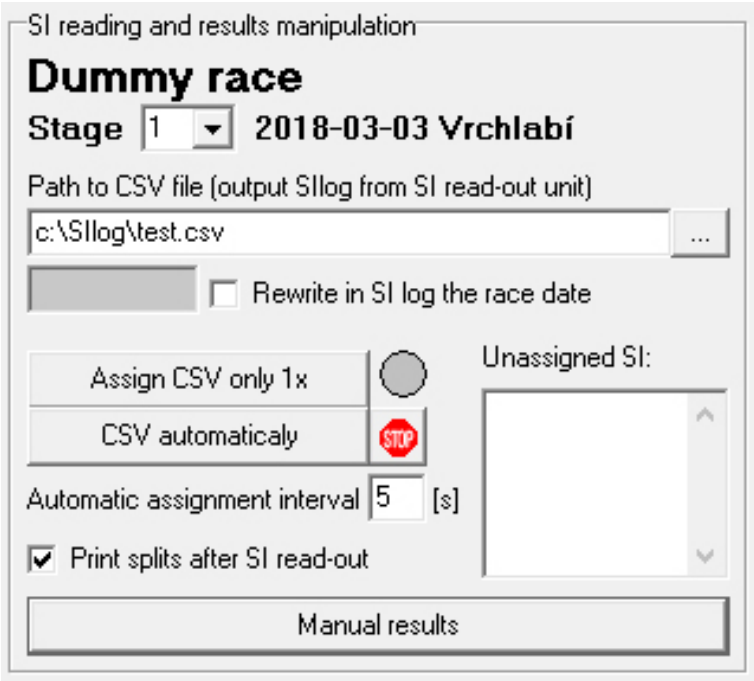
2.4.3 Automatic upload/download

Box **Automatic upload/download** allows repeat the sending in interval you can set (10 minutes in basic setting). This function is up if there is checked a checbox „repeating“ when you click on „Upload“ button. What files are uploaded you can find out by click on button „Info“. In main window in info box there will be displayed all automatically uploaded files.

2.4.4 Another FTP server

Sometimes you may want to save the data to another server. If so, fill in the proper data to box „Another FTP server“ (host, user, password, path). About the path you should be very precise. PreOr doesn’t checking it, if the path is given somehow wrong. If it is so, your data will be saved to root (if you have rights to doing it). The path should look something like this: „./dir/dir/dir/“ . The dot at the beginnig is important!

2.5 Reading out the SI and results manipulation



2.5.1 Reading out the CSV file

There is a very important to set the right stage! If you forget it, easily you can rewrite your previous day results. It is very important to backup the read-out CSV file to have a possibility to rebuild the results of accidentaly rewrited data again.

File to read-out is entered in textfield "**Path to CSV file**".

Sometimes when the SI units are not programmed properly, there can be a different date. You can rewrite it by check the checkbox „**Rewrite in SI log the race date**" and fill in the right one. Keep the date format **YYYY-MM-DD**.

