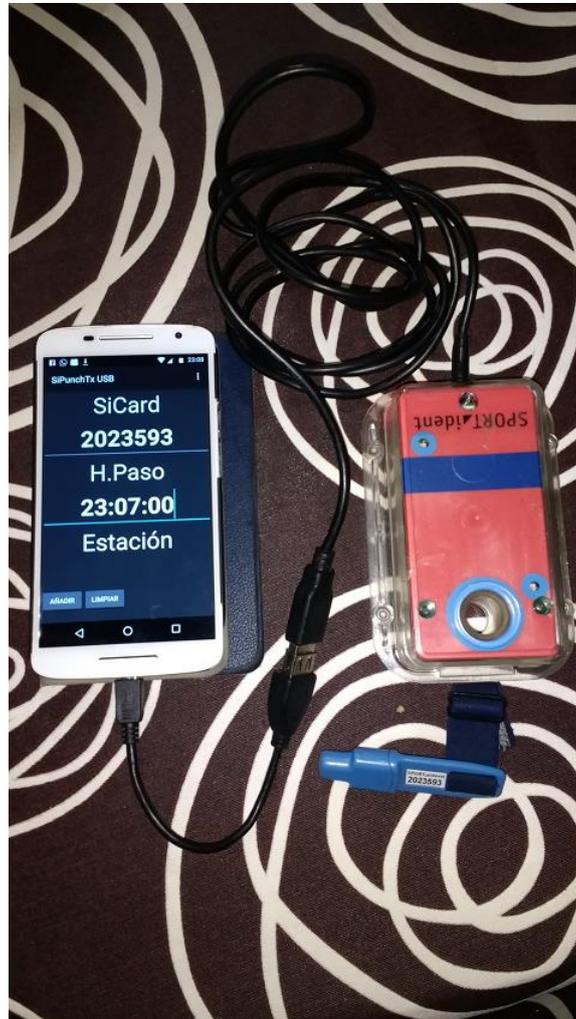


Intermediate Control Points

Rogaine. Unofficial results during the event



Intro

The idea is to provide a mechanism for **counting scores during a Rogaine-type competition**. To do this, we take advantage of an expansion of functionalities of both the Intermediate Control Points system and the Android Smartphone app for sending readings (we will use readings, punches or follow-ups interchangeably)

The current version of the app allows the connection, via USB, of a Sportident station in control mode or a **station in readout mode**. In the first case, when a Sportident card is inserted, a single reading is sent to the server with the SiCard, Time and Station data (see image above). In the second case, the card is downloaded and all the readings it contains in memory are sent (**no card content is erased or any additional marking is generated**)

The current version of the web client allows you to create an event, import data from participating teams, enter readings from various possible sources, and unofficial counting of scores.

Conditions for counting scores

- A Rogaine is long. To offer an account during the event it is necessary to have some points of the route that the teams pass through, at various different times of the day
- A marshal with a Smartphone, the app and a readout station would be located in the appropriate places, configured to transmit the readings to the event on the server.
- In order not to form a bottleneck in the field, the unofficial counting system only requires the readout of one of the SiCards of the team members (the rule that all members punch in less than 1 minute interval does not apply)
- The score given by a control is assumed to be the value of ten of its number. For example, control 38 gives 3 points; control 104 gives 10 points, etc.
- If finish control readings are sent then the system can count the race time and use it as a tiebreaker for equal points between teams
- No possible bonuses, penalties or neutralizations are applied

IMPORTANT NOTE: see appendix at the end for a more complete option in which different scores can be defined for the controls, a time limit and penalties for exceeding time.

Important notice

This is not a product. It's just the result of a benchwork where the author implements and tests ideas and solutions related to the sport of orienteering and IT. So, there are no fancy designs, complete reference guides or user's support.

Before going on, it would be interesting to familiarize yourself with the original follow up and integration system with OE2010 because the introductory document explains the use of the app and the web client.

https://jaruori.es/cpiminimo/intro_en.pdf

User's Web Side

To manage an event it is necessary to create and configure it from a website. The web pages of the user part are at the following address:

<https://jaruori.es/minintro.jsp>

User's Smartphone Side

Only Android devices with USB-OTG capability are allowed.

