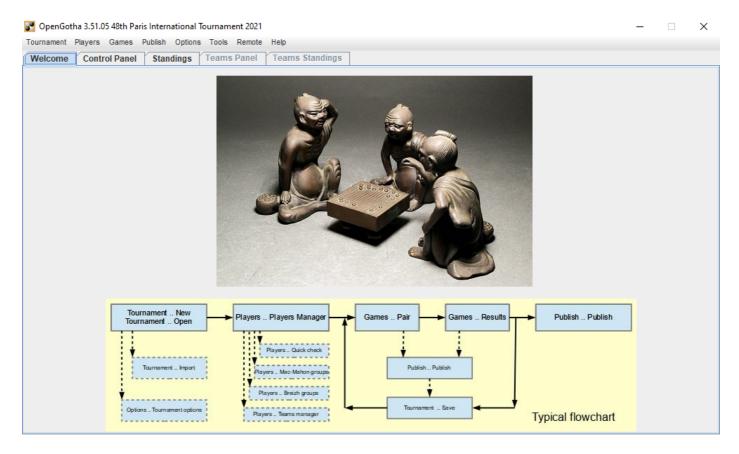
OpenGotha

User's guide



Luc Vannier. May 2021

Table of Contents

Starting OpenGotha	4
Tournament menu	7
Create a new tournament	8
Save facilities	10
Import facilities	11
Players menu	12
Players Manager frame	13
Players Quick check frame	16
Update ratings frame	17
McMahon groups frame	19
Breizh groups frame	20
Teams Manager frame	21
Games menu	24
Games Pair frame	25
Games Results frame	29
Games Round-robin frame	31
Teams Pairing frame	32
Publish menu	34
Contents	35
Parameters	37
Publish	38
Options menu	40
Tournament Options	41
General settings	42
Handicap settings	45
Placement settings	47
Pairing settings	50
Edit clubs groups	53
Team Placement settings	54
Games Options	55
Preferences frame	57
Tools menu	58
Discard rounds frame	59

60
61
62
63
64
65
69

Starting OpenGotha

OpenGotha is downloadable from http://vannier.info/jeux/download/download.htm . After unzip, you get a set of files and directories, including the core file : opengotha.jar.

OpenGotha runs under any operating system (it has been tested under Microsoft Windows, Linux and Mac OS) with a Java Virtual Machine version 6 or newer.

If you do not have Java installed yet, get it from http://www.java.com/en/download/index.jsp

Depending on your operating system, you may start OpenGotha either by a double-click on opengotha.jar, or by a right click on opengotha.jar and "Open with Sun Java Runtime", or by issuing the following command from a Terminal window:

```
java - jar opengotha. jar
```

Running modes

OpenGotha may be run in a Stand-Alone mode, which is the usual mode for small tournaments, or in a Client/Server mode where several workstations work simultaneously on the same tournament. Client/Server mode is recommended for big tournaments.

Stand-alone running mode

Click "Start"

Usually, it is sufficient.

If you get a "Please enter the OpenGotha directory path" do it.

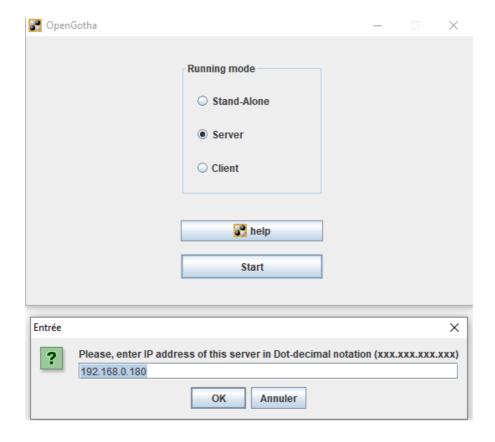
Under Linux this path may look like: "/media/username/xxx" if you saved the opengotha.jar file into this directory.

Client/Server running mode

You can use Client/Server mode if you have several workstations connected in a network. One unique workstation will be the Server. The others will be Clients.

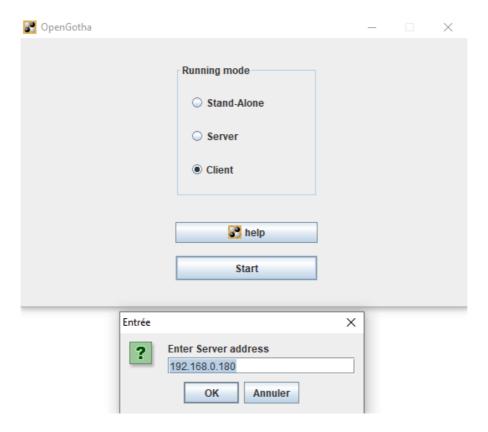
Many functions may be run from the server or from any client as well. But some others may be run from the server only. Server-specific functions are Open/Close/Save functions. Players management functions, Games functions and Options functions can be run equally and simultaneously by the server and the clients.

The server must be started first



A message box invites you to enter the server IP Address. Usually, the pre-written address is correct. But if your computer has several network interfaces, which may occur for instance when you have an Ethernet interface and a wireless network interface, then check the IP address and make sure to enter the address to which the clients will connect.

Then you can start the clients:



Replace the pre-written address by the actual server IP address..



From the dialog box, select the tournament you want to work on.

Tournament menu



Menu items list

New

This opens the Create a new tournament dialog box

Save, Save as ..., Save a copy ...

See: Save facilities

Build test tournaments

You can rapidly build dummy tournaments for test purpose.

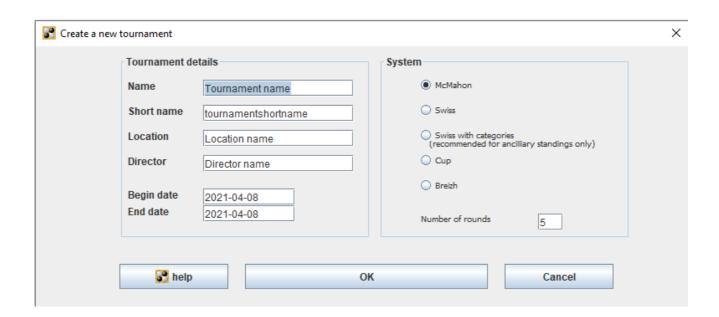
Import

This opens **Import facilities**

Export

Export facilities are now available from the **Publish menu**

Create a new tournament



System

McMahon

McMahon System's placement is based on McMahon Score (MMS).

Pairing is made between players with same MMS.

It is the most popular system and is recommended for nearly all kinds of tournaments.

In OpenGotha, by default, games in McMahon System may be played with handicap.

Swiss

Swiss System's placement is based on Number Of Wins (NBW)

Pairing is made between players with same NBW.

It can be considered as a McMahon system where all players start with 0 as common SMMS (Starting MMS).

In OpenGotha, by default, games in Swiss System are played without handicap.

Swiss with categories

Swiss with categories (Swisscat) system divides players in rank-based categories. Pairing is made internally in each category.

Even if you manage your tournament in McMahon system, Swisscat is interesting for ancillary placements, for example if you want to reward the best kyu players, the best 2-digit kyu players, etc.

Cup

Cup system is inspired from knockout system but players are not eliminated when they lose a game. Pairing is made between players having the same win/lose history.

You get the clearest placements if Number of players = 2ⁿumber of rounds.

Breizh

Breizh system is inspired from McMahon system but Group definitions are more flexible. Breizh Groups may contain 1, 2 or more McMahon groups.

Recommended for small and medium-size tournaments.

Save facilities

Save

The tournament is saved into the default tournament directory/file.

Default tournament directory

The default tournament directory is the last directory where the tournament has been saved to. Before the first save, the default tournament directory is the running directory.

Default file name

The default file name is the tournament short name.

Save as ...

You choose the directory and file name.

The tournament is saved. The chosen directory becomes the default directory.

The file name becomes the tournament short name.

Save a copy ...

You choose the directory and file name.

The chosen directory/file modifies neither the default directory nor the short name.

Use this to save copies of the current tournament.

Work files

After each modification, OpenGotha saves the current tournament to a work file : "runningdirectory"/tournamentfiles/work/"shortname".xml .

This file may be useful for instance in a case of accidental exit.

Import facilities

Import players and games from h9 file

h9 file format is described in Tournament table format

Import players and games from Tou file

Tou file format is described in <u>Le format TOU</u>

Warning

You must be aware that h9 and Tou files contain less rich information than what OpenGotha manages. For instance, Top-group informations are absent.

Import tournament from XML file

The format is specified in Tournament DTD.

You can selectively import players and/or games and/or tournament parameters and/or teams and team parameters and/or clubs groups.

Since OpenGotha V3.23, XML file is the standard format for OpenGotha files. You therefore can partially or totally import any previously saved tournament.

Players menu



Menu items list

Players Manager

This opens the <u>Players Manager frame</u>. from where you can register players, set and modify all players data.

Players Quick check

This opens the <u>Players Quick check frame</u> where you have a quick access to some of the players data : rank, registering status, participation ...

Update ratings

This opens the <u>Update ratings frame</u> where you can have access to the EGF, FFG and AGA rating lists and where you can update players ratings.

McMahon groups

This opens the McMahon groups frame where you can define McMahon top and super groups.

This opens the <u>Breizh groups frame</u> where you can set the Breizh groups and which players will be members of which groups McMahon top and super groups.

Teams Manager

This opens the **Teams Manager frame** where you can define teams.

