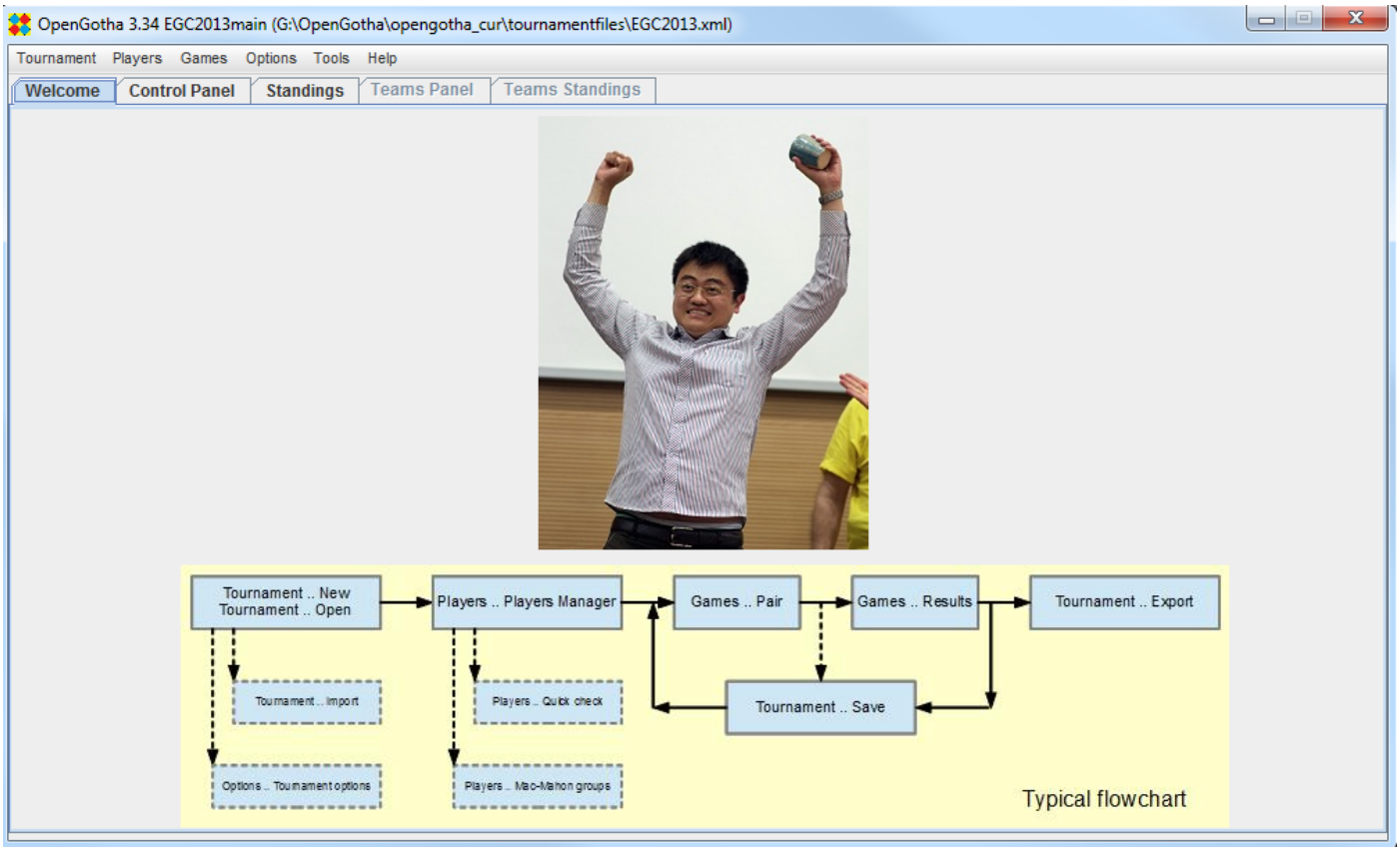
OpenGotha

User's guide



Luc Vannier. 28 August 2013

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Starting OpenGotha

OpenGotha is downloadable from http://vannier.info/jeux/download/download.htm . After unzipping, 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 can 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

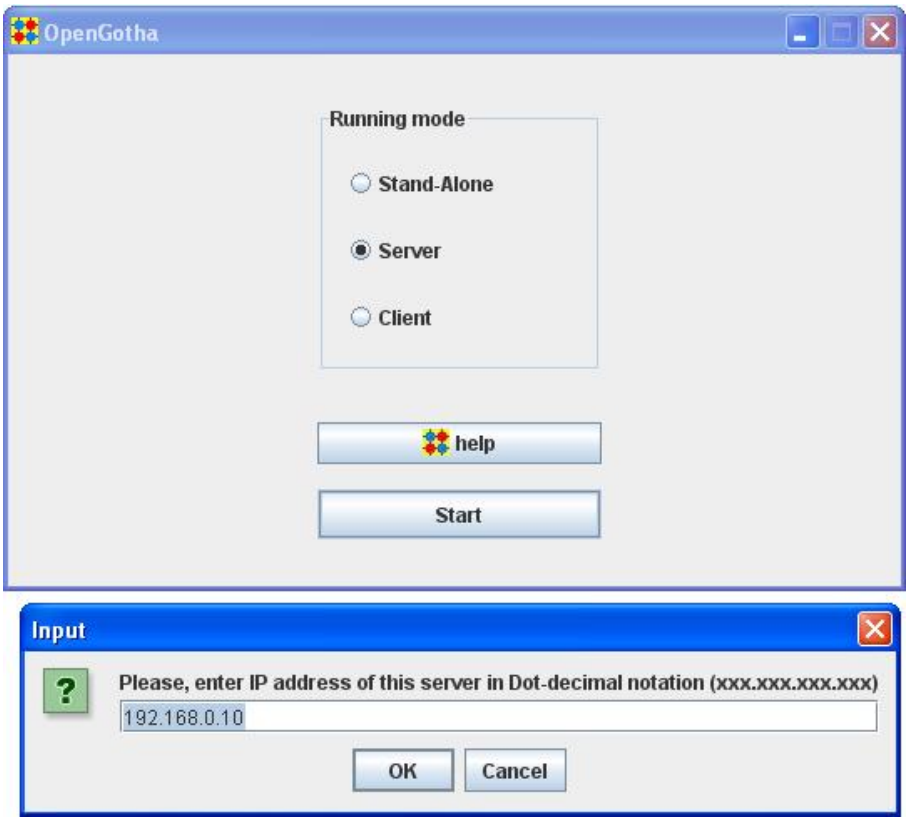
Click "Start"

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.

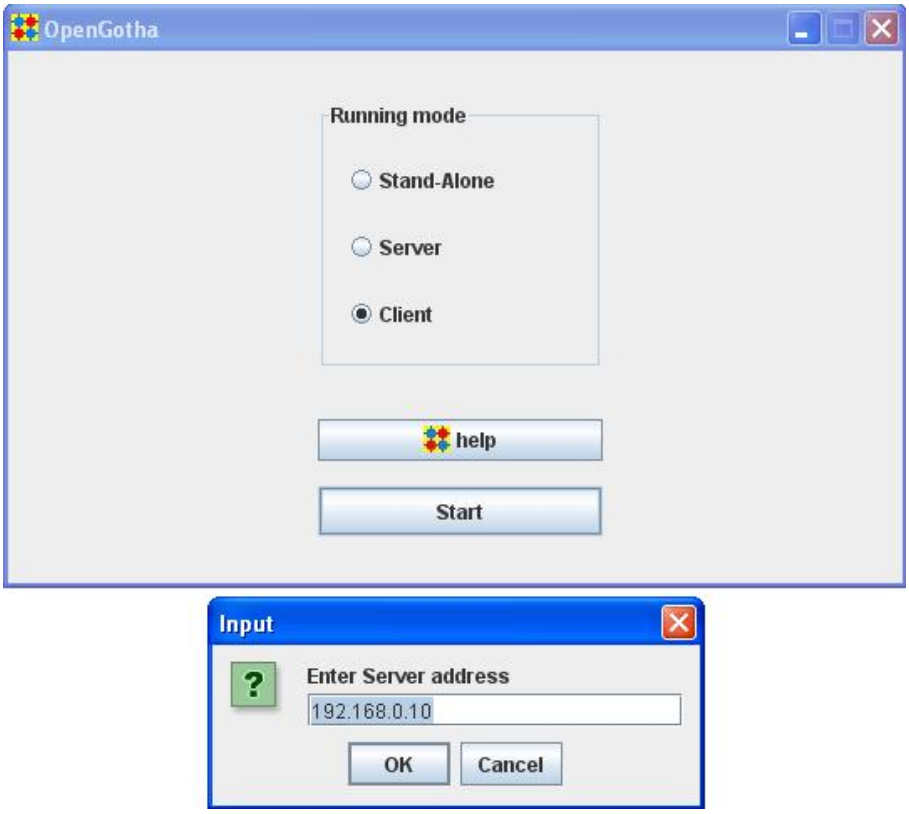
Many functions may be run from the server or from any client as well. But some others may be run from the server only. Server-specific functions are Open/Close/Save functions. Players management functions, Games functions and Options functions can be run equally and simultaneously by the server and the 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 gives access to Create a new tournament dialog box

Import

This gives access to Import facilities

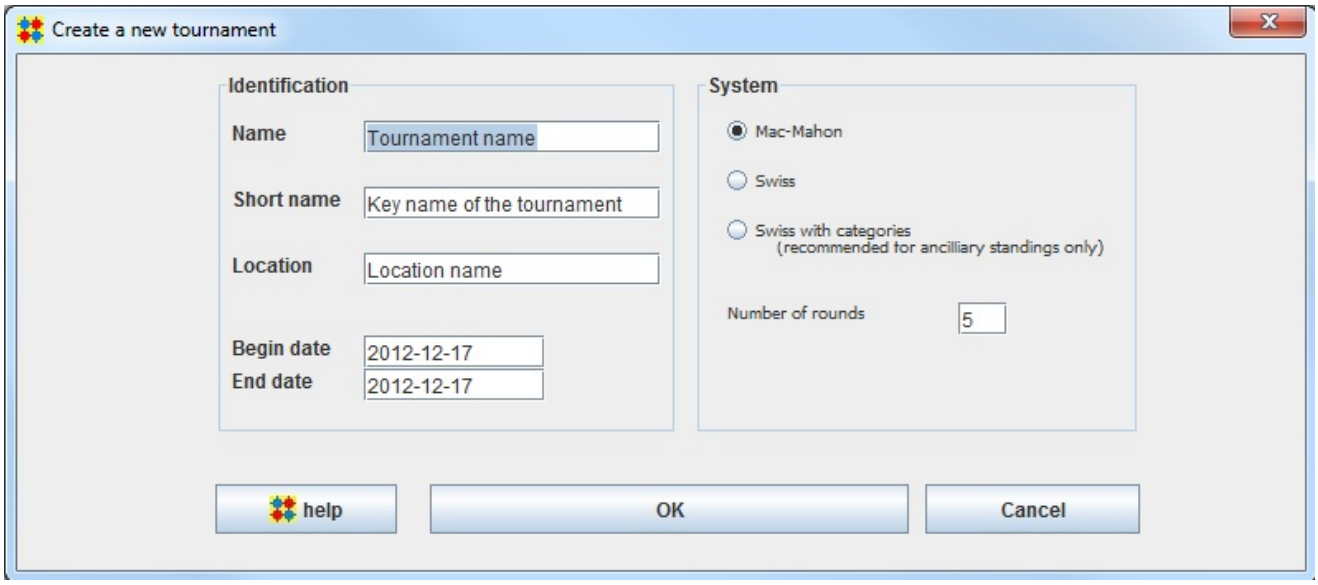
Export

This gives access to Export facilities

Build test tournaments

You can rapidly build dummy tournaments for test purpose.

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.

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 Le format TOU

Import players and games from Wallist file

Use this to import from Christoph Gerlach's MacMahon program

Import players from vBar-separated file

vBar-separated format is described in vBar-separated format

Warning

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

Import tournament from XML file

Format is specified in Tournament DTD.
You can selectively import players and/or games and/or tournament parameters and/or Teams and team parameters.
Since OpenGotha V3.23, XML file is the standard format for OpenGotha files. Therefore, you can partially or totally import any previously saved tournament.

Export facilities

Export results for EGF rating-list

The generated file respects h9 format.
Spaces inside a player name or first name are replaced by "_"
Total name + first name length is limited to 30
Character set is "ISO-8859-15".

Export results for FFG rating-list

The generated file respects Tou format.
Spaces inside a player name or first name are replaced by "_"
Total name + first name length is limited to 25
Character set is "ISO-8859-15".

Export results for AGA rating-list

The generated file respects AGA standard ratings submission format.
For players without an AGA id, dummy AGA ids are generated in the "99xxx" range.
Character set is "ISO-8859-15".