A Sportident station connects to the smartphone via a USB-OTG cable. The smartphone runs the application, which can be downloaded from the Play Store, searching by its name: SiPunchTxUsb

In order to use this application and the ability to connect to both a control station and a readout station, it is mandatory that the device has Android version 8 (Oreo) or higher

Options for sending punches

In order to upload readings to the server we have several options:

- Smartphone + App connected to a control station. Only the current punch is uploaded (SiCard, Time, Station). It is an unattended mode of operation. It is the one normally used to establish a typical radiocontrol of an Foot-O or MTBO event
- Smartphone + App connected to a readout station. Uploads all the punches in the SiCard's memory. It is a mode normally attended by a marshal
- Smartphone + App not connected to a station. A marshal can manually upload the readings, writing the card number or race number of the runner or team, optionally a time (if it is not written, the current time is sent) and a control station (if we are always located in the same place, just write it the first time and then it is maintained in the rest of the uploads)
- Website, handwriting. A marshal can manually upload readings once logged into the event (<https://jaruori.es/login.jsp?cLang=en>)
- Website, massive upload from file. A marshal can annotate readings in a text file in CSV format and upload them periodically.

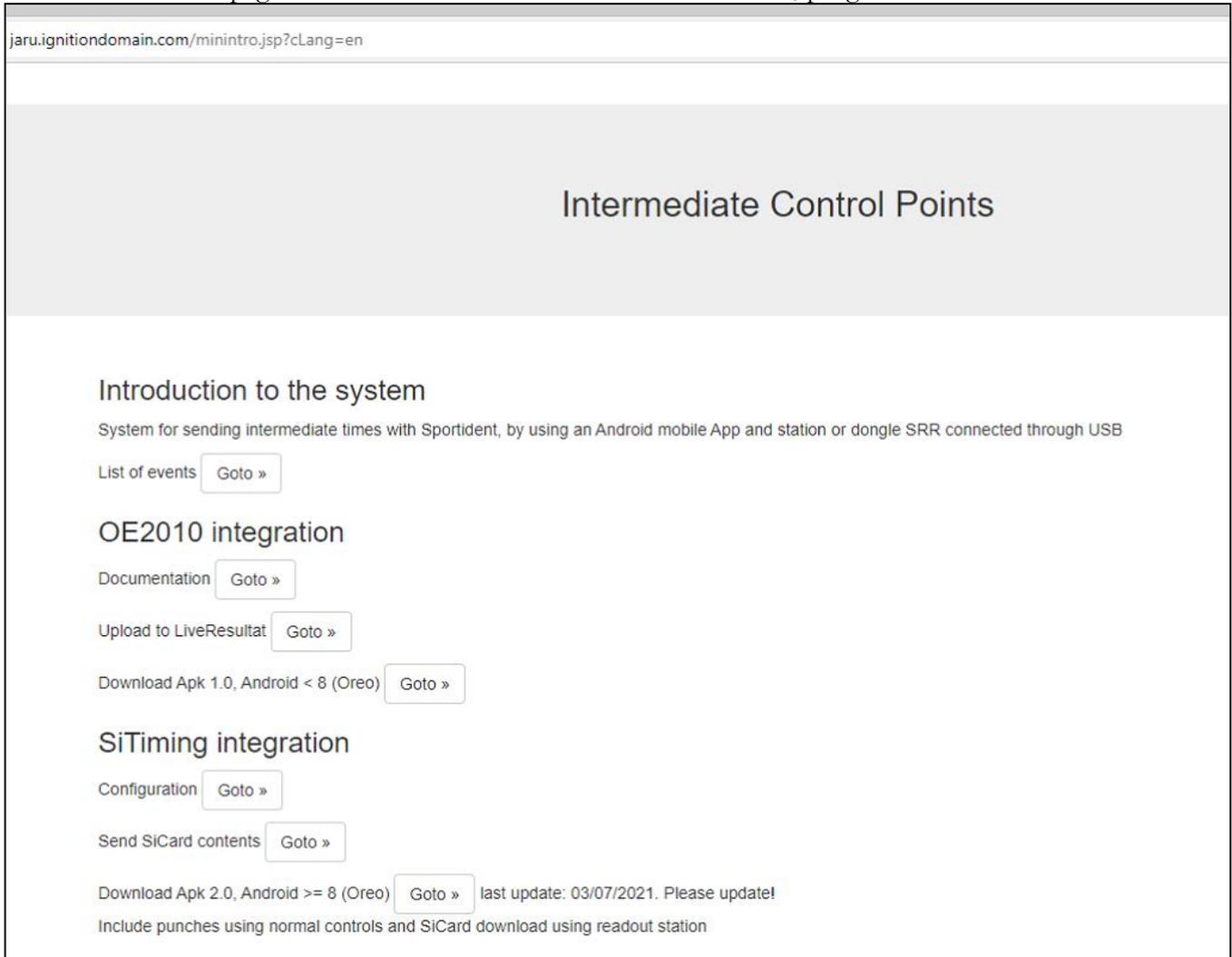
IMPORTANT. The system will only provide useful information to the public during the event insofar as it is possible to download / upload the readings of the electronic cards of the teams at strategically selected points based on the possibility that all (or large part of) teams pass through these points at various times during the event.

