Fritz 15

Content

1   First steps

1.1   Introduction

    Playing a game
    Levels of skill
    Help and coaching
    Interface with Ribbons
    Load and replay games
    Automatic analysis
    Let`s Check
    Engine Cloud.com
    Web Apps

Find more information on ChessBase products at: www.chessbase.com.

1.2   Playing a game

After you install the program it is automatically set to play games against you.

See also the Chapter about the Web Apps ....

So you can immediately start entering moves.

Menu File   New game

Note: Before starting a game is to be noted that the program is set after the first start on the Infinite analysis mode. Experience has shown that most users set the program for analyzing your own games. So you have to select a Playing level first before you can play directly against the program.

The pieces are reset in the initial position and the program is ready to play against you. You can select from a number of different kinds of games: blitz, long (tournament) games, friend mode, etc. In addition there are chess variants like Giveaway (you have to try to lose all your pieces) and Chess 960

Pressing *Ctrl-N* will start a new game of the kind you last played.

- To move a piece, move the mouse onto it, click and hold down the left mouse key and deposit the piece on a new square. You can also click the piece and then the destination square (or first the destination square and then the piece).

- To castle, move only the king two squares to the left or right. The rook will automatically be moved to its square.

- If an "en passant" capture is possible you should give the file on which it can be made.

- When you promote a pawn the program will offer you a choice of pieces.

The program only accepts legal moves. If you try to execute a move that does not conform to the rules of chess, the piece will simply jump back to its original square.

The program will automatically reply with its own move after a few seconds.

To take back a move click the takeback button
 in the menu bar   or below the board

You can also use "Undo move" or press Ctrl + <= (Ctrl cursor left)

You can offer a draw or resign in the "Game" menu, if the situation is completely hopeless.

Help
This program is a tough cookie, even for strong grandmasters. You will probably want to use some of the chess help available during the game. You should also try the special Friend mode, in which the program tries to play at exactly your level of skill.

There it can play like a real moron.

Autosave

All games are automatically saved in the database called Autosave, which can be found in the directory My Documents\ChessBase. It is also in the dropdown list of the database window.
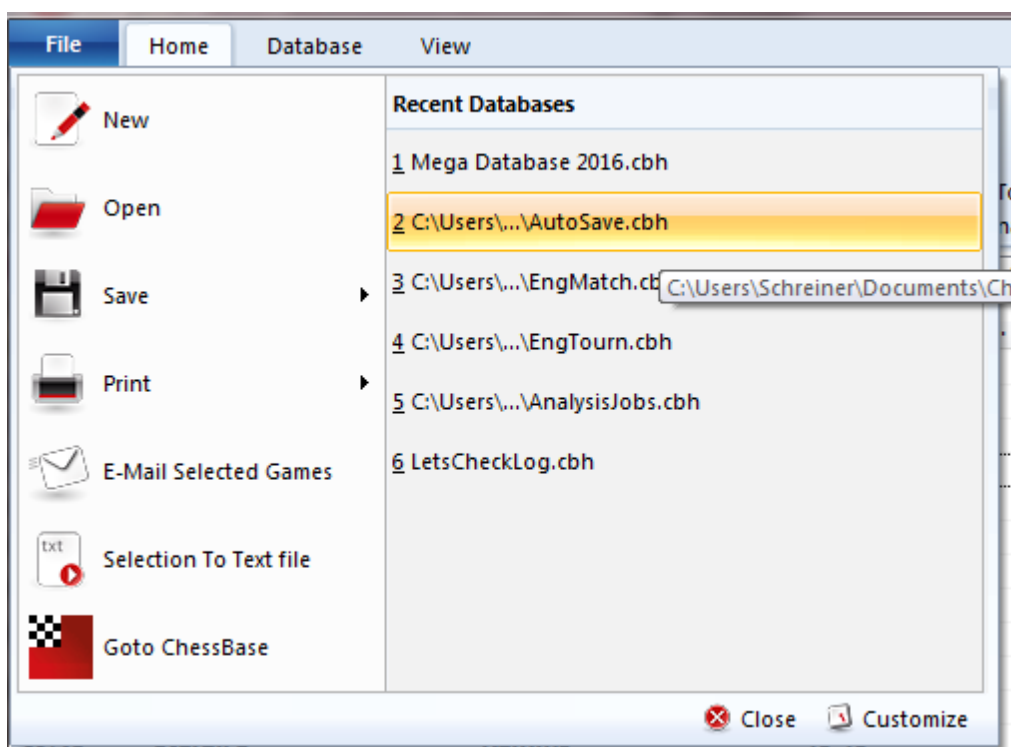
All the games played on the chess server will be automatically saved in a file called *MyInternetGames*.

1.3   Help and coaching

During a game you can ask the program for advice:

Hint	The program will analyse the position and offer advice
Suggestion	The program will suggest a move
Threat	Displays the direct threat
Explain all moves	Shows a list of all legal moves and what they achieve
Position tutor	Generates a brief strategic description of the current board position.
Threatened squares	Displays attacked and threatened squares in colour
Spy	Shows the plan or threat automatically with a coloured arrow
Kibitzers	Opens a new window with a different engine which you can consult
Expected move	Displays which move the program is currently expecting
Dynamic Hints	Possibilites for attack and defence manoeuvers are shown for every square when you move the mouse cursor over it
Opening Hints	If this option is selected, the program uses green arrows to show the most important opening moves
Visualize Search	It uses graphics to display possible plans for both sides on the Board
Measurements	The „hotness" display shows how complicated and tactically „hot" the position is.
Let`s Check	Every position that has been analysed by anyone at any time is voluntarily saved on a server.

1.4 Levels of skill

Full-strength playing levels

▸ Blitz games
▸ Long games

In both these levels it is advisable to use the function "optimise playing strength" if you want to get the most out of the program.

You can also use *Training Rated game* and play serious tournament games in which the program will give you an objective assessment of your playing strength.
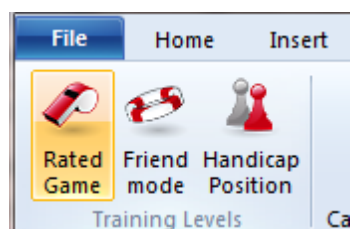
Reduced playing strength level

▸ Friend mode

Apart from the above, the program can be set to play games with a fixed time limit or search depth per move. Click Game – Levels to reach these settings.
Chess variants

▸ Givaway chess

▶ Chess 960

Apart from the above, the program can be set to play games with a fixed time limit or search depth per move. Click *Game Levels* to reach these settings.

1.5 Value of the pieces

The value of the chess pieces is a very elementary and essential strategic criterion. In top games even a material difference of a single pawn can be decisive.

The piece values are calculated in pawn units:

Piece	Value in pawn units
Pawn	1.0
Knight	3.0
Bishop	3.0
Rook	5.0
Queen	9.0

The program give its positional evaluation in pawn units, always from the point of view of White. If the program is displaying a value of +1.30 this means that it considers the white position to be better by the equivalent of 1.3 pawns. If White is actually a pawn up then the additional 0.3 is the result of positional considerations (mobility, deployment of pieces, king safety, pawn structure, etc.). A display of −3.00 means that White is a piece down – either a bishop or a knight, which are both equivalent to three pawns.

1.6 Position setup

Insert   Position setup

This opens a dialog box in which you can enter a completely new position.

The operation is quite simple:

▸   Choose a piece type in the columns on the right and put one or more of that piece on the board by clicking on squares. The right mouse key changes the colour of the piece deposited, a second click deletes the entry. You can also drag pieces off the board to delete them.

▶ You can drag a piece that is on the board from one square to another, holding down the mouse key in the process.

▶ You can clear the board completely or reset the starting position.

▶ The buttons "Copy/Paste ASCII", "Copy/Paste FEN" are used to enter diagrams that exist in one of the common text description forms. Mark the position in a word processor or browser and press Ctrl-C to copy it into the Windows clipboard. After that you can switch to position entry and click the paste button. The position will appear on the board. The copy buttons will copy a text description of the diagram into the Windows clipboard. FEN stands for "Forsyth-Edwards Notation", and the similar EPD for "Extended Position Description".

Example of a ASCII position description:

wKd6,Rc8,g8,Pg2, bKh7,Qe1,Pd4,e3,h5,h6
Example of the FEN description of the same position:
2R3R1/7k/3K3p/7p/3p4/4p3/6P1/4q3 w - - 0 1

You can copy either of the above descriptions out of the Help file and paste it in the position setup.

After you have set up the position you should, if relevant, give the castling status of each side. In a few cases it may be important to know that the side to move can take en passant. Type in the file on which the capture can be made. You can also tell the program which side has the move and whether it should start counting moves from 1 or a higher number. Click "OK" to end position setup.

Mirroring the position
These buttons below the pieces allow you to change the postion in two ways:

▶ White <-> Black mirrors the position vertically, i.e. between white and black, and changes the side to move.
▶ King <-> Queen mirrors the position horizontally, so that the pieces on the left are moved to the right and those on the right to the left.

2 General operation

2.1 Program Activation
"
The program is activated with a serial number.

After entering the serial number you have to register the program on the Internet. In the *Menu File* there is an option called *Activate* .

If you purchased the download version of the program, you will find the serial number in your shop account together with the installation files.
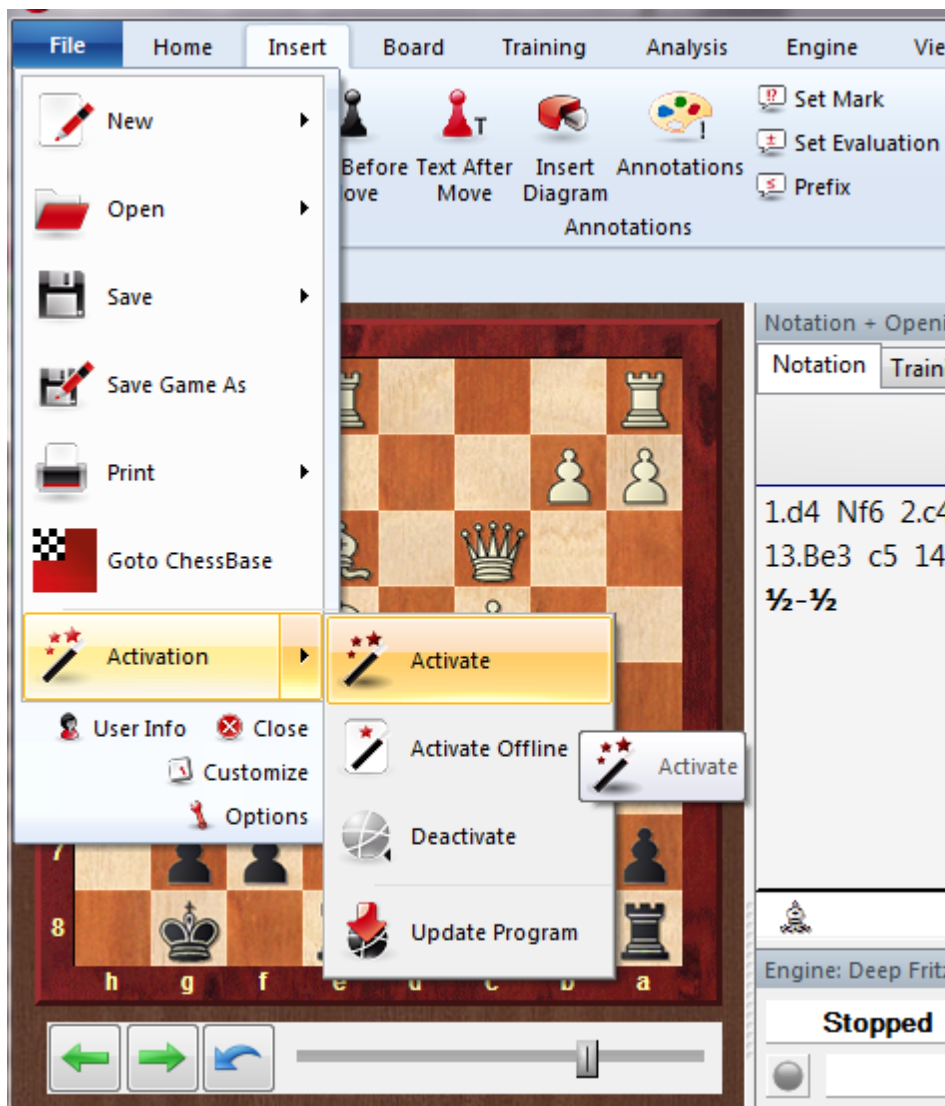
After selecting this function there is the following dialog:

Aktivierungsschlüssel:

| 8NSS5 | BKBV6 | 9BPKY | FWQG6 | N7P6L |

Bitte die vier obigen Buchstaben eingeben:
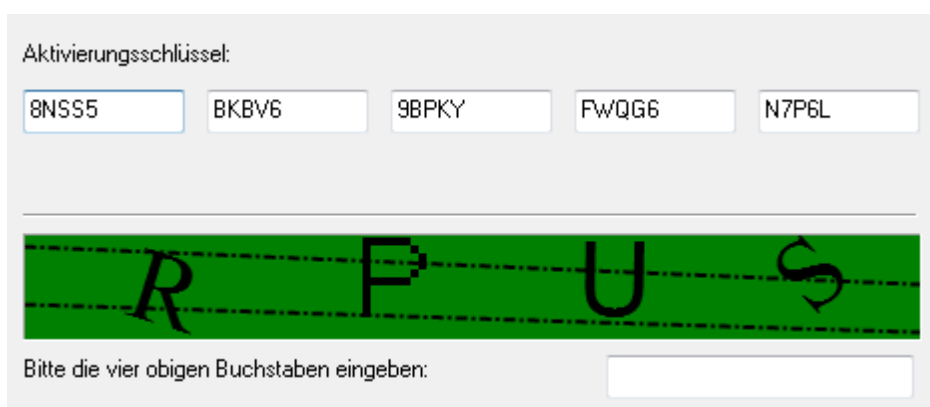
If a serial number is not already present in the text boxes type the number that you received with the program. The serial number can be used to install the program on a

maximum of three computers. If you want to install the program on a new computer, or you want to re-install your operating system, you should first deactivate the current registration online.

After entering the serial number you have to register the program on the Internet. To do this use the *Menu File* and click on **Activate**.

The online activation is necessary to be able to receive things such as free program updates. It is only possible to use "Let's Check" in the Online Analysis after activationg the program.

Information about ChessBase Admin Tool ....

If you want to install the program on a new computer you must first *deactivate* the previous online registration. The reason for this is the hardware recognition. When the program is registered the server stores information about the system configuration of the user's computer.

The deactivation is carried out with the *Menu File - Activation - Deactivate*. This increments a counter, so that the program can now be registered on a computer with a different system configuration.

Note: If you make significant changes to your computer's system configuration you must also deactivate the program and activate it again.

Manual Activation

It is also possible to register the program on a computer without an Internet connection (for instance a laptop or a second computer). To do this you have to find the hardware key of the computer not connected to the Internet.

Start Kommodo and select the option „Activate Offline" from the user menu.

After entering the serial number the program displays your computer's hardware key.
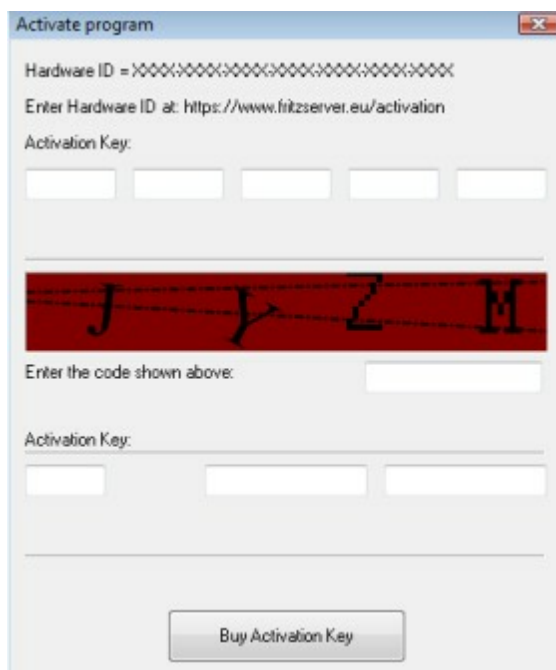
Make a note of this hardware key, and then use a computer with an Internet connection to access the web page:

> https://www.fritzserver.eu/activation/

Enter the hardware key and the security code. The web page will then give you an activation key, which you should carefully make a note of. Enter the key and the security code (here SDGX) in the activation menu of your computer without an Internet connection and click on OK.

If you have entered the details correctly your program will be successfully activated.

Playchess.com

You can use the Kommodo serial number for one account on Playchess.com. Enter it under *Account - Enter Serial number* and get one year of basic access.

2.2 Ribbons

The program offers a design based on the guidelines of the „Microsoft Fluent UI". The so-called ribbons were first implemented by Microsoft in Office 2007. The ribbon, also called a „band", is a graphical display concept which combines the elements of menus and icons. This concept offers many advantages when using a complex program.

"
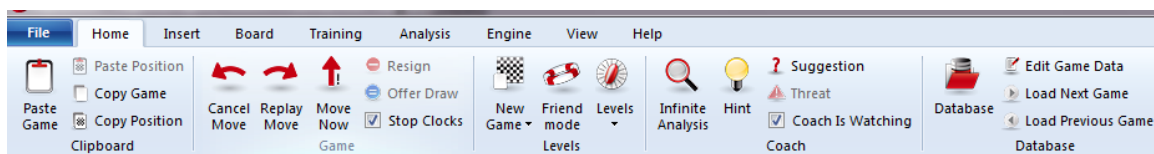
This means the end of the days in which users had to click through levels of menus and submenus to find functions. Instead of this simple icons are displayed for the program functions depending on the context the program is currently in. In the window's header words are listed – just as in traditional menus – which represent groups of commands, such as *Start* , *Insert* or *Board* .

However, clicking on a word doesn't open a menu, it opens a list of icons that represent the relevant commands. Each „menu" has its own list of icons.

The ribbon takes up more room on the screen than the classical combination of menus and icons. The symbols are grouped within the ribbon depending on the monitor's resolution and the size of the window. Since additional commands can be added to the ribbons it is rarely necessary to use dialog boxes. There is also the possibility to minimize the ribbons. This is done by right clicking on the ribbon and clicking on „Minimize the ribbon".

This leaves the command words on the screen, but removes the icon list until they are clicked.

A very important function in this user concept is the **File menu**.
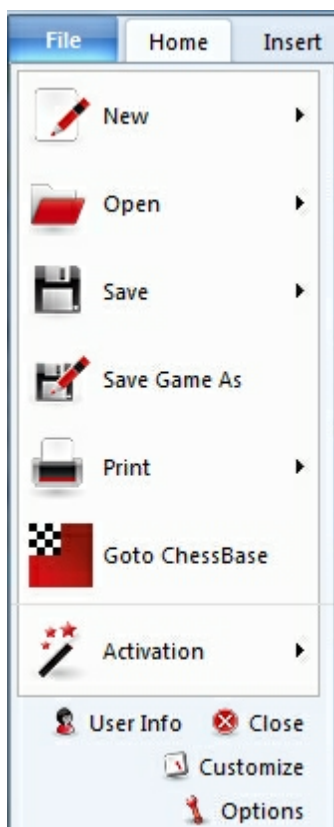
This menu is used to change important settings and access central functions of the program, such as the options dialog.

A further important component is the toolbar next to the user menu icon. These icons

"
are used to quickly access commonly used functions with a single mouse click.
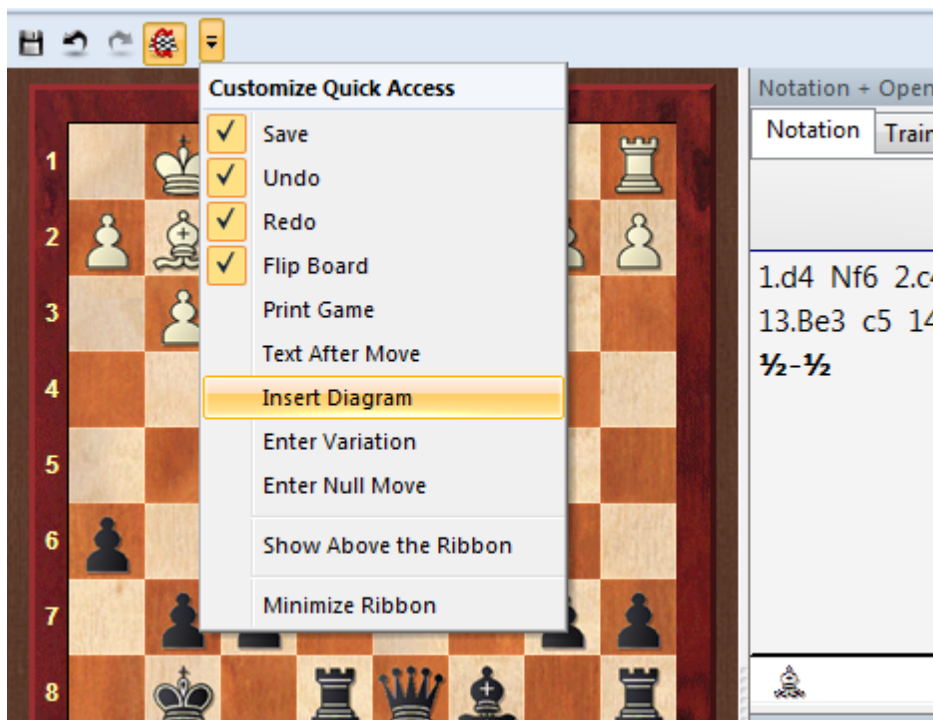
The user can decide whether the quick access toolbar is displayed at the top of the program window or below the ribbon. This option is selected by right clicking on the toolbar.

Add to Quick Access Toolbar allows the user to customise the environment by adding the functions he uses most often to the quick access toolbar.

This user concept offers many advantages in day-to-day work with the program. For instance, many commands can be carried out easily. such as board selection or offers on the chess server. Since the functions are ordered based on how often they are used the operation is quicker and easier.

When working with the program the user should always check if an item is followed by a small arrow.
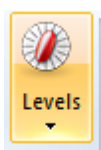
If this is the case it means that more functions are available.
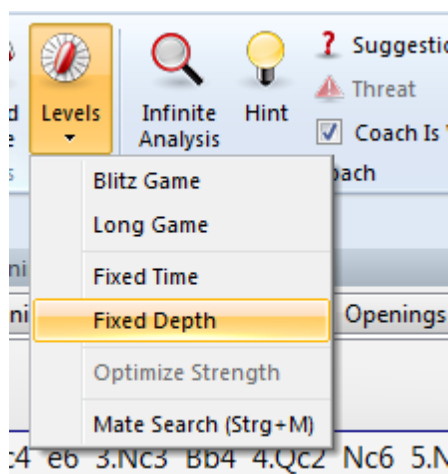
This example shows the selection of the different 3D views. Clicking on the small arrow opens a submenu with additional functions.

Using the ribbons makes it much easier to operate the program. It is true that the new user concept requires the user to adapt himself if he was used to the old menu structure. However, the new user concept is much simpler and many functions are easier to access.

2.3   Docking Windows

The program now offers a new way of docking and undocking windows more intuitively. To do this click on the handle (the top bar) of a pane and hold the mouse key while dragging it round the window. This undocks the window. In the following example the clock has been positioned directly above the board.

There are now several arrow buttons on the screen. These arrow buttons appear every time you move a window on the screen. These buttons can be used to place the window more accurately.
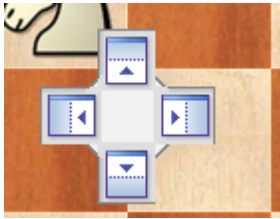
To dock a window move the mouse over the shaded part of a button while keeping the mouse button held. This will display the new position of the window before releasing the mouse button.

In our example we will move the chess clock window by moving the mouse over the upper arrow button. This will place the clock directly above the board. When you see the shaded blue area on the screen you can release the mouse button.

This places the clock in the exact position which was shaded.

This method of positioning windows using arrow buttons is easy to use if you remember that the position of the window is always shown by the shaded area next to the arrow buttons. If you practise you will find that you can position windows very quickly.

2.4 Standard Layouts

View Standard layouts (layout)
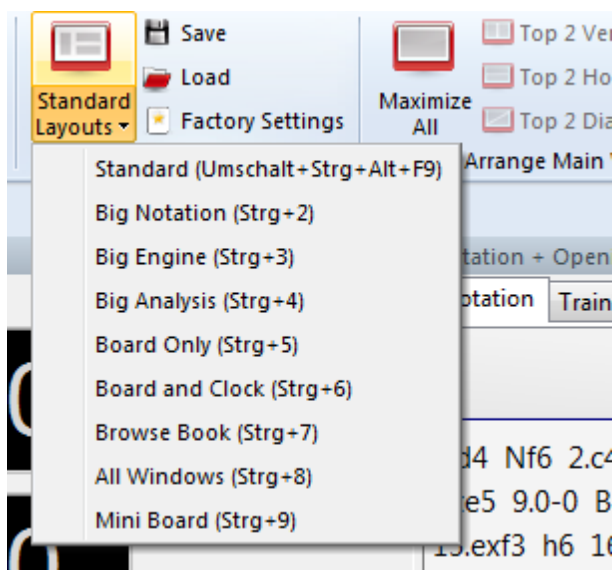
Here you can find a number of preset layouts which are useful in different situations. Whenever you start the program it uses the last layout from the previous session.

Note that if you have "lost" some elements of the board window then Ctrl+8 is a good "panic switch" that opens all the windows that are available.

Layout	Description
Standard	The standard "factory setting" with all the most important windows
Big board	Maximizes the size of the board to fit the current window. The other elements become smaller.
Big notation	The program window is maximised and the notation window enlarged for game replay.
Big engine	The engine window is given maximum space, a small variation board is installed.
Big analysis	A large analysis board is opened, so you can analyse the position.
Board only	All windows are closed, only the board is left. This is especially impressive in "Full screen" mode ("View" menu).
Board and clock	Only the board and the clock
Browse book	Large board and large book window, ideal for studying the opening.

All windows	Opens and arranges all important windows, including evaluation profile and chatter.
Mini board	The program window with only the board is placed at the top right-hand corner of your screen.

It is useful to get familiar to the keyboard shortcuts **Ctrl+1**, Ctrl+2, etc. for the layouts you need.

2.5 Window Pane Icons
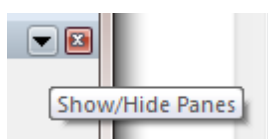
The program has additional icons for the important window panes.

Clicking on the *X symbol* closes the window.

Clicking on the arrow opens a small menu. This menu allows the user to quickly hide or display window panes if and when they are needed.
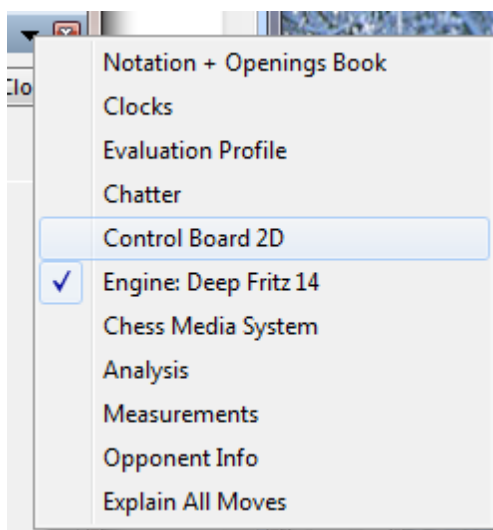
2.6   Board design – 2D board

Rightclick Chess board   Board - 2D
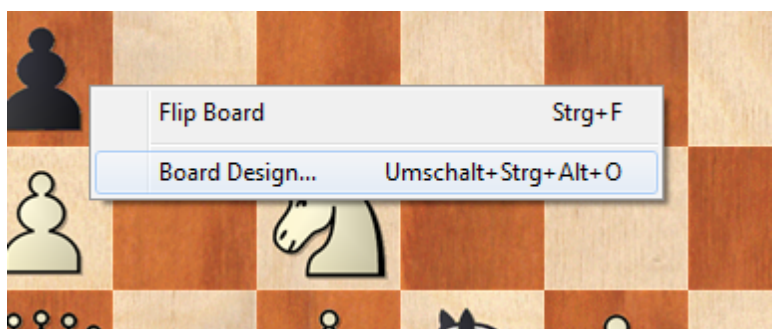
The 2D boards can be resized by changing the size of the board window. You can also view this dialog if you right-click on the board.
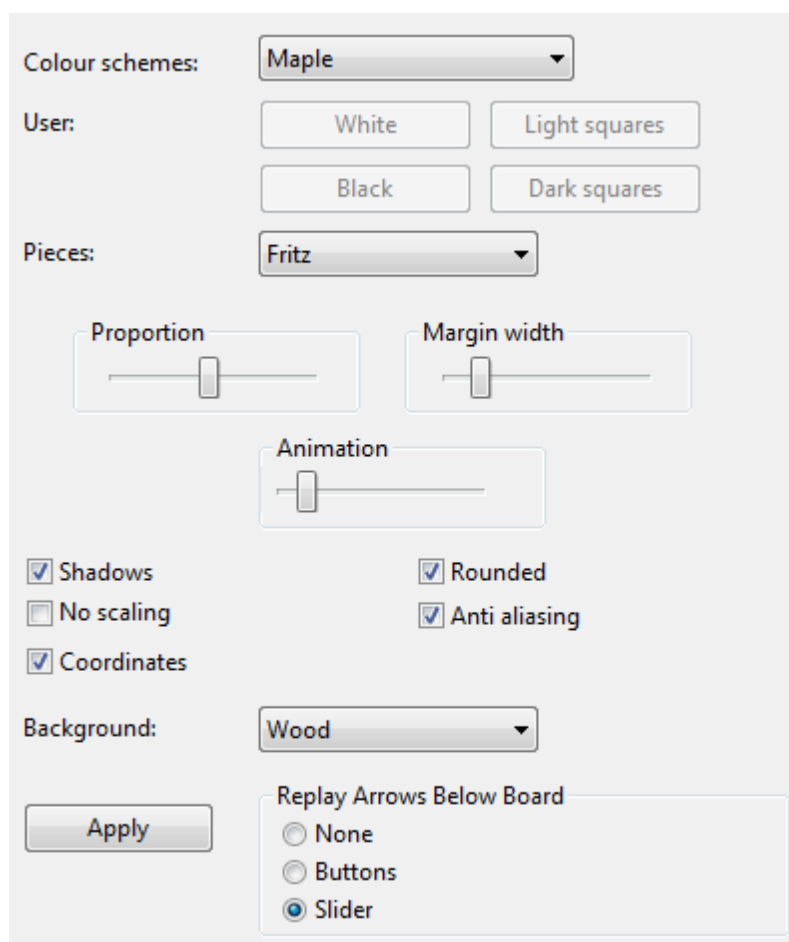
You can choose different materials (wood, marble, etc.) and colour schemes for the light and dark squares, and the background. You can configure the board to have co-ordinates around the board and the game replay control buttons below it.

There are also a number of different pieces styles. You can further improve the appearance of the screen diagrams by setting "*ClearType*" in the Windows "Display properties" – "Effects" menu. Since the diagram pieces are glorified chess fonts this will improve their appearance appreciably.

Here are the specifics of "Board design":

▶   *Colour schemes* selects the colour and texture of the dark and light squares of the chessboard. If you want to mix your own colours, click "plain colour" and select the colours you want for the squares and pieces. You can also use different material by clicking "User BMP" in the colour schemes.

▶   *Pieces* selects the piece design from several sets. "Habsburg" is classical European, "USCF" is a set in the style of American chess publications, and "Oldstyle" a nostalgic set that was used in books earlier in this century.

▶   *Proportion* regulates the relative size of the pieces with respect to the board.

▶   *Margin* width determines how wide the sides of the board should be.

▶   *Animation* determines how fast the pieces glide over the board.

▶   *Shadows* gives the pieces a shadow, so they appear to be slightly raised above the board.

▶   *Rounded* makes the pieces appear slightly rounded.

▶   *Anti aliasing* switches to older "Fritz" piece fonts with fixed sizes. Here too you can use your own bitmap material by clicking "User BMP".

▶   *Coordinates* displays the board coordinates 1–8 and A–H on the left and bottom edges of the board.

▶   *Replay arrows* below board puts recorder-style replay and forward buttons below the board. You can select simple buttons or a full slider:
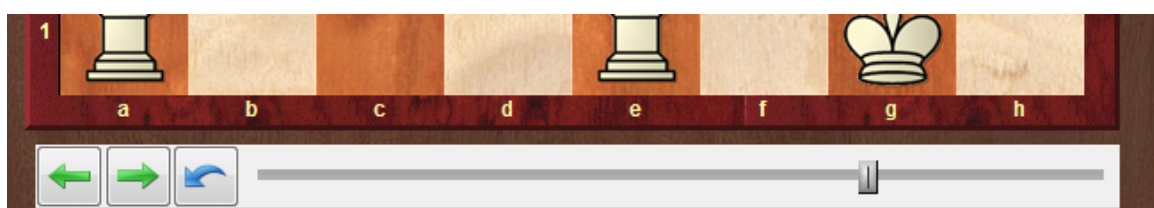
The buttons allow you to jump to the beginning or end of the game, or move one move backwards or forwards. The red takeback button allows you to enter a new move and overwrite the old ones without a query by the program (normally it will ask you whether you want to overwrite or start a new line).
Navigating games with the slider

The program has a intuitive way to navigate games. The slider below the board can be dragged or clicked, as in a media player, to get to different parts of the game very

quickly. This is especially useful in long, commented games. You can install the slider by using the menu right-clicking the board and using *Board Design - Slider*.

2.7 Board design – 3D

View   Board   3D
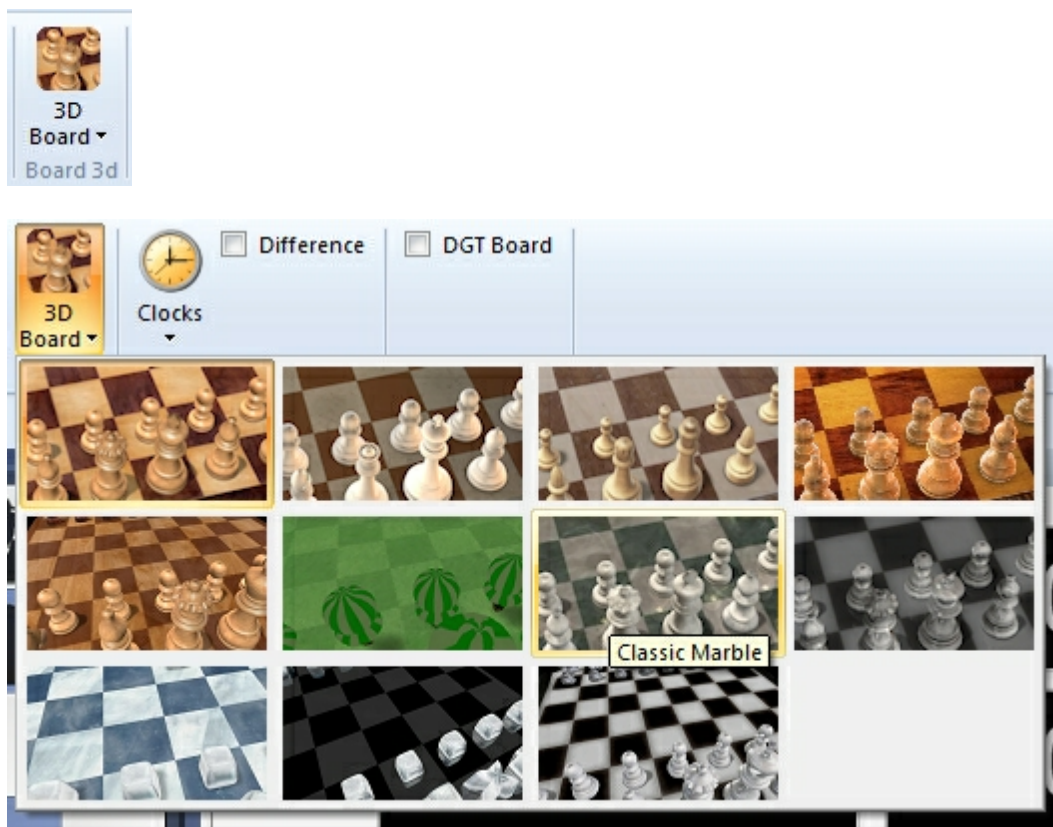
This switches to a photo-realistic three-dimensional chessboard. The high-resolution textured virtual reality board requires DirectX 9.0 or higher and a graphic accellerator.

This is what a small section of the 3D board looks like when you zoom in:
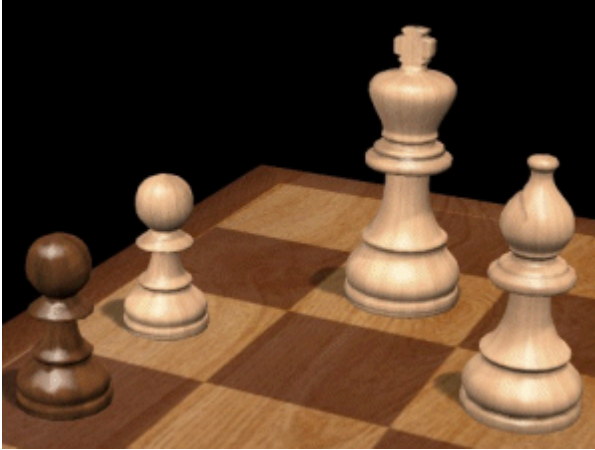
Note that when you switch on a 3D board a new window appears with a 2D chessboard, which you can use to execute moves or follow the game.
There are other pieces and textures to choose from. Use the control panel at the bottom left to move, tilt and zoom in or out.
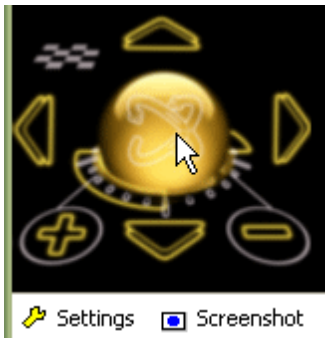
▶   Click on the golden sphere and, holding the left mouse button down, move the mouse cursor around to tilt the board.
▶   The four arrow icons around the sphere move the board up, down, left or right.
▶   + and − zoom in and out.
▶   The small chessboard is the "panic reset". It will center the chessboard and make it fit in the current window.

▶   Note that you can also zoom by holding down the Ctrl key and turning the mouse wheel.
▶   You can right-click the board (or left-click the edge) and then move the mouse cursor around to change the board angle.
▶   Ctrl + right-click defines what should be in the center of the window.

Keyboard controls
You can also control the board using only the keyboard:
▶   the comma and period keys turn the board;
▶   "i" and "o" zoom in and out;
▶   "v" and "y" move the board up or down;
▶   "9" and "0" move it left or right.

Memory keys F6 and F7
Before you change the angle or position of the 3D board you may want to press F6. That "remembers" the current position. After you have changed everything you can return to the previous setting by pressing F7.
Screenshot. This will produce a screenshot of the board, without any controls. You will get a dialog in which you can set the resolution. Using a large factor will give you extremely high-resolution image, which is stored in the JPG format on your hard disk.

Settings

This takes you to a dialog in which you can change all the settings of the 3D graphics board.

2.8 3D board – Settings

3D Settings (bottom left of the 3D board window)
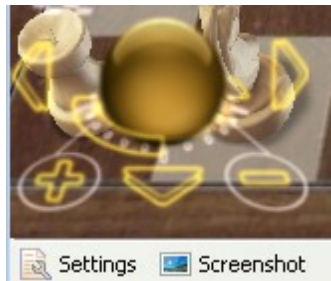
This produces a dialog in which you can select one of many 3D designs and then optimize it for your screen and graphics card.

Here is a short description of what some of the main categories are. Note that you may find additional boards in your Settings dialog, especially after major updates.

▸ Fritz Room – this is a classical Spanish chess room, with a table, chairs, pictures, bookshelves, etc. You can use the 3D control functions to explore the room, or zoom into the board and analog clock to play a game of chess.

▸ Glass, wood, marble, metal, modern, silver, simple, classic, Prague – these are chessboard and piece sets in various materials, designs and styles. Some are in very high detail and can take your graphics card to its limits. But you can also generate spectacular chessboard pictures using the "Screenshot" function at the bottom of the window.

▸ Symbol boards have very flat symbol pieces that are used with the board in an upright position, much like the graphic 2D board, except that the symbols have clear 3D forms.

▶   Egypt, Shredder, etc. are boards with imaginatively sculptured pieces, for instance ancient Egyptian figures perched on the top of a pyramid.

▶   Mia, Turk – these are new and very ambitious simulations of a futuristic Metropolis-like robot or the famous Chess Turk built in the 18th century by the Hungarian engineer Baron Wolfgang von Kempelen.

The Turk was a very famous chess-playing automaton, which was constructed in 1769 by Wolfgang von Kempelen (1734-1804) to entertain the Austrian Empress Maria Theresa. It was built in the form of a maplewood cabinet, 4 feet long by 2 feet deep and 3 feet high, with a figure dressed in a cloak and turban seated behind it. The cabinet doors could be opened to reveal internal clockwork mechanisms, and appeared to have no place in which to conceal a human player. But still the machine was able to play a strong game of chess against any opponents (even Napoleon tried his hand against it).
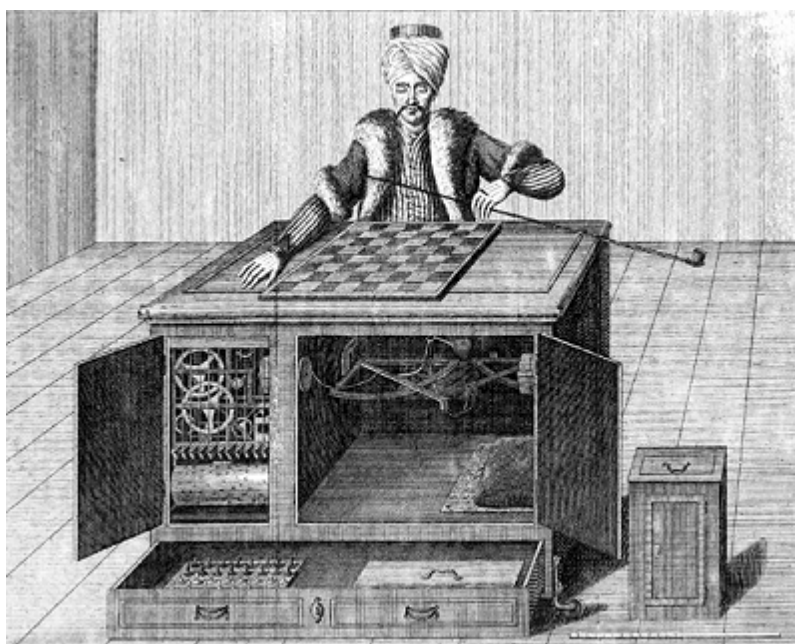
Contemporary copper engraving of von Kempelen's Turk

The point of the illusion was that a chess player was actually able to conceal himself very cleverly during the inspection of the machine, and then operate the Turk with the help of levers during the game.

2.9   3D board – Material

3D Settings   Board, Pieces

Here you can set different materials for the pieces and the board. You can also set the resolution for the textures, making sure that your graphics card is able to handle the complexity of the 3D graphics.
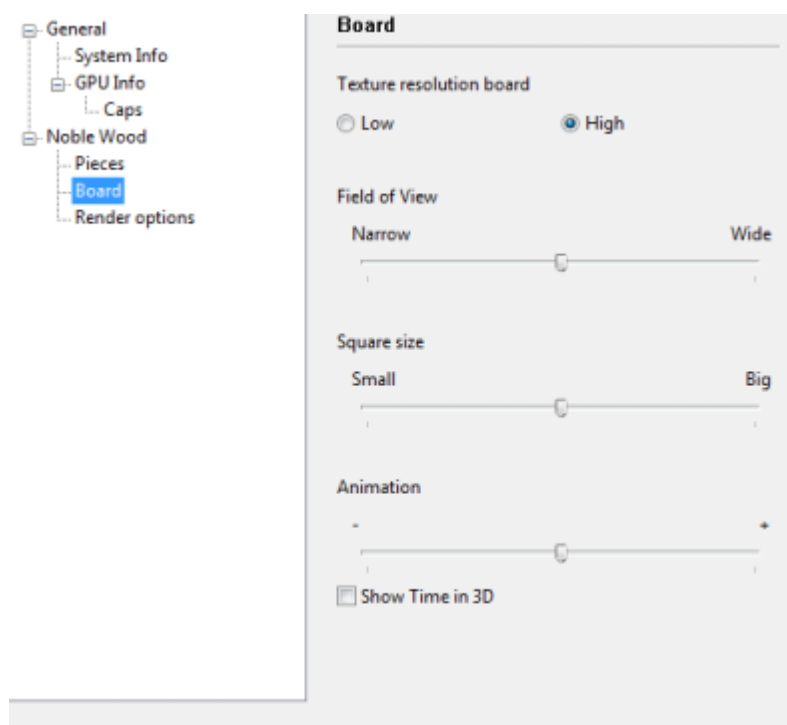
Show Time in 3D – This option in the "Board" settings displays a 3D clock below the front edge of the board.

Note: If you deactivate "View toolbar", switch to full screen mode (**Ctrl-Alt-F**), and in addition close all other window panes (**Ctrl-5**) you will get a spectacular full-screen chessboard which is a pleasure to replay games on. If the board is too bright or too dark you can change it using the Gamma setting.

2.10 3D board – Render options

3D Settings   Render Options
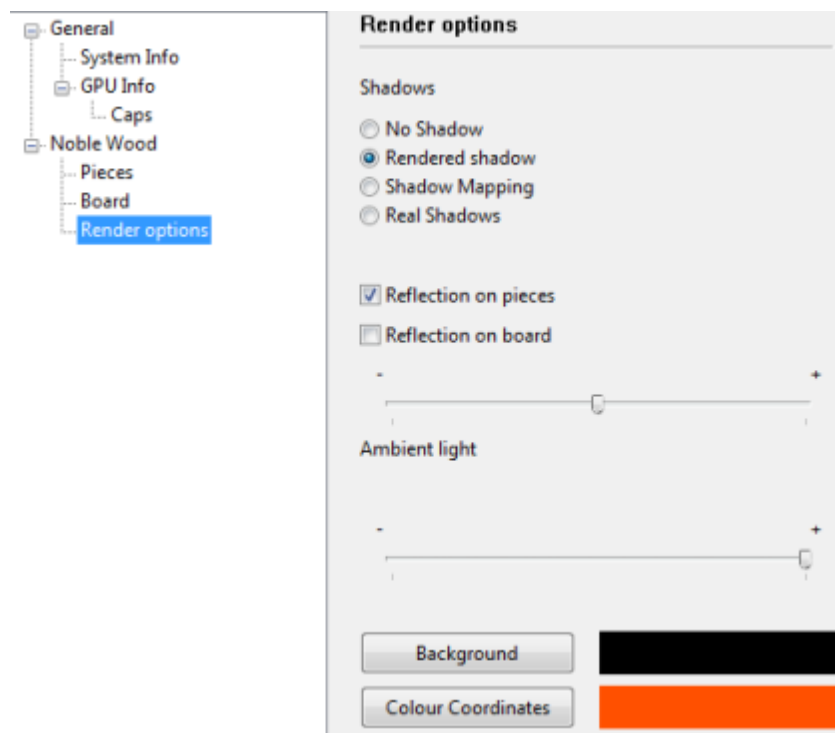
Here you can change a numer of general 3D effects. You can switch piece shadows on or off, make them rendered or calculated in real time. You can also switch on reflections on the pieces or on the board. Experiment with these settings to get a really nice display. The final quality is dependent on the power of your graphics card.

2.11 3D board – Info

True 3D Settings   System/GPU Info
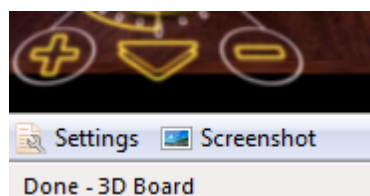
Here you can check the performance of your graphics card.
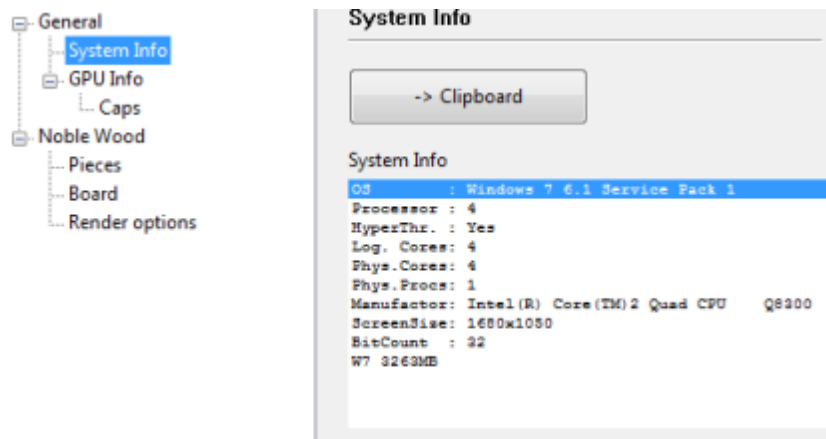
-> Clipboard will copy the values to the Windows clipboard so you can paste it into other applications (e.g. a word processor or email client). It is important that you send this in to ChessBase technical support in case you have problems with the 3D functions. The support address is info@chessbase.com.

2.12 Adjust thinking time

Program 's animated 3D displays demand a lot of resources from the computer.

A powerful graphics card is necessary to guarantee smooth performance. The performance of the 3d graphics display can be adjusted using the menu *Settings - General*.
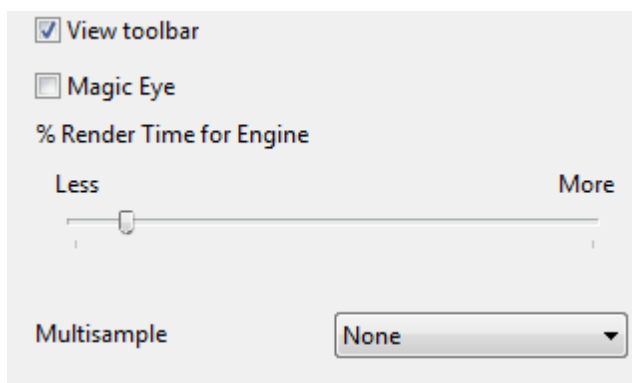
You can use the slider to decide how much processor time the CPU uses to render the 3D images. If the graphics module is given a large amount of time there will be less resources remaining for the chess engine, which leads to a weakening of the playing strength. If you want the chess engine to play strong chess in 3D graphics mode you should choose a low value for the rendering.

If you enable the display of the picture's refresh you will see as a permanent display in the top left corner how often the graphics are redrawn.

If you are using a multiprocessor system the 3d graphics will be handled by one of the CPUs. The chess engine will then be able to use 100% of the resources of the other CPUs.

It can take a long time for the Chess Turk to be displayed, depending on the computer's hardware configuration. This time can be speeded up by selecting a simpler 3D display before ending the program. This setting is then stored. The next time the chess Turk is selected it will take less time to load him.

2.13 Save and load layouts

Menu View   Save layout / Load layout
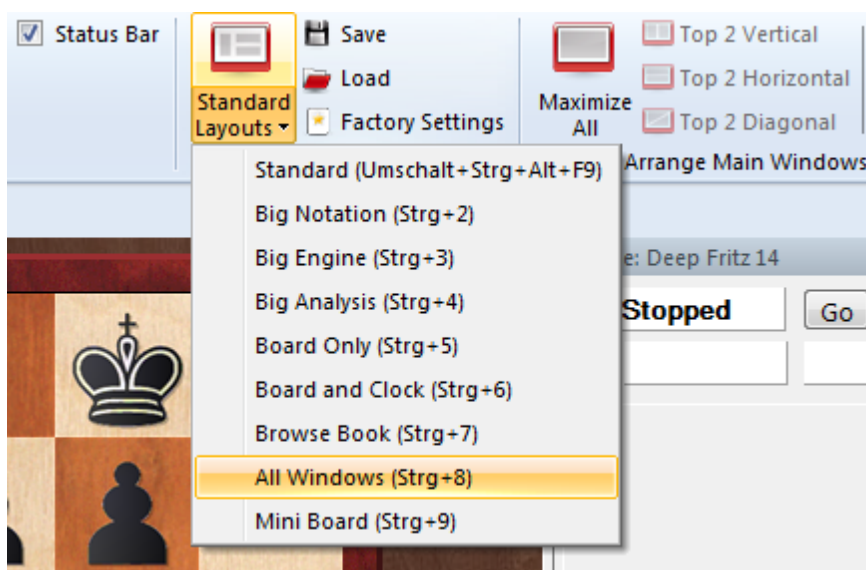
If you have created your own ideal layout, you can save it and load it again later. Enter a name for the layout when the save box appears.
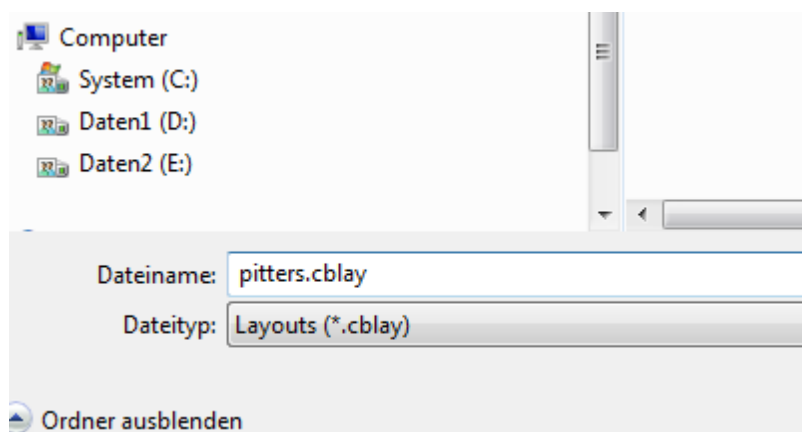
You can save as many layouts as you want.

2.14 Options

2.14.1 Options – Clocks and Notation

Menu File   Options   Clocks and Notation
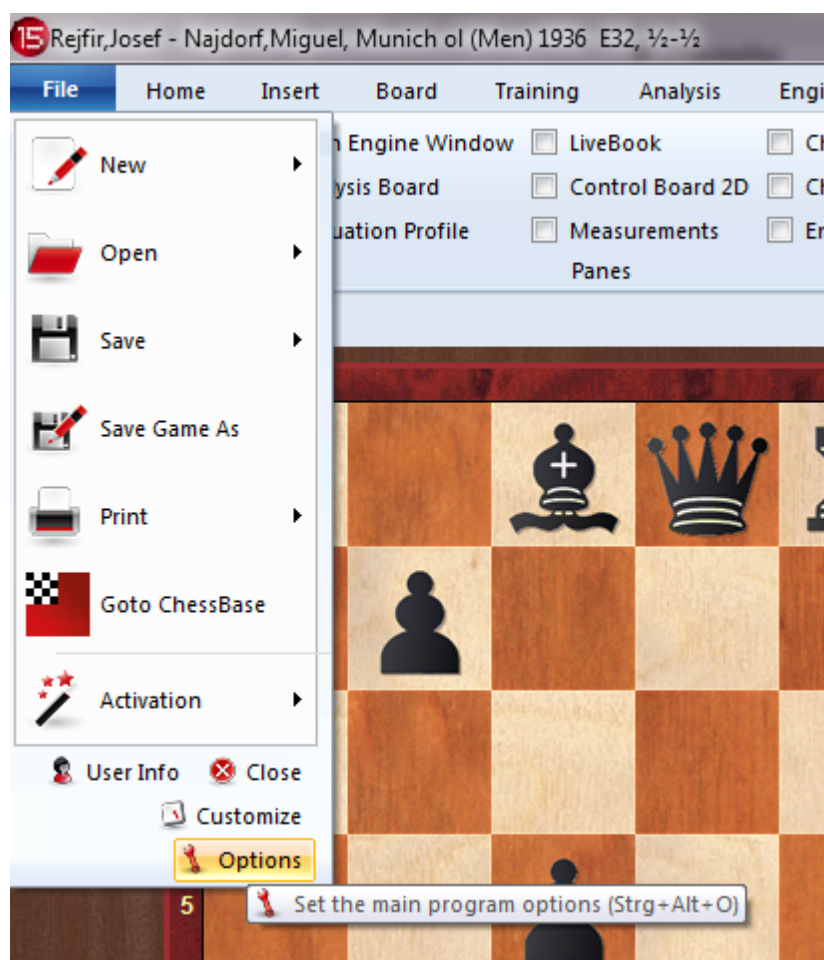
- *Digital / Analog / Double digital*: Choose the type of chess clock you want.

- *Logo in clock*: Displays the logo of the active chess engine to the right of the chess clock.

- *Figurine / KQNBRP*: Choose between letters and figurines for piece names. This applies to the screen and printed notation.

- *1.d4 / 1.d2-d4*: Choose either short or long algebraic notation. The latter always gives the start and destination squares of the move. It is more easily understood by beginners, and it is automatically set if you specify that you are an beginner when you install the program. In short algebraic the start square is not given if the move is unambiguous.

- **Time Difference** - Shows the different individual time consumption of the chess clocks.

- **Logo in Clock** - Does the logo in the display of the Chess clock

- *Store thinking time*: The time each side uses is recorded after each move in the notation.

- *Store evaluations*: This causes the program to record after every move its evaluation and the search depth. The form is value/depth.

- *Store expected move*: The program records the move it expected whenever the opponent plays something different.

2.14.2 Options – Game

Menu File   Options   Game

Here you can set a number of parameters relating to the games.

Resign: "Late" means that the program will have to see three times in a row an evaluation of 6.5 pawn units or worse for itself before it throws in the towel. "Early"

means it has to see minus 4.8 three times. "Never" means exactly that. Note that the program will not resign if it sees that it's being mated. Why spoil the fun?

Draw: This has the same type of options as resigning – Early, Late and Never.

Single click entry: It's a blitz game, you are completely winning, but your time is running out. Use the single-click entry to avoid this situation.

Normal: If you click a square to which only one piece can move it is immediately moved there. If more than one piece can move to the square then you must click it for the move to be executed. If you click g1 or g8 and short castling is legal it will be automatically executed.

Aggressive: Same as normal, but if more than one piece can move to the clicked square the piece that last moved will automatically be chosen. This allows you to execute a long check sequence or a king march very rapidly. A second difference: if you click a piece that can make a number of moves, if one of these captures the piece the opponent has just moved, then the capture is automatically executed.

Note: You can use a special technique called "dropping". This entails picking up a piece while your opponent is still thinking and holding it over the destination square. As soon as the opponent's move comes you let go of your piece, using practically no time on your clock. It is a slightly dangerous technique – if the opponent plays something unexpected you may let go the piece and then face disaster. Still dropping is used extensively in fast games on the chess server.

Coach: You can influence the quality of the coaching here:
▶   *Calc. time:* When you use the functions Hint and Suggestion in the Help menu the program must do a quick calculation. If you give it more time the quality of the coaching will improve.
▶   *Threshold*: When you make a mistake the coach appears. Here you can tell the program how serious the mistake must be (in pawn units) for the coach to appear.

Show opening: Shows the ECO codes and names during the opening phase of the game. The names appear in the status bar at the bottom of the screen.
Flip board on new game: The program likes to play occasionally with white. It will flip the board around when you start a new game, just like a human player. You can switch this option off if you always want to play white (you can flip the board manually with Ctrl-F).

Mark move with arrow: Your opponent's moves are marked with a yellow arrow, so you can catch them more easily. This is especially useful when you play on the Internet.

Always promote to queen: This is a timesaver for blitz games, where selecting a promotion piece (almost always a queen) can waste valuable seconds.

2.14.3 Options – Multimedia

Menu File   Options   Multimedia

This allows you to configure the multimedia elements of the program.

Audio
- ○ Talk
- ○ Announce moves   **Find TALK.CHT**
- ● Off

☑ Board sounds   ☐ 3D Sound

☐ Chatter (messages)

No music ▼

No music
Fritzmusic (Composition Engine)
Bach Vocal
Bach Organ
Bach Keyboard
Bach Orchestra
Bach mixed
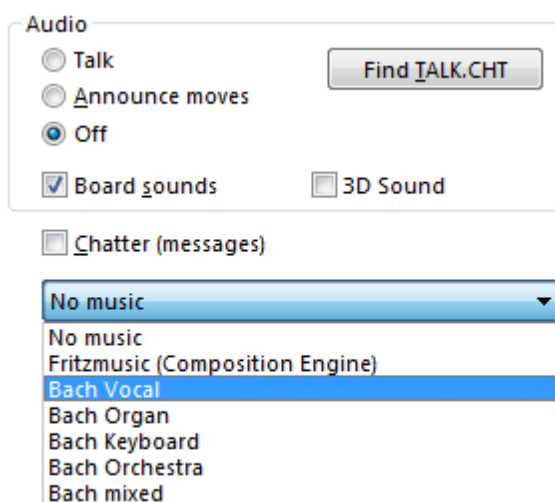
Talk: You can allow the program to chat you up during the game, or you can make it shut up, if the incessant remarks are getting on your nerves. The remarks depend on what is happening on the chessboard – whether you have improved your position, blundered, made an aggressive advance, taken the program out of book, etc. The program will also comment on the opening that is being played.

Announce moves: The program will speak the moves as it executes them if you want. This is useful if you are using the DGT intelligent sensor board, or you have a sight impediment, or if you are simply playing a slow tournament game and want to be alerted when the computer makes a move.

Board sounds: This switches on or off sound effects (e.g. moves, captures, ticking clock, coughs, etc.) that are used during the game.

Find TALK.CHT: If you want the program to talk to you during the game you may have to tell it where the TALK-files are located. Click "Browse" and search for the file Talk.cht. This is especially important if you have copied the TALK-files on your hard disk.

In the dialog that appears click the "Find TALK.CHT" button and show the program where the talk files are located.

▶   Once the program has found the Talk files you should test them to see that everything is working properly.

▶   If you want a break from the chatter you can click "Shut up". You can reactivate it later in the same dialog.

3D sound: If you have a sound system that supports surround, then you should switch this on for 3D sound effects.
Chatter (messages): During a game the program will chatter in written form, in the status bar at the bottom of the window (you can also open a special chatter window for them). As with the spoken "Talk", these remarks depend on the progress of the game and the last move played. They are, however, not identical to the spoken commentary.

Music/JSBach: If you switch "Music" on then at different times – e.g. when you start, when you win a game or a title in a rated game – you will hear a short piece of music. If you like Baroque music you can have the strains of Johann Sebastian Bach in the background while you play against the program.

Copy Talk files to hard disk

The "Talk" files consist of spoken remarks the program uses during the game. They are normally run from the CD. If you have enough hard disk space you can copy them there, using the following procedure:

- Create a directory anywhere on your hard disk for the Talk files. Call it, e.g., \TALK

- Copy the two files TALK.CHT and ECOSND.CHT into the new directory (TALK).

- Remove the write protection from these two files (files on a CD are always write protected). This is done by marking them in the explorer, then right-clicking them and selecting "Properties". Click off the attribute "Read-only".

In the Menu File – Options – Multimedia click the "Find TALK.CHT" button. Show the program where the talk files are located.

2.14.4 Options – Clipboard

Menu File   Options   Clipboard

In this dialog you can specify in which format you want games and positions to be stored in the Windows clipboard. From there they can be pasted (with Ctrl-V) into a text editor or paint program.

Game
Edit   Copy game (or Ctrl-C) copies the game notation into the Windows clipboard. You can specify whether it should be in PGN or standard, and if it is PGN whether it should be the old form, which is easier to read, or the newer version, which is better for some chess programs.

This is the standard format:
(60) RyCooder (2614) - Klosterfrau (2424) [B40]
Rated game, 3m + 0s Main Playing Hall, 17.02.2002
1.e4 c5 2.Nf3 e6 3.d4 cxd4 4.Nxd4 Qb6 5.c3 a6 6.Nd2 Qc7 7.f4 Qxf4 8.Nc4 Qxe4+ 9.
Be2 Bc5 10.b4 Ba7 11.Nd6+ 1−0
This is a PGN header
[Event "Rated game, 3m + 0s"]
[Site "Main Playing Hall"]
[Date "2002.02.17"]
[Round "?"]
[White "RyCooder"]
[Black "Klosterfrau"]
[Result "1-0"]
[ECO "B40"]
[WhiteElo "2614"]
[BlackElo "2424"]
[PlyCount "21"]

This is the old PGN notation

1. e4 {1} c5 {0} 2. Nf3 {1} e6 {0} 3. d4 {2} cxd4 {1} 4. Nxd4 {0}
Qb6 {0} 5. c3 {5} a6 {5} 6. Nd2 {3} Qc7 {7} 7. f4 {2} Qxf4 {5}
8. Nc4 {7} Qxe4+ {6} 9. Be2 {2} Bc5 {10} 10. b4 {2} Ba7 {2}
11. Nd6+ {Klosterfrau resigns (Lag: Av=0.9s, max=4s) 1} 1-0
This is the new PGN format
1. e4 {[%emt 0:00:01]} c5 {[%emt 0:00:00]} 2. Nf3 {[%emt 0:00:01]}
e6 {[%emt 0:00:00]} 3. d4 {[%emt 0:00:02]} cxd4 {[%emt 0:00:01]}
4. Nxd4 {[%emt 0:00:00]} Qb6 {[%emt 0:00:00]} 5. c3 {[%emt 0:00:05]}
a6 {[%emt 0:00:05]} 6. Nd2 {[%emt 0:00:03]} Qc7 {[%emt 0:00:07]}
7. f4 {[%emt 0:00:02]} Qxf4 {[%emt 0:00:05]} 8. Nc4 {[%emt 0:00:07]}
Qxe4+ {[%emt 0:00:06]} 9. Be2 {[%emt 0:00:02]} Bc5 {[%emt 0:00:10]}
10. b4 {[%emt 0:00:02]} Ba7 {[%emt 0:00:02]} 11. Nd6+ {Klosterfrau
resigns (Lag: Av=0.9s, max=4s) [%emt 0:00:01]} 1-0

Position/Text
The current position is copied into the clipboard either as FEN or in the traditional text
description. Both are described in the position setup.

Copy HTML format
If you switch on this option then the program will generate HTML code when you press
Ctrl-C in a game. This you can paste in a word processor, HTML editor or email client.

The program copies the game in many different fomats in the clipboard. These include
plain text, PGN and RTF. In many applications there is a "Paste Special" which allows
you to select the one you want. They are all present at the same time in the
clipboard. "Copy HTML format" simply ensures that this is also available.

Below you can see what the HTML code looks like in the clipboard. The background
colour is a pale yellow, the game header is in headline size three, and the moves are in
a separate paragraph without line breaks. The output should look very nice

<HTML>

```
<HEAD>
<TITLE>ChessBase HTML output</TITLE>
<META NAME="GENERATOR" CONTENT="Fritz 9">
</HEAD>
<BODY BGCOLOR=#FFFDE8>
<P><H3>(141) Zukertort,Johannes Hermann - Blackburne,Joseph Henry [A13]<BR>
 London, 1883<BR>
</H3></P>
<P>
1.c4 e6 2.e3 Nf6 3.Nf3 b6 4.Be2 Bb7 5.0-0 d5 6.d4 Bd6 7.Nc3 0-0 8.b3 Nbd7 9.Bb2
Qe7 10.Nb5 Ne4 11.Nxd6 cxd6 12.Nd2 Ndf6 13.f3 Nxd2 14.Qxd2 dxc4 15.Bxc4 d5 16.
Bd3 Rfc8 17.Rae1 Rc7 18.e4 Rac8 19.e5 Ne8 20.f4 g6 21.Re3 f5 22.exf6 Nxf6 23.f5
Ne4 24.Bxe4 dxe4 25.fxg6 Rc2 26.gxh7+ Kh8 27.d5+ e5 28.Qb4 R8c5 29.Rf8+ Kxh7 30.
Qxe4+ Kg7 31.Bxe5+ Kxf8 32.Bg7+ Kg8 33.Qxe7 1-0</P>
</BODY></HTML>
```

2.14.5   Options – Training

Menu File   Options   Training

You can create your own databases for the openings and endgame training. These can be stored anywhere on your hard disk. But you must tell the program where they are.

Use the "Browse" button to find the files and click "OK" to save.

2.14.6   Options – Design

Menu File   Options   Design

You can set a number of options that affect the appearance of the program.