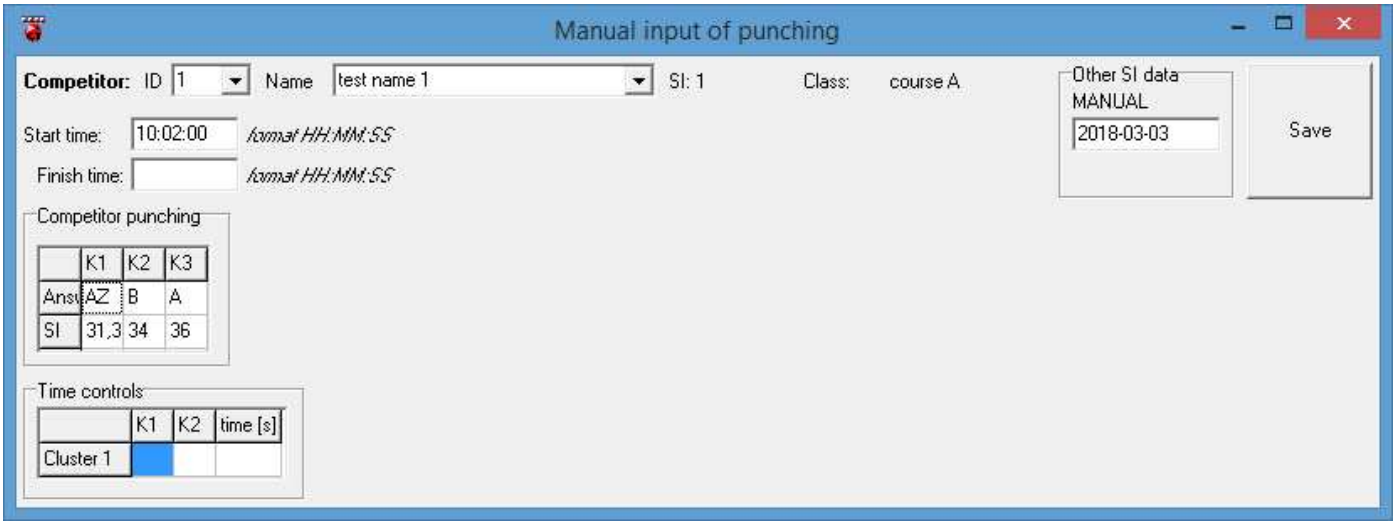
Then you can simply click on button „**Assign CSV only 1x**" or „**CSV automatically**". Program goes through the CSV file and if it finds some new data, it select them and save them to the stage subdirectory as „competitor's ID".si. „CSV automatically" starts automatic testing of the CSV file in interval given by textfield „**Automatic assignment interval**". Click on „STOP" to stop it.

If the printer is connected, you can print the splits right after the read-out. Just check the checkbox „**Print splits after SI read-out**". If there is in CSV a new record, program prepare the print and send it to printer.

If you read-out the SI card which number is not associated to any competitor, you are warned about it in information area in main window. This SI number is added to a „**Unassigned SI**" list. You don't need to stop the CSV checking, just go to „**Competitor**" dialog and set the SI number to a correct competitor. During next CSV check the SI shall be assigned automatically.

2.5.2 Manual results

Program allows you to manually input results data (punching, time controls) and correct SI punching if you need to. You can during this manage the races you organise without SI. You can get into this dialog by click on large button„**Manual results**" in main window.



Dialog window contains:

- two comboboxes for competitor selection (according ID or name), whose results you want to manage
- textfield for competitor's start time
- textfield for competitor's finish time
- if there is setted an interruption, a textfield for times „From" and „To" shows up
- you can edit additional SI data (not important)
- box "Competitor punching"
- box "Time controls"

Competitor punching

In this table you can see primary two lines of data. It's an answers line and assigned SI line (SI unit is assigned according the entered answer). Program primary operate with SportIdent, so if there is no use of SportIdent, you still need to assign a fictive SI-unit numbers to your controls in „Race" dialog. The SI-unit number is added automatically while editing the answers.

If there is a mispunch (two and more answers for one control), two or more SI numbers are shown.

In this table there are more two hidden lines. To get them out, you need to click somewhere to table and roll your mouse wheel (or use your „down arrow“ on keyboard).

Third line is filled by times of punching of each control. Not so important data, you can miss it.

In the fourth line there is an order of punching. It is important data if you want to checking it. In ideal case there are numbers 1,2,3,... This sequence is corrupted when you punch in different order... obviously. If you edit this line, the *.si file will be rewrited. To get it back just delete this file and let the program assign the CSV read-out file again.

Time controls

Here you simply fill in the answers and the time in seconds of each setted cluster.The time must be **integer**!

2.6 Print

The print output is optimized for thermoprinter Zonerich AB320, but shall be functional for all Windows printers.

IMPORTANT! Before you run the program, you have to set the default printer to printer you want to use for the split times! There is no setting for selecting a printer in PreOr.

Because not all printers has the same width/height of paper, is there implemented a bar **Zoom** which alowes you to optimize the output for your printer. For AB320 the ideal value is 10. For PDF Creator seems ideal the value 30. It’s about testing.