IMPORTANT. The system will not be able to offer useful information if there is no close involvement on the part of the organizer. The course setter is the one who can design a route that eases obtaining the information. A sufficient number of collaborators is the way to spread out on the ground and capture the information.

IMPORTANT. The date of the collected punches is taken by default as the current day. The system will compute scores by control stations, not by the date on which they occurred. If the event lasts several days and a Start station has been used then the count of time for tiebreakers will be wrong. Simply use pre-assigned start time instead of a Start station. If the event lasts one day, there will be no problem. There are some options to consider the use of dates on a programming basis, based on the date of the event and a relative count of days that is stored in the electronic cards; maybe in the future.

Appendix. Snapshots from the Web Side

The website's homepage allows us to access the download of manuals, programs and list of events



jaru.ignitiondomain.com/minintro.jsp?cLang=en

Intermediate Control Points

Introduction to the system
System for sending intermediate times with Sportident, by using an Android mobile App and station or dongle SRR connected through USB

List of events [Goto »](#)

OE2010 integration

Documentation [Goto »](#)

Upload to LiveResultat [Goto »](#)

Download Apk 1.0, Android < 8 (Oreo) [Goto »](#)

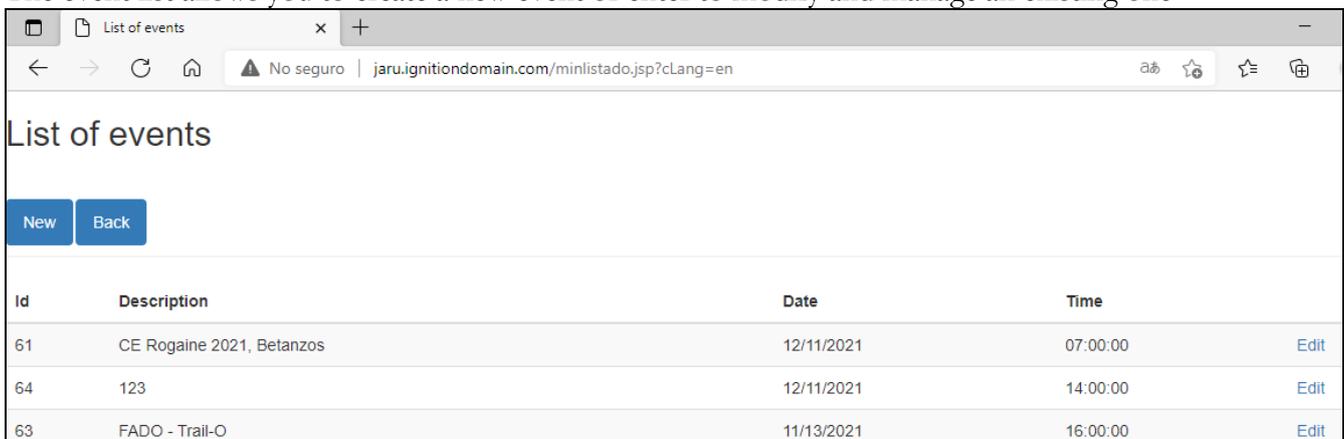
SiTiming integration

Configuration [Goto »](#)

Send SiCard contents [Goto »](#)

Download Apk 2.0, Android >= 8 (Oreo) [Goto »](#) last update: 03/07/2021. Please update!
Include punches using normal controls and SiCard download using readout station

The event list allows you to create a new event or enter to modify and manage an existing one



List of events

[New](#) [Back](#)

Id	Description	Date	Time	
61	CE Rogaine 2021, Betanzos	12/11/2021	07:00:00	Edit
64	123	12/11/2021	14:00:00	Edit
63	FADO - Trail-O	11/13/2021	16:00:00	Edit