Background
Board
Wood

Board Design

3D board settings

☐ Notation in high quality
☑ Use 'Theme Keys'
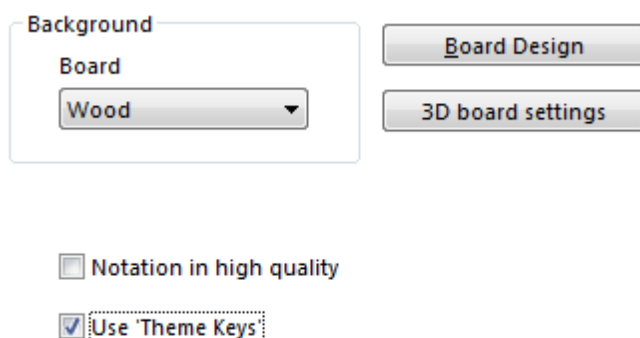
▶ Background – Windows: Choose different materials and colours for the background of the windows. "User BMP" allows you to use any picture for the windows.

▶ Background – Board: Select a material, colour or picture ("User BMP") for the area around the board.

▶ *Board design*: Set the board colours. You can get directly to that screen by right-clicking the board and selecting "Board design".

▶ *3D board settings:* Change the settings of the 3D board.

▶ *Splitter thickness:* Set the width of the separation of the Windows.

"Notation in high quality"
In rare cases there can be problems with the display in the list windows or in the notation window. If, e.g., what is printed in the lists does not appear until you have scrolled up or down the list or till you have used the ALT - TAB key combination, then a change in the options dialog for the program will help.

If you deactivate this setting, then the problems with text display which have been described will no longer occur.

Use Theme Keys"
If a database is classified with Theme keys, you can access relevant parts on the tabs. This option turns on the display above the list window or out. Databases from ChessBase classified alongside the opening key with finely textured themes keys that allow quick access to certain games with middle or endgame motives.

| Text | Games | Players | Tournaments | Annotator | Sources | Teams | Game Title | Openings | Themes | Tactics | Strategy | Endgames |

⊞ Brilliant moves	/ Brillante Züge	10223
⊞ Blunder	/ Grobe Patzer	24521
⊞ Stalemate	/ Patt	5569
─ Hitting succession 10x	/ Schlagfolgen 10x	130
⊞ Critical opening positions	/ Kritische Eröffnungsstellungen	8587
⊞ Critical middlegame positions	/ Kritische Mittelspielstellungen	5692
─ Piece path	/ Figurenpfad	1574
⊞ Medals	/ Medaillen	6061
⊞ Commented games	/ Kommentierte Partien	111358
⊞ Symbols	/ Symbole	119713
⊟ Rapid games	/ Schnellschach	18986
─ Smyslov		22
─ Tal		11

100%

| Text | Games | Players | Tournaments | Annotator | Sources | Teams | Game Title | Openings |

Number	White	Elo W	Black	Elo B	Result	Mov...	ECO	Tournament	Ro
75113	**Kieninger,P**		**Mueller,H**		**½-½**		A00	*Vienna*	6
75114	**Meyer,H**		**Galia,K**		**0-1**		A00	*Vienna*	6
75115	**Schmitz**		**Sahlmann,W**		**1-0**		A00	*Vienna*	6

2.14.7   Options – Language

Menu File   Options   Language

Program Language

English

Alternative Annotation Language

English

○ One   ● Both   ○ All

Transcript

○ (none)   ● Cyrillic   ○ Greek

You can set the language you want for the program, and for game commentary (when you enter text commentary you can specify in which language you are annotating the game).

You can choose to display commentary in one, two or all languages. If a game contains no commentary in the languages you specify then the other languages are shown.

2.14.8 Options – Version

Menu File   Options   Version

Tournament settings

☑ Tournament version   ☐ Log File

☐ PGN: C:\Users\Schreiner\Documents\ChessBase\N

Browse...

Opponent

Operating time   0
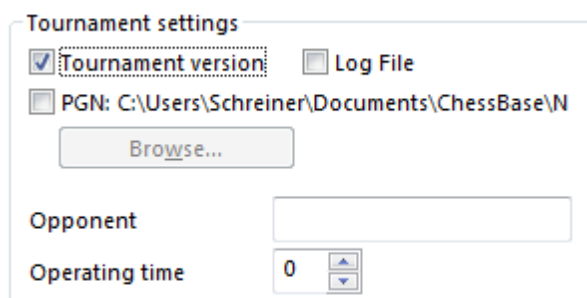
There are many different chess engines that can run under the program interface. Here you can set which of the engines will represent the program by default.

Tournament version
This switches to a special mode in which the area surrounding the board turns red when the program has made a move. This is useful as a signal for a human operator, especially when the program is playing against a human opponent and it is not acceptable to have a sound signal switched on. The option is only meaningful for such encounters, and not of relevance to normal users.

Log file: this causes the program to keep a log file of the game, so that everything can be checked meticulously after an important tournament games. The file can be printed out and given to the arbiter.

PGN: here you can specify a file for a PGN record of the game. It is updated every time a move is made, and contains the moves and the evaluation of the program. This function is useful for publishing games on the internet.

Operating time: you can specify how much time the program should deduct from its own thinking time in order to compensate for the lag of a human operator, who needs some time to register and enter the move of the opponent (and execute the computer moves on the official chessboard).

2.14.9 Options - Engine

Menu Options - Engine

☐ Show Plans

☑ Coach Is Watching

☐ Spy

☐ Threatened Squares

Show Plans - Displays the planned Manoeuver of the engine. The function is not supported by any engine!

Coach is watching - The trainer monitors the moves and indicates errors and better alternatives!

Spy - The spy provides additional information during the game.

Threatened Squares - Shows the power constellations on the chessboard.

2.14.10 User Info

Menu File   User info
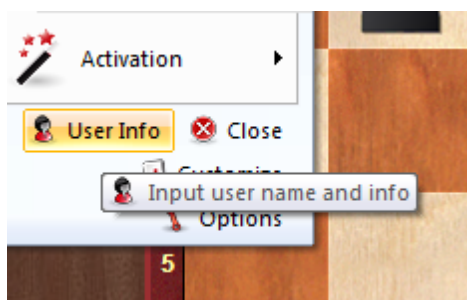
When you start the program for the first time it will ask you for your full name, your town, and the name of your computer (e.g. "Pentium 400/128"). It also asks you whether you are a beginner, a hobby player, or a club player. If you choose the first it will start in "Friend mode", set long algebraic notation, and put co-ordinates around the chessboard.

The user information is used when saving games and for the chatter messages on the screen. It can easily be changed by clicking "User info" in the "Tools" menu.

2.15 Program windows

2.15.1 Window "panes"

Menu - View
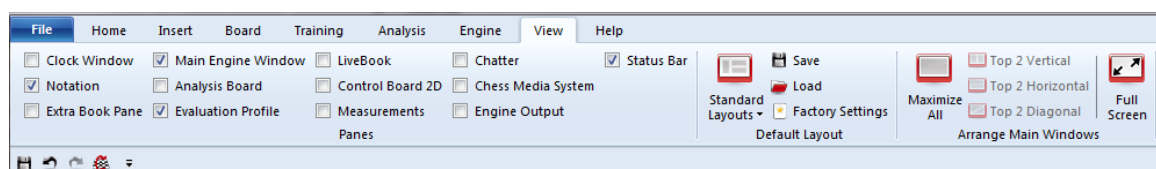
This opens a submenu in which all the the program windows are listed. They are called "panes" because most are normally nested in the main program window that is currently being used.
The individual panes can be switched on or off. You can also close them directly by right-clicking them and selecting "Close".

Here's a description of each window element:

Notation	The game notation, variations and commentary.
Clocks	Chess clocks with optional engine logo.
Main Engine	Provides information on the thought processes of the chess engine during the game. It can include a variation board.
Evaluation profile	Graphically displays the evaluation and times used in the course of the game.
Extra Book pane	A separate window for the openings book "tree" with full statistics for each move (normally this is a rider in the notation pane).
Analysis Board	Displays a separate board for analysis.
Control board 3D	This produces a second board which you can use to follow the game (especially if the main board is in 3D and hard to read).
Extra Book	A separate window for the openings book "tree" with full statistics for each move (normally this is a rider in the notation pane).
Chatter	Displays the program's written remarks during the game.
Explain all moves	Explains all the moves in the current position.
Chess Media System	A special audio and video system that allows you to see a player or teach who moves the pieces on the graphic chessboard.

2.15.2 Notation window

The *notation window* displays all the moves of the game.
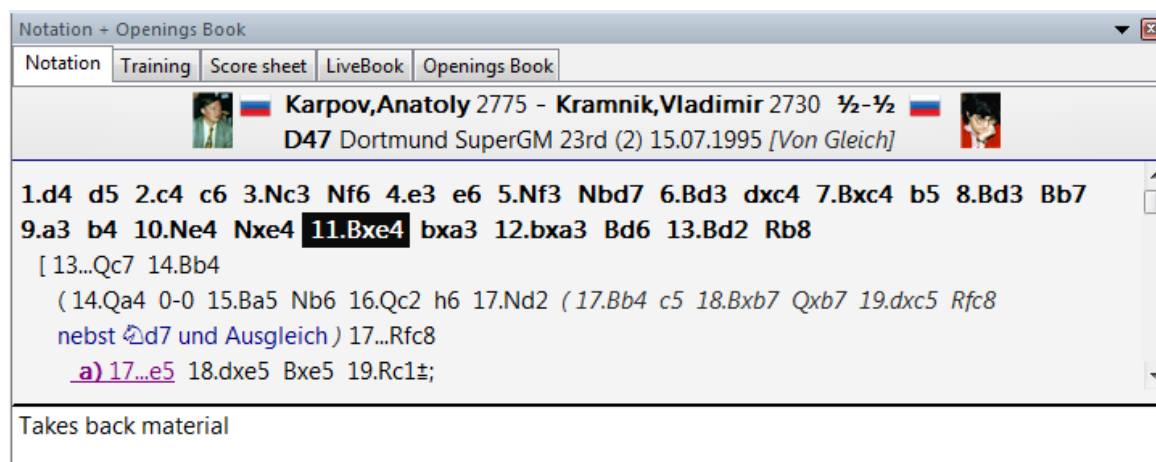
With an Internet connection, the program has direct access to a player lexicon is stored on our servers and can display pictures of the players.

There may be variations and commentary embedded. You can jump to any place in the game by simply clicking on the notation – the board will follow. The cursor keys can also be used to navigate the moves.

At the top of the notation window there is a tab for *Openings book* . This allows you to browse through the openings book.

Score sheet notation

In regular games with no commentary you may find it better to use the score sheet style of notation. Click on the rider above the notation to select it. Note that this notation can be printed out very nicely using the menu File – Print scoresheet.
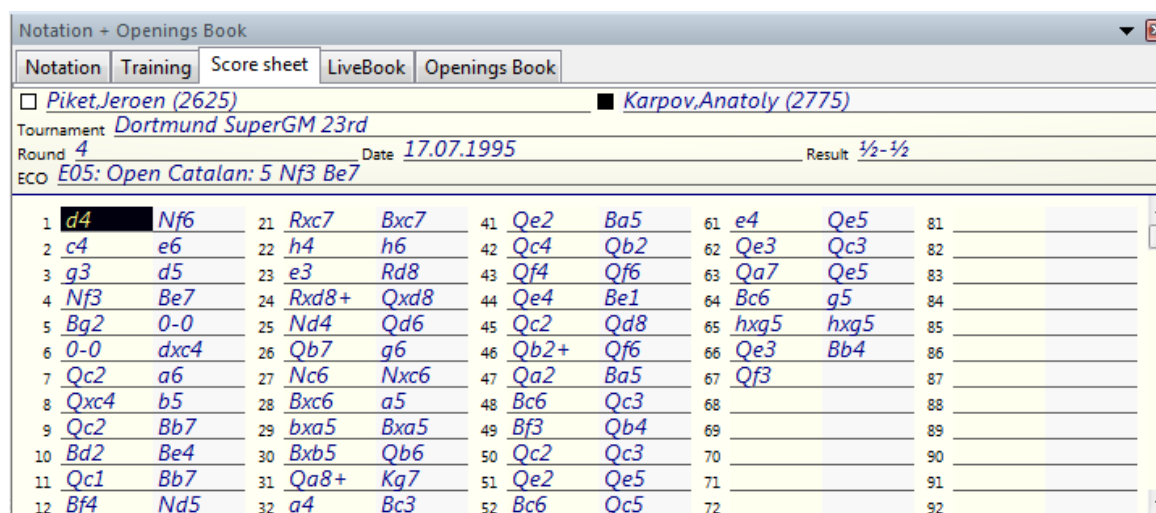
Some users may encounter problems with the screen notation and printing. Specifically

the chess symbols are not correct.

▶ **Cause:** The program uses special TrueType fonts for the chess notation and the board pieces. These may sometimes not be installed properly together with the program. This is especially the case if you do not have administration right to install fonts on the system.

▶ **Solution:** Manually install the fonts using the Windows control panel. All the chess fonts are to be found in the directory \FONTS on your program DVD. You can also try the reinstallation of the program to solve the problem.

2.15.3 Book window

In the initial phase of a game the program plays out of an "openings book". This can consist of millions of openings positions, and for each of these the program has full information on which moves were played, how often, and with what results. The program stores its own experience with openings variations it has played. It learns from success and defeat.

See also LiveBook ...

You can consult the openings book by clicking on the *Openings book* tab at the top of the notation window (if an openings book is not loaded, click the button and select one from your hard disk).

Extended Book Display ....
This is what you see in the openings book tree:

▶ **Moves**: (Tree icon) Sometimes a move will appear in grey, which means that it was never played, but leads to a position that results from some other line.

▶ **N**: (N) The header displays the total number of games which led to the current board position. The N column displays the number of games in which each move was executed.

▶ **%**: Percentage score achieved by the move, always from the point of view of the colour to play. If the number of games is low, the percentage is given in grey because it does not have great statistical significance.

▶ **Av**: Elo average of the players of the move. If only a small percentage of the players had a rating, then the number is given in grey.

▶ **Perf** : Elo performance of the move. This is the rating a player would have achieved in a fictitious tournament, playing the move in all his games.

▶ **Fact**: The factor or "weights" allocated to each move control the probability with which it will choose the move in a game. The value can range between –125 to +125. The values are initially set to zero, but may change when the program actually plays games in the individual variations. You could say that the program is learning from experience. The weights can be manually modified by right-clicking a move and selecting "Change weight". To reset all weights click Edit – Openings book – Reset weights. After that, the program will use only the purely statistical information to select its moves.

▶ **Prob and [%]**: The first value is the purely statistical probability of the move, based on the number of times it was played and the results achieved in the games that went into the book. This is the probability of the move being played by the program as long as the weights have not been changed – either manually or by automatic learning. The value on the right [%] is the practical probability of the program playing the move. This is a product of the statistical evaluation and the weights. If you change the latter you can see how the [%] value (but not the "Prob") changes. In Book options you can determine how much the weights influence the probability of play.

	1-0: 36450 = 35%	N = 102838 (119036)
	1/2: 43198 = 42%	2584-2631 (91466)
	0-1: 23190 = 23%	2585-2540 (91529)

At the bottom of the Openings Book window there is a graphic display of the percentage wins, losses and draws that were achieved with the highlighted move.

How to navigate the tree

▶ Use the up/down cursor keys to move the headlight bar up and down.

▶ Use the right/left keys to move forward and backwards in the variations.

▶ Click a move with the mouse to move forwards in a variation.

▶   Right-click a move to annotate it.

▶   In the same menu you can exclude a move from tournament games. The move appears in red. Repeat the action to make it playable again.

▶   Press F11 to open and close the tree display window.

Book display option

2.15.4   Chess clocks

Right-click the clock window to select

Chess players use a double clock to record the times taken by both sides. The clock on the left records White's time, the one on the right records Black's time.
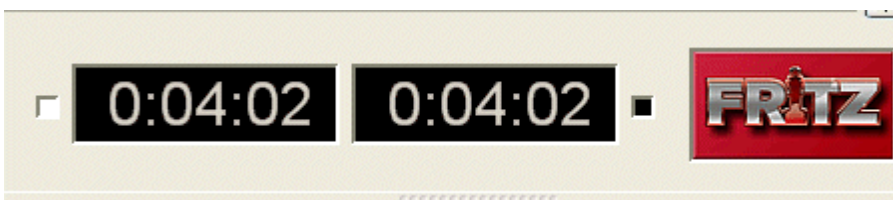
The double digital clock shows the total time at the top and the time for the last move below.

The difference clock shows the time difference between you and the engine:

The left clock displays your absolute time. The right time displays the difference to the engine time. In the above example, you are 29 seconds ahead.

You can right-click the clock window and switch to an analog clock. You can also add an engine logo.

There is also a photo-realistic "Garde" chess clock. You can zoom in and out, and also press the left mouse button to tilt and swivel it.

▶ **Note**: You can set the time controls for "Blitz" or "Long games" by right-clicking the chess clocks.

2.15.5 Engine window

This program provides you a wealth of information on the engine thought processes during the course of a game. This is the "search information" and reflects what the computer has found while calculating its next move.

See also Extended Engine Information ...

Let`s Check ...
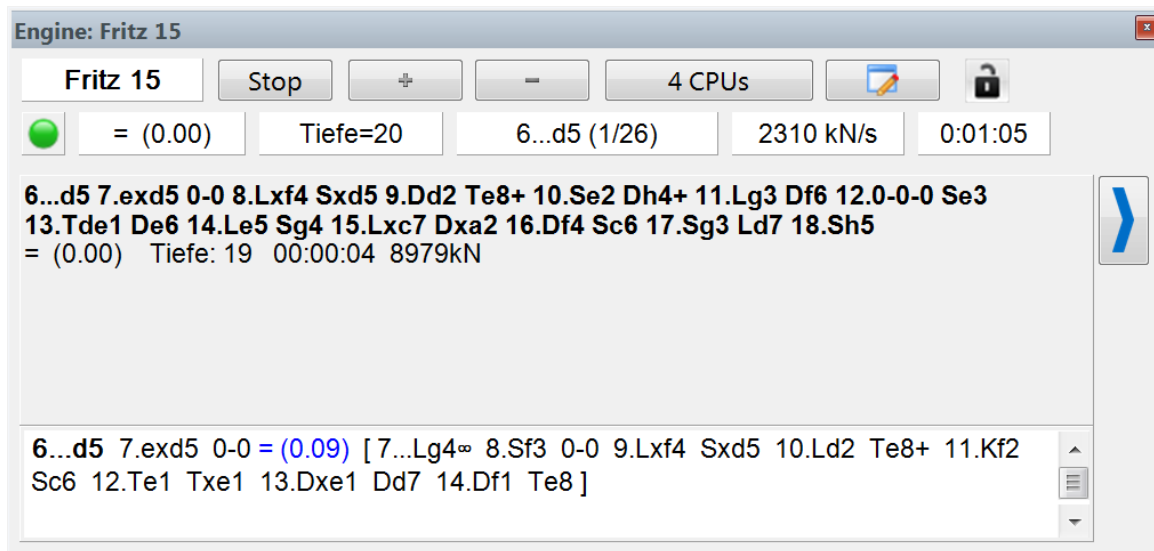
Note: Clicking on a line in the engine window enters this move on the chess board immediately. This works the same way as clicking on a move in the openings book.

‣ On the top left you can see which chess engine is currently calculating the moves (the actual name will be displayed). Right-clicking the engine name will allow you to switch engines.

‣ The move it is calculating is 24...Rb8, and this is the first of 48 legal moves.

‣ The "Stop/Go" button allows you to stop and then restart the calculation, or force a move.

‣ With the "+" and "−" buttons you can increase or decrease the number of lines that are calculated in parallel (these buttons disappear during a regular game and are only available in analysis mode).

‣ In the second line there is a lamp which turns red when the engine finds something dramatic (i.e. when the value suddenly rises or falls dramatically). An arrow pointing up or down denotes a "fail high" or "fail low", which simply means that the computer has discovered something good or bad in the position but doesn't yet know what it is.

‣ The number to the right of the lamp gives the position value, above −0.87. The evaluation is expressed in pawn units, always from the point of view of White (i.e. −0.87 is good for Black). A value of 3.00 pawns would mean that White is a piece up −

either a bishop or a knight, which are both equivalent to about three pawns. Rooks are worth five and the queen about nine pawns. If the values deviate from whole numbers this is the result of additional positional considerations (mobility, deployment of pieces, king safety, pawn structure, etc.). In addition to the precise pawn values, the evaluation is also given in standard chess symbols: +− means White is winning, −+ means Black is winning, = means the position is drawish.

▶   The search depth tells you how many moves deep the search has progressed. The value is in "ply" or half-moves. The first number gives you the "brute force" depth, the second is the depth to which certain critical lines have been investigated. The value is in "ply" or half-moves. For instance a display of "depth = 12/30" means that the program has looked at every continuation to a depth of 12 ply (six moves), while some promising or dangerous continuations are being examined up to a depth of 30 ply.

▶   After it has played a move, the chess engine shows you which move it expects you to choose (in the field after the depth field).

▶   Finally you can see the speed at which it is running: "634kN/s" means the program is generating and evaluating 634,000 positions per second ("kilo nodes per second"). Right-click this display if you want to see the total number of positions instead.

▶   In the section below the search information you see the "principle variation", i.e. the best continuation the program has found so far. Together with the search information the total number of positions is also given. In the above example the engine has looked at 4.061 million positions to come up with the third line. You can right-click the display and select more or less information, and decide whether the history of the search should be scrolled. You can also insert a small "variation board" on which you can play through the main line the program is considering.
Right-click menu in the engine window

If you right-click the engine window, you get a menu with a number of functions or options to set.
Some of the items will only be available when the program is in Analysis mode (Alt-F2).
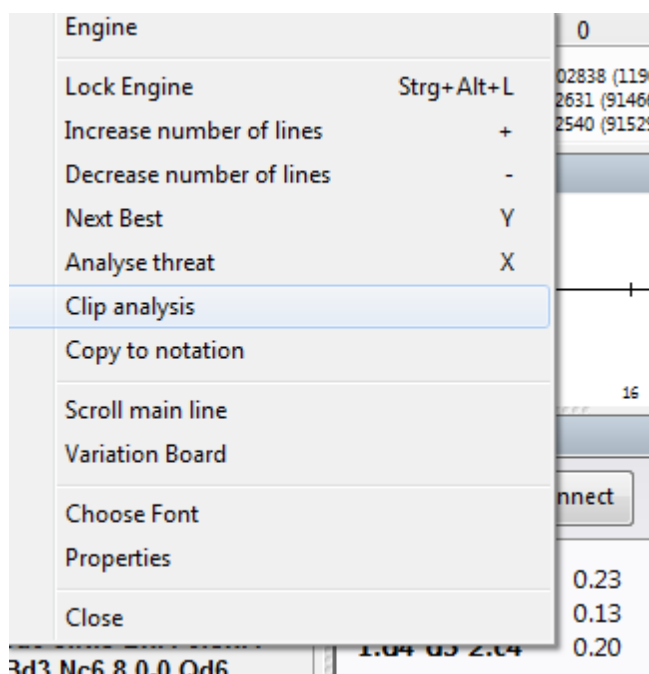
▶   **Engine**: This allows you to switch engines.

▶   **Lock Engine:** Normally, in analysis mode, the engine automatically follows the board. However, you can "lock" it to a particular position and then move around the game without the engine following. Click again to unlock.

▶   **Increase/Decrease lines**: Many engines can calculate more than one line simultaneously. Press "+" or "−", or click the "+" or "−" buttons at the top of the search window to increase or decrease the number of lines it is considering.

▶   **Next best:** When it is calculating multiple lines the program is sharing it resources for different moves. If you click "next best" or press Y, it will discard the best move it has found so far and devote its full attention (processing power) to the next best move. This function is not available in all engines.

▶   **Threat**: This function shows you the immediate threat (i.e., what the opponent could do if no defensive move is made. The threat is always calculated on the level currently set).

▶   **Clip analysis**: Copies the current analysis into the Windows clipboard, from where you can insert it into a text processor.

▶   **Copy to notation**: Copies the analysis into the game notation.

▶   **Scroll main line**: The program will normally display the entire history of the search (i.e., all lines it has checked so far). You can switch this off and watch only the latest line.

▶   **Variation board**: This inserts a small board on which you can play through the main line.

▶   **Choose font**: Allows you to set the font size for the chess notation.

▶   **Properties**: This allows you to adjust the engine parameters.

▶   **Close:** Closes the engine window.

2.15.6   Kibitzers

Menu Engine   Add Kibitzer (Ctrl-K)

A "Kibitzer" is a person who watches a game in progress without making any moves himself. A kibitzer is also notorious for giving advice and knowing everything better.

w

You can add a kibitzer by selecting an engine in the select box that appears.

A new engine window appears in which it can work parallel to the one already loaded. You can use one or more kibitzers (up to six) to help you in your game against the primary engine, or you can use them for a second opinion on a position you are analysing. Remember that they will be sharing the processor power, so the quality of analysis sinks with every added kibitzer.

Click *Remove kibitzer* or *Remove all kibitzers* to close the additional engine. You can also right-click a kibitzer and "Close" it.

Kibitzer cannot be combined with the "Explain all moves" window.

2.15.7 Evaluation profile

The evaluation profile graphically displays the evaluation and times in the course of the game.

View - Evaulation Profile
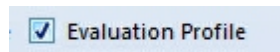
The evaluation profile offers a graphical view of the use of thinking time and the evaluation of the positions during a game.
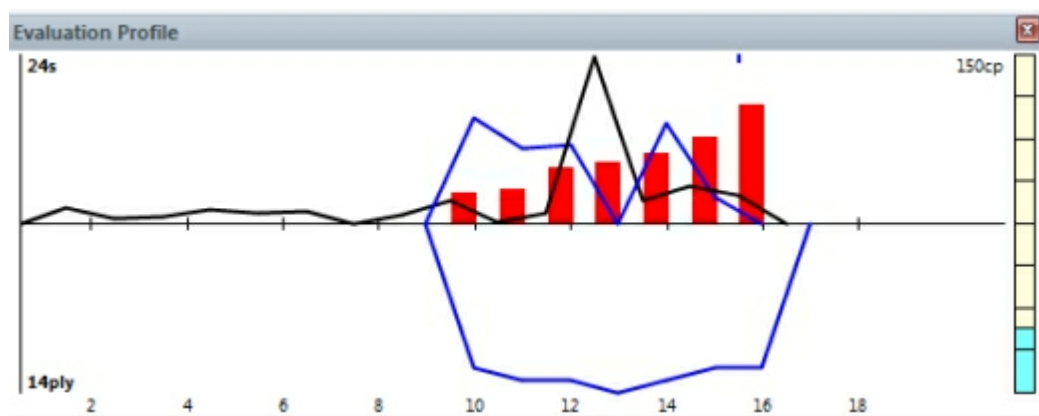
This is how to read the evaluation profile:

Bar above line: advantage for White
Bar below line: advantage for Black
Green bar: advantage for opponent
Red bar: advantage for the computer
Yellow bar: goes beyond the scale of the current window.
The scale is given in "centi-pawns" = 1/100ths of a pawn.
Superimposed in the evaluation profile is the time each side has used.
Blue graph: time used by White
Black graph: time used by Black

"
The scale is in seconds.

Right clicking on the evaluation offers different views:

✓	Evaluation
✓	Time
✓	depth
	Zoom
	Logarithmic
	Close
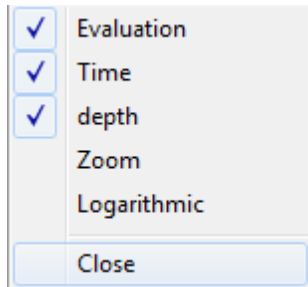
The new option is the *Logarihmic* view, which becomes useful when the evaluation is a large number, such as +/- 5. When a game is observed which one side has won slowly it is easier to see the progress if the display is non-linear, i.e. small differences remain apparent even if there are large values. The theory behind this is that the difference between +5 and +7 is irrelevant, but the difference between +0.2 and +0.4 is important.

Additional features

‣ The graph below the horizontal axis gives the search depth of the program.

‣ On the right there is a "thermometer" showing the evaluation graphically.

‣ You can click on the evaluation profile to jump to that position in the game. This is useful if you want to quickly go to the position in the games where the tables turned. There is a little blue pointer which always shows you where you are in the game.

‣ You can right-click to hide/show the time and/or the evaluation profile.

‣ Right-click on Zoom to enlarge the display.

2.15.8 Chatter window

View   Chatter

Engine	View
☑ Chatter	
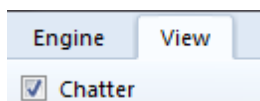
During a game the program will also chatter in written form, ("Don't you think that's a wee bit daring?"). This is normally displayed in the status bar at the bottom of the screen, but you can give it a separate window where it is easier to read. As with the spoken "Talk", these remarks depend on the progress of the game and the last move played.

"Fritz to programmers: I'm up against a really strong player here. Please send instructions!"
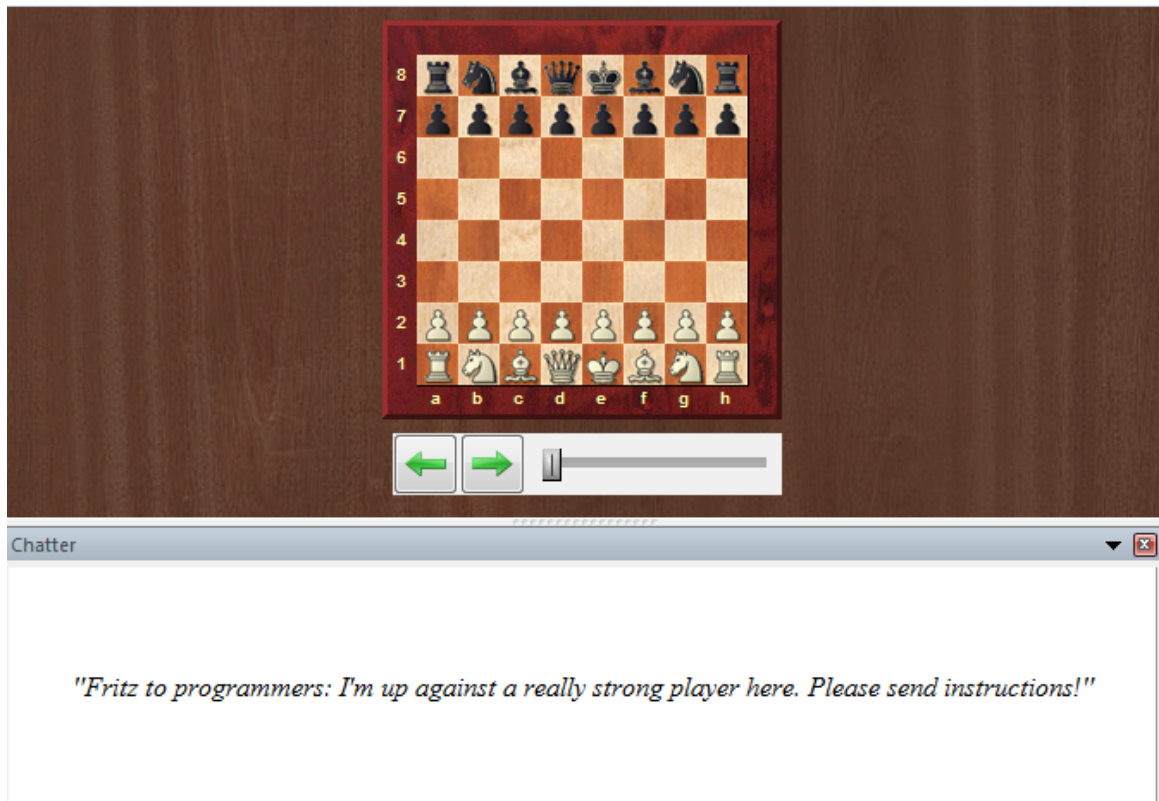
Here are some examples from well over a thousand that might be used:

"Another game? Sure, why not. Why not indeed."
"Normally I'd fight you to the death, but in this case I'll make an exception. I accept the draw."
"I can't believe it. How could anyone play so badly! I resign. Congratulations."
"Damnation, a check. You know how I hate that, Frederic!"
"Outplayed by a human! How very, very embarrassing!"
"I believe you have taken back three moves now."
"Wooosh, right across the board!"

2.15.9 Window Pane Icons
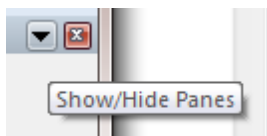
The program has additional icons for the important window panes.

Clicking on the *X symbol* closes the window.

Clicking on the arrow opens a small menu. This menu allows the user to quickly hide or display window panes if and when they are needed.
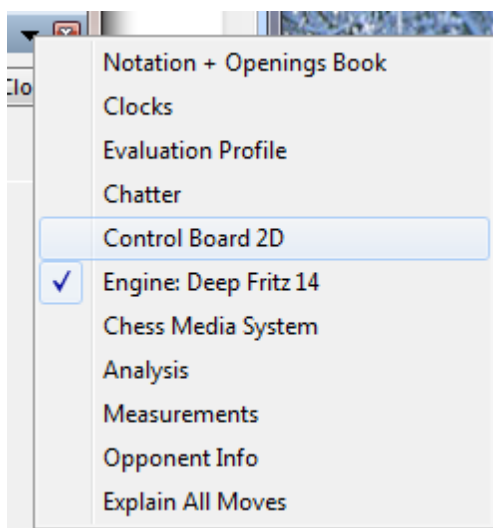
2.16 Move entry

2.16.1 Chess notation

One of the most important factors in the advancement of chess knowledge was the invention of an efficient notation to describe moves. It is done with the help of piece names, eight file letters (a – h) and eight rank numbers (1 – 8).
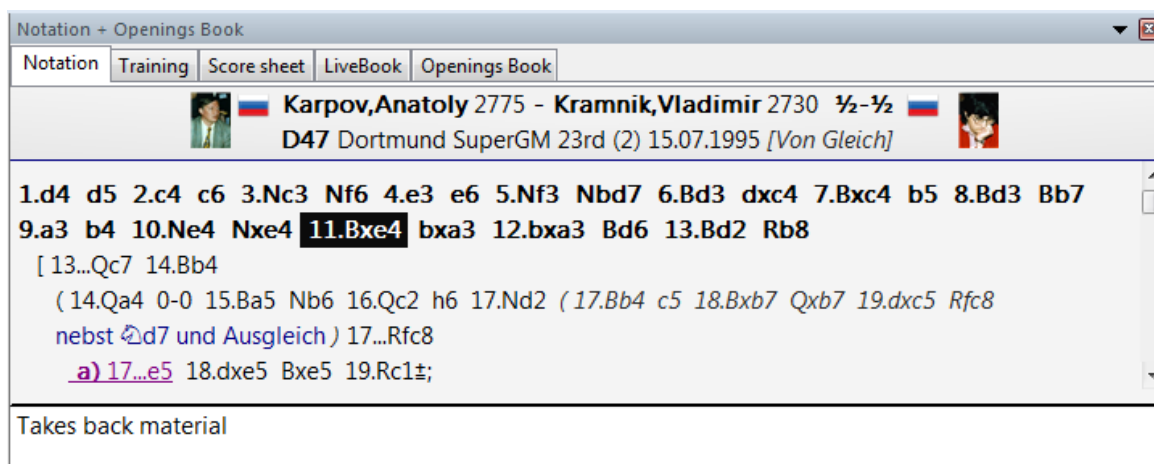
To record a move you need the following:

▶   A move number. Move 1 is a move by White and then one by Black. Each of the components is called a "ply" or "half-move".
▶   A piece letter (for king, queen, rook, bishop and knight). You can also use "figurines", small images of the pieces.
▶   Co-ordinates designating where the piece moves to.

The piece names are

King	**K**
Queen	**Q**
Rook	**R**
Bishop	**B**
Knight	**N**

The initial for pawns is omitted, only the move co-ordinates are given.

▶ In long algebraic notation you use the piece letter, followed by the start and destination squares. Example: 1.Ng1-f3.

▶ In short algebraic notation you use only the destination square whenever possible. Example: 1.Nf3, because only the knight on g1 can move to f3. If there is an ambiguity, you have to supply an additional letter or number. Example: 5.Nbd2 if two knights can move to d2, one from b1 and one from f3. If the knights are on b1 and b3 you would write N1d2.

▶ Pawn moves are given without a letter for the pawn. Example: 1.d2-d4 or 1.d4

▶ Captures are denoted with an "x". Example: 3.Nf3xd4 or 3.Nxd4.

▶ Checks are marked with a "+", checkmate is "#".

Note: You can switch between long and short algebraic notation in the menu Menu File – Options – Notation.

2.16.2 Entering moves with single click

In blitz games against the computer you may have a winning endgame, but you cannot enter the moves quickly enough.
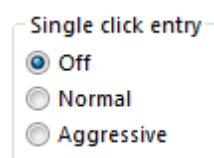
To avoid this unsatisfactory situation, we have implemented a special single click entry mode:

▶ If you click a piece that has only one legal move, then it is immediately executed.

▶ If you click on a piece that has more than one legal move, but if one of these captures a piece that has just moved, then that move is automatically executed (typical recapture sequence). Otherwise you must use a second click to show the program which square the piece must move to.

▶ If you click on a square to which only one piece can move, then the program executes that move. If more than one piece can move to the square, then you must

use a second click to show the program which piece – except if one of the pieces has executed one of the last two moves. If that is the case, then this piece is automatically chosen. This allows you, for instance, to give a series of checks very rapidly.

▶   If you click the squares g1 or g8 and short castling is legal, then it is executed.

Dropping

There is a special technique called "dropping". This entails picking up a piece while your opponent is still thinking and holding it over the destination square. As soon as the opponent's move comes you let go of your piece, using practically no time on your clock. It is a slightly dangerous technique – if the opponent plays something unexpected you may let go the piece and then face disaster. Still dropping is used extensively in fast games on the chess server.

Premove

While your opponent is thinking you can already enter one or more moves, especially when they are obvious. It is marked with a green arrow and immediately executed when it is your turn. This saves a lot of time and is especially useful in endgames, where you might pre-enter an entire series like a2-a4-a5-a6-a7-a8. Note that right-clicking the board will delete clear all pre-moves.

2.16.3   Move Input

When entering moves on the 2D board the source and destination squares are clearly marked in the "mouseover" mode.

What does „mouseover" mean? For instance, if you move the mouse cursor over the program's buttons a small text box with information is displayed. Mouseover offers additional information which is relevant to the position where the cursor is.

The following examples show the meaning of Mouseover while entering a move.

White selects the pawn on e2 and moves it while holding down the mouse button. The source field e2 is marked with a circle. When the mouse moves over the square e3 the square is coloured.

If White continues to move the pawn to the square e4, this potential destination field

is then coloured. The program is using graphical aids to help avoid illegal moves on the chess board.

This is also extremely useful in rated games and games on the Playchess chess server.
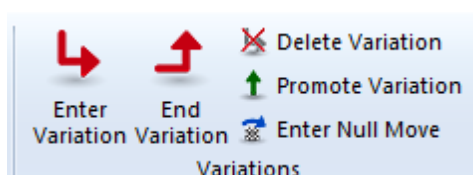
2.16.4 Variations

A variation is an alternative to the next text move. Basically you take back a move and enter another one instead. In the game notation the variation is given in brackets and indented.

Entering moves has been made much easier. The variation dialog pops up less often. If an alternative move is entered in the notation a variation is usually created without a variation dialog being displayed.

10.Bg2 17
  [**10.Bg2 Rc8 11.0-0 0-0**]
10...Qc7 9 **11.Nd5** 21 **Bxd5** 3:54 **12.exd5** 11 **0-0** 0 **13.Bf3** 47 **Rac8** 8
14.Nc3 39 **Ne8** 13 **15.Bg4** 33 **f5** 9 **16.Bf3** 41 **Nef6** 0 **17.0-0** 39 **e4** 1.5

A variation can be started by simply entering an alternative move, which automatically produces a variation window.

You can also use the annotation palette or the actions available in the Insert – Variations menu:

Enter variation
Takes back the current move and allows you to add an alternate line (equivalent to pressing "T").

End variation
Ends the variation and jumps to the main line, so you can continue entering the moves of the main line.

Delete variations
Removes the current variation and all subvariations from the game. Ctrl-Z will undo.

Promote variation
The current variation is promoted to the next-higher level, and the variation there becomes the subvariation. Ctrl-Z will undo this action.

The variation dialog is displayed if an alternative move to the last move is entered, because this is a case in which errors frequently have to be corrected.

Note: If you press the CTRL -Key + a Mouseclick, the Variation dialog is always

started!
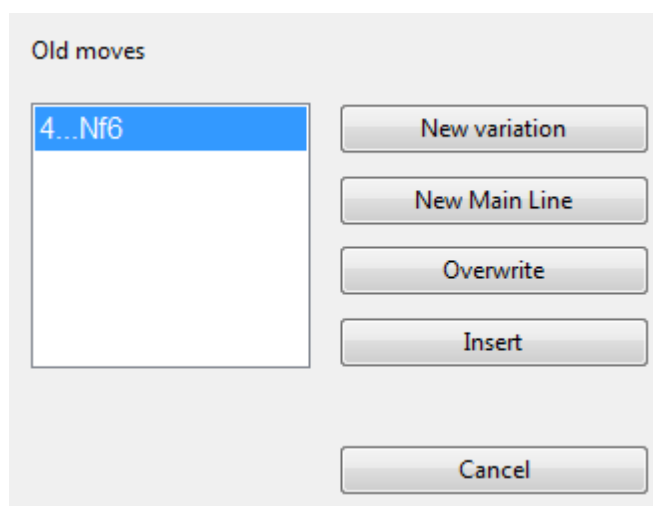
2.16.5 Entering moves on the keyboard

Because of the beautiful graphical interface of the program, you will probably want to enter moves using the mouse. There is, however, an interesting alternative. You can type in moves on the keyboard, a facility some experienced chessplayers might prefer.

To enter moves on the keyboard type in the start and destination square, e.g. g1f3.

2.16.6 Edit and annotate game

Right-click the game notation or book window

There are a number of functions and annotation tools for you to use. Remember that all changes are made in memory only. You must "save" or "replace" the game, as described in the previous sections, if you want to store them on disk.

Delete variation
This removes a line (and all its sublines) from the game. It applies to the line in which the notation cursor is currently located.

Promote variation
This raises the current variation to the next-higher level, making its parent line the subline instead.
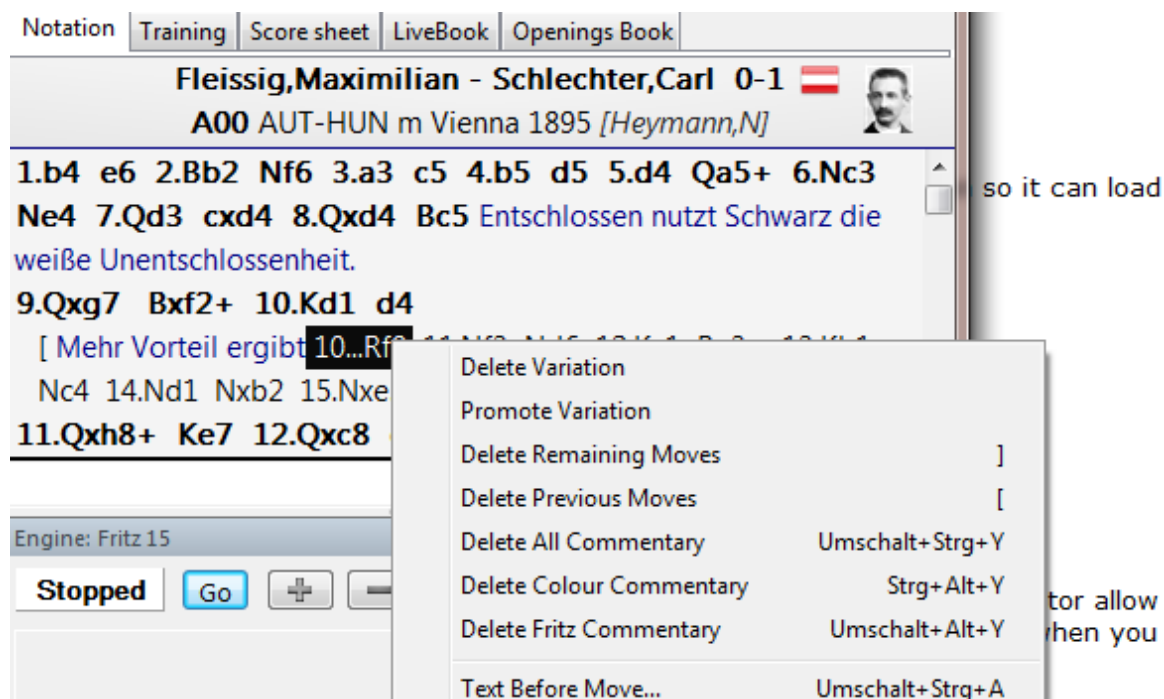
Delete previous/remaining moves
Removes all moves before or after the current board position. If you delete previous moves, the program automatically inserts a position description so it can load the game fragment later.

Delete all commentary
Removes all variations and text commentary from the game.

Delete color commentary
Removes all coloured arrows and squares from the game.

Delete Fritz commentary
This deletes the search information the program sometimes inserts into the game (when you tell it to do so).

Text before/after move

Both functions give you a text editor in which you can type in commentary, which can be inserted before or after a move. The tabs at the top of the editor allow you to specify the language(s) to use for annotating the game. In the menu "Tools" – "Options" – "Language", you can specify which language(s) should be displayed when you load a game.

!,?... / +-,=..., RR, ...

This inserts chess commentary symbols (e.g., "!!" = an excellent move, "??" = a blunder) or position evaluation (e.g., "+–" = White is winning, "–/+" = Black is better), which appears in the notation of the game and is saved with the moves. RR commentary symbols appear before a move (e.g., "Better is" or "With the idea").

Variation colour

This allows you to change the colour of individual variations, (e.g,. to mark special lines or keep your own analysis in a special colour).

Insert diagram

Marks a position for a diagram in the printout. You can also mark it by pressing Ctrl-A (insert text after move) or Ctrl-D. When you print out the game a diagram will appear in this position.

Show material

Inserts a material balance display at the bottom of the notation window. In our example White has a knight for a bishop and pawn.

```
Takes back material
Black has no isolated pawn any more on: a5
White should play on the king side
Black should play on the queen side
```

Show position tutor

Another useful coaching function is switched on by right-clicking the notation window and selecting "Show position tutor". This fires up a special chess engine which has a lot of chess knowledge. It generates a brief strategic description, in plain text, of the current board position.

Choose font

Allows you to set the font face and size for the chess notation. Be sure to select one that begins with "Figurine..." so that the chess figurines and commentary symbols are displayed correctly.
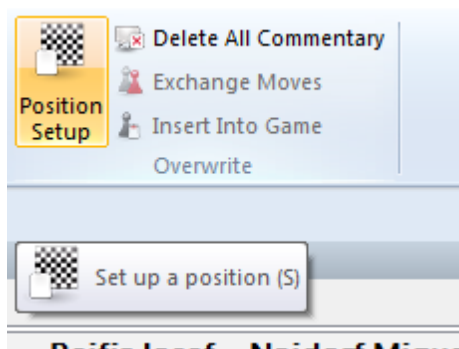
Graphic commentary

The program uses coloured arrows and squares to illustrate tactical points and make strategic themes and plans more clear. You can manually enter these using a combination of mouse and keyboard. Press the Alt key and click a square or draw a line from one square to another. This will give you a green square or arrow. Alt+Ctrl

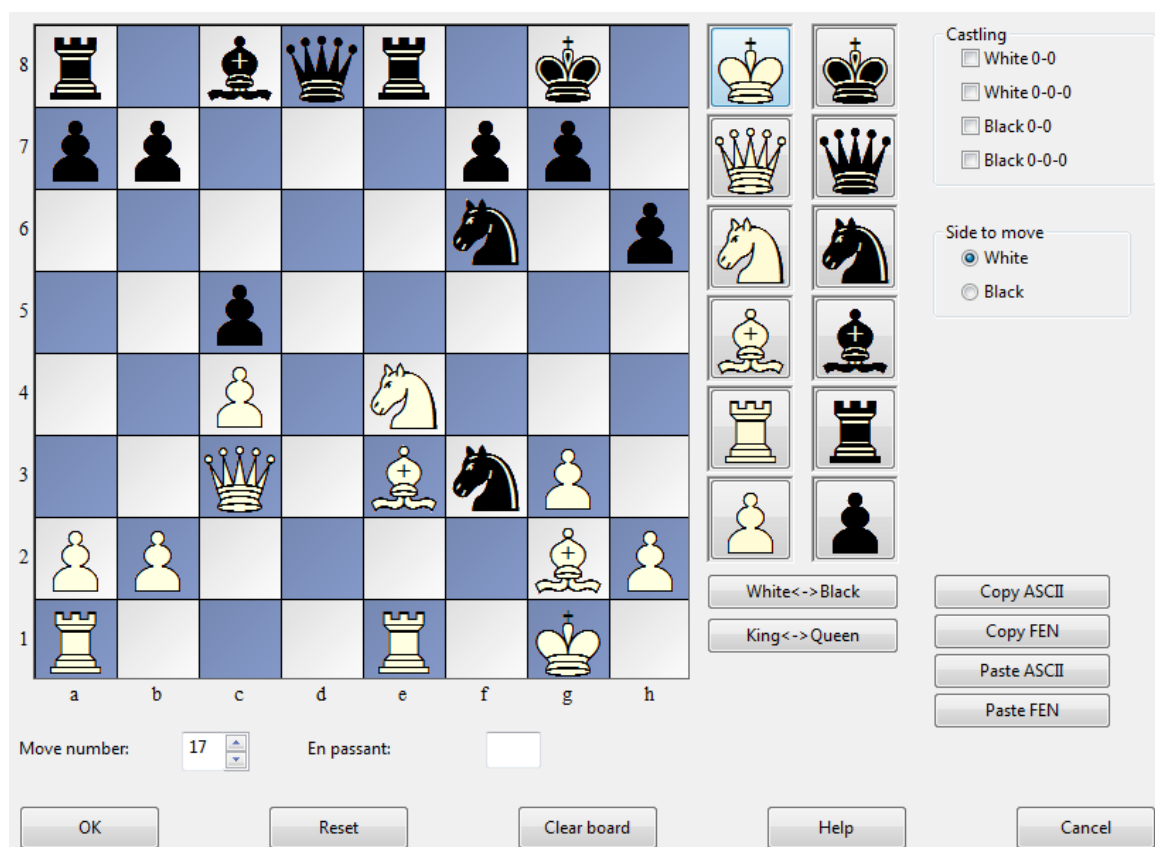does the same in yellow, use Alt+Shift for red. Clicking on the area around the board will remove the arrows and colored squares. All of this is great for chess lectures.

2.16.7 Position setup

Insert   Position setup

This opens a dialog box in which you can enter a completely new position.

The operation is quite simple:

▶   Choose a piece type in the columns on the right and put one or more of that piece

on the board by clicking on squares. The right mouse key changes the colour of the piece deposited, a second click deletes the entry. You can also drag pieces off the board to delete them.

▶ You can drag a piece that is on the board from one square to another, holding down the mouse key in the process.

▶ You can clear the board completely or reset the starting position.

▶ The buttons "Copy/Paste ASCII", "Copy/Paste FEN" are used to enter diagrams that exist in one of the common text description forms. Mark the position in a word processor or browser and press Ctrl-C to copy it into the Windows clipboard. After that you can switch to position entry and click the paste button. The position will appear on the board. The copy buttons will copy a text description of the diagram into the Windows clipboard. FEN stands for "Forsyth-Edwards Notation", and the similar EPD for "Extended Position Description".

Example of a ASCII position description:

wKd6,Rc8,g8,Pg2, bKh7,Qe1,Pd4,e3,h5,h6
Example of the FEN description of the same position:
2R3R1/7k/3K3p/7p/3p4/4p3/6P1/4q3 w - - 0 1

You can copy either of the above descriptions out of the Help file and paste it in the position setup.

After you have set up the position you should, if relevant, give the castling status of each side. In a few cases it may be important to know that the side to move can take en passant. Type in the file on which the capture can be made. You can also tell the program which side has the move and whether it should start counting moves from 1 or a higher number. Click "OK" to end position setup.

Mirroring the position
These buttons below the pieces allow you to change the postion in two ways:

▶ White <-> Black mirrors the position vertically, i.e. between white and black, and changes the side to move.
▶ King <-> Queen mirrors the position horizontally, so that the pieces on the left are moved to the right and those on the right to the left.

2.17 Keyboard

2.17.1 Entering moves on the keyboard

Because of the beautiful graphical interface of the program, you will probably want to enter moves using the mouse. There is, however, an interesting alternative. You can type in moves on the keyboard, a facility some experienced chessplayers might prefer.

To enter moves on the keyboard type in the start and destination square, e.g. g1f3.

2.17.2 Keyboard input for commentary symbols

In order to enter chess commentary symbols into your text annotations, you must use special keyboard shortcuts.

If they do not work properly. it means that the TrueType font "Figurine..." has not been installed correctly. In that case you may not be able to see the left-most column in the table below.

Char.	Keyboard	Meaning
♔	Ctrl-K	King
♕	Ctrl-Q	Queen
♘	Ctrl-N	Knight
♗	Ctrl-B	Biahop
♖	Ctrl-R	Rook
♙	Ctrl-P	Pawn
→	Ctrl-A	with attack

|		
↑	Ctrl-I	with initiative
⇄	Shift-Ctrl-C	with counterplay
Δ	Ctrl-Alt-I	with the idea...
○	Ctrl-S	space advantage
⊕	Ctrl-Z	time, time trouble
↻	Ctrl-Alt-D	development advantage
⇔	Ctrl-L	file
↗	Shift-Ctrl-D	diagonal
⊙	Ctrl-Alt-Z	zugzwang
⊞	Ctrl-Alt-C	centre
×	Shift-Ctrl-W	weak point
□	Ctrl-O	only move
∟	Ctrl-W	with
⌐	Ctrl-Alt-W	without
《	Ctrl-Alt-Q	queenside
》	Ctrl-Alt-K	kingside
⊥	Ctrl-E	endgame
	Ctrl-Alt-P	pair of bishops
◩	Ctrl-Alt-O	bishops of opposite colour
◪	Ctrl-Alt-E	bishops of same colour
∞̲	Ctrl-M	with compensation
±	Ctrl-1	White is better
⩲	Ctrl-2	White is slightly better
∞	Ctrl-3	unclear
∓̲	Ctrl-4	Black is slightly better
∓	Ctrl-5	Black is better
◠	Ctrl-Alt-B	better is
½	Ctrl-Alt-R	draw
⌀	Shift-Ctrl-P	passed pawn
○	Ctrl-.	isolated pawn

2.17.3 Customize keyboard

Menu File - Customize...

There are many shortcuts that make the operation of the program quicker and more effective. For instance, **Ctrl-N** starts a new game, **Ctrl-F** flips the board, and pressing the Spacebar forces the computer to make a move.

You can customize the keyboard and assign your own shortcuts, even for functions that do not have any assigned to them.
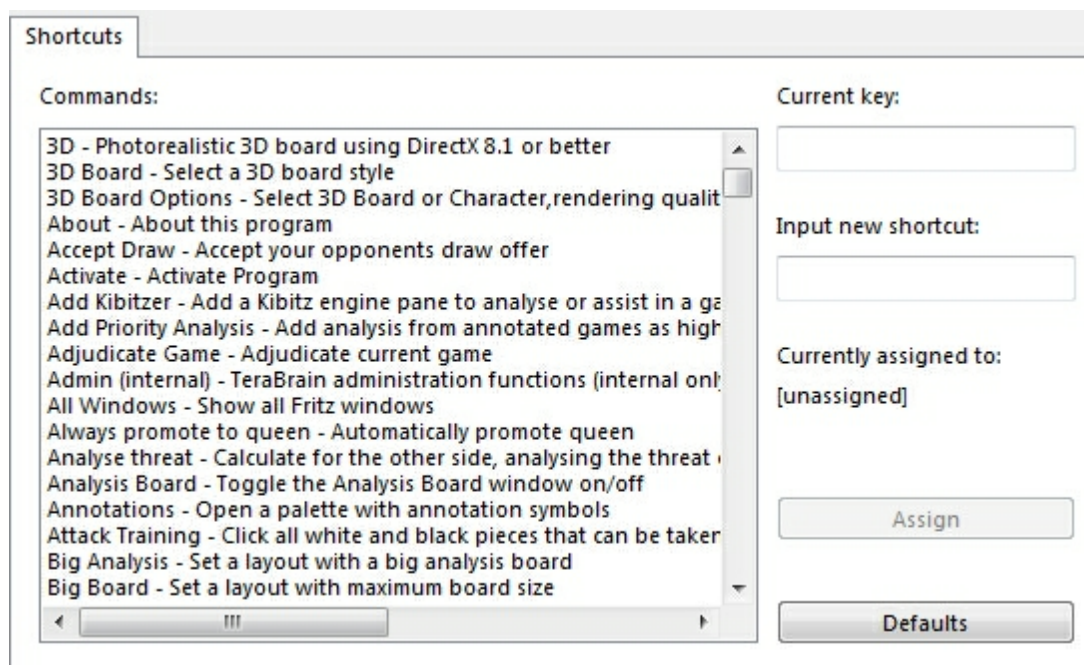
All commands are listed on the left. You can select one and give it a keyboard

shortcut by simply pressing the corresponding keys in the input window on the right.
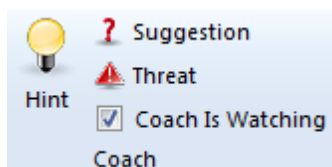
If the function already has a shortcut, this will be displayed under "*Current key*".

3 Reference

3.1 Help during the game

3.1.1 Help and coaching

During a game you can ask the program for advice:

Hint	The program will analyse the position and offer advice
Suggestion	The program will suggest a move
Threat	Displays the direct threat
Explain all moves	Shows a list of all legal moves and what they achieve
Position tutor	Generates a brief strategic description of the current board position.
Threatened squares	Displays attacked and threatened squares in colour
Spy	Shows the plan or threat automatically with a coloured arrow
Kibitzers	Opens a new window with a different engine which you can consult
Expected move	Displays which move the program is currently expecting
Dynamic Hints	Possibilites for attack and defence manoeuvers are shown for every square when you move the mouse cursor over it
Opening Hints	If this option is selected, the program uses green arrows to show the most important opening moves
Visualize Search	It uses graphics to display possible plans for both sides on the Board
Measurements	The „hotness" display shows how complicated and tactically „hot" the position is.

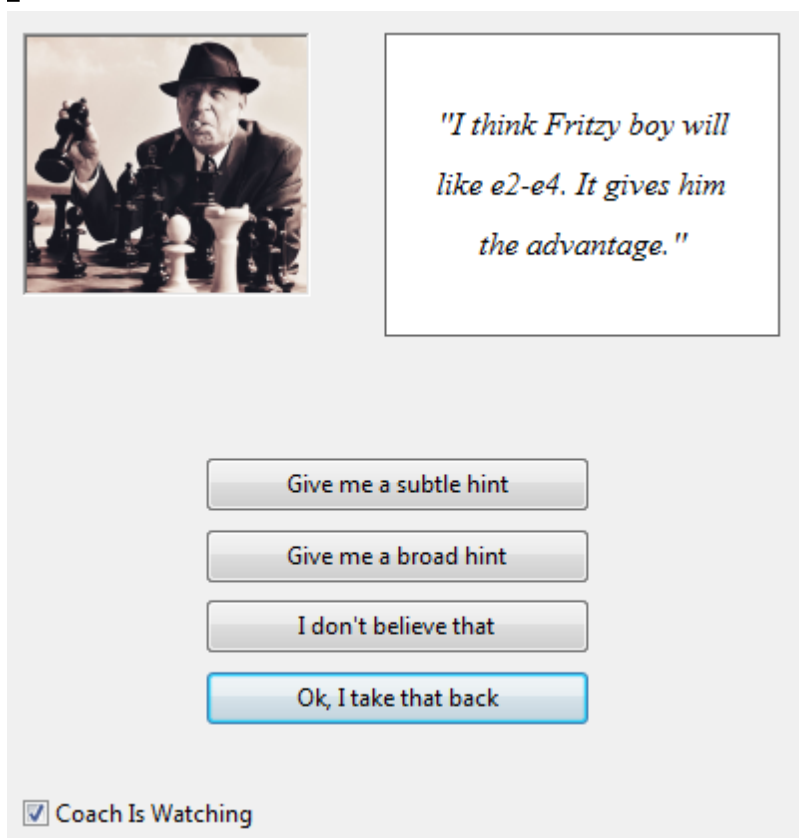**Let`s Check**   Every position that has been analysed by anyone at any
                              time is voluntarily saved on a server.

3.1.2   The chess coach

The *chess coach* helps you during a game.
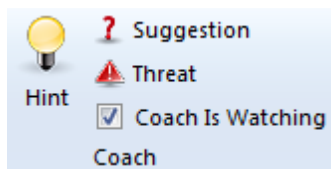
▶   You can ask for a hint. This is not a direct move suggestion. The program offers
to analyse the position. The quality of the chess coach help can be set in the game
options.

▶ The coach also gives move suggestions.

▶ If you make a blunder or a poor move, the coach appears and offers to help. You can switch this function on and off under *Home   Coach is watching* .

3.1.3   Hint

Home   Hint (you can also press F2)
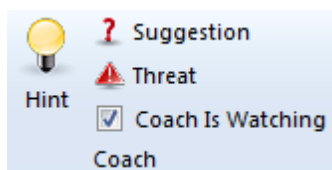
Hint brings up a special window with extensive advice on the current position.

You can click buttons to find out which enemy pieces are attacking your pieces, which of your pieces are under attack, and which are undefended.
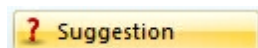
The engine's "plan" shows you the threat you are facing from the opponent, and "Suggestion" gives a constructive suggestion on what you should play next.

The quality of the hint assistance depends on the search depth, which you can adjust in the "Game" options.

3.1.4 Suggestion

Home   Suggestion (or press ?)

The program will do a quick check and then suggest a move for you. The move is displayed as an arrow on the chessboard.
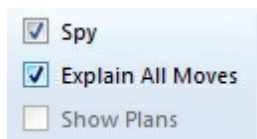
Er..., er...., well, let me see...

The quality of the hint asssistance depends on the search depth, which you can adjust in the "Game" options.

3.1.5 Explain all moves

Training   Explain all moves.

This will opens a new window with a list of all legal moves in the current position, sorted according to their value. The best move is listed first. The program will periodically recompile the list, searching one move deeper in the process.
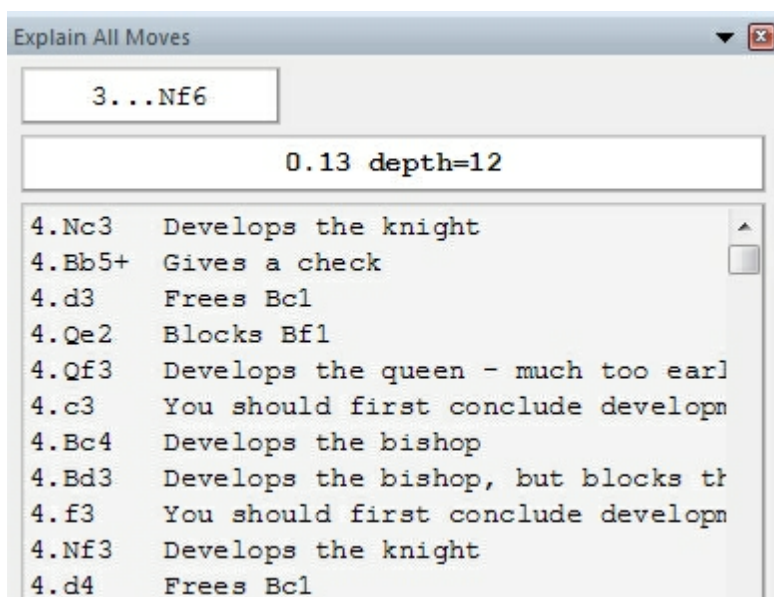
For each move there is a short characterisation. If you click any of the moves, the principal variation that would follow displays at the top of the screen, along with the resulting evaluation. Coloured arrows and squares on the board (to illustrate the point) may appear.
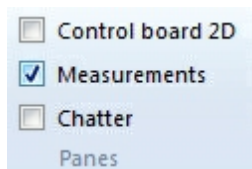
w

You <u>can double-click a move to execute it</u> on the board.

Click *Explain all moves* again to get rid of the display – or right-click and "close" the window.

3.1.6 Measurements during a game

'

Using the menu *View - Measurements* you can open a window with two displays for the *games Hotness* and the *Mate-O-Meter*.

What is the meaning of these two measuring devices?

This example is from the early part of a game. The „hotness" display shows how complicated and tactically „hot" the position is. The higher the value, the more complex the tactical and positional aspects of the position are.

The „Mate-O-Meter" shows the possibility of checkmate. In this example you can see that there is no mate threat.

The next example is from later in the game

This example shows that the position is very hot, i.e. there are very complex tactical and strategical problems in the position. The Matt-O-Meter also shows that the

danger of checkmate is much higher. The last example is what the Matt-O-Meter displays in a position with mate in three moves.

The „measurements" display is very useful especially for beginners. One look at the measurement clocks will show a beginner or a viewer who has just arrived the status of the game.

3.1.7 Position tutor

Right click notation window   "Show position tutor"

This starts a special chess engine which has a lot of chess knowledge.

It generates a brief strategic description, in plain text, of the current board position. The information is displayed at the bottom of the notation window.
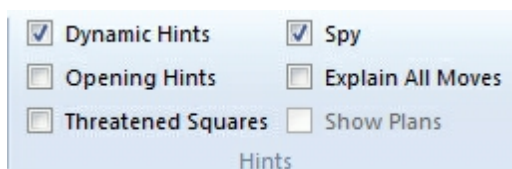

3.1.8 Dynamic Hints

When moves are made the balance of power on the board can be shown with arrows. This can be selected by the menu *Training - Dynamic Hints*.

Possibilites for attack and defence manoeuvers are shown for every square when you

move the mouse cursor over it. This "mouseover" effect gives assistance in understanding the balance of power on the board.

This information is shown in two colours. Green arrows are defensive manoeuvers, red arrows are attacks.

There are further differences shown by the type of line. A solid line shows a direct attack or defence. Dotted lines show a possible attack or defence that depends on the next move made.
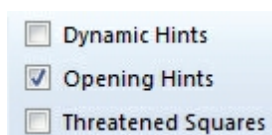
If a red line is drawn thicker it is a move that will win material.

This means that the dynamic tips can be an effective help during a move by showing what consequences there will be on the board.

3.1.9   Opening Hints

The menu *Training - Opening Hints* can be used to display useful information in the beginning of a chess game. This phase is usually called the "opening".

Note: This is only possible if an openings book has been loaded.

If this option is selected during the opening, the program uses arrows to show the most important moves in the position.

This example shows the board after the first moves of the French defence, 1.e4 e6 2. d4 d5. It is now White's turn, and the green arrows show four plausible moves he can make.

Note: The arrows are not based on calculations made by the program, but on data read from the openings book. For this reason the Opening Hints can only be displayed when an openings book has been loaded.
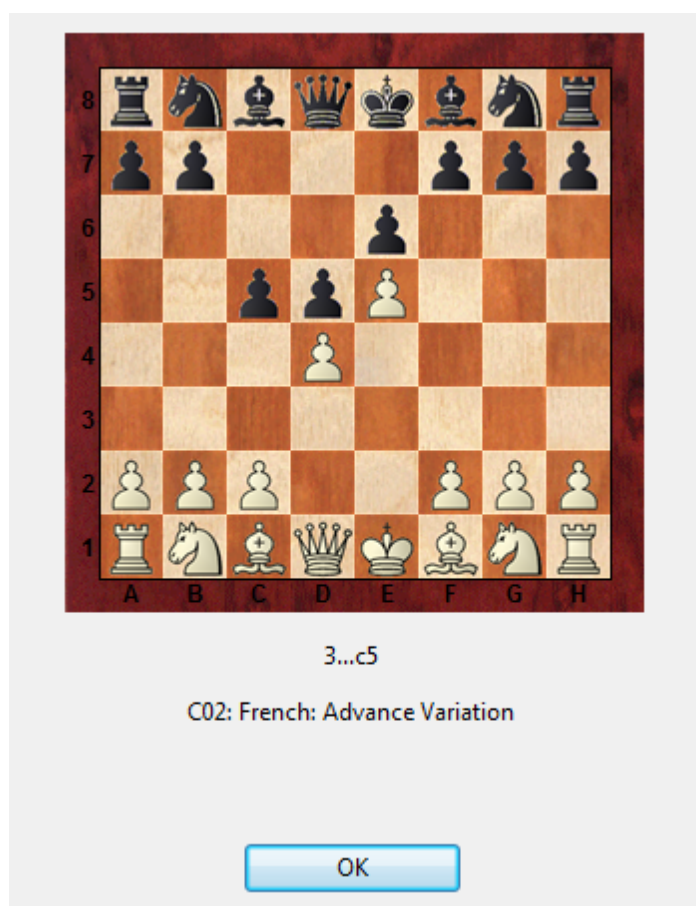
3.1.10 Opening Classification

"
"The program is now able to classify openings more precisely. The feature *Classify Opening* now makes it possible for the user to state to what opening system a particular board position belongs.