There is possible to print any of splits later. Just pick one competitor from the print list and click on button „Print“.
You can set, if you want on the splits mark the bad answers. Check the checkbox „**Print answers**“ – in this case each mistake is marked by a small star.
„**Print to printer**“ you can turn off. It has sense only if the last checkbox „Print to window“ is checked. It will show the splits in special window. It can be used for control what’s going to print without wasting the paper. Or of course, you can want not to print the splits... ;)

3.0 TempO Station

TempO Station is a web application which communicate with PreOr and is here because of recording the answers on TempO controls/clusters and sending them to web. This app you can launch on every device with ability to browse the internet = no need to install anything.
App is here: http://o-adventure.cz/index.php?stranka=software on the right side.

For entry to the app you need your Username, the same you use in PreOr. Then click on Start.

Opening page is very simple, just a title and datums of your competitions (which you uploaded into web before by PreOr). Pick a race and click on Select.

The app loads data stored on server and goes to the next page. Here you put your password (given by PreOr, case sensitive) and select a cluster of the race where you want to pick the data from. Then click on Select and you will go to the final screen for collecting the answers (collecting screen, described later).
Lower there is a button named „Clear local storage“. TempO Station uses the Local Storage of the device for storing the collected data and it is good to clear it up before you start the work. So click on it if you don’t have any important data in it (like previous measurement). Any data in Local Storage will be now gone.

3.1 Collecting screen

In the collecting screen there are:

- identification, what cluster you are in and how many tasks are there.
- 2 fields for Competitor, where you select in the list the competitor who are you going to record. You can pick him by name or by ID. Doesn't matter which way you pick him, both work the same way. You can measure one competitor many times, but the last data are saved only. Or in another words... by new measure the old ones are rewrited. As the last competitor there is a Dummy. It is for measuring competitors who are not in the list (for any reasons, like last time entering, etc.). This data are not stored, you shoud keep them on paper.
- button START. By clicking on this you start the timer (measuring in seconds) and in the box next to it you see the clock is on.
- Answers buttons. During the measurement you're picking letters A-F+Z according answers of the competitor. If the answer is somehow corrupted, you may mark X. Timer stops right after the last answer is marked. Recorded data shows in textfield under the Answers buttons. Here you can correct it as usual text handling before you save it.
- Save to Local Storage. If you are lucky with your recording, click on „Save to Local Storage". Success of this you can check by the number in the button. It is increased. The record is saved even when you change the recorded competitor or ID.
- Post storage to web. This button send all Local Storage data on web, where the PreOr can download them from. Beware, this action leave the collecting screen and return to previous page where you selecting the cluster! You have to go back by refilling password and select right cluster.

Next to the button „Post storage to web" there is a small box. In fact it is an I-frame, floating frame with the Posting script only. It means that every 5 minutes this script automatically posting all data to server without disturbing the operator.
It has one weekness – internet connection. If you lose the connection in time when this script is trying to send the data, this operation is aborted and works no more. No data since this are posted. But no stress, you can upload them manually when you reach the internet again... by click on the button „Post storage to web". If you want to work the automat again, you need to reloading the collecting screen.

The application has been written in PHP with parts in JavaScript (aspecially the collecting screen). It means that in some cases you can work without the internet. When you have the connection, you start the recording (step on the collecting screen). The script downloads all necessary data (competitors, number of clusters, ...) and have it all in memory. You can lose the internet now and the JavaScrip doesn't recognize it. All data management working offline (picking competitors, saving records to Local Storage). Of course, Post storage to web won't work. BUT! If you

accidently click on the button „Post storage to web“, the app will try to connect. It left the collecting screen, but without the internet it stops with an error. And you won’t be able to return to recording!

Not only for this, it is good to have an sheet of paper with table of competitors and room for their answers. Every answer recorded in TempO Station you should keep as backup in the paper too! Anything with your device can go wrong and you don’t want to corrupt your race because of device malfunction.

4.0 What’s new

Changes to previous version:

- FTP module was reestablished, so the whole FTP management has been changed. Important issue is that now PreOr is using the webservice of Orienteering Adventure website to manage the time controls data using „TempO station“ (described in 3.0 part)
- You can now cancel one time cluster (green column) at all if something there goes unexpectedly.
- Several minor improvements