Ready-To-Publish results in HTML format

The generated file contains all the results of all players. It is associated with a style sheet. A default style sheet is supplied. The user can supply his own style sheet.
Character encoding is "UTF-8".

Ready-To-Publish Teams list in HTML format

The generated file contains a list of teams and team members the results of all players. It is associated with a style sheet. A default style sheet is supplied. The user can supply his own style sheet.
Character encoding is "UTF-8".

Ready-To-Publish Team results in HTML format

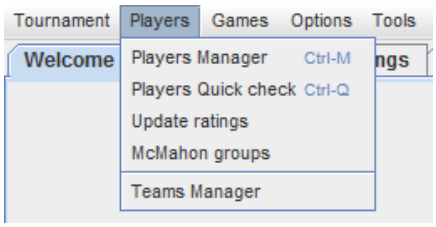
The generated file contains Teams results. It is associated with a style sheet. A default style sheet is supplied. The user can supply his own style sheet.

Character encoding is "UTF-8".

Players in csv format

The generated file contains the players data.
CSV format is a commonly used format. Most spreadsheets read it.
Character encoding is "UTF-8".

Players menu



Menu items list

Players Manager

This gives access to Players Manager frame. from where you can register players, set and modify all players data.

Players Quick check

This gives access to Players Quick check frame where you have a quick access to some of the players data : rank, and registering status.

Update ratings

This gives access to Update ratings frame where you can have access to the EGF rating list and where you can update players ratings .

McMahon groups

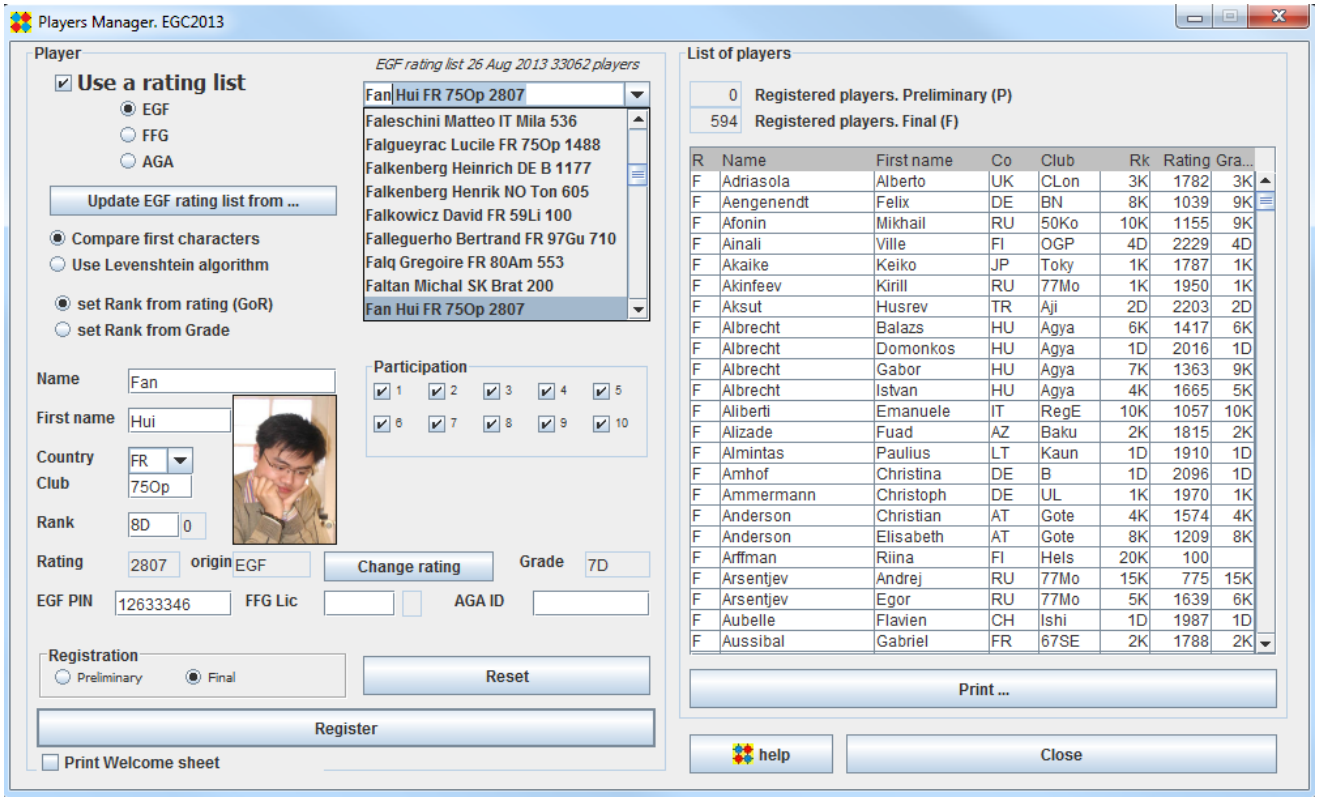
This gives access to McMahon groups frame where you can define McMahon top and super groups.

Teams Manager

This gives access to 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.



Rating Lists

OpenGotha incorporates EGF, FFG and AGA rating lists.
An instance 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 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 neighbour names.
A rank will be calculated from the rating as it appears in the rating list.
With EGF rating list,
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 a 9D rank
With FFG rating list,
a rating equal to or below -2901 will give a 30K rank
a rating between 0 and 99 will give a 1D rank

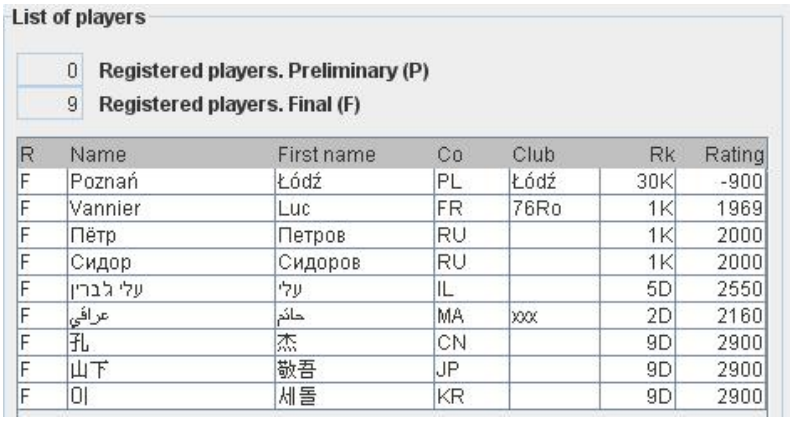
a rating equal to or above 800 will give a 9D rank
With AGA rating list,
a rating equal to or below -30.01 will give a 30K rank
a rating between -2.00 and -1.01 will give a 1K rank
a rating between 1.00 and 1.99 will give a 1D rank
a rating equal to or above 9.00 will give a 9D rank
With EGF rating list, you can select the set Rank from Grade radio button. Rank will then be defined from 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 List of players, right click, "Modify player", or simply double-click.

Players names

OpenGotha supports all the character sets :


List of players

0 Registered players. Preliminary (P)
9 Registered players. Final (F)

R	Name	First name	Co	Club	Rk	Rating
F	Poznań	Łódź	PL	Łódź	30K	-900
F	Vannier	Luc	FR	76Ro	1K	1969
F	Пётр	Петров	RU		1K	2000
F	Сидор	Сидоров	RU		1K	2000
F	עלי גברין	עלי	IL		5D	2550
F	عرافي	حاتم	MA	xxx	2D	2160
F	孔	杰	CN		9D	2900
F	山下	敬吾	JP		9D	2900
F	이	세돌	KR		9D	2900

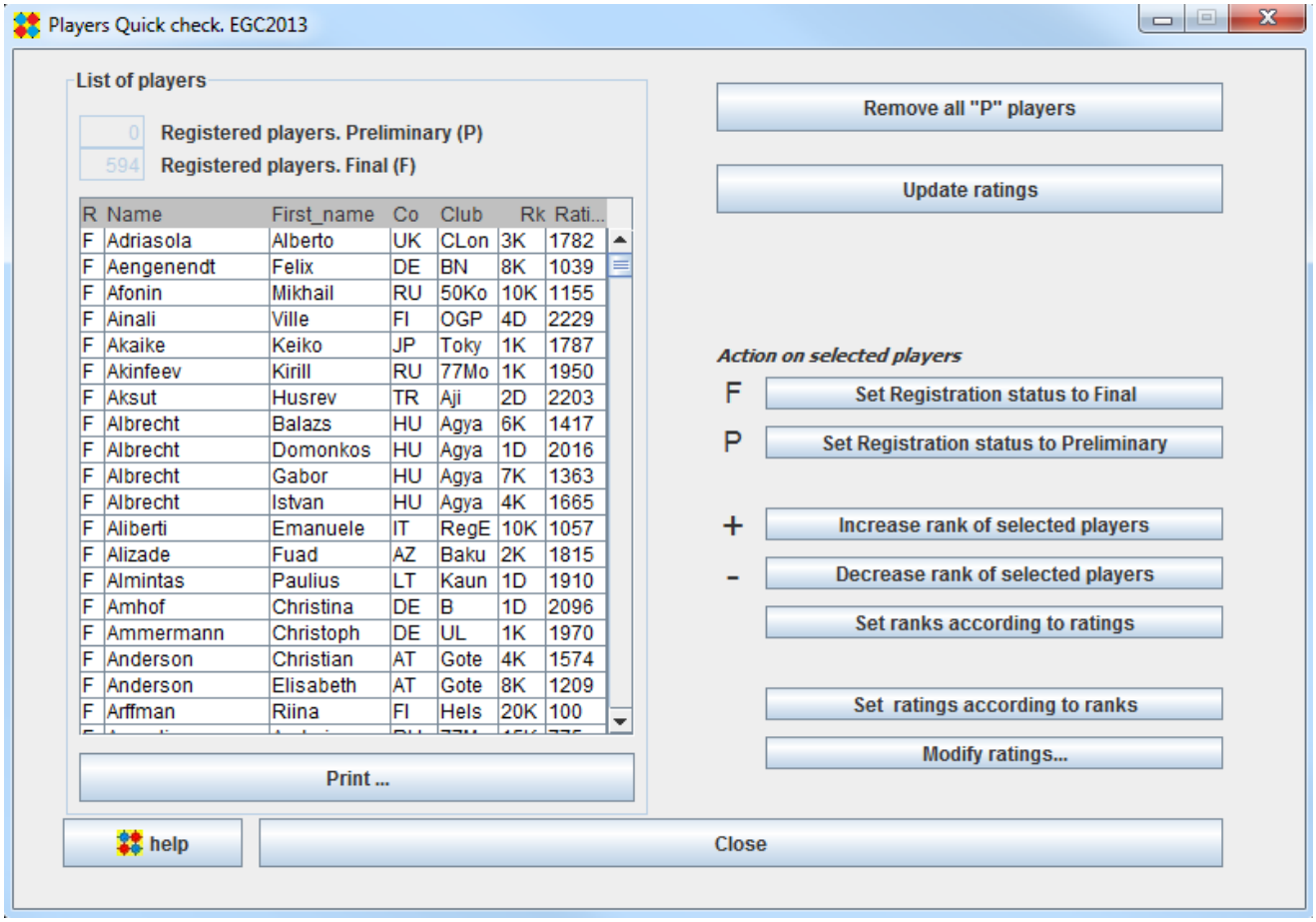
Welcome sheet

The welcome sheet contains general information about the tournament and specific information about the player.
It may be 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