Note: This function is only useful in the opening phase of a game. In the middle and endgame it is no longer possible to make a classification.

This function is in the menu *Analysis   Classify Opening* .
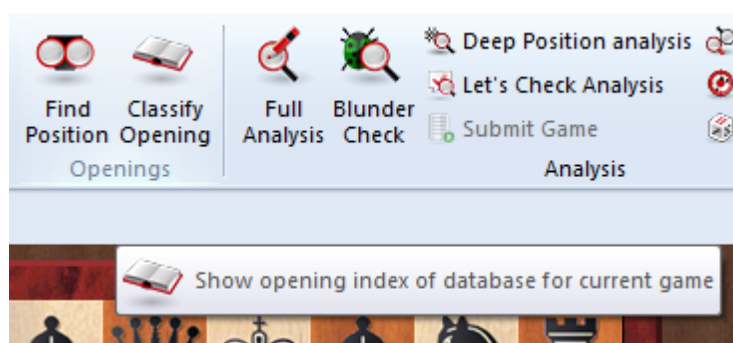
Select this function during a game's opening. The following example shows the result:

3...c5

C02: French: Advance Variation

[OK]

The program examines the board and compares it with classification positions. In this example it was possible to make an exact correlation with an opening, and the name is presented in the information box.

In the Database window click the tab **Openings** to see the Opening classification of your Database.

3.1.11 Threat

Home   Threat (or Shift-T)
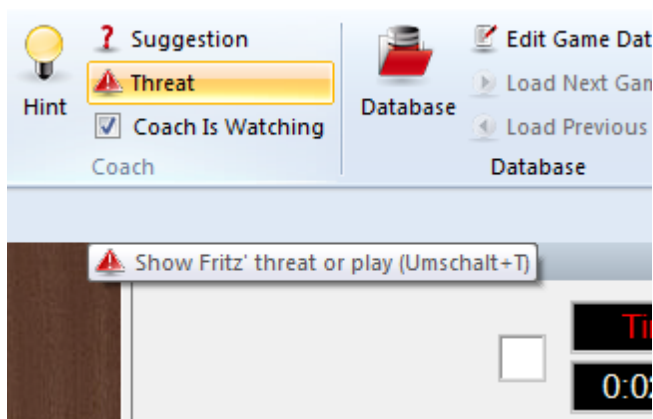
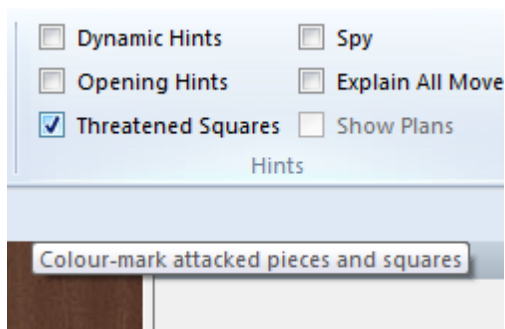
Displays the immediate threat, (i.e., what the opponent could do if no defensive move is made). The threat is displayed as a red arrow on the board.

Please note: a kibitzer can be set to display the threat in every position that occurs on the board. Right-click the engine window of the kibitzer and select "Threat".

3.1.12 Threatened squares

Training   Threatened squares

Displays the status of each piece on the board.

▶   A red square means that the piece is under attack and not sufficiently defended, or that it is being attacked by a piece of lesser value. This is usually a pretty serious danger signal and means you must take active measures to avoid losing a piece.

▶   Yellow means that the piece is under attack, but it is just sufficiently defended. You must be careful about removing any defending piece.

▸ Green means the piece has enemy contact but is well defended. Usually it is okay to remove a defending piece.


Help with your moves

With the "threatened squares" function switched on, the program will, in addition, help you with the move you are about to make. When you click a piece, all squares to which it can legally move are displayed in the corresponding colour codes:

▸ red for danger squares on which you will almost certainly lose material,
▸ yellow for contested squares, and
▸ green for safe ones.

3.1.13 Spy

Training Spy
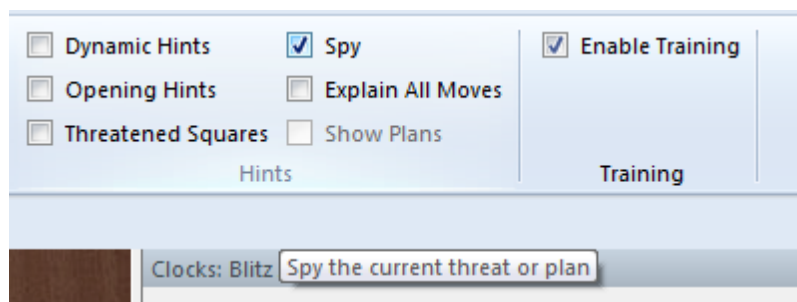
In "spy" mode the program uses a red arrow to display what it is planning to do on its next move.

This feature helps beginners and intermediate players avoid dropping pieces or getting thrashed quickly. It is highly recommended as a training tool. Games played in spy mode tend to achieve a higher level of play.
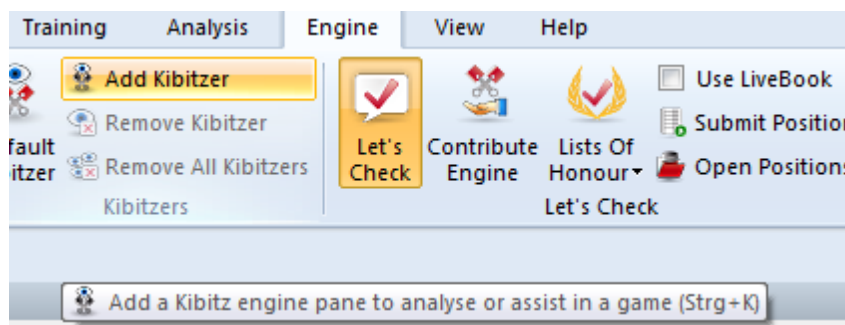
The Spy uses coloured arrows to show the threats in the current board position. In contrast to the function „Show Threat" this function also displays what will happen in the following move.

This function is not only useful for beginners, because it helps avoid elementary tactical errors. Games played with the spy function active are of a much better quality. This function has been improved and now the Spy only shows strong unmistakable threats.

Note: If simple combinations are possible these are shown by a blue arrow on the chess board.

3.1.14 The Kibitzer

Menu Engine   Add Kibitzer (Ctrl-K)

A "Kibitzer" is a person who watches a game in progress without making any moves himself. A kibitzer is also notorious for giving advice and knowing everything better.

You can add a kibitzer by selecting an engine in the select box that appears.

A new engine window appears in which it can work parallel to the one already loaded. You can use one or more kibitzers (up to six) to help you in your game against the primary engine, or you can use them for a second opinion on a position you are analysing. Remember that they will be sharing the processor power, so the quality of analysis sinks with every added kibitzer.

Click *Remove kibitzer* or *Remove all kibitzers* to close the additional engine. You can also right-click a kibitzer and "Close" it.

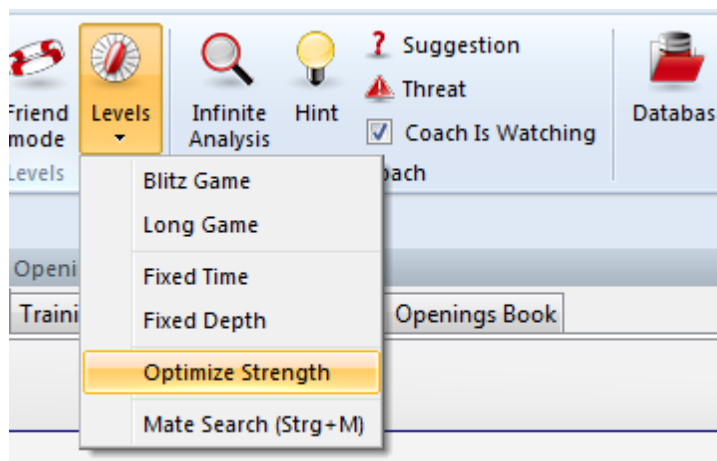Kibitzer cannot be combined with the "Explain all moves" window.

3.2   Levels of skill

3.2.1   Levels of skill
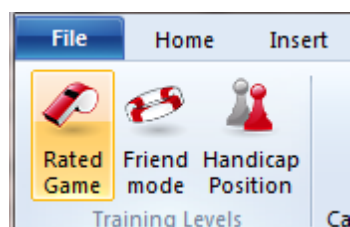
Full-strength playing levels

▶   Blitz games
▶   Long games

In both these levels it is advisable to use the function "optimise playing strength" if you want to get the most out of the program.

You can also use *Training Rated game* and play serious tournament games in which the program will give you an objective assessment of your playing strength.

Reduced playing strength level

▶   Friend mode

Apart from the above, the program can be set to play games with a fixed time limit or search depth per move. Click Game – Levels to reach these settings.
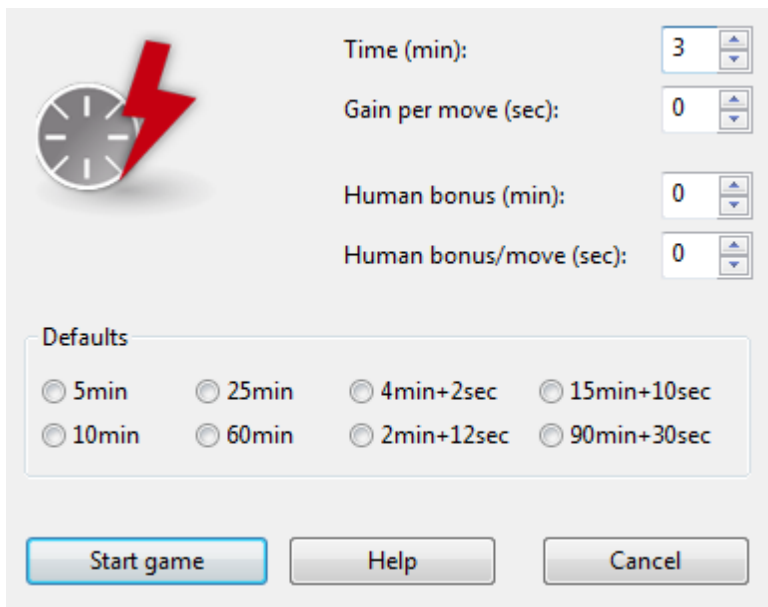Chess variants

▶   Givaway chess
▶   Chess 960

Apart from the above, the program can be set to play games with a fixed time limit or search depth per move. Click *Game   Levels* to reach these settings.

3.2.2 Blitz games

In blitz chess all the moves of the game must be played within a certain time, which is usually given in minutes.

In addition, you can give a bonus (in seconds) for each move. This is added to the time allocation as soon as the move is executed. It prevents one side from winning a game purely on the basis of the other side running out of time.

You can also give the human opponent a time advantage – for the entire game, or for each move. This can compensate for move entry time, or be a handicap which allows you to think longer than the computer.

Note: You can set the time controls by right-clicking the chess clocks and selecting either "*Blitz*" or "*Long game*".
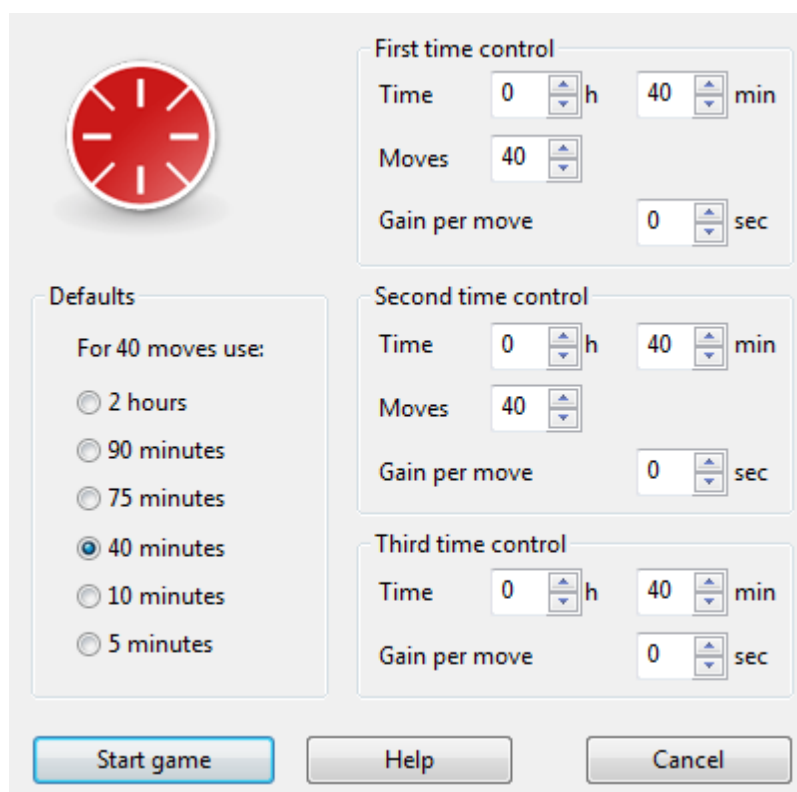
Note: The program uses different scoring modes in the disciplines Bullet, Blitz and long games!

3.2.3   Long (tournament) games

Home   Long game
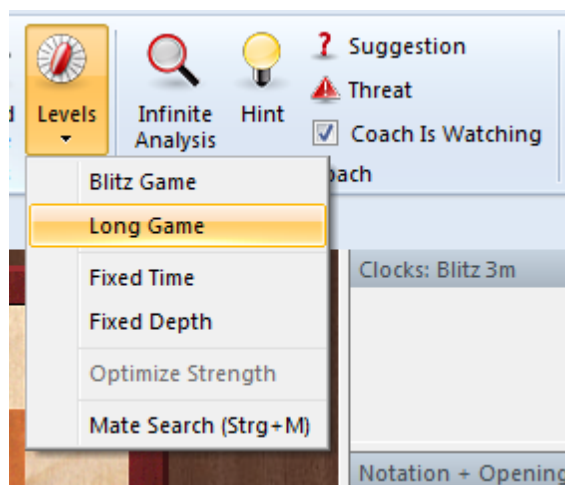
In tournament chess you are required to execute a certain number of moves in a given time. Usually the game has a number of phases, e.g., two hours for the first 40 moves, one hour for the next 20, and 30 minutes for the rest of the game (a very common tournament control).

You can use *Long game* to adjust the time allocations or number of moves per phase. You can also select one of the common levels predefined in the dialog box

("Defaults").

Note: The program uses different scoring modes in the disciplines Bullet, Blitz and long games!

If you set the time of the second and third time controls to zero, they are ignored as the first time control is always used.
Overstepping each of these time controls means you lose the game. If you use less than the specified time in any phase, it is added to the next phase.
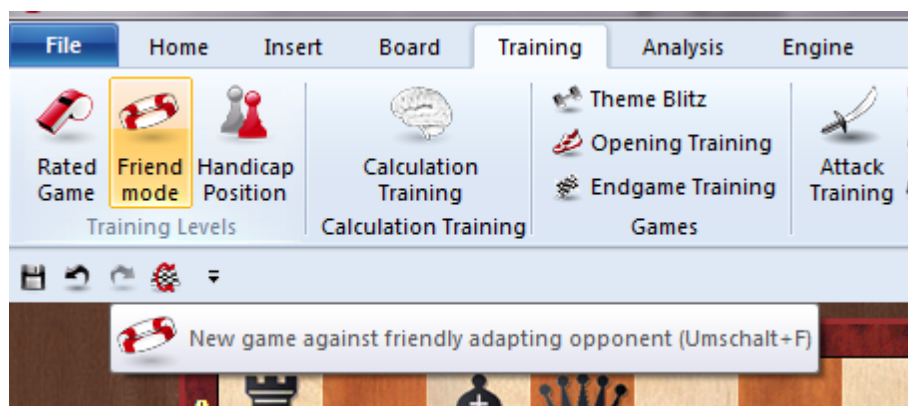
3.2.4 Friend mode

Training   Friend mode

The program offers a completely overhauled friend game mode. Modern chess programs are too strong for almost all chess players. You can use the friend game mode to adapt the playing strength so that you have a genuine chance to win without the program making primitive mistakes. Based on your initial settings and the games you have played the program attempts to adjust its playing strength to the same level as the player.
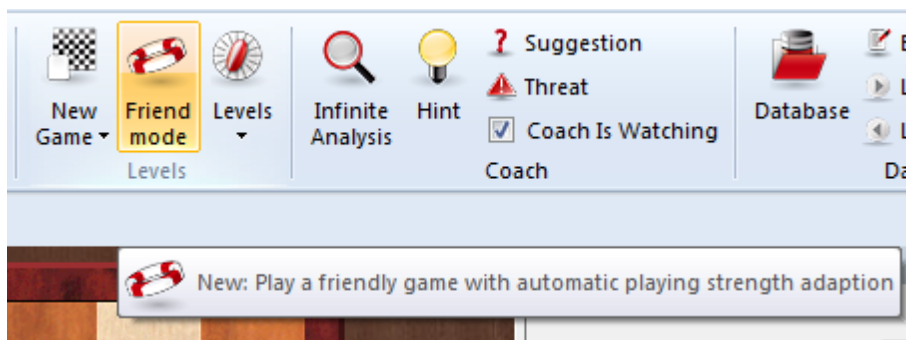
A friend game can now be started directly from the start menu with the ribbon "Friend Mode". This means that you no longer have to start the game via the Training menu.

As an alternative, you can still use the Training menu if you wish.

or

Menu Home - Friend Mode

Note: A normal game is still started with the ribbon "*New Game*". Please note that when the program starts it is always in analysis mode as default. This is because practice shows that most users use the program to analyse their own games. The program has been changed to accommodate this usage. For this reason you now have to select a normal playing level before you can play a game against the program.

You have to select a default level when you first start friend mode. This is used for future games.
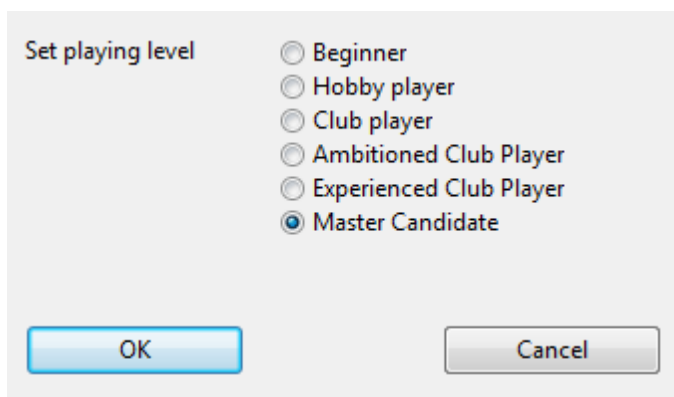

"*Set playing level*" determines the strength level that the program should play. The program does not necessarily play badly on the lower levels. If you give the program tactical opportunities, leave pieces undefended or allow checkmate the program will take advantage. This will help you to learn from your mistakes. Don't lose patience if you lose all the first games. The program will adjust itself to your playing strength as time passes.

The program will attempt to play as strong as you do. It remembers the results of previous friend games and adjusts its strength accordingly. The program attempts to adjust its playing strength while playing.

Every new friend game is with a new colour, so every second game you play will be with Black.

If you have already played games against the program in friend mode you will see a diagram every time you start.

Games   10

Score   35%

Playing level   Master Candidate

Rating   **2213**
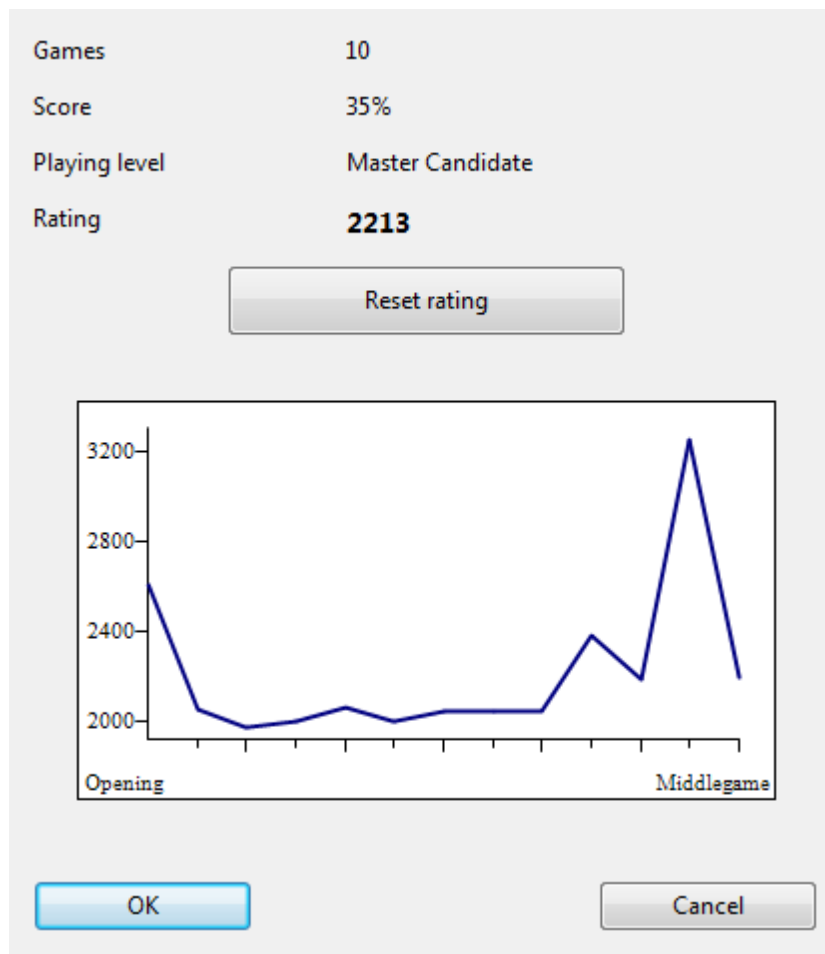
Reset rating

This shows you the number of games you have played, your results as a percentage, the level you have reached and your Elo rating. The button "*Reset Rating*" deletes the stored results and begins a new evaluation of your games.

The diagram presents an overview of the evaluation in the different phases of the game. This goes from the opening to the endgame. A low evaluation in the opening phase shows that the user needs to invest more time in openings training.

During friend games the program offers the user useful pieces of advice. The Coach is not active, but if you miss a tactical opportunity the program inserts the missed chance into the game notation and marks it as a training question.

Solution: Nf3-g5

| Continue | Next Question | Try again |

| Load Next Game |

View board from side

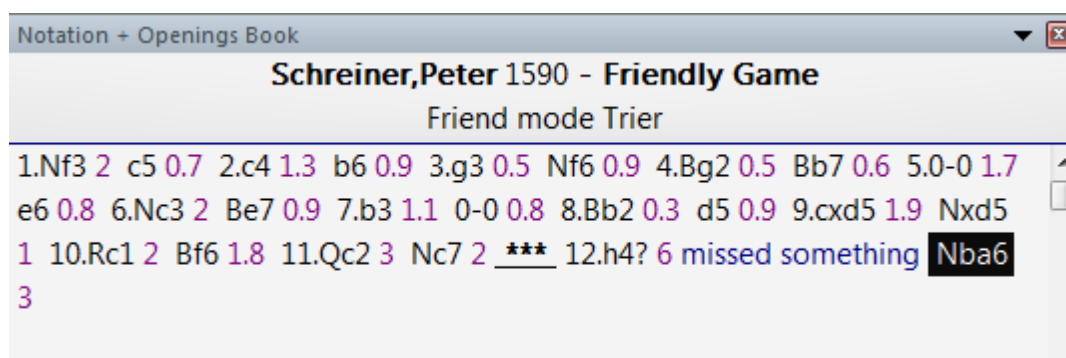◉ Side to move   ○ White   ○ Black

Your score this move: 0/10
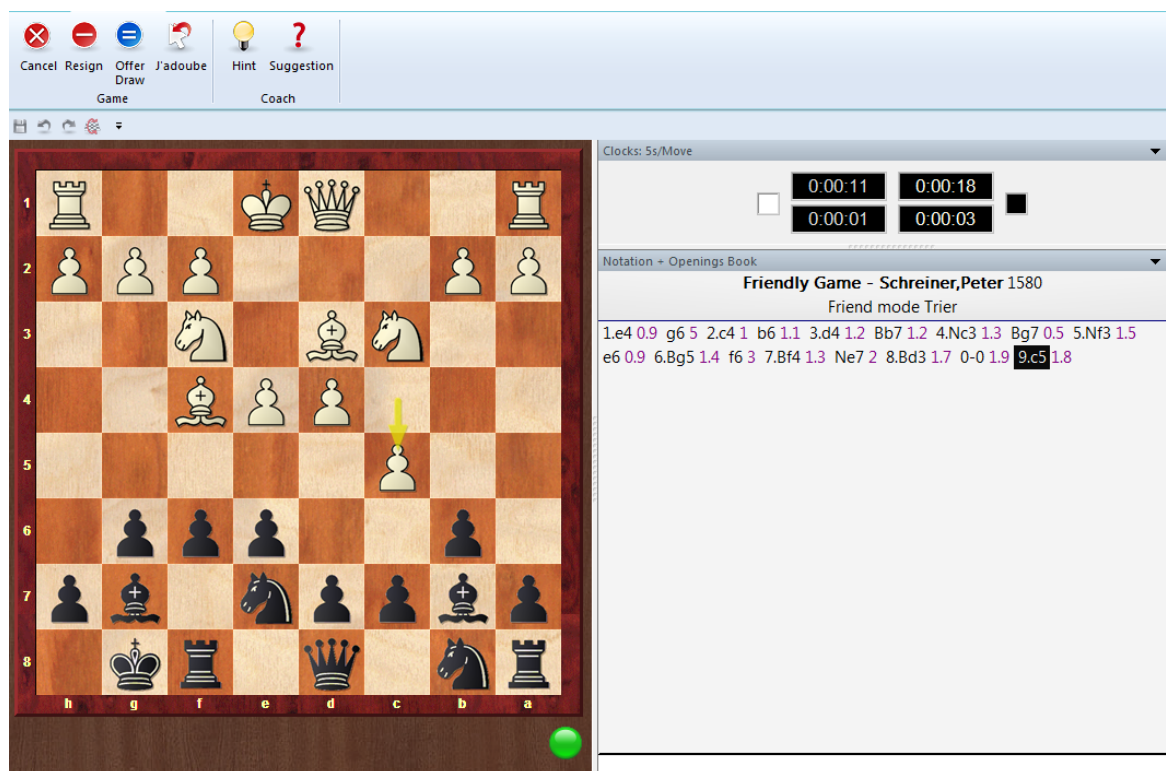
Score in game: 0/20 = 0%

Note: All games played in friend mode are stored in the database Autosave in the user's folder.

If you later load a game from the Autosave database the position is displayed where the user missed an opportunity and a tactical question is asked.

As an alternative you can use an analysis mode to examine the game and see what tactical opportunity you missed.

Notation + Openings Book

Schreiner,Peter 1590 - **Friendly Game**

Friend mode Trier

1.Nf3 2 c5 0.7 2.c4 1.3 b6 0.9 3.g3 0.5 Nf6 0.9 4.Bg2 0.5 Bb7 0.6 5.0-0 1.7 e6 0.8 6.Nc3 2 Be7 0.9 7.b3 1.1 0-0 0.8 8.Bb2 0.3 d5 0.9 9.cxd5 1.9 Nxd5 1 10.Rc1 2 Bf6 1.8 11.Qc2 3 Nc7 2 ******* 12.h4? 6 missed something Nba6 3
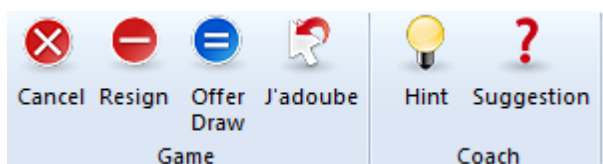
3.2.5   Playing a Friend Game

The chess clocks show how much thinking time you have used, but they have no other purpose. You can think for as long as you like.

Enter your moves on the graphic chess board.

During the game the following functions are available by using the function buttons on the toolbar.

Abort	-	This ends the current game immediately.
Resign	-	This gives up the game.
Offer Draw	-	You can offer the program a draw.
J`adoube	-	This takes back the last played move.
Hint	-	The program makes a suggestion for your next move, also showing threats and plans, if you wish.
Suggestion	-	This displays an arrow for a suggestion.

Beneath the chess board there is a small warning light. When this light is green the game is running peacefully.

If the light blinks it means that in this position the player has a tactical opportunity.

This is in contrast to the serious rated games, in which no help is allowed. This is a useful tip. If you make a move which isn't what the program expected, the program inserts it into the game notation, and when you replay the game the critical position is used as a training question.
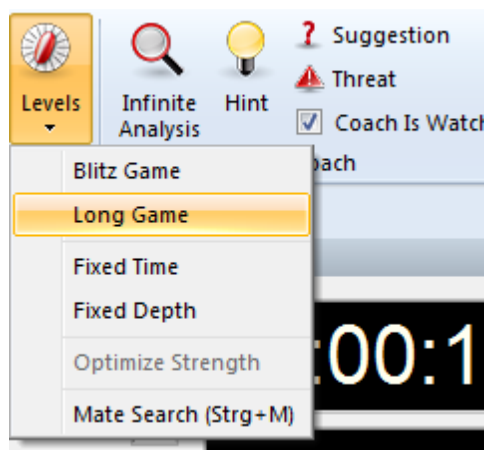
3.2.6 Rated games

Training   Rated game

Rated games are the most exciting games, and also the most honest way to challenge a computer program. You are playing against the program under genuine tournament conditions. Your results are stored, and you are given a rating in the form of an Elo number.

The rated game mode is started by the Menu *Training   Rated game*.

First you must select the type of time controls that you want, either Bullet, Blitz or long game. This is very important because the program will give you separate ratings for each of the types of time controls.

The following games in the session are started with the time controls you have selected. If you want to play with other time controls you must change the settings with the ribbon *Home   Levels*.

This is the start dialog for the rated game mode:

Games	8
Score	100%
Playing level	Ambitioned Club Player

Opponent playing strength

1155	1770	2555

Rating

☑ Program plays fast

OK   Help   Cancel

Use the sliding bar to select the playing strength of the program for the rated games. If you have already played rated games against the computer you will see statistical information about your results in the "*Rating*" dialog.

"*Program plays fast*": If this option is selected the program makes its moves either immediately or very fast. This can have a demoralising effect on human players, especially in Blitz mode. Turning off this option makes the program seem "more human".

What sets the rated mode apart is that it's not possible to take moves back, and there are no suggestions or hints made by the program. This makes the game identical in style to strict tournament games. The features available to the user are more restricted than in the more tolerant friend mode.

You can resign, offer a draw, or if the computer hasn't yet moved you can correct a move you made by accident.

The program rates your game play for the game types *Bullet*, Blitz and long games. You can see these ratings by clicking the button "*Rating*" in the start dialog.

Bullet
Blitz
Slow

Blitz

|		Oppone...	Result
Total Games	25	1607	1-0
Stored Results	8	1607	1-0
White	0	1607	1-0
Wins	8	1607	1-0
Draws	0	1607	1-0
Losses	0	1607	1-0
Result	8.0/8 = 100.0%	1607	1-0
Opponents Rating	1607	1607	1-0
Rating	1680		
Date	6.11.2015		

Chart

Delete all results

This dialog displays the ratings for the different types of games. The button "*Chart*" shows a graph of the development of your rating over time.

"*Delete all results*" starts a complete Evaulation.

3.2.7 Optimise playing strength

Home - Levels   Optimise strength
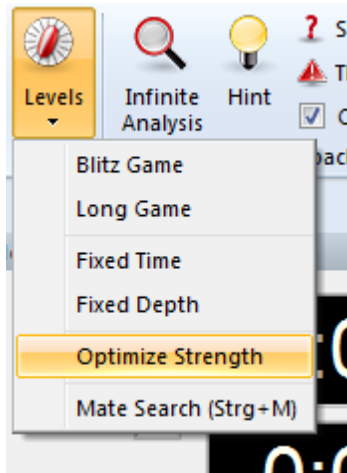
This function is only available in Blitz or long games with time controls. It configures the program for maximum playing strength.

This is done as follows:

▶ The Multimedia functions are switched off.

▶ The hash table size is optimised.

▶ The opening book options are configured for serious play.

3.3 The openings book

3.3.1 The openings book

In the initial phase of a game, the program plays out of an *openings book* . This can consist of millions of openings positions, and for each of these, the program has full information on which moves were played, how often and with what results. The program stores its own experience with openings variations it has played. It learns from success and defeat.

	N	%	Av	Perf	Fact	Pr..	[%]
Fritz13	236481	56.7	2588	2632			
1.e4	102838	56.4	2584	2631	0	37.8	36.8
1.d4	94152	57.1	2591	2634	2*	36.8	39.0
1.Nf3	20080	56.2	2589	2633	0	12.1	12.4
1.c4	17277	57.5	2595	2635	0	11.4	11.8
1.g3?	1249	53.9	2583	2615	0	1.3	0
1.b3?	333	50.5	2589	2595	0	0.3	0
1.f4?	322	45.7	2568	2561	0	0.3	0
1.Nc3?	74	56.8	2605	2641	0	0	0
1.e3?	54	39.8	2563	2530	0	0	0
1.b4?	46	43.5	2552	2556	0	0	0
1.a3?	30	46.7	2615	2616	0	0	0

1-0: 31939 = 34% N = 94152 (106851)
1/2: 43592 = 46% 2591-2634 (89565)
0-1: 18621 = 20% 2584-2542 (89649)

The openings book is called the "tree" as the branching variations in the opening resemble the structure of a tree. The files that make up a tree are pretty large. The program requires about 80 bytes to store a position and all the information associated with it. You can leave the files on the program CD. However, in this case, the program will not be able to modify the book as it plays games (i.e., it cannot learn).

Thus, it is advisable to copy them to your hard disk.

Some things to note:

▶   The size of the openings tree is limited only by the amount of disk space available. It is important to note that access to the information is always extremely fast, even if the files are truly gigantic.

▶   Existing openings trees can be easily extended, simply by importing games. This means that whenever a series of high quality games are available, the program can read them and extend its openings knowledge.

▶   The tree recognises all transpositions, even those that did not occur in the games from which the tree was generated. Sometimes you may be able to switch from one known position to another with a move that has never yet been played.

▶   The tree can handle reversed colours perfectly. For instance after 1.d3 d5 2.d4, the program is likely to reply 2...c5! and play the entire Queen's Gambit as Black.

▶   The openings tree is not just an instrument to make the program strong, it is also a very powerful training tool for chess players. For this reason each move can be marked with chess symbols like "!" and "+=".

Note: If you are using Windows it is very important to keep all your databases and openings books in the standard directory (My Documents\ChessBase) suggested by the program. Otherwise the operating system will try to back up the giant files every time you close the program.

3.3.2 The book window

In the initial phase of a game the program plays out of an "openings book". This can consist of millions of openings positions, and for each of these the program has full information on which moves were played, how often, and with what results. The program stores its own experience with openings variations it has played. It learns from success and defeat.

See also LiveBook ...

You can consult the openings book by clicking on the *Openings book* tab at the top of the notation window (if an openings book is not loaded, click the button and select one from your hard disk).

Extended Book Display ....
This is what you see in the openings book tree:

▸ **Moves**: (Tree icon) Sometimes a move will appear in grey, which means that it was never played, but leads to a position that results from some other line.

▸ **N**: (N) The header displays the total number of games which led to the current board position. The N column displays the number of games in which each move was executed.

▸ **%**: Percentage score achieved by the move, always from the point of view of the colour to play. If the number of games is low, the percentage is given in grey because it does not have great statistical significance.

▶ **Av**: Elo average of the players of the move. If only a small percentage of the players had a rating, then the number is given in grey.

▶ **Perf** : Elo performance of the move. This is the rating a player would have achieved in a fictitious tournament, playing the move in all his games.

▶ **Fact**: The factor or "weights" allocated to each move control the probability with which it will choose the move in a game. The value can range between –125 to +125. The values are initially set to zero, but may change when the program actually plays games in the individual variations. You could say that the program is learning from experience. The weights can be manually modified by right-clicking a move and selecting "Change weight". To reset all weights click Edit – Openings book – Reset weights. After that, the program will use only the purely statistical information to select its moves.

▶ **Prob and [%]**: The first value is the purely statistical probability of the move, based on the number of times it was played and the results achieved in the games that went into the book. This is the probability of the move being played by the program as long as the weights have not been changed – either manually or by automatic learning. The value on the right [%] is the practical probability of the program playing the move. This is a product of the statistical evaluation and the weights. If you change the latter you can see how the [%] value (but not the "Prob") changes. In Book options you can determine how much the weights influence the probability of play.

At the bottom of the Openings Book window there is a graphic display of the percentage wins, losses and draws that were achieved with the highlighted move.

How to navigate the tree

▶ Use the up/down cursor keys to move the headlight bar up and down.

▶ Use the right/left keys to move forward and backwards in the variations.

▶ Click a move with the mouse to move forwards in a variation.

▶ Right-click a move to annotate it.

▶ In the same menu you can exclude a move from tournament games. The move appears in red. Repeat the action to make it playable again.

▶ Press F11 to open and close the tree display window.

Book display option

3.3.3 Extended Book Display

In the book options (Rightclick - Properties) you can use **Show Next Move** to change to an informative table display.

This makes it easy to see the continuations and statistics that are stored in the position tree.

Inside each box a move is displayed, the number of games in which this move was displayed, and the success rate as a percentage.

If the percentage is displayed in gray it means that not enough games were played to provide a meaningful statistic.

Tip: The subsequent moves are displayed next to one another. If you click on the next move, both moves are entered on the board. This can be tested by using the start position. Click on the move that follows 1.e4, which is 1...c5 in the Opening book. Both moves will be entered on the board immediately.

3.3.4 Book display options

To configure the tree window, right-click a free area and select *Properties* in the menu that appears.
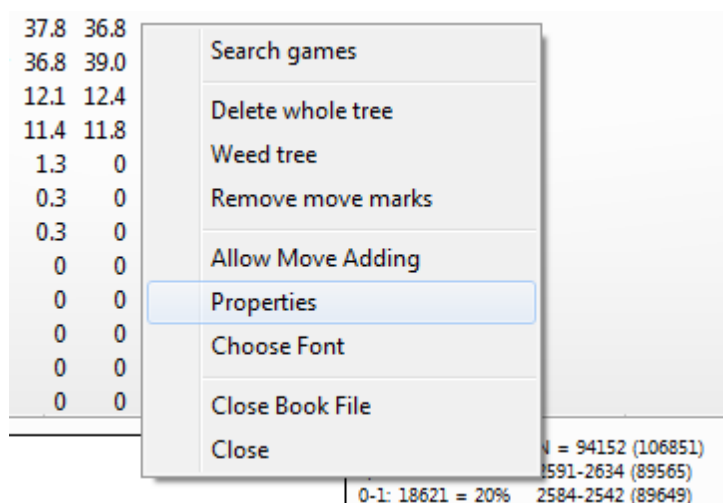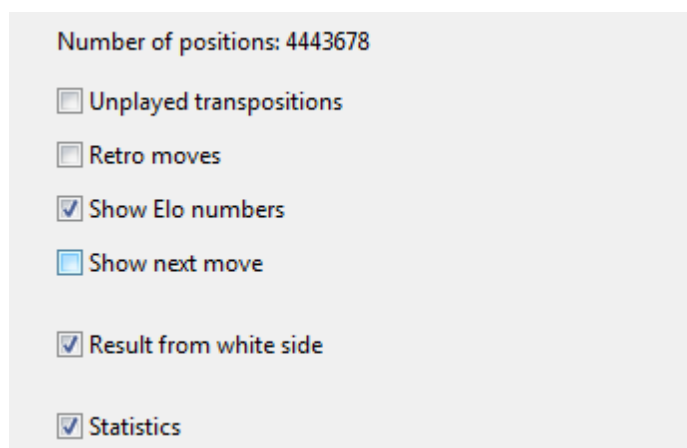

A dialog box appears in which you can enable or disable a number of elements of the tree window display.

The top left of the dialog box displays the number of positions in the tree ("Np = ").

- *Unplayed transpositions* are moves that were not actually played in the games, which were merged into the tree, but which lead to another known position.

- *Retro moves* are the moves leading to this position from other positions in the trees.

- *Show Elo* numbers can be switched off to speed up the book display (on slow computers).

- *Show next move* to change to an informative table display

- *Statistics* will produce exact details for each move as a bar graphic at the bottom of

the screen. It shows in how many games the move occurred and what percentage of these games were won, drawn or lost. The graphics make it easy to take in the information at a glance.

- Unplayed transpositions and retro moves should only be used if needed. Because of the many disk accesses they tend to slow down the tree display operations.
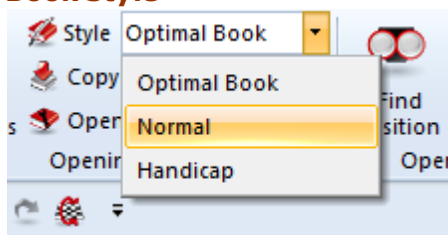
See also LiveBook ..

3.3.5 Book settings
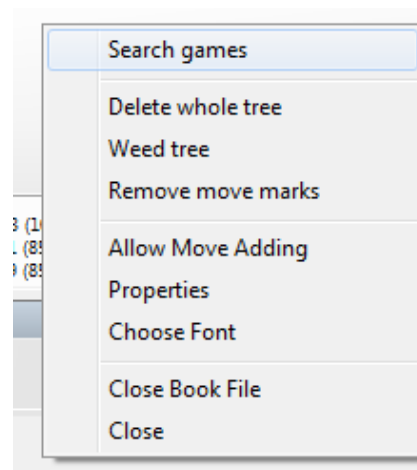
Analysis - Openings Book
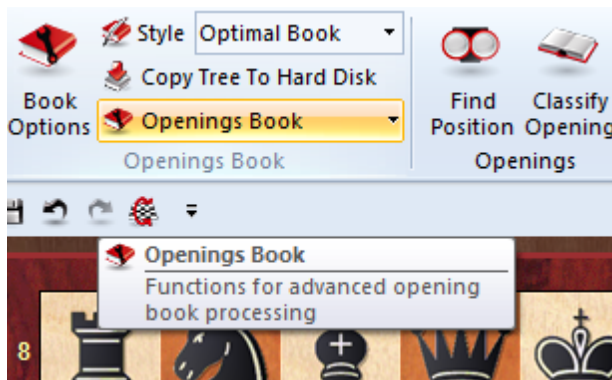
Book Style

▶ **Optimal book** instructs the program not to play moves that have been excluded from tournament play. If the option is off, the moves might sometimes be played.

▶ **Normal** is for informal games.

▶ **Handicap** for games on the handicap levels.

Extended book options

w

Right-click the tree window (on a free space) for extended openings book options:

Search games

Delete whole tree
Weed tree
Remove move marks

Allow Move Adding
Properties
Choose Font

Close Book File
Close

▶   Search games displays a list of all games of the Database in which the current board position occurred.

▶   Sort allows you to resort the list according to different criteria (number of games, percentage, Elo average and performance).

▶   Delete whole tree removes the tree from your hard disk.

▶   Weed tree removes moves which were played in very few games.

▶   Remove book marks takes out all the evaluation symbols that encourage or discourage the program in its choice of lines.

▶   Allow move adding makes it possible to add moves to the tree by executing them on the board.

▶   Properties allows you to set certain display options, like "unplayed transpositions" (moves that have not been actually played, but which lead to another known position) and "retro moves" (moves leading to this position from other positions in the trees).

▶   Choose font allows you to set a different font and size for the tree.

▶   Close closes the tree window (the book remains active). Click *View   Extra Book Pane*   or Ctrl-Alt-B to reactivate the window.
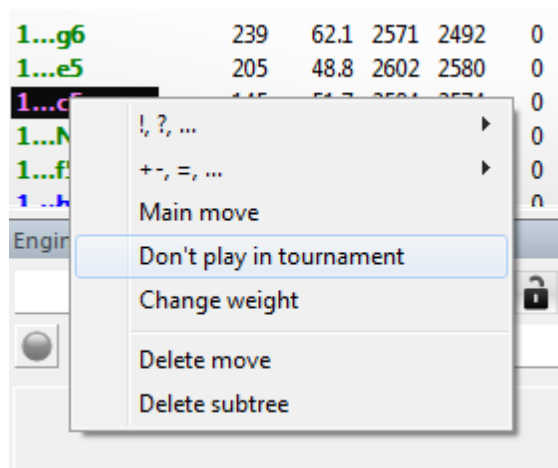
3.3.6   Tournament move

A tournament move appears as green in the openings tree window

Tournament moves are played by the program if directed in the book options. It will not play a move that has been excluded from tournament play and which appears red in the tree.

If you right-click a move you can change its status (e.g., by selecting "Don't play in tournaments").

3.3.7   ECO chess openings classification

ECO stands for the *Encyclopaedia of Chess Openings* and is used by almost all chess players and publications all over the world.

Individual openings variations have a code consisting of a letter (A – E) and a two-digit number. There are also names for most of them.

Examples:

A51   Budapest Gambit, Fajarowicz Variation
B72   Sicilian Dragon: 6 Be3, lines with h3+Bc4 and sidelines

The ECO classification used by this program was improved by leading openings expert **GM Dr. John Nunn**.

The program can create an openings key based on the ECO code.
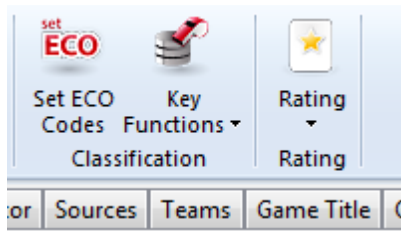
When you save a game, the correct ECO code is automatically inserted.

3.3.8 Copy openings book to hard disk

Analysis   Copy tree to hard disk
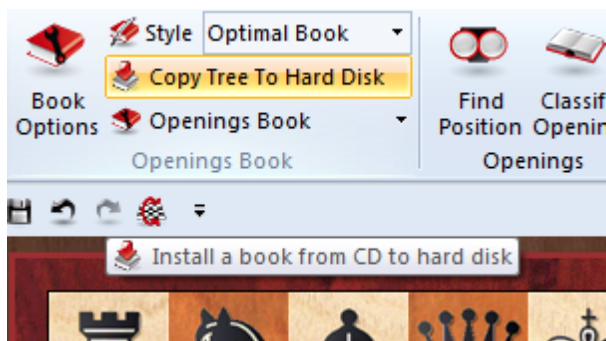
This will copy an openings tree from the CD/DVD ROM to your hard disk, making access faster. Doing this also allows the program to learn from the games it has played and by reading databases.

3.3.9 Import old book

Analysis   Openings book
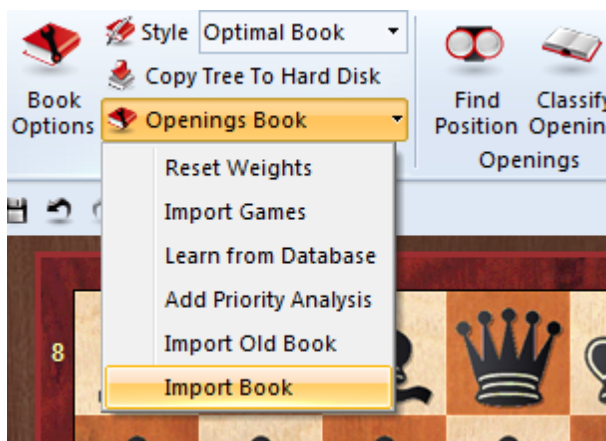
▶   *Import Book* merges the contents of a different book into the current one.

▶   *Import Old book* converts a book in the older (FBK) format and imports the

contents.

The program will also convert and import books from the programs *Genius*, *Rebel* and *Chessmaster*. If a move is already in the openings book it will be marked as a preferred tournament move.

3.3.10   Importing games to the openings book
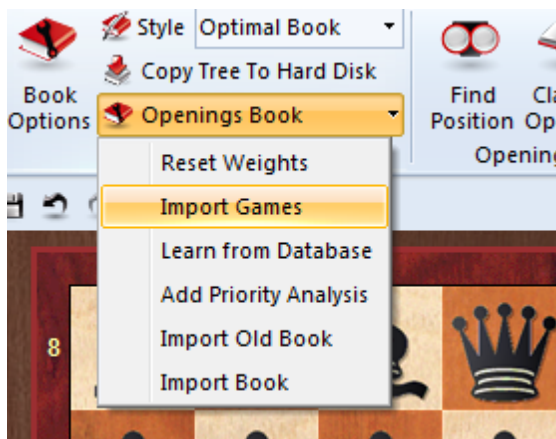
Analysis - Openings book   Import games

This is a very powerful function. It allows you to build giant opening trees with a minimum of effort. You can, for instance, import all the games of your main database, or all from a specific variation (to create a highly specialised book).

The games of the database will be merged to a tree of positions. Crucial for the size of the resulting tree is the length of the variations which are put into the tree. It is not very meaningful to put entire games into it, so you should truncate them at a specific point.
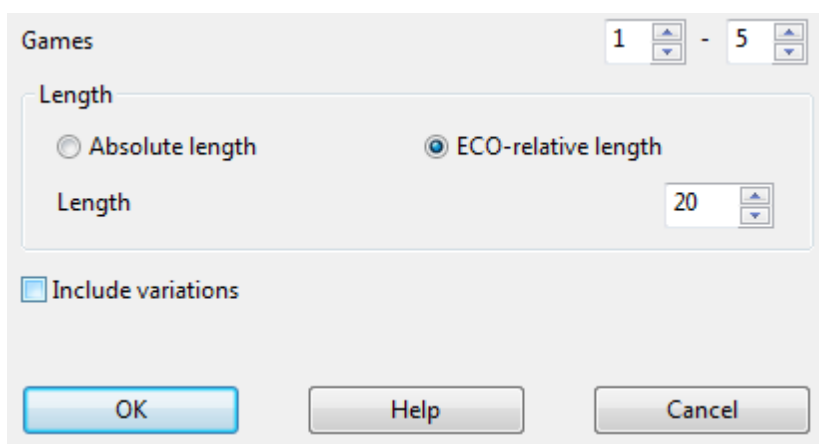
The program allows you to limit the length of the variations in two different ways.

1. You can specify that every variation should be "n" moves long.

2. It is more sensible to limit the variations relative to the ECO classification. This results in long variations for theoretical main lines (ECO classification position found late in the game) and short variations for side lines (i.e., early deviations).

Obviously, if you choose a shorter length – absolute or ECO-relative – the tree will be compact. But then you are liable to lose some valuable information. If you choose a very large value then the tree will be gigantic, and it will contain a lot of superfluous information. A good practical value for importing games is ECO-relative 20.

You can also include variations (i.e., analysis that might be included in the games), but these are not included in the statistical analysis.

3.3.11 Import analysis into openings book

Analysis   Openings book   Add priority analysis

Imports the variations of a specified database and marks the moves as preferred tournament moves. In effect, the program is learning from the analysis of the grandmasters.
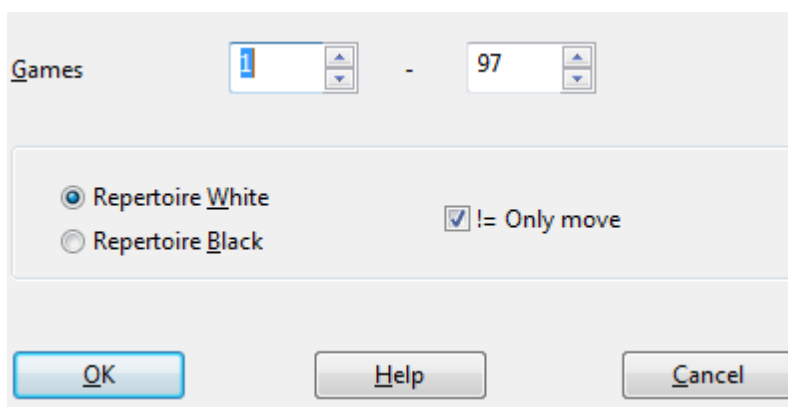
The analysis is incorporated as (green) tournament moves.

In the dialog box that appears you can specify how the individual lines will be treated:

▶   Repertoire White: Every white move becomes a tournament move, black moves are ignored.
▶   Repertoire Black: Every black move becomes a tournament move, white moves are ignored.

Moves that are annotated with a *question mark* are not played in tournament mode, and appear red in the book window.

! = Only move: This option makes moves that are annotated with an exclamation mark the only moves that will be played. They appear green in the book window, while all alternatives become red (i.e., they won't be played in serious tournament games).

3.3.12 Openings book, learning from a database

The program learns from the games it plays.

But you can also enhance the book in other ways.

The tools for this are in the menu *Analysis   Openings book* :

▶   *Import book* merges the contents of a different book into the current one.

▶   *Import old book* converts a book in the old (FBK) format and imports the contents.

▶   *Import games* merges the games of a selected database into the tree, including full statistics.

▶   *Learn from database* adds the statistics from a selected database without actually importing the moves into the tree.

▶   *Add priority analysis* imports the variations of a specified database and marks the moves as preferred tournament moves.

The program allocates "weights" to the individual lines of the book. These weights control the probability with which the program will choose the move in a game. The value can range between −125 to +125. The values are initially set to zero. The weights are given in the "Engine" column in the book window.

Learning from a database

With this function the program learns from the experience of other players. It looks at the games of a database and pretends it has played them itself. On the basis of the results it changes the weights of individual variations.

Edit   Openings book   Learn from database
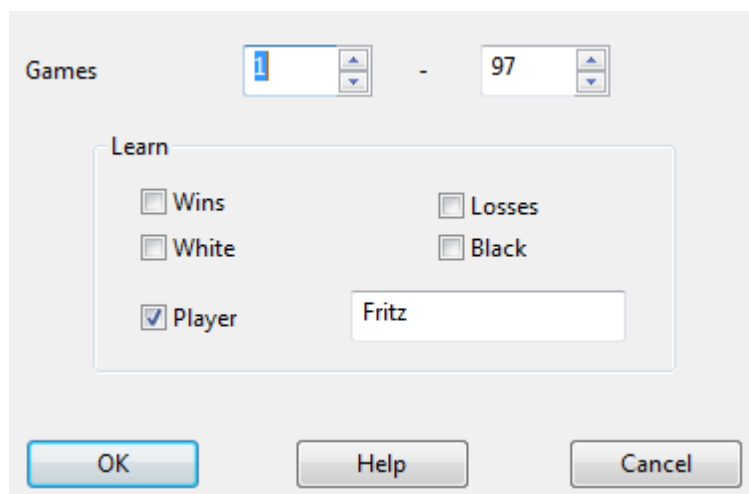
displays a dialog box in which you can set a number of learning parameters.

▸ **Wins:** Only won games are used, the program increases the weights of white moves if White won and black moves if Black won.

▸ **Losses**: Only losses are considered. If White lost, the white moves are reduced, and if Black lost, the black moves are reduced.

▸ **White:** The program evaluates the games from the point of view of White only. The weights for white moves are increased if White won, and decreased if White lost.

▸ **Black:** The weights for black moves are increased if Black won, and decreased if Black lost.

▸ **Player:** Only considers the games of one specific player in the database.

These five options can be combined in any way you like. You can also restrict the import to a certain number of games in the database by selecting "*Games*" at the top of the dialog box.
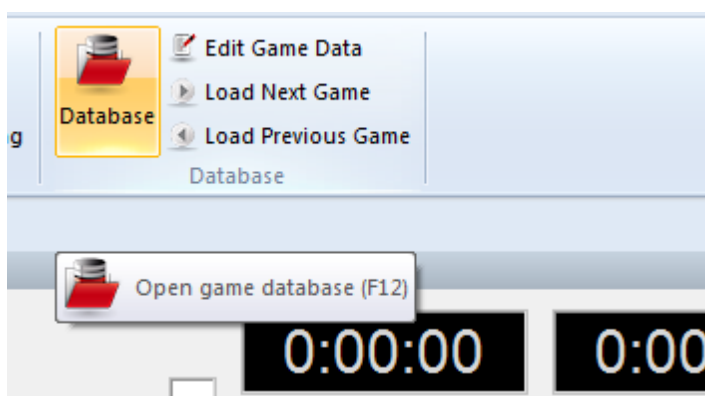
3.4 Database functions

3.4.1 The database window
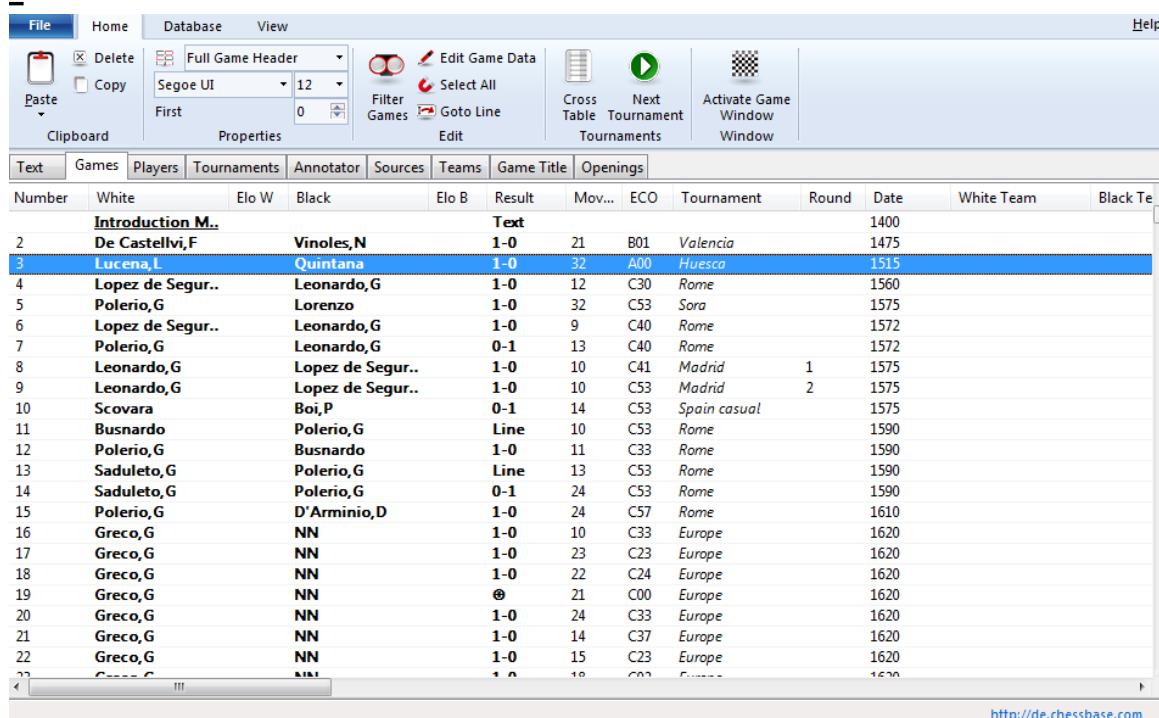
This program has sophisticated database functions and can store any number of games in many different databases. These may be games you play against the program, but also historical and topical games which are available in very large numbers from the manufacturer ChessBase.

The games are automatically classified according to all kinds of criteria. And you have powerful search tools that are able to locate any game in a very short time.

Home   Database window

This opens the separate database window with a list of games of the Database.

You can also get there from the main board by pressing F12 or **Esc**. These keys will get you back to the board window.

There are also buttons in both menu bars that will do the same.

The database window always displays <u>the contents of the currently opened database</u>. You can switch to other databases, create new ones, copy games, have the program analyse them, create tournament tables, indexes, etc.

Here are the main functions:

File Menu   Open
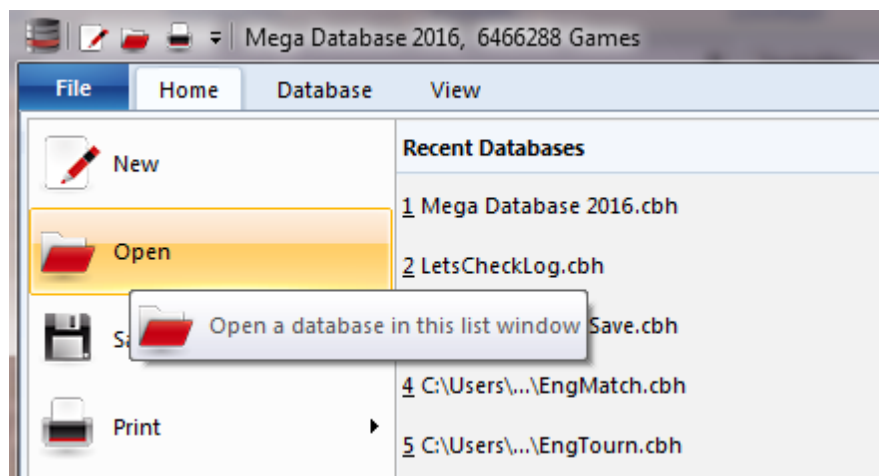
Use this command to browse for the database you want. The databases can be in

w

many different formats – CBH, CBF, PGN, etc. You can convert games from one format to another by copying them into a database with the format you require.

Filter games (or Ctrl-F)

Produces a "search mask" in which you can tell the program to look for particular games.

At the top of the list there are a number of tabs that lead to the different indexes.

Text	Games	Players	Tournaments	Annotator	Sources	Teams	Game Title	Openings
Number	White		Elo W	Black		Elo B	Result	Mov...	ECO	Tournament

Number	White	Elo W	Black	Elo B	Result	Mov...	ECO	Tournament
	Introduction M..				**Text**			
2	**De Castellvi,F**		**Vinoles,N**		**1-0**	21	B01	*Valencia*
3	**Lucena,L**		**Quintana**		**1-0**	32	A00	*Huesca*

The information in the games list have been sorted more clearly in Fritz 15, and the columns have been significantly extended. The games list contains a list of the texts, games and game fragments, including (if available) the Player, Tournament, ECO Classification, Date, Result and Number of Moves.

In addition, the database functions have been extended to allow direct access to the Player, Tournament, Commentator and Team indexes.
Text – shows the texts available in the database.

- **Games** – shows the games list of a database in the order in which they were stored on the hard drive. You can access the games by browsing, filtering or sorting.

- **Players** – The player index

- **Tournaments** – The list of tournaments

- **Commentators** – The commentator index

- **Sources** – The list of sources

- **Teams** – The index of team events

- **Game titles** – With the help of your own texts you can easily access specific themes.

- **Openings** – The openings key - Double-click an opening to go to the sub-lines or the games of that opening. If you are not familiar with the "ECO" openings index you can click *New   Openings index* and choose a descriptive ("coarse") classification with well-known names like "Sicilian", "Pirc", "French Defence", etc.

Please note: many ChessBase data DVD`s have different, often more extensive and specialised games indexes.

Recent databases

Click *Menu File* and select "*Recent databases*" to get a dropdown list of the databases

you last opened.
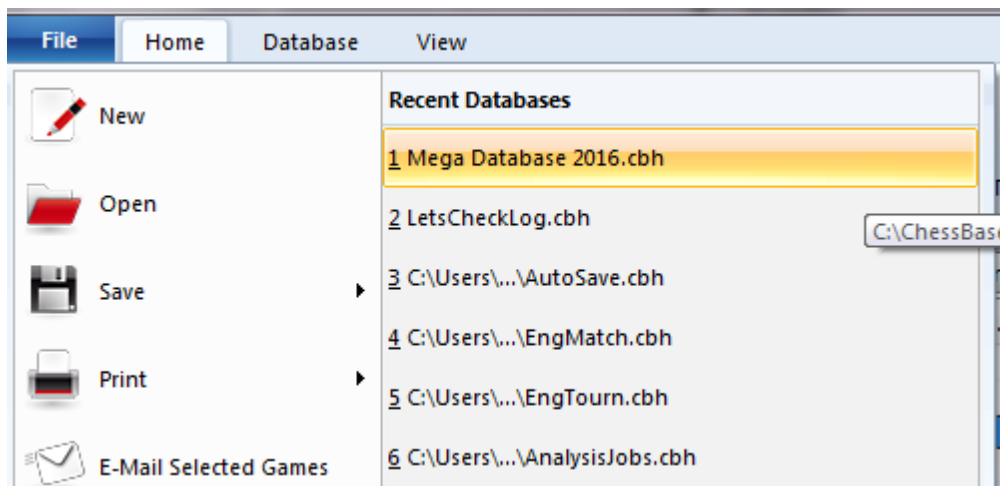
You can simply click an entry to jump to a recent database.

3.4.2 Preview window

Database window - Menu View - Database Browser

A preview window has been integrated into the database window.
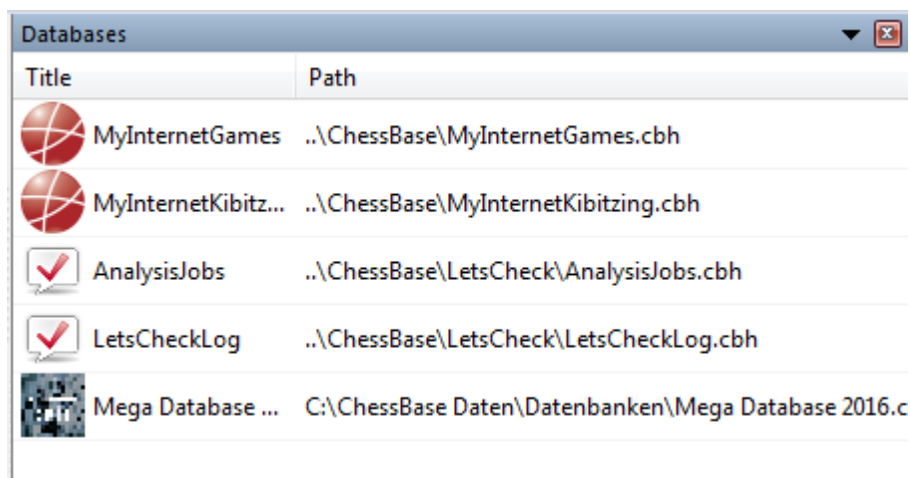
Databases are displayed that can be bought and downloaded from us.

The database can be activated with the menu *View - Database Browser*.

It is possible to change the format of the preview window by right clicking. The "Details" view is particularly informative. This shows for instance the place where the database is stored on the hard drive.

Clicking on a database symbol displays the game list in the left half of the database window. Double clicking on a game loads it into the board window.

Note: The browser only displays databases that have been stored in the default folder for databases.

This should be especially useful to help beginners handle databases.

Tip: If you want to display your own databases with the database browser copy them into the default folder. In the picture you can see that the databases have been copied into the folder /My Documents/ChessBase/Shop.

Now they can be directly accessed with the database browser.

3.4.3 Games list

The list window has a number of tabs at the top which take you to the different indexes for the games of the database.

The other indexes are all described in their own sections:

- Default Text
- Players index
- Tournament index
- Annotators index
- Source index
- Teams
- Game Title
- Openings key
- Game Title A new Index.

Optional Theme keys for tactics, strategy, endgames and general themes.
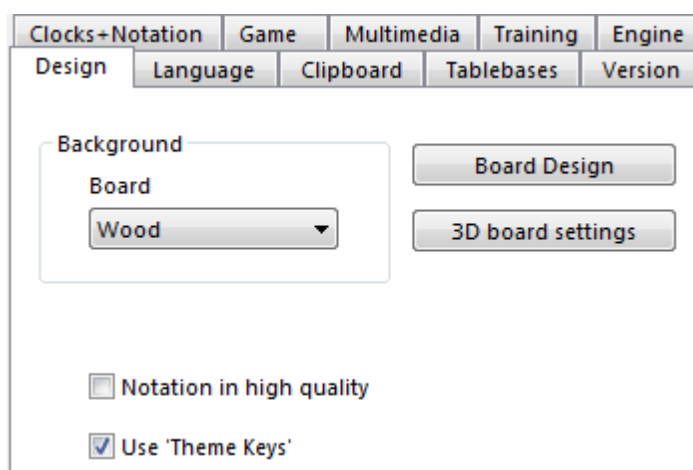
Naturally the games list is the most frequently used window type in the Database window. You use it to browse a database, a search result, contents of an openings key, game of a player and so on. Please try to understand how to configure a games list, it will considerably increase the usability of the program for you. Other lists (players, tournaments) work the same.

Right clicking on the list window and selecting List *Format   Columns   All Columns* turns on the display of all the available columns for the list.