Players Manager frame

With the Players Manager frame, you can register or unregister players, and modify players data. You normally use it to register players and print the players list at the beginning of the tournament. You also use it during the tournament, for instance to change participation or correct any data.



Click the "Register button" to actually register the player.

Rating Lists

OpenGotha incorporates EGF, FFG and AGA rating lists.

A copy of each of the rating lists is delivered with OpenGotha. You can download up-to-date rating lists by clicking the "Update XXX rating list from ..." button.

These rating lists enable fast and spelling-error-free access to known players. Type in the first letters of the player and known players with the same first letters will show up. If you are not sure of first letters, then use Levenshtein algorithm. OpenGotha will do its best to find players with similar names.

Rating/Grade/Rank

Rating is the information as it appears in rating lists

Grade is the information as professed by the player (xP, yD, zK)

Rank is the information (Dan/kyu) used by the pairing system

A rank will be calculated from the rating as it appears in the rating list.

With EGF rating list,

rating is also named GoR on EGD site

a rating between 50 and 149 will give a 20K rank a rating between 2050 and 2149 will give a 1D rank a rating equal to or above 2850 will give a 9D rank With FFG rating list,

rating is also named Niveau on FFG site
a rating equal to or below -2901 will give a 30K rank
a rating between 0 and 99 will give a 1D rank
a rating equal to or above 800 will give a 9D rank
With AGA rating list,

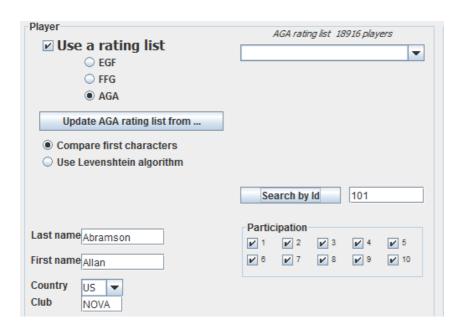
rating is also named rating on AGA site :-)
a rating equal to or below -30.01 will give a 30K rank
a rating between -2.00 and -1.01 will give a 1K rank
a rating between 1.00 and 1.99 will give a 1D rank
a rating equal to or above 9.00 will give a 9D rank

With EGF rating list, you can select the set Rank from Grade radio button. The rank will then be defined from the grade.

Register a player

You can enter (automatically by rating list or manually) players data. Define participation (by default, the player is assumed to participate in all rounds). Define Registration status (Preliminary or Final). Then Register by clicking Register or by typing Enter key. Players data will be editable during the whole tournament by selecting a player in the Players panel, right click, "Modify player", or simply double-click.

Search by Id (AGA only)



Give an AGA Id and click the "Search by Id" button.

Players names

OpenGotha supports all the character sets:



Welcome sheet

The welcome sheet displays general information about the tournament and specific information about the player.

It may be printed out and given to each player after registration.

The Tournament organizer can customize the welcome sheet by editing it.

The welcome sheet is located in [OpenGotha Root Directory]/welcomesheet/welcomesheet.html. A template welcome sheet is supplied.

Edit general information with any text processor, keeping html syntax.

Insert the player-related tokens where desired.

Player-related tokens are:

<name>, <firstname>, <country>, <club>, <rank>, <rating>, <ratingorigin>, <participation>

At run time, the tokens will be replaced by the player actual information.

<rank> is the rank between 30K and 9D

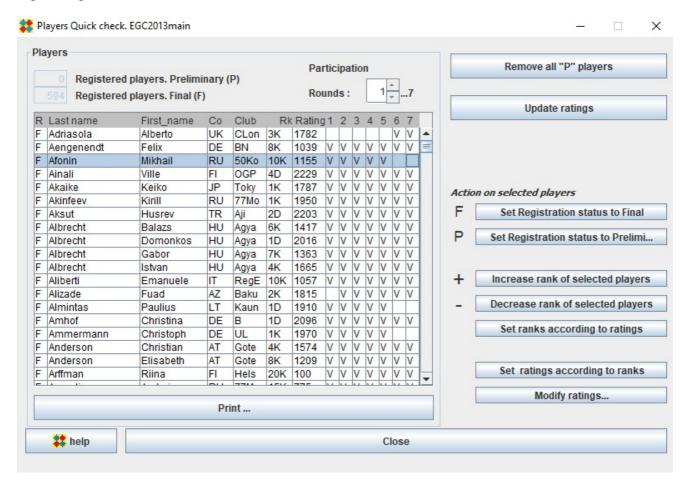
<rating> is the rating as found in the rating list

<ratingorigin> is the name of the rating list : EGF, FFG or INI. If the rating has not been defined by a rating list, the rating is defined from the rank and rating origin is INI.

<participation> defines the participation of the player for each round.

Players Quick check frame

The Players Quick check frame is typically used after registration to quickly check and modify registering status and rank.



In the "Players" panel, select the players you want to modify

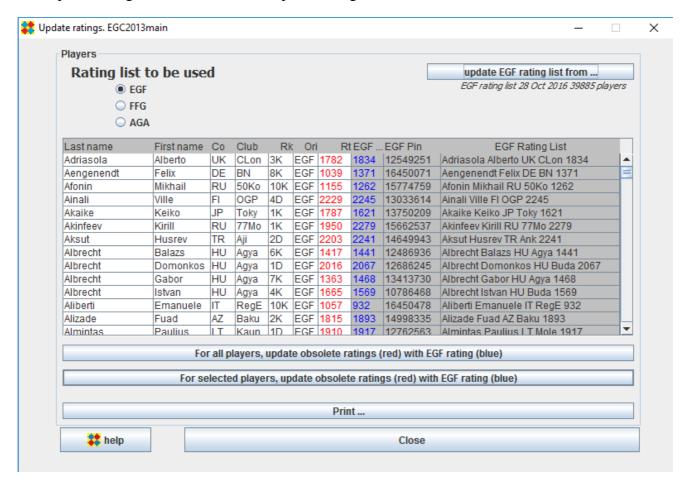
Then use buttons on the right or keyboard shortcuts to modify registration status or rank

To toggle participation of a given player in a given round, click the appropriate "V" in the appropriate row and column.

Participation status is modifiable only if the specified player has not been assigned in the specified round.

Update ratings

The Update ratings frame is used to the update ratings from EGF, FFG or AGA database.



In the top left, choose which rating list is to be used

The left part (white background) of the "Players" panel shows the list of players in the tournament.

The right part (grey background) shows the players current rating.

OpenGotha tries to match the tournament players with the database.

If a player is found, it is shown.

If no player is found, a red "????" is displayed in EGF Rt (or FFG Rt or AGA Rt) column.

Accessing the rating list

By clicking in the "xxx Rating list" column, you get access to the rating list.

Type in the first letters of the player's name and known players with the same first letters will show up. To navigate in the rating list use Arrow and Escape keys.

To make actual update, use Enter key

Updating the players ratings

You can also update several players ratings simultaneously by selecting one or several lines and clicking the "For selected players, ..." button

And, to update all the players at once, click the "For all players, ..." button.

Licence status

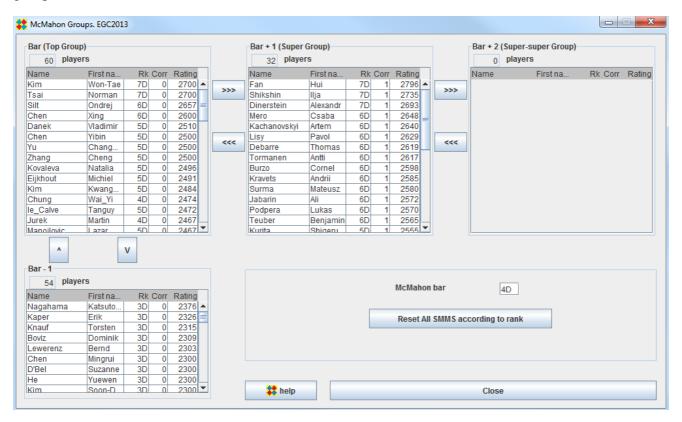
If the rating list is FFG rating list, an additional column is displayed:



The "L" column displays the FFG Licence status.

McMahon groups frame

Use this frame to set the McMahon bar and to define which players will be members of Top/Super groups



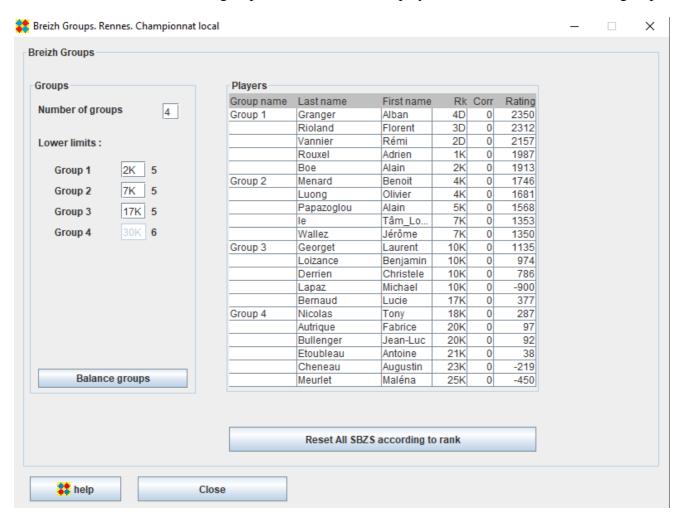
Players whose rank equals the McMahon bar are initially placed into the Top Group and shown in the *Bar (Top Group)* panel.