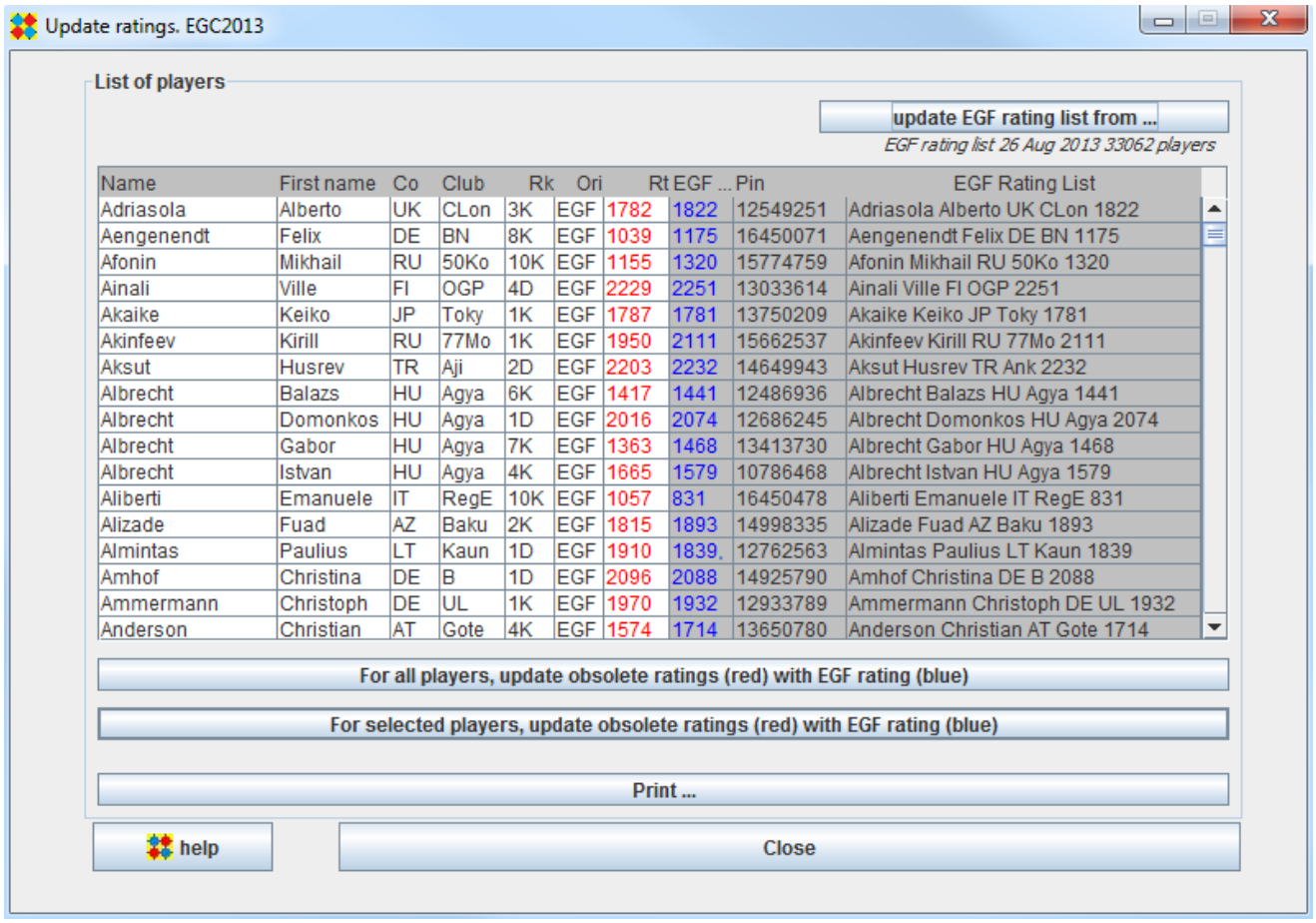
Players Quick check frame is typically used after registrations to quickly check and modify registering status and rank.



In the "List of players" panel, select the players you want to modify
Then use buttons in the right or keyboard shortcuts to modify registration status or rank

Update ratings

Update ratings frame is used to update ratings from EGF database.



Name	First name	Co	Club	Rk	Ori	Rt	EGF ...	Pin	EGF Rating List
Adriasola	Alberto	UK	CLon	3K	EGF	1782	1822	12549251	Adriasola Alberto UK CLon 1822
Aengenendt	Felix	DE	BN	8K	EGF	1039	1175	16450071	Aengenendt Felix DE BN 1175
Afonin	Mikhail	RU	50Ko	10K	EGF	1155	1320	15774759	Afonin Mikhail RU 50Ko 1320
Ainali	Ville	FI	OGP	4D	EGF	2229	2251	13033614	Ainali Ville FI OGP 2251
Akaike	Keiko	JP	Toky	1K	EGF	1787	1781	13750209	Akaike Keiko JP Toky 1781
Akinfeev	Kirill	RU	77Mo	1K	EGF	1950	2111	15662537	Akinfeev Kirill RU 77Mo 2111
Aksut	Husrev	TR	Aji	2D	EGF	2203	2232	14649943	Aksut Husrev TR Ank 2232
Albrecht	Balazs	HU	Agya	6K	EGF	1417	1441	12486936	Albrecht Balazs HU Agya 1441
Albrecht	Domonkos	HU	Agya	1D	EGF	2016	2074	12686245	Albrecht Domonkos HU Agya 2074
Albrecht	Gabor	HU	Agya	7K	EGF	1363	1468	13413730	Albrecht Gabor HU Agya 1468
Albrecht	Istvan	HU	Agya	4K	EGF	1665	1579	10786468	Albrecht Istvan HU Agya 1579
Aliberti	Emanuele	IT	RegE	10K	EGF	1057	831	16450478	Aliberti Emanuele IT RegE 831
Alizade	Fuad	AZ	Baku	2K	EGF	1815	1893	14998335	Alizade Fuad AZ Baku 1893
Almintas	Paulius	LT	Kaun	1D	EGF	1910	1839	12762563	Almintas Paulius LT Kaun 1839
Amhof	Christina	DE	B	1D	EGF	2096	2088	14925790	Amhof Christina DE B 2088
Ammermann	Christoph	DE	UL	1K	EGF	1970	1932	12933789	Ammermann Christoph DE UL 1932
Anderson	Christian	AT	Gote	4K	EGF	1574	1714	13650780	Anderson Christian AT Gote 1714

The left part (white background) of the "List of players" panel shows the players list of the tournament.
The right part (grey background) shows the players as they are in the EGF rating list.
OpenGotha finds in the rating list the rated player corresponding to the tournament player. Search is first made by EGF Pin, and if the EGF Pin is not found, a search is made by name and first name.
If a player is found, it is shown.
If no player is found, a red "????" is displayed in EGF Rt column.

Accessing the rating list

By clicking in the "EGF Rating list" column, you get access to the rating list.
Type in the first letters of the player and known players with same first letters will show up. To navigate in the rating list use Arrow and Escape keys.

To make actual update, use Enter key

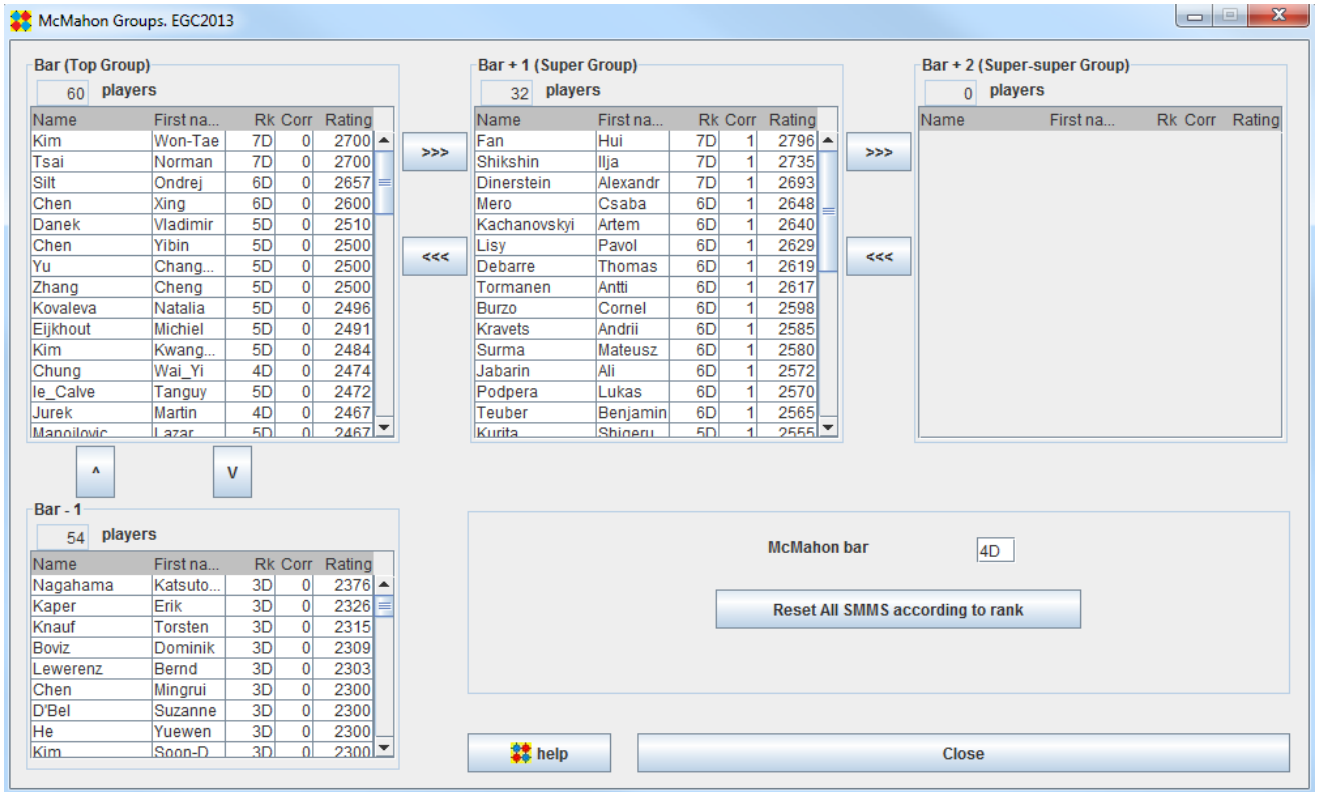
Updating the rating of players

You can also update several players ratings by selecting one or several lines and click the "For selected players, ..." button
And, to update all the players at once, click the "For all players, ..." button.

McMahon groups frame

Use this frame to set the McMahon bar and to define which player will be a member of Top/super groups

A guide to Setting MacMahon groups is in : http://www.eurogofed.org/gotour/rules.htm



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.

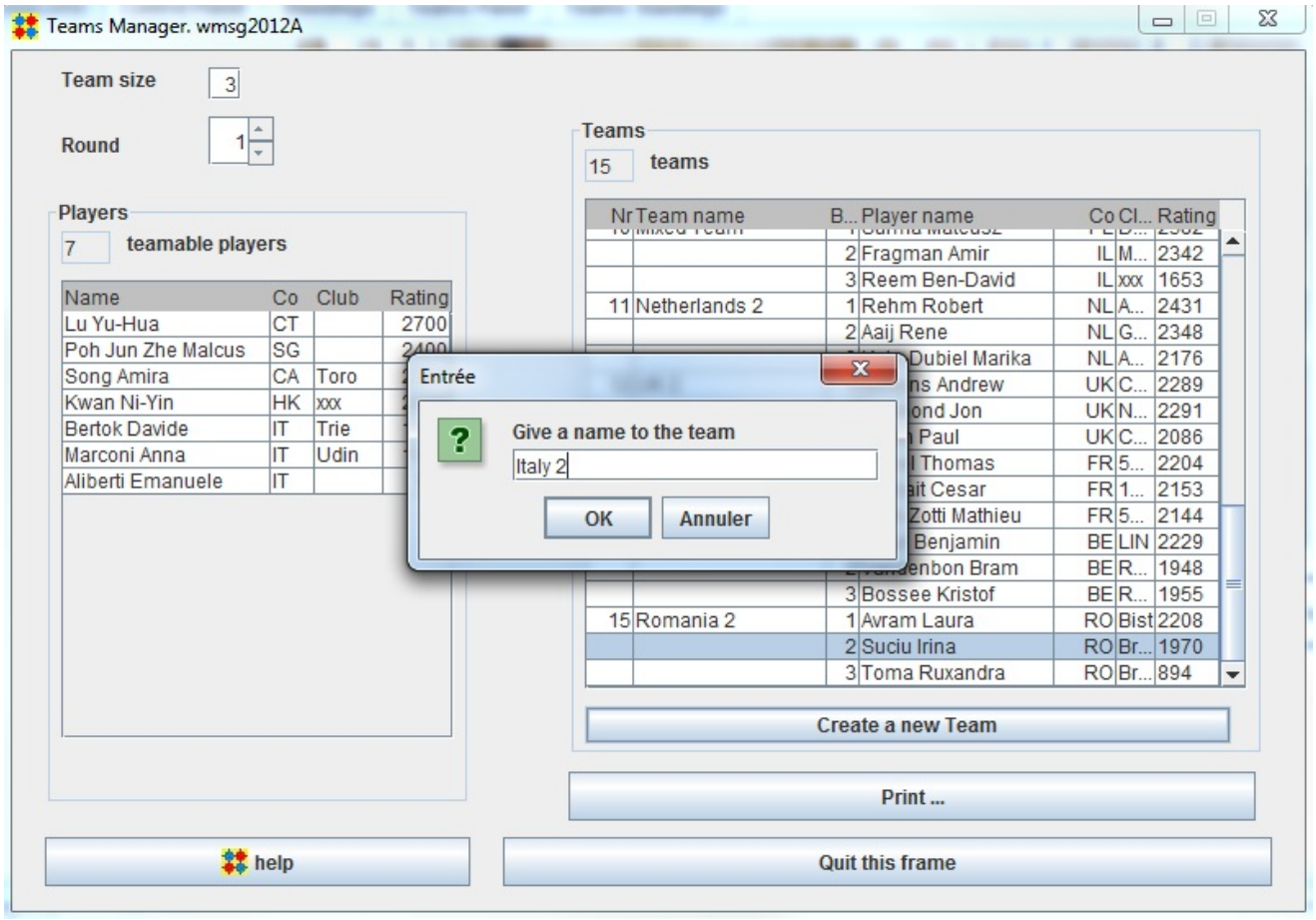
You can then move players from one group to another one by using arrow buttons.