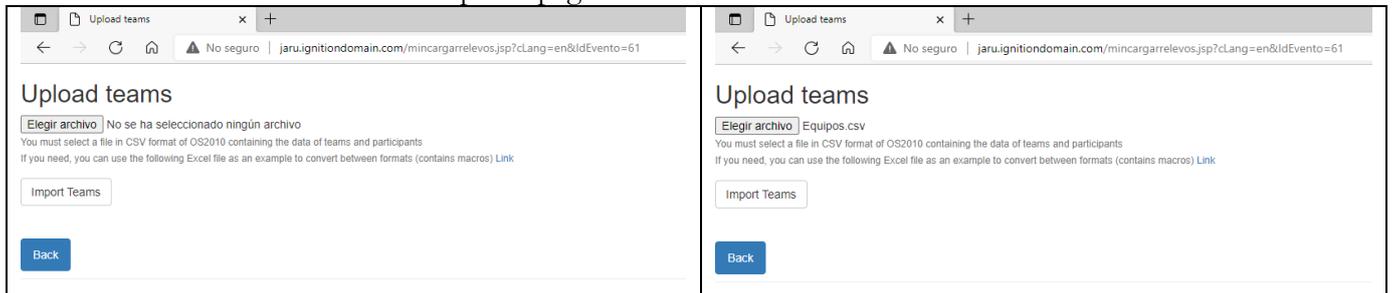
To **create** a new event you have to enter all the data. The start date and time is local to the event. In source you have to select **Minimal Event**. In the event type you have to select **Rogaine** to be able to handle the specific functions

When accessing the **modification** of the event, the basic data can be edited but also certain functions of configuration and management of the event can be executed

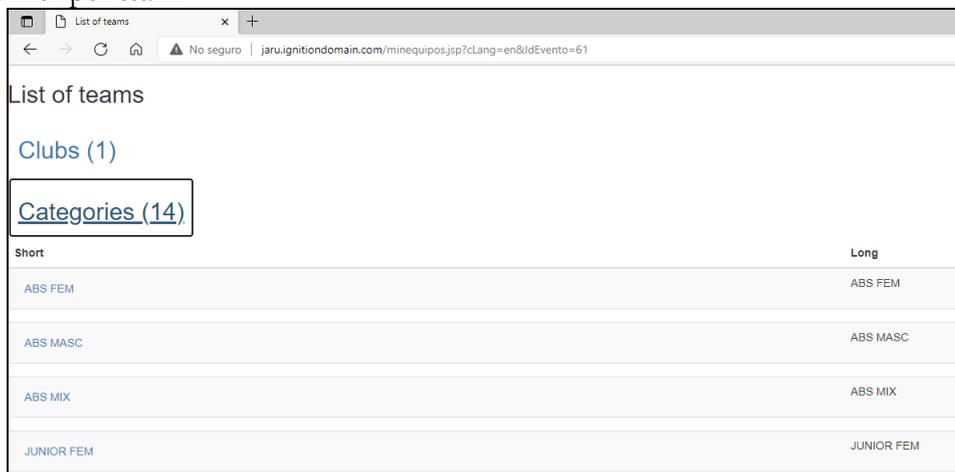
The main steps are as follows:

- **List of teams/Load file of teams.** It is a preliminary configuration step. With a single file, in CSV format of the OS2010 program, you can import all the information of: teams, runners, Sportident cards, bib numbers, categories and clubs
 - From the file upload page you can get an example file. It is an Excel file with macros; the OS2010 format can be created from a typical registration file in OE2010 or OEScoreV12
 - The list of existing teams allows you to change some basic data: SiCard associated with teams or runners, start and/or finish time
- **List of uploaded punches**
 - Individual punches can be deleted from this page
- **Write individual punches**
- **Load punches massively** from a file
 - From the upload page you can get an example file. It is a CSV file with several columns for editing the necessary data
- **Delete all punches**

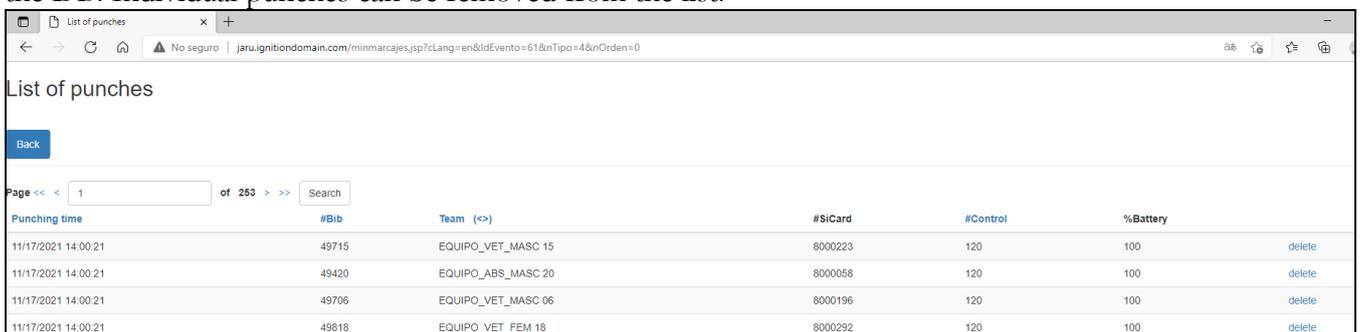
To upload a file of teams, you have to compose a CSV file with the format of the OS2010 program. It can be easily generated from a typical entry file in OE2010 or OEScoreV12 format using the sample Excel file that can be downloaded from the upload page.