Players whose rank equals the McMahon bar - 1 are initially shown in the Bar - 1 panel.

You can then move players from one group to another one by using the arrow buttons.

Breizh groups frame

Use this frame to set the Breizh groups and to define which players will be members of which groups



Groups panel

With the groups panel, you define the number of groups (max 9) and the lower limits of each group. The "Balance groups" button sets the lower limits so that the numbers of players in groups are balanced, as far as possible,

Players panel

The players panel dispalys the groups and players.

If you want to upgrade/downgrade a player, select the player, right click and choose Upgrade/Downgrade from the popup menu (see the Corr column).

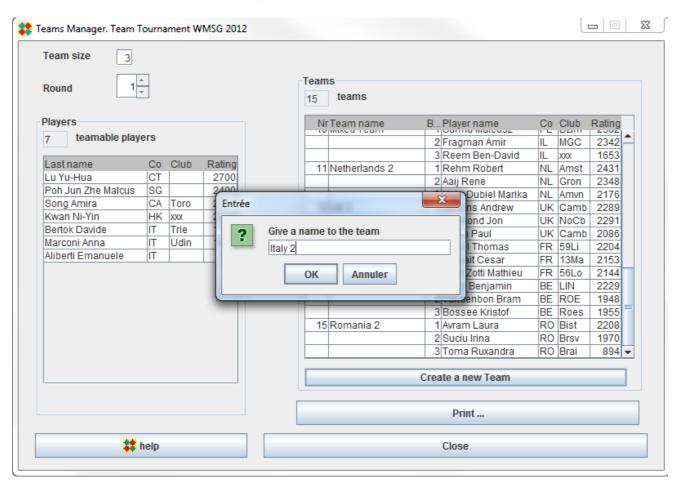
The "Reset All SBSZ according to rank" button resets all the correcions (corr column).

Teams Manager frame

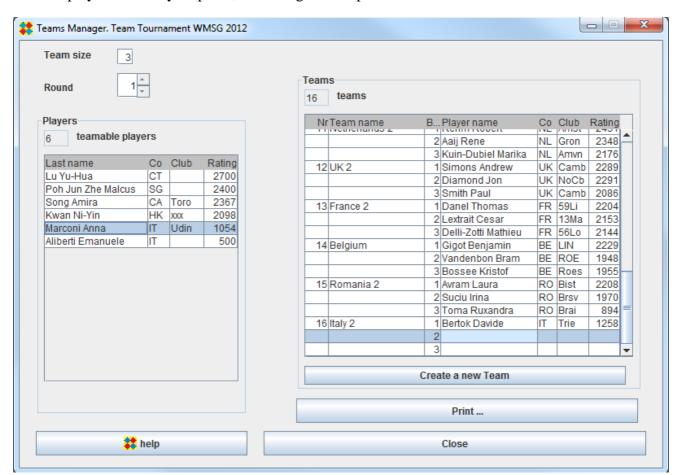
With the Teams manager frame, you can create teams, add/modify/remove players to teams and edit teams.

Create a new team

Click the "Create a new Team" button, choose a name for the team and click OK



Assign players to teams



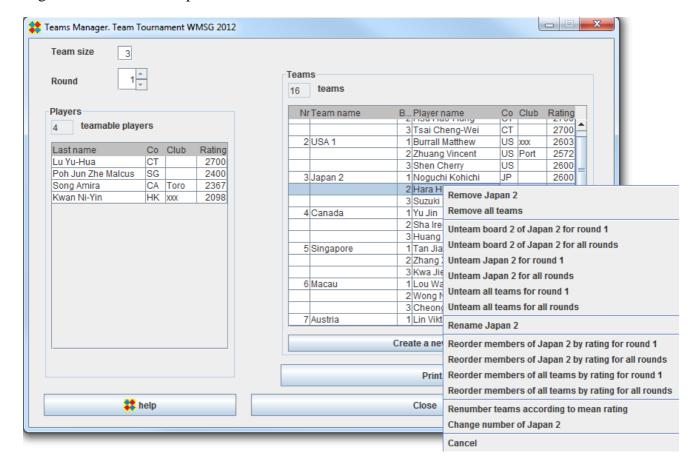
Select a player from Players panel, then Drag and drop it to the desired board of the desired team

Assignment is made for all other rounds if no other player has been assigned yet.

You also can assign different players for different rounds. You just have to select current round (top left spinner) and assign the player by drag and drop.

Edit teams

Right-click in the Teams panel and choose a menu item



Games menu



Menu items list

Pair

This opens the Games Pair frame where you can make pairing

Results

This opens the **Games Results frame** where you enter results

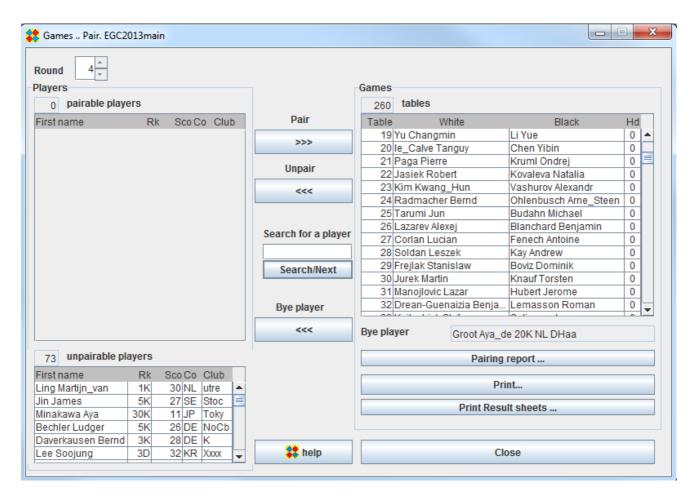
Round-robin

This opens the <u>Round-robin frame</u> where you can manually define pairing and results for small tournaments.

Teams Pairing

This opens the **Teams Pairing frame** where you can manually pair teams.

Games Pair frame



All players appear in this frame.

Players declared as not participating in the current round are in the "unpairable players" list Players already paired appear in the Games list

The bye player, if exists, appear below the Games List. Only one player can be the bye player for a given round.

The remaining players appear in the "pairable players" list.

Automatic pairing

Click on the Pair button.

If the number of players is uneven, you will be asked to choose a bye player or to let OpenGotha choose it.

The pairing process will move players from the Players list to the Games list.

Manual pairing

Select players

To select one player, just click on this player. To select 2 or more players, use Shift+click, Ctrl+Click and/or Ctrl+Shift+Click

You can pair a couple of players by selecting them in the pairable players list and click on Pair Button You can pair a set of players in a semi-automatic way by selecting desired players and click on Pair Button

As a help for manual pairing, when a unique player is selected, a list of previous games of that player is displayed.

Unpairing

You can unpair some or all games by selecting games and clicking on the Unpair Button.

Modify a game

You can modify the colour/handicap of a given game by selecting that game, right-clicking and choosing "Exchange Colours" or "Modify handicap".

Change table numbers

Table numbers are chosen by OpenGotha according to availability.

You can renumber them according to best score order by right click and choose "Renumber table by best score order"

You can change a given table number by selecting that game, right click, choose "Change table number", then enter a new number. If necessary, OpenGotha will automatically renumber the game previously assigned to the target table.

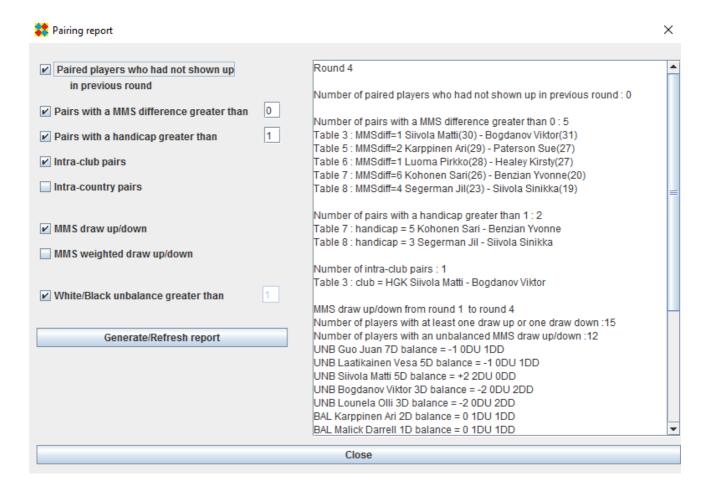
In some tournaments, you may happen to use different rooms with table numbers starting from a number other than 1. For instance, the available tables will be tables 25-48, tables 156-234, etc. To do that, select a table, right click, choose "Shift tables" and a new table number for the selected game. Subsequent table numbers will be shifted as well. However, table numbering should remain inside 1 to 1000 limits.