Teams Manager frame

With the Teams manager frame, you can create teams, affect players to teams and edit teams.

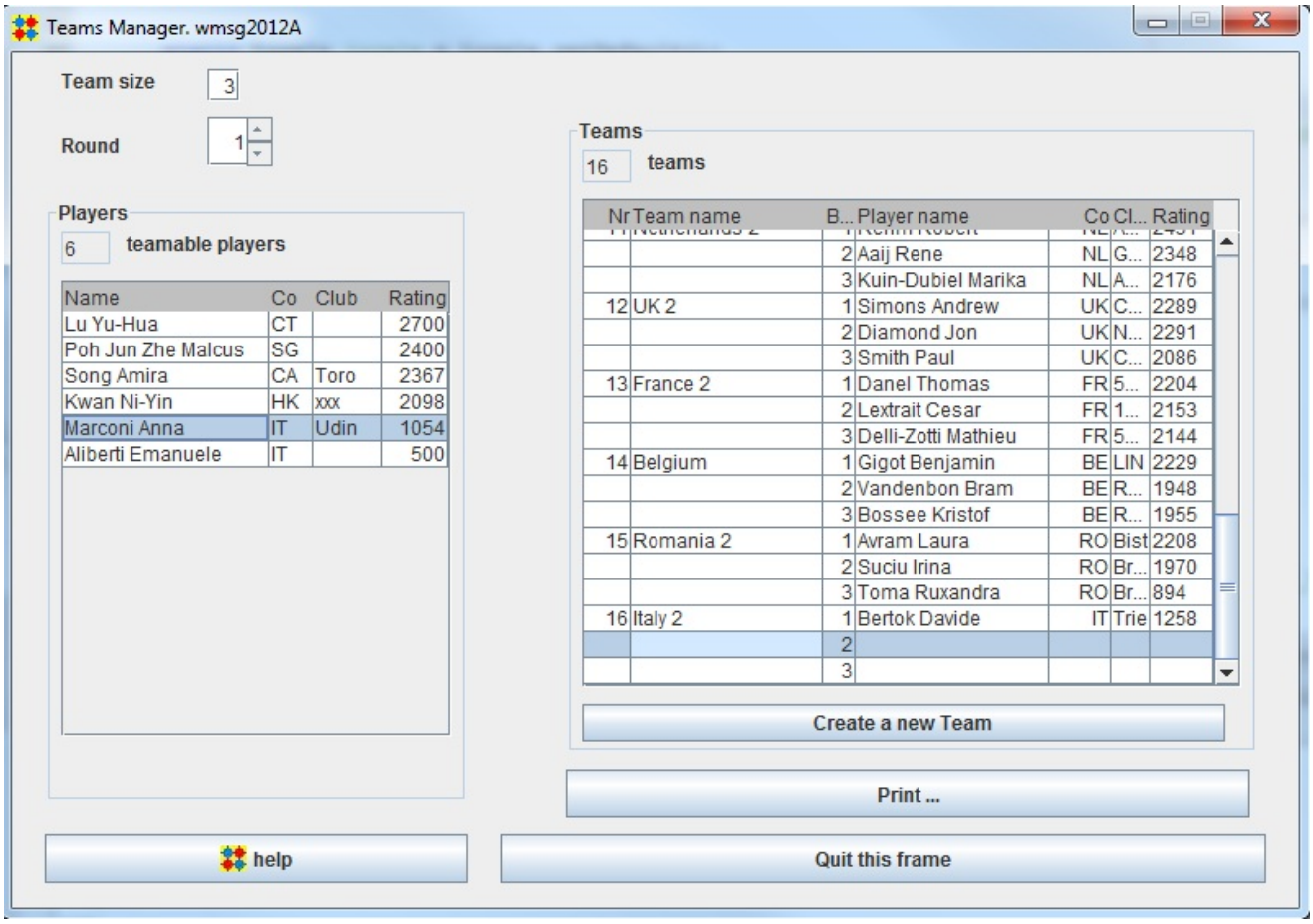
Create a new team

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



Assign players to teams

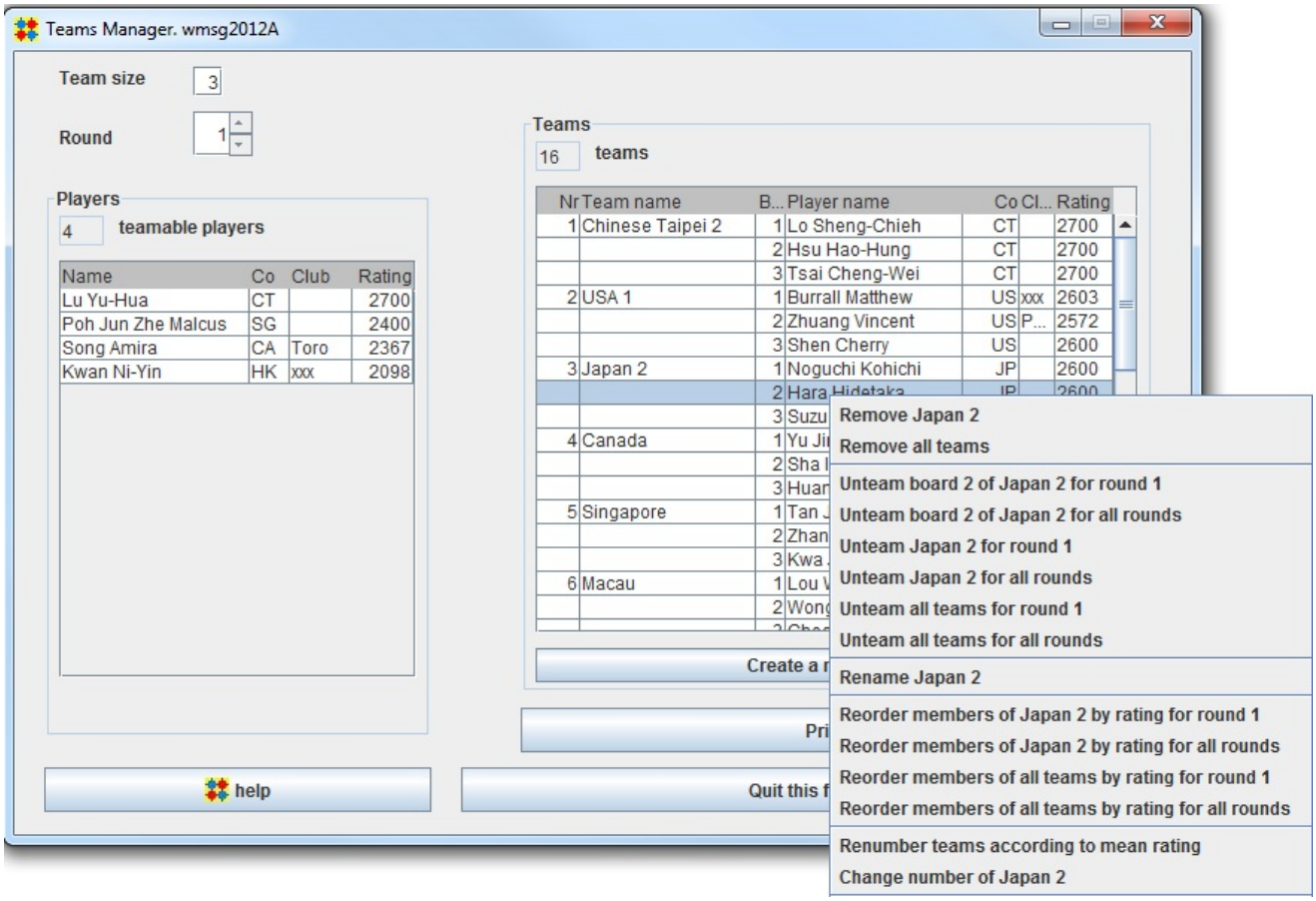
Select a player from Players panel, then Drag and drop it to the desired board of the desired team



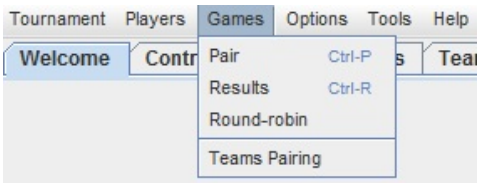
Assignment is made for all other rounds if no other player has been assigned yet.
You also can assign different players for different rounds. You just have to select current round (top left spinner) and assign the player by drag and drop.

Edit teams

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



Games menu



Menu items list

Pair

This gives access to Games Pair frame where you can make pairing

Results

This gives access to Games Results frame where you enter results

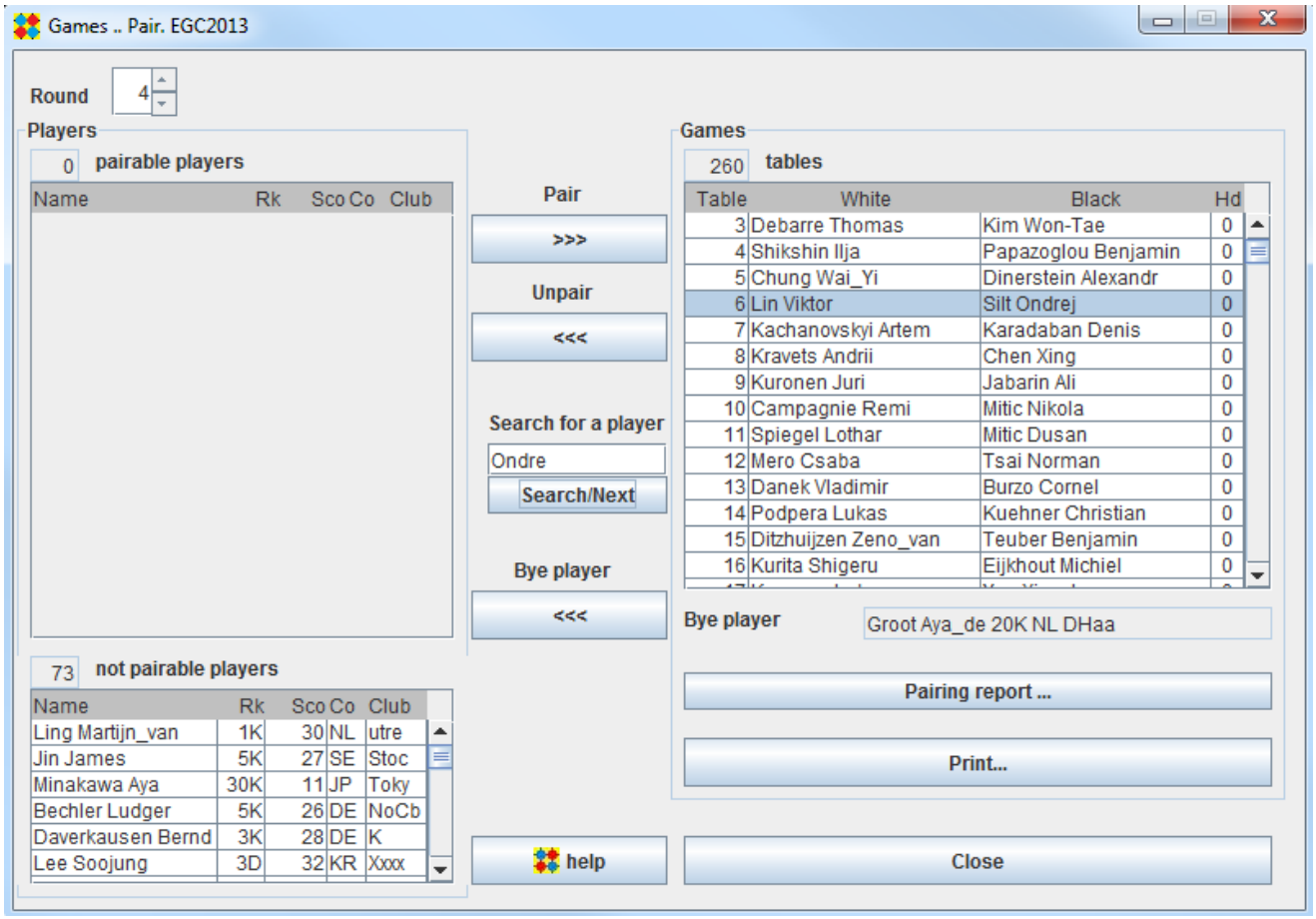
Round-robin

This gives access to Round-robin frame where you can manually define pairing and results for small tournaments.