The list of teams and runners allows you to check the imported data and also edit any last minute changes of SiCard. Note: for internal use of the program, the team is associated with the SiCard of the first of the runners. In case of being an individual competition, the same teams file must be uploaded, only that it will have a single runner per team.



The list of punches allows a timekeeper, marshal or organizer to see the content of the readings stored in the DB. Individual punches can be removed from the list.



Individual punches can be uploaded. The team / runner can be identified by team bib, rider bib or SiCard number (only one of the three data is mandatory). The time is not mandatory. If nothing is put on, the current one is taken. The control station number is also mandatory, to identify the control they have passed through.

The screenshot shows a web browser window with the title 'Follow-up of control points'. The URL is 'jaru.ignitiondomain.com/seguimiento.jsp?cLang=en&ldEvento=61'. The form contains the following fields:

- Team Bib#
- Runner Bib#
- #SiCard
- Punching time (HH:mm:ss)
- #Control

At the bottom of the form, there is a 'Send' button and a blue 'Back' button.

The punches can be uploaded massively from a CSV file that contains the same data as when it is registered manually. In this case, the time is a mandatory data.

The image shows two side-by-side screenshots of the 'Upload punches' web form. Both screenshots show the same form with the following elements:

- Form title: 'Upload punches'
- File selection: 'Elegir archivo' button.
- Instructions: 'No se ha seleccionado ningún archivo' (left) and 'marcajes495.csv' (right).
- Form description: 'You must select a file in CSV format containing only four columns: Bib#, SiCard (only needed one of both), control & time (HH:mm:ss). If you need, you can use the following CSV file as an example Link'.
- Buttons: 'Import Punches' and a blue 'Back' button.

When returning from the import, the page shows the number of records that have been processed.

The screenshot shows a web browser window with the title 'Modification of an event'. The URL is 'jaru.ignitiondomain.com/minmodif.jsp?nError=0&cLang=en&cOrden'. The page displays the following information:

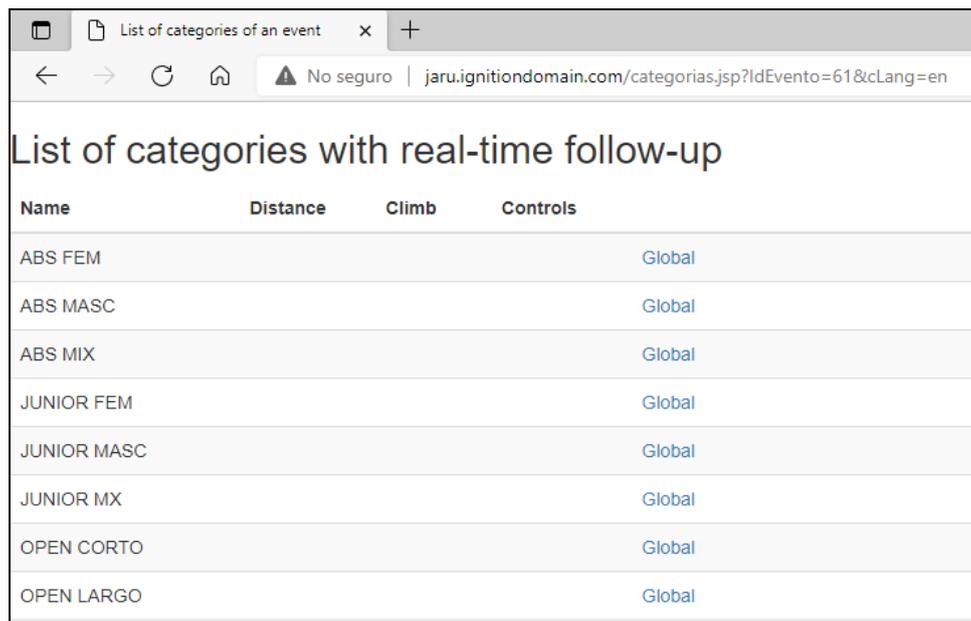
- 1800 records processed
- Form title: 'Modification of an event'
- Description: CE Rogaine 2021, Betanzos
- Type: Rogaine

All of the above is a private part that can only be accessed by entering the username and password that are associated with the event. In order to publish the unofficial scores of the teams during the development of the event, some public access pages are available.