Pairing report

The Pairing report provides informations relevant to the tournament organizer:

- Paired players who had not shown up in previous round
- Pairs with a non zero MMS difference
- Pairs with a big handicap
- Intra-club and intra-country pairs
- MMS draw up/down

- MMS weighted draw up/down
 In this report a draw up/down of x levels will be counted as x instead of 1
- White/Black unbalanced players

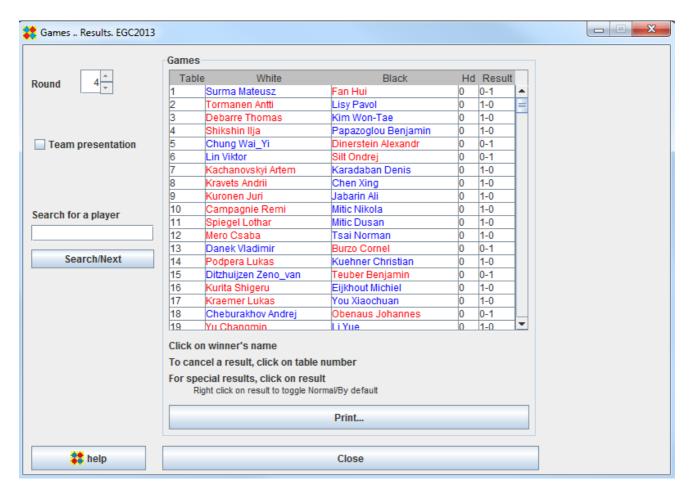


Result sheets

You can print result sheets. 4 sheets per page are printed

Coupe Confucius 2018 Result sheet			
Table : 9	Hd = 0	Round : 5	
Surround winner's name or ½ - ½			
White		Black	
Mizessyn Francois(2D,44Na)	1/2 - 1/2	Nedellec David(1D,75Al)	
EGF Pin: 10386541		EGF Pin: 13633048	
Signature :		Signature :	
Coupe Confucius 2018 Result sheet			
Table : 10	Hd = 0	Round : 5	
Surround winner's name or 1/2 - 1/2			
White		Black	
Boe Alain(2K,35Re)	1/2 - 1/2	Detivaud Pierre(2K,38Gr)	
EGF Pin : 10733096		EGF Pin : 15286359	
Signature :		Signature :	
Coupe Confucius 2018 Result sheet			
Table : 11	Hd = 0	Round : 5	
Surround	Surround winner's name or 1/2 - 1/2		
White		Black	
Aubry Vincent(2K,35Re)	1/2 - 1/2	Souchay Jean(3K,75OB)	
		EGF Pin : 10713967	
Signature :		Signature :	
Coupe Confucius 2018 Result sheet			
Table : 12	Hd = 0		
Surround winner's name or ½ - ½			
White		Black	
Cornaggia Remi(3K,35Re)	1/2 - 1/2	Nemo Andre(3K,78Ve)	
EGF Pin : 15249685		EGF Pin : 12325027	
Signature :		Signature :	

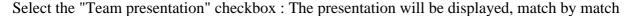
Games Results frame

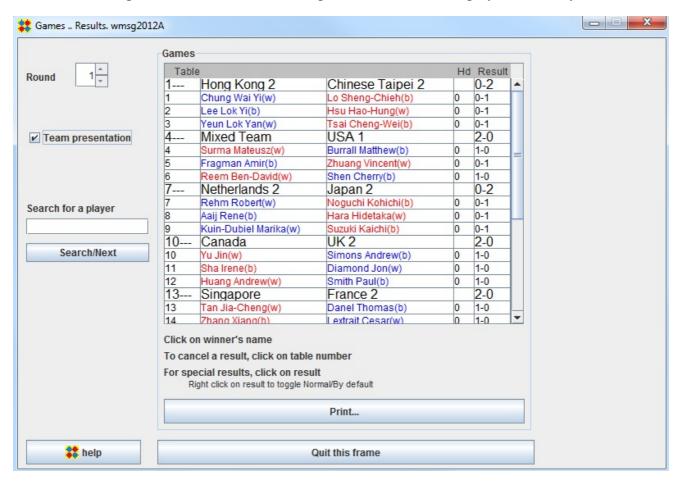


To enter usual results, just click on the winner. The winner is coloured in red, the loser in blue, an equal result in purple.

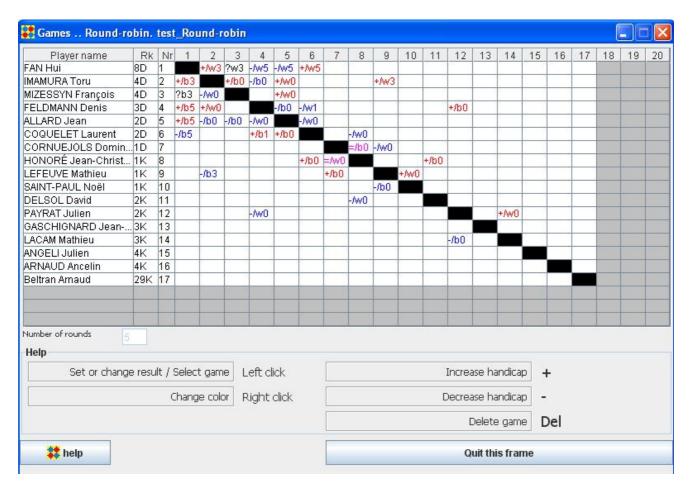
For special results, repeatedly click inside the specific result, until the desired result appears. The list of possible results is given in Games Encoding

Games Results for Team Tournaments





Games Round-robin frame



The Games Round-robin frame is usable only for small tournaments (20 players max).

Manual pairing and results entering can all be done in a single frame.

You don't have to worry about round numbers. OpenGotha will internally manage that for you, so that export functions will work exactly as if you had followed the usual complete process.

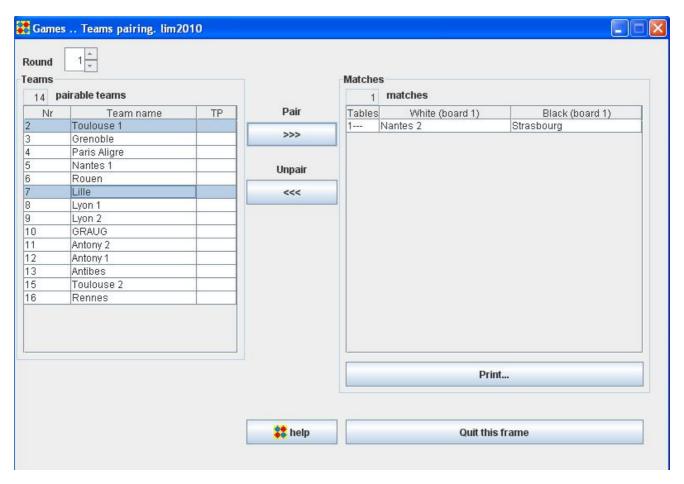
If you need to enter by default results, use Games Results Frame

Team Pairings frame

With the Team Pairings frame, you can manually pair teams.

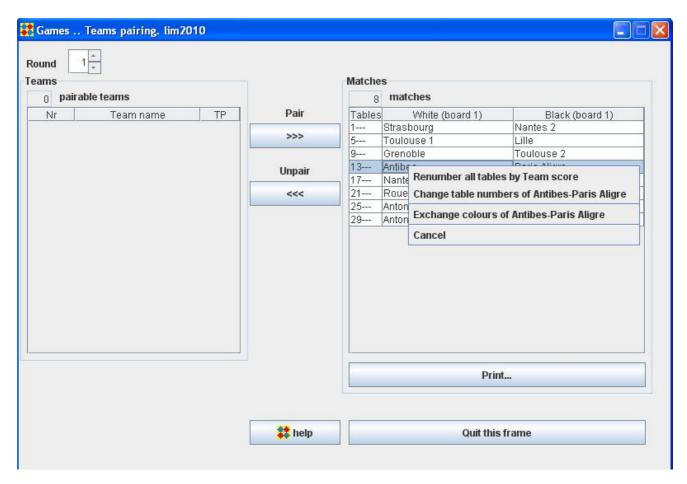
Pair 2 teams

Select the teams and click the "Pair" button.



Each player of each board of one team is paired with the player of the corresponding board of the other team.

Modify one or several matches



To renumber all tables, right-click in the Matches panel and choose the "Renumber all tables by Team score" menu item.

To change table numbers of a given match, right-click on the match in the Matches panel and choose the "Change table numbers of ..." menu item.

To change colours of all games of a given match, right-click on the match in the Matches panel and choose the "Change table numbers of ..." menu item.

Other modifications

To modify individual games, use the Games Pair frame

Publish menu

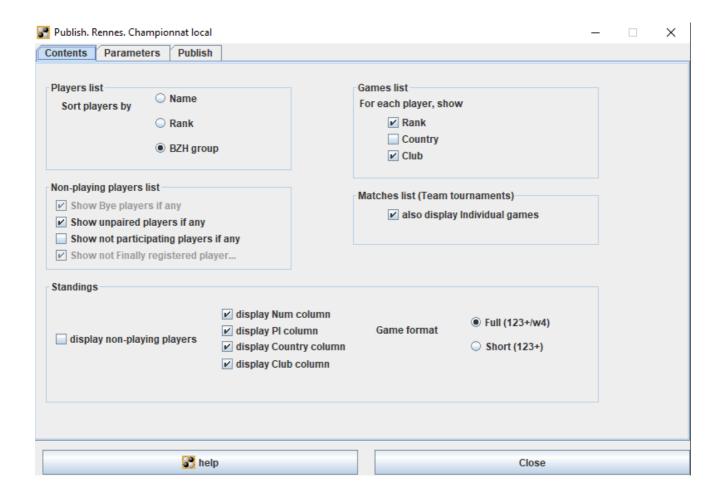


Publish ...