Above the list important functions to process the information in the list is available in Ribbons. This means that all the most important functions are available by simple mouse clicks.
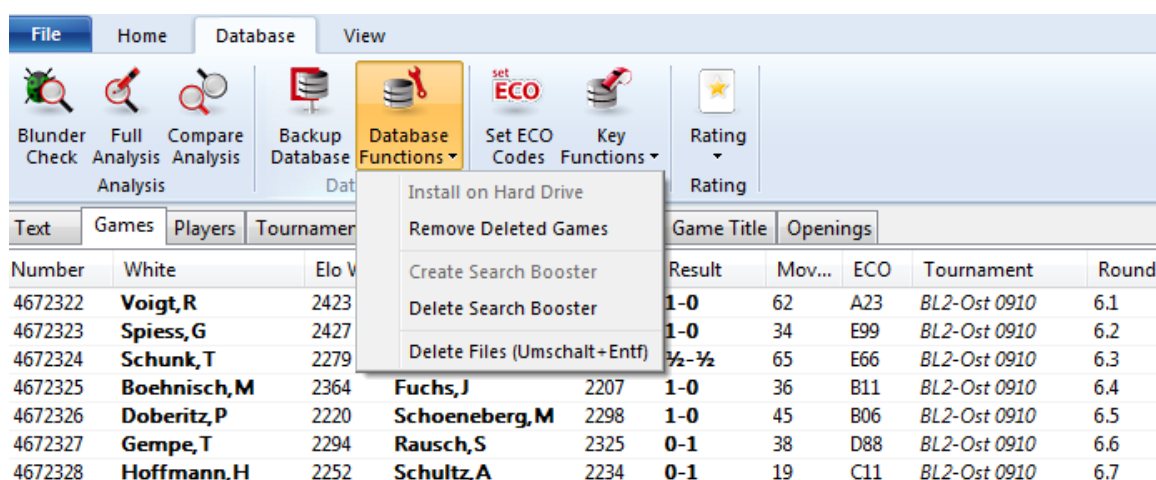
In every list there is an extensive right click menu with functions that depend on whether one or several games have been selected.

Example Selecting games: Clicking two games while holding the shift key selects all the games that lie between them.

Clicking two games while holding the control key selects two individual games.

In the games list, you can see the game numbers, names of the players, their ratings (which may be left out if there is too little space in the list), the tournament, round and the annotator (in square brackets).

Behind this you will sometimes find "medals", a coloured band which helps to characterise the game.

The next columns give the ECO code, date, result and number of moves. On the right is a column that tells you what the game contains:

V = the game contains variations (alternate lines)
C = the game contains text commentary
A = it contains graphic annotations (coloured squares and arrows)
F = the game contains correspondence chess commentary
I = critical positions (special annotation) are marked in the game
T = the game contains training commentary
S = the game contains commentary symbols (!, !?, etc.)
G = another game is quoted in the notation
R = a "repertoire" game

M   =   the game contains multimedia elements (sound, pictures, videos)
P   =   the game starts from an entered position (studies, problems)

The above letters may also be small, if the variations, commentary, etc. are not extensive.

Source	VCS	P	Line Moves
EXT 2014	**cs**		
EXT 2014	**vCs**		12
EXT 2014	**vCs**		5
EXT 2014	**Cs**		
EXT 2014	**c**		
EXT 2014	**vCs**		4
EXT 2014	**vCs**		15
EXT 2014	**vcs**		7
EXT 2014			

For instance "**Vcs**" means a lot of variations, but relatively little text commentary and Symbol commentaries.

3.4.4   Sorting by columns

In all lists the entries can be sorted by clicking with the left mouse button on the column headers.

Clicking on a column header sorts the information in the column, and clicking a second time reverses the sort order.

Text	Games	Players	Tournaments	Annotator	Sources	Teams	Game Title	Openings
Number	White		Elo W	Black		Elo B	Result	Mov...	ECO

Example: Clicking on **White** sorts the list alphabetically, and clicking a second time sorts the list in reverse alphabetical order.

Clicking on Elo W sorts the list with the strongest players first, and clicking a second time reverses the order.

Tip: Right clicking on the line with the column headers opens a context menu.

White	El W Bl k	El B R lt M v...	ECO	Tournament	Ro
Zueger,B	Optimize column widths Ctrl-+		D34	*SUI-Kasparov*	
Zarnicki,P	All Columns		B06	*Internet blitz 3'*	
Zarnicki,P			B83	*Internet blitz 5'*	
Zarnicki,P	Hide 'White'		B22	*Buenos Aires sim*	1
Zarnicki,P	Auto Fit Column ('White')		B19	*Internet blitz 5'*	
Zarnicki,P	Hide all columns to right ('White' -> ...)		B84	*Buenos Aires sim*	2
Zarnicki,P			C04	*Internet blitz 5'*	
Zarnicki,P	Show 'Game Title'		B22	*Internet blitz 5'*	
Zakharov,A	**Kasparov,G**	½-½ 14	B10	*Sokolsky Memorial*	

This makes it possible to select which columns should be displayed and which should be hidden.

The column separators in the title line can be moved with the mouse.

3.4.5 List views

The information in the different lists (games list, player list, tournament index, commentators, etc) is sorted into columns.

The games list contains a list of the texts, games and game fragments, including (if available) the Player, Tournament, ECO Classification, Date, Result and Number of Moves.

Right clicking on List window – *List format* offers the option to configure the list window.

First select in the games list List format – Columns – All columns. Please note the possibility to access special information by simply sorting the columns.

The setting "*All columns*" greatly extends the information in the list. If you scroll right with the scrollbar at the bottom of the window you will find other options, such as the display of the game notation.

3.4.6 Player Index

If you click on the tab Players in the games list the **Player Index** is opened, the list of all players who are stored in the database.

The players index is sorted alphabetically.

You can use the Player Index to get an immediate overview of all the chess activities of the selected player. The Player Index is divided into three windows, which are also divided into columns to make it easier to refine the information. You can adapt the information in all three windows by turning individual columns on or off. Please refer to the notes in this documentation about sorting columns in list views.
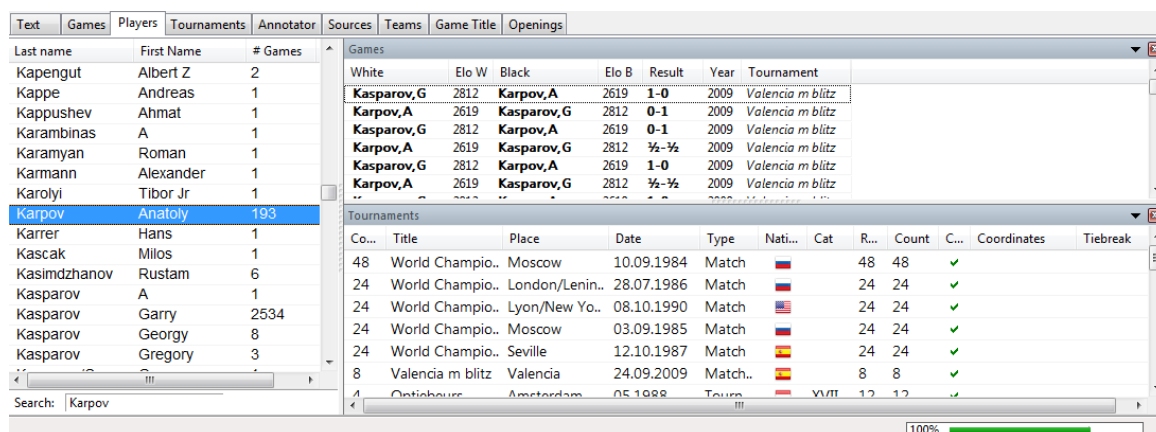
In the left window there is a list of all the players who have played games in the current database. Clicking on the column header Name sorts the list alphabetically.

At the bottom of the window there is an input field. Enter the first letters of a player's name.

A player with this name is displayed. In this example above a player is displayed with the name "*Karpov Anatoly*".

Select the entry in the list view. In the games window all games are listed played by Anatoly Karpov, and in the tournament window all the tournaments are listed in which Anatoly Karpov took part. The lists can be adapted by sorting the columns to find the information you are looking for.

Tip: The input field also sorts player names that begin with small letters.

You can close the games list or tournaments list panes by right-click close. To reopen them, use menu *View*. You can rearrange the window panes in the usual fashion with the splitter bars.

If you select more than one game of a player in the Player Index, this dialog will allow you to edit the name in all games:

Rightclick Playername - Edit

3.4.7 Tournament index

Just like the player index, the tournament index is divided into three windows.

The information in the lists in the <u>three windows</u> is divided into columns. You can adapt the information in all three windows by turning individual columns on or off. Please refer to the notes in this documentation about sorting columns in list views.

In the left window there is a list of all the tournaments for which games are contained in the current database. Clicking on the column header Title sorts the list alphabetically according to the names of the tournaments.

In the games window on the right all the games in the selected tournament are listed. In the player window below it all the players who take part in the selected tournament are listed.

3.4.8 Commentator index

The commentator of a game is entered in the game data when a game is saved or replaced.

The name is contained on the second page of the Save dialog. If a game has not been commented this entry is left empty. If you add your own comments to a game which has no commentator the program automatically enters your name in the commentator field.

The display of the commentator index is divided into two halves.

In the left window there is a list of the commentators including the number of games commented by each commentator.

Clicking on the column headers *Name* or *#* sorts the list.

Underneath the list there is an input field which can be used to quickly find a commentator.

3.4.9 Source Index

Every game can be marked with a source to state where it came from.

The source index contains a list of all the sources.

This can be processed by sorting the columns in the same way as the player list and tournament index.

3.4.10 Team Index

This displays a list of the games that have been played by members of the listed teams.

When you are saving a game in a match between two teams you can enter the names of the teams on the second page of the Save dialog.

If all the team matches have the same tournament (e.g. "West Midlands"), the tournament index can generate a correct table of the teams.

The information in the team index is divided into three windows.
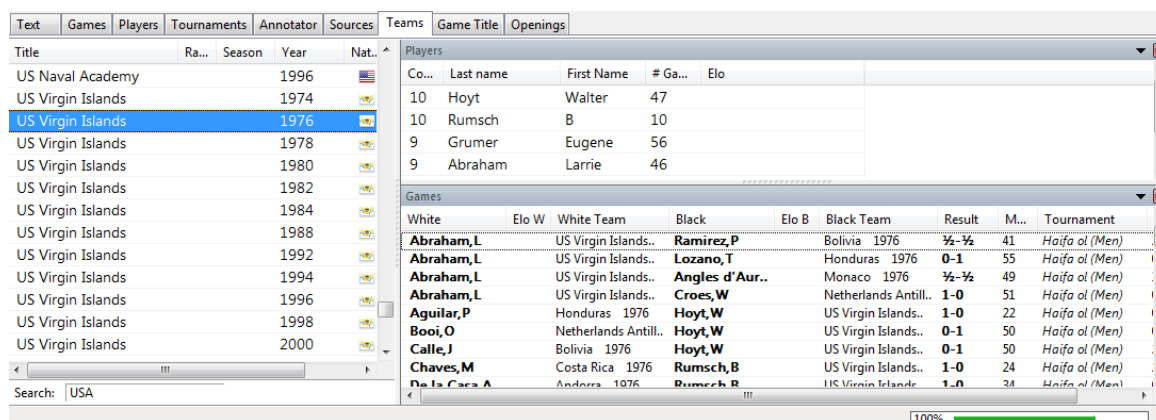
In the left window there is a list of all the teams contained in the database. The information in the list can be sorted by clicking on the column headers.

In the Player window on the right there is a list of the players in the selected team, and in the Games window below it there is a list of the games played by the teams.

There are ribbons to search and filter the information in the windows, in the same way as the player index and tournament index.

Full text search in the Tournament list is possible.

Rightclick Team - Edit starts the following dialog.

Now you can edit the single items in the List.

3.4.11 Openings Key

Openings classification in ChessBase/Fritz refers to the identification of the openings variation in the openings key.

The program plays through each game backwards and compares every position it encounters with all the positions contained in the classification positions of the openings key. As soon as a match is encountered it knows under which key it must classify the game. The reason for playing through the game backwards is that we are interested in the deepest position, i.e. the one that identifies the most detailed variation.

3.4.12 Game Title

When a game is saved a description text can be added to it, dependent on the default language. The dialog has been extended to take this into account.

Under the "Game Title" the text and the language in which it is to be displayed are input.

These texts can be used to quickly find certain types of games. The texts that you have created are listed in the game index and player index to reference games. These texts are displayed when you click on the button "Special Titles" in the menu Player - Games - Tournament Index. This gives you the possibility to freely classify games however you want without having to access them via the player names. This gives you another way to quickly access games of a specific type.

The new index is excellent for the easy classification and access of games which might be very difficult to filter with other options.

Setting Games Titles is possible with the ChessBase 13 software only!

3.4.13 Theme Keys

List Window - Themes/Tactics/Strategy/Endgames
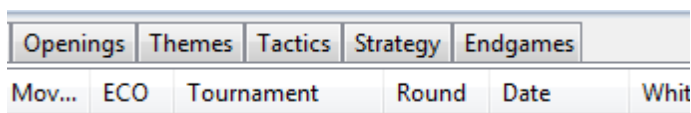
Theme keys are only available optionally. You can enable them via *Menu File - Options - Design - Use Theme Keys*
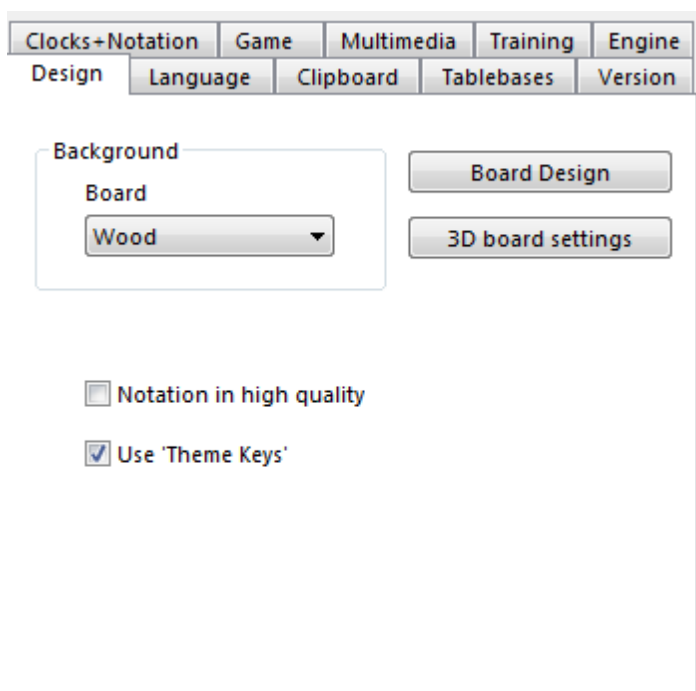
ChessBase has two main methods for accessing a database. On the one hand the search mask offers you a flexible method of searching by various criteria; on the other the keys (openings, players, etc.) give you a structured means of access which has the additional advantage of being virtually instantaneous.

The theme key of ChessBase combines both methods. A key is defined by the contents of the search mask, and this definition is permanently stored with the key.

The classification keys for themes, strategy, tactics and endgames can all be viewed by clicking tabs in the list window.

If you load a game from a theme key the program will jump to the position that led to the match (if that is possible).

3.4.14   Load and replay games

Menu File   Database window

Opens the database window with a list of games. You can also open this from the main board by pressing F12 or Esc.

Menu File   Open   Database (or Ctrl-0)

Select the large database. This is on your Program DVD, but it can be installed on your hard disk.
Double-click a game in the list

In the list of games that appears, you can double-click a game, or single-click on it and press Enter. This takes you back to the main chessboard screen, with the game loaded in the notation window.

Replay the game with replay buttons
You can use the replay buttons at the top of the screen or below the chess board.
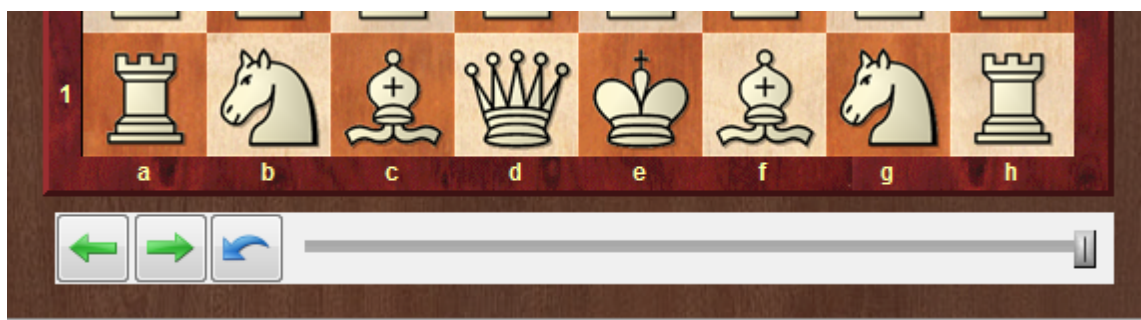
If the replay buttons are not visible, right-click the menu bar and select them.

If there are no replay buttons beneath the board, right-click the board or area around it and select "Replay arrows below board".

Navigating games with the slider
The program has intuitive way to navigate games. The slider below the board can be dragged or clicked, as in a media player, to get to different parts of the game very quickly. This is especially useful in long, commented games. You can install the slider by using the menu right-clicking the board and using Board Design - Slider.

The takeback button in the middle has a special purpose: The program will not query what to do with a new move you enter but simply overwrite the old ones.

Analysis – Replay game
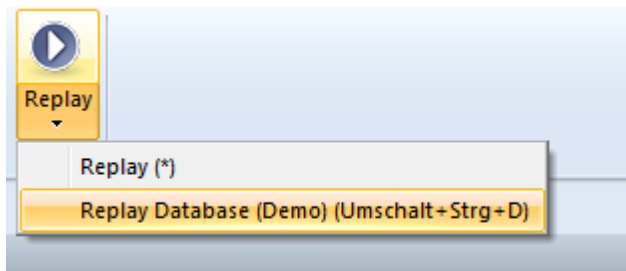
This will <u>automatically play through the moves</u> of the current game. You can adjust the speed in the control window that appears.

3.4.15 Save game

Menu File   Save game (or Ctrl-S)
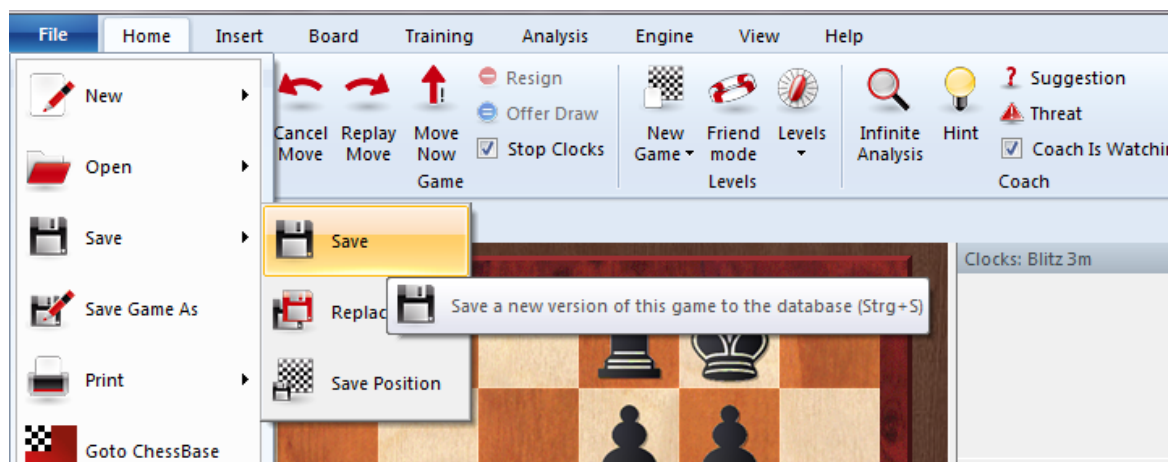
This will save a game in the currently open database.

You can also call up the Save dialog and enter all the game data in advance, i.e., before you actually save the game. Click *Edit   Edit game data*. You can also edit the game data in the games list, without actually loading the game. Right-click it and select Edit – Edit game data (or press F2).

▶ **Players' names (White/Black)**
Type in the last name and first name(s) of the white and black players. You should try to use the standardized spellings, especially when entering the games of internationally known players. To facilitate the standardization of names you can use the players database which contains the names of over 100,000 players – practically everyone who has an international rating. Type in a name or part of it and then click the question mark button on the right. A list of names appears from which you can choose the correct one.

▶ **Tournament**
In the tournament line you normally enter the name and place of the tournament. If you want to do it properly you should click Details. A special dialog appears where you can add a number of other important details.

Title, Place: Type in the official name and place of the tournament. If the tournament has no name, (e.g., New York 1924) then enter the place in both lines. Only one will appear in the games list.

Date: The year, month and day are for the tournament, not the individual game (this is entered in the Save dialog). Usually the day of the opening ceremony or the first round defines the tournament date. If the exact date is not available, you can leave the month and day empty and the program will only store the year.

Complete: Select this item if you have all the games of a tournament. A tournament marked as complete will have the (green) check mark shown at the right in the tournament list.

Nation: Click the pull-down button on the right to produce a list of national abbreviations and select the one you want.

Rounds: Enter the number of rounds. In special tournaments, (like knockouts and Grand Prix) you can specify "subrounds" in the Save dialog. This allows the program to sort games properly according to rounds. It can also generate clean progress tables in open tournaments if the rounds are properly entered.

Category: Enter a category between 1 and 25. This is displayed in the tournament list.

Type: Specify match, tournament, Swiss, team, knockout, simul, etc. This too is displayed in the tournament list.

Time controls: Specify the speed of play (blitz, rapid, normal or correspondence chess).

▶ **ECO code**
The ECO code is automatically inserted by the program. You can correct it if you disagree with the program.

▶ **Elo ratings**
Enter the ratings for White and Black, if available.

▶ **Round, subround**
Specify the round and, in case of knockouts or Grand Prix, the subround.

▶ **Date (year, month, day)**
Here you specify the year, month and day on which the game was played. This is not to be confused with the tournament date. If the exact date is not available leave the day or month empty.

▶ **Result**
Enter 1-0 (White won), ½-½ (draw) or 0-1 (Black won). If you haven't entered a complete game, i.e., if the moves merely represents analysis, then you may want to use an evaluation symbol instead of the result. By clicking the arrow in the result box, you get the menu shown on the right of evaluation symbols from which you can choose.

▶ **Reset**
This clears all data from the Save dialog.

Annotator and Teams
Click the Annotator and Teams tab at the top of the Save dialog to enter data in this form.

▶ **Annotator**
If you have entered variations and text annotations you should type in your name here. The program will automatically offer you the user name that is entered in the *Menu File* – Unser info.

▶ **White/Black teams**
If a game is part of a team championship, you should enter the names of the teams here.

▶ **Source**

You can give a source for the game. If you want to do so properly, you should click Details for a more extensive dialog box.

Note:

▶ Games cannot be stored in a database which is on a DVD. Remember to create a new database for your games, which you will probably not want to store at the end of a database of historic games.

▶ All games you play against the program are automatically stored in a file called autosave.cbh. You can always access this database and check games you may not have manually saved.

3.4.16 Save Mask Annotators/Team

You reach the second page of the save mask by clicking the Annotator and Teams tab.

Annotator

If you have entered variations and text annotations you should type in your name here. ChessBase will automatically offer you the user name that is entered in the menu Tools – Options – User. A list of all annotators appears in the annotators index of a database.

White/Black teams

If a game is part of a team championship you should enter the names of the teams here. They are displayed in the teams index of the database.

Source

You can give a source for the game. If you want to do so properly you should click Details for the source edit dialog. The source is given in the source index of the database.

3.4.17 Copying Games

We're going to look at how to copy games from one database to another. It works very much like the process of copying files in Windows Explorer or copying text in a word processor.

There are two terms we' ll use in this description:

Source database -- the database you're copying games from
Target database -- the database you're copying games to

Your first step is to go to the game list window (shortcut: F12 on your keyboard).

Open the source database *Menu File - Menu/Open/Database*.
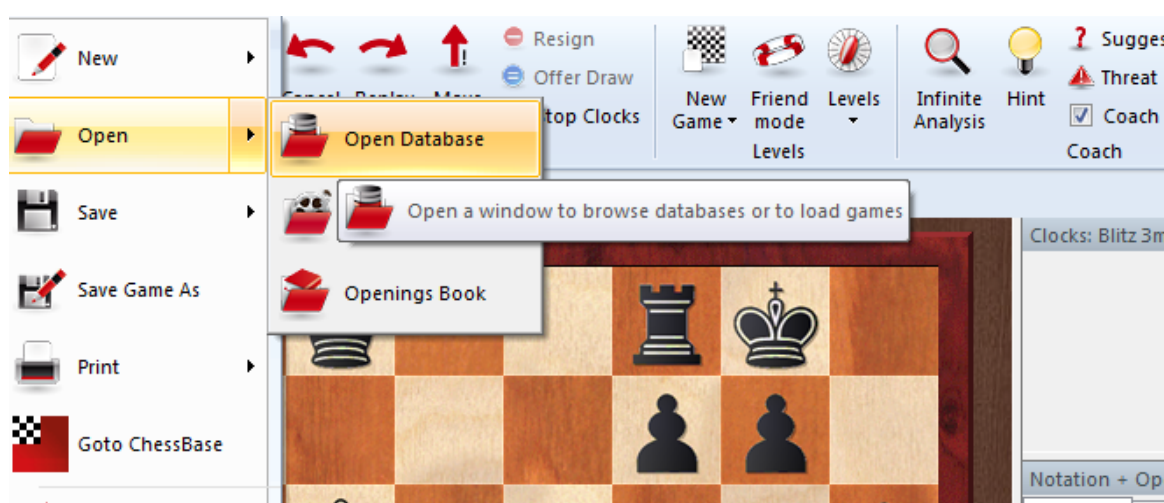
Highlight the games you want to copy; there are a number of ways to do this. You can hold down the CTRL key on your keyboard and single-click on the individual games you'd like to copy. If the games are in a "block" (that is, adjacent to each other in the database), you can hold down the SHIFT key and use the down cursor (down arrow) key to highlight them after single-clicking on the first game in the "block".

But if you want to copy all of the games in a database, you can use a menu item or keyboard command to highlight the whole shebang. Go to the Edit menu and choose "Select all", or else you can use CTRL-A on your keyboard. All of the games in the game list will then be highlighted.

Once you've highlighted the games you want to copy, go to the Home menu and select "Copy" (or else hit CTRL-C on your keyboard). It'll look like nothing happened, but what you've just done is tell the program that you want to copy the highlighted games.

Next you'll open the target database (again, *Menu File - Open/Database*). You then go to the Edit menu and select "Paste" (or hit CTRL-V on your keyboard).

There is a confirmation dialogue, asking you to confirm that you do indeed want to copy the games.

Click the "OK" button. The games are copied and your newly copied games will appear at the end of the target database.

3.4.18 Players database

The players database is a huge catalog of over 100,000 players and tens of thousands of pictures. Practically every player who has an international rating is in this "encyclopedia".

The players database is part of the ChessBase database program. If you own this, you can use it to help you standardise names when you are saving a game. You can type in the name or part of it, and then let the program present a list of names from which you can choose the correct one.

The program access the Online Player Database shows pictures of the Players in the Notation window!

3.4.19 Autosave database

All the games played against the computer are automatically saved in a special "autosave" database. This is physically located in the directory c:\[user]\My documents\ChessBase\ (if you did not specify another database during installation).

The autosave database is always present in the history list at the top of the database window.
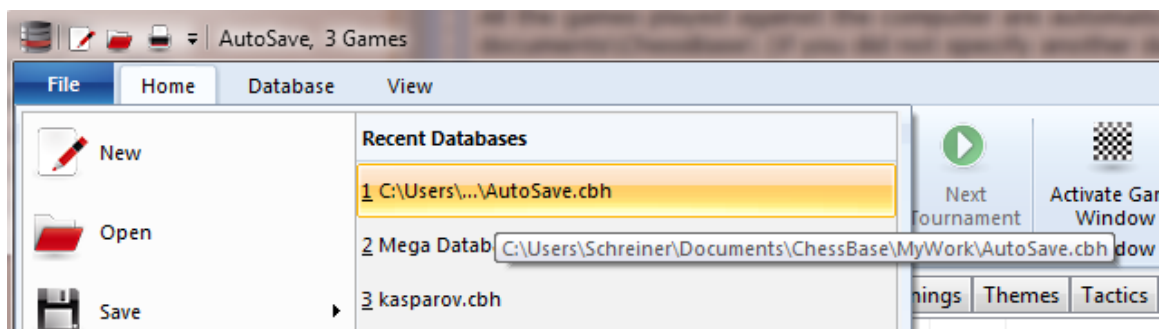
3.4.20 Search for games

Database Window - Home - Filter games (or Ctrl-F)
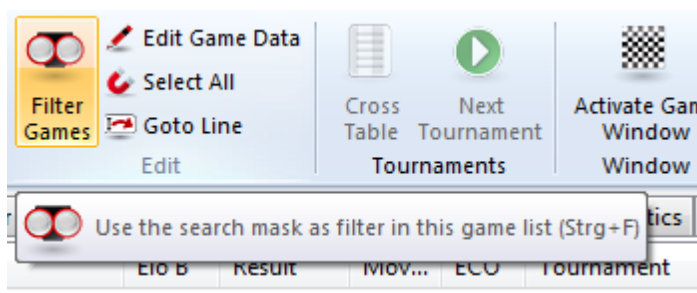
Produces a "search mask" in which you can tell the program to look for particular games.

▶ Search for names, tournament, year, etc.
▶ Search for game commentary
▶ Search for positions or position fragments
▶ Search for medals

Note: In the database window, pressing the Tab key will switch the search filter on and off.

3.4.21 Search for names, tournaments, etc.

Database window   Filter games (or Ctrl-F)

Produces a "search mask" in which you can tell the program to look for particular games. By clicking on the tabs at the top of the search mask, you can define all kinds of different categories.

▶   **White/Black:** Enter the name or part of it ("kasp" is sufficient to find Kasparov's games). You can use wildcards: "*asparov" will get you all Kasparov's games as well. The search is case sensitive, but typing a small letter at the beginning will work, since it is automatically changed into a capital.

▶   **Ignore colours:** If you enter the name of one player and click this on then all his games will be shown. If "Ignore colours" is off, then only his white or black games are listed. With two players clicking "Ignore colours" on will give you all games of both players against each other, while clicking it off will only retrieve the ones in which the first player had white and the second black.

▶   **Tournament, Annotator:** Here you can search for specific tournaments or games with commentary by certain annotators. The search is case sensitive.

▶   **Year:** To search for the games of a particular period, enter the years here.

▶   You can search for the games from a particular ECO key, e.g., "C43" – "C45".

▶   **Moves:** You can search for long and short games here.

▶   **Text:** retrieves database texts. These are not games but text reports which may contain pictures, videos, positions and links to games, keys, other texts, etc.

▶   **Elo:** When searching for the games of players who lie within a certain Elo range, you can specify whether one player, both players or the average should lie within the

given range.

▸ **Result:** retrieves games in which White won, Black won or which were drawn, and games that ended in mate, stalemate or a check.

It is possible to search in a database for games with no result. Clicking the box **0-0** makes the program search the database for games which have been listed in the database with no result.

3.4.22 Search for positional fragments

Database Window - Filter games (or Ctrl-F)
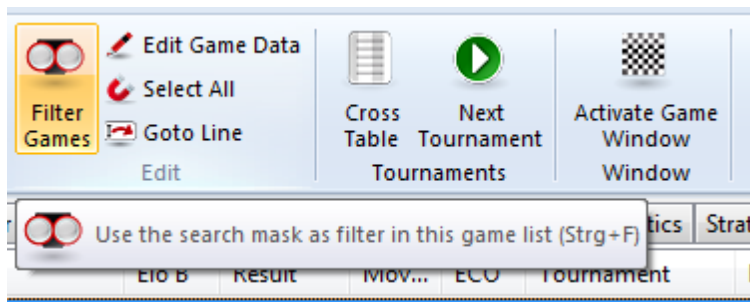
Produces a "search mask". Click "Position" to look for games which contain specific positions or positional fragments.
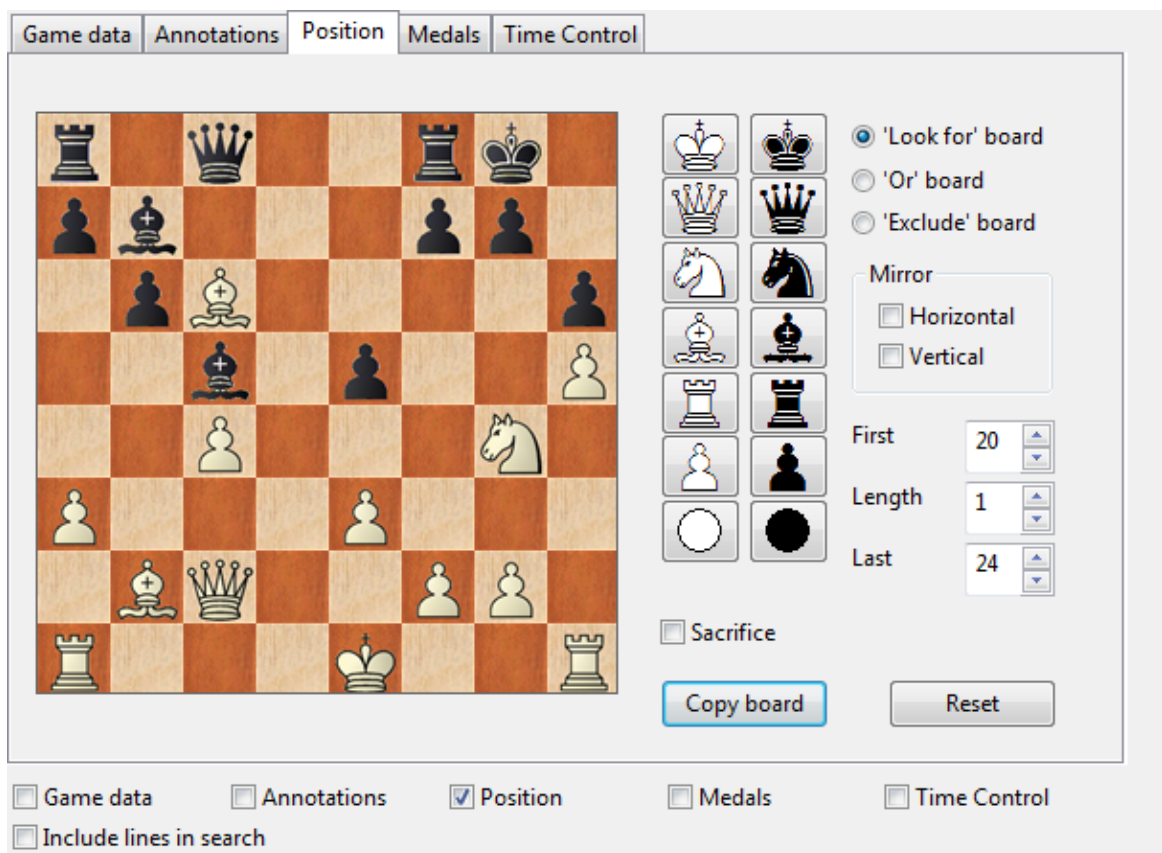
To deposit pieces on the board, click a piece type on the right and then a square on the board. Clicking with the right mouse button deposits a piece of the opposite colour. The two "jokers" at the bottom can be used to indicate that any piece of that colour should be present.

In the above example, the program will retrieve all games in which White executed a bishop sacrifice on h7 or Black on h2. Note that when you load one of the retrieved games the program will jump straight to the position in which the sacrifice occurred.

▶ **Look for, Exclude and Or boards:** You can enter different pieces for each of these. In the first case the program will look for the positional fragment. In the second it will make sure the positional fragment did not occur in the games it retrieves. On this board you can enter multiple pieces per square. On the "Or board" you can enter a second position the program should look for simultaneously.

▶ **Mirror:** horizontal/vertical: Rotate the boards horizontally or vertically and simultaneously search for the same fragment at the top or bottom (e.g., find bishop sacrifices on h7 or h2), or on the left and right.

▶ **First, length, last:** Restricts the search to a specific phase of the game. In the above case, the program will start looking from move five of the game and stop at move 40. The position must occur for one move (length).

▶ **Copy board:** Transfers the current position on the main board to the "Look for" board. You can modify it before you start the search.

3.4.23 Search for game commentary

Database Window - Home
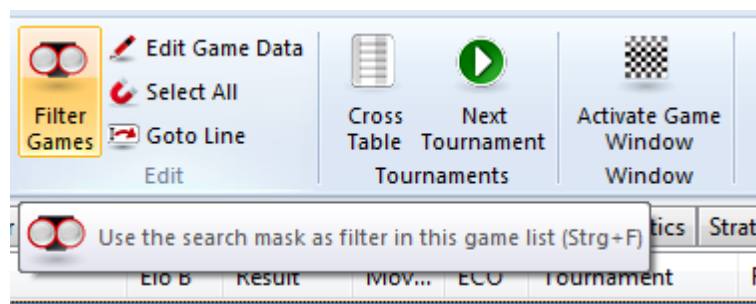
Games can contain text commentary, which is generated by the program or which you can type in yourself. Apart from that, the games of ChessBase Magazine are extensively annotated with text, chess commentary symbols and graphic elements.

Menu: View   Filter games (or Ctrl-F)
Use this command to open the Filter Games dialog. Click the "Annotations" tab to search for game commentary.

▶   **Text1, Text2:** Enter two text strings and the program will search for all games in which either occurred.

▶   **Whole word:** Check this to search for an exact match only. In the example on the right, the program will not find "brilliantly".

▶   **Symbols:** Enter commentary symbols like "!" and !?".

▶   **Deleted:** Check to retrieve deleted games.

▶   **Position:** List games that start from a special position (e.g., problems and studies).

You can also search for games that contain variations, training positions, multimedia, coloured squares and arrows ("Colors"), marks for pawn structure, piece paths, critical positions, etc.

3.4.24 Search for medals

Database Window - Filter games (or Ctrl-F)
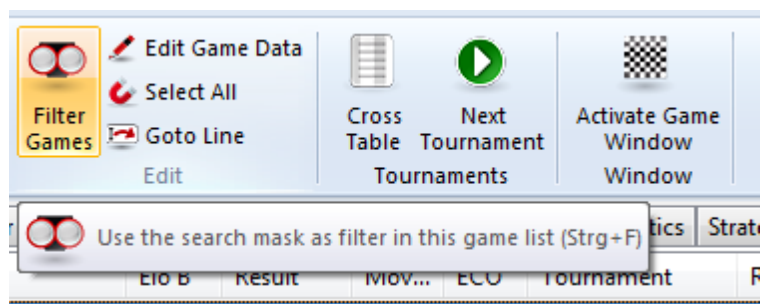
Use this command to open the Filter Games dialog. Click the "Medals" tab to search to search for games which were marked as being especially interesting. The medals include categories such as novelty, pawn structure, attack, defence, sacrifice, blunders, etc.
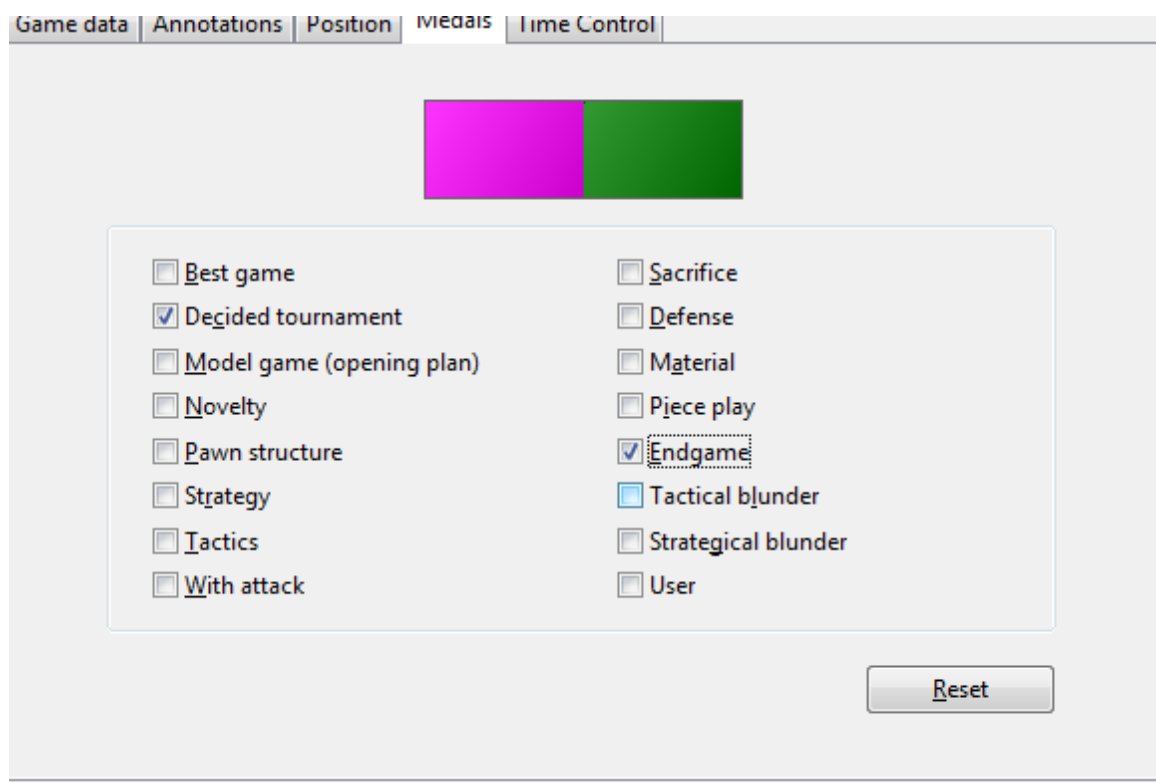
You can search on multiple categories. Note that the program will retrieve games in all marked categories.

3.4.25 Search for Time Controls

Database Window - Home (or Ctrl-F)

This is useful for games played on the chess server, in engine matches or tournaments.

Note: You find the database with your games from playchess.com in "My Documents\ChessBase\MyInternetGames.cbh".

Click *Blitz* to search for Blitz games and enter a range for the base time and the Fischer offset per move.

If you choose *Tournament*, enter the time in minutes for the first time control and leave Gain unchecked.

3.4.26 Search booster

–
Database Window - Database   Create/Delete search booster (in the database window)
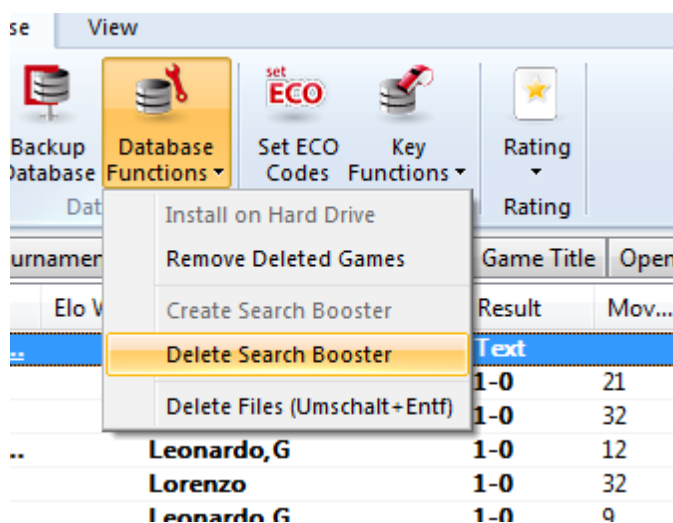
The search booster consists of a pair of additional files attached to a database. They consume about 50 bytes per game (so they can be fairly large). But it speeds up the search for specific games and positions considerably. The booster files have the ending .CBB and CBO and can be deleted from your hard disk if no longer required.

The program will offer to create a search booster for a large database which doesn't have one. You can also use this command to delete the booster files.

3.4.27 Find position

–
Analysis   Find position

This is a very powerful function that retrieves all games from the currently open database in which the board position occurred.

If you double-click one of the games, it will be loaded on the main board for replay. Make sure you have saved your original game, because it would otherwise be lost. You can use F10 to load one game after another and study the continuation.
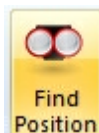
The speed of the search can be increased considerably by creating a search booster. The database you get on your program DVD already has a search booster, so you don't need to do anything there.

3.4.28 Archive database

Database Window - Database   Backup Database (or Ctrl-Z)

Click this in the database window. All files that make up the current database will be compressed into a single "archive file" (with the ending .cbv).
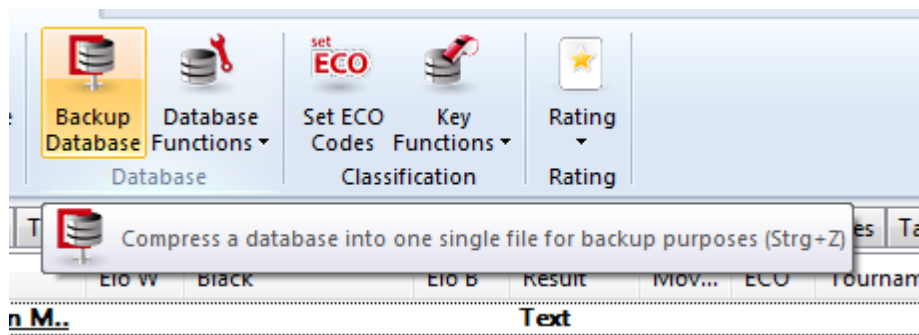
All ChessBase programs can open and unpack these archive files into a normal database.

Archive files are compressed and can be sent as a single file by email. They are also the best way to publish games on the Internet.

3.4.29 Install on Harddrive

Database Window - Database Functions   Install on Harddrive

This program comes with a collection of high quality games, which are located in the directory \DATABASE on the DVD. If you want to add games to this database, or simply to access it faster, you should copy it onto your hard disk.

In the database window click *Database Functions   Install on Harddrive*.

The program will ask you for a directory and then copy all necessary files into it.

3.4.30 Backup database

Any database in ChessBase format actually consists of multiple files.

When you create a database in .CBH format, you'll notice that the program (ChessBase, Fritz, or one of the other playing programs) will ask you to name the .CBH file. This does not indicate that the whole database is stored in just that one file!

The .CBH file stores just the header information from the games in the database; the annotations are stored in another file, the moves in yet another, each key is kept in its own file, etc.

What this means is that when you make a backup of a ChessBase/Fritz database, you need to backup all the files that make up the database. A ChessBase/Fritz database in .CBH format is composed of a minimum of seven and as many as twenty separate files.

If you backup or save just the .CBH file and try to open it later, you'll get nothing - the additional files are required.

But ChessBase and the various playing programs we offer give you the option of bundling all of these files together into one unified archive file. This file ends in the extension .CBV and is an archive that stores the multiple database files into a single compressed file. This allows for easier copying to a storage medium (such as a CD or DVD) since you'll only need to copy one file instead of seven to twenty of them.

In the playing programs, such as Fritz, you first go to the database window, where you'll see the list of games for the current database. To archive it, go to Database Window and select "*Database - Backup Database*".
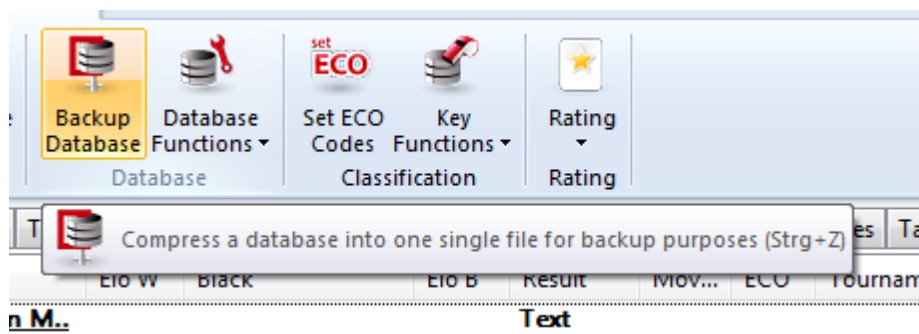
The function jumps you right to the Windows file select dialogue.

Here again it's best to create the .CBV file in a different folder.

Once the multiple database files have been compressed into the single .CBV file, you can copy that archive file onto a floppy, CD,DVD, ZIP disk, or tape backup or any external storage medium. If your original database (which is still in its original location, by the way -- nothing happens to it just because you made an archive copy) gets corrupted or accidentally deleted, you now have a replacement copy.

Make frequent backups. This is very important and applies to more than just your chess databases. Any important stuff that you've written or created should be backed up. And, as a personal recommendation, having a rewritable CD drive is very handy for this if your PC doesn't already have one. Also, you can forget about using CD-RW disks -- they're essentially useless, as the data can't be used on a PC other than the one on which the CD was formatted. CD-R disks are much better, since you can change the disk's parameters to enable its use on other PCs (this is something else I learned the hard way).

3.4.31 Database text

A database text is not a game but text reports, which may contain pictures, videos, positions and links to games, keys, other texts, etc. It appears like a game in the database list, an can be loaded in the same way. But it produces a new window for the report.
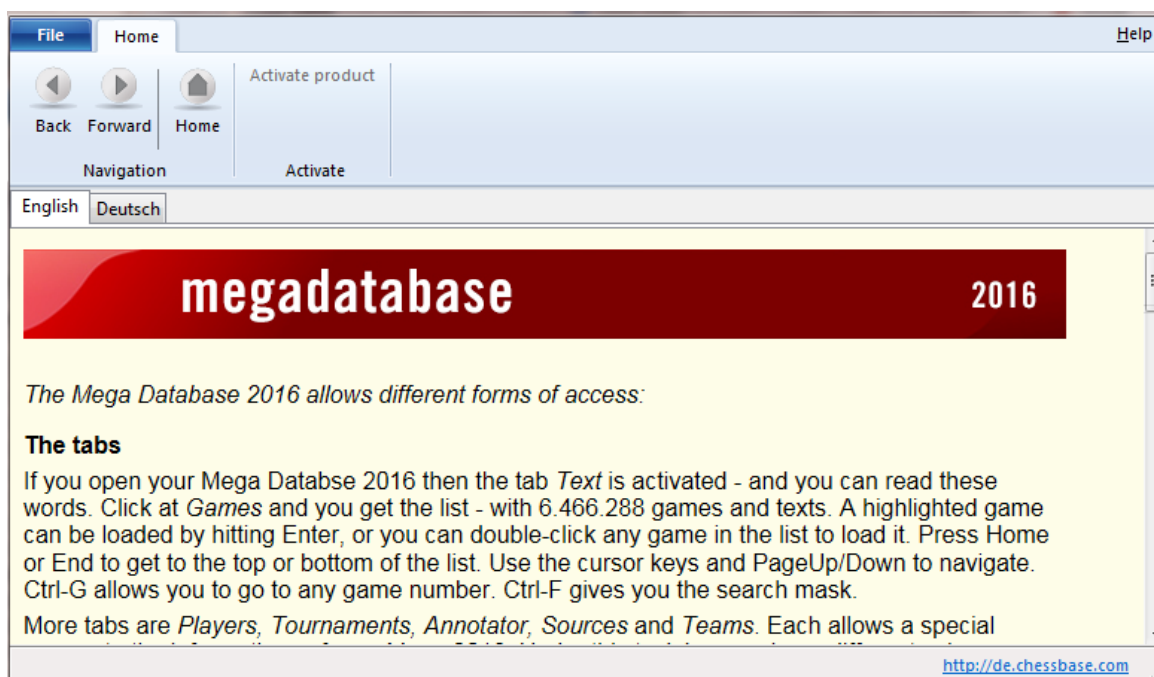
This is an example of a database text from the Mega Database 2016.

Database texts are only available in the CBH database format.

3.4.32 Database formats

This program reads and writes all ChessBase file formats, including the old **CBF format**, the normal multimedia **CBH format**, the ChessBase archive format CBV, the international PGN format, and EPD positions (these can only be imported into a database). When you copy games from one format to another they are automatically converted.
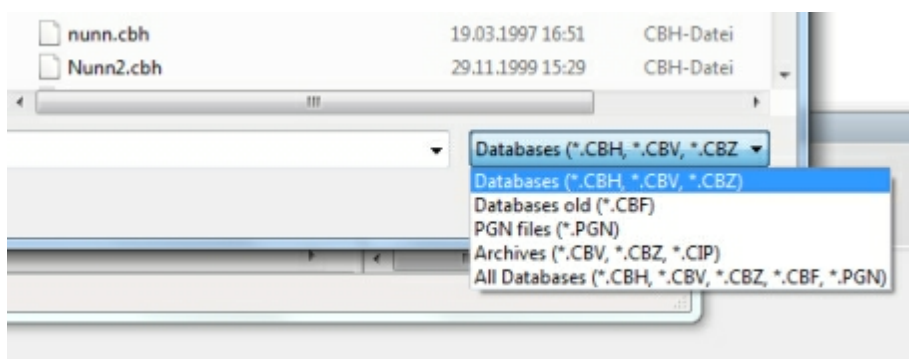
The program uses the openings book tree format CTG, but it can import old books in the FBK format.

PGN is an internationally accepted text format which can be read and edited with a simple ASCII editor. On the Internet you will find many games in PGN format. Even if

these files contain a lot of additional text – tournament reports, tables, general messages – they can still be accessed directly, without any prior conversion. Just make sure the file has the ending "PGN". The program will ignore all the text in between the games.

Note: You can convert games from one format to the other by copying them into a database with the required format.

3.4.33 ChessBase Magazine

ChessBase Magazine is published <u>every two months</u>. This unique, electronic publication contains over 1000 games from the best tournaments throughout the world. A majority of them are extensively annotated, often by world class players and often with easy-to-understand text commentary. There are special sections for opening surveys, gambits, tactics, middle and endgames, blunders. ChessBase Magazine presents the ultimate training material for ambitious players.

The Magazine is also the ideal upgrade tool for the openings tree. Every two months you can execute the function Openings book – Learn import games or Learn from database and the program's knowledge of openings theory will be completely up to date.

ChessBase Magazine also contains exciting multimedia reports from current tournaments, private interviews with top players, and video commentary of their games.

With this program you can enjoy all aspects of ChessBase Magazine, including the text reports and the multimedia sequences. A special "reader" is also included on the DVD, which has many of the important functions of the ChessBase program.

3.4.34 ChessBase

This program has a number of functions that come from the chess database program ChessBase, which is the standard tool of top players all over the world. Our chess playing programs are perfect for amateurs who want to look after their own games and browse around in the games of the masters. But if you decide to start working seriously with very large databases you should consider acquiring ChessBase.

WHAT YOU CAN DO WITH CHESSBASE:

Retrieve games according to openings, players and tournaments; generate tournament cross tables and full graphic statistics of players or openings; "Similarity search" shows all games with similar pawn structures, sacrifice patterns, endgame positions etc.; "Let's check"*: access the world's largest database of in-depth analysis (more than 200 million positions); Cloud analysis: analysis of a single position with several engines from different computers running in parallel; "Deep analysis": generates an analysis tree that changes dynamically as with time weaker variations are dropped. One click annotates your game with the "Theoretical Novelty"; merge games on-the-fly into an opening tree; generate a player's dossier containing all available information from the database; generate a comprehensive openings report with main and critical lines, plans and most important games; Single click publishing of games on the Internet; print games in superb quality with diagrams and multiple columns; automatic update of your local reference database with the weekly install- ments of games (only with the current Mega Database); access to the ChessBase online database with over 7 million games**.

NEW IN CHESSBASE 13:

The ChessBase Cloud***: you are now able to make use of your databases from any computer and later also from any mobile device. Set up your own repertoire and your own games in private space in our cloud

Optimise the performance of your engines with analysis tasks. First of all define which positions are to be analysed one after the other. Like this your engine will over a long

period of time assemble independently and store for you in-depth analyses.

The improved repertoire function distinguishes between the repertoire for White and Black.

Ergonomic operation: Easier analysis and annotation by a new series of buttons. More efficient input of variations during analysis, new variations accepted without a request for confirmation. And much more.

This is what ChessBase give you beyond the functions of this program:

▶   Parallel operation on many databases and games, easy copying of any number of games via drag & drop, navigation between databases in the "database window".

▶   Powerful search functions, e.g., material distribution, moves, manoeuvres, sacrifices, and structures. Creation of search boosters to drastically speed up the search.

▶   Access to super-fast players, annotators and tournament keys. Endgame keys.

▶   Players encyclopedia with data on all rated players and thousands of portraits.

▶   Input text with the built-in WYSIWYG editor, with hypertext functions (load pictures, jump to games, play multimedia files, etc.).

▶   Create full openings reports in any position with a single mouse click. The report contains all important historical and current GM games, all critical continuations, repertoire recommendations, typical plans, etc.

▶   Create player portraits at a click of the mouse, including photos, Elo development, best tournaments, openings repertoire, great combinations, commentary, mate combinations, etc.

▶   Automatic elimination of doubles, sort games according to different criteria, powerful clipboard functions.

▶   Full administration of your correspondence chess games, with printing of postcards or letters.

▶   Advanced printing functions, e.g. ECO-style printing of openings surveys. Creation of ASCII, RTF and HTML files, with diagrams, ideal for tournament reports on the web.

▶   Creation and maintenance of theme keys, access to tactical and strategic motifs. Sophisticated theme keys are included and can be modified with ChessBase.

▶   Copy variation trees from one game to another with drag & drop.

▶   Enter spoken commentary to game moves and training positions. Design full training courses.

▶   Extensive statistical displays, e.g. of players: most successful tournaments, openings preferences, best and worst results against specific players, etc.

▶   Integrity test for damaged databases.

▶   Easy global editing of game data, e.g. to standardise players' and tournament names.

Full information is available at our web site: www.chessbase.com.

3.5   Analysing games

3.5.1   Infinite analysis

Menu: Home   Infinite analysis (or Alt-F2)
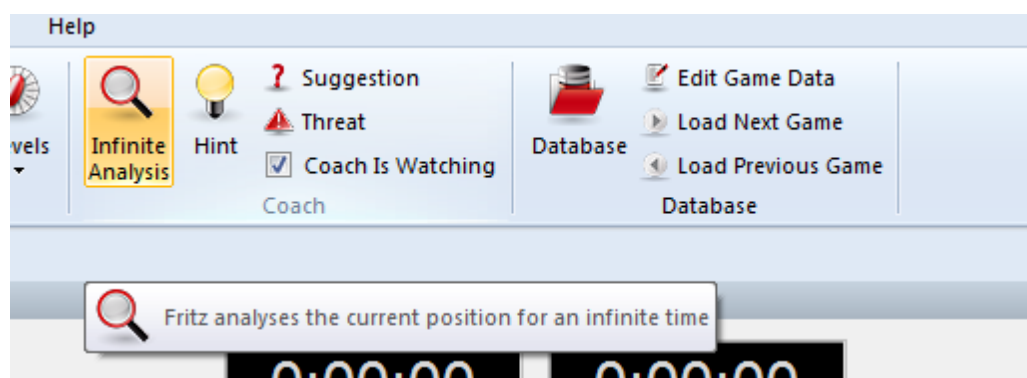
Note: Before starting a game is to be noted that the program is set after the first start on the Infinite analysis mode. Experience has shown that most users set the program for analyzing your own games. So you have to select a Playing level first before you can play directly against the program.

This puts the program into a special mode where it does not reply when you enter a move but instead simply analyses the position on the board. You can now enter all the moves of a game.

Clicking the same menu or pressing Alt-F2 again switches back to normal game mode.

There is also a button in the toolbar at the top to start and stop infinite analysis.

See also Game analysis with Let`s Check ..

3.5.2   Evaluation of the position

Chess engines evaluate positions with the help of a numeric value. The evaluation is expressed in pawn units, always from the point of view of White. If the program is displaying a value of +1.30, this means that it considers the white position to be better by the equivalent of 1.3 pawns. If White is actually a pawn up, then the additional 0.3 is the result of positional considerations (mobility, deployment of pieces, king safety, pawn structure, etc.). A display of –3.00 means that White is a piece down – either a bishop or a knight, which are both equivalent to about three pawns.

Rooks are worth five and the queen about nine pawns. Of course the king's value is unlimited – lose it and you've lost the game.
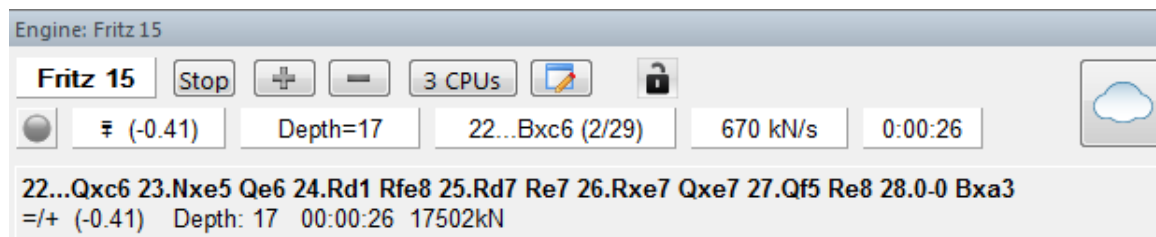
Always it is the case: positive values favour White, negative values favour Black.

In addition to the precise pawn values, the evaluation is also given in standard chess symbols:

=	The position is about equal
⩲	White is slightly better
±	White is clearly better
+-	White is winning
-+	Black is winning
∓	Black is clearly better
⩱	Black is slightly better

3.5.3 Extended Engine Information

In the analysis mode the standard engine displays new information in the engine window.

Right clicking in the engine window opens a context menu.

"
% 23.Rh3 Be7 24.0-0-0 e4 25.Rg3 Bg5 26.Ne5 Qe
Engine

✓ Lock Engine   Strg+Alt+L
   Goto Lock Position   Strg+L
   Increase number of lines   +
   Decrease number of lines   -
   Search options...
   Next Best   ▸
   Analyse threat   X
   Clip analysis
   Copy to notation

   Scroll main line
   Variation Board

   Choose Font

   Close
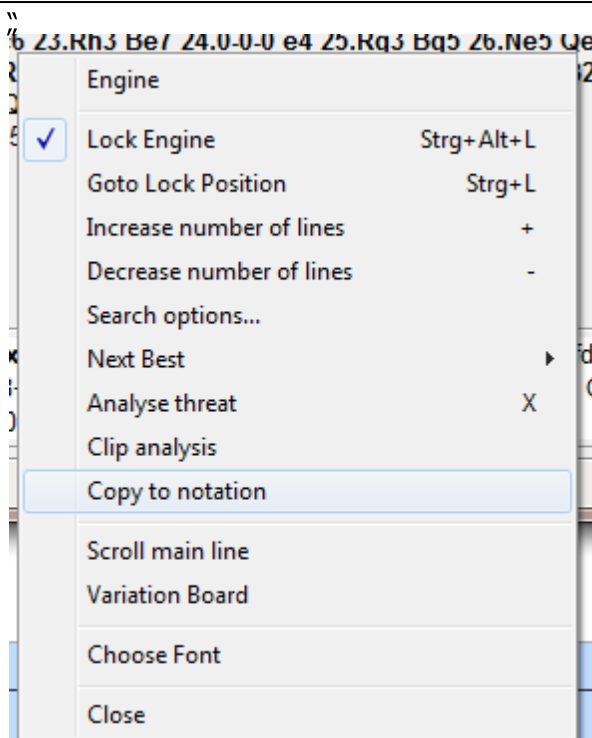
Next Best calculates the second best alternative for continuing. While the engine is calculating this information can be accessed faster by typing the key Y. At the beginning of the engine window the best line found so far is displayed in light gray letters.

After this possible alternatives are displayed.

Tip: This information is at the beginning of the list view. If you cannot see this information use the scroll bar to scroll back to the beginning of the list.

Hint: The next best move option is only available while the engine is only analysing one line.

The program has options for the function *Next best move* .The function *Next best move* calculates alternatives to the main line. While the engine is thinking this information can be accessed directly by typing the letter Y, which is faster than accessing this function via a context menu.

At the top of the engine windows you can see the best alternative moves, shaded grey. „Look for a better move" tells the engine to search for moves that have a higher evaluation.

Display of the current main line
At the bottom of the engine window the line that is currently being examined is displayed.The main advantage of this display is that it is constantly updated even if the best line displayed remains unchanged during lengthy processing.
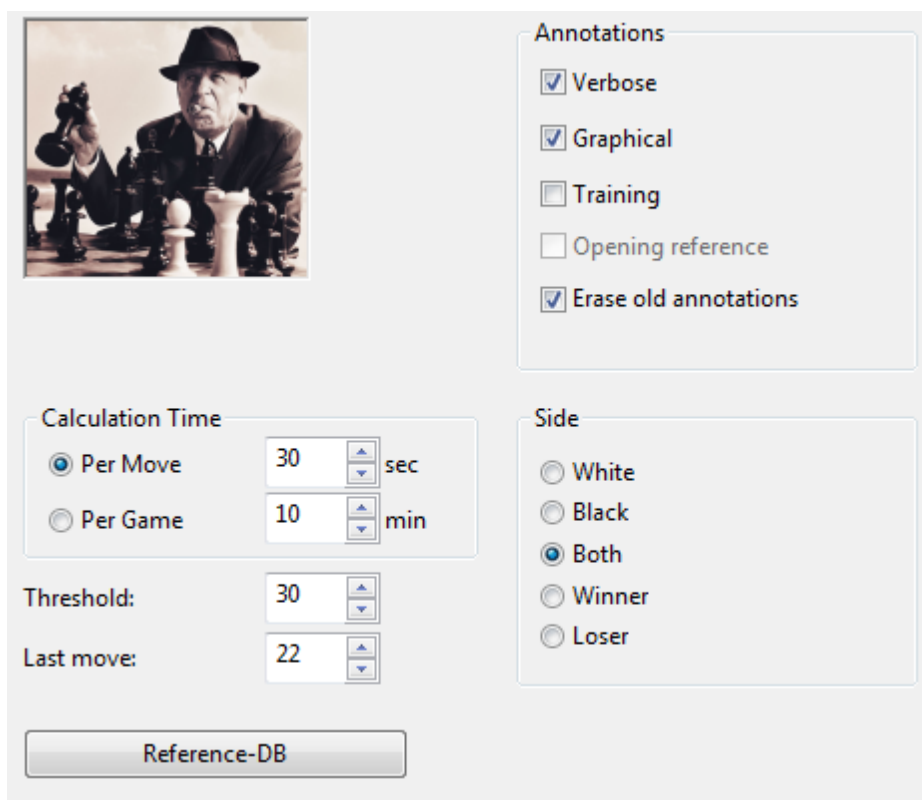
3.5.4 Full analysis

Analysis   Full analysis
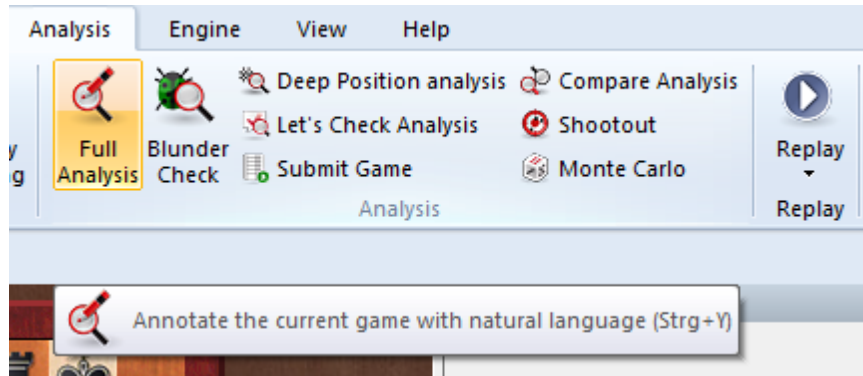
This is a very powerful function which has repeatedly won awards (specifically in 1996, 1997 and 1998 the Herschberg Award of the International Computer Chess Association) for the best computer generated commentary of a chess game.
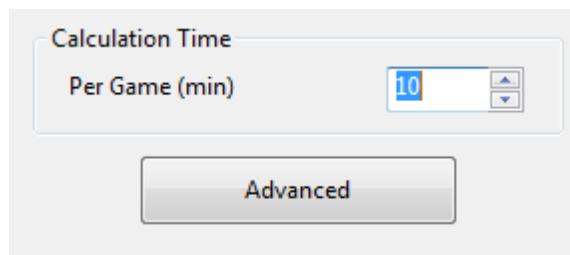
The program not only annotates games in very high quality and in natural language, it is also the only program that can identify tactical categories and "tries". The latter are inferior moves which were not played but which are of great interest to human players. "Naturally White cannot capture the bishop because of..." is typical for the kind or didactic commentary you will get.