A link to the event results page can be established on the organizer's website. The syntax of the web address is as follows:

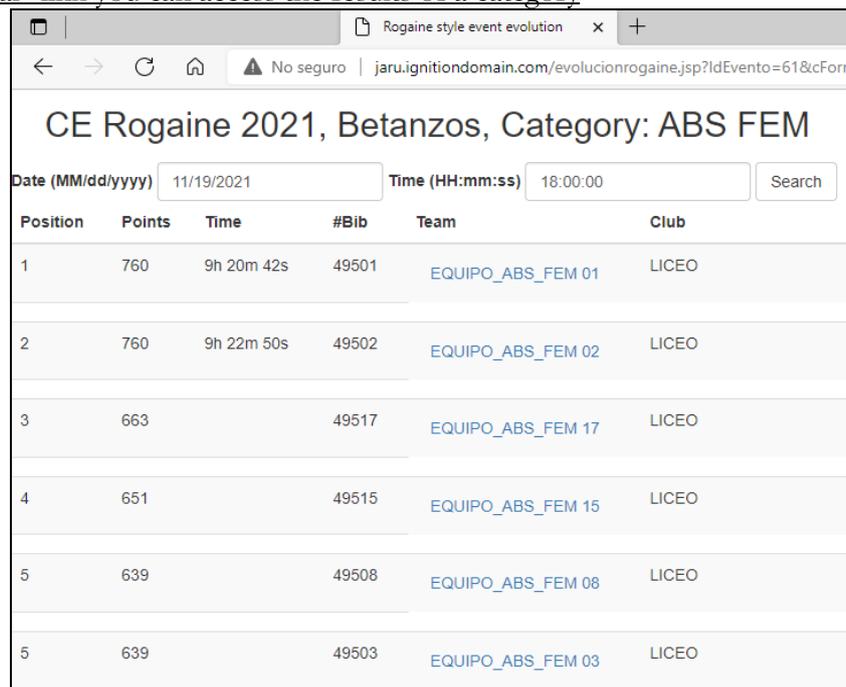
<https://jaruori.es/categorias.jsp?cLang=en&IdEvento=nnn>

The value *nnn* must be replaced by the identifier of the event. This value can be consulted in the list of events.



Name	Distance	Climb	Controls
ABS FEM			Global
ABS MASC			Global
ABS MIX			Global
JUNIOR FEM			Global
JUNIOR MASC			Global
JUNIOR MX			Global
OPEN CORTO			Global
OPEN LARGO			Global

Through the "Global" link you can access the results of a category

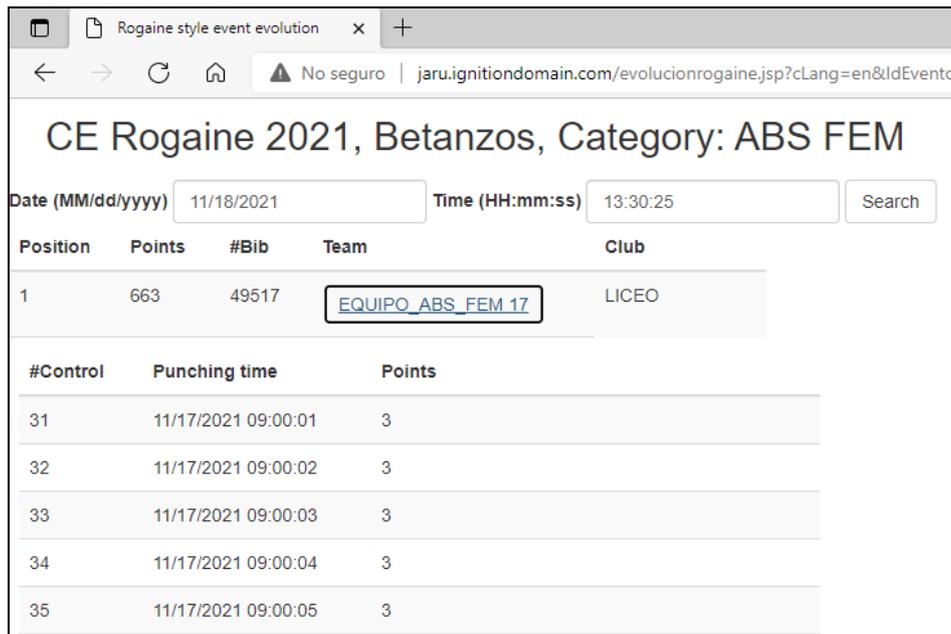


Position	Points	Time	#Bib	Team	Club
1	760	9h 20m 42s	49501	EQUIPO_ABS_FEM 01	LICEO
2	760	9h 22m 50s	49502	EQUIPO_ABS_FEM 02	LICEO
3	663		49517	EQUIPO_ABS_FEM 17	LICEO
4	651		49515	EQUIPO_ABS_FEM 15	LICEO
5	639		49508	EQUIPO_ABS_FEM 08	LICEO
5	639		49503	EQUIPO_ABS_FEM 03	LICEO

By default, the results are calculated with the current date and time value (local time to the event). Therefore, you can check how the results were at any previous time, for example to know the evolution according to time slots: until 12:00:00, until 13:00:00, etc.