Clicking the Publish menu item gives the following three tabs:

- Contents : defines contents
- Parameters : defines what actions publish buttons will launch
- Publish: launches Print or Export actions

Contents



Players List

Games List

Non-Playing Players List

A player may be a non playing player in a given round for one of the four following reasons:

- He is a bye player: this occurs when the number of players for this given round is odd
- He has not been paired: this is usually a temporary situation. The organizer should pair the player or set him as a bye player or set his participation status to not-participating
- He does not participate in the given round. To set the participation status, use the Players .. Manager frame
- His registration status is Preliminary. To set the registration status, use the Players .. Manager frame or the Players .. Quick check frame

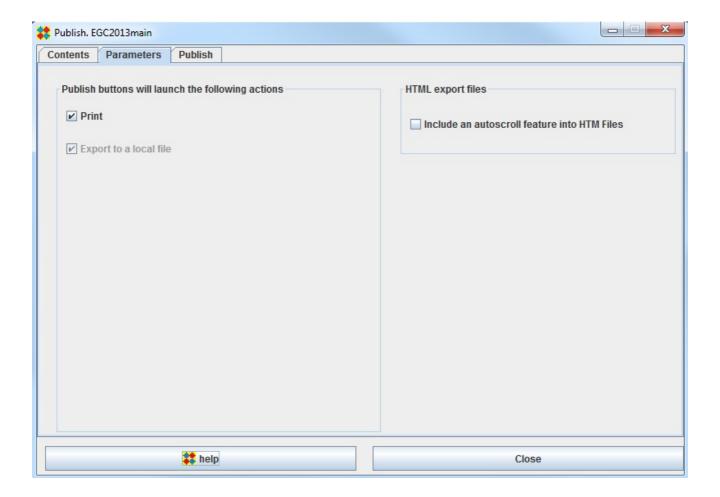
Matches List

This refers to team tournaments. If you do not check the "Also display individual games" checkbox, only Team names will be displayed in the Print matches list or in the Export(html) matches list. If you do check the checkbox, all individual players will be printed or exported as well.

Standings

- display non-playing players. check this checkbox if you want all players be displayed, including PRE registered players. By default, non-playing players are not displayed
- display Num/Pl/Country/Club : if checked (resp. unchecked), the corresponding columns are displayed (resp. hidden)
- Game format

Parameters



Print

Check this checkBox if you want the published items to be printed

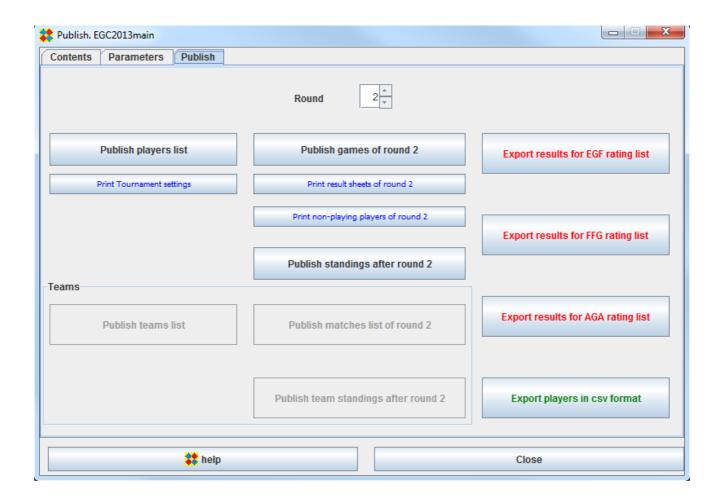
Export to a local file

This checkbox is always checked. Published items are sent to a html file in export/html directory

Include an autoscroll feature into HTML files

With this option selected, HTML pages will automatically scroll the contents when displayed. This is useful for example if you use a projector to display pairings and you have more than 30 boards to display. Think of using Ctrl+ and Ctrl- to adjust font size.

Publish



Publish ... buttons Print ... buttons

Data is automatically formatted according to what is specified in the Contents tab.

Html files are locally stored in the *export/html* directory. They are also optionally exported to OpenGotha site.

Html files are associated with a style sheet. A default style sheet is supplied : *current.css*. The user can supply his own style sheet.

Character encoding is "UTF-8".

Export results for EGF rating-list

The generated file complies with the <u>h9 format</u>.

Spaces inside a player name or first name are replaced with "_"

Total name + first name length is limited to 30

Character encoding is "ISO-8859-15".

Export results for FFG rating-list

The generated file complies with the <u>Tou format</u>. Spaces inside a player name or first name are replaced by "_" Total name + first name length is limited to 25 Character encoding is "ISO-8859-15".

Export results for AGA rating-list

The generated file complies with the <u>AGA standard ratings submission format</u>. For players without an AGA id, register for a new membership <u>online</u>. Character encoding is "ISO-8859-15".

Export players in csv format

The generated file contains the players data.

CSV format is a commonly used format and is supported by most spreadsheets.

Character encoding is "UTF-8".

Options menu



Menu items list

Tournament Options

This opens the **Tournament Options frame**.

Games Options

This opens the **Games Options frame**.

Preferences

This opens the **Preferences frame**.

Tournament Options

General settings

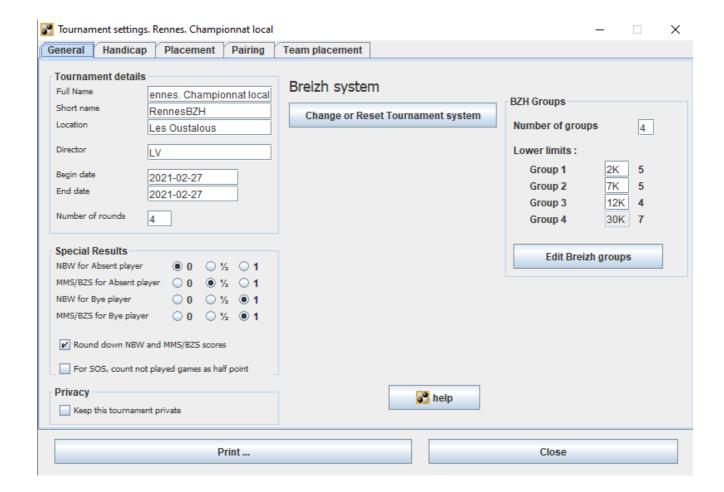
Handicap settings

Placement settings

Pairing settings

Team Placement settings

General settings



Tournament details

Number of rounds

It can be set between 1 and 20.

It can be increased at any time.

It can be decreased at any time too, provided that no game has been defined for abandonned rounds.

Special results

An absent player for a given round is a player who has been declared as not participating in that round.

A bye player for a given round is a player who has been defined as bye in the pairing process. Not more than one player can be bye for a given round.

The NBW and MMS scores for absent and bye player for a given round will be computed according to what you define in this frame.

Round down NBW and MMS scores

When, as a result of bye or absence, the score is not an integer, a rounding down is made if the "Round down NBW and MMS scores" checkbox is selected. Otherwise, no rounding is made.

NB: Points resulting from a draw are not rounded.

NB: For pairing, players with a non-integer score are grouped with players with an integer score just below, whatever the "Round down NBW and MMS scores" choice might be.

For SOS, count not played games as half point

When a player plays with an opponent who did not play in an other round, his SOS will be affected, according to the "Special Results" choices. If the "For SOS ..." checkbox is selected, the SOS will be computed as if the opponent had got 1/2 point from his not played game, whatever the choices for "Special Results" may be.

A "not played game" may refer to an absent player, a bye player, a not paired player, or a game whose result is unknown or is a "by default" result.

Privacy

Your tournament is uploaded to opengotha site, according to your choices for Internet access.

You have an access to uploaded tournaments from the "Remote Tournaments frame".

If the "Keep this tournament private" is selected, your tournament will be visible only by you and OpenGotha site administrator (Luc Vannier)

McMahon

The McMahon Bar defines the SMMS (Starting McMahon Score) for players above the bar.

The super-bars can also be defined in big tournaments.

The McMahon Floor defines the SMMS (Starting McMahon Score) for players below the floor.

The Bar can be set between 10K and 9D

The Floor can be set between 20K and 1D

The Bar must be higher or equal to Floor

McMahon Zero defines the rank corresponding to zero in MMS computings.

By default, McMahon Zero is set to 30K (and not modifiable, actually)

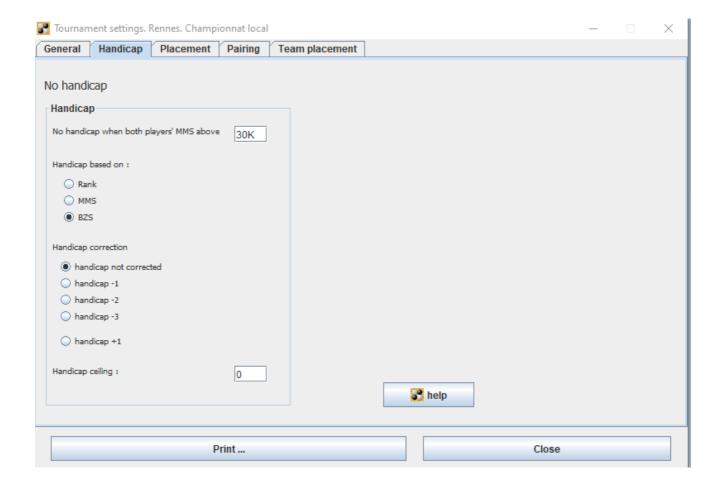
Breizh

The BZH Groups are displayed. They are editable by clicking the "Edit Breizh groups".