The evaluation profile also gives you a clear picture of how the game developed and when decisive mistakes were committed. Remember that you can click on any place in the evaluation profile to jump to that position in the game.

You can call up the automatic analysis for the game loaded on the main screen, but you can also use it in the database window. There you can select several games for analysis.

In the dialog box there are a number of different options. If you simply click "OK", the analysis will start. You can stop the automatic analysis by clicking the "Stop" button that appears in the menu bar.

These are the options you have:

▶ **Calculation time per move:** This is the minimum time the program will spend on a move. If it creates variations, the same amount of time is spent on each move of the main line. Naturally, the more time you allocate the better the quality of the analysis.

▶ **Calculation time per game**: Set a rough total time in minutes for analysing the whole games.

▶ **Threshold**: Here you specify when the program should consider a move a mistake. If you enter a high value (e.g. 300 = three pawn units), then only grave blunders will be considered. If you set a very low value the number of "Better is…" commentaries and variations will increase.

▶ **Last move**: This sets a limit for the analysis. Analysis always starts at the end of the game and goes backward, ending with this move (i.e., "1" = analyse from move 1 of game).

▶ **Reference DB**: If the program has access to a large database, it can generate some very interesting reference commentary, quoting recent games that are similar to the current one and identifying the novelty in it. Click the "Reference DB" button and show the program which database to use.

▶ **Storage**: This is relevant when you automatically analyse a number of games from the games list. the program

▶ **Erase old annotations**: Should the program add annotations to any that are already present in the game, or should it delete previous annotations and start with a clean game notation?

▶ **Verbose/Graphical/Training:** Normally the program annotates games with the help of variations and commentary symbols. If "verbose" mode is on it will also include commentary in natural language ("This throws away the game" or "Black must return material"). "Graphical" allows the program to include coloured arrows and squares in its annotations. "Training" makes it generate quiz questions like "How would the (inferior) move x be refuted?" or "Why didn't White play x takes y?" These questions come up when you are replaying the game. The program will even set time allowances and award points for training positions.

▶ **Side**: Here you can restrict the analysis to the player of the white or black pieces, or to the winner or loser.

3.5.5 Deep position analysis

Analysis   Deep position analysis

This function is used to analyse a specific position. It is very good for getting deep and detailed analysis of a critical position, and especially interesting for correspondence players.

Deep position analysis generates a detailed analysis tree for this position. You can determine how deep and broad the tree should be and what moves should be included or excluded from the analysis.

Time/depth: The precision of the analysis is determined by time available per move, or by the fixed calculation depth you allocate. Time per move is more flexible since it allows the program to go much deeper in certain positions (e.g., in the endgame). If on the other hand you are doing the analysis in the background then fixed depth is better since the analysis will be fully executed even if the program is only getting very little CPU resources.

Plus (root) allows you to add extra time or search depth to the root position, so that it is analysed more deeply than positions that occur in the search.
Branching: The branching factors for the 1st, 2nd and 3rd moves define how many alternative moves are given. The higher the values, the broader the analysis tree. However, the program may change the branching factor if it thinks the position merits that. This is dependent on the evaluation window described below. If there are moves present after the position, these will always be considered.

Branching: White, Black, both determines whether alternatives should be given for one or both sides. Example: you want to show that in a certain position White is winning by force. Then you are not too interested in white alternatives and should set branching for Black only.
Length of variations: Sets the length of analysed variations.

Evaluation window: This value, given in 100ths of a pawn, determines when a variation will be discarded. The value 80, for instance, means that moves which are 0.8 pawns worse than the best move will not be investigated any further, even if the branching factor would allow it.

The *Threshold* determines when a move is considered a mistake. This is described in

"centipawns" (one hundredth of a pawn's value).

At the end of deep position analysis, all the variations that have been generated are sorted and the strongest moves becomes the main line.

Length of variations:	6
Evaluation window [1/100 pawns]:	80
☐ Cut bad lines	
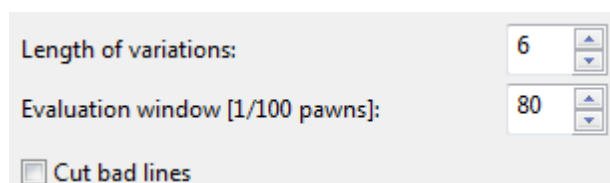
Cut bad Lines means that bad continuations, as recognized by the Alpha-Beta algorithm, are ignored and not examined any deeper.

Note

▶   You can influence the analysis by entering continuations to the game. These moves and variations will always be taken into consideration. If you do not enter any moves then the program is free to look at any lines it thinks are worthwhile.

▶   If you annotate a move with a "?" then it will not be taken into consideration. So this is an excellent way to exclude lines you know will lead to nothing, but which the program would otherwise analyse extensively.

▶   You can use more than one engine to analyse a position. The engines are used in the order in which they are listed – if you have four engines and two lines then the first two engines will be used for these.

▶   It is often better to give let the program analyse many alternatives for one side only. For instance if you want to know if White can force a win in a given position you may set a branching factor only for Black to see if the program can find any defence against the best white attack.

3.5.6   Blundercheck
–
Analysis   Blunder check
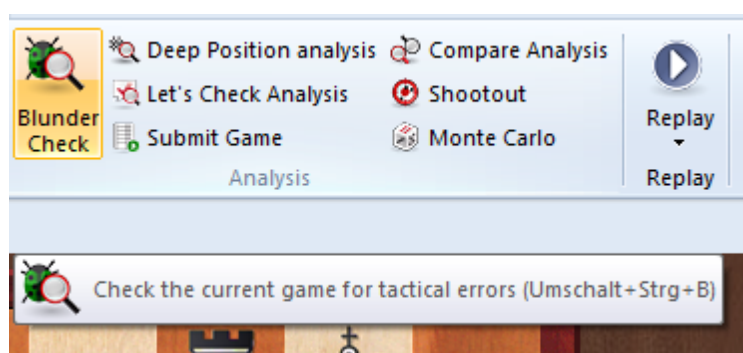
This does not provide a full analysis of a game, but simply a tactical examination, one that reveals glaring errors. There are a number of options in the blunder check dialog box:.

▶ **Side to analyse:** You can restrict the analysis to the player of the white or black pieces, or to the winner or loser
(similar to the automatic analysis).

▶ **Output:** If the game you are checking already contains annotations, you may not want the program's analysis buried in the variations. Select Annotate by Text to make it easier to find the remarks in the notation.

▶ **Full variations, Erase old annotations, Training:** Select these choices to erase the old analysis, and have the variations written out in full. You can also specify to have training positions generated.

▶ **Storage, Time/depth, Threshold:** You can determine the average search depth per move. Enter the minimum time the program should spend on a move. The threshold defines when a move is considered a mistake. If you enter a high value (e.g., 300 = three pawn units), then only grave blunders will be considered. If you set a very low value, the number of commentaries and variations will increase. If you set the threshold to zero, the program will annotate every move, even if there is nothing to say.

▶ **Check main lines/variations:** Select the main line of the game to be checked, the variations, or both.

▶ **Storage:** If you are blunder-checking one or more games in the database window (mark many and execute "Blundercheck"), then you can specify how to store the games after they have been checked. You can put them back into the same place in the database (i.e., replace the original games); or append to the database (i.e., store again as a fresh copy).

Games in which the blunder check has revealed serious errors are marked with the black "Tactical blunder" medal; they can be easily found in the games list and with the search mask.

The name of the engine that was used in the blunder check is entered as a text

commentary before the first move. If you analyse the game again with a different engine, the name of the engine with every new variation appears.

3.5.7 Compare analysis

Analysis   Compare analysis

The automatic comparison of the analysis of two different engines has two main uses. First, it is an excellent way of evaluating the strengths and weaknesses of the engines. On the other hand, from a chess point of view, it is very interesting to compare the conclusions of two different engines. One might be tactically more reliable, the other more positionally sound.

It is also interesting to compare two versions of the same engine. The "compare analysis" function allows you to check what each finds at a specific search depth, or how many position nodes each of these engines actually checks to reach a certain search depth.

You can set a variation colour for each engine (when loading it) so that it is easy to tell at a glance which engine produced the individual lines.

How to load engines:

‣   **New** allows you to select engines from the list of all available engines.

‣   **Edit** allows you to change the settings for the engines already loaded (hash table size, variation colour).

You can use "compare analysis" on a number of games (in the database window). In this case, specify whether the analysed games should replace the original entries or if they should be appended to the end of the database.

Please note: You can load an engine more than one at a time and then use Edit – Parameters to set different engine parameters. In this way you can find out how the settings affect the performance of the engine.

3.5.8 Shootout

–
Analysis   Shootout
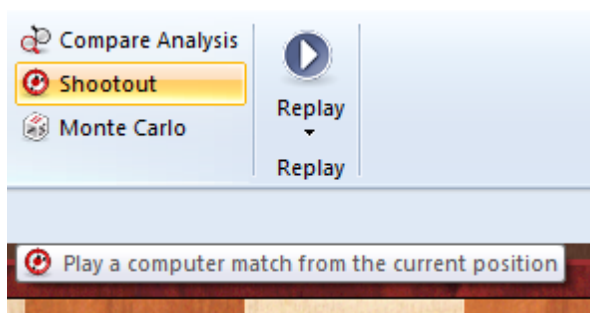
This allows you to use one or more engines to play out the rest of the game. It is used to test different engines – which lets them play out a tactical, strategic or endgame position at different depths – but also for analytical purposes.
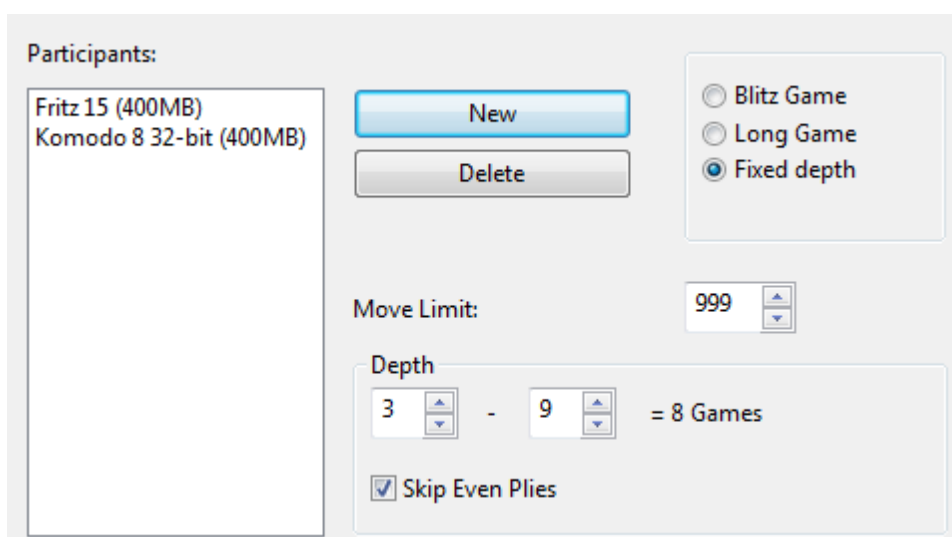
▸   **New** is used to include new engines in the shootout.

▸   **Delete** is used to to remove them from the list.

▸   **Move limit**: You can set a maximum game length and average search depth for each move.

▸   **Depth:** If you set depth = 5 – 9, new games will be played at each ply depth. Using two engines, the program will switch sides at each ply depth.

▸   **Skip even plies** allows you to avoid the weakness of some engines at even plies. In the above example, setting 5 – 9 plies and skipping even plies results in three games (at a search depth of 5, 7 and 9). Since sides are changed after each game, we have a total of six games in the shootout.

The games from a shootout analysis are saved in the Engine Engine Database.

3.5.9   Shared Analysis

Shared Analysis is used when analyzing a single position.

Start Infinite Analysis (ALT-F2)

Then right-click in the Engine Analysis pane to get a popup menu and select "*Shared Analysis*" from that menu.
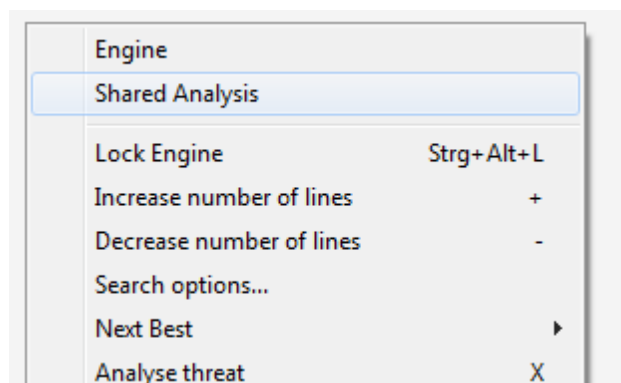
The single Engine analysis pane then splits into two panes. Here's what's happened. The original chess engine gives up half of your computer's processor cycles.

The software then starts a second "invocation" of the same chess engine which will then use that freed processing power; in other words, the software starts an identical copy of that same chess engine. Both of these engines then start analyzing the position, each using half of the computer processor's power.

The first chess engine gets "*locked*" on the initial position it was analyzing when you started Shared Analysis.
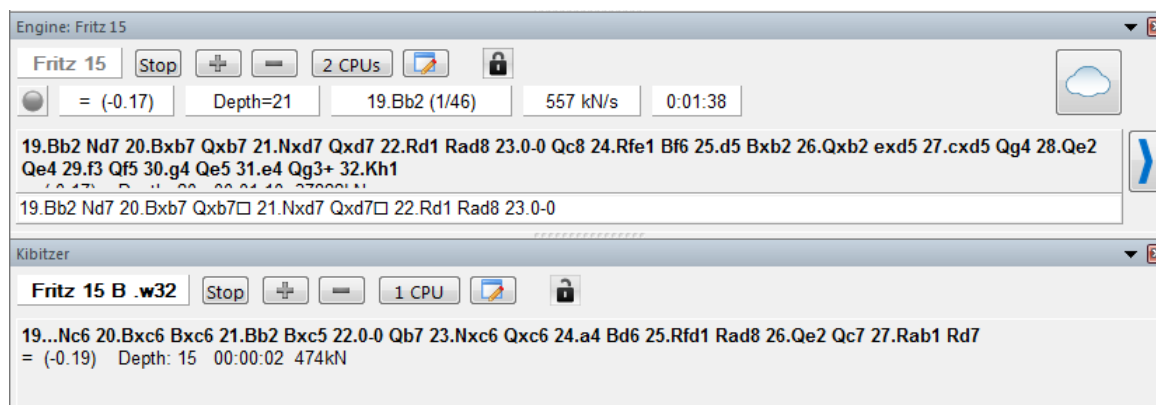
But the second chess engine (in the lower pane, noted as the "B" engine in the above illustration) is free to analyze different positions if you move the Notation pane cursor somewhere farther ahead in the game, but this second engine will also be storing its analyses in the same hash tables which it shares with the "A" engine.

Let's start Shared Analysis and then use the cursor keys or VCR buttons to jump the

game ahead, say, three moves. The "A" engine will still be analyzing the initial position (the one on the board when we started the Shared Analysis function), but the "B" engine will be analyzing the position on the board three moves later and storing its evaluations in the hash tables it shares with Engine "A"; in theory, the "B" engine will always be three moves ahead of its "twin", therefore it'll always be storing positions in the hash tables for places the "A" engine hasn't reached yet. But when the "A" engine does get to these points, it'll find a whole lot of positions which have already been analyzed. This will allow the "A" engine to analyze a lot more positions very quickly and search even deeper than it could if the "A" engine was analyzing by itself. It's like a military team sending a reconaissance patrol ahead to report back on the terrain and enemy positions it encounters. When it's all said and done, Engine B is "feeding" extra analysis to Engine A.
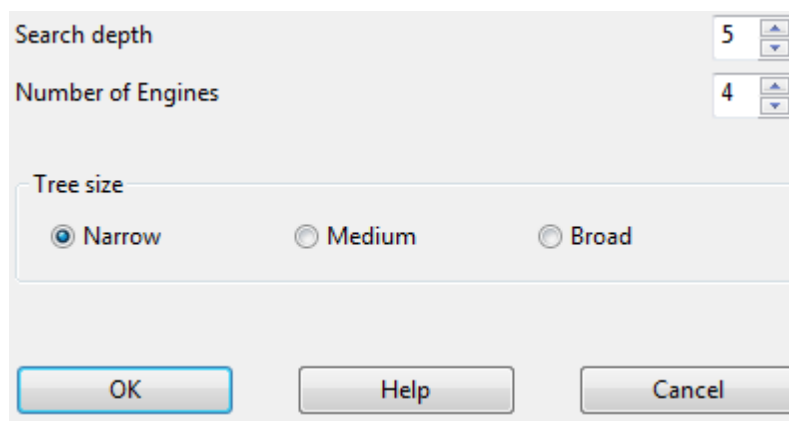
As a last tip regarding Shared Analysis, it's best used with a large-sized hash table (as big as you can get without causing excessive hard disk activity). Remember, you set the hash table size in the engine selection dialogue (reached by hitting F3 while in the main chessboard screen).

3.5.10 Monte Carlo

Analysis - Monte Carlo
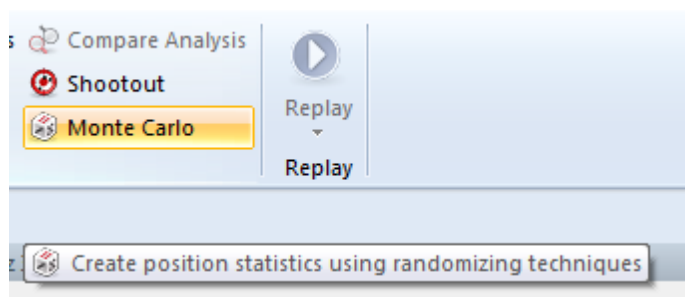
To start a Monte Carlo analysis from a particular position, go to the Tools menu, select "Analysis", and then "Monte Carlo" from the submenu (note that this function will be in grey half-tone and unavailable unless you've already loaded a Rybka engine). The next thing you know, something startling happens: the game in your Notation pane disappears, to be replaced by the "Load book" button.

Search depth   5 ⏶⏷

Number of Engines   4 ⏶⏷

Tree size
  ⦿ Narrow   ○ Medium   ○ Broad

[OK]   [Help]   [Cancel]

The first is the search depth, with a default of "5". This controls how far ahead (in half-moves, or "plies") the engine will look before making a move. For example, if you leave this at "5", the engine will look 2.5 moves ahead before making a move. Remember, the engine is going to be playing a lot of games against itself and storing the moves in the form of a tree, so the search depth is important. You must realize, however, that there's something of a tradeoff here; the higher you set the search depth, the more time the engine will need to make each move -- so you're trading time for depth. On the other hand, setting a lower search depth means that many more games will be played in a given amount of time, but that the moves themselves are likely to be more superficial.

Keep in mind, too, that you should use only odd numbers for the search depth, because chess engines tend to develop a tactical "blind spot" when made to analyze at even ply depths. Rule of thumb: odd numbers good, even numbers bad.

The second setting is the "width" of the tree. This is similar in some ways to the "Branching factor" in Deep Position Analysis and is another "space for time" tradeoff. If you create a "Narrow" tree, you won't see many alternative moves displayed in your game tree but the overall process of playing games and generating the tree will be faster. "Broad" trees show more alternatives but take longer to generate (it requires more processor time and thus slows down the chess engine).

The software will load the engine and you'll get a dialogue to that effect. For a minute or so it'll look like nothing's going on, but then you'll see the tree view (your former Notation pane) become populated with data

This looks a lot like the game tree/opening book display with which you're already acquainted. This one acts a bit differently in the data it displays. You still have "N" for the number of games played (ten so far when I took this screen shot) and a numerical percentage of how well the move did from White's perspective.

#
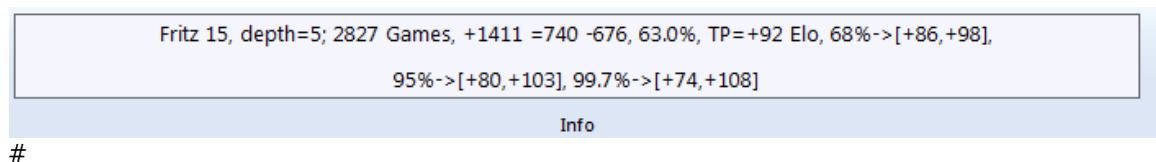
Note that you can actually play through the moves of the tree while it's still being generated, too. Use the cursor keys on your keyboard to navigate through the moves (left and right to move forward and backward, up and down to select a move when multiple moves are displayed).

 This display reminds us of the engine which is being used for the analysis and the search depth we set at the start of the process. We see how many games have been played so far and the results of those games.

You can let Monte Carlo analysis run for as long as you like. Remember that the more games you let the engine play, the more reliable will be the statistical results.

To stop the Monte Carlo analysis, click the "Stop" button (the little red button with the white "x" in the upper left corner of the Monte Carlo analysis screen). You'll see a popup dialogue asking if you wish to save the tree which the analysis generated.

Save statistics tree

If you click "Yes", you'll get the standard Windows dialogue prompting you to pick a folder in which to store it and for you to give it a name. Note that all of the game moves prior to the point at which you started the analysis are also saved as part of the tree; in our example, all of the moves through 14.c3 will be saved along with the "Monte Carlo tree" which begins with Black's 14th move.

If you select "No", you'll simply be returned to the normal game window (board and Notation pane), but you'll notice that any moves you replayed in the tree while the analysis was being generated will be displayed as variations/subvariations in the Notation pane's gamescore.

All of that seems prety verbose, but it's really very simple: Monte Carlo analysis causes the Engine to play a large number of games against itself and then store the results in the form of a statistical tree.

3.5.11 The Kibitzer

Menu Engine Add Kibitzer (Ctrl-K)

A "Kibitzer" is a person who watches a game in progress without making any moves himself. A kibitzer is also notorious for giving advice and knowing everything better.

You can add a kibitzer by selecting an engine in the select box that appears.

A new engine window appears in which it can work parallel to the one already loaded. You can use one or more kibitzers (up to six) to help you in your game against the primary engine, or you can use them for a second opinion on a position you are analysing. Remember that they will be sharing the processor power, so the quality of analysis sinks with every added kibitzer.

Click *Remove kibitzer* or *Remove all kibitzers* to close the additional engine. You can also right-click a kibitzer and "Close" it.

Kibitzer cannot be combined with the "Explain all moves" window.

3.5.12 Visualize Search

Menu File- Options - Engine   Visualize Search

Note: Some Engine do not support this feature!

While the program is thinking about a move, either during a game or during game analysis, the program gives detailed information in the engine window, for example the evaluation, the search depth and the best continuation line.

The variation board offers a display of the best line, which can be played through in the variation board.

The option " *Visualize Search* " goes one step further. During the Infinite Analysis (ALT-F2) it uses graphics to display not only tactical manoeuvres, but also possible plans for both sides.

This example shows how the function works.

The orange arrows show the plans that the progam prefers for White, the blue arrows show the plans that have been calculated for Black.

Possible destination squares are coloured green if they play a special role in the tactical manoeuvres. In the above example the square f5 is very important, and so the move f7-f5 is displayed as Black's main plan.

Note: This function is currently only available for the main engine, and is not supported by other engines..

It is recommendable to give the program more time to think in critical positions. The more time the program has, the more informative his resuts will be.

3.5.13 The Analysis board

The program has a special function that many users are not well acquainted with.

It is to be found in the menu "***View   Analysis board***". You can also switch the analysis board on and off by pressing the key combination Ctrl-Alt-A.

The analysis board appears as an extra "pane" in the board window and can be used to analyse the game that is currently loaded. You can move the analysis board to a convenient place, as you can do with all the panes of the program – by grabbing the top of the pane and "docking" it on some other part of the screen.

See also Let`s Check ..

Anyone who has worked with previous versions of Fritz may be forgiven for asking

what the analysis board could possibly be useful for. After all the program in its regular layout offers some of the finest analysis functions available in current chess software. You can switch on one or more engines, let them analyse one or more lines, copy the main move or entire variations into the game notation with a single mouse click, you can lock the engine to a particular position and then continue studying the game while the engine is working. It is even possible to play through the main line the engine is displaying on a small variation board. And there is a wealth of additional automatic analysis functions, like blunder check, deep position analysis, shootout, compare analysis, etc. (all in the menu "Tools"). So why do we need an additional analysis board?

Well, one important advantage is that you have an additional board to work on. It is like using a pocket chess set when watching a GM game. You have the original position in view and can experiment with lines on the pocket chess.

The biggest advantage of the analysis board becomes clear when you are logged into the Chess server and are watching a game. Theoretically you could periodically "unplug" the transmission (by pressing Ctrl-U) and start analysing on the main board. But then you do not know when new moves are played. And once you plug back into the transmission the board jumps straight to the current position in the game. With the new analysis board things become considerably easier. You can watch the game and, without disturbing the position, try out lines on the second board.

There are a number of buttons below it to support the analysis. Here is a description of what each of them do.

▶   **Start** – this activates the analysis board (which is initially empty) and copies the position from the main board onto it. You can start moving pieces on the analysis board, using the engine to help you if you wish. The new lines appear in a copy of the main game notation, but the position on the main board remains unchanged.

▶   **Stop** – this ends the analysis session, empties the analysis board and jumps to the main game notation. If you restart the analysis board you will see that the

previous analysis is still there.

▶ **? Sync** – this jumps back to the position on the main board, which is useful when you are in a deeply nested variation tree and want to get back to the original position quickly.

▶ **= Copy** – This copies the current game and all the analysis it contains into the analysis board.

▶ **! Move** – This copies the first move of your analysis to the main board. For instance if you are playing against Kommodo and using an analyis board on the side you can try out a line and then click ! Move if you decide to play it against the program.

▶ **X Close** – This will close the analysis board. To reopen it in its original location press Ctrl-Alt-A.

Note that the analysis board is only there for quick, temporary analysis. The variations you can see in the analysis notation will not be saved together with the game.

3.5.14 Variation board

You can activate the variation board by right-clicking in the engine window and selecting "Variation board" from the popup menu.

The size of the variation board will vary with the size of the engine pane. The purpose of the variation board is to allow you to play through the best variation the engine has found thus far in its search.
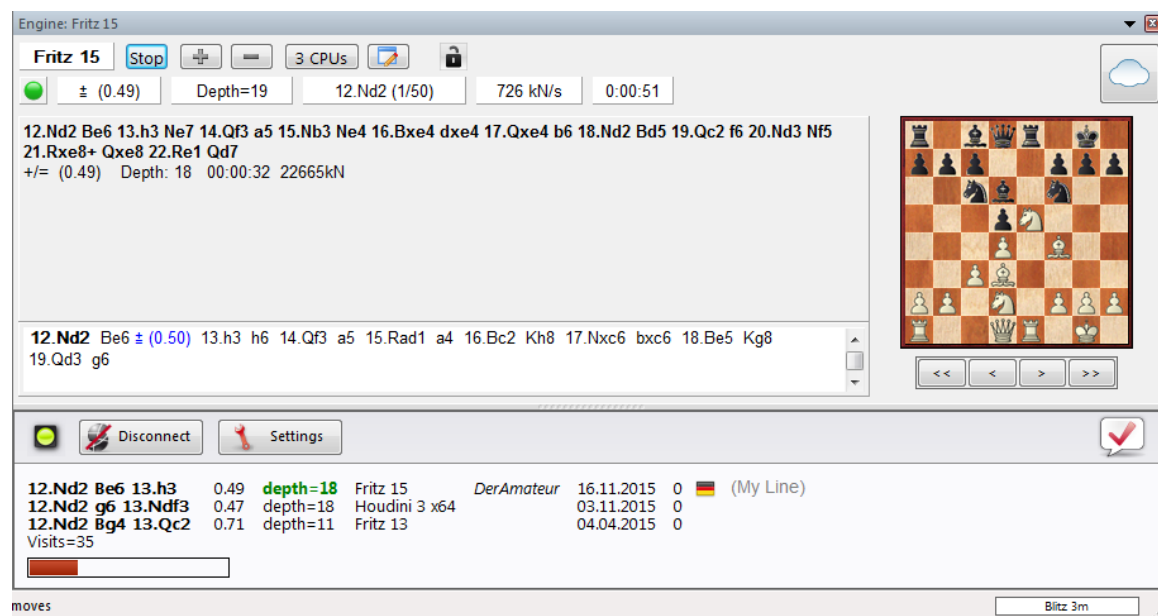
You'll notice a set of VCR buttons below the variation board; these are your controls for playing through moves on this board.

You can step forward and backward through the variation one move at a time by using the single arrow VCR buttons.

If you want to jump right to the beginning or end of a variation, you can use the double arrow buttons for that purpose.

3.5.15   Chess problems, mate search

Home - Levels   Mate search (or Ctlr-M)

This allows you to solve chess problems ("White to play and mate in n moves"). There is a special mate solving engine which can also handle selfmates in which White must force Black to mate him, and helpmates, in which both sides co-operate to mate Black.
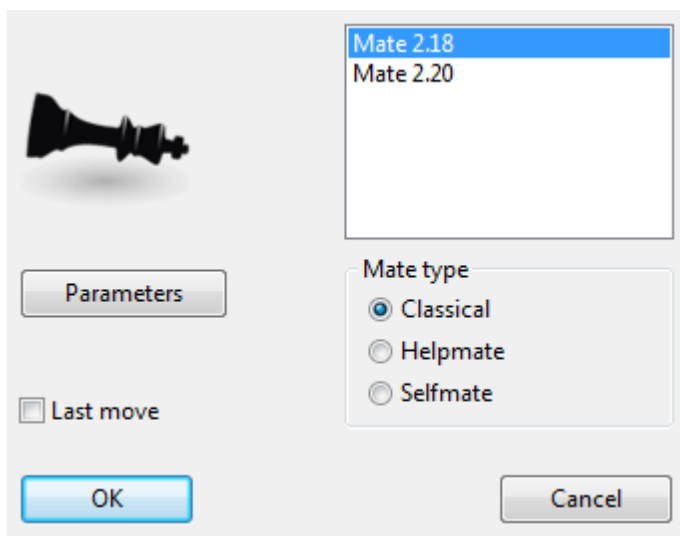
In the dialog box for the mate search, select an engine (only engines which are specialised for mate searches will be displayed) and specify the kind of problem you are solving.

"Parameters" allows you to set certain options, especially for very deep mate problems which would otherwise take too long.

▶   **"Heuristic search"** allows you to specify the maximum number of flight squares the black king can have.
▶   **"Threat with check"** specifies how deep a mate threat should be for it to be considered.

The program not only displays the key move of the problem, but also generates a complete solution, with all alternative defences by Black. If the problem has more than one solution (i.e., it is "cooked"), then alternate solutions will be given as lines to the first move of White. "Last move" specifies whether the last move of the problem, which is usually obvious, should be included or not.

3.5.16 Let`s Check

3.5.16.1 Description

"*Let s check*" is a completely new analysis function which will revolutionise the chess world for years to come.
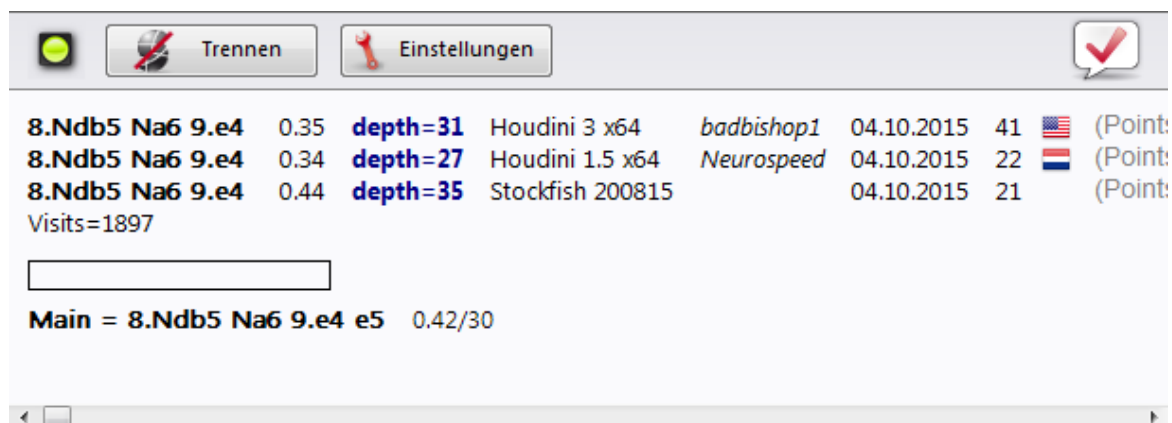
Engine analysis has changed chess forever. This is so obvious that many aspects are now taken for granted. For instance, a slow engine on an old notebook does not always tell the truth, and yet people only wait a few seconds before uncritically making the recommended move. Popular positions are analysed by thousands of players over and over again. This means an immense amount of time and electrical enetgy, both of which are finite ressources.

The program offers help. Every position that has been analysed by anyone at any time is voluntarily saved on a server. The possible engine variations are then available to everyone who looks at this position. We call this system „Let's Check" because detailed analysis can be gained immediately without investing any time.

Whoever analyses a variation deeper than his predecessor overwrites his analysis. This means that the Let's Check information becomes more precise as time passes. The system depends on cooperation. No one has to publish his secret openings preparation. But in the case of current and historic games it is worth sharing your analysis with others, since it costs not one click of extra work. Using this function all of the program's users can build an enormous knowledge database. Whatever position you are analysing the program can send your analysis on request to the "Let's check" Server. The best analyses are then accepted into the chess knowledge database. This new chess knowledge database offers the user fast access to the analysis and evaluations of other strong chess programs, and it is also possible to compare your own analysis with it directly. In the case of live broadcasts on Playchess.com hundreds of computers will be following world class games in parallel and adding their deep analyses to the "Let's Check" database. This function will become an irreplaceable tool for openings analysis in the future.

When you store a variation in Let's Check you can add your name to it. If your analysis is later replaced by a deeper evaluation his name is then put in your place. Three variations are possible for every position. Whoever analyses a position deeply for the first time becomes the „discoverer", and his name is connected with the position forever, even if other users make a deeper analysis. Apart from common

theory every position in chess can be „discovered".

There is an honours list for those who have won or discovered variations. Winning a variation is more valuable depending on how often it is visited and how deep the previous variation was. It is also possible to use Let's Check anonymously without entering your name.

Whether you are a beginner, a club player or a grandmaster. With the help of "Let's Check" every chess player can contribute to this database. Especially valuable: whoever analyses a position for the very first time wins the position for himself and his analysis is connected with his own name for the chess world. Who has won the most positions? With the help of deeper analyses you can win positions from other players and enter the honours list of "Let's Check". (All chess engines are allowed as analysis programs, whether single or multi processor versions).

With Let's Check every chess player has access to the current openings theory and the evaluations of the strongest chess engines. The program presents the complete openings theory as a statistics tree. The "LiveBook" shows for every position not only the complete statistics based on the weekly updated Chessbase Online Database (currently over five million games) but also how often a particular continuation was examined in the "Let's Check" database.

LiveBook ..

Online Book ..

Analysing ..

Game analysis ..

Contribute Engine ..

3.5.16.2 LiveBook

The Let's Check data can be used as an openings book. Since all the openings of the online database are contained the LiveBook is already the largest source of information for openings moves that have already been played. You can use this book to play or just to look up information. The LiveBook is „live" because it can change from second to second. Every position that is checked with the LiveBook is immediately available together with an evaluation.

When a top game is broadcast and the viewers are using LiveBook, a full analysis with evaluations is available in the LiveBook when the game is over.

Anyone can add moves to the LiveBook, regardless of how sensible they are. Just like a human brain the LiveBook forgets information that is unimportant and rarely accessed.

Click on the tab *LiveBook* in the notation window.

"
"
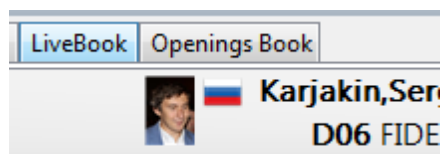
If you are connected every move you make is stored, so click on *Disconnect* for private preparation. Data is only transferred to the LiveBook when the <u>connection light is green.</u>

The information about the position is displayed in columns.

- **Move**: shows the possible moves in this position.

- **[%]** : The frequency with which this move was played. This is based on the games in the LiveBook.

- **Evaluation**: The average of the evaluations added by chess engines.

- **Games:** The number of games in which the move was played.

- **Result**: The average performance of the move.

- **Elo-AV**: The average Elos of the players in the games used.

- **Dates**: The last analysis added to the LiveBook.

- **Visits**: The number of accesses to the position that is being displayed.

If a top game is being played on the chess server and lots of viewers are using Let's Check, then when the game is over it is available in full in the LiveBook with relatively deep engine analyses.

Anyone can add his own moves to the LiveBook, sensible or not. Just like a human

brain the LiveBook forgets unimportant material after a while, i.e. information that is rarely updated.

When the engine is running additional information can be found in the engine window when the Let's Check function is active.

Infoboards in the LiveBook
In the LiveBook tab there are two miniature boards.
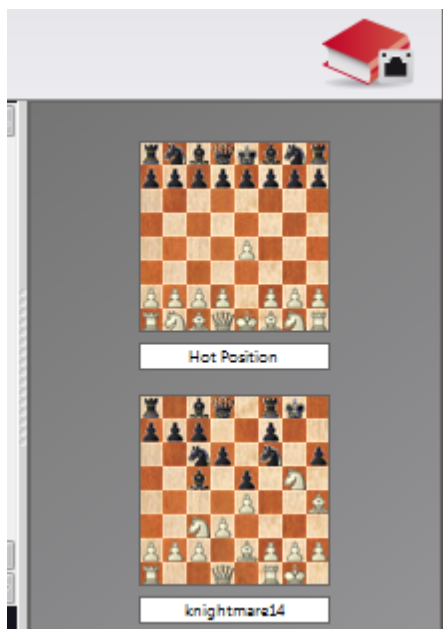
The left or upper mini-board shows the position which is currently being accessed the most. The right or lower mini-board explains the current chat. If it says, for instance, "DerAmateur has won a position"", the position is displayed. Clicking on a line in the chat window displays the position. Clicking on the board copies the position.

3.5.16.3 Start Let`s Check

Click on the large blue right arrow in the engine window to start Let's Check.
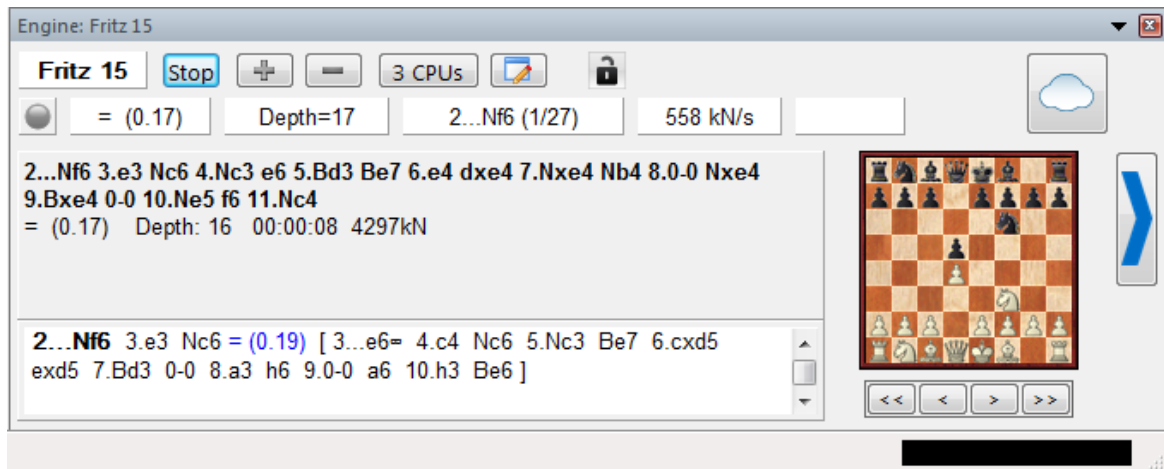
Alternatively you can start the analysis with the *menu Engine - Let's Check*.

Click on *Settings* to enter login details for the chess server to add your name to your analysis.
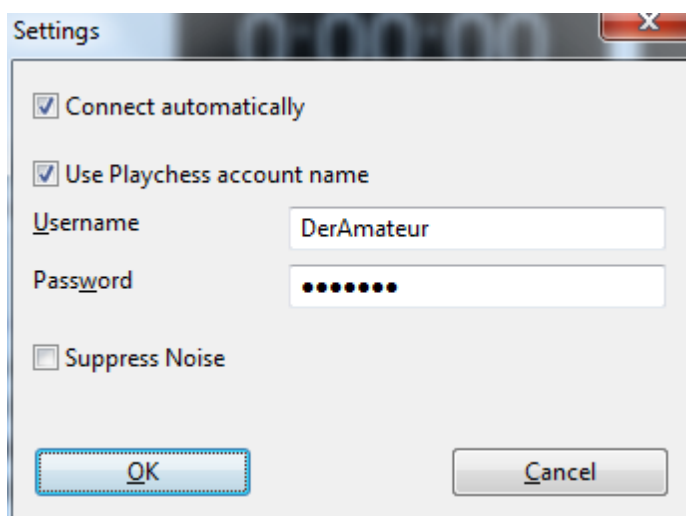
To work privately click on "*Disconnect*". When the connection button is green you are connected with the server. See also ...
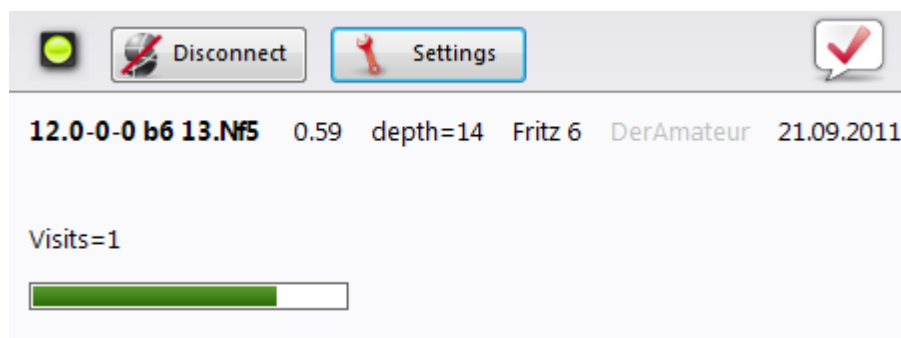
Whoever saves a variation in Let's Check can have his name added to it. If a variation is replaced by a deeper analysis the name is replaced with that of the other person. Up to three variations are allowed for each position. Whoever is the first to analyse a position sufficiently deeply becomes the positions "Discoverer". His name is always connected to the position, even if other users later add deeper variations.

You win a variation if you replace the second or third variation in the list of three variations. You win a position if you replace the first variation in the list. The first variation is not deleted, it just drops down to the second place.

The creation date of the variation is displayed next to the discoverer's name.

The value next to the national flag shows how often a variation was confirmed. The higher this number is, the more trustworthy the information is.
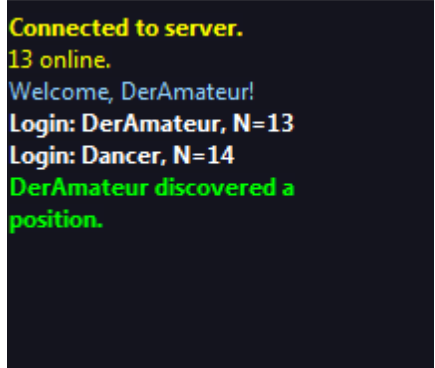
The window also displays whether the position is standard openings theory (main), the number of visits and the main variation.
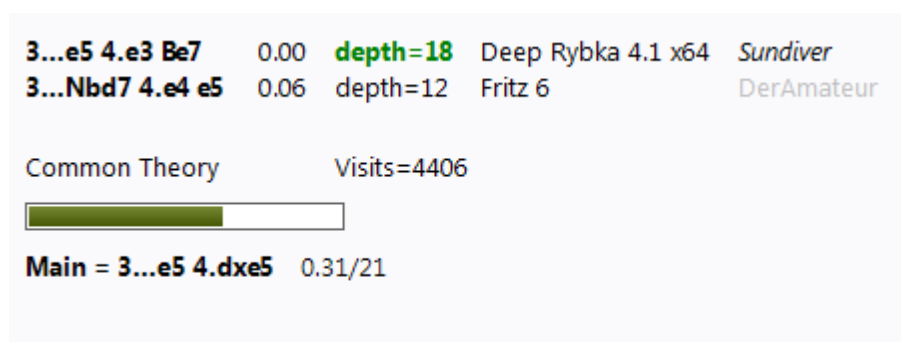
Progress Bar

Deep analyses are very valuable. The progress bar shows roughly how long it will be until the position has been analysed enough for your name to be added to the book.

As soon as the analysis has been accepted this is displayed in the chat window.

Note: Apart from the already known openings theory every position in chess can be "discovered".

There is an honour list for those who have won positions, i.e. who have named positions. A win is more valuable the more often a position was visited and the deeper the previous variation was. It is also possible to use Let's Check anonymously without adding your name.

Discovering a position

More calculation time is needed to "discover" a position than for standard analysis. The green progress bar jumps back slightly when the next step is displayed.

The system has three levels:

1. Fast calculation (black display)

2. Deep calculation (green display)

3. Very deep calculation (Discoverer, only the first)

Deeper calculations can overwrite the variation, but the name of the person who discovered the position remains. The window also shows whether the position is part of common chess theory, the number of visits, the main line and the depth.

The entry "**My Line**" has to do with the variation that has been discovered (3 half moves) and is currently being displayed in the Let's Check window. The position's discoverer is stored separately and has nothing to do with this information.

The evaluation of the analysis is also displayed.

3.5.16.4 How should a game be analysed with Let's Check?

A deep analysis that would normally last over an hour can now be carried out in a few minutes.
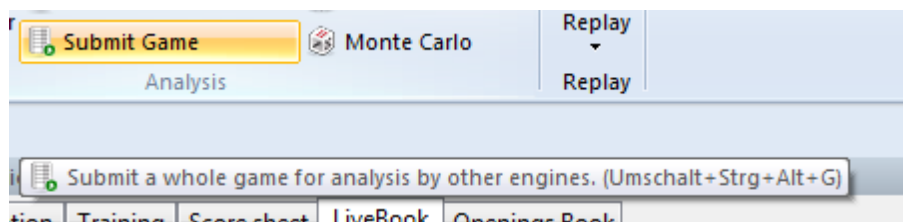
The condition for this is that you have already won enough analysis credits by contributing your own engine. The credits system achieves a balance between giving and taking analysis power. For every position that you analyse while contributing your engine you win 1 credit. If you analyse a complete game you win about 1.3 credits per position. This difference is to benefit the server's own interests.

As far as the analysis is concerned it is relatively uninteresting that the evaluations come from different engines. On the one hand today's top programs are so similar that you almost long for a different variation. On the other hand it has no chess value to trust differences of 1/100 pawn values. Engine analyses are subjective because they have been tuned in games of machine against machine. They should only be used as guidelines in non-tactical positions.

How can I access the results of a game I've submitted all at once?

In the chat window of the Live Book you can see how many positions have already been analysed. The first results usually arrive after about a minute. As soon as the game is finished select *Let s Check Analysis* in the Analysis tab and click "Add".

All the calculated variations will be inserted in the game notation.
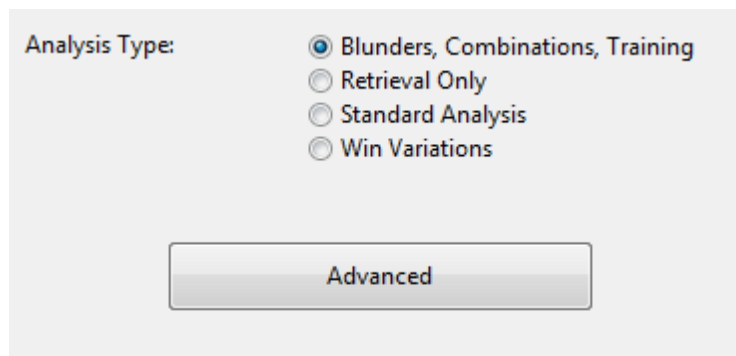
This access of variations is very practical after live games broadcast on the chess server have finished. Games being watched by many viewers are usually available immediately after the game with deep analysis.

3.5.16.5 What do the green, blue and red letters for the depth mean?

Let's Check recognises three levels of evaluation depth. The "green level" is the lowest and needs about a minute of calculation on a modern computer with a deep engine. Evaluations below this level are ignored when choosing a main line.
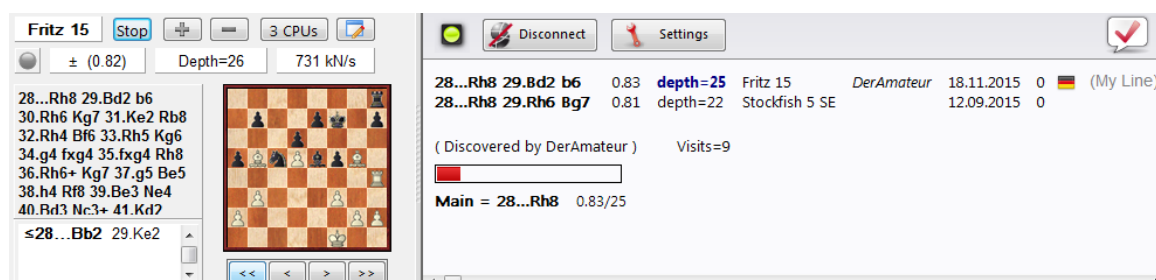
The "blue level" is the depth that is needed to discover a position. The "red level" leads to the message "Deep Analysis" in the Chat window. On a modern computer with four processors this can last up to an hour.

3.5.16.6 Why does the progress bar often jump back after reaching 100%?

The progress bar shows how far you are from reaching the next goal.
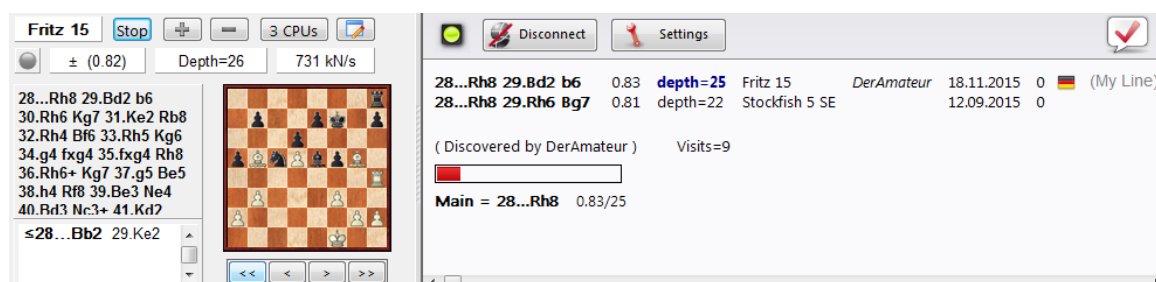
This can be the depth to win a variation. As soon as this has been achieved the progress bar shows the time needed to win the next variation.

When there is nothing left to win the depth goals for a position have been reached and the message "Deep Analysis" appears in the Chat window of the Live Book window.

3.5.16.7 Let's Check Server Statistics

You can view the statistical information in _real time_ at any time.

3.5.16.8 Let's Check context menu

Right clicking in the Let's Check window opens a context menu with various functions:
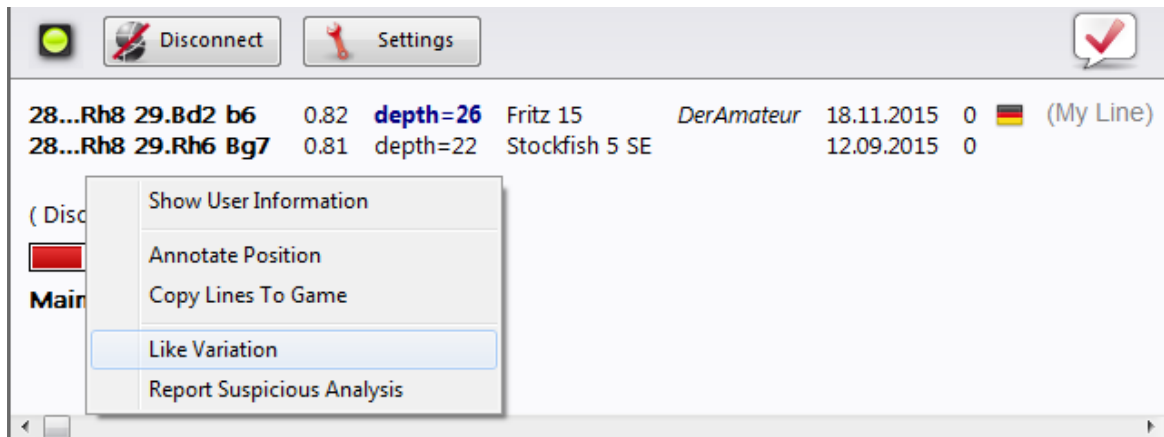
Show User information: This displays information about the user whose analyses have been sent to the Live Book. This is only possible if he has a user name on the Playchess.com server. In the dialog window there is a section containing the statistics. This shows the number of points the user has, and the number of variations he has won. The number of points depends on the value of the positions that have been analysed. The window only contains the total points reached. The number of variations is a number that can change at any time, if another user stores a deeper analysis for this variation. The window also shows how many Likes the user's lines and comments have been given by other users.

Annotate Position: This inserts the analysis of other users into the game notation. Right click in the Let's Check window and then click on "Annotate Position". This copies the analyses from the Let's Check database nested up to four levels deep. Only variations are used that have at least a "green level".

After clicking on the function the evaluation is copied into the notation.

Copy lines to notation: This copies all existing variations (not just the selected variations) into the notation.

The following is an example of copying lines into the notation:

What does "Engine/Game Correlation" mean at the top of the notation after the Let's Check analysis?
This value shows the relation between the moves made in the game and those suggested by the engines. This correlation isn't a sign of computer cheating, because strong players can reach high values in tactically simple games. There are historic games in which the correlation is above 70%. Only low values say anything, because these are sufficient to disprove the illegal use of computers in a game. Among the top 10 grandmasters it is usual to find they win their games with a correlation value of more than 50%. Even if different chess programs agree in suggesting the same variation for a position, it does not mean that these must be the best moves. The current record for the highest correlation (October 13th 2011) is 98% in the game Feller-Sethuraman, Paris Championship 2010. This precision is apparent in Feller's other games in this tournament and results in an Elo performance of 2859 that made him the

clear winner.

Like Variation/Report Suspicious Analysis: These functions send a report about the evaluation of the selected variation to the server. This is also displayed in the Chat window of the Live Book.

3.5.16.9 Information in the Chat window
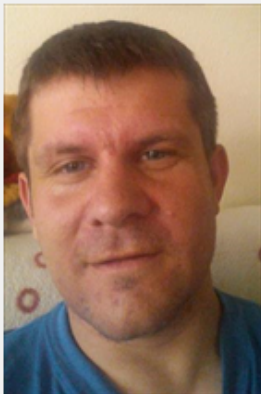
In the Live Book's Chat window you can see important information from the server.

New comments are displayed, and users are also displayed who discover a position or win a variation.

There is also a context menu for the Chat window.

Show User Information: This displays detailed information about the user whose engine analysis was entered into the Live Book.

The number of points, the number of variations and the ratings are displayed. The number of points depends on the value of the positions that have been analysed. The window only contains the total points reached. The number of variations is a number that can change at any time, if another user stores a deeper analysis for this variation. The window also shows how many Likes the user's lines and comments have been given by other users.

Clear: This empties the contents of the Chat window.

Don't scroll: This freezes the Chat window in its current position.

Font: You can choose a different text font to display the text in the Chat window.

Important information in the Chat window

Warning: N variations = 3
This message appears when the user is running his chess engine in multi-line mode. This results in an analysis which isn't as deep and is of less value for Let's Check, since it profits from analysis that is as deep as possible.

Information about variations that have been won
Variations can be both discovered and conquered (won). In the Chat window it is often stated that a variation has been won. What is the meaning of the name of the user that is in brackets?

This message tells us that the the other user has sent a deeper analysis to the server that has replaced the variation previously sent.

Information Deep Analysis

"Deep Analysis" goes one step further than discovery, and means that the user has made an extremely deep analysis.

The user also receives bonus points for the ranking list as described.

3.5.16.10 Commentaries in the LiveBook

The evaluations in Let's Check come exclusively from chess programs. Every position in the LiveBook can be given a text commentary in any language with a maximum length of 139 characters.

Other users can rate these commentaries with either "**Like**" or "**Don't Like**". Commentators who are often praised are weighted more and their texts are moved to the top.

Texts are only allowed that have to do with the chess content of the current position and do not contravene the copyrights of other authors. Anyone who breaks these rules will be ejected without a warning.

Use: Depending on the size of the LiveBook window the text entry field is at the right or at the bottom. Clicking on "*Write*" opens the input dialog.

Clicking on a flag selects the language.

Please write only comments related to the current position.
Please respect the copyright of other authors.

Type your comment here

The commentary can be deleted or edited until someone else rates it.

Tip: Clicking on a commentary opens it in a preview window to make it better to read.

Text

"He must come through this hollow way, no other path leads to Küssnacht" - Friedrich Schiller
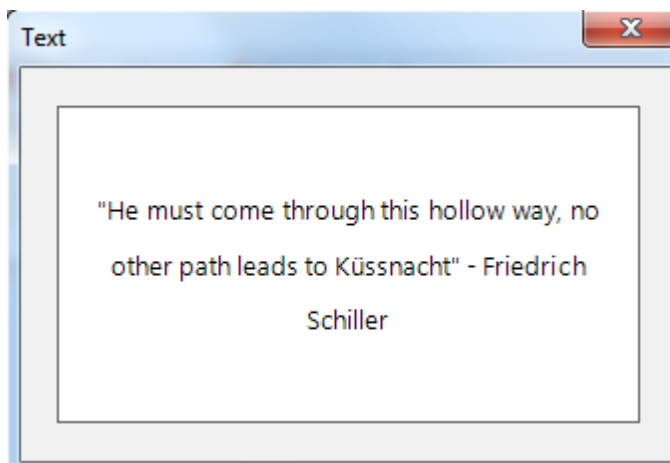
The commentary is now displayed clearly in a commentary window.

You can add your own text comment to the Live Book, if the position has <u>not yet been processed</u>, using the menu "Write".

3.5.16.11 Using the LiveBook as the Openings Book

The LiveBook has not been created only as a source of information. It can also be used as an openings book in games played against the chess program.

Start a new game by typing **Ctrl-N**.

Activate the tab "Openings Book" and select the option "LiveBook".

Play the first move. The chess program answers automatically, and because of the

fast server the opening moves are played without any delays.

Move	Games	Result	Elo-Av	Date	Evaluation	Visits	[%]
1.e4	727746	54%	2422	2015-Nov-18	=	16713904	48
1.d4	591318	55%	2440	2015-Nov-18	=	10557850	30
1.Nf3**	167691	55%	2437	2015-Nov-18	=	2747705	8
1.c4	114302	56%	2440	2015-Nov-18	=	2440048	7
1.g3	14090	55%	2426	2015-Nov-18	=	352321	1
1.b3	5797	53%	2413	2015-Nov-16	=	213994	1

Text	Author	Likes	Dislikes
White is better	ÈOPI	13	8
"Die Grundstellung ist remis" (Kasparov)	DarthVader	34	7
Der gute Spieler hat immer Glück(José Raul Capablan..	Messi im Scha..	7	1
Gegen Sie hier einen Kommentar ein...	Voodoo Chile	1	4
How do you reactivate this mess	lucky12	4	5
A blank canvas---Let's put some art on it!	Anhao	2	3
Das ist die schwierigste Stellung von allen.	sir66	5	3
Friedlicher wird die Position nie mehr sein!	Radost	15	5
Schach wurde bereits von mir gelöst! Bei perfektem S..	CNC-Fräser	3	3
Esto me suena... ¿Qué era lo que había que jugar aquí?	Salvamento	8	7

Write   Edit   Delete   Like   Report

Since the LiveBook is based on an enormous online database the the computer analysis of many users the program is working with the optimum theoretical conditions in the opening phase.

Tip: If an openings book is also available on the hard disk this can be directly compared with the statistics of the current state of the LiveBook. Click on the tab "Openings Book" and adjust the playing possibility of the book on the hard disk.

Openings Book							
	N	%	Av	Perf	Fact	Pr..	[%]
Fritz13	9203	55.8	2589	2636			
6.Be3	2785	56.9	2607	2652	0	25.2	24.3
6.Bg5	1989	56.7	2577	2641	0	19.8	19.3
6.Be2	1756	53.9	2589	2625	0	16.4	16.2
6.Bc4	706	53.7	2532	2587	0	8.7	9.0
6.f4	657	56.1	2558	2621	0	8.7	9.0
6.f3	504	57.5	2616	2657	0	7.7	8.1
6.g3	320	54.2	2584	2621	0	5.0	5.6
6.a4	229	54.1	2595	2621	0	3.7	4.4
6.h3	191	54.7	2616	2643	0	3.4	4.0
6.Bd3?	28	62.5	2609	2676	0	1.0	0
6.Rg1?	27	46.3	2606	2609	0	0.3	0
6.a3?	4	50.0	2631	2592	0	0	0
6.Qf3?	4	62.5	2622	2629	0	0	0
6.Qe2?	4	12.5	2538	2409	0	0	0
6.Nb3?	1	100.0	2644	2818	0	0	0
6.Qd3?	0	-	-		0	0	0
6.Nde2?	0	-	-		0	0	0
6.Nf3?	0	-	-		0	0	0

Notation + Openings Book

Notation | Training | Score sheet | **LiveBook**

Disconnect | Settings | Shop

Move	Games	Result	Elo-Av	Date	Evaluation	Visits	[%]
6.Bg5	11836	51%	2418	2015-Nov-18	=	447127	17
6.Be2	9871	52%	2436	2015-Nov-18	=	287864	11
6.Bc4	5200	48%	2398	2015-Nov-17	=	154874	6
6.f4	3397	51%	2427	2015-Nov-15	=	59128	2
6.f3	2690	55%	2452	2015-Nov-18	=	182753	7
6.g3	2044	52%	2432	2015-Nov-18	=	69637	3
6.h3	2028	55%	2460	2015-Nov-18	=	161177	6
6.a4	1360	53%	2450	2015-Nov-14	=	35185	1
6.Bd3	231	48%	2421	2015-Okt-19	=	20159	1
6.Rg1	215	53%	2409	2015-Okt	=	9401	0
6.Qf3	171	51%	2405	2015-Nov-9	=	7888	0
6.Qe2	44	60%	2422	2015-Mai	=	3124	0
6.Qd3	36	53%	2494	2015-Okt	=	4223	0
6.a3	21	48%	2500	2015-Mai	=	3230	0
6.Nb3	20	43%	2346	2015-Nov-16	=	2166	0
6.h4	3	33%	2414	2015-Okt	=	433	0

The LiveBook is based on an enormous online database and the computer analyses of other users. This means the program is playing with the optimum theoretical conditions in the opening phase.

If an openings book is also available on the hard disk this can be directly compared with the statistics of the current state of the LiveBook. Click on the tab "***Openings Book***" and adjust the playing possibility of the book on the hard disk.

3.5.16.12 Networked Analysis

Whoever wants to easily climb up the Let's Check Honour List should temporarily "contribute" his engine to the community. The system thinks like one global worldwide chess brain about positions that seem to be interesting to people at the moment, or which may become interesting soon. If you have logged into the Let's Check server the positions may be conquered by you or even discovered for the first time

Tab Engine - Contribute Engine

Contribute Engine | Lists Of Honour | Use LiveBook | Submit Position | Open Positions | Engine Match | Tournament | Process Test Set | Chess Benchmar...

Let's Check | Testing

The server may send you positions for analysis, you can interrupt any time.
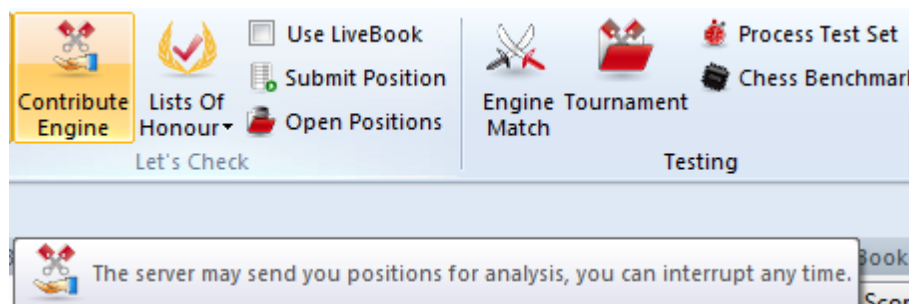
After this function has been started the engine that the user has "contributed" is used for the analysis of positions that are picked by the server. The server chooses positions based on different criteria, such as their current interest. By using "Contribute Engine" you are aiding in the creation of an online book for other users.

It is possible to abort this function at any time. You can do this by closing the window, starting a new game, or by clicking on the "*Contribute Engine*" button a second time.

It is also possible to suggest positions for analysis. These positions are presented to the „contributed" engines. Whoever contributes an engine collects „credits". If your credits account is in the plus positions that you suggest for analysis are treated with a high priority, and they are chosen sooner, Even if you have overdrawn your credits account you can suggest any number of positions, but they will be put at the end of the queue and may even expire before it's their turn.

3.5.16.13 Game analysis with Let's Check

Menu Analysis - Let's Check Analysis
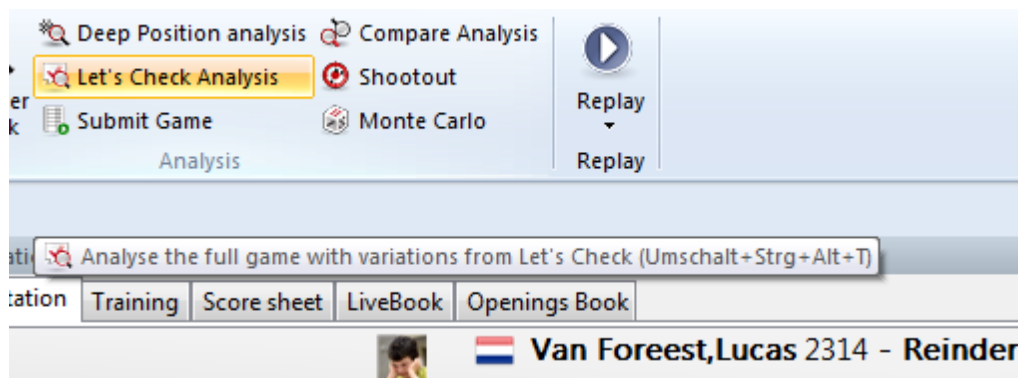
Let's Check can quickly comment a game with engine variations. If all the positions are already known the full analysis only lasts a few seconds. Blunders are marked with question marks, the best known moves are marked with exclamation marks.

There are different types of analysis:
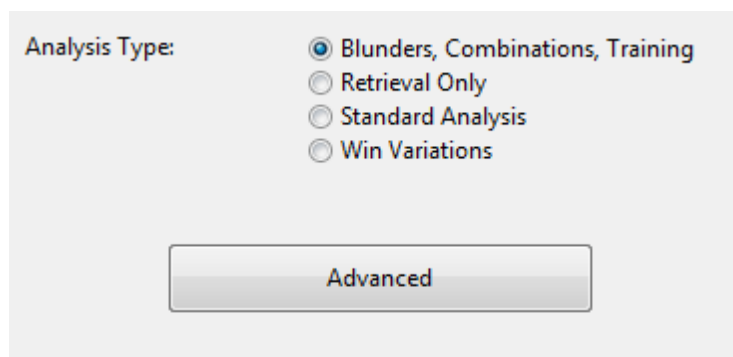
Blunders,Combinations,Training analyse for those criterias

"**Retrieval Only**" just fetches known variations from the server and does not make any calculations.

"**Standard Analysis**" analyses until the minimum depth is reached to enter a person's name. If a variation with this depth already exists no calculations are made.

"**Win variations**" calculates until at least one variation has been won.

The *minimum and maximum* calculation time per move limit the calculation time.

Tips:

a) After an important live game deep analyses are probably already available for the whole game.

b) If you analyse famous historical games using "Win variations" with a large minimum time it is possible that you will "discover" new positions.

3.5.16.14 Honours Lists

The program shows two rating lists for the usage of the online analysis.
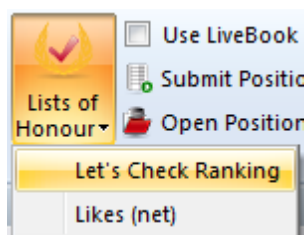
Weighted Rating List for Let's Check

User	Points
jeroen	242.46
mw working	184.79
Piper	99.34
frühlingstraum	95.24
Matthias	70.68
mw testing	63.27
Bertman	57.63
Christian Gorals	43.42
Sundiver	32.26
Ludwig	28.25

The rating list is based on the frequency of the engine analyses and the search depth.