While teams do not reach the finish line, the only ordering criterion is the score. If the finish punches are transmitted, the value of the race time can be used as a tiebreaker.

By clicking on the name of the team you can see a breakdown of the readings that have been taken into account to prepare the score count.



Position	Points	#Bib	Team	Club
1	663	49517	EQUIPO_ABS_FEM 17	LICEO

#Control	Punching time	Points
31	11/17/2021 09:00:01	3
32	11/17/2021 09:00:02	3
33	11/17/2021 09:00:03	3
34	11/17/2021 09:00:04	3
35	11/17/2021 09:00:05	3

There are 2 special control station numbers. A station with the number 1 means START. With the number 2 it means FINISH. They do not award points.

*** One way to set a team's start or finish time is through manual punching, indicating 1 or 2 as the station code.

Appendix. Exporting results using CSV format

It is possible to obtain a visualization of the results in text format separated by semicolons, so that an ad hoc post-processing of the data can be carried out in another tool, for example in Microsoft Excel.

A first line of data contains the title data, event name, class, date and time (the maximum date and time from which to collect punches)

The second line contains the names of the fields. If some additional parameters are not specified, which are explained a little further down, the content is: position; points; time; bib#; team; club. From there, a good number of additional fields called control mm are added to record the possible control numbers visited (controls are listed by time of passage, not by control number)

Some URL examples:

1.- To obtain the evolution in CSV of a class of the event taking the punches up to the current date and time

https://jaruori.es/CSVEvolucionRogaine.jsp?cLang=en&IdEvento=mm&cCatego=class_short

2.- Same as above but obtaining up to a specific time

https://jaruori.es/CSVEvolucionRogaine.jsp?cLang=en&IdEvento=mm&cCatego=class_short&cFecha=03/22/2022&cHora=10:30:00

Being the date in format MM/dd/yyyy and the time in format HH:mm:ss

3.- Same as above but with the parameter that adds, after each control visited, the date/time of passage and the score it gives

https://jaruori.es/CSVEvolucionRogaine.jsp?cLang=en&IdEvento=mm&cCatego=class_short&cFecha=03/22/2022&cHora=12:30:00&nExtra=1

4.- Same as above but creating a separate line for each control visited, instead of concatenating all the controls visited by a team in a single line, to facilitate filters and data searches later in a tool like Excel

https://jaruori.es/CSVEvolucionRogaine.jsp?cLang=en&IdEvento=mm&cCatego=class_short&cFecha=03/22/2022&cHora=12:30:00&nExtra=1&nSeparado=1

To be able to do the query you have to know the Id of the event and the short name of the class, but that can be seen when using the URL that shows the information in HTML:

<https://jaruori.es/categorias.jsp?cLang=es&IdEvento=mm>

If the browser gives problems with the use of the symbol / to separate the date and the symbol : to separate the time, the following equivalence can be used:

Symbol / => %2F

Symbol : => %3A

Appendix. Examples of files for loading data

Sample files can be downloaded from the data upload pages. They are as follows:

Import of teams / runners / categories / clubs.

https://jaruori.es/extras/ConversionOE_Equipos.xlsm

WARNING: the import deletes all the existing data and imports the new ones, including punches

NOTE: it is an Excel file with macros. It allows composing the data set in CSV OS2010 format from the usual entry files in CSV OE2010 or CSV OEScoreV12 format. After preparing the data in the entry sheet and running the conversion macro, the contents of the OS2010 sheet must be saved in CSV format.

INFORMATION: the column “start” can be used to set the start time of the teams, using the format hh:mm:ss based on the zero hour of the event. For example, if the base time for the event is 07:00:00, a 00:00:00 value in the column will create a start time of 07:00:00. A 01:00:00 value will become 08:00:00

Massive load of punches.