Change or Reset Tournament system

et tournament paran	neters to their deta	auit values		

Handicap settings



No handicap when both for players' MMS above

Players with a current MMS equal or above the corresponding specified rank.

If a player is above and his opponent is below, the handicap will be computed as if the MMS of the stronger player was the MMS corresponding to the specified rank.

Handicap based on

If you choose McMahon score, the handicap will be computed according to the current MMS. If you choose Rank, the handicap will be computed according to the rank, independently of previous results.

Handicap correction

After previous computations, handicap will be decreased by 0, 1, 2 or 3 stones or increased by 1 stone.

Handicap ceiling

The handicap is then limited to this value. The handicap ceiling is between 0 and 9.

Placement settings

Glossary

• NBW

Number Of Wins.

• CPS

Cup Score.

Designed for Cup Tournaments. A Win in a given round has always a bigger weight than all Wins in following rounds.

• MMS

McMahon Score

At the beginning of the tournament, each player is given a starting McMahon score (SMMS) which is usually based upon his ranking. For instance, a 1 dan player starts with 30 points, a 20 kyu player starts with 10 points. After each round the MMS of each player is increased by 1 for a win, 1/2 for a draw, 0 for a loss.

When a player is absent or bye, he is given points according to values defined in special results panel of General parameters Default values are 1/2 point for absence and 1 point for bye.

But if the sum of such points is not an integer, it is rounded down to the closer integer, according to the choice of *Round down NBW and MMS/BZS scores* checkbox in the *General* tab.

BZS

Breizh Score

At the beginning of the tournament, each player is given a starting Breizh score (SBZS) which is usually based upon his Breizh group. After each round the BZS of each player is increased by 1 for a win, 1/2 for a draw, 0 for a loss.

When a player is absent or bye, he is given points according to values defined in special results panel of General parameters Default values are 1/2 point for absence and 1 point for bye.

But if the sum of such points is not an integer, it is rounded down (or not) to the closer integer, according to the choice of *Round down NBW and MMS/BZS scores* checkbox in the *General* tab.

Rank

As defined at registration time. Value is between 30K and 9D.

Rating

As defined in the reference rating list. Value is between -2950 and 850. When EGF rating list is used, Rating = GoR -2050

• CUSSW

Cumulative Sum of Scores (NBW).

CUSSW after round r is the sum of NBW as computed after round 1 + NBW as computed after round 2 + ... + NBW as computed after round r

CUSSM

Cumulative Sum of Scores (MMS).

CUSSM after round r is the sum of MMS as computed after round 1 + MMS as computed after round 2 + ... + MMS as computed after round r

• SOSW, SOSM, SOSB

Sum Of Opponents scores. SOSW is based on NBW. SOSM is based on MMS. SOSB is based on BZS.

If the player does not participate in a round, the opponent's score is replaced by the starting score of the player himself.

In handicap games, the opponent's MMS/BZS is corrected according to the handicap before addition to the SOSM/SOSB

• SOSW-1, SOSW-2, SOSM-1, SOSM-2, SOSB-1, SOSB-2

Same as SOSW, SOSM, SOSB but after elimination of 1 or 2 worst opponents scores

SODOSW, SODOSM, SODOSB

Sum Of Defeated Opponents scores.

• SOSOSW, SOSOSM, SOSOSB

Sum of Opponents' SOS

• EXT, EXR

Exploits Tentes, Exploits Reussis. The idea is to take in account the *difficulty* of the game. A game is assumed to be difficult for a player if the actual handicap (AH) was, for that player, more difficult than Natural Handicap (NH)

- o if AH < NH, then coef = 0 (easy game)
- o if AH = NH, then coef = 1 (normal game)
- o if AH = NH + 1 then coef = 2 (difficult game)
- o if $AH \ge NH + 2$ then coef = 3 (very difficult game)

EXT is the sum of opponents scores, with coef as a weight factor

EXR is the sum of defeated opponents scores, with coef as a weight factor

• DC

Direct Confrontation. This performs a special sort on players having the same score for higher priority parameters than DC, so that a player is above the ones he has defeated. DC numeric value has no meaning by itself, it is set to enforce rank given by following algorithm:

- This applies to a group of players equal according to higher priority settings, looking only at results of games played against each other.
- It detects and removes cycles of victories, by putting players forming a cycle in a single "node" sharing all victories and defeats against other players of the group.
- Considering all players with no victory against the group, take the one (or the ones, there can be ties) with the lowest score for parameters after DC. Rank this player last.
- Remove ranked player from the group and iterate previous step.

• SDC

Simplified Direct Confrontation. Considering players having the same score for higher priority parameters than SDC:

- if they all have played against each others, SDC value for a player is the number of victory amongs its peers.
- if they haven't, SDC value is 0 for all of them.

• STS

STrasbourg Score. Used ONLY for a tournament, where the players of the top group play in a single elimination bracket to decide the champion, while other players play a classic McMahon tournament.

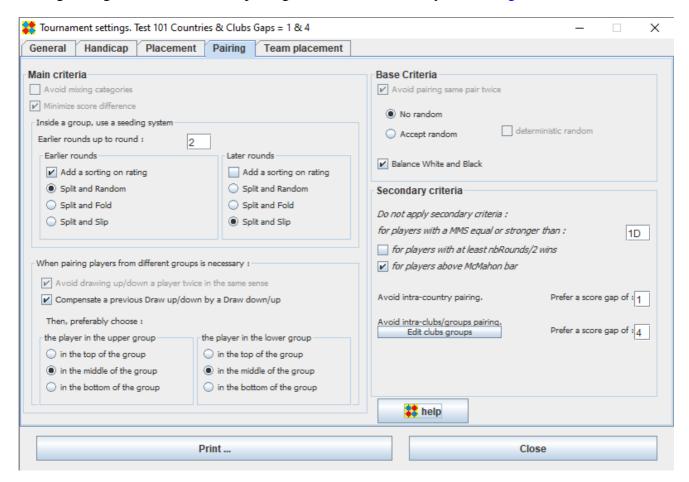
- When a player of the top group loses a game, he joins the classic McMahon tournament. The losers of semi-finals play a match for the 3rd place.
- STS is equal to <u>MMS</u> for all players, except for the 4 players of the top group reaching the semi-finals:
 - o at each round, STS is increased according to MMS rules.
 - o but a win in quarter or semi-finals gives a bonus of 2 STS points.
- STS used as first placement criterion aims at ranking players (Standings tab -> use temporary set) according to the elimination bracket results.
- The pairing of the players in the elimination bracket has to be done manually. For a tournament with n rounds, the number of players in the McMahon top group, who enter the elimination bracket, must be set to 2ⁿ.

• SOSTS

Sum Of Opponents' STS

Pairing settings

Pairing settings refer to a subset of pairing criteria as described by the Pairing evaluation function.



Main criteria

A "group" is a set of players with same score for main placement criterion (MMS, NBW, CPS, BZS).

Avoid mixing categories

Relevant in "Swiss with categories" only. When selected, the pairing will prefer intra-category pairing.

Minimize score difference

Always selected. Pairing prefers to pair players with equal or neighboring main score.

Seeding system

Inside a group, players are ordered according to their placement. Each player of the higher half of the group will be paired with a player of the lower half.

You can choose a different system for earlier rounds and later rounds.

And, for earlier and later rounds, you can add a sorting on rating.

When pairing players from different groups ...

Difficulties or impossibility to make intra-group pairing (due to uneven size of a group, for instance) may occur.

When this occurs, OpenGotha will choose one player in the group and this player will be paired with a player of a stronger or weaker group.

OpenGotha will try to do not draw-up or draw-down a player twice in the same direction.

It will also try to compensate a previous draw-up by a draw-down and vice versa. However, you may inhibit this compensation system by unchecking the "Compensate a previous Draw up/down by a Draw down/up" checkbox.

It will also prefer to chose drawn-up and drawn-down players according to your choice, in the top, middle or bottom of the group.

Base criteria

Avoid pairing same pair twice

Always selected

Random

OpenGotha can introduce randomness as part of the pairing process. If you choose to accept random, you will have to choose between:

- Deterministic random. Two successive pairings will give exactly the same pairing
- Non-Deterministic random. Two successive pairings may give different pairings

Balance White and Black

Tends to give the same number of games with white and black for a given player.

Secondary criteria

Secondary criteria are "Minimize handicap" criterion and geographical criteria. Secondary criteria are, by default, applied. But you can exclude these criteria for some defined players:

• Players above a certain rank

[&]quot;Split and Fold" will prefer pairs on the "1 - n, 2 - n-1, ..." scheme

[&]quot;Split and Slip" will prefer pairs on the "1 - n/2+1, 2 - n/2+2, ..." scheme

[&]quot;Split and Random" will make random choice.

- Players with a good performance in previous games.
 For instance, in a 10 rounds tournament, if you select this option, then players having at least 5 wins in their previous games will not be concerned by these secondary criteria.
- Players above the McMahon bar

Minimize handicap

This criterion is already taken in account in McMahon system because intra-group pairing will not lead to handicaps.

It is relevant in Swisscat system.

Details in Pairing evaluation function.