"**Likes**" shows a list of the rated commentaries of a user.

User	Likes (net)
DarthVader	7
Supermichi	4
Radost	4
Michael Enderle	3
Salvamento	2
Kendo	2
Matthias	1
André	1

3.5.16.15 Speedindex

The speed index is a relative value. It is based on the speed of the computer used by one of our developers.

This value is relevant to the user because it gives an idea how long it will take to calculate a variation.

Main = 19.Rc2 Nd7 20.Rdc1 Rxc2 21.Rxc2 Nc5 22.Qxb4   0.72/30
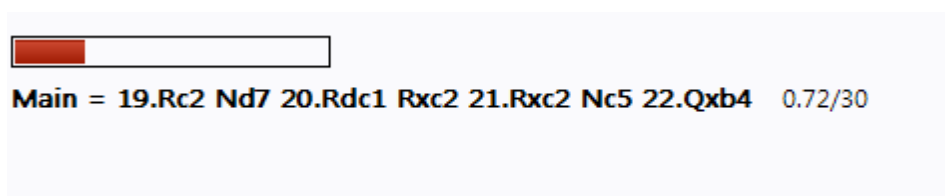
The lower the number is the longer it will take until a variation becomes green.

3.5.17 Common questions Let`s Check

3.5.17.1 Is my analysis always sent to Let's Check?

No. Clicking the button "Disconnect" breaks the connection and no more data is sent via the Internet.
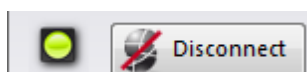
To do this the program must have been activated with a valid activation key.

When Let's Check is active engine analysis is sent to the database, and already existing analyses are received. All queries of a position are stored in the database and counted as "visits". No other data is sent, and no complete games.

If information has been sent it means the user has entered this move notation with the Let's Check feature running.

3.5.17.2 Can Let's Check be used anonymously?

Let's Check can be used without logging into a Playchess.com account.

In this case you will receive no information about who analysed which position.

3.5.17.3 What does it cost?

The use of Let's Check is included in the price of the program. It is guaranteed that the program will support this feature until the end of 2016.

3.5.17.4 What difference does the power of my computer make?

The program regularly performs speed checks on your computer. Fast computers are at an advantage. By contributing your engine you can process more positions in the same time and win "credits".

Deep engines also have a strong advantage. Analysing in multi-variation mode needs more time. If you log into your Playchess.com account your "speed index" will be displayed in the Chat window.

3.5.17.5 What engines are allowed?

Every engine that can be used in the User interface can be used for Let's Check.
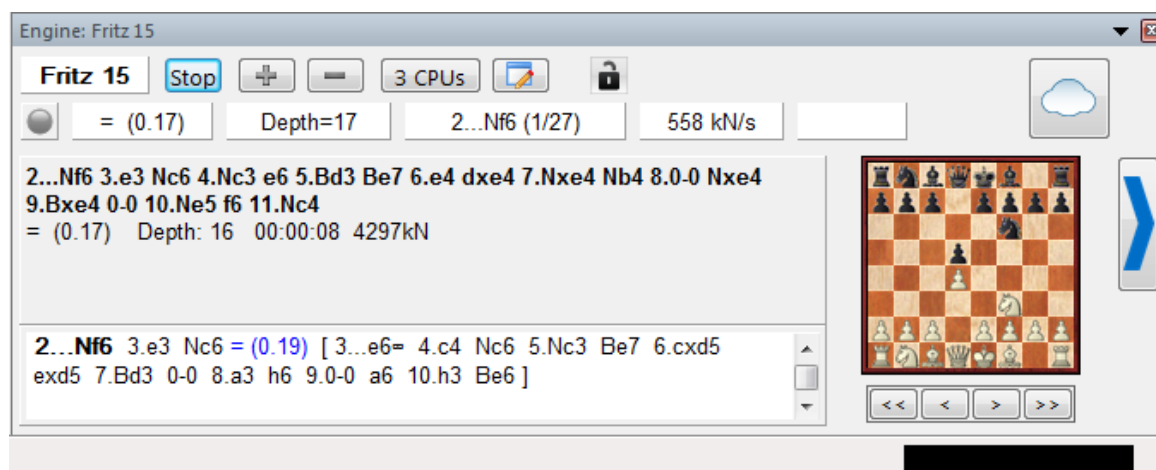
3.5.17.6 Can variations and evaluations be manipulated?

Since Let's Check is open for all engines it is possible that old, bad or manipulated engines can be used. Destructive content is always possible whenever people can share content in any form of online community.

The hardware power and the processing time of variations play a role, so it will be difficult to falsify an analysis even if an engine has reported having made the deepest analysis.

In the Let's Check window we also see how often a variation has been verified by other users. The system cleans itself, and so unverified variations and the obsolete

evaluations of older engines will disappear with time.

3.5.17.7 Can senseless moves be input and analysed?

All <u>legal positions and moves</u> are valid for analysis. Rarely visited moves without deep analysis expire after a while.

If you don't want to see any senseless moves you should check the option "*Hide rare moves*".

3.5.17.8 How are the Let's Check honours lists created?

Points are awarded for winning a variation. The number of points depends on the popularity of the position and the time spent calculating it. The starting position is the most valuable position because it is visited the most. If you lose a variation to someone else you lose some of the points you were awarded for winning this variation, so your points can fall when you are not active.

3.5.17.9 What do the two diagrams in the LiveBook window mean?

The left (or upper) diagram shows the most popular position, i.e. the position that is being analysed by the most visitors. The right (or lower) diagram shows positions that have been reported as discovered or won in the Chat window.
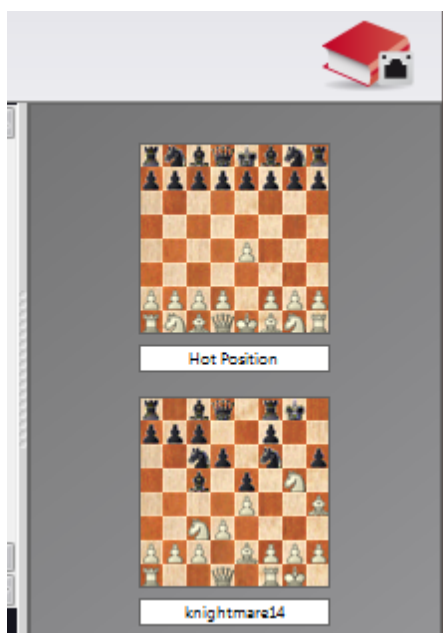
Clicking on a won/discovered message in the Chat windows displays this position. This position can be copied into the main board (Home - Paste Position). Then the moves of the variation can be played backwards, if they are known to the system.

If the first move of the engine variation leads to a position which also has a deeply analysed engine move this is added to the "main line". This is repeated until no more positions are found or a length of 10 half moves is reached.

3.5.17.10 Can a text commentary be edited or deleted?
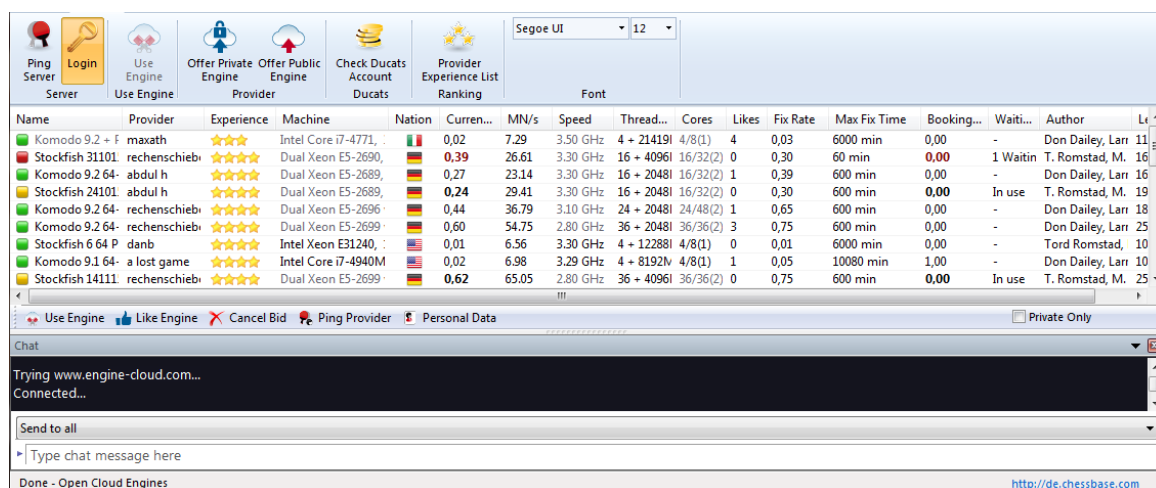
You can edit or delete your own comments until someone else clicks "Like" or "Dislike". Comments can be changed by right clicking on them.

Administrators can correct spelling mistakes or delete comments if they violate copyrights or do not make a chess-related comment on the position. Copyright is deemed to to have been violated if comments are taken from a source that exceed the amount of usually accepted quoting.

3.5.18 Engine-Cloud.com

3.5.18.1 Server Engine-Cloud.com

The new server *Engine-Cloud.com* offers a groundbreaking innovation for analysis with chess engines. It is possible to use the Internet to access chess engines that are running on <u>other computers</u> and use them for <u>your own analysis</u>. *Engine Cloud* is ideal for people who have several computers and would like to combine them for detailed analysis. It is also possible to run an engine on your computer and offer it to other users in the Cloud.

- Increase the quality of your analysis by using different chess engines on different computers, combining the results in a single board window. That is just as comfortable as if you were running the engines locally on your own computer.

- If you own several computers you can use them with Engine Cloud to create a single analysis. When you do this you have all the ressources of the available hardware and software at your fingertips.

- It is possible to remotely access an office computer and use its chess engines in the Interface as if they were stored on your own computer.

- This system offers many advantages to tournament players. They can travel to a tournament with a relatively weak notebook. In between rounds they can use Engine Cloud to analyse positions with the more powerful computers that they have at home.

- Chess engines are extreme applications that demand a computer's complete power.

This means that a lot of energy is needed. If you work with a notebook a lot you can use the computing power of other computers to prolong the life of your battery and still use the maximum power for analysis. Another advantage is that the fan doesn't have to be used so much, so the computer runs more quietly during the analysis.

- Powerful computers cost a lot of money. By using Engine Cloud you can pay a small fee to use top engines running on extremely powerful hardware. You can decide for yourself how often you want to use these ressources, so you don't have to invest a lot of money in expensive hardware to make first class analyses.

- For complex analyses you can access several machines at the same time as kibitzers, each running with full power.

- If you own fast hardware and top engines you can use Engine Cloud to offer your ressources to other users for a small fee.

- You can use Cloud Engines to do anything that you would use local machines for, such as analysis, engine matches, or for games in the the Engine Room at Playchess. com.

3.5.18.2 List View

After logging into Engine Cloud with your *Playchess.com account* details you see the start up screen of the server.
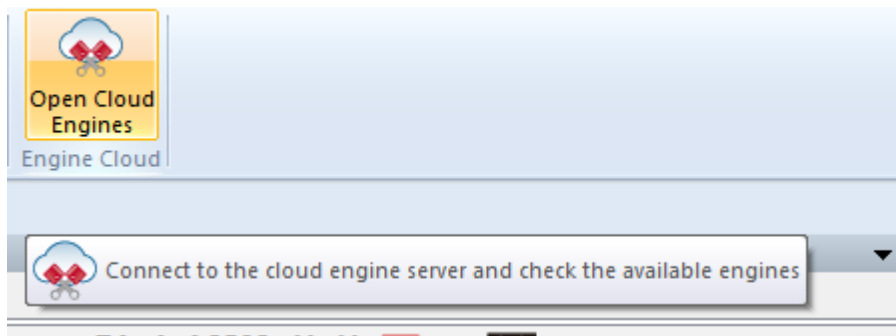
Here you can offer engines, and you can see a list of the Cloud engines offered by other people.

The list is ordered into columns. By right clicking on a column header you can configure the list to your own requirements.

The following information is offered in the columns of the List View.

Name	The name of the engine that is being offered.
Provider	The name of the Playchess.com user. You can right click on a column and click on Show User Information.
Experience	The experience rating of the user. It is based on the usage of the engine, the number of different users, the number of Likes, and the amount of ducats that have been earned. You can see also the quality of the Internet connection.
Machine	The hardware configuration of the computer being offered.
Nation	The nationality of the provider.
Threads + Hash	The number of processes that are used by the engine, followed by

the size of the hash tables.

Cores	The number of cores and threads that are being supplied by the provider. The example shows that 4 cores with 8 threads are being offered in 1 processor.
MN/s	The performance of the Clound Engine in meganodes per second.
Likes	The number of positive ratings of the user configuration.
Current Rate	The price per minute for the use of the engine, as decided by the user.
Fixed Rate	The fixed price per minute, as decided by the provider.
Max Fixed Time	The time limit for the use of the engine at the Fixed Rate. At the end of this time the user can be outbid.
Booking Fee	The one time booking fee, which is independent of the time used.
Waiting	The number of users that are waiting to use the engine, in the order of their offer for using the engine.
Author	The name of the developer of the chess engine.
Let`s Check	The speed index for the access on the Let's Check server. The higher the index is, the faster green entries appear in Let's Check.

Some information in the list are displayed in different fonts and colours.

Name	Provider	Experience	Machine	Nation	Curren...	MN/s
🟥 Stockfish 31101	rechenschieb	⭐⭐⭐⭐	Dual Xeon E5-2690,	🇩🇪	0,39	26.61
🟩 Komodo 9.2 64-	abdul h	⭐⭐⭐⭐	Dual Xeon E5-2689,	🇩🇪	0,27	23.14
🟨 Stockfish 24101	abdul h	⭐⭐⭐⭐	Dual Xeon E5-2689,	🇩🇪	0,24	29.41
🟩 Komodo 9.2 64-	rechenschieb	⭐⭐⭐⭐	Dual Xeon E5-2696	🇩🇪	0,44	36.79
🟩 Komodo 9.2 64-	rechenschieb	⭐⭐⭐⭐	Dual Xeon E5-2699	🇩🇪	0,60	54.75
🟩 Stockfish 6 64 P	danb	⭐⭐⭐⭐	Intel Xeon E31240,	🇺🇸	0,01	6.56

If you are using a Cloud engine yourself it is displayed in green and underlined. In this example the engine „Houdini" is being used for analysis.

If an engine is only available for private use it is displayed in the list in blue.

🟩 Fritz 10	deramateur	⭐	Intel Core2 Duo E8400

The colour of an engine changes to red when an offer has been made for an engine.

This happens when there are several offers for an engine and there is a waiting list.

Waiting
In use
In use
-
-
In use
1 Waiting
In use
-

If your offer is not the highest the engine will be loaded when the other users have stopped using it. This way of using Cloud engines is useful if you are not at your computer all the time and you want to limit the costs.

If the hardware configuration of a provider changes the text in the Machine column changes to light grey.

Experience	Machine	Nation	Curren...	MN/s
★★★★	Dual Xeon E5-2690,	🇩🇪	0,39	26.61
★★★★	Dual Xeon E5-2689,	🇩🇪	0,27	23.14
★★★★	Dual Xeon E5-2689,	🇩🇪	0,24	29.41
★★★★	Dual Xeon E5-2696 ·	🇩🇪	0,44	36.79
★★★★	Dual Xeon E5-2699 ·	🇩🇪	0,60	54.75
★★★★	Intel Xeon E31240, :	🇺🇸	0,01	6.56
★★★★	Intel Core i7-4940M	🇺🇸	0,02	6.98
★★★★	Dual Xeon E5-2699 ·	🇩🇪	0,59	65.05
★★★★	Intel Core i7-3930K	🇦🇹	0,05	17.39

There are various symbols to the left of the engine's name.

All engines marked with a green symbol ▢ can be used for analysis immediately, by double clicking on the engine's name

If a yellow symbol ▢ is used the engine is being used by someone else, but you can take control of the engine for your own analysis by offering a higher price

The engine name is displayed in red ▢ if there is a waiting list for the engine. A red symbol next to the name means that there is a fixed price per minute.

At the bottom of the List window there is a toolbar with commonly used functions.

▢ Use Engine   ⊕ Like Engine   ✗ Cancel Bid   🖧 Ping Provider   🅂 Personal Data
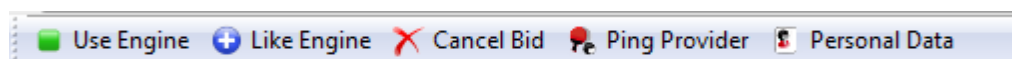
Use Engine	The engine is loaded that is selected in the list.
Like Engine	You can say that you like the engine.
Cancel Bid	This removes your bid from the waiting list.

Ping Provider   This measures the speed of the provider's Internet
connection.

Personal Data   This opens the provider's „Personal Data" menu.

3.5.18.3 Board window with provided engine

If you have made an engine publically available it is started in a separate board
window.
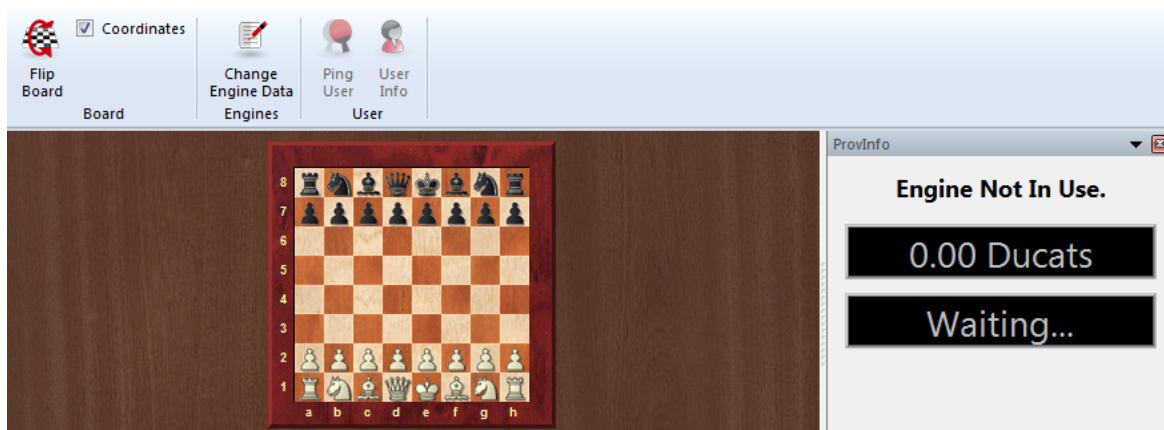
If someone is using the engine that you have provided this board window shows you
the position that the user is analysing with your engine. The window also shows you
information about the user, the time he has spent analysing, and the number of ducats
transferred.
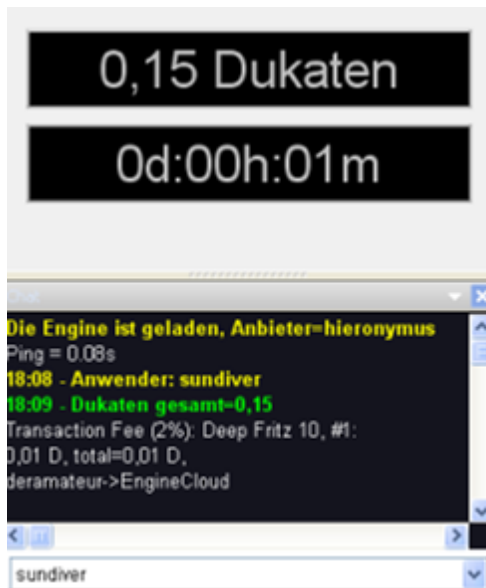
You can talk to the user in the chat window.
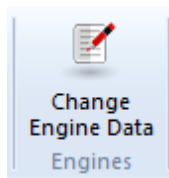
Change Engine Data offers the chance to change the conditions for an engine's use. If you close the window the engine is unloaded and is no longer available to be used.

3.5.18.4 Engine connection

After loading an engine for your own analyses by double clicking it and agreeing on payment a connection window is displayed for the cloud engine.
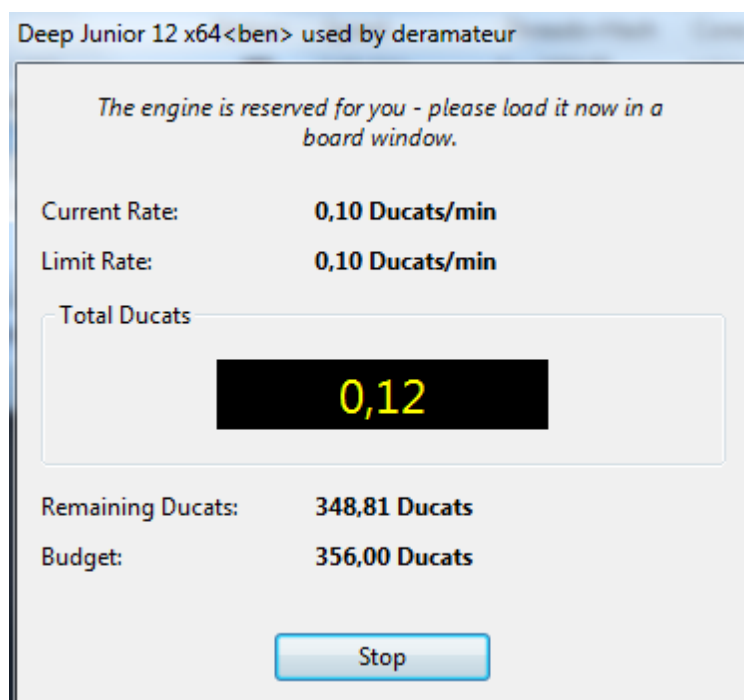
In this window you can see <u>the price for the use of the engine</u> and how much money <u>you have paid</u> for using the engine so far. Your account balance in ducats is also displayed.

3.5.18.5 Using a Cloud Engine privately

If you own <u>several computers</u> you can connect them with *Engine Cloud* and use them for a single analysis.

First you have to start the program on the computer on which the engine is installed. Click on the menu Engine – Open Cloud Engines.

Log on with the <u>user name of your Playchess.com account</u>. In the selection window pick the engine you want to use as a Cloud Engine and select the option „Offer private engine".
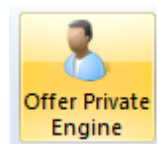
Now start Kommodo on the other computer that you want to use for the analysis, and select *Engine   Open Cloud Engines* again.

„
"

Log on with the same account as before. The engine that you have provided is displayed in the list in blue. If you only want to see the private engines in the dialog tick the box *Private Only* .

Double clicking an engine in the list opens the connection window, and the engine is now shown in the board window ready to be used for analysis or playing games.

3.5.18.6 Public Cloud Engines

In order to use the public Cloud Engines you would usually need a supply of Ducats. Ducats are the currency used on the server Playchess.com. They are used to pay for services such as private training, and they are also used to pay for the use of Cloud Engines.

Sometimes you can find users who offer their computer free of charge. These engines are marked as Free in the *Booking Fee* column, but there is the chance that another user will take this engine away from you by bidding ducats to use it.

You can buy ducats in the ChessBase online shop at www.chessbase.com.

In the column Name the available engines are displayed. If an engine is marked with a green point in front of the name it can be loaded immediately and can be used for your own analysis.
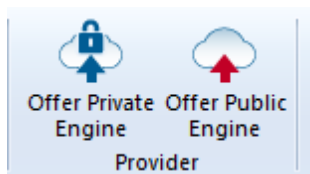
If you are offering an engine for public use you can define the conditions for its use in the Revenue menu.
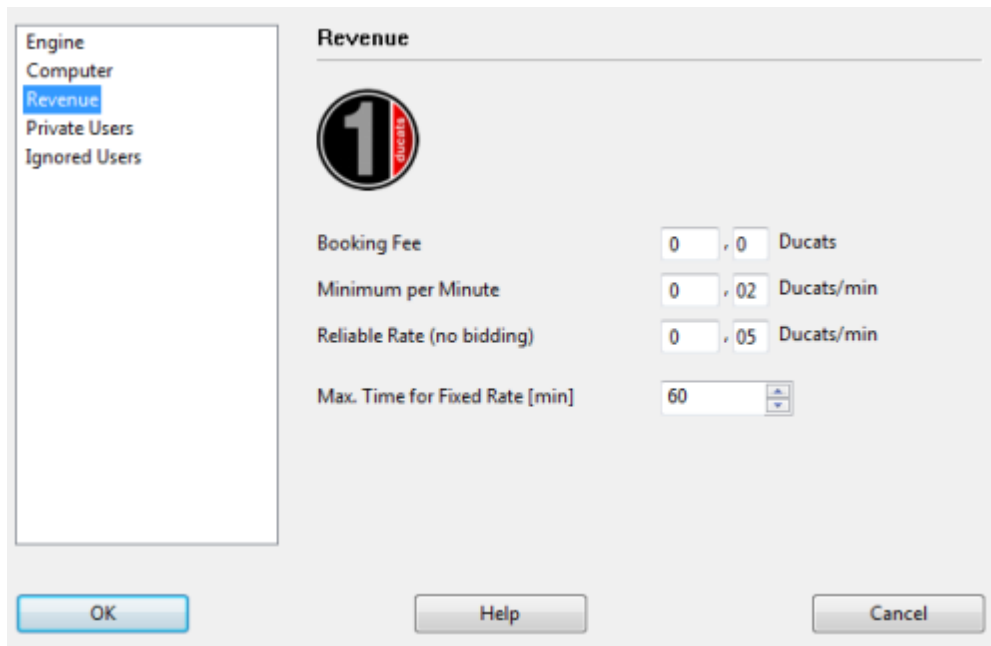
The **Booking Fee** is always charged when an engine is used. It is possible to set the value to zero.

The **Minimum per Minute** should be set to a low rate, but other users can offer a higher amount and take control of the Cloud Engine at any time. You can fix an upper limit for the offer, but only the existing rate is charged if no other user takes control of the engine. This setting is sensible if there is a low demand.

You can be certain of keeping an engine by booking it with the **Fixed Rate**. This rate is a bit higher than the standard rate, but other users are not allowed to outbid you and you are guaranteed control of the Cloud Engine. This is recommended if there is a high demand on the Engine Cloud Server. During the analysis the user never pays more than the price for one minute in advance. If you aren't satisfied with the results supplied by the engine you can stop the analysis. In this way you can try out many engines without risking a lot.

If a yellow symbol 🟨 is displayed to the left of an engine it is currently being used by another user. If you would like to use this engine you can attempt to outbid the user.

If an engine is being used a fee is added to the bid which is the same as the current price per minute. This is also the case if a bid is unsuccessful. This is to protect the user of an engine against destructive bids which are only intended to take an engine away from him. If a bid is unsuccesful the user is placed in a waiting list. This means that the bidder gains control of the engine automatically when the previous user no longer needs the engine. After an engine has been booked a new window opems with the current board position and the engine begins the analysis.

If there is a waiting list for an engine the engine's name is displayed in red.

If there is a red symbol 🔴 to the left of the engine's name the engine has been booked for a fixed price, the reliable rate per minute.

As already stated, an engine can be taken away from another user by offering a higher bid.
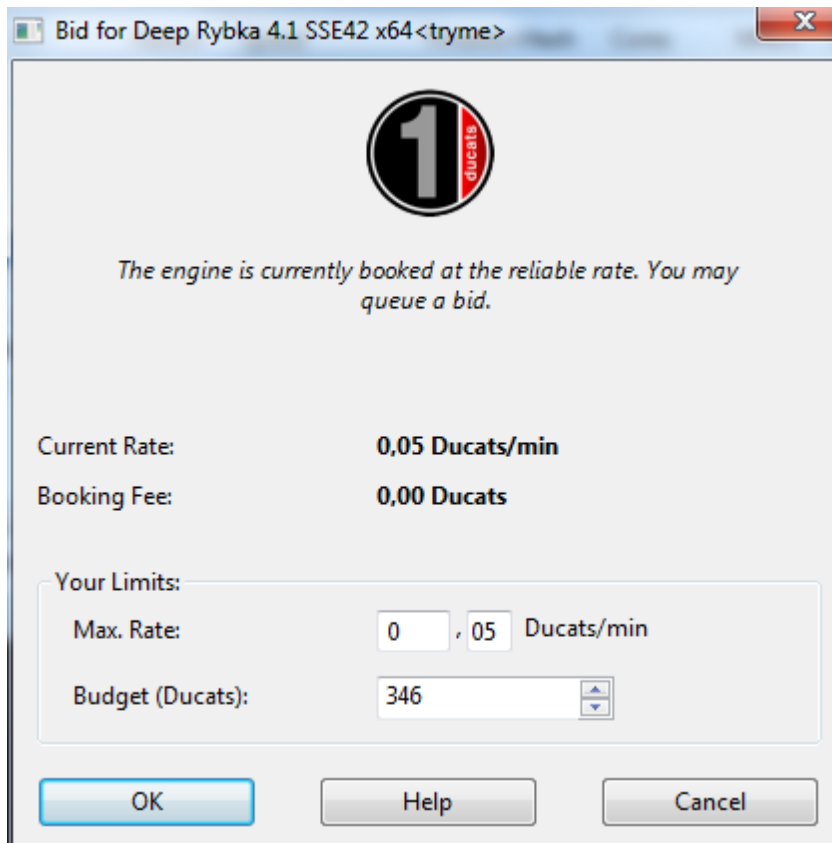
As soon as an engine changes hands a window opens that tells the user the <u>status of the engine</u>, the <u>bid</u> and the <u>ducat budget</u>.

By clicking on the button *Stop* the engine is halted immediately and the payments are stopped.

3.5.18.7 Offering a public Cloud Engine

Every chess engine that has the engine layout that was introduced in Fritz 11 can be offered as a Cloud Engine. These engines are easily recognisable, since they have the extension ***.engine**.

UCI engines can also be used as Cloud Engines. In the case of UCI engines **pay attention to the conditions of the license of the maker of the UCI Engine**! The

"
older chess engines can still be used in the GUI, but they are not accepted as Cloud Engines. Only the engines that can be used are displayed in the dialog window.

After the chess program has been started use the menu Engine – Open Cloud Engines.

The next step is to log into the server with your existing Playchess.com account details.
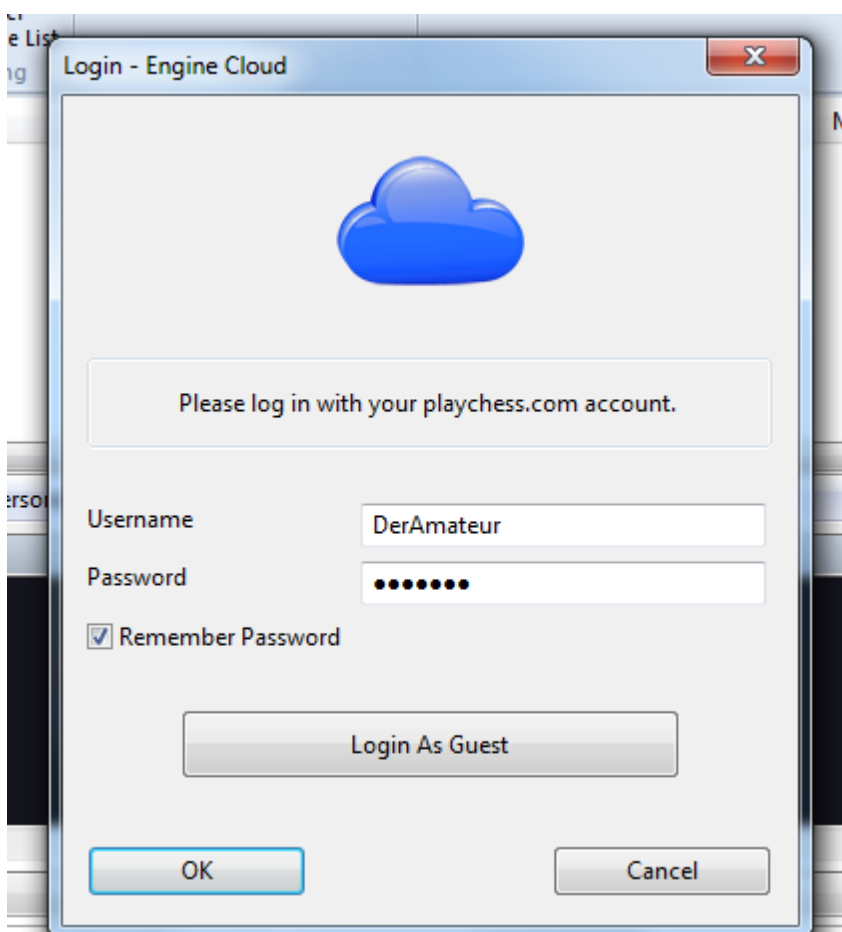
Note: If you log in as a *Guest* you can see the activities of the Cloud Engine server, but you cannot load an engine or take part in the analysis possibilities.

After you have connected to the server click the button *Offer Public Engine*.
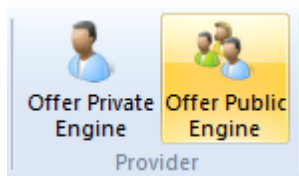
Select an engine from the Load Engine dialog and confirm the selection with OK.
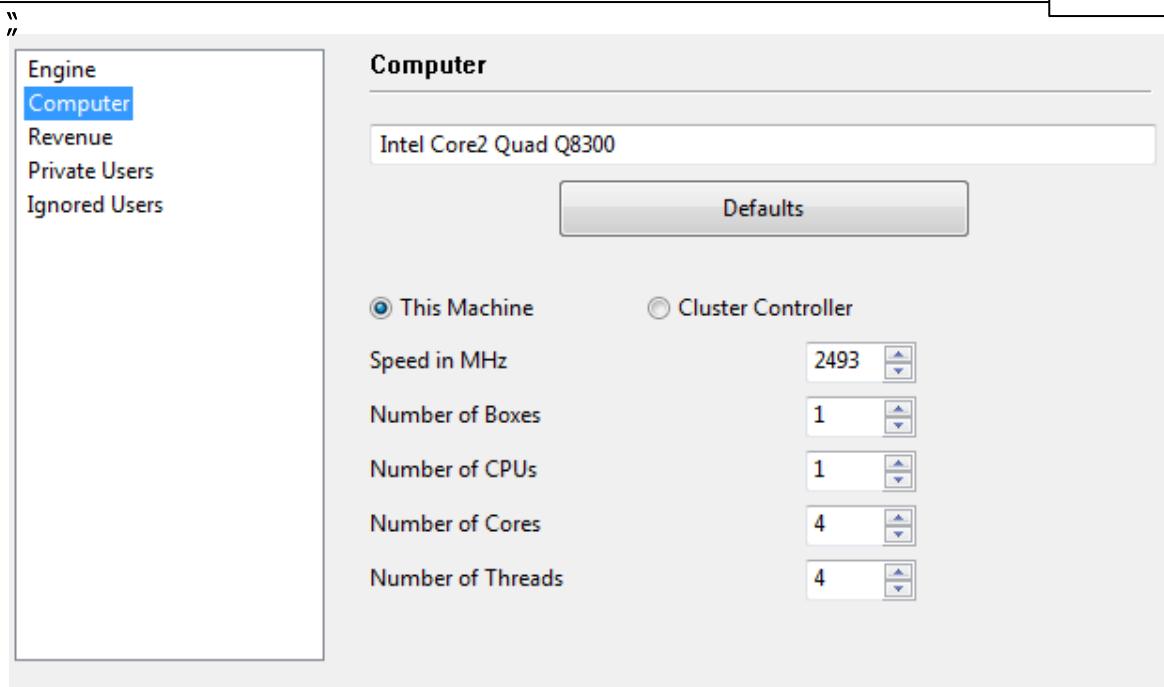
In the configuration dialog for the Cloud Engine you have selected there are the following options:

Engine

Here you can set the Informations for the used Chess engine.

Computer

"
"
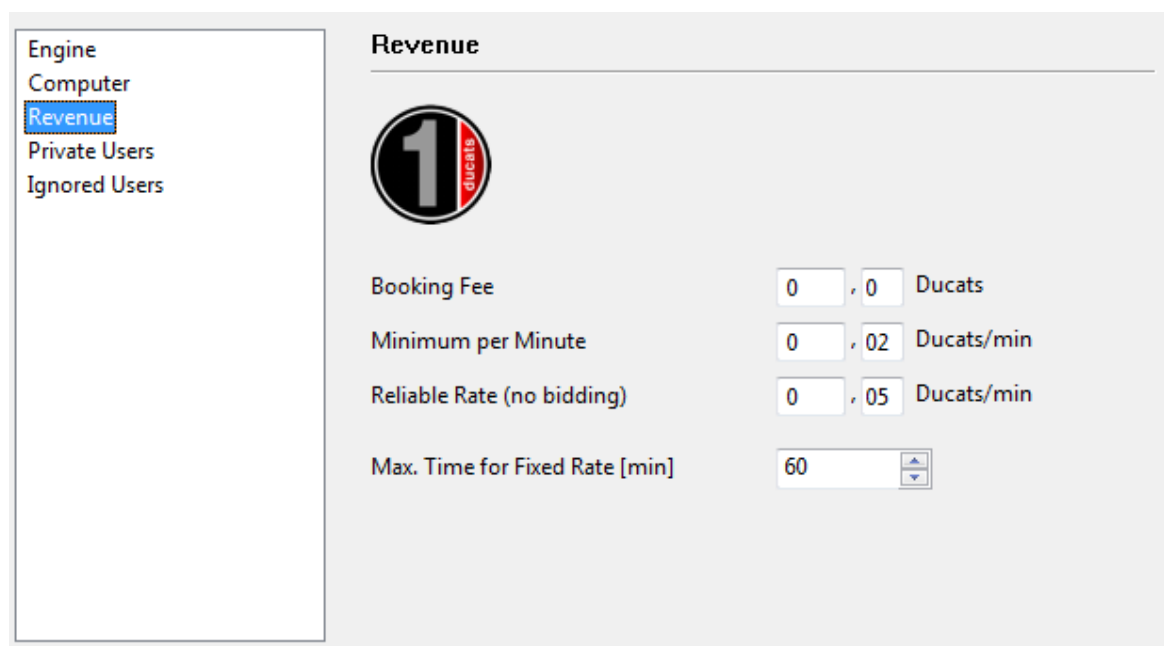
This defines the settings for the hardware ressources. *This Machine* copies the settings from the System Properties. By selecting *Cluster Controller* you can define your own settings for the ressources you want to make available, for instance the number of cores or threads.

Revenue

This sets the prices for potential users of the engine. The meaning of the individual parameters is described in another part of this Help file.

Private Users / Ignored Users

This adds users who you would like to allow to take part in your private analyses.

If you tick the box *Only private users can see this engine* only the users named here can see the engine that is being offered.

☑ Only private users can see this engine

It is also possible to prevent certain users from using the engine. To do this you have to tick the box *Activate ignore list* .

☑ Activate ignore list

Notes for the providers of public engines

When you first start to use Engine Cloud you should charge a very low amount for the booking fee. This will assure that as many users as possible will try out your hardware/ software combination. You will definitely receive ducats for providing a cloud engine when users decide to use the engine for a fixed price. In our opinion the first attempts at offereing a Cloud Engine should be used to build up a good reputation among users, who will then go on to make big analyses with the engines.

The server identifies the engine by the user name, the engine name and the hardware key. The system calculates the average speed and sums up the positive ratings for other users in the Likes column.

3.5.18.8 Summary of the auction system

It is important to understand the *difference between the providers and the users* in the Engine Cloud system.
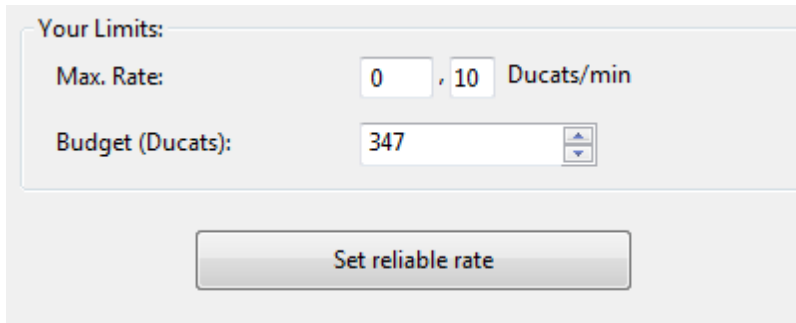
It is possible to be both a provider and a user at the same time.

Renting of a Cloud Engine for a fixed price

The booking fee plus a fixed price per minute has to be paid.

🔴 If a red symbol is at the beginning of the row the engine cannot be taken away from the current user by outbidding him. den. Bids can still be made, but they will not be accepted until the current gives up the engine or his maximum time runs out. If the board window is open the engine starts to analyse this position automatically!

Normally there is a maximum time for renting the engine at the fixed price.

At the end of this time there is no more protection against being outbid, but if there are no bids you can continue to analyse normally.

🟢 All engines with a green symbol can be used for analysis immediately by double clicking on the engine's name.

In the dialog window you can see the provider's settings for the current price, the fixed price and the booking fee.

Renting of a Cloud Engine with an auction

🟨 In this case you must pay the booking fee and the current rate for one minute. The <u>yellow symbol next to the engine signifies that the engine is being used</u> by another user. If you would like to use this engine for your own analysis you can try to outbid the user. You can offer a higher rate than is being used with the menu Limits – Max Rate.

Your Limits:
Max. Rate: 0 , 10 Ducats/min
Budget (Ducats): 347
Set reliable rate

If you are outbid the price rises automatically, <u>like it does with Ebay bids</u>. Starting with the next minute the user is charged the higher price. If the other bidder withdraws his bid, for instance by logging out, the price falls slowly back to the old value.

If the user's price is outbid he is given a warning and has to react. If he does not increase his price the engine is unloaded after 20 seconds. The new user then pays the higher price that he has offered. Even if the engine is unloaded fast it can take a few minutes for the price to drop to the old level. This means that if there are auctions for popular engines the prices are automatically higher.

Fees
At the end of the rental period the <u>provider pays a transaktion fee of 2% to the server.</u>

If the provider merely unloads the engine, half of the price since the start of processing the last main line is refunded.

When you bid against another user you have to pay the price for one minute to the server even if your bid is unsuccessful. This is to prevent people making bids just for fun.

3.5.18.9 Hints

3.5.18.9.1 Use of Cloud Engines

Can engines be used without paying ducats?

This is possible if you load private engines on your own computers to be used by yourself. This is one of the ways to use the Engine Cloud. You can also use the engines of other users that are listed in the Booking Fee column as FREE.

Booking Fee	Max Fix Time
Free	60 min
0,02	120 min
0,02	120 min

Can I offer a lower price than the currently asked price per minute? Can I negotiate a price?

You can always make an offer. The provider is informed and has the opportunity to lower the booking fee. If he does this the engine is automatically loaded. It is recommendable to load a board window with the position to be analysed in advance. If an engine is loaded while the user is away it immediately starts to analyse the position in the board window.

Can the length of time for using an engine be limited?

This can be done by limiting the ducat budget for using an engine.

As soon as the limit is reached the Cloud Engine is unloaded and the current line including its evaluation is copied into the game notation.

Can engine matches be carried out with Cloud Engines?

Yes. Engine Cloud offers an interesting type of autoplayer. You can load both engines from the Engine Cloud server, or you can load one engine to play against a local engine on your own computer. The Cloud Engines can be used for test suites, permanent analysis on the Let's Check server or in the Machine Room on Playchess.com. If you use a Cloud Engine in this way you should use a fixed price. This makes sure that you will not be outbid and will be able to continue using the engine. If you lost an engine by being outbid you would lose a game.

3.5.18.9.2 Providers of Cloud Engines

Can an engine be offered just to a small group of users?

In the engine settings there is section for „Private Users". Here you can list the users who are allowed to access your engine.

What do the stars in the „Experience" column mean?

This shows how often a provider's engine has been used. The number of stars is based on the number of times it has been used, the number of different users, the number of Likes and the ducats that have been earned.

What price should I ask for my system configuration?

The price is decided by supply and demand. You should start off by offering your Cloud Engine free of charge. This will allow you to gather experiences and decide on a suitable price.

What does „Max Time for Fixed Rate" mean?

The fixed rate protects the user of a Cloud Engine from being outbid. After the time limit specified by the provider has been reached the Clound Engine is open for new bids, even though the current user can continue if there are no bids.

Can more than one engine be offered on a computer?

No. The identification of an engine is a combination of the user name, the engine name and the hardware key. This combination is unique for every engine.

3.5.19 Examples

3.5.19.1 Cloud Engines on Playchess.com

Cloud Engines can be used in many different ways. You can use these engines for your own analyses and tests. This can be done for engine matches, permanent analysis or in the Engine Room on the Playchess.com server.

You can use Cloud Engines in the *Engine Room* in Playchess.com. Enter the Engine Room and select the option *File   Playing Mode   Computer*.
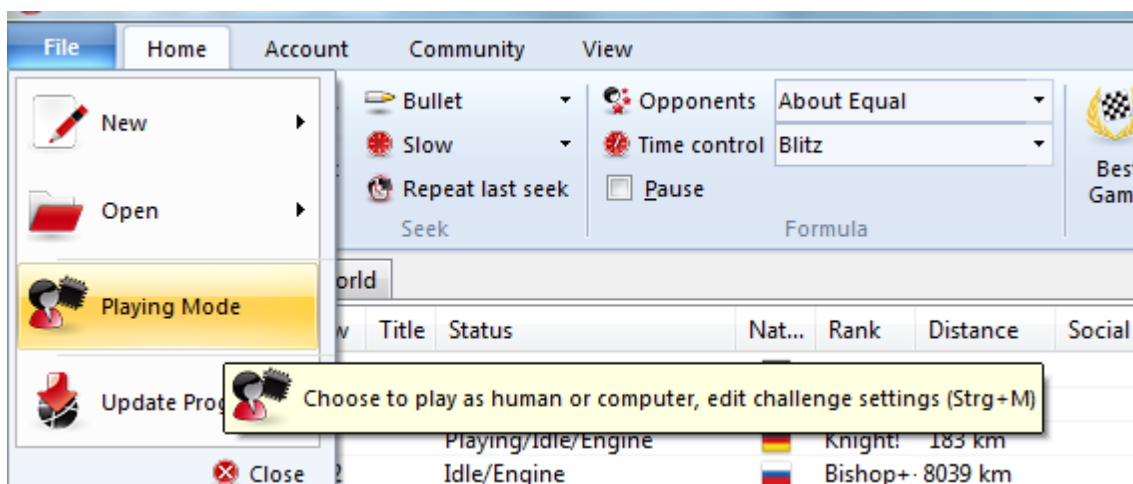
Click the button *Define Engine* to start the Load Engine dialog. There is a button *Cloud* in this dialog.

If you click this button you are asked to log into the Engine Cloud server.
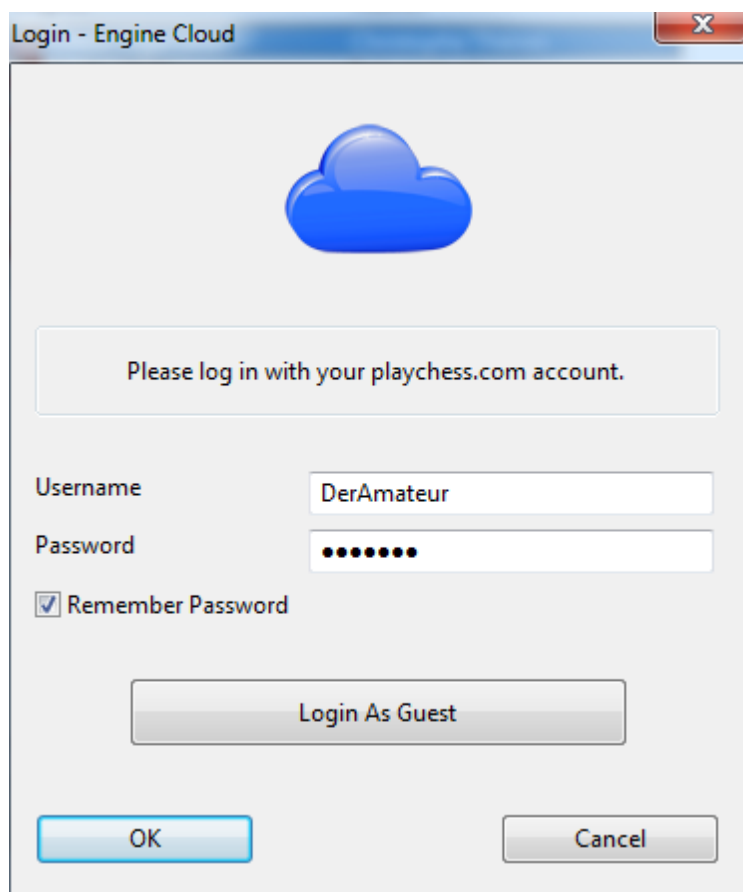
Now the main window of the Engine Cloud Server is opened in a separate window. You can select the engine you want to use in the Engine Room by double clicking on one of the engine names in the list.

After you have done this a window is displayed for the engine connection, and the engine can be used in the Engine Room in the same way that any local engine can be used.

By clicking the Advanced button you can set the path for the openings book or select the Live Book.
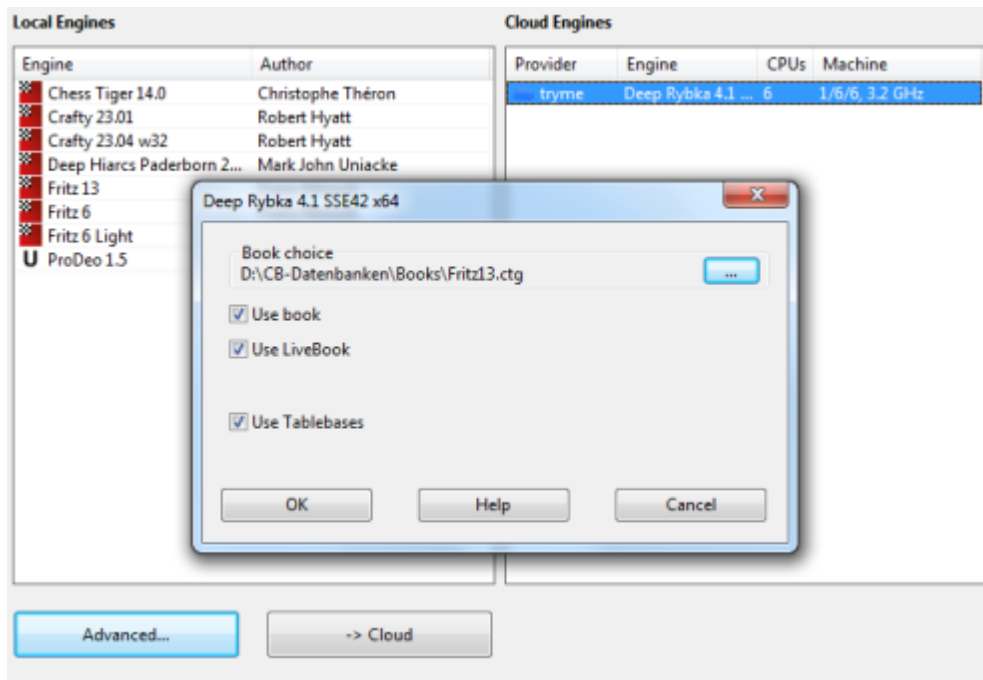
There is a confirmation in the Chat window when a Cloud Engine has been loaded.

3.5.19.2 Playing games

You can use any Cloud Engine as an opponent when you are playing a game against the computer.

The menu *Engine   Open Cloud Engines* opens the main window of the Engine Cloud server. Choose and load one of the Cloud Engines. After you have made a bid and confirmed that you want to use the engine you can play a game against the Cloud Engine.

By using Engine Cloud you can use top engines with enormous processing power even on a relatively slow computer.

3.5.19.3 Let's Check

The Cloud Engines can be used on the Let's Check server in the same way as any locally stored engine.
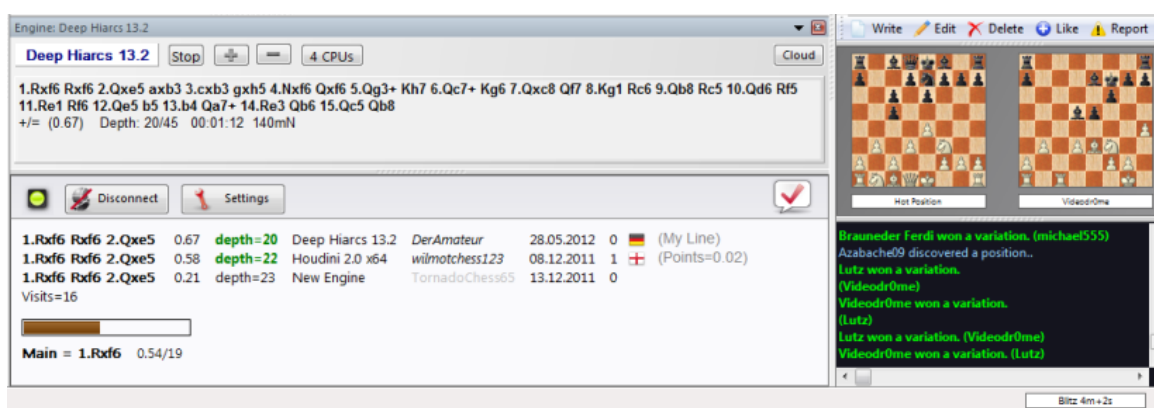
The speed index is based on the speed of the engine's provider, not on the speed of the computer with which you are using Let's Check.

3.5.19.4 Engine matches

You can use *Cloud Engines* for engine matches. It is also possible to play engine matches with <u>Cloud Engines against locally stored engines</u>.

Menu Engine   Engine Match   White + Black
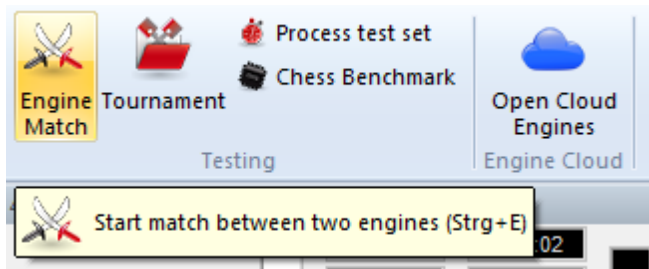
First load the the Cloud Engines that you want to use in the main window of the Engine Cloud server.

Clicking the button Define opens the dialog Load Engine.
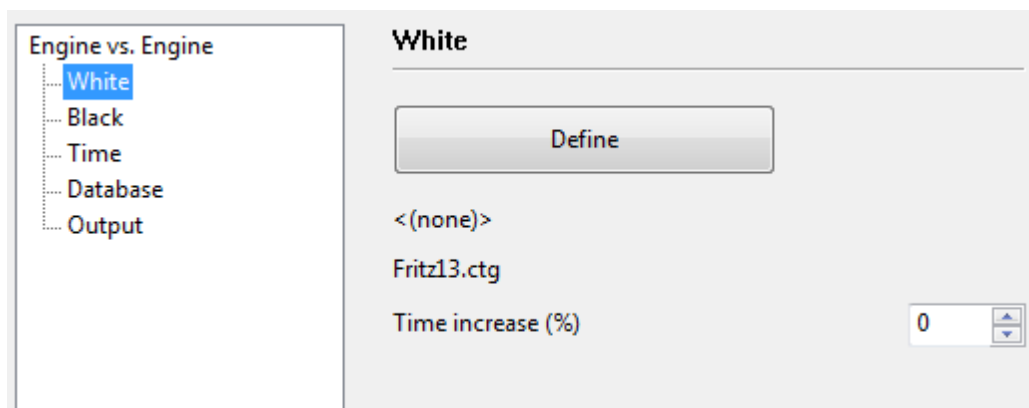
This gives you a list of the available local engines. By clicking the button Cloud you can also select a Cloud Engine.
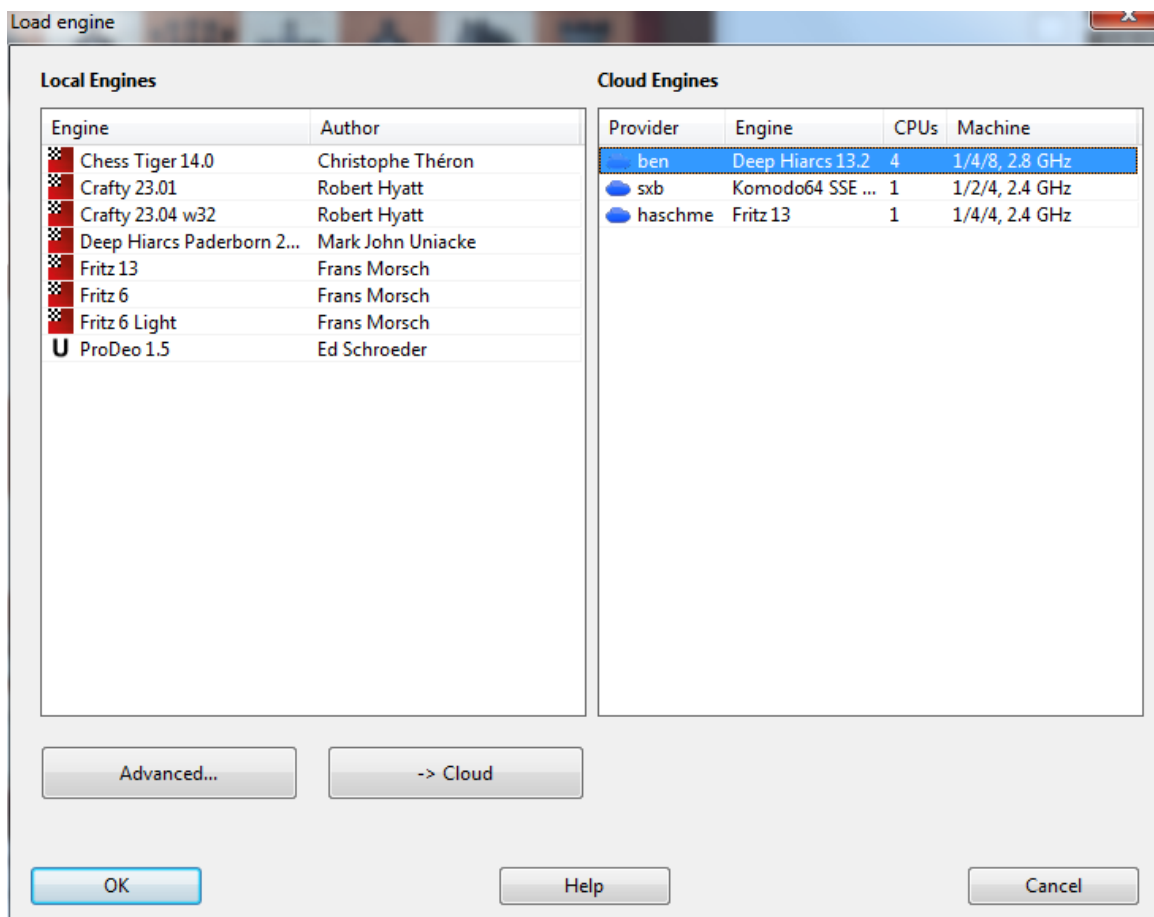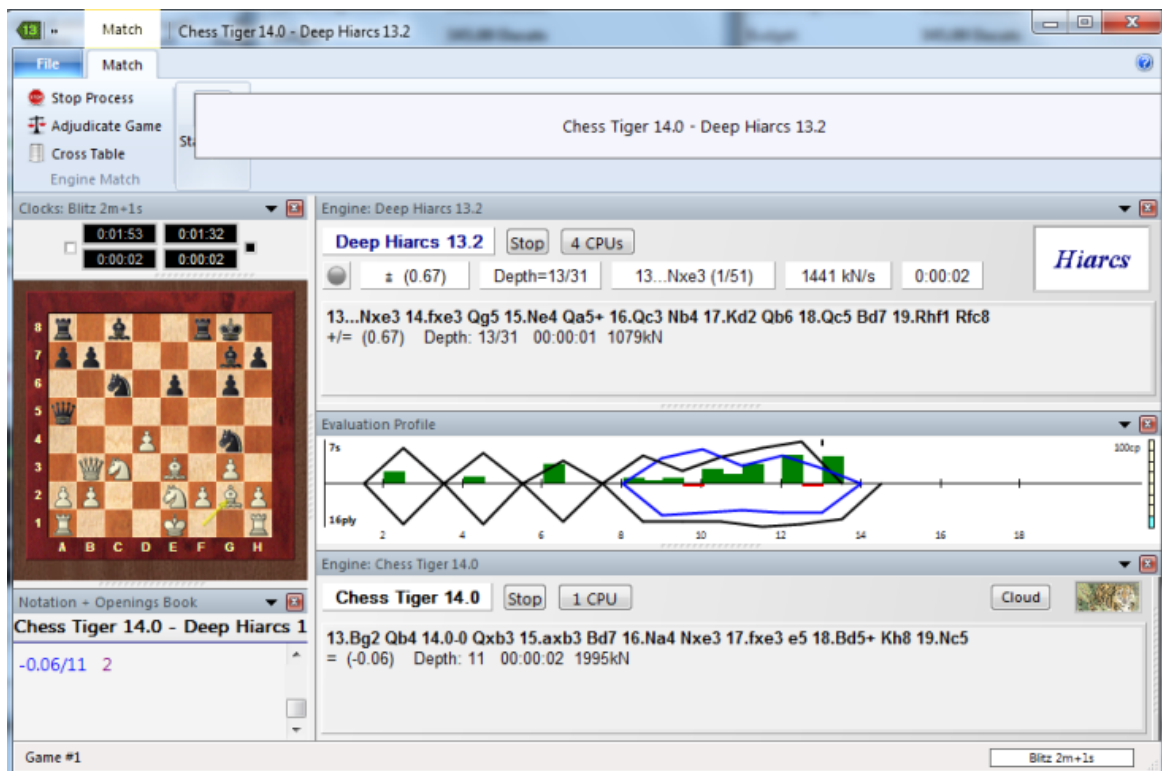
3.5.19.5 Solve Test Sets

First load the Cloud Engine that you would like to use for the test set. The connection window tells you the status of the engine you have loaded. Then you can start the test set with the *menu Engine   Process Test Set*.
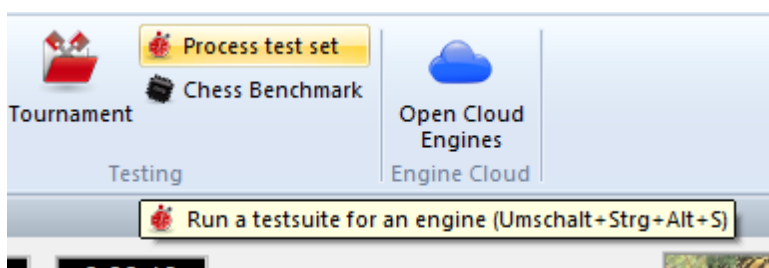
The Cloud Engine then carries out the analysis.
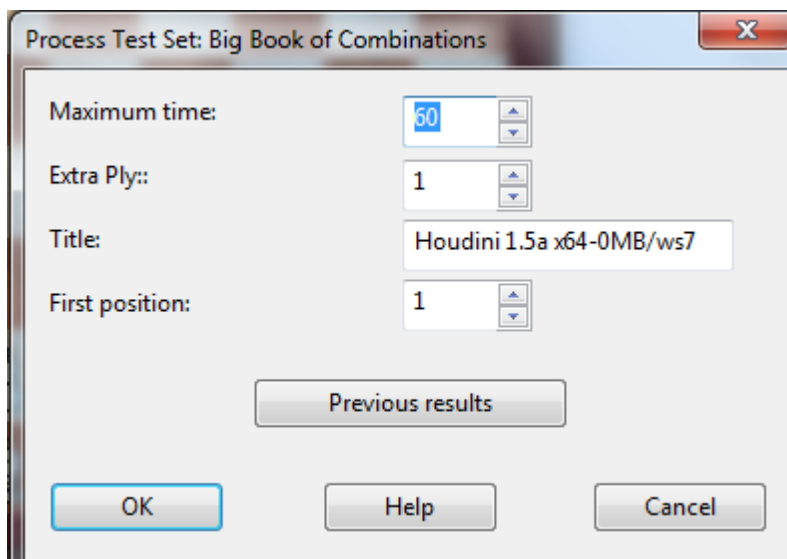
3.5.19.6   Infinite Analysis with a Cloudengine

Every game can be analysed by several Cloud Engines in <u>parallel</u>. Since the Cloud Engines run at full speed regardless of the limitations of the local computer you can come to plausible analysis results very fast.
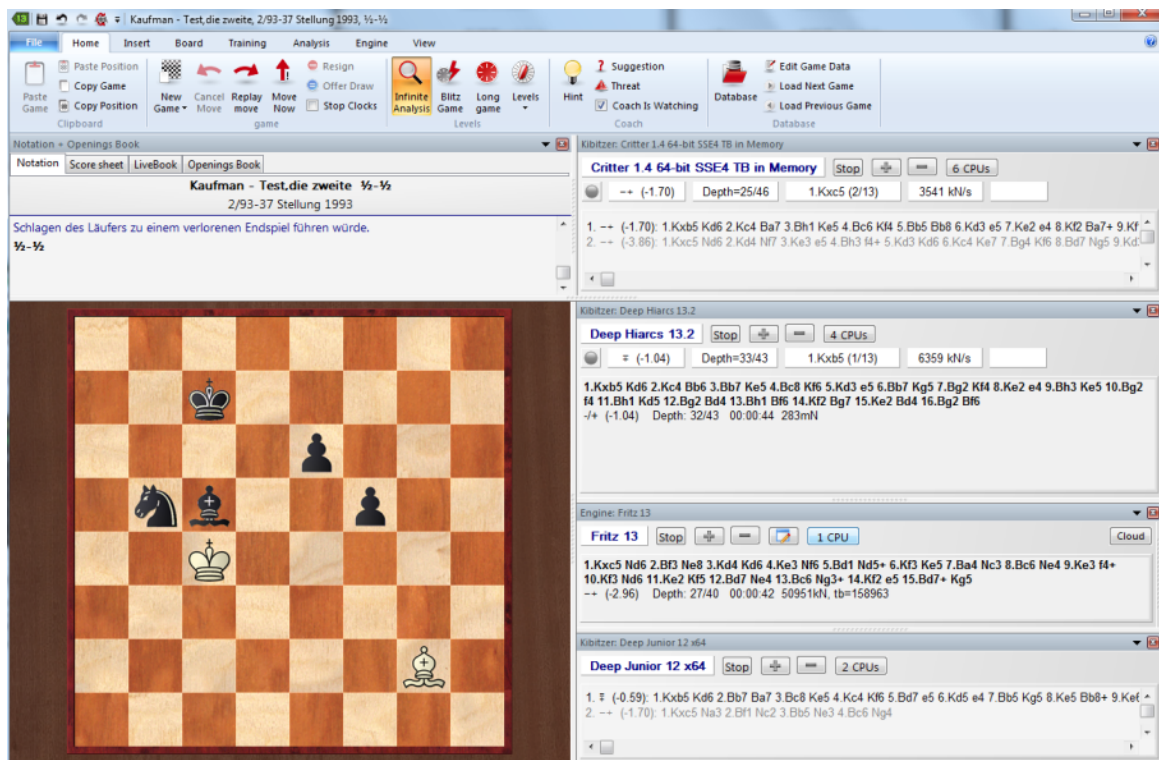
The above diagram shows the analysis of a position with three different Clound Engines, which are each running at full speed in the board window. As you can see from the Task manager, the CPU load is only 0%.
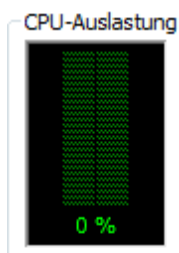
The Cloud Engines can deliver precise results even on weaker computers.