Teams Pairing

This gives access to 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 "not pairable 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 bye player for a given round.
Remaining players appear in "pairable players" list.

Automatic pairing

Click on Pair button.
If the number of players is uneven, you will be asked to choose a bye player or to let OpenGotha choose it.
Pairing process will empty the "pairable players" list and fill 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 all games or some games by selecting games and click on Unpair Button.

Modify a game

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

Change table numbers

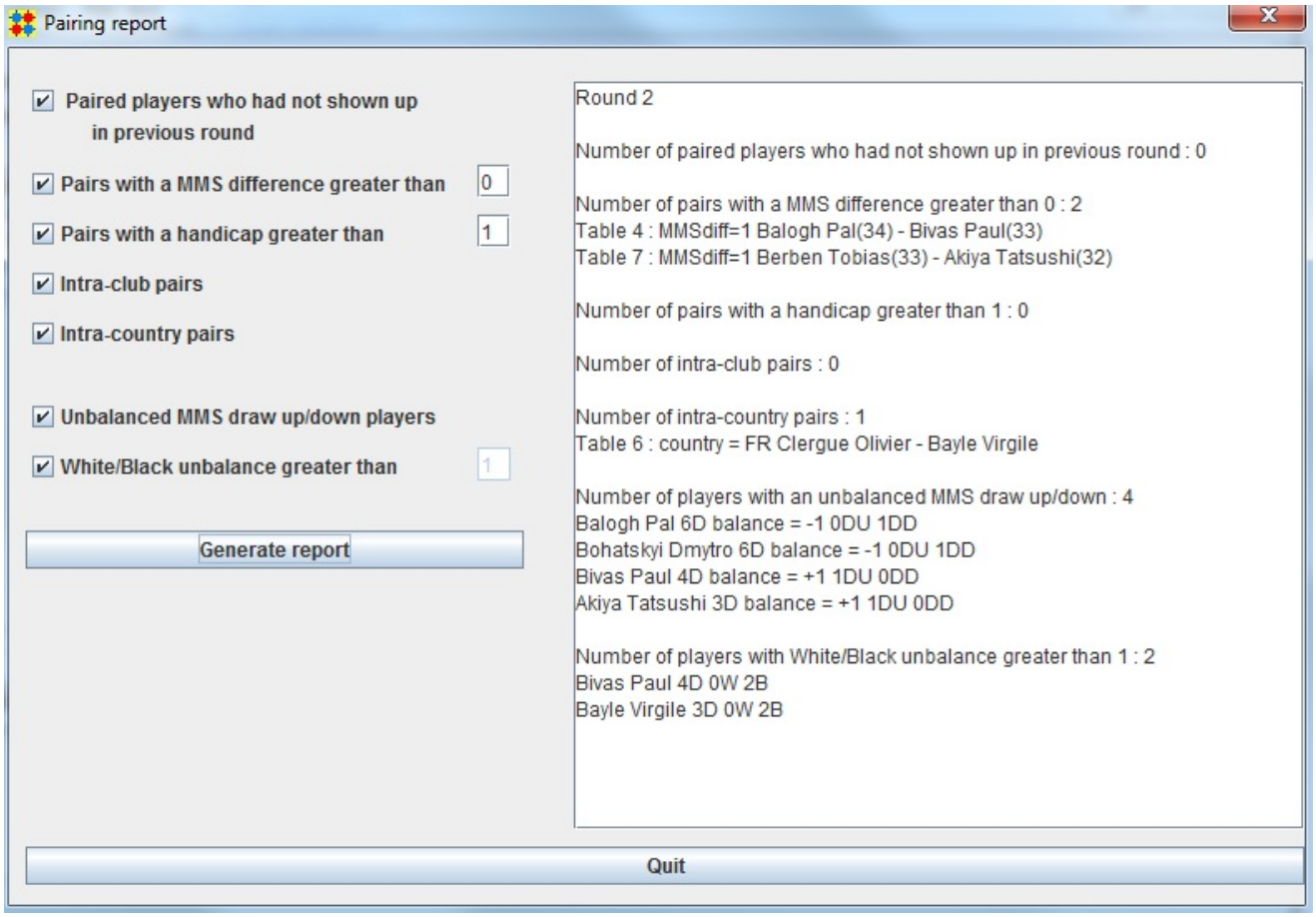
Table numbers are chosen by OpenGotha according to availability.
You can renumber them according to MMS order by right click and choose "Renumber table by MMS"
You can change a given table number by selecting that game, right click, choose "Change table number", then enter a new number. If necessary, 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 willl 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. Following table numbers will be shifted as well. However, table numbering should remain inside 1 to 600 limits.

Pairing report

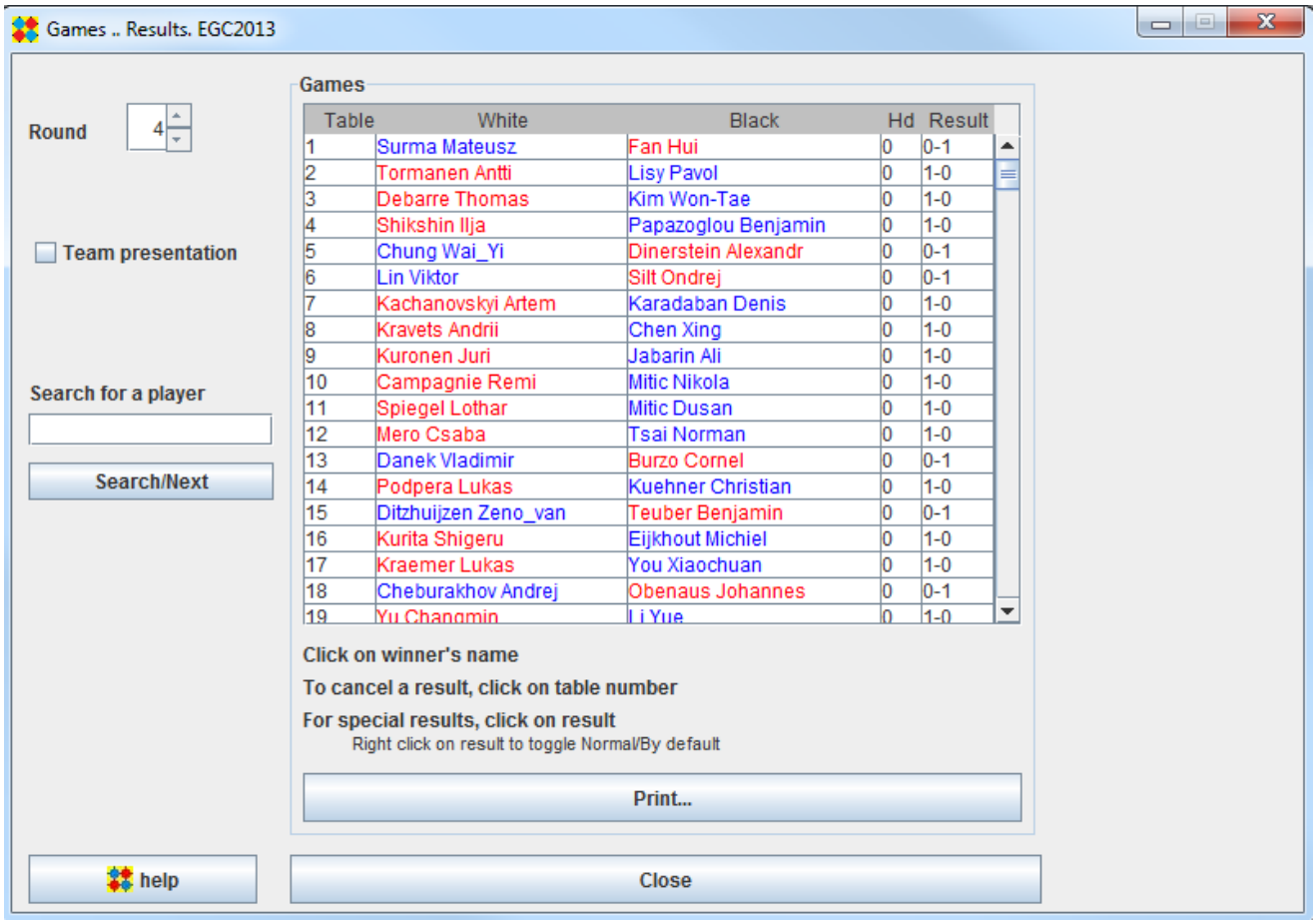
Pairing report will give you informations about what might be a concern for the organizer :

- 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
- Unbalanced Drawn up/down players