Avoid intra-country and intra-clubs/groups pairing

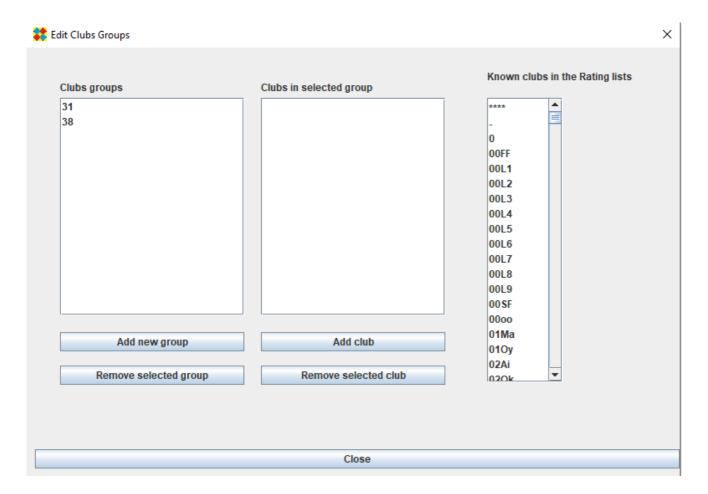
This determines what is acceptable to avoid intra pairing.

For instance, in a McMahon tournament, if you choose 3 as the score gap, which is the default value for intra-clubs/groups pairing, then OpenGotha will prefer to pair a given player with another player coming from another club even if their MMS difference is up to 3 points rather than to pair him with a player coming from the same club with same MMS value.

In certain towns (e.g. Toulouse), you may have several clubs (31To, 31Co, 31Ba) and players from these clubs often play together.

Define these clubs groups Edit clubs groups button

Edit clubs groups



Add or remove clubs groups.

To add or remove clubs, select a clubs group, then use the add club/remove selected club buttons On the right, a list of clubs shows the clubs appearing in the rating lists (EGF, FFG and AGA)

Team Placement settings

Glossary

• TEAMP

Team points.

2 points are given to the team having more than (number of boards)/2 board wins

1 point is given to a team having (number of boards)/2 board wins

2 points are given to the team having less than (number of board)/2 board wins

• SOST

Sum Of Opponents scores.

The Opponents scores are the team points.

• BDW

Board wins.

Number of individual board wins

• BDWxU

Board wins on x upper boards

Number of individual board wins. Only the boards from 1 to x are taken in account.

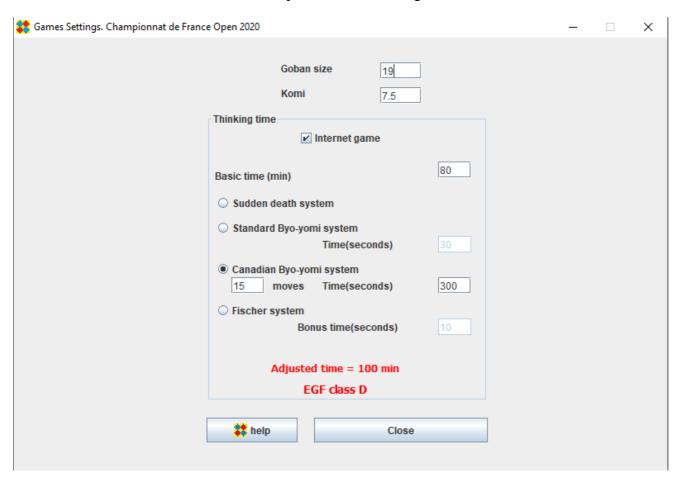
• MNR

Mean rating.

Mean of ratings of the team members

Games Options

The information in this frame is used to export results for rating lists



You can choose between 4 time systems.

- · Sudden death
 - Basic time and no additional time
- · Standard Byo-yomi
 - Basic time and additional time for each move
- Canadian Byo-yomi
 - Basic time and additional time for each series of moves
- Fisher
 - Bonus time is added to the credit of the player after each move, starting from the first move of the game.

EGF classes

EGF recognizes four tournament categories:

• class A

well organised tournament recognized by an EGF member

time limit requirements: adjusted time minimum 75 minutes,

basic time minimum 60 minutes (Fisher time : basic time 45 minues, adj. time for 120 moves : 75 minutes)

weight for inclusion to EGF ratings: 1.00

· class B

well organized tournament recognized by an EGF member

basic time limit requirements: adjusted time minimum 50 minutes,

time minimum 40 minutes (Fisher time : basic time 30 minutes, adj. time for 120 moves : 50 minutes)

weight for inclusion to EGF ratings: 0.75

· class C -

casual or club tournament recognized by an EGF member

time limit requirements: adjusted time minimum 30 minutes,

basic time minimum 25 minutes (Fisher time : basic time 20 minues, adj. time for 120 moves : 30 minutes)

weight for inclusion to EGF ratings: 0.50

· class D -

Tournaments played on Internet

time limit requirements: adjusted time minimum 50 minutes,

basic time minimum 40 minutes (Fisher time : basic time 30 minues, adj. time for 120 moves : 50 minutes)

weight for inclusion to EGF ratings: 0.25

Adjusted time:

is calculated as:

- Sudden death basic time.
- **Standard byoyomi** basic time + time equivalent to 45 moves.

```
e.g.: basic time: 60 minutes, byoyomi: 30 seconds per move:
```

$$60 + (45 \times 30") = 82.5$$
 minutes

• Canadian byoyomi - basic time + time equivalent to 60 moves.

e.g.: basic time: 75 minutes, byoyomi: 12 moves in 5 minutes:

```
75 + (60 \times (5 / 12)) = 100 \text{ minutes}
```

• **Fischer** - basic time + bonus time equivalent to 120 moves.

```
e.g.: basic time: 45 minutes, bonus per move: 15 seconds:
```

$$45 + (120 \times 15") = 75 \text{ minutes}$$

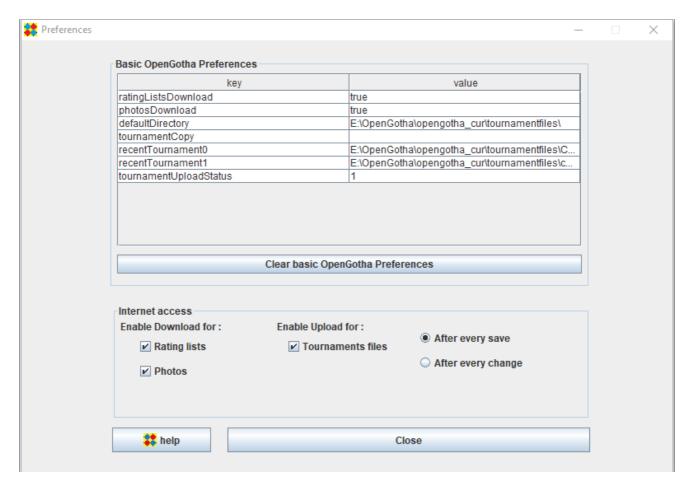
Sudden death - implying adjusted time = basic time - is acceptable, provided all other criteria are met.

Preferences frame

As opposed to *parameters*, attached to a tournament and stored in the tournament file, *preferences* are installed on a computer and stored in the register (Windows) or a dedicated file (Linux and Mac OS). OpenGotha uses *preferences* to store:

- The list of recent tournaments
- The Internet access authorizations

Some of them are editable.



Internet access authorizations

- Rating list downloads
 Enables/Disables the possibility to download rating lists
- Photos downloads
 Enables/Disables the possibility to download photos from EGD
- Tournaments files
 Enables/Disables the possibility to upload tournaments

Tools menu



Menu items list

Discard rounds

This opens the **Discard rounds frame**.

RMI Manager

Useful for Administrators/Programmers.

Memory manager

Useful for Administrators/Programmers.

Experimental tools

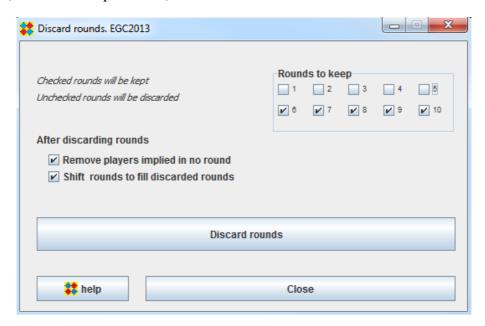


Work in progress

Discard rounds frame

Useful to keep certain rounds in a tournament and discard others.

May be used before exporting part of a tournament. Typically, if you run a main tournament in an European congress, you will have to split your rounds, rounds 1-5 for the 1st week, rounds 6-10 for the 2nd week (as in the example below)

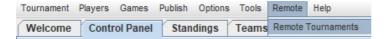


The "Discard rounds" button will:

- Discard unchecked rounds
- (if checkbox selected) Remove players participating in no round
- (if checkbox selected) Shift rounds to fill discarded rounds
 In the example above, results of 2nd week (rounds 6-10) will be shifted to rounds 1-5

Remote menu

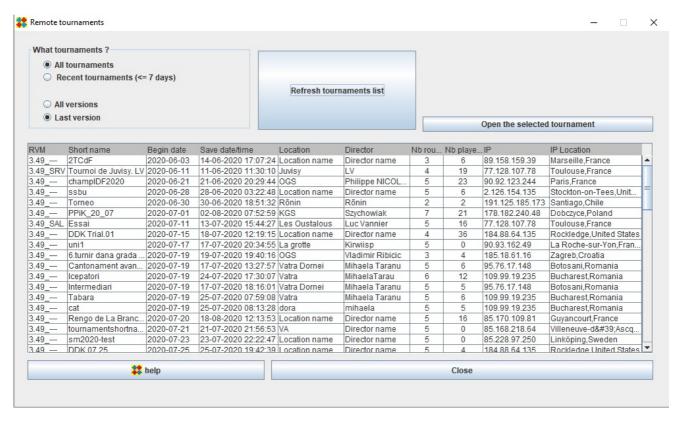
OpenGotha manages uploading tournaments files to opengotha site, according to the choice made in Preferences frame



Remote tournaments

This opens the Remote tournaments frame.