<https://jaruori.es/extras/marcajes.csv>

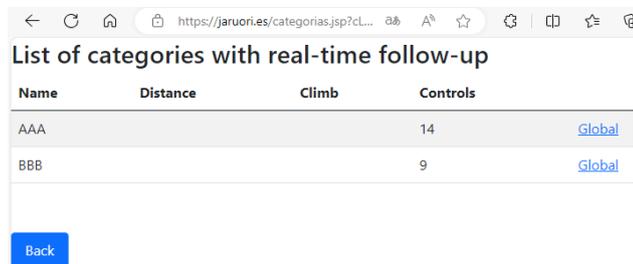
Appendix. Alternative calculation of points. FEDO's system

The simplest and most direct is the option explained at the beginning. It only requires loading the teams and the calculation is done automatically based on the numbering of the controls, counting by the ten.

Menu options for the other event types have been added to provide the ability to manage data from categories, controls, and assignment of controls to categories. This way you can:

- Assign a time limit, in minutes, to each category, and say whether the default calculation system is going to be used (the one explained above) or not (the one explained here). If the time limit is zero, then no penalties will be applied for overtime.
- Assign the existing control points on the terrain and the score they give
- Assign the control points that correspond to each category, so as not to take into account others that do not belong to it
- The penalty for excess time is the one that FEDO (Spanish Orienteering Federation) applies to rogaines, that is:
 - If it is exceeded between 00:01 and 10:00 minutes, a penalty of 2 points per minute or part of it
 - If it is exceeded between 10:01 and 20:00 minutes, a penalty of 3 points per minute or part of it
 - If it is exceeded between 20:01 and 30:00 minutes, a penalty of 4 points per minute or part of it
 - From 30:01, all points are lost (in the FEDO system it implies disqualification)

Some screenshots:



[categorias.jsp?cLang=en&IdEvento=90](#)

Rogaine style event evolution

Category: AAA

Position	Points	Time	Penalty	#Bib	Name	Club	Salida	34	38	41	31	42	44	40	43	36	35	33	37	32	39	Meta
1	3	0h 1m 41s	0	1	1 (Perez 2103653)	Liceo	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2	3	1h 3m 58s	0	3	3 (Martinez 2103655)	Liceo	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
3	2	0h 1m 42s	0	2	2 (Lopez 2103654)	Aromon	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Category: BBB

Position	Points	Time	Penalty	#Bib	Name	Club	Salida	34	38	41	31	44	36	35	37	32	Meta
1	4	1h 0m 13s	0	7	7 (Varela 2103659)	Liceo	●	●	●	●	●	●	●	●	●	●	●
2	2	0h 1m 40s	0	4	4 (Diaz 2103656)	Aromon	●	●	●	●	●	●	●	●	●	●	●
3	2	1h 15m 9s	0	6	6 (Rodriguez 2103658)	Aromon	●	●	●	●	●	●	●	●	●	●	●
4	1	0h 1m 40s	0	5	5 (Gomez 2103657)	Liceo	●	●	●	●	●	●	●	●	●	●	●

[Back](#)

[evolucionrogaineevento.jsp?cLang=en&IdEvento=90](#)

Creation/Modification of a category

Key* (If using OE data, the value of this field will be the Category Id)

1

Name* (If using OE data, the value of this field will be the category's short name) Long*

AAA

Distance

Climb

Controls

14

T.Limit (If you do not use the default calculation, you can set a time limit (in minutes) to start applying penalties. 0=no time limit)

0

Use default punctuation

No

The informal calculation by default does not check controls that belong to the course, it does not penalize for excess time and the assignment of points is automatic taking the tens (31=3 points; 112=11 points)

The informal calculation according to the FEDO system consists of applying a penalty for excess time: the first 10 minutes of excess penalizes 2 points per minute; between 10 and 20, penalize 3 per minute; between 20 and 30, penalizes 4 per minute; after 30 you are disqualified (here 0 points will be added)

In the category you can set a time limit, in minutes

When assigning controls to categories you must define the course controls and write the points that grant

List of Control Points to Categories association

[New](#) [Back](#)

Records: 27

Category	Control Point	Leg	Order	Description	
AAA	1	1	1	Salida	delete Edit
AAA	34	1	2	34	delete Edit
AAA	38	1	3	38	delete Edit
AAA	41	1	4	41	delete Edit
AAA	31	1	5	31	delete Edit
AAA	42	1	6	42	delete Edit
AAA	44	1	7	44	delete Edit
AAA	40	1	8	40	delete Edit
AAA	43	1	9	43	delete Edit
AAA	36	1	10	36	delete Edit
AAA	35	1	11	35	delete Edit
AAA	33	1	12	33	delete Edit
AAA	37	1	13	37	delete Edit
AAA	32	1	14	32	delete Edit

Contact

Javier Arufe, Liceo Orienteering Club, Corunna (Spain)

e-mail: jarufe.geo@yahoo.com

Please, feel free to contact me before creating a new event, just to know about the interest to use the system. Thank you.