This type of analysis can also be used while watching a game in the Broadcast Room of the server Playchess.com.
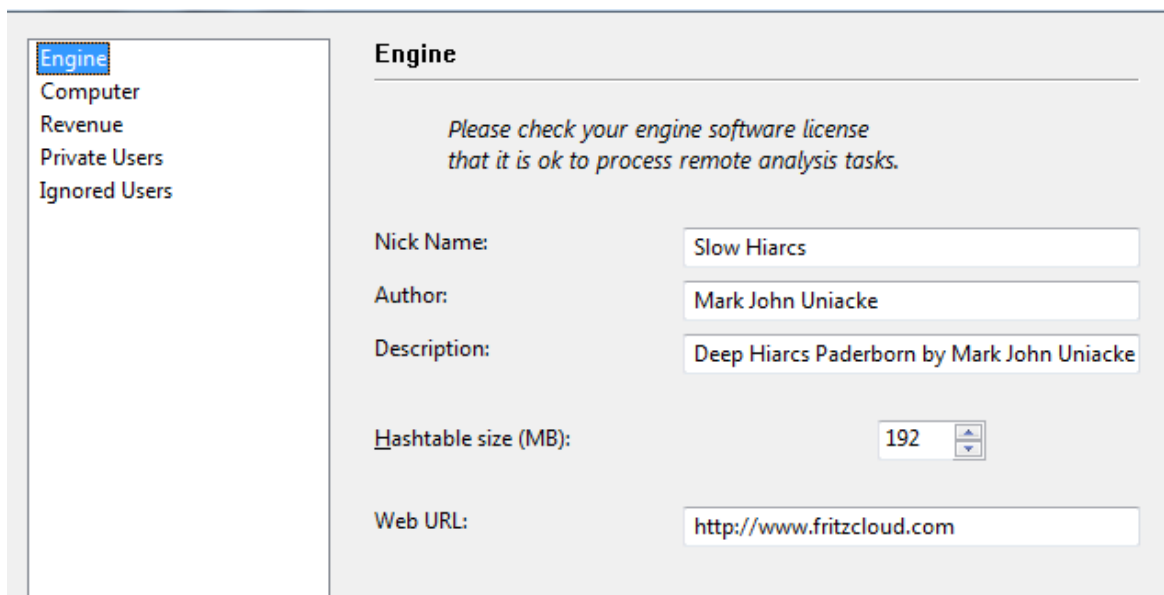
3.5.20 Settings dialog for providers

Engine
Computer
Revenue
Private Users
Ignored Users

- Engine ....

- Computer ....

- Revenue .....

- Private Users ....

- Ignored Users ....

3.5.21 Engine

The section Engine defines the standard settings for the display of the engine in the Engine Cloud main window.

Note: Please pay attention to the user license of the software that you would like to use on the Engine Cloud server!

- **Nick Name:**   Pick a name that you would like to give to the engine in the list window.

- **Author:**   The name of the developer of the chess engine.

- **Description:** The provider can give a short description of his configuration.

- **Hashtable size:** The size of the hash tables in megabytes.

- **Web URL:** The address of a web site containing further information.

3.5.22 Computer

"The section *Computer* allows the provider to adjust the system configuration he is offering. If you do not wish to make any modifications simply tick the box *This Machine*", and the settings from the System Properties will be used.

The option *Cluster Controller* is needed if you have access to a cluster. A cluster is a group of networked computers which act as a single computer to the outside world. A cluster is very efficient for carrying out intensive analyses with chess engines.

If you have access to a cluster and want to offer this, it is displayed as a cluster in the column „**Cores**".

```
Cores
4/8(1)
4/8(1)
2/4(1)
2/4(1)
6/6(1)
6/6(1)
4/4(1)
6/6(1)
Cluster
4/4(1)
```
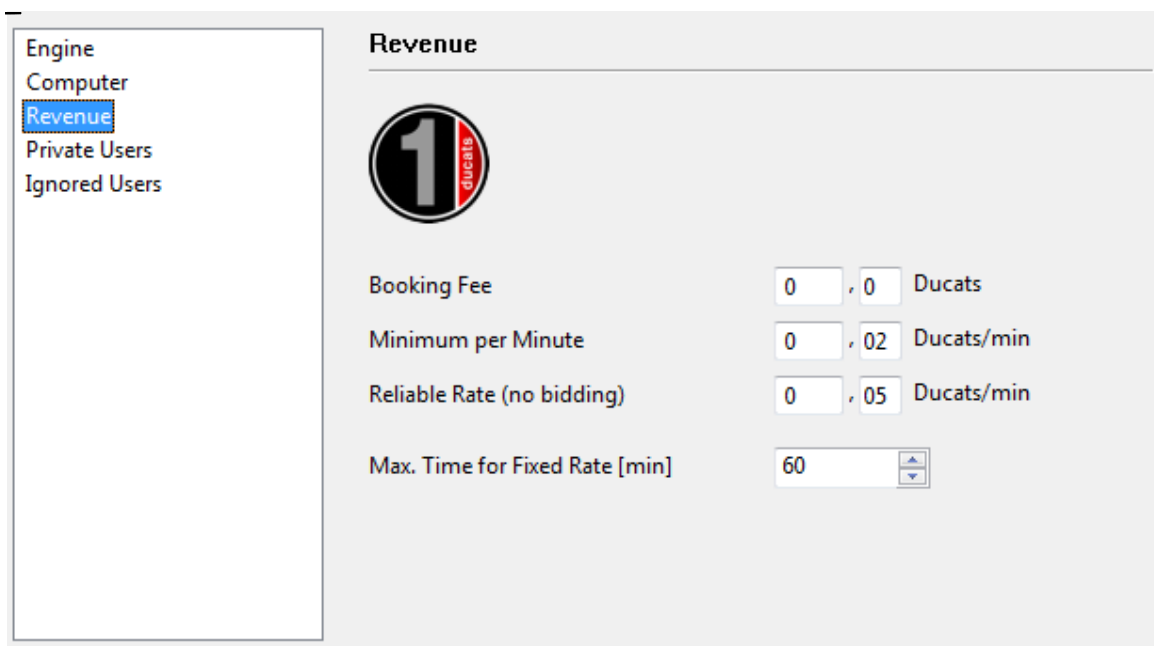
The following paramaters are available:

Speed in MHz	The processor speed.
Number of Boxes	This parameter is only relevant for clusters.
Number of CPUs	The number of processors that are used.
Number of Cores	The number of processor cores.
Number of Threads	The number of parallel tasks allowed in the process.

3.5.23   Revenue

Supplying a chess engine costs money, for instance for the electricity used.

The section Revenue determines how much users must pay the provider for using his engine.

The ***Booking Fee*** is charged whenever an engine is used. It is possible to set this value to zero.

The ***Minimum per Minute*** is the lowest price for which a user can use the engine. Other users can bid more than this amount at any time.

The *Fixed Rate* (Reliable Rate) is a higher rate at which bidding auctions are no longer allowed. Other users cannot take control of the Cloud Engine by bidding more. Users pay the Fixed Rate when there is a high demand for engines on the Engine Cloud server.

See also

-> Auction System ...

-> Providers of Cloud Engines ....

3.5.24 Private Users

"In this section you can name users who you would like to take part in your private analyses.
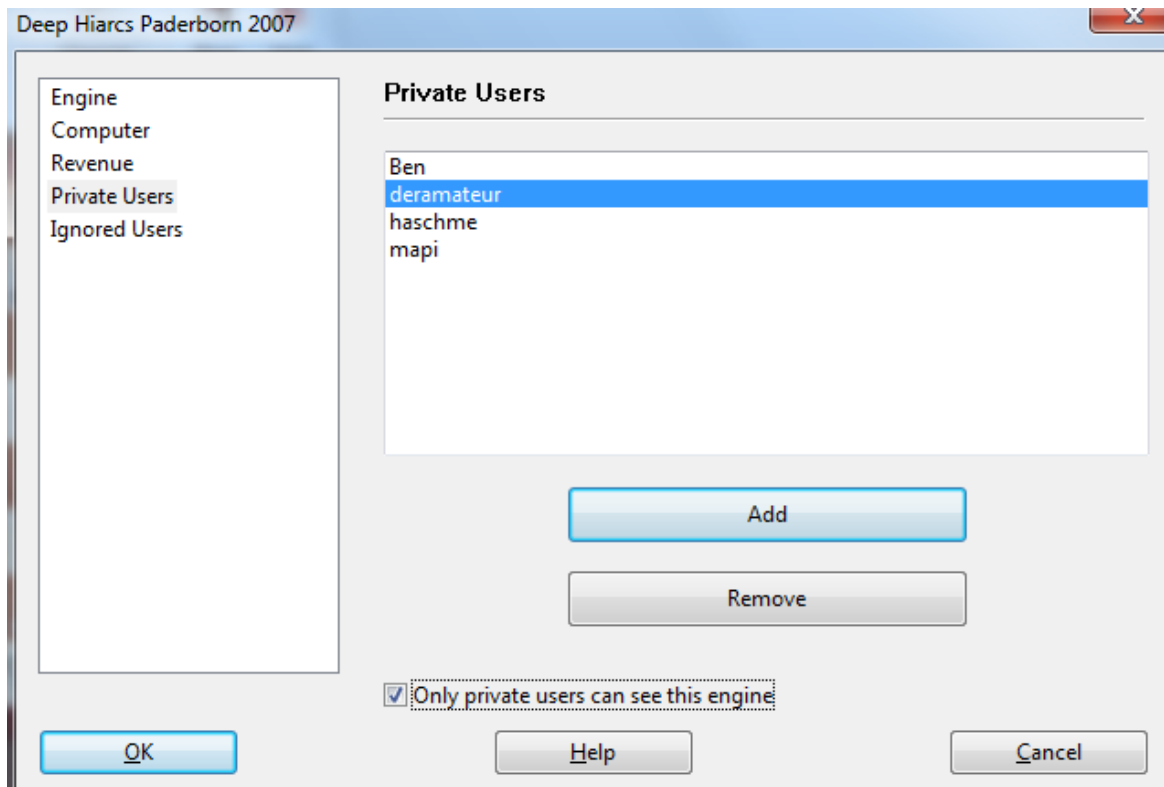
Tick the box *Only private users can see this engine*" if only the listed users should see the engine in the engine list.
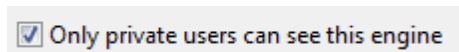
If an engine is only available for private use it is listed in blue and is underlined.

3.5.25 Ignored Users

"It is possible to forbid certain users to access an engine. The engine is invisible to these users. After the users who are to be ignored have been listed you have to tick the box *Activate ignore list* .

3.5.26 Bid Dialog

After double clicking on an engine in the Engine Cloud window a dialog for bidding pops up.

This dialog displays the <u>status of the engine</u>. In this case it is displayed that the engine is available at the current rate.

Current Rate   This shows the price that the user must pay to use the engine.

Fixed Rate   This is the reliable fixed rate as defined by the provider.

Booking Fee   This is the one time fee for using the engine.

In the **Max Rate** the user can agree to pay <u>a higher rate</u> for using the server. If there is a bid against him the price rises automatically, in the same way as Ebay bids. The user is then charged the higher price starting the next minute. If the other user withdraws his bid, for instance by logging out, the price slowly drops to the old value.

If the new bid is larger the user is given a warning and must react immediately. If he does not react the engine is unloaded after 20 seconds.

Note: In the chat window you are informed about the results of bids.

See also

-> Auction system .....

-> Public Cloud Engines .....

3.5.27 Ducats
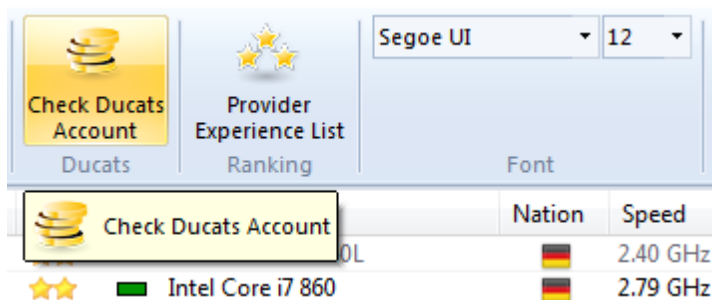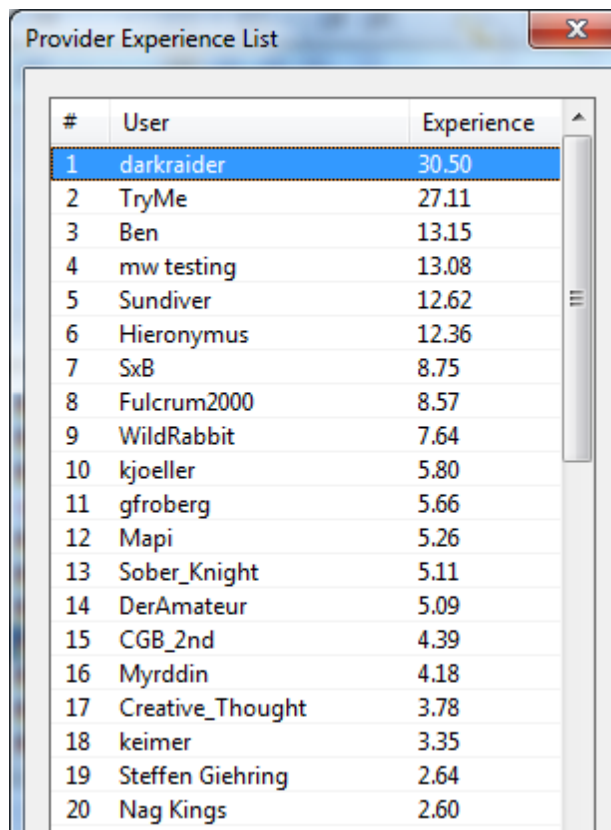
Ducats are the currency of the Playchess server. You can purchase ducats in the ChessBase Shop.

A ducat is worth about 8.6 cents, 11.6 ducats are equal to one Euro (approximately one dollar). The conversion contains the VAT required by German law. You can buy ducats from the ChessBase shop at this rate.

3.5.28 Rating List
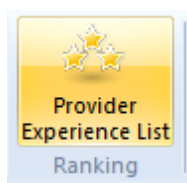
In the main window of the Engine Cloud server you can open a rating list based on user experiences. The rating in the list is based on the time the engine was used, the number of different users, the number of Likes and the ducats that were earned.

3.6   Training

3.6.1   Calculation Training

You can vastly improve your playing strength by training to calculate variations. This function is fun to use and helps you to learn visualization of moves on the board without moving the pieces. This is what over the board chess is all about!

Calculation training starts from an arbitrary position on the board. Call menu *Training - Calculation Training*. *(Ctrl-Alt-B)*
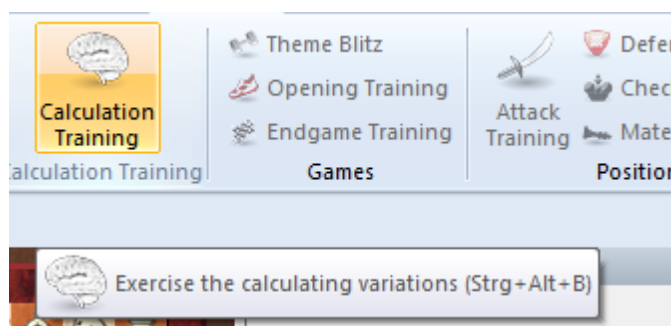
You enter moves by clicking or dragging with mouse like on the normal board. Every move is added to the notation. You can click in the notation and move forward or

backwards with the arrow keys. At any stage you can enter new variations. However the pieces on the board always remain fixed in the starting position.

Calculation training offers you different levels of feedback:
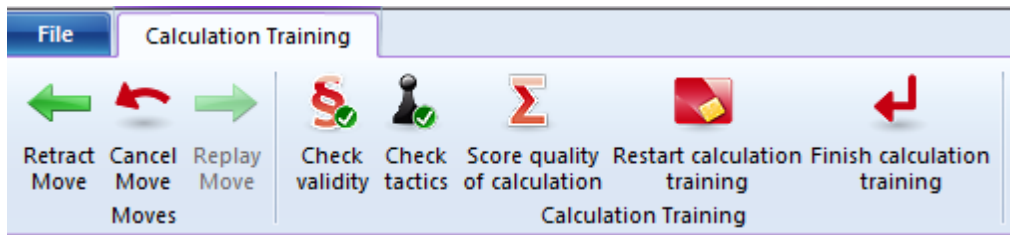
From left to right

- *Arrow left* takes one move back.

- *The curved arrow* retracts a move for quick correction: The next move you enter will overwrite the retracted move without the usual query.

- *Arrow right* executes a move in the notation.

- *The green checkmark* checks all moves for legality. Like in real calculation you may enter illegal moves.

- You can start the engine for interactive analysis. However the board will still remain in the starting position. Good for tactical checking without moving the pieces.

- *Score the quality of your calculation*: This will take a while. The engine examines every move you entered and assigns a point score. Simple moves will get one point, strong moves four points and tactical oversights will score negative values.

- *New calculation* – deletes all previous lines.

- *Quit* calculation training ends the current session and, if you wish, merges your variations into the game notation.
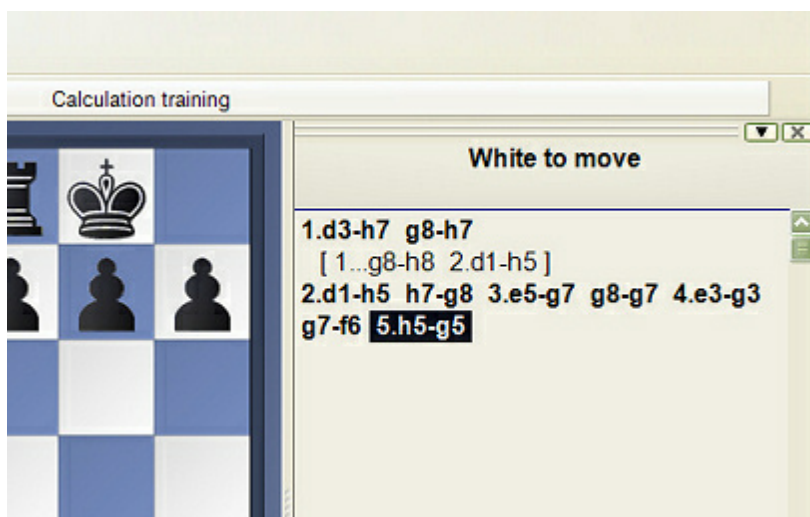
Calculation training – only long notation without piece names

The calculation training has been extended. The user has new options, such as deleting results already made with the program in order to start again.

The program first asks whether the user really wants to delete the results. The program also checks whether the moves that have been entered are legal.

Important: You can use calculation training on the chess server during a broadcast, using Menü Tools - Calculation Training. This is to be especially recommended during live broadcasts when players are spending a lot of time pondering over a position. It will help your chess much more than simply looking at the main line of your engine.

3.6.2 Opening Training

Training   Opening training
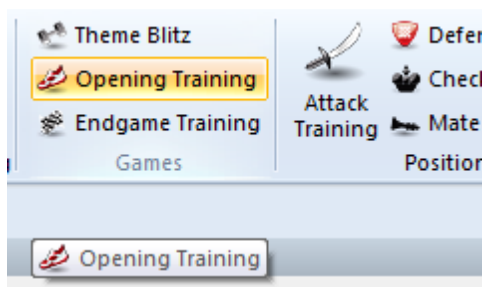
The program has special training functions for openings and endgames. In both you keep playing a position against the computer until you learn how to handle it.
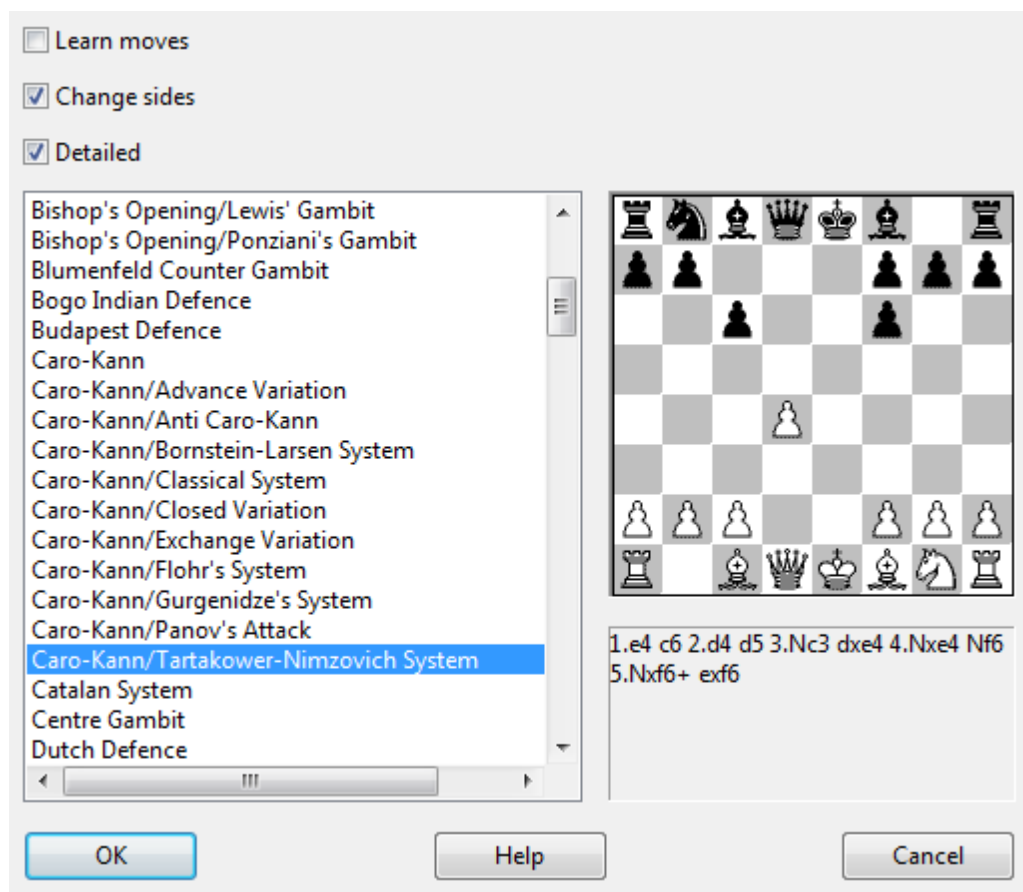
In the list of openings that appears you can choose one you want to learn. The position that defines the opening appears on the board to the right. Click OK if it is the one you want to practice.

The position is transferred to the main board and you can start playing against the computer. Every time you press Ctrl-N (for "New game") the same position appears on the board – until you switch off the opening training mode.

There are three options on the top left:

- **Learn moves:** This brings the initial position on the main board, and you are expected to play the main line from scratch. This is of course given below the board in the picture above.

- **Change sides:** This will switch sides whenever you start a new game so you can learn both sides of the opening.

- **Detailled:** You get a more detailed set of openings (as in the picture above) rather than the basic set.

When you practice an opening against the computer, if you enter a move that is not part of current theory the coach will appear and warn you. It will offer you the following alternatives:

- **Show move:** This shows you the main line continuation in the position.

- **Ignore:** Lets the move you have entered stand. Of course this means you are deviating from the main line.

- **Take back:** This takes back the move you have entered and allows you to try again.

Note: you can extend the opening training database.

3.6.3 Endgame Training

Training   Endgame training
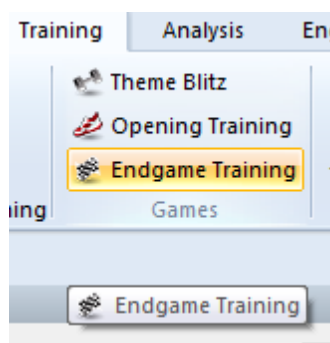
This is similar to the openings training, except you get instructive endgame positions.

In the list of endgames that appears you can choose one to practise. The position is transferred to the main board and you can start playing against the computer. If you do not succeed in achieving the goal you can press Ctrl-N to start a New game. The same endgame postion will be set up and you can try again.

Here you have only one option: Change sides. This allows you to try both sides of the endgame.

Note: you can extend the endgame training database.

3.6.4 Tactical Training

Training   Attack/Check/Defence/Mate training
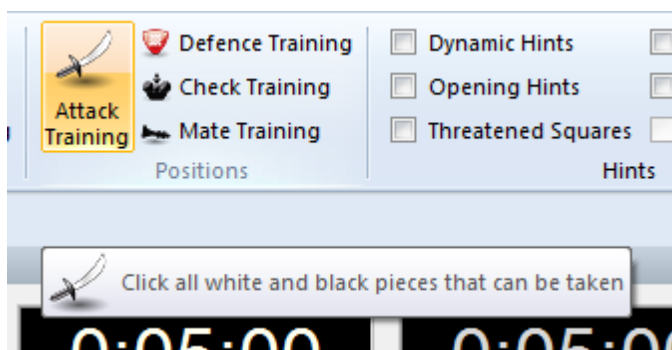
There are certain basic skills in chess, like the ability to spot tactical patterns quickly and reliably, that can be honed. The program has modules to help you train and improve your abilities in this area.

The special trainings modules automatically generate practise positions, presenting you with positions in which you must spot all pieces that are attacked, in check or not defended. The positions are taken from any database you select.

Click on *Training* and select one of the three options: **Attack, Check/Mate** or **Defence**.
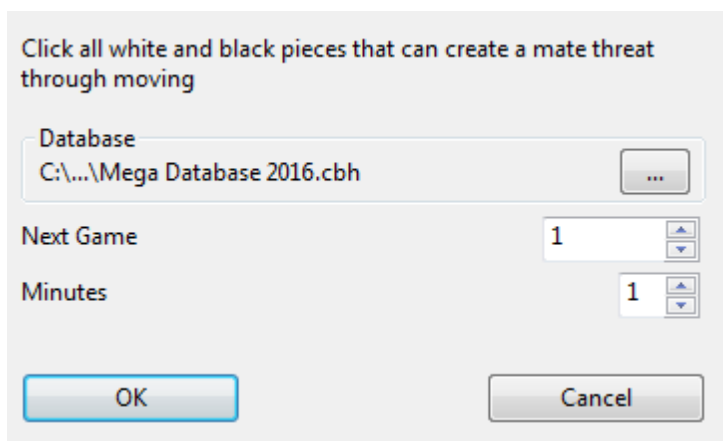
In the dialog that appears you can select a database and a start game number. The program keeps track of the games it has already gone through and offers you the next one when you start again. You can also set the maximum time you get per position.

The above picture shows the dialog that appears for Attack training. The others work in basically the same way (except that the task given is different). This is what you have to find

▶   **Attack** – here you are required to click all white and black piece that can be captured by the enemy;

▶   **Check** – click all pieces that can deliver check to the enemy king by moving to a checking square;

▶   **Defence** – click all squares which are not defended by at least one friendly piece.

Clicking on squares will mark them green, clicking again removes the mark. If you solve the problem in the allocated time the program will automatically present a new position. If not it will show you the correct solution. You also get statistics of your results, and can proceed to the next training position. Click on the red "Stop" button on the top left to end the training session.

In the above example we are supposed to mark all white and black pieces that are under attack. The correct solution is almost there, except that the white bishop on g5, which is attacked by the pawn on h6, has not been marked. If we click on that piece the solution is complete and the program will load a new position. Otherwise it will display the solution, with the bishop marked in yellow.

3.6.5   Mate Training

Training - Mate Training
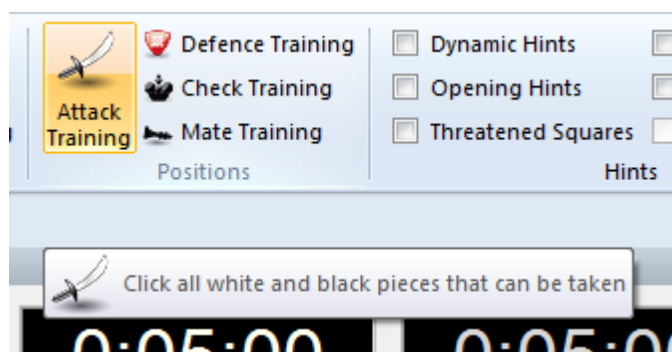
In this training mode you have to select all the pieces which you can move to threaten mate. The positions are chosen by the program from a database which the user can choose.

Clicking on the "*Database*" button starts the Windows File dialog. Select a database on the hard drive from which the program should filter the required positions.

<u>**Note:**</u> You should select a large database in which you are certain that there are concrete checkmate positions. The mate training only works in combination with game databases. Position databases which only contain fragments are not supported! In selecting a game the program will only choose a position that is especially suited fot the training type.

"*Next Game*" tells the program from what position in the database it has to start looking for another game. This is especially useful if you are using a large database. This setting is saved.

"*Minutes*" defines the maximum time to solve a problem. If you set the value to 1 the solution to a training problem is displayed after one minute. If, on the other hand, the problem is solved correctly and completely the ptogram immediately loads the next game and presents a new problem to solve.

Clicking "**OK**" loads the position from a game which is the most suitable for the mate training.

3.6.6　Theme Blitz

Training　Theme blitz
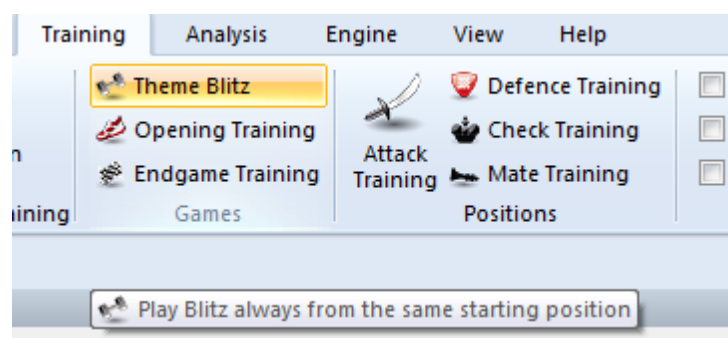
In this mode the game starts from the position you have on the board. This might be an opening, or a middle or endgame position.

▶　To start a theme blitz get the starting position on the board, either by entering moves or entering a position.

▶　Now click *Training　Theme blitz*. The position will be displayed in a dialog.

▶ Click OK to get to the board window and play out the position against the computer.

▶ When you have finished press Ctrl-N (= new game) to try again. The same starting position will be set up for the new game.

▶ If you click "Change sides" in the theme blitz dialog the sides will be switched every time you start.

▶ If you click "Learn moves" then you will get the initial position of the game every time you press Ctrl-N, and you are expected to play to the theme position on your own. If you enter a move that is not part of the variation the coach will appear and warn you. This works just like the openings training function.

3.6.7   Extend training database

The opening and endgame training that come with the program can be extended or replaced by training files you create yourself.

The basis is two normal databases which should be kept in the directory Program Files\ChessBase\Training. They should be called Openings.cbh and Endgames.cbh. You can also keep them in a different location, but then you must set the path in the Training options.

Practical tips

▶ For the openings training enter the moves of the main line of each opening and save the game. Give it a name to describe the opening (e.g. Benoni Defence - Classical Variation". You can use the White and Black fields to format the names nicely.

▶ You can enter variations, which the program will choose at random on its side of the opening. You can influence the choice by giving commentary symbols. A "!" will double the number of times the move is played, a "!!" will triple it. Moves marked "?", "??" and "?!" will never be played by the computer.

3.6.8 Delete Training Results

The program offers training for beginners.

Using the menu Training - Attacking Chess/Defensive Chess you can train yourself to recognize certain powerful combinations on the chess board.

The results are stored by the program and displayed after every cycle.

Delete the file *Highscore.ini* to get started. Use the Windows Search function to locate the file on your computer.

3.7 Commentary

3.7.1 Edit and annotate game

Right-click the game notation or book window

There are a number of functions and annotation tools for you to use. Remember that all changes are made in memory only. You must "save" or "replace" the game, as described in the previous sections, if you want to store them on disk.

Delete variation
This removes a line (and all its sublines) from the game. It applies to the line in which

the notation cursor is currently located.

Promote variation
This raises the current variation to the next-higher level, making its parent line the subline instead.

Delete previous/remaining moves
Removes all moves before or after the current board position. If you delete previous moves, the program automatically inserts a position description so it can load the game fragment later.

Delete all commentary
Removes all variations and text commentary from the game.

Delete color commentary
Removes all coloured arrows and squares from the game.

Delete Fritz commentary
This deletes the search information the program sometimes inserts into the game (when you tell it to do so).

Text before/after move
Both functions give you a text editor in which you can type in commentary, which can be inserted before or after a move. The tabs at the top of the editor allow you to specify the language(s) to use for annotating the game. In the menu "Tools" – "Options" – "Language", you can specify which language(s) should be displayed when you load a game.

!,?... / +-,=..., RR, ...
This inserts chess commentary symbols (e.g., "!!" = an excellent move, "??" = a blunder) or position evaluation (e.g., "+–" = White is winning, "–/+" = Black is better), which appears in the notation of the game and is saved with the moves. RR commentary symbols appear before a move (e.g., "Better is" or "With the idea").

Variation colour
This allows you to change the colour of individual variations, (e.g,. to mark special lines or keep your own analysis in a special colour).

Insert diagram
Marks a position for a diagram in the printout. You can also mark it by pressing Ctrl-A (insert text after move) or Ctrl-D. When you print out the game a diagram will appear in this position.

Show material
Inserts a material balance display at the bottom of the notation window. In our example White has a knight for a bishop and pawn.

Takes back material
Black has no isolated pawn any more on: a5
White should play on the king side
Black should play on the queen side

Show position tutor

Another useful coaching function is switched on by right-clicking the notation window and selecting "Show position tutor". This fires up a special chess engine which has a lot of chess knowledge. It generates a brief strategic description, in plain text, of the current board position.

Choose font

Allows you to set the font face and size for the chess notation. Be sure to select one that begins with "Figurine..." so that the chess figurines and commentary symbols are displayed correctly.

Graphic commentary

The program uses coloured arrows and squares to illustrate tactical points and make strategic themes and plans more clear. You can manually enter these using a combination of mouse and keyboard. Press the Alt key and click a square or draw a line from one square to another. This will give you a green square or arrow. Alt+Ctrl does the same in yellow, use Alt+Shift for red. Clicking on the area around the board will remove the arrows and colored squares. All of this is great for chess lectures.

3.7.2 Text commentary

Insert   Text before/after move
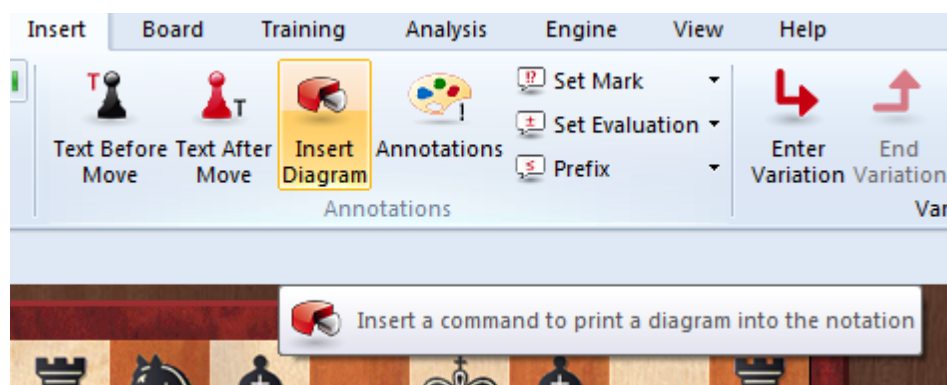
An annotation is text that you can enter to comment on a move or position. This is how you type in text:

▶   Right-click the notation and select "Text after move". You can also press Ctrl-A.
▶   Right-click the notation and select "Text before move". You can also press Shift-Ctrl-A.

In both cases, a text editor appears in which you can type in your annotations.

All
English
Deutsch
Francais
Espanol
Italiano
Nederlands
Portuguese
Polska

All

Is this really good?

OK   Help   Cancel
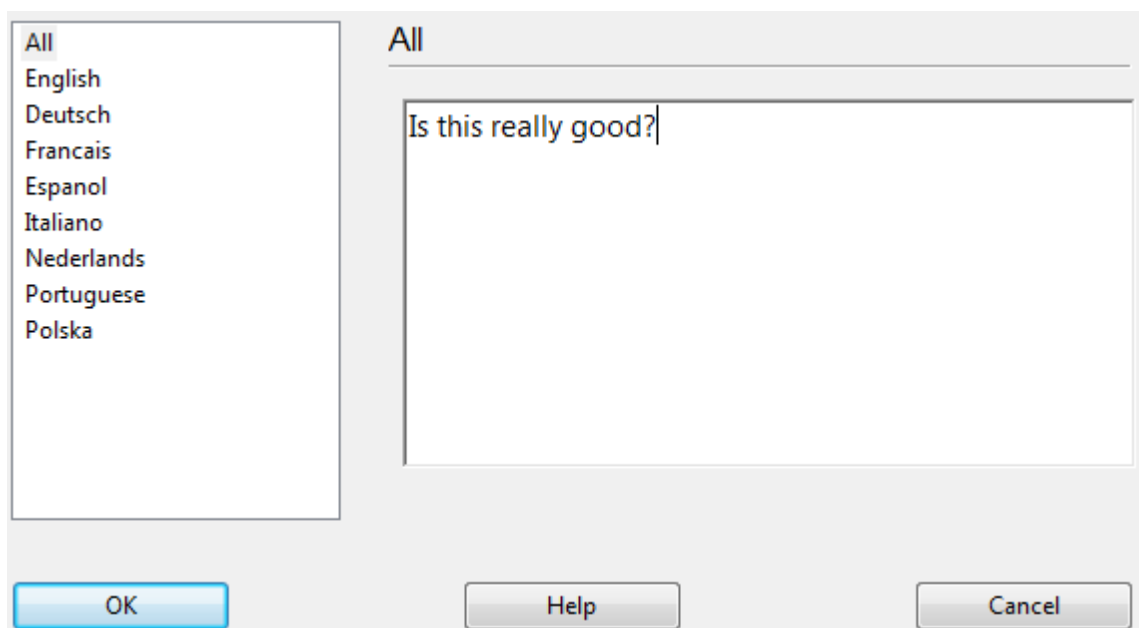
You can use most of the normal Windows edit functions while entering your annotations. For instance you can press Ctrl-X and Ctrl-C to cut or copy bits of text, and Ctrl-V to paste them. You can even insert text from a different source by copying it to the Windows clipboard and then pasting it into your own text.

You can also use all the special chess commentary symbols, which can be typed in from the keyboard.

Some points to note

‣   You can resize the text input box.

‣   Text commentary can be written in different languages. Before typing it in, you can specify whether it is neutral or in one of the given languages: English, German, French, Spanish, Italian, Dutch or Portuguese.

‣   In the menu Options – Language you can determine which languages should be displayed when you load a game. "All" is language independent and will always be displayed.

‣   You can mark a position for a diagram by inserting a Ctrl-D character into the text. When you print out the game a diagram will appear in this position.

3.7.3   Commentary symbols

In chess there is a system of commentary that uses special symbols to annotate moves or positions. The advantage is that they can be read in any language and immediately understood by chessplayers all over the world.

CTRL-ALT-S starts the *Symbol Palette*
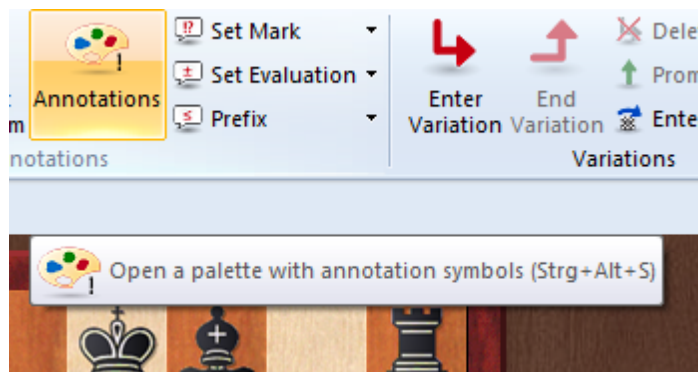
The program knows all the international chess commentary symbols.
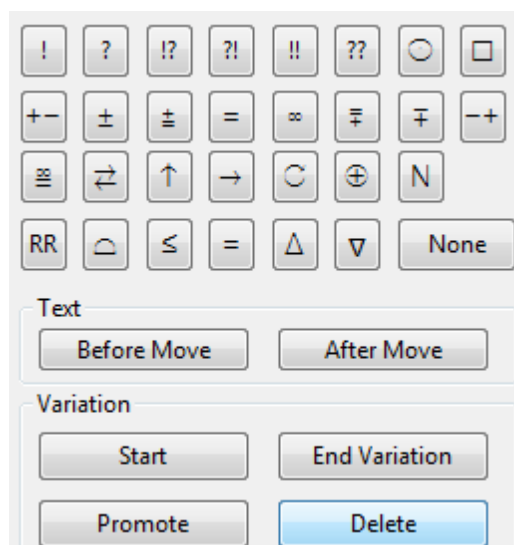
Here are the most important ones:

Symbol	Meaning
!	Good move
!!	Very good move
?	Bad move
??	Very bad move, blunder
!?	Interesting move
?!	Dubious move
=	The position is about equal
²	White is slightly better
±	White is clearly better
+-	White is winning
³	Black is slightly better
μ	Black is clearly better
-+	Black is winning

𝑓	With attack
,	With initiative
„	With counterplay

How to enter commentary symbols from the keyboard.

See also LiveBook ..

3.7.4 Medals

If a game has some interesting aspect, it may receive a "***medals***". The medals appear as coloured stripes in the games list. The main use of the medals is to search for games that all belong to certain categories.

Tournaments	Annotator	Sources	Teams	Game Title	Openings	Themes	Tactics	Strategy	Endgames

Line Moves	Medals	AIT	Players (CBF)	Tournament (CBF)	Year
146		AI	**Anderssen,Adolf - Mayet,Carl**	*Berlin m1 [Eliskases/Schluricke]*	1851
29		a	**Zukertort,Johannes Hermann - NN**	*Leipzig blindfold sim [Kesmaecker,P]*	1877
206		AtI	**Schlechter,Carl - John,Walter**	*Barmen Masters-A (8) [Reti,R/Schluric..*	1905
49		a	**Lazard,Frederic - Renaud,Georges**	*FRA-ch 04th Biarritz [Lazard,F]*	1926
18			**Lamerat,H - Anglares,Emile**	*FRA-ch Rouen [Kesmaecker,P]*	1930
301		AI	**Colle,Edgard - O'Hanlon,John**	*Nice-A (9) [Oleinikov]*	1930
312		AtIG	**Yurgis,A - Botvinnik,Mikhail**	*Leningrad Electr industry [Botvinnik M..*	1931
37			**Marshall,Frank James - Gladstone,D**	*New York [Kesmaecker,P]*	1932
81		a	**Raizman,Maurice - Gibaud,Amedee**	*FRA-ch Paris [Kesmaecker,P]*	1934

Medals are sometimes awarded automatically by the program. But in most cases they are already in the game, put there by the contributors to the ChessBase games collections.

3.7.5 Graphic commentary

The program uses coloured arrows and squares to illustrate tactical points and make strategic themes and plans more clear.

These are entered using a combination of mouse and keyboard:

Mark square green, draw green arrow	Press the Alt key and click the square or draw a line from a to b.
Mark square red, draw red arrow	Press Alt + Shift and click the square or draw a line from a to b.
Mark square yellow, draw yellow arrow	Press Alt + Ctrl and click the square or draw a line from a to b.

▸   If you draw a line with the same colour again, the original line is erased.

▸   A right-click on the area around the board erases all graphic elements from the current position.

The graphic commentary is stored together with the game and appears automatically

during replay.

3.7.6 Chess Media System

The *Chess Media System* allows chess teacher and lecurers to comment on games while moving the pieces, drawing arrows and marking squares on the graphics chessboard. Using a video camera or simply a microphone, chess experts can hold lectures or comment on games, while moving the pieces on the board. These lectures can be recorded and viewed offline.

The lectures can be transmitted live over the Internet and broadcast on the Playchess server, or they can be recorded and distributed on CDs and DVDs.

How exactly does the ChessBase Media System work. It makes use of the Windows Streaming Media format (the files have the ending .wmv and .wma) to capture video and/or audio files on the fly. Whatever is done on the chessboard is recorded by the program and instructions are embedded in the multimedia stream. When the file is replayed everything is faithfully repeated on the graphic chessboard.

There are different way of viewing a lecture:

▶   If you have the lecture on a CD or DVD, like the ones of Garry Kasparov, Viktor Kortschnoi and other great teachers and trainers, then you simply open a file using " *File   Open   Chess Media File*". The program will open a chess media window and you can sit back and watch the game.
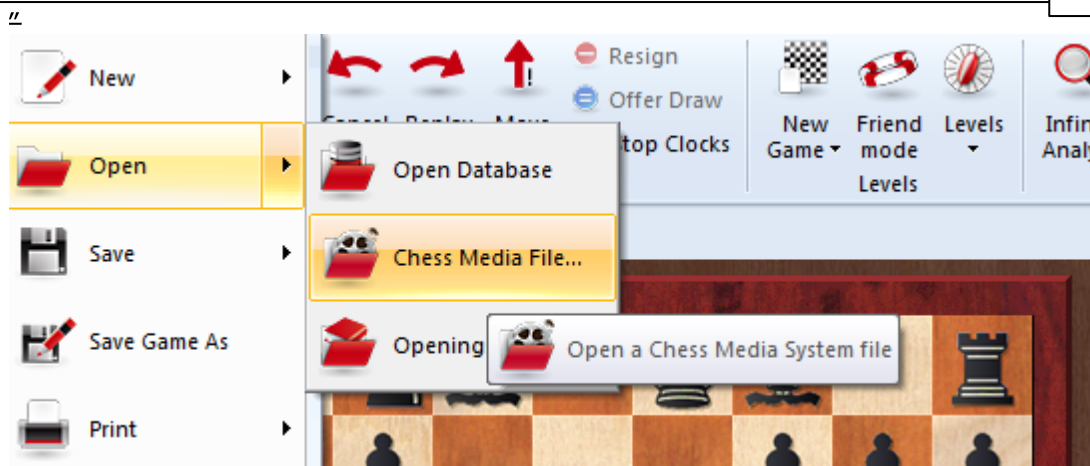
▶ If the lecture is on Playchess then you load the game. The program will detect the Chess Media broadcast and open the media window. Usually lectures and broadcasts have names like "TV ChessBase". Note that no multimedia broadcasts are available in the main playing hall and in other tournament rooms. They are generally to be found in "Broadcasts", in "Training and Teaching" and in the "Chess Media System" room. In the latter there are a lot of recorded lectures.

If the Media System window does not open by itself you can do this manually, using *View   Chess Media System* .

At the bottom of the media window there are some buttons which allow you to open a new file, start, stop and pause the replay, change the volume, and move the slider to jump to a different position in the multimedia file. Note that if you do this it will take a few seconds for the position on the board to synchronise (it is stored at regular intervals in the media file).

Note that you can pause the game at any stage and use Ctrl-S to save it in a separate database. You can also start an engine and analyse the position on the board. But make sure to save your analysis in a separate database before you continue or it will be overwritten by the game that is being replayed in the media file.

System requirements
In order for you to watch and hear the Chess Media lectures you need to have a working sound system on your computer; and to have the last Windows Media Player Version installed. This is available free of charge on the Microsoft web site. It is probably already installed on your computer.

3.8   Computer chess

3.8.1   Engines

The chess playing part of this program is separate from, and independent of the graphical interface. The playing part is called the "chess engine". The engine can be changed (Menu Tools – Engine), and the interface can support more than one engine at a time.

You can stage engine matches and engine tournaments.
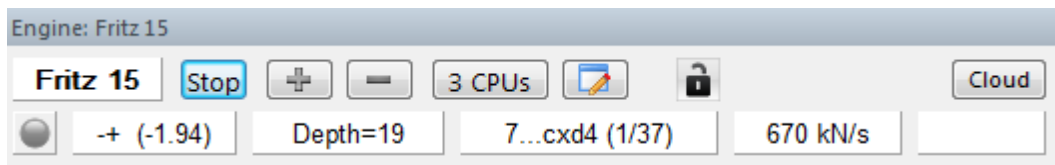
ChessBase regularly publishes new engines, keeping you completely up-to-date with the strongest chess playing software in the world.
See also Engine Interface ....

Other current top engines (November 2015)

▶   **Deep Fritz 14**
A 32/ 64 Bit version that supports multiprocessor systems.

▶   **Komodo**
a strong chess program with ratings well above Elo 3000. Komodo is especially useful for opening analysis, because its grandmaster programmer has made sure that the program's evaluations generally agree with accepted theory. Komodo also excels in the evaluation of positions with material imbalance, which it handles more intelligently than other top engines. The endgame of Komodo has been improved by the use of Syzygy tablebases*, which employ only the most essential information, to save computing time and memory. Another unique feature of Komodo is its superior performance when using eight or more cores.

▶   **Houdini**
Houdini also offers all the virtues and elements that made its predecessor the most popular analysis program in the chess world, but now also uses extremely precise evaluation functions that directly correlate with the engine's expectations of winning a particular position. As well as this, the improved "tactics mode" now makes Houdini the best tactical puzzle solver ever.

See also Cloud Engines ....

3.8.2   Load Engine

Menu: Engine   Change main engine
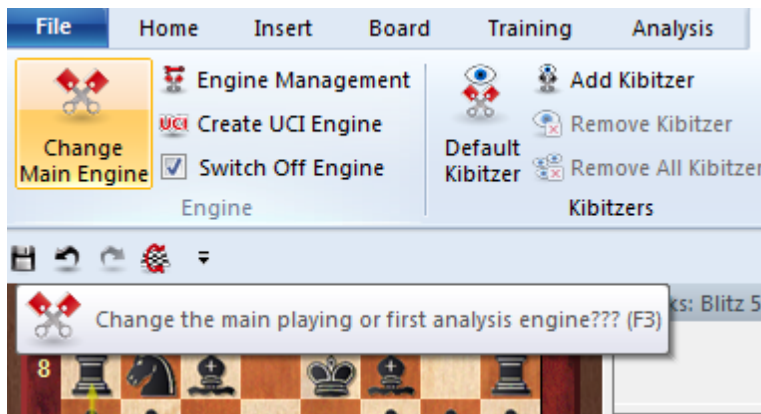
This brings up a dialog box in which your can load engines and set different engine parameters.
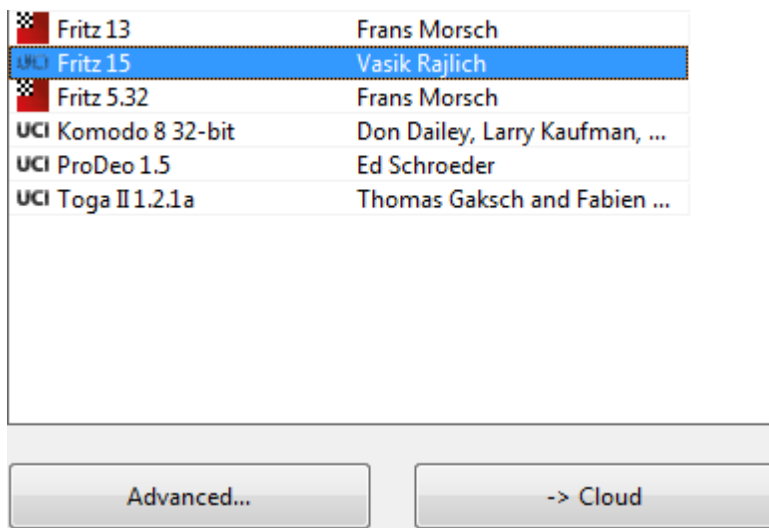
Advanced offers you more possibilities. **->** Cloud Engines ...

▸   **Clear hash tables:** This removes all information from the hash tables (which might have been filled in an earlier search).

▸   **Engine parameters**: click to set the engine parameter available for the selected engine.

▸   **Hash table size**: This is important if you are looking for optimum strength, especially in longer time control.

▸   **Permanent brain** is the term for thinking on the opponent's time. This is an advantage because the engine often guesses what the opponent is going to play and then has already calculated its reply.

▶ **Tablebases** are special endgame databases which allow the program to play five-piece endings perfectly (even find them in the search).

3.8.3 Advanced
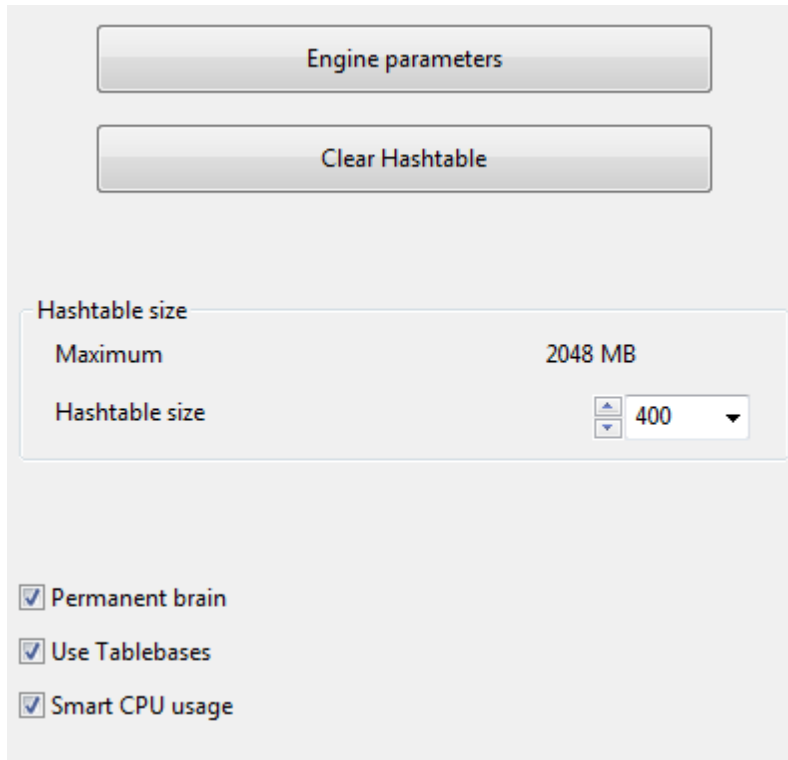
Engine parameters: click to set the engine parameter available for the selected engine.

Use Book/Use Livebook : Active those Databases for the access.

Hash table size: This is important if you are looking for optimum strength, especially in longer time control.

Tablebases are special endgame databases which allow the program to play five-piece endings perfectly (even find them in the search).

Smart CPU usage
On a computer with hyperthreading (i7 4 cores + 4 hyperthreading) a deep engine only starts with 4 threads/processes. On a computer without hyperthreading (i5, AMD) it starts with n-1 threads/processes. If you turn this option off it starts as in the older version.

Exception: The user has explicitly defined the number of threads/processes, for instance by defining a UCI engine.

3.8.4 Switch off engine

Engine   Switch off engine
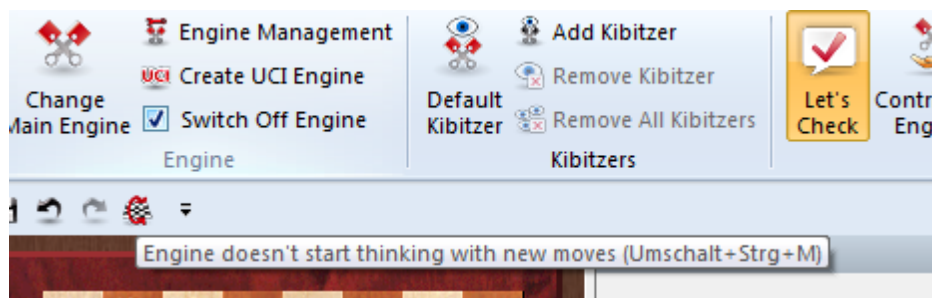
Normally when you enter a move the program will start playing against you. You can also switch to infinite analysis, in which case the engine will calculate in the background while you enter moves for both sides.

If you want to turn the engine off altogether you can do so with "Switch off engine". After this the engine will not run in the background, which is useful if you are running a number of program at the same time.

3.8.5 UCI Engines

What is UCI?

This program was designed as a multi-engine system. This means that the graphical user interface and the actual chess engine (the module that calculates moves) are strictly separated. They use a pre-defined interface to communicate with each other.

UCI stands for *Universal Chess Interface*. It is a communications standard defined by *Stefan Meyer-Kahlen*. The UCI interface is closely related to the "Winboard" protocol. This means that existing Winboard engines can be very easily adapted by the authors to run under our interface. For these programmers the new UCI interface has the following advantages:

‣   The engine can be run under an interface which has numerous advanced testing facilities that allow them to improve the strength of the engine.

‣   The engine runs at full performance and strength without the need of additional adapters.

‣   The engine will become available to a large number of users, who are able to install it without the need for complicated configuration, as is often the case with Winboard.

‣   The UCI protocol may be used without any license fees, for private and for commercial purposes.

A UCI Engine is installed using the menu *Engines   Create UCI Engine*. The dialog has two purposes:
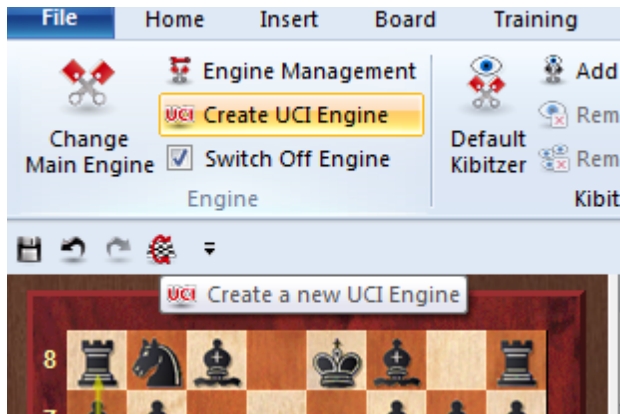
1. A new UCI engine can be selected and made available to the program.

2. The parameters of an engine that has already been installed can be modified. The modified engine can then be saved under a different name.

With regard to renaming engines there are certain restrictions. The original engine name must be contained in the new name. If the engine is saved with the standard settings the name must be left in its original form, i.e. you will not be able to edit the engine name at all. On the other hand if you change the default parameters then the name must also be changed (retaining the original name as part of the new one). The name of the engine author cannot be removed. However you do not need to modify it when you change the parameters.

Example: Let us assume that you are using the UCI version of Shredder under the Fritz interface. You change certain parameters of the engine. You will want this engine to appear with a different name in the list of engines. The standard name is "Shredder". You can for instance change it to "Shredder tactics monster" because that contains the original name. But you cannot change it to "Fred's chess engine" because that does not.

Installing a UCI engine
Before a UCI engine is displayed in the engine dialog (F3) it has to be installed. This is done in a few simple steps:

1. Select the option Create UCI engine in the Engine menu.

2. Next you must tell the program where the UCI engine is located. This is done by point and click in the file selector that appears. Use "Browse" and locate the UCI engine on your hard disk.

3. The name of the engine and its author are automatically given. Simply click "OK" to install the engine, which will then be displayed in the engine list.

Note that the UCI engine can be stored in any directory on any partition of your hard disk.

Modifying engines
Many UCI engines allow you to modify a number of search and evaluation parameters which influence the playing style of the engine. To change the parameters proceed as

described above. In the Create UCI engine dialog click on the button Parameters.

Each UCI engine will display the parameters which can be changed, and which vary for different engines. If you change any of the parameters the input fields for "Name" and "Author" become active and can be modified, within the constraints described above.

After clicking "OK" the new engine is registered and will appear in the engine list, together with the other UCI and native chess engines.

Please note: modifying and storing an engine with a different name does not create a new copy of the engine on your hard disk. Only the modified parameters are stored under the new name and applied to the engine when this is started.

See also Engine Interface ....
See also UCI Priority ...

Load logo
You can install different logos for different UCI engines, which are then displayed in engine matches. For this it is necessary that

‣   the logo is in BMP format
‣   the size is not larger than 100 x 50 pixels
‣   the file name of the logo is the same as that of the engine
‣   it is in the same directory as the engine

3.8.6   Set UCI Priority

The program was conceived as a multi-engine chess program and allows many different chess engines to be integrated. The user interface and the chess program itself are strictly separated and communicate with one another via a standard interface. Many chess engines can be downloaded from the Internet that use the UCI protocol. UCI is a protocol that was devised by Stefan Meyer-Kahlen and stands for Universal Chess Interfacet.

The program fully supports engines that use the UCI protocol. The menu *Engine Create UCI Engine* opens a dialog to integrate a UCI engine.
The installation is carried out via an intuitive dialog.

The program must first be told where the UCI engine has been stored on the computer. The button "Browse" opens a folder tree that can be used to select the folder which contains the engine.

After the path has been selected the fields "Name" and "Author" are automatically filled, as long as the engine contains this data. There is a button entitled "Parameters" which can be used to alter the engine's playing style.

In Fritz there is a new parameter to determine the priority of a UCI engine. What does it mean if the priority is set to lower?

Priority

☐ Below normal
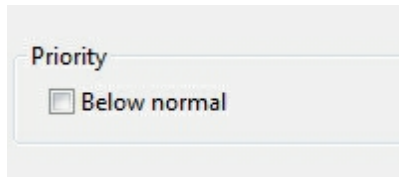
This has to do with the distribution of the processor time. The communication between the user interface and the chess engine is carried out by a separate program, the Engine Interface. The Engine Interface runs with low priority to give the chess engine the maximum amout of ressources. Some UCI engines have problems with the default setting because they use too many ressources and the Engine Interface cannot receive the evaluation results and similar data. The setting "Lower priority" solves display problems that arise when certain UCI engines are used.

Even when the lower priority is set a UCI engine receives all the processor speed it needs and brings its best performance. This setting does not adversely affect the performance of a UCI engine! This is easy to test by analysing the same position with both settings. There is no change in the engine's speed, it only makes the usage smoother.

So why can the priority be lowered for the UCI engines and not for Fritz (and the other engines sold by Chessbase)? The native Chessbase engines are linked as DLL's to the user interface, which means that unlike the UCI engines they are not external processes. No external protocol is necessary, and no priority must be set.

See also Engine Interface ....

3.8.7 Hash tables

Hash tables are memory areas in which the program can store positions and evaluations while it is calculating the moves of a game. If the program encounters the same position again, it can simply take the evaluation from the hash tables, rather than analysing the position all over again.

Hashtable size

Maximum   2048 MB

Hashtable size   ⬍ 400 ▾

Hash tables increase the playing strength of the program considerably. This is especially true of tactically strong engines like Fritz, Houdini or Kommodo. Some run at well over 500,000 positions per second, and will fill the hash tables very quickly. After that, the search slows down. This is not the case in a slower, positionally oriented program, which processes less positions per second, and takes much longer to fill the hash tables.

For slower time controls and deep analysis the engines need large hash tables. Tournament games with an average of three minutes (180 seconds) per move would ideally require over 256 MB for the hash tables. On blitz levels 16 to 64 MB is enough.

Some engines work best with hash tables sizes that are powers of two. This means that 64 MB of hash tables is much more valuable than 63 MB. Hash table sizes are set in the "Load engine" menu.

Some technical notes

▶   The Windows operating system takes unused memory and uses it for internal purposes (e.g., to cache file and speed up the hard disk). If you set very large hash tables, Windows has to free the memory the first time you activate the engine. To do so, it writes the contents to the hard disk, closes files, etc. The process can sometimes take a while, and during that time the hard disk will run constantly.

▶   After the memory required for the hash tables is free the hard disk should show no more activity (except for short seeks in the openings). This applies to subsequent games as well.

▶   If there is constant disk activity during the game, then the hash tables you have set are too large. Windows has installed part of the tables on your hard disk, which slows the program down drastically. You will notice that the search depth remains very low.

▶   If there is no disk activity at all when you first start an engine, this generally means that you have been too timid with the hash tables size. You may want to increase the size to get optimum playing strength.

▶   If you are playing an important tournament game with large hash tables, you should start the engine once to force Windows to release the required memory. Press Alt-F2 to start the engine, and Alt-F2 again to stop it when everything is quiet.

3.8.8   Engine management
Engine   Engine management
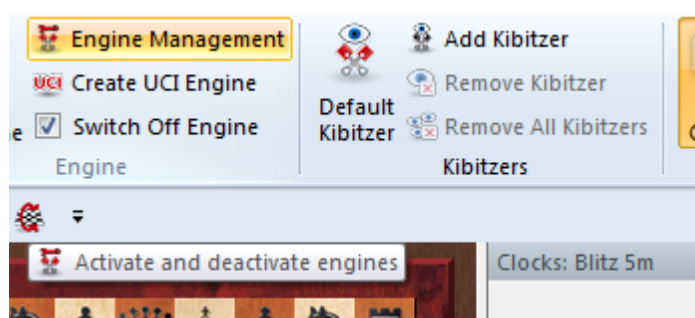
One of the great strengths of the ChessBase programs is that there is a strict separation between the interface, which provides the graphics and functionality, and the chess engines, which calculate the moves. This makes it possible to provide many interesting chess engines by talented programmers all over the world. The authors themselves do not have to bother about the interface, they can concentrate fully on

improving the intelligence of their engines.

If you have collected a large number of engines, the list from which to choose becomes long and unwieldy. The function Engine management helps you "archive" engines and activate them only when they are needed.

▶ **Active engines:** these are the ones that will be visible when you load an engine.

▶ **Inactive engines**: are those that are parked away for later use.

▶ The buttons **>>** and **<<** are used to move engines from one window to the other.

3.8.9 Engine matches

Engine   Engine match
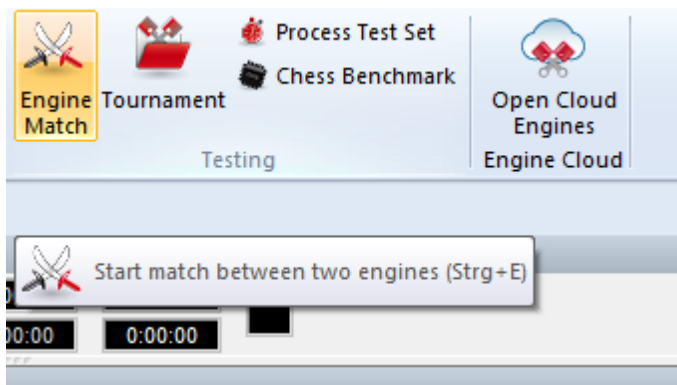
This allows you to stage automatic engine matches between two computer opponents. You can also play an engine against itself, that is, to test the quality of different openings books. In the engine dialog box you can specify which engines should play, which books they should use, time limits, number of games, etc.
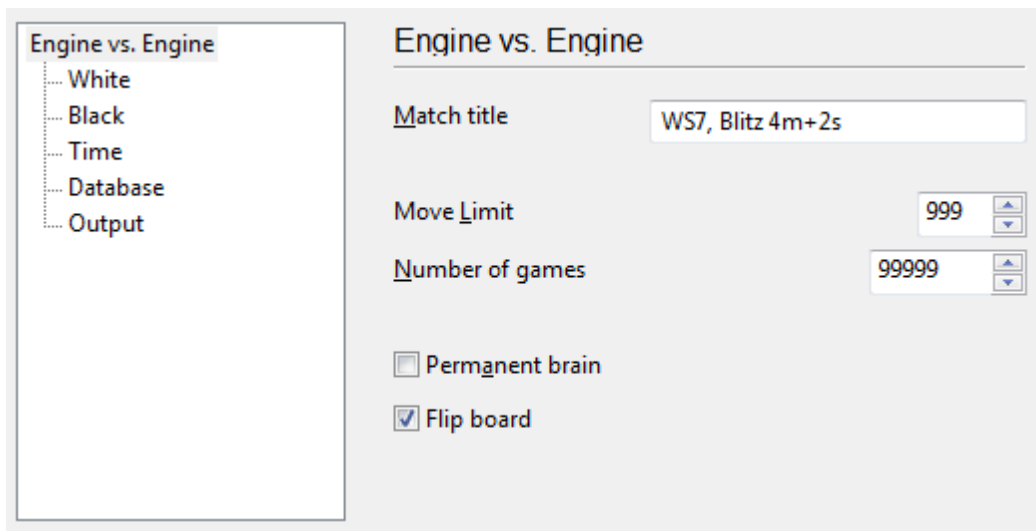
▶ **Match title:** This is the title that will appear in the tournament column of the games list.

▶ **Define:** These two buttons allow you to select and configure the engines. You can set the hash table size, the use of endgame tablebases, the openings book and possibly the engine parameters. You can give an Elo rating for the engine. The left engine has white in the first game.

▶ **Blitz/long/fixed:** You can stage engine blitz matches, or play the games at tournament time controls. It is also interesting to set a fixed depth which can be set to different values for each engine.
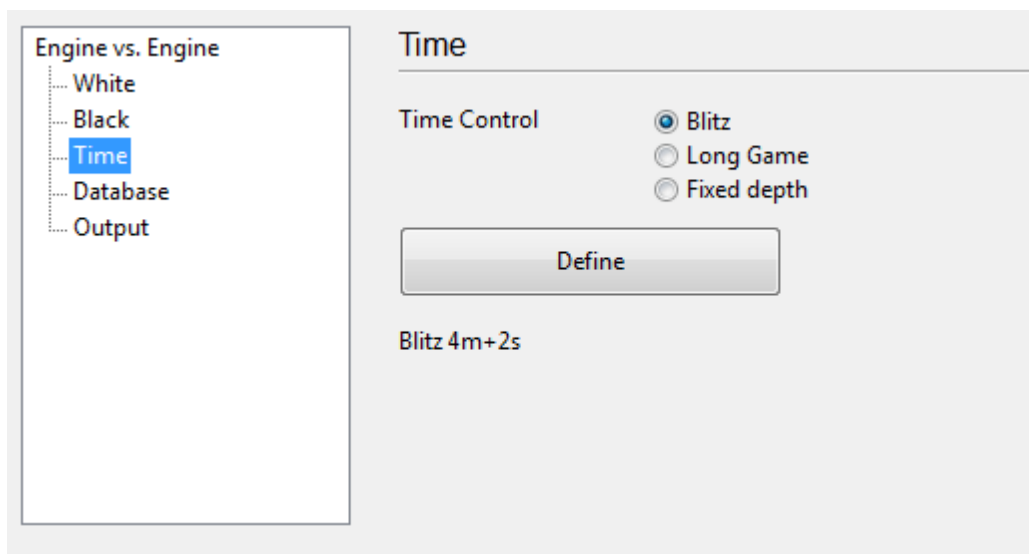
▶ **Number of games**: You can specify how many games should be played.