- White/Black unbalanced players



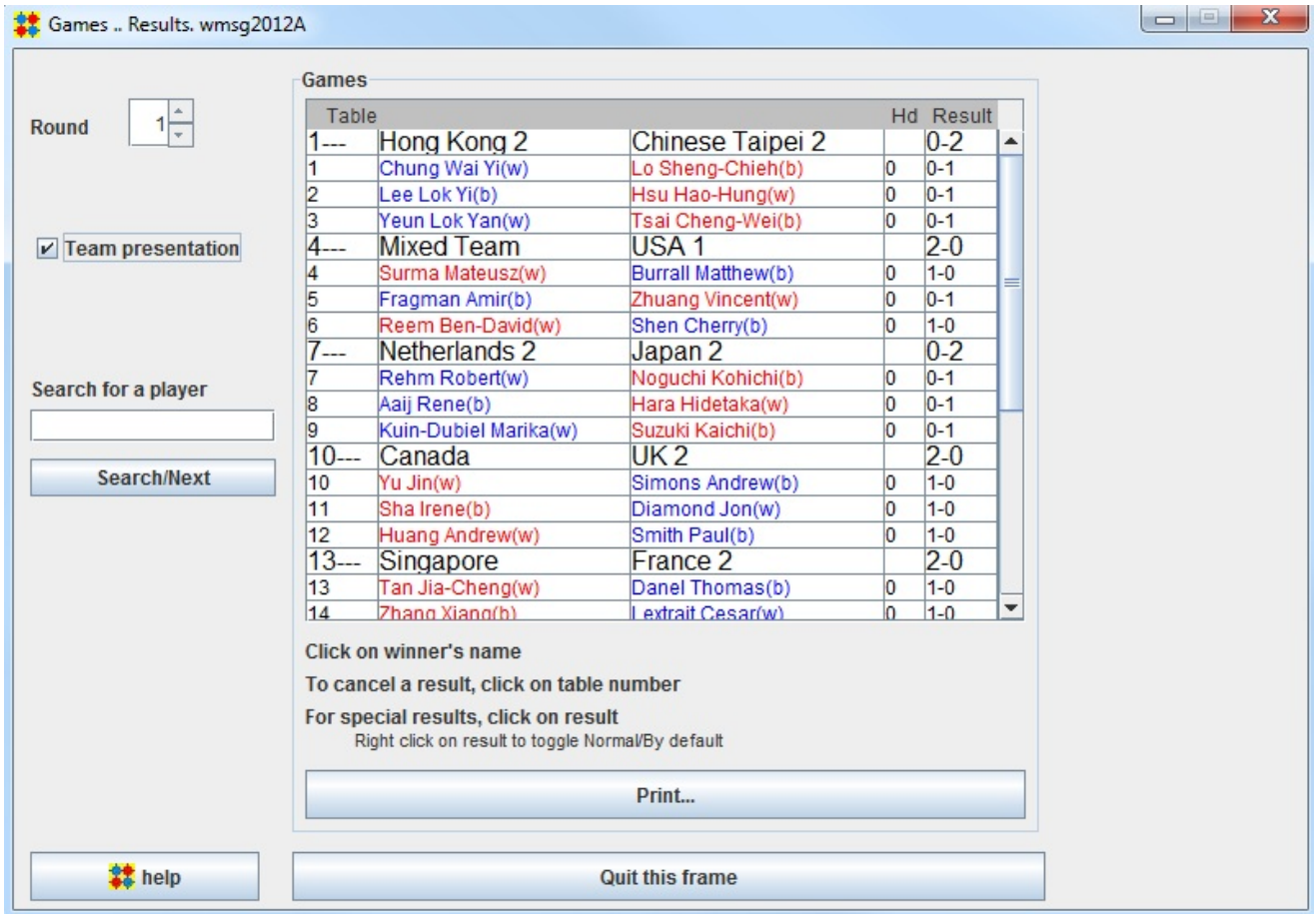
Games Results frame



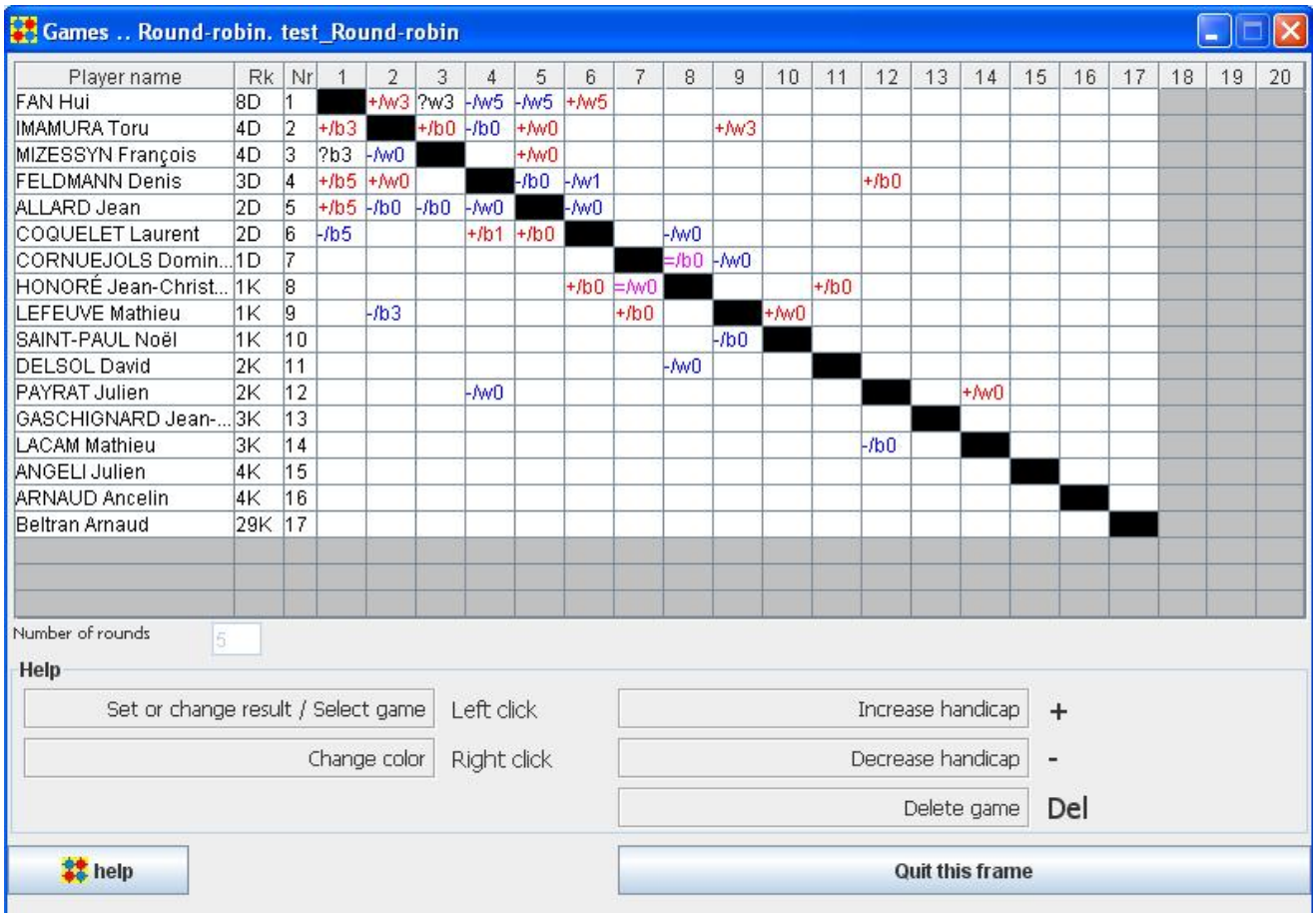
For usual results, just click on the winner. Winner is coloured in red, loser in blue, equal result in purple.
For special results, click on results. The list of possible results is given in Games Encoding

Games Results for Team Tournaments

Select the "Team presentation" checkbox : The presentation will be displayed, match by match



Games Round-robin frame



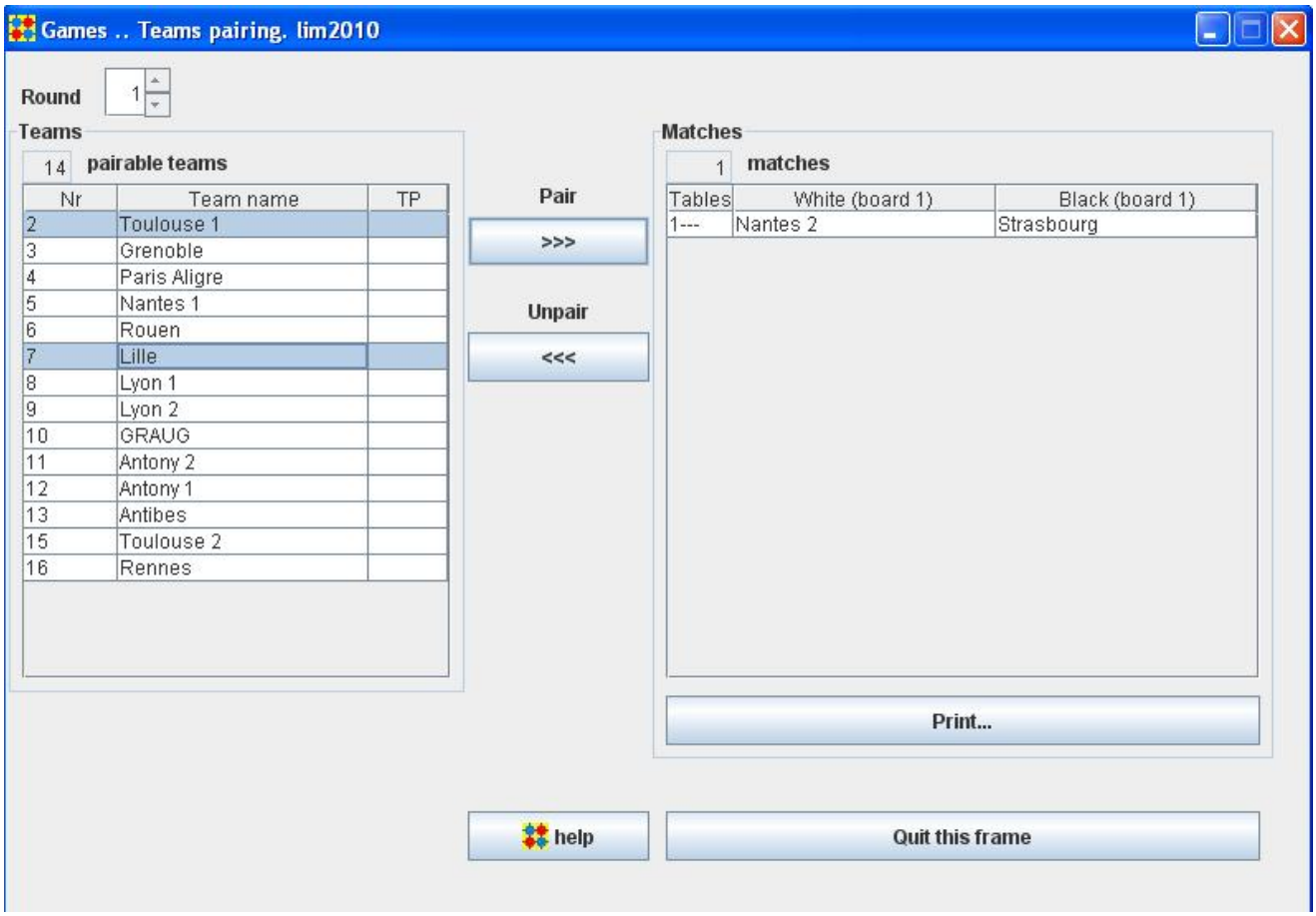
The Games Round-robin frame is usable only for small tournaments (20 players max).
Manual pairing and results entering can all be done in a single frame.
You don't have to worry about round numbers. OpenGotha will internally manage that for you, so that export functions will work exactly as if you had followed the usual complete process.
If you need to enter by default results, use Games Results Frame

Teams Pairing frame

With the Teams pairing frame, you can manually pair teams.

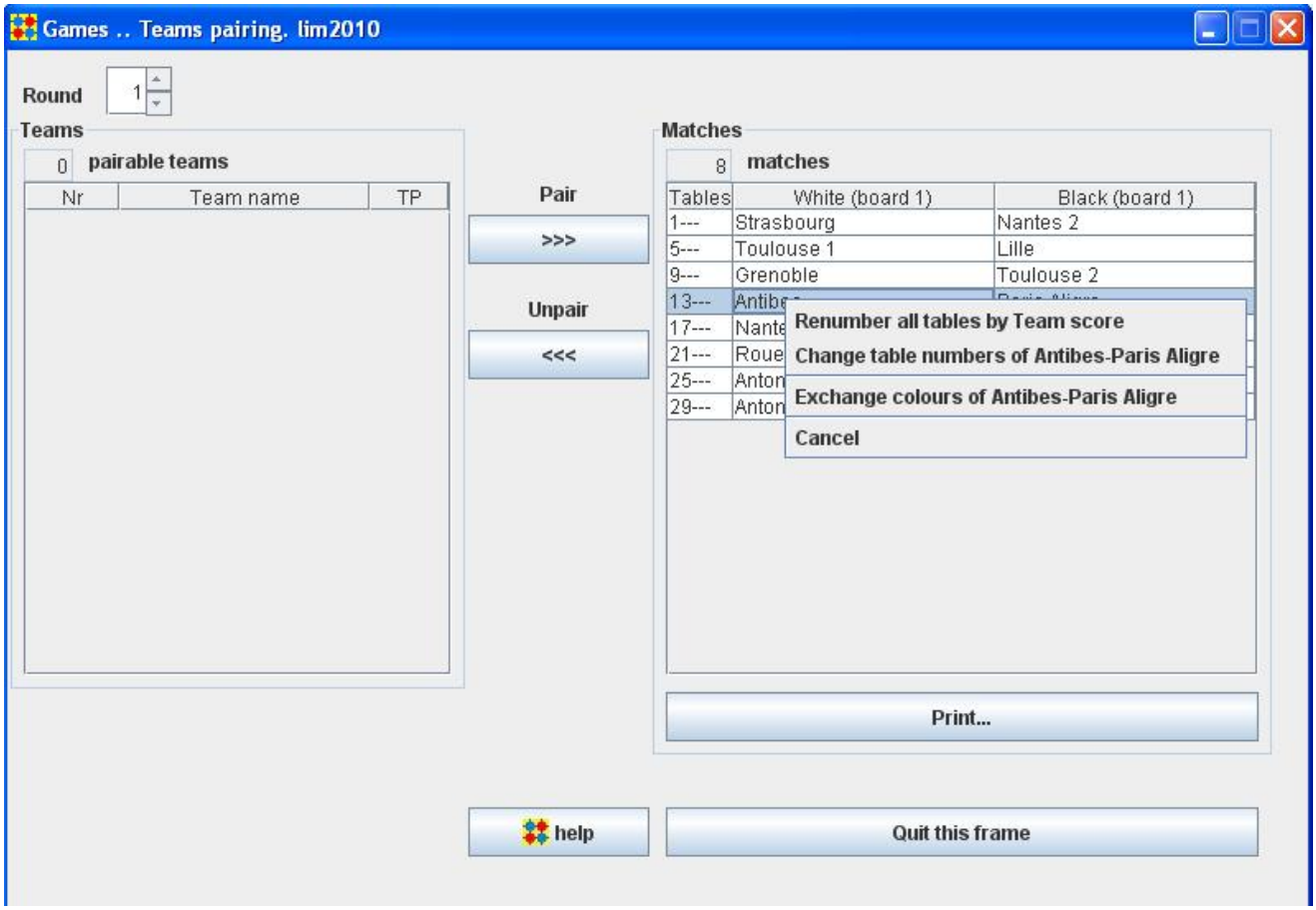
Pair 2 teams

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

Options menu

Menu items list

Tournament Options

This gives access to Tournament Options frame.