Remote tournaments frame



Remote tournaments frame is dedicated to download tournaments from opengotha.info .

In the "What tournaments?" panel, choose the tournaments to be displayed. Then click "Refresh tournaments list".

Appendices

Games encoding

Pairing algorithm

Pairing evaluation function

Games encoding

When displayed in a frame like Games .. Results, a game is represented by a string of 1 to 4 characters.

Result	Encoding
Unknown	_
White wins	1-0
Black wins	0-1
Equal	1/2-1/2
Both win	1-1
Both lose	0-0
White wins by default	1-0!
Black wins by default	0-1!
Equal by default	1/2-1/2!
Both win by default	1-1!
Both lose by default	0-0!

A result is declared "by default" when one player or both did not show up.

When displayed in a table like in the Standings Tab or in an export file like html export file, a game is represented by a string of up to 8 characters

char 1-4: opponent number

char 5 : result : + for win, - for lose, = for $\frac{1}{2}$

char 6: "/" or "" (empty) for "normal" result. "!" for "by default" result

char 6 or 7 : colour : w for white, b for black, ? for unknown colour.

char 7 or 8 : handicap : from 0 to 9

For a dummy game (absent, bye or unassigned) the string is "0-/","0=/" or "0+/" meaning loss, equal or win. The result is always a loss for unassigned, and may be loss, equal or win for absent or bye, depending on user's choice in <u>General settings</u>

Pairing algorithm

OpenGotha's pairing system is based on an evaluation function and a maximum matching algorithm. To pair a set of n players, OpenGotha first computes a cost for each pair of players, that is to say n*(n-1)/2 costs. The cost is computed by an evaluation function. A low cost means an undesirable pairing while a high cost means a desirable pairing. Then these n*(n-1)/2 costs are input to the maximum matching algorithm which finds the set of n/2 couples that gives the maximum sum of costs.

The maximum matching algorithm

OpenGotha's pairing system is based on an O(n^3) implementation of Edmonds' algorithm, as presented by Harold N. Gabow. The development is part of the UCSB JICOS project. Adaptation for OpenGotha has been made by Jean-François Bocquet.

Descriptions of Maximum matching algorithms, Edmond's algorithm and Gabow's implementation can be found in :

- J. Edmonds, "An introduction to matching," Notes of Engineering Summer Conference, Univ. of Michigan, Ann Arbor, 1967.
- C. Gerlach, <u>Ein Mac-Mahon-Losungsprogram für "Go-Turniere unter Benutzung von Maximum Weight Perfect Matching"</u>, 1994.
- B. Korte, "Combinatorial Optimization", Springer, 2006, available on Google books

Pairing evaluation function

OpenGotha's pairing evaluation function delivers, for a given pair of players and for a given round, a cost value which takes into account evaluation criteria.

Base criteria

Avoid duplicate games

Set to 500 000 * 10^9 if the two players have not yet played each other. Set to 0 if the two players have already played each other.

Random

If the option is selected, set to a value between 0 and 10^9

The deterministic function is a scrambling function of players names

The non-deterministic function is based on standard Java method.

Balance White and Black

For each player, the number of games played with White and no handicap is compared with the number of games played with Black and no handicap.

If both players give a strictly opposed result, then set to 1 000 000.

If one player's balance is 0 and the other one's is greater than 1, then set to 500 000.

Else set to 0.

Main criteria

Avoid mixing categories

If both players belong to the same category, then set to $20\ 000 * 10^9$.

else set to coef * 20 000 * 10^9 where coef is a number between 0.0 and 1.0, computed by a concavity function

Minimize score difference

Aims at pairing inside a group.

If both players have equal score then set to $100 * 10^9$.

else set to coef * 100 * 10^9 where coef is a number between 0.0 and 1.0, computed by a concavity function

Draw-up Draw-down

Aims at choosing players according to their positions inside their group (Top/Middle/Bottom) and at correcting previous draw-ups/draw-downs.

If players have a group distance >=4, set to 0

else 5 scenarii:

- scenario = 0 : Both players have been already drawn up/down in the same sense
- scenario = 1 : One of the players has been already drawn up/down in the same sense
- scenario = 2 : Normal conditions (does not correct anything and no previous draw in the same sense. This case also occurs if one DU/DD is increased, while one is compensated
- scenario = 3 : It corrects a previous DU/DD for one player
- scenario = 4 : It corrects a previous DU/DD for both players

If scenario = 0, set to 0

Else take in account the position of each player inside his group. This gives a value between 0 and 20 000 000, according to the choice of "choose player in the top/middle/bottom" parameter.

```
If scenario = 1, add 20 000 000
```

If scenario = 2, add 40 000 000

If scenario = 3, add 60 000 000

If scenario = 4, add 80 000 000

Set to the resulting value, which is a number between 0 and 100 000 000

If players belong to different categories, decrease the resulting value

Seeding

Aims at pairing according to chosen seeding system: "Split and Random", "Split and Fold" or "Split and Slip".

The cost of this criterion is between 0 and maxSeeding = 5 000 000 cla1 and cla2 being the internal placement (0 to groupSize - 1) of players inside the group ...

• Split and Random.

If both players are not in the same half of the group, the cost is randomly chosen between 0.8 * maxSeeding and 1.0 * maxSeeding

```
else cost = 0
```

• Split and Fold.

```
x = cla1 + cla2 - (groupSize - 1)

cost = maxSeeding - maxSeeding * x^2 / (groupSize - 1)^2
```

• Split and Slip.

```
x = 2 * |cla1 - cla2| - groupSize

cost = maxSeeding - maxSeeding * x^2 / groupSize^2
```

Secondary criteria

Are secondary criteria relevant for these players?

Secondary criteria are not applied for players above a certain ranking, as set by the organizer (by default, 1D) and, optionnaly (by default, secondary criteria applied), for players with a number of wins >= (number of rounds) /2.

When both players are concerned by secondary criteria, the function values are set as computed.

When both players are excluded from secondary criteria, the function values are set as to the maximum possible.

When one player is excluded from secondary criteria and the other player is not, an intermediate value will be computed (see sources for details)

Minimize handicap

The maximum value is $20\ 000 * 10^9$. The minimum is 0

Between the extrema, set to coef * 20 000 * 10^9 where coef is a number between 0.0 and 1.0, computed by a <u>concavity function</u> a If MMS difference is 0, set it to Secondary criteria are not applied for players above a certain ranking, as set by the organizer (by default, 4D) and, optionnaly (by default, secondary criteria applied), for players with a number of wins >= (number of rounds) /2.

Geographical criteria

A malus value is computed if both players belong to the same club or group of clubs. An other one if both players belong to the same country. The values of the malus depends on the "Prefer a score gap of ..." as defined by the user. The geographical malus is computed as a combination of both malus.

Concavity function

The concavity function is used to compute the weight of several criteria.

Let us see why this function is necessary and how it is used.

An example : have a tournament where you have 1 player 1K, 2 players 2K, 2 players 3K, ... 2 players 10K and 1 player 11K. The parity issue will result in a choice between :

- Pair everybody with his same rank fellow. And fix the parity issue by pairing the 1K with the 11K.
- Pair the 1K with a 2K, the other 2K with a 3K, etc.

Any human organizer would choose the second option, but the computer might not, if you don't take care.

Assume that in your evaluation function, the base value for a pair is 1000 and you give a penalty of 100 * d for a dan/kyu rank difference.

The sum of values will be, in both cases 9000.

Now, with the concavity function.

Instead of 1000 - 100*d, you use 1000 * (1.0 - x) * (1.0 + k * x)) (OpenGotha uses 0.5 for k. x = d/maxRange, d/10 here)

Then, the sum of values will be 9 * 1000 + 0 = 9000 in solution 1 and 10 * 945 = 9450 in solution 2 OpenGotha prefers solution 2.

All the details

OpenGotha is hosted by GitHub. Sources are available from lucvannier/opengotha github repository In Tournament.java, see the costValue method.

Index

A Appendices (62)
B Breizh groups frame (20)
С
Contents (35) Create a new tournament (8)
D
Discard rounds frame (59)
E
Edit clubs groups (53)
G
Games encoding (63)
Games menu (24) ´ Games Options (55)
Games Pair frame (25)
Games Results frame (29) Games Round-robin frame (31)
General settings (42)
Н
Handicap settings (45)
I
Import facilities (11)
M
McMahon groups frame (19)
0
Options menu (40)
Р
Pairing algorithm (64)
Pairing evaluation function (65) Pairing settings (50)
Parameters (37) Placement settings (47)
Players Manager frame (13)
Players menu (12) Players Quick check frame (16)
Preferences frame (57)
Publish (38) Publish menu (34)

R Remote menu (60) Remote tournaments frame (61) S Save facilities (10) Starting OpenGotha (4)

Т

Team Placement settings (54)
Teams Manager frame (21)
Teams Pairing frame (32)
Tools menu (58)
Tournament menu (7)
Tournament Options (41)

UUpdate ratings frame (17)