Games Options

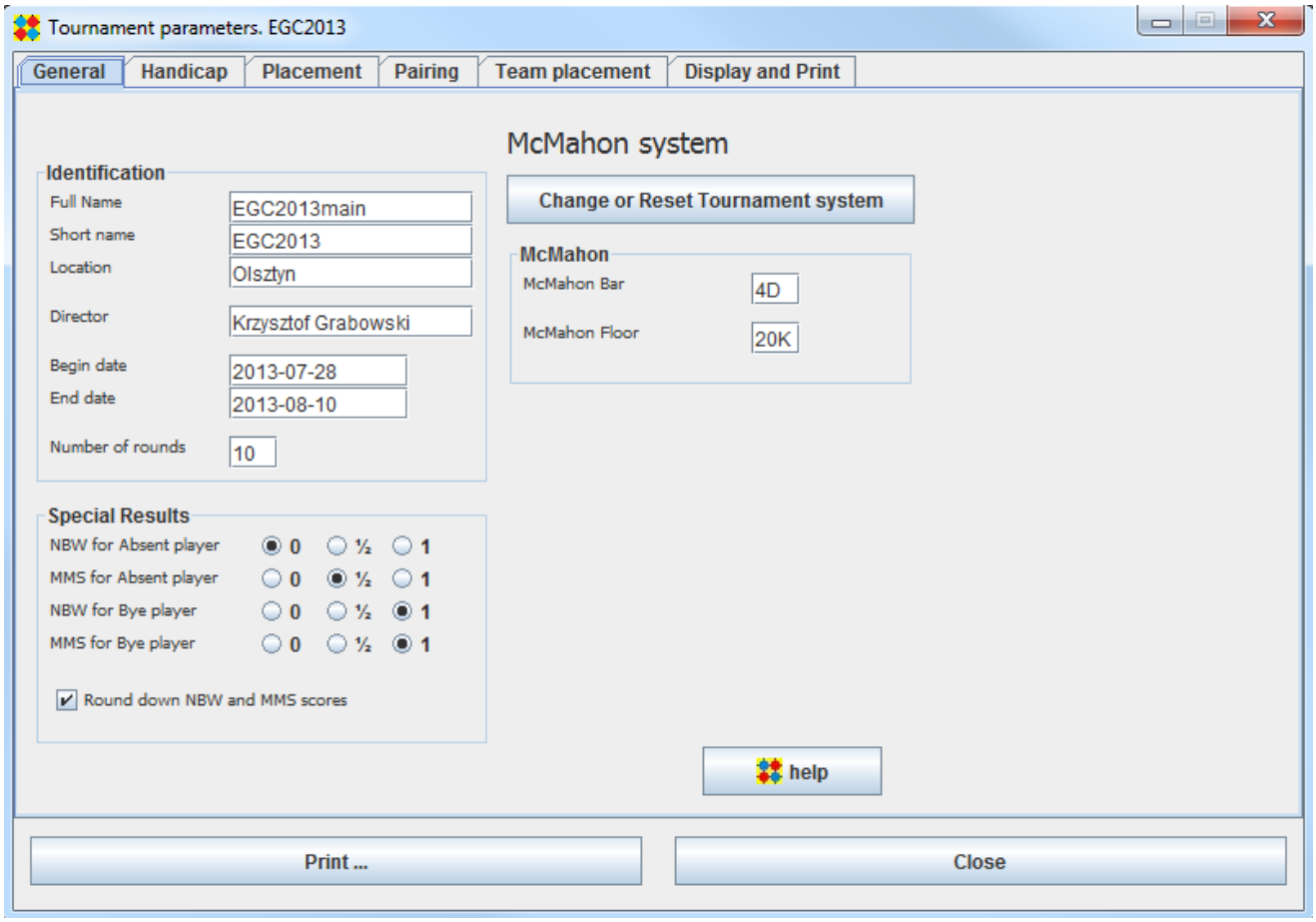
This gives access to Games Options frame.

Preferences

This gives access to Preferences frame.

Tournament Options

General parameters



Identification

Number of rounds

It can be set between 1 and 20.
It can be increased at any moment.
It can be decreased at any moment 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.
When, as a result of bye or absence, the score is not integer, a rounding down is made if the "Round down NBW and MMS scores" checkbox is selected. Otherwise, no rounding is made.
NB : Points got by a draw result 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.

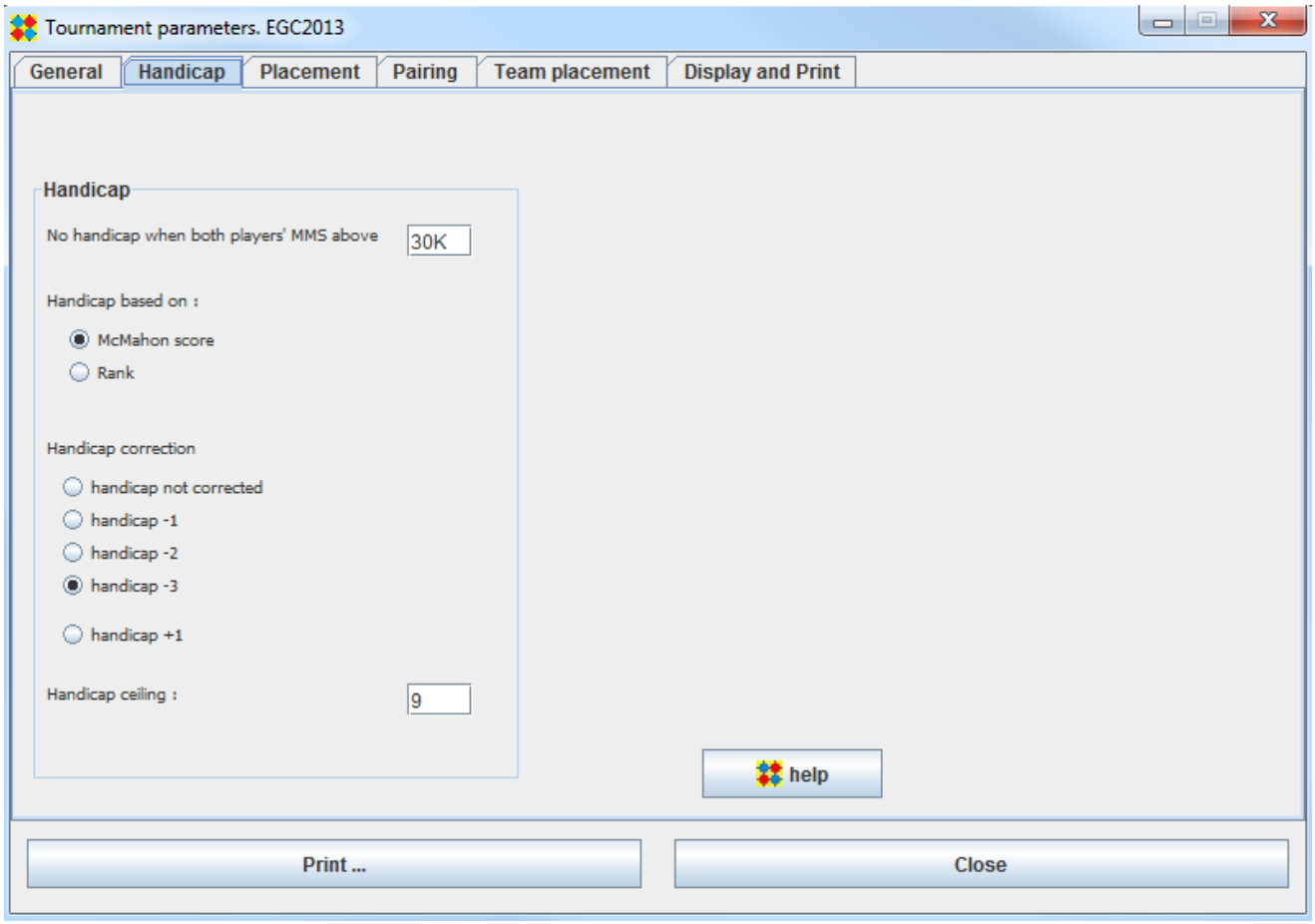
McMahon

McMahon Bar defines the SMMS (Starting McMahon Score) for players above the bar. Super-bars can also be defined in big tournaments.
McMahon Floor defines the SMMS (Starting McMahon Score) for players below the bar.
Bar can be set between 10K and 9D
Floor can be set between 20K and 1D
Bar must be higher or equal to Floor

Change or Reset Tournament system

This button gives acess to a dialog box where you can choose one of the three tournament systems or reset tournament parameters to their default values

Handicap parameters



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

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

Placement parameters

- NBW
  Number Of Wins.
- 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 integer, it is rounded down to the closest integer.
- Rank
  As defined at registration. 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
  Sum Of Opponents scores. SOSW is based on NBW. SOSM is based on MMS.
  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 is corrected according to the handicap before addition to the SOSM
- SOSW-1, SOSW-2, SOSM-1, SOSM-2
  Same as SOSW and SOSM but after elimination of 1 or 2 worst opponents scores
- SODOSSW, SODOSSM
  Sum Of Defeated Opponents scores.
- SOSOSW, SOSOSM
  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)

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

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

- DC

Direct Confrontation. This performs a special sort of 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 parameters, 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 looses a game, he joins the classic McMahon tournament. The loosers of semi-finals play a match for the 3rd place.
- STS is equal to MMS for all players, except for the 4 players of the top group reaching the semi-finals:

  - at each round, STS is increased according to MMS rules.
  - but a win in quarter or semi-finals gives a bonus of 2 STS points.

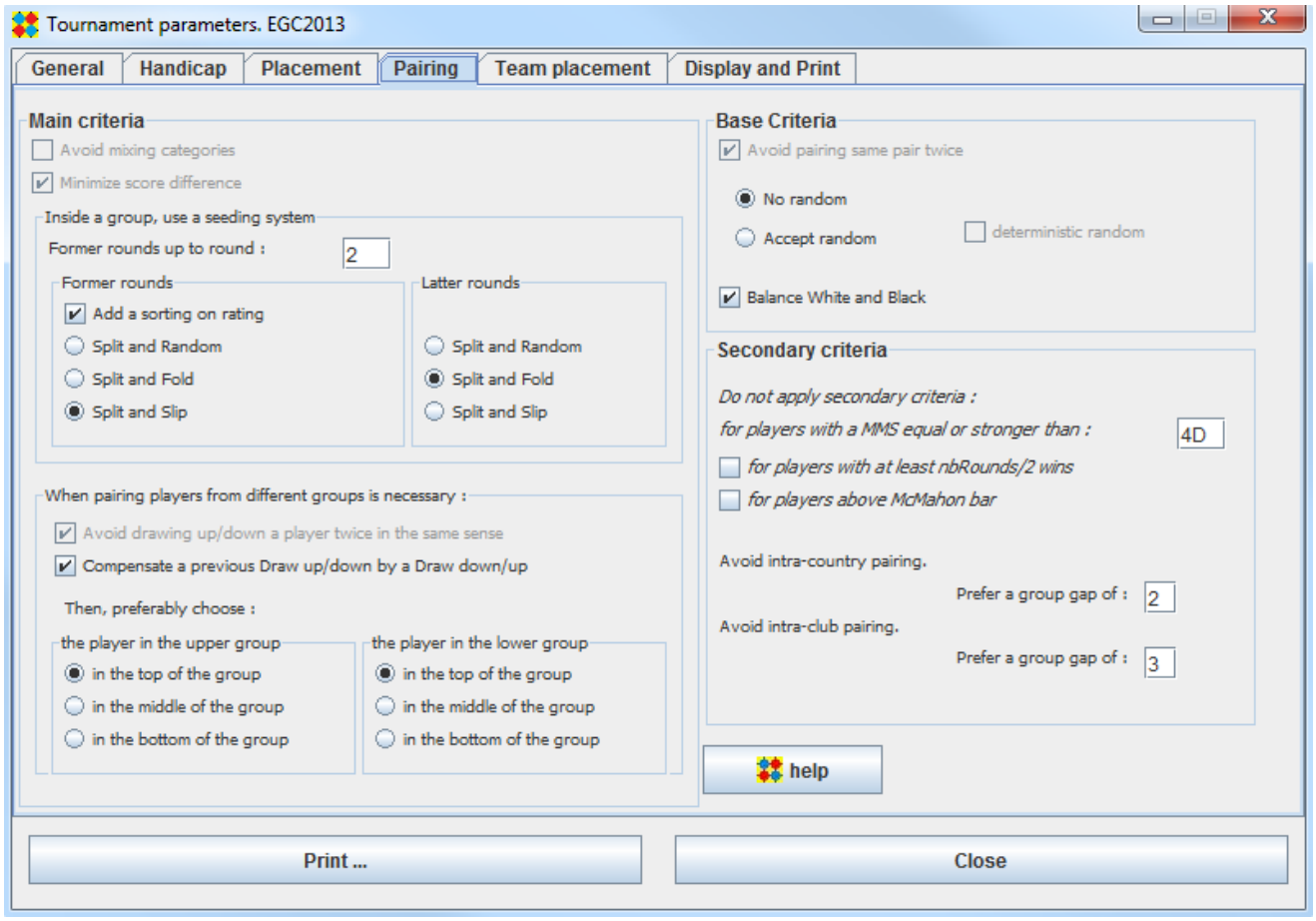
- STS used as first placement criterion aims at ranking players (Standings tab -> use temporary set) according to the elimination bracket results.

- 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 2^n.

- SOSTS
  Sum Of Opponents' STS

Pairing parameters

Pairing parameters refer to a subset of pairing criteria as described in [Pairing evaluation function.]



Main criteria

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

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, MMS or NBW.

Seeding system

Inside a group, players are ordered according to of their placement. Each player of the higher half of the group will be paired with a player of the lower half.
"Split and Fold" will prefer pairs on the "1 - n, 2 - n-1, ..." scheme
"Split and Slip" will prefer pairs on the "1 - n/2+1, 2 - n/2+2, ..." scheme
"Split and Random" will make random choice.
You can choose a different system for former rounds and latter rounds.
And, for former rounds, you can add a sorting on rating. This is the recommended mode if you want to avoid a game between two best players in the former rounds.

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 a part of random in pairing. 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
- 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 McMahon bar

Minimize handicap

This criterion is already taken in account in McMahon system because intra-group pairing will not lead to handicaps.
It may be more relevant in Swisscat system.
Details in Pairing evaluation function.

Avoid intra-country pairing and Avoid intra-club pairing

This determines what you accept to do to avoid intra pairing.
For instance, in a McMahon tournament, if you choose 3 as group gap, which is the default value for intra-club pairing, then OpenGotha will prefer to pair a given player with an other player coming from an other 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.

Team Placement parameters

- 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
- BDxW
  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 at first round

Display and Print parameters

Games format

Defines the way game results are displayed, printed and exported.

Columns in Standings

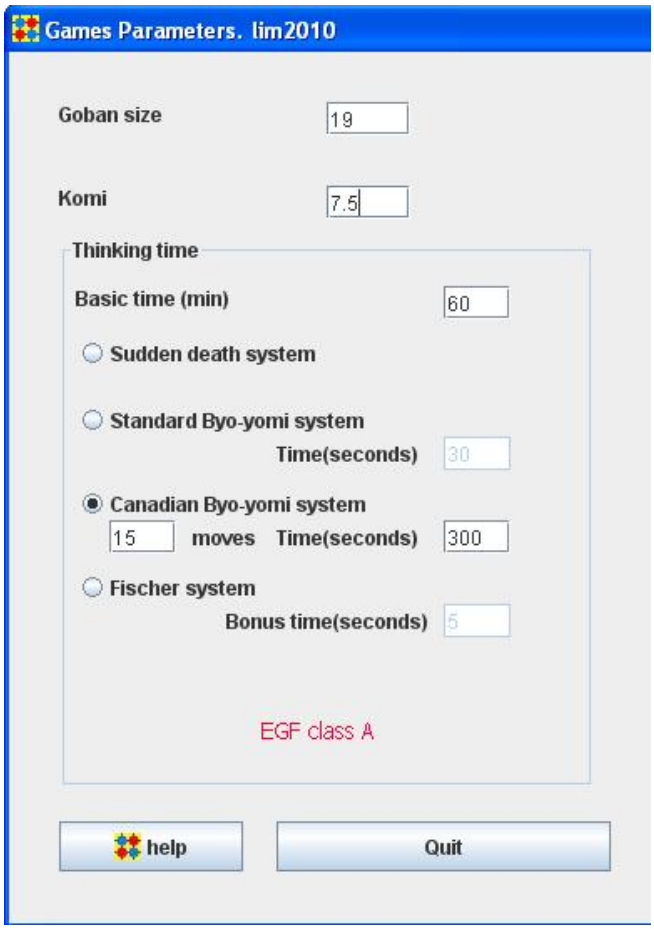
Defines whether Num and Pl are displayed/printed/exported in Standings.

Matches List. also display individual games

Defines whether Individual Games are printed or not in Matches list

Games Options

The informations in this frame are useful 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

Depending on the time parameters, OpenGotha computes the class (A, B, C, or no class) according to EGF rules.

EGF recognizes three tournament categories:

- **class A** - well organised tournament recognised by EGF member
  time limit requirements: adjusted time minimum 75 minutes, basic time minimum 60 minutes (45 for Fischer)
  weight for inclusion to EGF ratings: 1.00
  In addition tournaments with handicaps in the top bar are not included in class A.
- **class B** - well organized tournament recognized by EGF member
  time limit requirements: adjusted time minimum 50 minutes, basic time minimum 40 minutes (30 for Fischer)
  weight for inclusion to EGF ratings: 0.75
- **class C** - casual or club tournament recognized by EGF member
  time limit requirements: adjusted time minimum 30 minutes, basic time minimum 25 minutes (20 for Fischer)
  weight for inclusion to EGF ratings: 0.50

Adjusted time:
is calculated as:

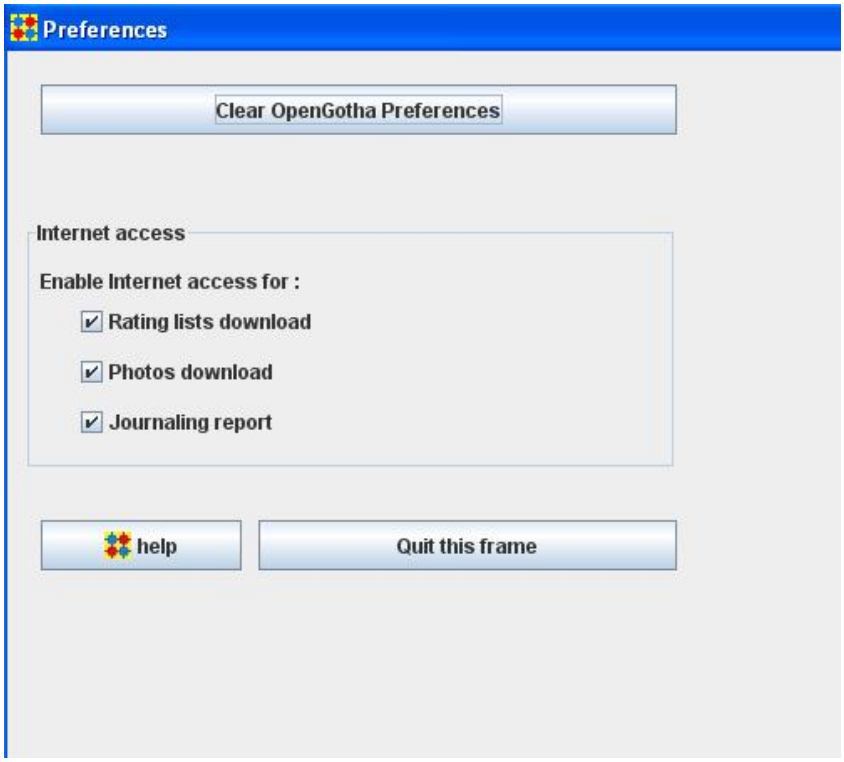
- **Sudden death** - basic time.
- **Standard byoyomi** - basic time + time equivalent to 45 moves.
  e.g.: basic time: 60 minutes, byoyomi: 30 seconds per move:
  60 + (45 x 30") = 82.5 minutes
- **Canadian byoyomi** - basic time + time equivalent to 60 moves.
  e.g.: basic time: 75 minutes, byoyomi: 12 moves in 5 minutes:
  75 + (60 x (5 / 12)) = 100 minutes
- **Fischer** - basic time + bonus time equivalent to 120 moves.
  e.g.: basic time: 45 minutes, bonus per move: 15 seconds:
  45 + (120 x 15") = 75 minutes

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

Preferences

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

- The default type of rating list
- The default registration status, Preliminary or Final
- The list of recent tournaments
- The journaling informations
- The Internet access authorizations



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
- Journaling report
  Enables/Disables the possibility to upload Journaling reports
  Journaling report data are sent to the author of this program. It is highly recommended to keep journaling enabled.

Options menu

Menu items list

Discard rounds

This gives access to Discard rounds frame.

RMI Manager

Useful for Administrators/Programmers.

Memory manager

Useful for Administrators/Programmers.

Experimental tools

Maintenance 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, round 1-5 for 1st week, round 6-10 for 2nd week (as in example below)

The "Discard rounds" button will :

- Discard unchecked rounds
- (if checkbox selected) Remove players implied 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

Appendices

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	½-½
Both win	1-1
Both lose	0-0
White wins by default	1-0!
Black wins by default	0-1!
Equal by default	½-½!
Both win by default	1-1!
Both lose by default	0-0!

A result is said "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 ½

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 General parameters

Pairing algorithm

OpenGotha's pairing 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 give the maximum sum of costs.

The maximum matching algorithm

OpenGotha's pairing is based on on an O(n^3) implementation of Edmonds' algorithm, as presented by Harold N. Gabow. The development is a part of 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, Ein Mac-Mahon-Losungsprogram für Go-Turniere unter Benutzung von Maximum Weight Perfect Matching :
  http://www.cgerlach.de/go/diplom.pdf
- B. Korte, "Combinatorial Optimization", Springer, available on Google books :
  http://books.google.com/books?id=tu6nz572uJIC&printsec=frontcover&dq=Combinatorial+Optimization

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 in 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 4 scenarii :

- scenario = 0 : One of the players has been already drawn in the same sense
- scenario = 1 : Normal conditions (does not correct anything and no previous drawn in the same sense)
- scenario = 2 : It corrects a previous DU/DD for one player
- scenario = 3 : It corrects a previous DU/DD for both players

If scenario = 0, set to 0
Else take in account the position of the player inside a group. This gives a value between 0 and 33 333 333
If scenario = 2, add 33 333 333
If scenario = 3, add 66 666 666
Set to the resulting value, which is a number between 0 and 99 999 999
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 concavity function 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 for if both players belong to the same club. An other one for if both players belong to the same country. The values of the malus depends on the "Prefer a group gap of ..." as defined by the user. The geographical malus is set as a worse value between 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 will choose the second possibility, but the computer will 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 d 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

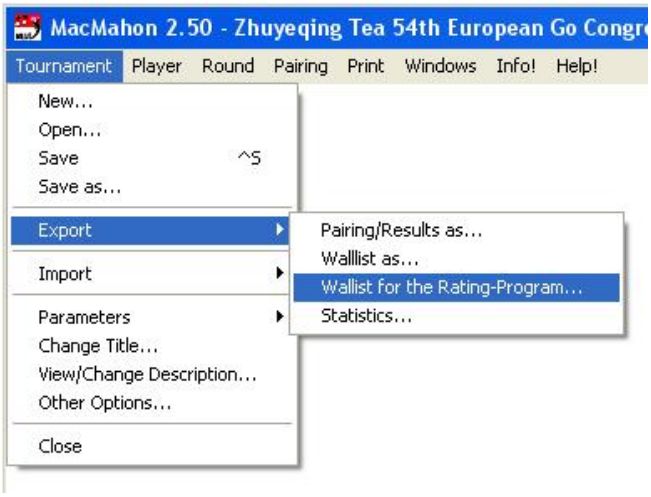
Download OpenGotha sources from OpenGotha Development page
In Tournament.java, see the costValue method.

Compatibility issues

You can re-use tournament data generated by other programs

Importing players and games from Christoph Gerlach's MacMahon program

From MacMahon 2.50, use "Tournament .. Export .. Wallist for the Rating-Program" menu item.



Save the file into a .txt file

In OpenGotha, create a new tournament.
Then import the .txt file with the "Tournament .. Import .. Import Players and Games from Wallist file" menu item

Importing players and games from Geoff Kaniuk's GoDraw program

From GoDraw 6.3.6, use "File .. Export .. Ratings" menu item.

Save the file into a .h9 file

In OpenGotha, create a new tournament.
Then import the .h9 file with the "Tournament .. Import .. Import Players and Games from Wallist file" menu item

Opening a tournament saved by an old OpenGotha program

Usually, the "Tournament .. Open" menu item is what you need.
However, for tournaments managed by OpenGotha V3.22 or older, the file to open is the .xml file as generated by the "Tournament .. Export .. Tournament in XML format" menu item :

Save the file into a .xml file

In new OpenGotha, open the .xml file with the "Tournament .. Open .. " menu item

Running several instances of OpenGotha

Some compatibility issues may occur when running several releases of OpenGotha.
To solve them, choose the "Options .. Preferences" menu item and click "Clear OpenGotha Preferences"

VBar-separated format

vBar-separated format has been defined by Christoph Gerlach. It is supported by OpenGotha to facilitate transition from MacMahon program to OpenGotha.
Each row of the file holds the dataset for one player and has to follow this format :
name|firstname|rank|club|country|rating|registration
name :
firstname :
rank : Number followed by "d" or "D" is interpreted as Dan, everything else as Kyu; the limits are 30 Kyu - 9 Dan
club : Truncated after 4 characters
country : Truncated to 2 characters. Ignored if 0 or 1 character is supplied.
rating : from 0 to 2900.
registration : "p" for Preliminary "f" = Final.
Notes

- Fields must be separated by "|"
- ";" declares the rest of the row as a comment.

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