▶ **Move limit:** This limits the length of individual games. The number gives the number of ply (half-moves) after leaving the openings book. In the database, the games are stored without a result, but with an evaluation symbol.

Tip: If you want to check an openings book, set the move limit to "1". The program will go to the ends of different lines, calculate one move and save them with an evaluation symbol.

▶ **Permanent brain:** You can specify whether the engines should continue working while the opponent is thinking. This, however, means that each engine will be using 50% of the processing power.

▶ **Openings DB**: This is a special feature which allows you to select a database of games. The engines load each game, jump to the end and play on from there. This function allows you to stage "theme tournaments" and also conduct interesting experiments, like the "Nunn match", in which each side must play ten representative openings positions with black and with white. These positions are included on your program CD (Nunn.cbf) and were selected by Grandmaster John Nunn. They have become the standard for testing chess engines without the influence of the openings book.

First game: If you use an openings database, you can specify which position the match should start from. and one with black. If both programs are using the same openings book, or if you are using an openings database like the Nunn match, each engine will play the same opening with white, and then with black.

Information during the match

While an engine match is running there is a lot of information available to keep you briefed on its progress. These are to be found at the top of the screen.

▶   On the top left you see the names of the two engines.

▶   The "X" button allows you to stop the match.

▶   Click the middle button when you want to "adjudicate" a game. This is useful when one side is clearly winning but the game will drag on for many hours before it is decided.

▶   The third button will generate a tournament table, giving you an overview of the engine match so far.

On the top of the screen there is more information: You can see names of the programs, the current score, number of draws, and the result in percentage. You can also see the tournament performance in Elo, with the standard deviation in square brackets, and the certainty (in percent) that the performance lies within this margin of error.

Where the games are stored

A special engine-engine database is used to store all games from engine matches. It is by default, the database c:\My Documents\[User]\ChessBase\CompBase (unless you have specified otherwise during the installation).

The engine-engine database is called "EngMatch" and is always present in the history list at the top of the database window.

3.8.10 The Nunn Match

The use of an opening database in an engine vs engine match has some interesting applications. For instance, you can start a theme tournament to test the quality of your favourite openings system, store various lines in the database and then have the program play them out against itself. Or, you can store a series of games or positions you want to analyse in a database and start the program working on them. It can also be used to conduct the well-known "Nunn test".

GM John Nunn has selected a series of ten openings to test engine strength. The opening database required to conduct the match is to be found on your program CD, and is automatically installed on your hard disk (in the directory \testsets). If you start a match between two engines using this "Opening DB" and "Alternate colours", you will get 20 games which give you a very good idea of the pure playing strength of the engines.

There are a number of reasons for this kind of experimental match, which eliminates the use of traditional openings books:

▶   With the amount of effort going into the production of optimised openings books, and with the advent of learning books, the measurement of the playing strength of the chess engine itself has been pushed into the background. A large number of computer vs computer games are decided by the openings book.

▶   It is possible to improve the results of one program against a competitor by simply "booking" the opponent (i.e., including lines in the books that are aimed at a specific program). Such "killer openings" appear repeatedly on the boards of testers and drastically improve the score of a program, without need for improvement in the playing strength of its engine.

▶   It is important to define a fixed set of games that should be played in a test, rather than to use a random set of games, where there is a danger of selective reporting. A Nunn match is only valid if exactly twenty games are submitted. It is entirely reproducible and transparent to everyone. This is even more true if the precise hardware configuration is known, and the thinking times and evaluation of each move recorded, which the program does automatically.

3.8.11   Engine tournaments (with humans)

Menu Engine   Tournament
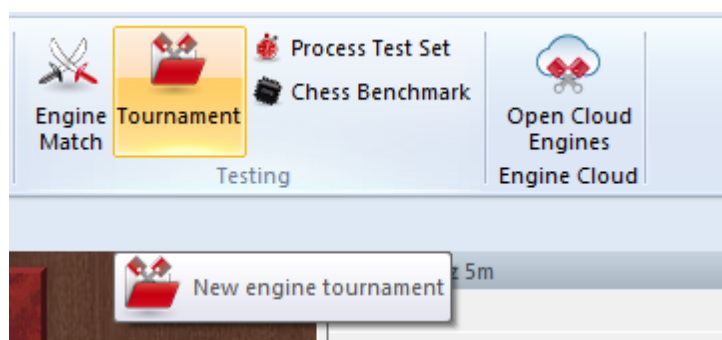
Matches between two engines have a disadvantage: program A might win easily against program B but have problems against program C, even though program C can beat program B. This is less probable among human players. To accurately measure a program's strength it has to play against a wide variety of opponents. The easiest way to do this is round robin tournaments.

The program does this automatically. You invite engines to a tournament with their opening books, specify a time control and leave the program to itself. If you need to use the computer in the meantime you can interrupt the tournament and resume it later.

You can use the menu *Engine   Tournament* to invite engines to an engine tournament.

You must choose the name of a tournament (with the extension **.cbtourn**) which will contain the data of the engines that are participating.
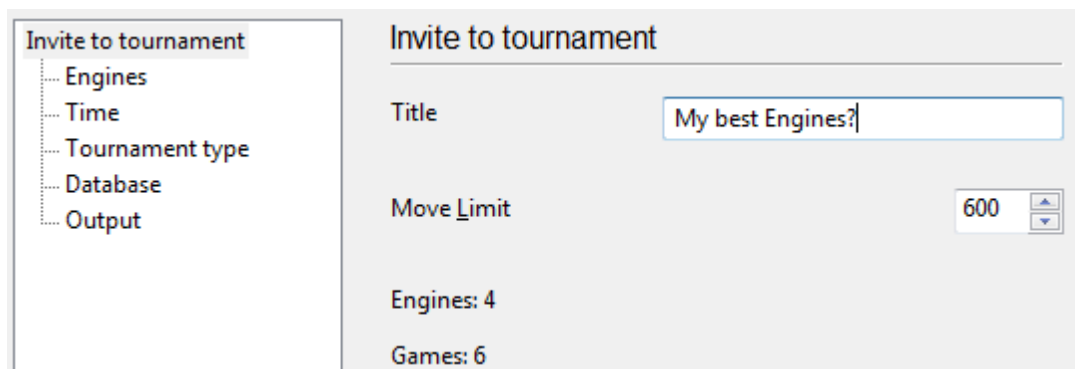
Title: The text that you input is saved in the games as the "Tournament".

Dialog Engines

You can choose from the engines installed on your system. For each engine, you can select an openings book, set the book and engine options, hash table size, etc.
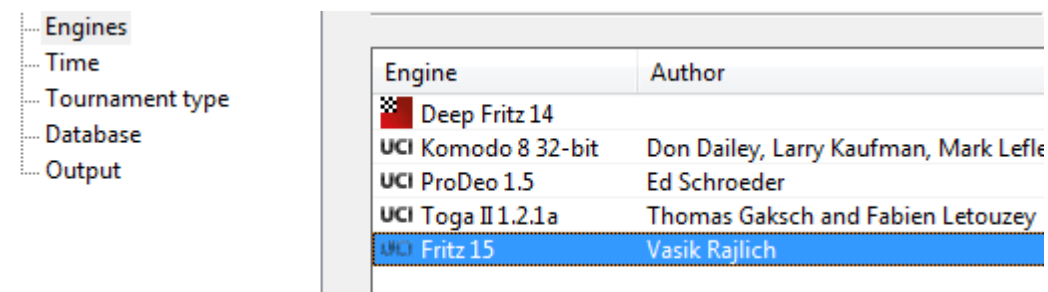
Unify Book: All the engines are to play with the same openings book.
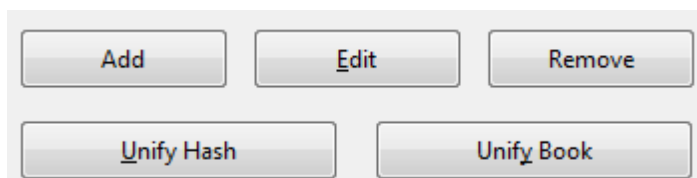
Unify Hash: All the engines should have the same size hash tables.

Dialog Time
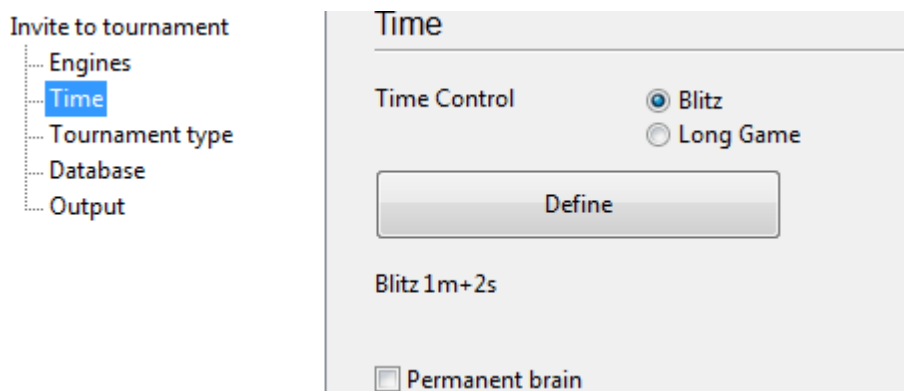
Blitz: The tournament is carried out with blitz games.
Long game: The tournament is carried out with games that use classical time controls.

Permanent Brain: Use opponent's time: The engines are allowed to think while it is the opponent's turn. This uses 50% of the processor time.

Dialog Tournament Type
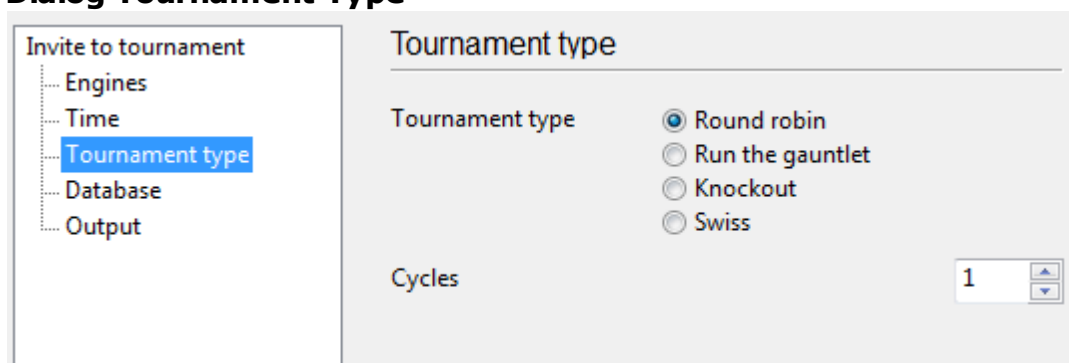
- **Cycles**: This specifies how many games each player should play against each opponent. This is the number of rounds in the Swiss system.

- **Round robin:** Every engine plays as many games against each opponent as are specified by the cycles.

- **Run the gauntlet**: The first engine in the list plays as many games against each opponent as are specified by the cycles. This is useful for testing individual engines.

- **Knockout**: Engines play against each other in pairs. The winner advances to the next round.

- **Swiss System**: In each round engines with approximately the same point score play against one another. After a few rounds the strongest engines are playing one another and the weakest engines are playing against one another. As many rounds are played as there are cycles.

Dialog Database
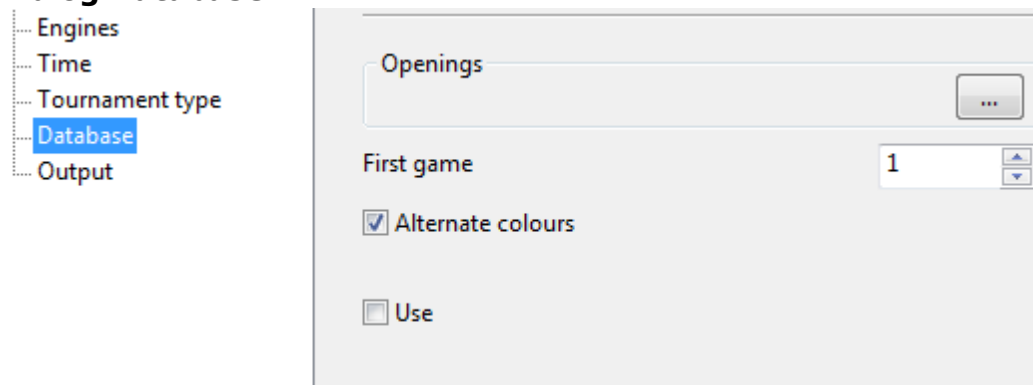
"Database" specifies which database should be used for the selection of openings. "*Alternate colours*" changes the colours for every game.

Dialog Output
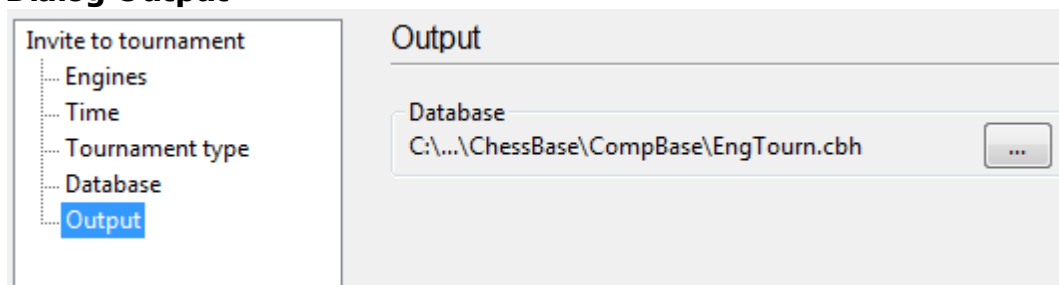
"*Output*" specifies the database in which the games of the engine tournament are to be stored.

Tournament database

The program saves all engine tournaments automatically in a tournament database. You will find this in the directory c:\My documents\ChessBase\CompBase\EngTourn, unless specified otherwise during the installation of the program. The tournament database is always shown in the history list of the database window.

3.8.12 Process test set

Engine   Process test set
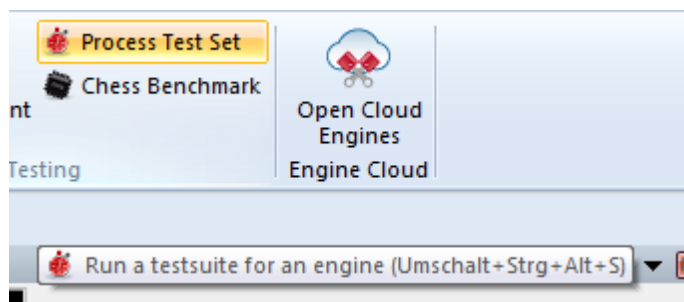
Solving a series of test positions is an objective way of evaluating the strength of an engine. But, it is a tedious task to enter each of the positions, start the engine, and then protocol the solution times.

You can run a whole database of test positions automatically. The solution times and values are automatically recorded together with the moves. Even the engine name is noted behind the first move of the solution.

After installing the program, you will find a test set of 200 difficult tactical positions for you to experiment with. It is in the directory ChessBase\Testsets. This is how to run a test set:

▶   Switch to the database window and open a database of test positions. The database should only contain positions, and no games. Each position should have the first move of the solution. If there are two solutions, then the alternative move should be given as a variation.

▶   In the board window, click *Analysis   Process test set*.

The following dialog box appears:
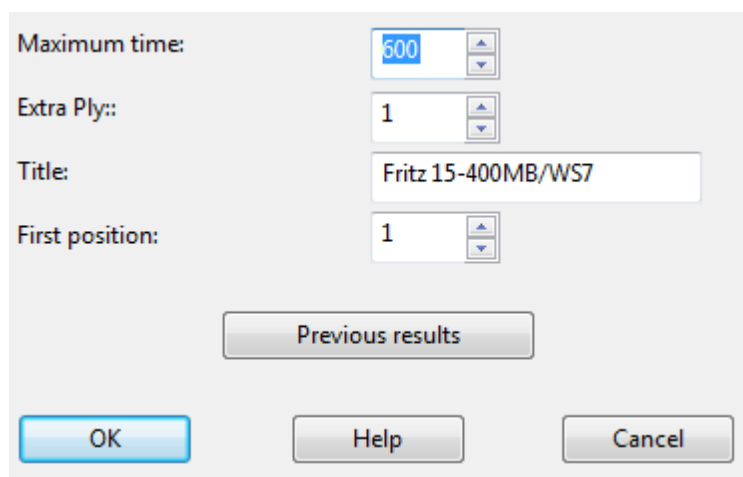
Maximum time: Defines the maximum length of time the program should work on each position.

Extra ply: When the engine finds the solution, then it should not stop immediately. The correct move may have come up by chance. The program should at least finish calculating the current ply depth. This corresponds to the setting Extra ply = 1. If you want to be sure, you can make the program go one or two plies deeper. This may, however, greatly extend the processing time.

First position: Allows you to specify from which position the program should start. Thus, if you have interrupted a session, you can easily continue at a later time.

Previous results: The program keeps a record of the results achieved by each engine that has run the test. It displays these in a sorted list. This contains the following results:

▶   The number of positions solved in the allocated maximum time per position.
▶   The average solution time of all the positions that were solved.
▶   The average solution time of all the positions (including those not solved).

This last value, which of course is influenced by the maximum time set, is the most illuminating. While the program is working you see the current results (how many positions solved, percentage, average time) in the area just below the status bar at the top of the board window.
In the displayed ranking list (click "Previous results"), you can delete the results of individual engines, or all results. You can clip the results (i.e., copy them into the clipboard and insert them in a spreadsheet program).

The unsolved positions are marked in the database with "medals". Positions that were not solved in the current test run are marked with black medals for **"Tactical blunders"**. Those not solved by any program, get the "User" medal (blue-green). You can see the medals in the database list and search for them with the search mask. This is the best way to get a list of unsolved positions. To load one position after another, switch to the board window and press F10.

Note: You can define a position as solved if one or more moves are not played. This is done by annotating them with a "?". For instance if the notation says 1.Ne5? (1.Ng5?) then the position is solved when neither of these moves is in the main line.

3.8.13   Compare analysis

Analysis   Compare analysis

The automatic comparison of the analysis of two different engines has two main uses. First, it is an excellent way of evaluating the strengths and weaknesses of the

engines. On the other hand, from a chess point of view, it is very interesting to compare the conclusions of two different engines. One might be tactically more reliable, the other more positionally sound.

It is also interesting to compare two versions of the same engine. The "compare analysis" function allows you to check what each finds at a specific search depth, or how many position nodes each of these engines actually checks to reach a certain search depth.

You can set a variation colour for each engine (when loading it) so that it is easy to tell at a glance which engine produced the individual lines.

How to load engines:

▸ **New** allows you to select engines from the list of all available engines.

▸ **Edit** allows you to change the settings for the engines already loaded (hash table size, variation colour).

You can use "compare analysis" on a number of games (in the database window). In this case, specify whether the analysed games should replace the original entries or if they should be appended to the end of the database.

Please note: You can load an engine more than one at a time and then use Edit – Parameters to set different engine parameters. In this way you can find out how the settings affect the performance of the engine.

3.8.14 Permanent brain

Permanent Brain is the term used to denote the program thinking on the opponent's time.

After it has executed a move, the program tries to guess what the opponent will play, and starts calculating a reply to that. If it has guessed right, it will play its reply quickly - sometimes immediately. The program shows the move it is expecting in the engine window.
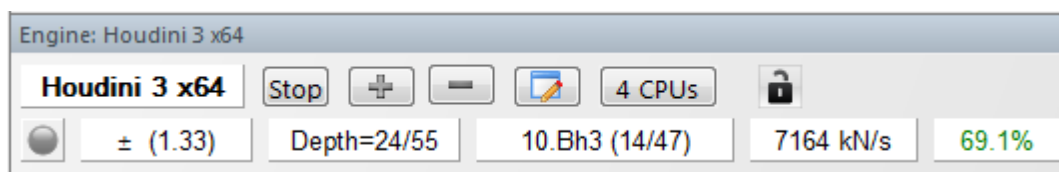
In engine tournaments, if two engines are playing against each other, using permanent brain slows down the side that is computing the next move (because it has to share resources with the other side's permanent brain).

3.8.15 Expected move

After the program has executed a move, it already expects the opponent to make a certain reply. In fact, it continues to calculate on the opponent's time, under the assumption that this move will be played. If the opponent actually plays it, the program can execute its next move much more quickly – sometimes instantaneously.

You can see what the program expects you to play in the engine window:
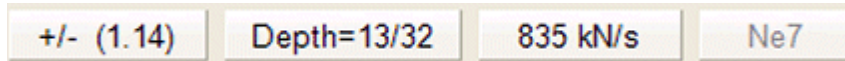
The expected move (Ne7) is displayed in the engine window.

3.8.16 Engine parameters

Menu: Engine   Change Main Engine - Advanced   Engine parameters
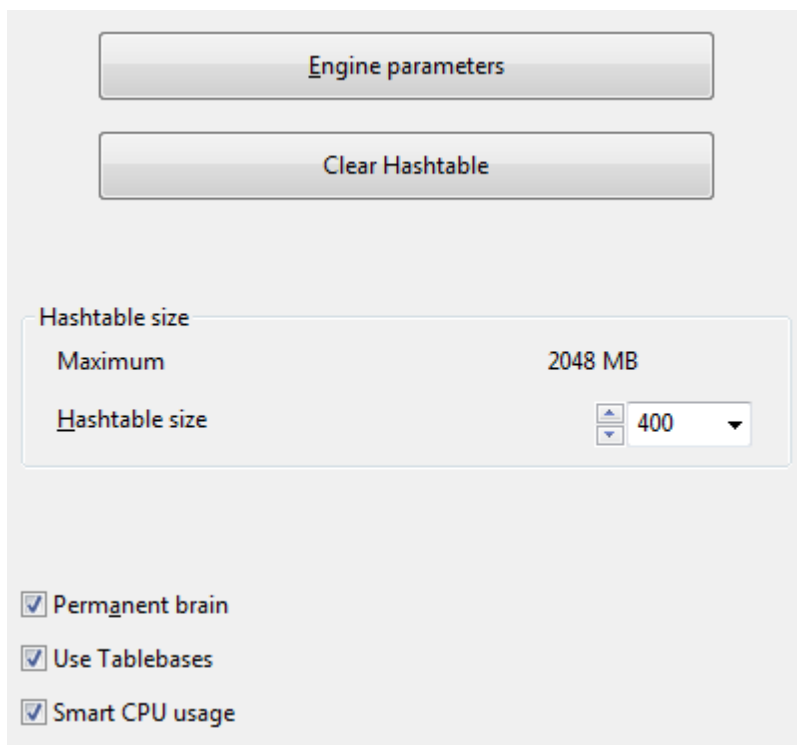
Many of the engines available have special parameters you can set. To do so, click the button "Engine parameters" in the engine window.

Now, you can change the settings that affect the playing style of the engine. Each engine will present the parameters that are relevant to its algorithms.

Here are examples of the parameters you can set in most engines to influence their playing style. You will often be able to achieve a higher performance in specific situations (e.g., playing very fast games, solving tactical positions or studies). Different parameters may be available in different engines, not all of the ones given below may appear in your default.

Note: The default configuration of the engine has been carefully tested. It is possible that in some circumstances other settings lead to better results, but for the best overall performance and strongest play it is recommended that you leave the default settings unchanged.

Engine Parameters of the Engine

You can modify the parameters of the engine. When you load an engine with the function key F3 you should select the engine that you want to load.

There is a button entitled "Engine Parameters" which opens a dialog with some options:

Log - Write stuff (like, communication with the GUI) to a file.

xLog - Write stuff to a HTML file (seems to only work for Opera Browser...)

Max CPU - The number of cores that Rybka will use, if this number is higher than your cores, Rybka will use them all.

CPU usage - In case you want to use less than one core, set it in this parameter.

Main Process Priority / Child Process Priority: Changes the engine priority without needing to visit the Task Manager. For instance:

Inherit should be to start the main process at the same priority of the GUI.

NalimovUsage - Same as in Rybka 3 (affects how much she is slowed by tablebases, default should be best).

Use Large Pages - After you set "lock pages in memory" in the OS, expect some 15% speed up if you give her 1GB Hash (or more, less hash should also give benefits but not as dramatic - only lasts until you unload the engine, then you'll probably have to reboot the computer for this to take effect again).

Always Score Main Move - With this OFF Rybka would move into looking for alternative moves in fail lows, with ON she will first give the move a score. Recommended to set it ON for analysis, OFF for games.

Display Upperbounds - With this OFF Rybka would not tell the user when a fail move happened, so if you were away from the computer you wouldn't have a way to know. Recommended to set it ON for interactive analysis, OFF for games.

Preserve analysis - Same as R3 (Engine keeps old contents on the hash for much longer, slows her down the more positions analyzed. I chose to keep it OFF).

Clear Hash - Allows Rybka to get a fresh look at the position.

Hash File / Save Hash / Load Hash - Used for when you are going to unload the engine or reboot, so Rybka keeps the hash contents on reload (I never use this).

MultiPV_cp - Same as R3 (Controls how worse than best the moves have to be to appear on MultiPV, e.g. a value of 0 only would show moves that are exactly as good as the best move).

TCBuffer - How many seconds Rybka thinks she has subtracted from the clock. Useful for bullet (1 '0) and blitz games (3 '0) so Rybka avoids losing on time (by time stolen by the GUI or the opposing engine, like clones), and also may give a general better time management when set at 3 (setting does nothing on incremental or repeating time controls.)

TCNormal Move Time - The rate at which Rybka should play the game. Lower values will make the engine play faster, and vice versa.

TC Max Move Time - The amount of time Rybka is willing to spend in critical positions (higher values will make her think longer on such cases).

These last 3 settings are extremely sensitive to hardware, time control and even, opponent, so to see Rybka 4 shine on games, you'll probably need to experiment a lot to find the optimal settings, but the gains can be significant.

[Pieces cp] - The offset of the pieces in centipawns. Please note that the behavior is

different on analysis than of games. On analysis "White" and "Black" are taken literally, so that when you analyze from the other side you get the same evaluation. On games White means "Me" and black means "The opponent", so by setting the values you are really setting how Rybka should evaluate her pieces and the opponent's, regardless of what side she's playing on.

Rook Endgame Scaling: If you see Rybka playing too much into dead drawn endgames with a rook and an extra pawn, try lowering this value. Useful for analysis of such positions, as well.

 xLog - Write stuff to a HTML file (seems to only work for Opera Browser...)

Main Process Priority / Child Process Priority: Changes the engine priority without needing to visit the Task Manager. For instance:

Inherit should be to start the main process at the same priority of the GUI.

NalimovUsage - affects how much she is slowed by tablebases, default should be best.

Use Large Pages - After you set "lock pages in memory" in the OS, expect some 15% speed up if you give her 1GB Hash (or more, less hash should also give benefits but not as dramatic - only lasts until you unload the engine, then you'll probably have to reboot the computer for this to take effect again).

Always Score Main Move - With this OFF Rybka would move into looking for alternative moves in fail lows, with ON she will first give the move a score. Recommended to set it ON for analysis, OFF for games.

Display Upperbounds - With this OFF Rybka would not tell the user when a fail move happened, so if you were away from the computer you wouldn't have a way to know. Recommended to set it ON for interactive analysis, OFF for games.

Save: This saves the engine modifications. This opens a dialog to select the filename for the stored parameters. The extension of the configuration file is *.param.

Load: This opens a dialog to load previously stored engine parameters. The parameter files can be found in the folder Engine Parameter.

Defaults: This button restores the engine's factory settings.

Tip: You can set up engine-engine matches or engine tournaments to test your modifications against other engines.
Save stores the new parameters for the engine. Restore deletes the changes you have just made. Defaults switches back to the normal parameters.

Please note: The default parameters are the one the programmers consider the strongest for general play.

3.8.17 End Game Table Base support

The Program integrates the Syzygy table probing code © Ronald de Man, the Gaviota EGTB probing code © Miguel A. Ballicora and the Nalimov EGTB probing code © Eugene Nalimov.

Syzygy bases

The Syzygy 6-men EGTB system is the recommended table base solution for Houdini.

It features by far the best compression (smallest file size) and best performance, especially when multiple threads perform simultaneous EGTB probing. Houdini has been extensively tuned for this state-of-the-art end game table base system so as to provide optimum precision and strength in the late endgame at any time control and with any number of cores. While installing the files on a SSD disk is recommended, the performance of the Syzygy on a normal hard disk is still very good.

The only drawback of Syzygy bases is that they do not contain the exact Distance to Mate information. If you require an exact mating distance in a position you'll need an alternative solution.

The Syzygy 6-men EGTB system is the recommended table base solution for Houdini.

For the Syzygy EGTB support you'll need to install the Syzygy EGTB files. At the time of writing all the Syzygy files are available for torrent download at http://oics. olympuschess.com/tracker/index.php. The 3-4-5-men Syzygy are also available for direct download at http://olympuschess.com/egtb/sbases.

The total size of the 3-4-5-men files is 938 MB (290 files), the 6-men table bases require 149 GB (730 files).

Nalimov EGTB

For the Nalimov EGTB support you'll need to install the Nalimov EGTB files.

Question: I don't understand the concept of setting a depth for EGTB probing. Why wouldn't all positions that have 3-4-5 pieces probe the table bases to get the evaluation?

EGTB probes are extremely slow compared to a normal evaluation by the engine. Suppose you have a K+Q+P against K+N ending. Even without consulting the table bases Houdini knows that this ending is easily won for the K+Q+P side. Consulting the EGTB for this position would reduce Houdini's playing strength, as it could easily have evaluated 1,000 other positions instead of making the rather useless EGTB probe.

Even the in-memory "soft" Gaviota or Scorpio probes are sometimes relatively slow compared to a native evaluation of the position - especially when multiple threads are running. If two threads simultaneously perform a soft probe, the second thread has to wait for the first to finish its probe.

This is aggravated by the fact that Houdini contains a lot of end game knowledge in its native evaluation function - a lot more than most other chess engines. For example, even in a non-obvious ending like KBP v KB with bishops of the same color,

Houdini knows quite well which positions are won and which are drawn. This means that except for difficult-to-evaluate endings like KQP v KQ the 5-men EGTB do not really increase Houdini's playing strength.

To handle this situation in an intelligent way, Houdini will vary the frequency at which the EGTB are probed depending on the actual end game that is occurring. In difficult-to-evaluate endings Houdini will probe the EGTB files much earlier than in endings that are easy to evaluate.

The frequency of the probing is further influenced by the following parameters:

· Hard Probe Depth is the earliest search depth at which the EGTB probing will result in a disk access. You can reduce this value if the table base files are installed on a very fast disk, or if you are running less than 4 threads.

· Soft Probe Depth is the earliest search depth for EGTB probing that uses only the memory cache. You can reduce this value if you are running less than 4 threads.

3.8.18 Extended Options in the Engine Window

In the engine window the user now sees a new display of the number of processors used. This display is only relevant for computer systems with several processors and programs that are able to use more than one processor.
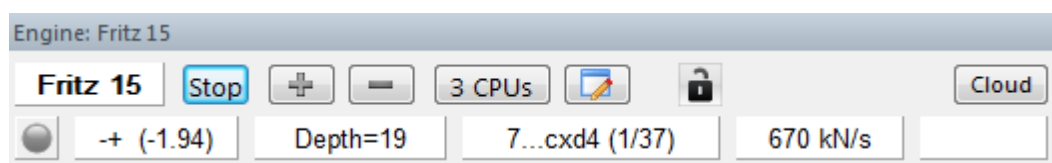
Clicking the CPU button in the engine window allows the user to change the number of processors being used.

3.8.19 Endgame databases

Many chess programs can play all important major piece endings with four and five men on the board perfectly. This is to be taken literally.
They contain full information on every legal position that is possible in these endings. At any stage, the program knows whether the position is won, lost or drawn, and how many moves it takes to win or lose (assuming perfect play by both sides).

End Game Table Base support

Houdini integrates the Syzygy table probing code © Ronald de Man, the Gaviota EGTB probing code © Miguel A. Ballicora and the Nalimov EGTB probing code © Eugene Nalimov.

The Syzygy 6-men EGTB system is the recommended table base solution for Houdini. It features by far the best compression (smallest file size) and best performance,

especially when multiple threads perform simultaneous EGTB probing. Houdini has been extensively tuned for this state-of-the-art end game table base system so as to provide optimum precision and strength in the late endgame at any time control and with any number of cores. While installing the files on a SSD disk is recommended, the performance of the Syzygy on a normal hard disk is still very good.

The only drawback of Syzygy bases is that they do not contain the exact Distance to Mate information. If you require an exact mating distance in a position you'll need an alternative solution.

Syzygy EGTB

For the Syzygy EGTB support you'll need to install the Syzygy EGTB files. At the time of writing all the Syzygy files are available for torrent download at http://oics.olympuschess.com/tracker/index.php. The 3-4-5-men Syzygy are also available for direct download at http://olympuschess.com/egtb/sbases.

The total size of the 3-4-5-men files is 938 MB (290 files), the 6-men table bases require 149 GB (730 files).

The location of the Syzygy EGTB files is specified in the SyzygyPath option.

Nalimov EGTB

For the Nalimov EGTB support you'll need to install the Nalimov EGTB files. At the time of writing they are available for download at the address ftp://ftp.cis.uab.edu/pub/hyatt/TB or http://tablebase.sesse.net. Download the files and save them in a directory on your hard disk. The total disk space required for the 3-4-5-men table bases is about 7 GB (290 files). The space requirement for the 6-men Nalimov table bases exceeds 1 TB.

The location of the Nalimov EGTB files is specified in the NalimovPath option.

The endgame databases in the Nalimov format and are know as "Tablebases".

Eugene Nalimov from Novosibirsk (currently in Redmond) wrote the powerful algorithms to generate the endgame tablebases.

Options   Tablebases

Accessing the endgame databases (Nalimov tablebases) from a hard disk is much faster than from the CD. It is advisable to install them onto your hard disk, if you have enough space.

Create a directory (e.g., e:\cbdata\tbs) on your hard disk and copy the content of the directory \TBS from the program CD into the new directory. Then set the path in the "Options" dialog box:
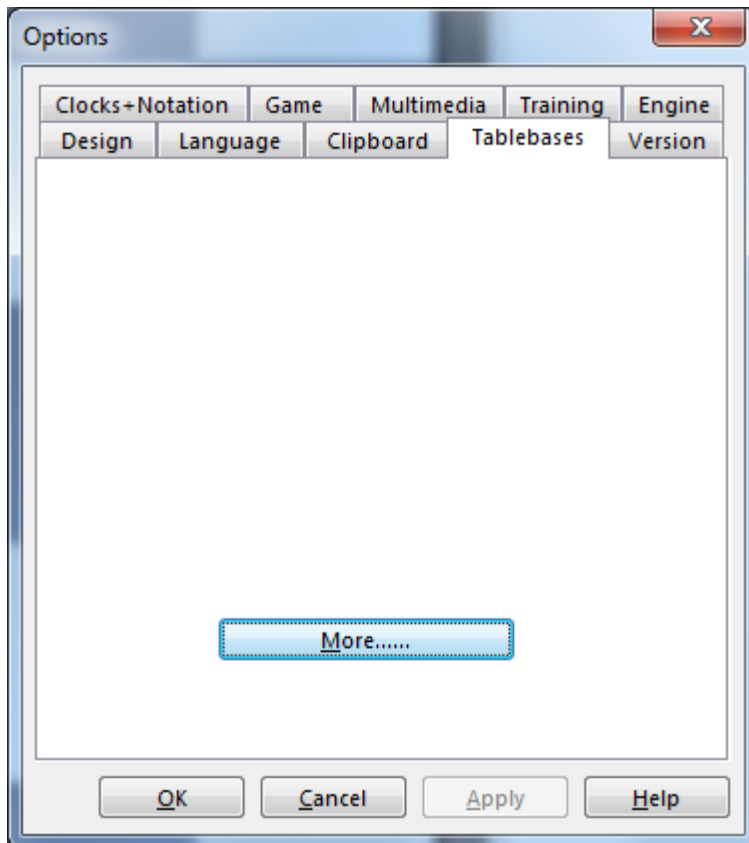
Click More.
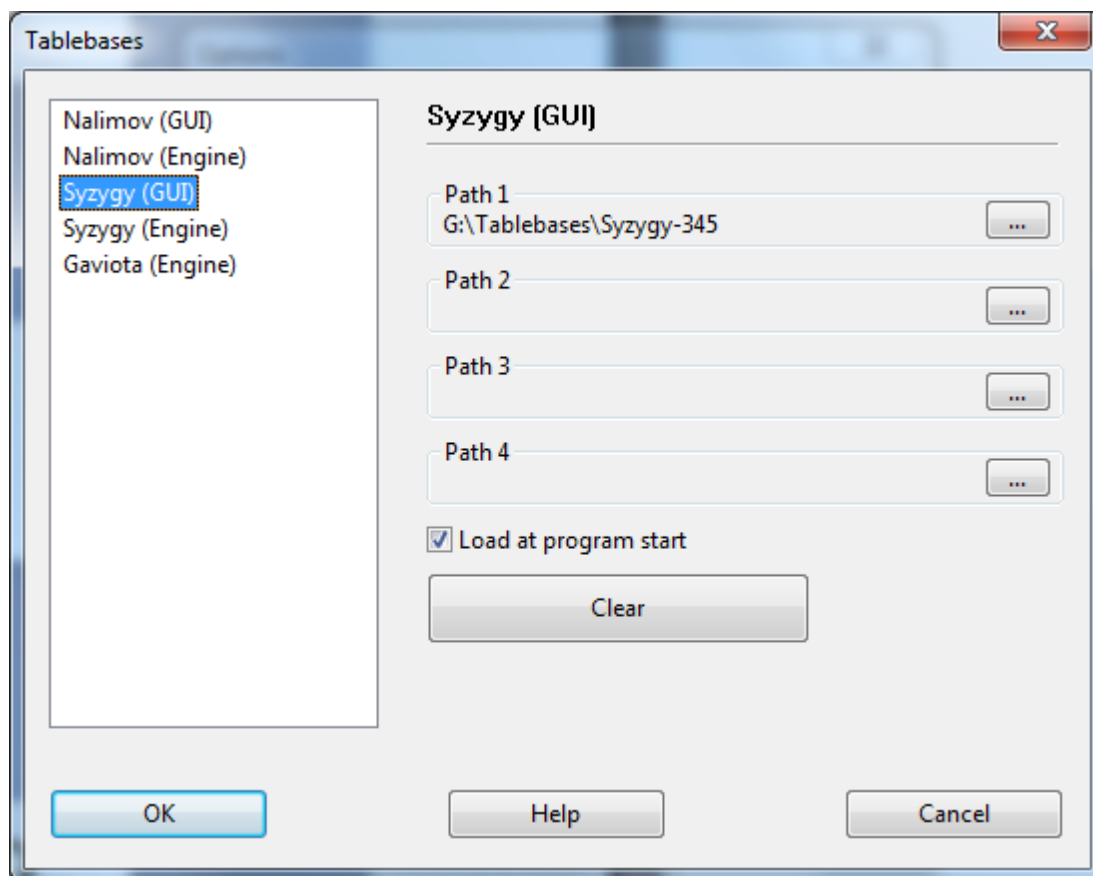
Select the prefered Format and set the path.

Note that you can put the tablebase files into different directories, partitions or even different hard disks on your computer. Use the "Browse" button to locate the directories.

The cache memory is used to speed up access to the tablebases during a game. A value between one and eight MB is advisable.

Access to the tablebases improves the playing strength of the program in the endgame considerably. Whenever it hits on one of the five-piece endings in the search, it can stop and get a completely accurate assessment of the position from the tablebases. It does not have to generate thousands of follow-up positions. But, accessing the tablebases is quite slow (in comparison to the move generation and evaluation). You can speed things up by copying the tablebases onto your hard disk.

Use the endgame database to practice the endings or to study difficult positions. Not even the greatest experts in the world can give you more reliable analytical help.

Endgame Turbo
ChessBase has a product, the Endgame Turbo, which consists of five DVDs filled with Nalimov Tablebases.

With the help of the Endgame Turbo, all five and a number of six-piece endgames will be played with absolute perfection. Since the positions are also indentified in the search the program played the entire endgame, including positions with more than six pieces on the board, much more accurately.

See also End Game Table Base support ....

Gaviota Endgame Databases

For the Gaviota EGTB support you'll need to download the Gaviota EGTB files. At the time of writing they are available for download at the address http://www. olympuschess.com/egtb/gaviota.Download all 145 files and save them in a directory on your hard disk. The total disk space required is about 7 GB.

The location of the Gaviota EGTB files is specified in the TbPath option.

Houdini will scan the folder for the "kqkr.gtb.cpX" file and accordingly decide which compression level to use.

3.8.20 Syzygy EGTB

The program supports a relatively new endgame database format, the *Syzygy Endgame Tablebases*. The new format was designed by Ronald de Man from Holland. Most new chess engines already support this format.

You can activate the Syzygy Endgame Tablebases in the program settings, in the menu *File Options TableBases More*.
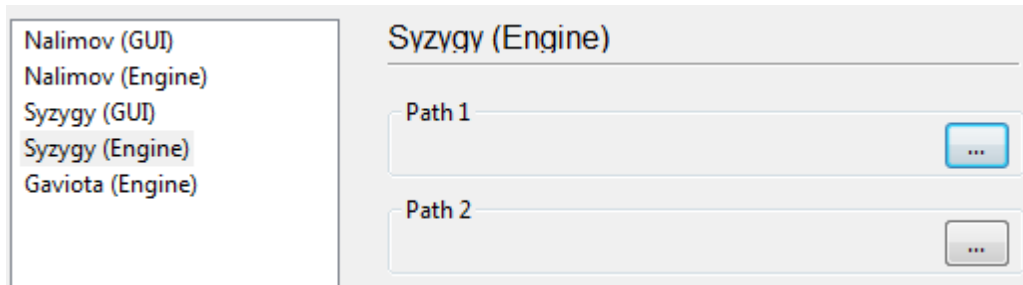
Enter the path of the folder where the Syzygy tablebases are stored in the "*GUI*" and "*Engine*" tabs. Clicking on the button with the three dots activates the standard Windows dialog to select the folder. Click OK to confirm the settings, and the program will now use the information in the tablebases.

You can check whether the access is working by looking at the output of a chess engine.

In this example you can see entries "tb= xxx", which show how often the Houdini chess engine is accessing the endgame tablebases. A big advantage of the Syzygy Endgame Tablebases is that they are much smaller. The 6-man Syzygy tablebases need 150 GB disc space, whereas the Nalimov tablebases need more than 1 TB.

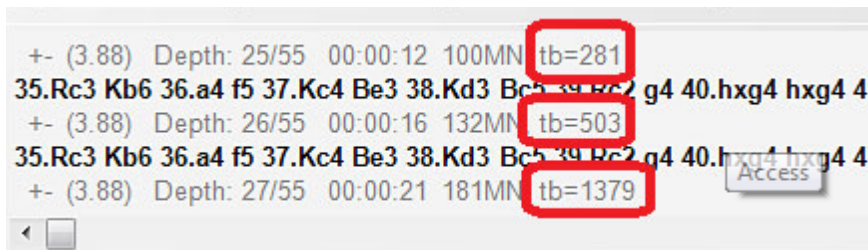The Syzygy Endgame Tablebases pay attention to the 50 move stalemate rule. If there are 50 moves without a piece being taken or a pawn being moved, the game is drawn. Since the data can be accessed in RAM very fast and effectively the Syzygy Endgame Tablebases are now used exclusively by many modern chess engines.

For instance, the chess engine only uses the Syzygy tablebases during the search, but it also uses the Nalimov tablebases when a position is on the board. It is to be expected that the Syzygy tablebases will become increasingly popular with engine developers.

The best way to get the complete Syzygy Endgame Tablebases is to buy the *Endgame Turbo 4* from our online shop.

Because of the size of the tablebases it is best to install them outside of the Documents folder, for instance in C:/Tablebases/.

There are two different types of Syzygy tablebases.

WDL (Win-Draw-Loss).

In these files only information about the result of the position is stored. This is the only information used in the search. Based on this information the chess engine cannot tell how many moves it will take to win the game. The engine is merely informed whether the position is a Win, a Loss or a Draw.

DTZ (Distance to zero).

These tablebases are used by the GUI to generate a value which states how many moves it will take to win the game. Some engines use this information during the search.

The Syzygy tablebases support bitbases in both WDL and DTZ format. The latter format is only used when an exact position is already on the board. However, only the number of moves to reach another endgame (or sometimes checkmate). Another endgame begins after any move that resets the 50 move rule. By this definition, every time a piece is taken or a pawn moves a new endgame has begun and the count is set to 1. If a pawn keeps advancing, after every move the count is 1 again. That means that the count is reset after every move which changes the position irreversibly.

This means that the Syzygy Endgame Tablebases are different to the tablebases that have been used until now. This means that the moves to mate are not necessarily displayed, but the moves to the transition into another endgame. When sorting the moves pawn, capture and promotion moves are put first, because these are the moves that bring the game forwards.

For example, if you are using the engine to analyse a 5 or 6 piece endgame that can definitely be won, the Syzygy tableBases might give an evaluation of +250. There is no longer a display of "Mate in x moves".

As in the case of the Nalimov tablebases there are 290 files for the 3/4/5-piece endgames, but they are differently distributed. The Nalimov tablebases have two files per endgame, one for "White To Move", one for "Black To Move". The Syzygy tablebases only need one file, regardless of who is moving, but there are two versions of each tablebase: one contains the WDL (Win-Draw-Loss) result and the other contains the DTZ (Distance-To-Zero) result.

3.8.21 Copy endgame databases to hard disk

File Menu   Options   Tablebases
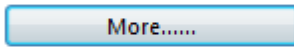
Click More ...

A major feature is the support of the new *6-men Syzygy table bases*. The program has been extensively tuned for this state-of-the-art end game table base system and will provide optimum precision and strength in the late endgame at any time control and with any number of cores. While we strongly recommend using the 6-men Syzygy tables, Houdini 4 continues to support Nalimov and Gaviota table bases.

Accessing the endgame databases (Nalimov tablebases) from a hard disk is much faster than from the CD. It is advisable to install them onto your hard disk, if you have enough space.

Create a directory (e.g., e:\cbdata\tbs) on your hard disk and copy the content of the directory \TBS from the program CD into the new directory. Then set the path in the "Options" dialog box:

Note that you can put the tablebase files into different directories, partitions or even different hard disks on your computer. Use the "Browse" button to locate the directories.

The *cache memory* is used to speed up access to the tablebases during a game. A value between one and eight MB is advisable.

3.8.22 Benchmark

Engine   Chess Benchmark
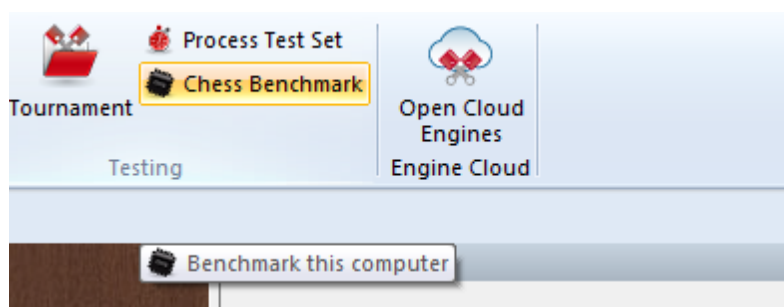
The speed of the hardware that the engine is running on, has great influence on its playing strength. Obviously, a 3 GHz Pentium is going to give you a much better performance than one running at 1.7 GHz. But the optimum configuration of the hardware also plays an important role. For instance, the amount of first and second level cache, the speed of access to memory, and other such factors, can lead to considerable variance. Two computers with exactly the same processor may produce

quite different results.

A built-in chess benchmark helps you measure the chess specific performance of your hardware. In order to make the results reproducible it is always conducted with a standard chess engine.

The results of the chess benchmark test depend to a great extent on the size of the hash tables. It also varies according to the number of applications you have running in the background. You should use the test to check the effectiveness of your current configuration.

Typical chess benchmark values for a 2.6 GHz Pentium with 128 MB hash tables is 1.4 (i.e. it is 1.4 times faster than a P3 running at 1 GHz. You should get a kilonodes per second value of abround 600. The Centrino and Athlons will give you much better values, since they are better suited to the kind of (integer) calculations used by chess engines.

The nodes-per-second value of the chess benchmark gives you the number of positions the engine is generating and evaluating per second. This value (in "kilo nodes") is independent of hash tables, and depends almost solely on processor speed. Some engines will give you up to two million nodes per second on modern hardware. But remember that the lower node counts of some engines does not necessarily mean that they are weaker. Usually they are simply processing more chess knowledge.

Fritz Chess Benchmark.exe
On the program DVD there is a utility called Fritz Chess Benchmark.exe. This is what is running during a chess benchmark as described above. The utility can also be started independently, which means you can copy it onto a memory stick and run it on different computers when you are purchasing a new one. This will help you make sure you select a machine that gives you good values for chess calculations.

3.8.23 Engine Interface

The program's engine interface has been adapted to the latest Windows specifications, for example Windows 8/10.

This means that all current and future engines will don be stored in the folder

\Program Files\Chessbase\Engines but in \Program Files\Common Files\Chessbase\Engines.

This is the folder where the new engine and the latest version of Crafty will be installed.

Older chess engines installed by previous program versions will remain in the folder

\Program Files\Chessbase\Engines.

UCI Engines
UCI engines can still be installed in any folder in any partition anywhere on the computer.

The UCI configuration files with the extension ***.uci** must always be stored in the folders
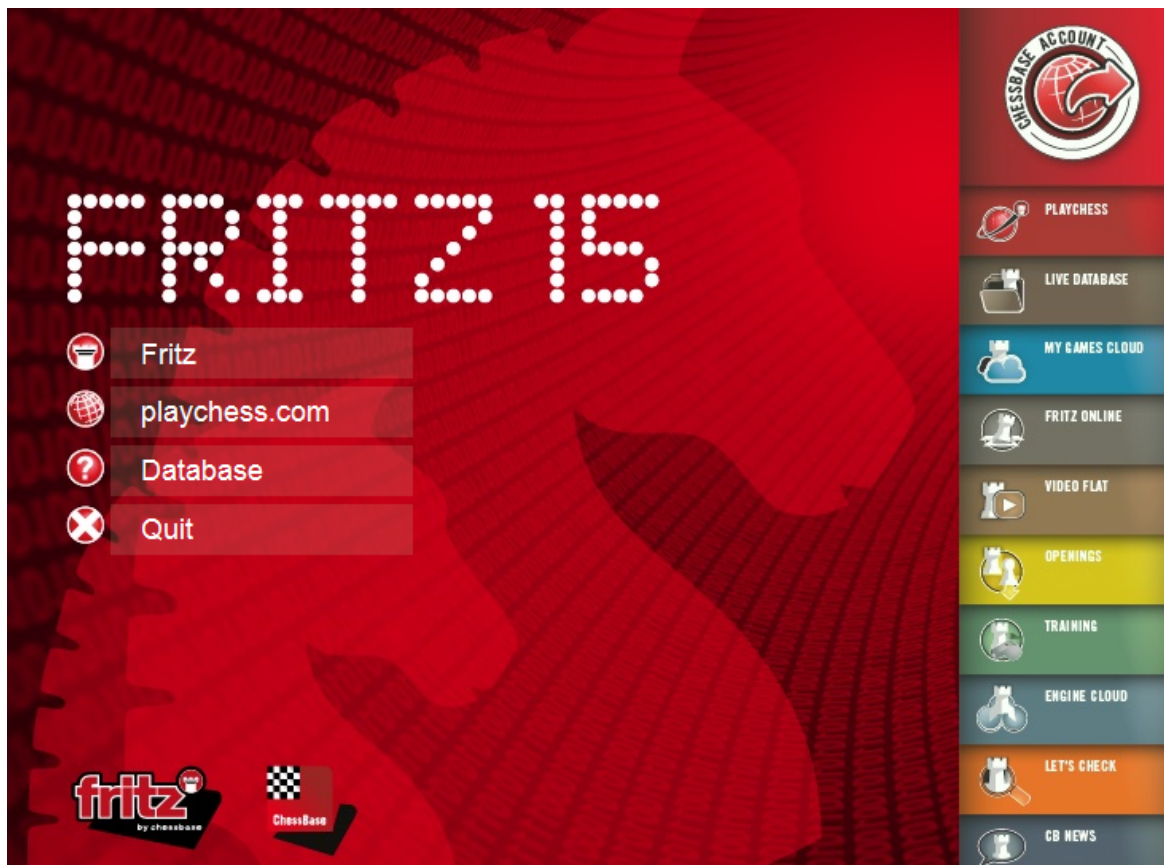
\My Documents\ and \Settings\<username>\Application Files\Chessbase\Engines.UCI.

3.9   ChessBase Web Apps

3.9.1   Startscreen

After installing the program you can launch it my double clicking the program icon on the desktop.

First the start screen is displayed.

Fritz starts the classic chess program. **Playchess.com** connects you with our chess server. **Database** opens the database module of Fritz 15 and displays the games list of the last database used.

You can use the buttons on the right side of the start screen to access our **web based apps** which can be used with any current browser. You can carry out free

tactics training, save your games on the cloud server or access our large online database.

3.9.2 Playchess App

Using this web client and any up to date Internet browser you can play games with your friends all over the world, you can watch broadcasts, or you can chat with your friends. New features are being added on a regular basis.

You can use the web client either as a "*Guest*" or with a registered player account. However, as a "Guest" not all features of the application are available.


Access

If you are trying out the chess server for the first time it's sufficient to be a "*Guest*". Simply click on the button "Guest" in the login dialog.

You can play your first games or watch other people play as a Guest, even though not all features are available. If you want to use all the functions available in the program you have to create a user account.

The following functions are available on the application's home page.
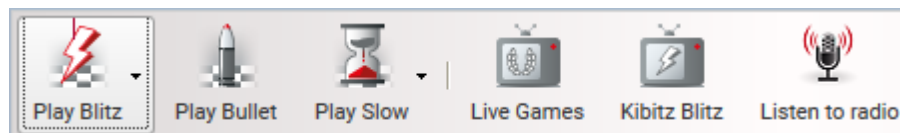
- **Play a Blitz Game** - This starts a game with five minutes time for each player.
- **Play a Bullet Game** - This starts a game with only one minute time for each player.

- **Play a Slow Game** - This starts a game with 15 minutes time for each player.
- **Live Games** - This allows you to watch games being played by grandmasters. You can load the four most popular games from current tournaments into different board windows.
- **Kibitz Blitz** - This loads the game with the strongest players into the board window for you to watch as it's being played.
- **Listen to Radio** - You can watch games for which there are live audio commentaries.

There is a small arrow at the side of some function buttons. This tells you that other functions are available. Clicking on the arrow displays the additional functions.
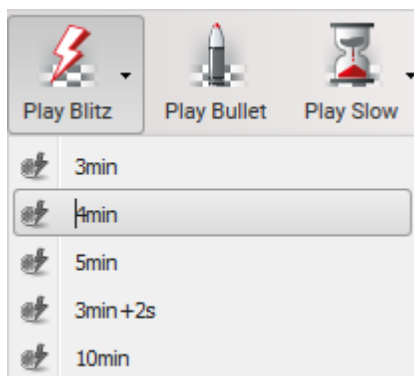
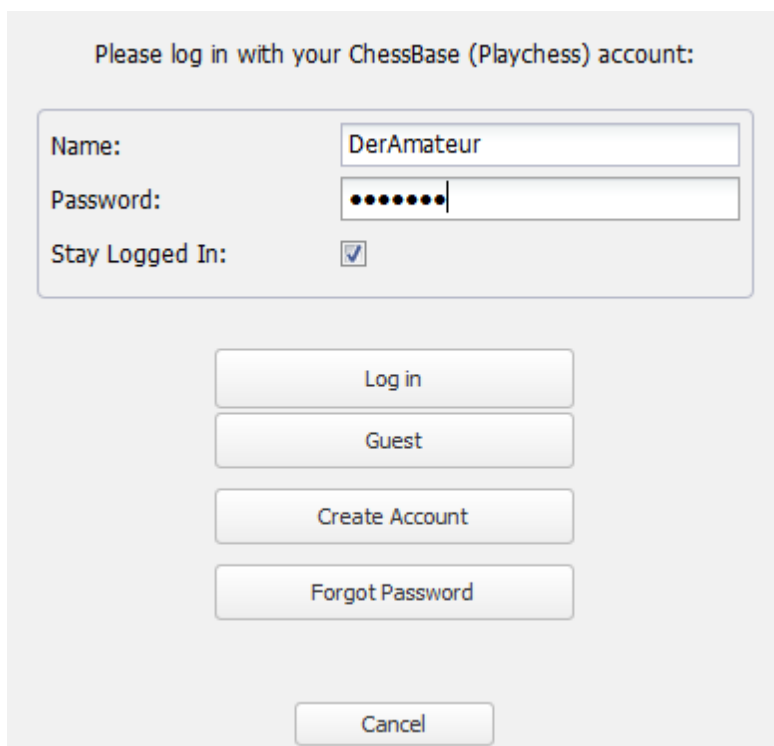## Playing your first games as a Guest

In the Challenges window there are offers to play games. Challenges from other players are marked with a green arrow.

Click on one of the names in the list, then click the button **Accept**. A game is then started in a new board window with the specified time controls.

Create Account

It is best to create a user account that you can use for all your browser applications. By clicking on the on the Login button you can log in with an existing player account or create a new account.

Enter an already created player name (handle) with which you want to be known in the player rating lists. Enter the password that you selected when you created your account.

Below the login dialog there is a button entitled "**Create Account**". Clicking this button starts a dialog to create a new user account.

The following data has to be entered:

**Name** = The name of the player that will appear in the player lists.

Email = The email address is needed in case you forget your password. It is also used to identify the user and unlock the account the first time it is used.

Note: The email address is only used for identification purposes. It is handled confidentially, and it is not used for advertising.

Password: For safety reasons the password must be entered twice.

Tip: Please make a note of the password and keep it secret. For security reasons the server does not store passwords as text, which means that even the system operators cannot see your password. If you have forgotten your password you can request a hint by email. For this reason you should choose a memorable text in the appropriate dialog box.

Information about the login status is displayed in the chat window.
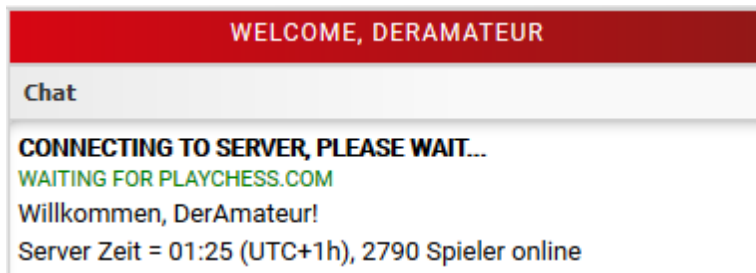
By clicking on the button Login you can set up your account. For instance, you have the possibility to select some users as friends and to ignore others. If a player logs into the server who is marked as a friend there is a short acoustic signal and a message in the chat window.

There is the opposite effect if you add a user to the Ignore List. All chat messages and challenges are filtered out by the program, so that you never know he is online.

User Interface

The welcome screen is divided into several windows. The most important and commonly used functions are on the toolbar at the top of the window.

- **Play a Blitz Game** - This starts a game with five minutes time for each player.
- **Play a Bullet Game** - This starts a game with only one minute time for each player.
- **Play a Slow Game** - This starts a game with 15 minutes time for each player.
- **Live Games** - This allows you to watch games being played by grandmasters. You can load the four most popular games from current tournaments into different board windows.
- **Kibitz Blitz** - This loads the game with the strongest players into the board window for you to watch as it's being played.
- **Listen to Radio** - You can watch games for which there are live audio commentaries.

At the top right there are the following buttons.
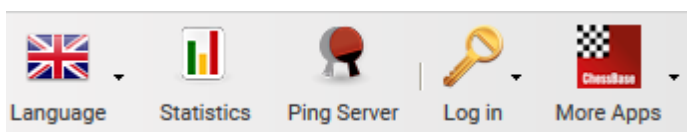
- **Language** – Select your Language
- **Statistics** - This button opens a window which displays details about the server usage since the server was last started: the peak connections, the number of games each day, the number of visitors and the date the server was started.
- **Login** - You can configure your player account.
- **More Tools** - This button offers access to other applications.

The welcome screen is divided into different windows.

Players / Games / Map Window

You can look at the list of players, the list of games being played or the zoomable world map.

Challenges Window

Online players can send you challenges directly.

Open challenges sent for anyone to reply to are also displayed in the Challenges window.

Direct challenges are marked with a red arrow. Open challenges are marked with a green arrow.

Chat Window

Chatting refers to talking to one another by typing text on the Internet. In order to begin a chat, click on a person's name in the player list.

Please note that chatting is only possible if you have registered a user account on the server.

After selecting a player his name appears in the input line of the chat window.

The windows can be individually resized by dragging the window separators. When you

are playing or watching a game the information window in the middle is replaced by a board window in which a chess board is displayed.

Player List

Clicking on the Players tab displays the player list. The program displays a list containing all online players. The list is divided into columns containing the following information:

Name	Coun...	Blitz	Bullet	Status
♟ Zugzwang1	🇺🇸	1300	1062	
♛ Zile72		2458	2277	Playing
♟ Ziegenmeister	🇩🇪	1597	1650	Playing
♟ Zarathustra121	🇩🇪	1545	1980	Idle
♟ Yusufozen		1187	873	Seeking/Idle
♟ Yluegooo	🇪🇸	1431	1483	
♟ Wolle2	🇩🇪	1581	1693	Playing
♟ Wilkog		1627	2000	Playing/Idle
♟ Werner-beinhart		2023	1829	Idle
♟ Vendi		1910	1758	

🔴 Ping 🔵 Challenge   ☑ Only strong players

- **Name** - This is the name and rank of the player. The symbol to the left of the name is the rank.
- **Country** - The country where the player lives.
- **Blitz** - The player's rating for blitz games.
- **Bullet** - The player's rating for bullet games.
- **Status** - This column shows what the player is doing: whether he is playing a game, idle or doing nothing.

If you select a player in the list and click the button "*Challenge*" a challenge is sent to the player.

Ping Server - This measures the user's connection quality and displays the result in the chat window.

Game List

Clicking on the Games tab displays the games list.

In the games list there is a complete list of all games being played on the server, including the names of the players and the time controls.
You can use the search box to search for a player by his name.

This list is also divided into columns. Please read the notes about sorting columns later in this document.

The columns contain the names of the players, their Elo ratings, the result of the game, the number of kibitzers and the time controls.

You can pick a game that you want to watch from the games list. Double clicking on a game opens it in a board window.

Map
The world map uses red dots to show the locations of the online users.
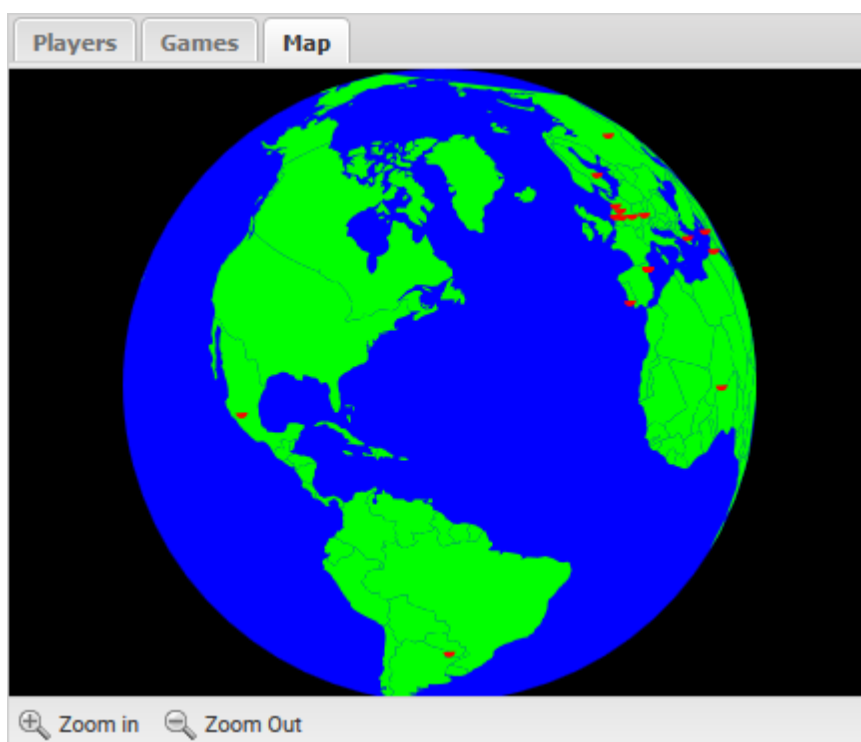
This gives you an impression where in the world most people are playing on the chess

server. The buttons "Zoom In" and "Zoom Out" can be used to change the map's scale.

Sorting by Columns

When a list window, for instance the player list, is displayed the information is separated into columns. Clicking on a column's header sorts the list using the data in that column. Clicking on the same header a second time reverses the sort order.

Examples: Clicking on *White* in the games list sorts the games alphabetically by the names of the white players. Clicking a second time reverses the sort order. Clicking on *Elo White* in the games list sorts the games by the strongest white players. Clicking a second time puts the weakest players first.

The same principle applies to all list windows that use columns.

Adapting the Columns

The representation of the columns can be adapted to your own tastes. If you hover with the mouse ponter over a column header a small black arrow is displayed. If you click on this arrow you can configure the columns.

Apart from sorting the list, you can display or hide individual columns. This is possible in all list windows that use columns.

Playing games

Finding an opponent

There are several ways to find an opponent on Playchess.com. The easiest method is to send out an open challenge by using the buttons in the toolbar at the top left of the screen.

- **Play Blitz** - This starts a game with five minutes time for each player.
- **Play Bullet** - This starts a game with only one minute time for each player.
- **Play Slow** - This starts a game with 15 minutes time for each player.

At the bottom left of the screen there is the *Challenges window*.

Challenges				
Name	Conditions	Elo	Time Control	Con
Stani47	Rated		6m + 1s	60n
Drbarde	Rated		15m + 5s	30n
Blond0007	Rated		10m + 4s	120
Ivanserm	Rated		5m + 0s	90n
Masetti	Rated		3m + 1s	120

Accept   Delete   Seek

This window contains challanges from other players. This list is also separated into columns.

- **Name**: This column contains the names of the players who are issuing challenges.
- **Conditions**: This column shows whether the games are to be rated or unrated.
- **Elo**: This column displays the ratings of the players issuing challenges.
- **Time Controls**: This column shows the time controls of the games requested by the players issuing challenges.
- **Connection**: This shows the connection quality of the players issuing challenges.

Open challenges are marked with a green arrow. If you double click on a list element with a green arrow the board window is opened and you can play against the challenger immediately.

Challenges which have been made to you personally are marked with a *red arrow*.

A *blue arrow* marks challenges that you have sent to other players. Players who receive this challenge see it marked with a green arrow.

There are three buttons beneath the Challenges window.

Clicking on a list element followed by clicking on the Accept button has the same effect as double clicking on a list element: a board window is opened to play the game with the requested time controls.

Delete deletes a challenge from the list.

Seek issues a new challenge. This button opens a dialog window to set the time controls. "*Time*" is the total time in minutes, and "Gain per Move" is a time increment in seconds to be added to the total time after each move.

Finding an opponent in the player list
In the player list you can see in the "*Status*" column which players are not playing games at the moment. Select a player's name in the list and click on the *Challenge* button. Your challenge is them sent directly to the player and marked with a red arrow in his Challenges window.

Board Window
After you have accepted a challenge the board window is started.

Next to the window the chess notation and the chat window are displayed.

You can use the chat window to send your opponent short text messages.

You can use the board window to play games or watch games being played by other players on the chess server. The remaining time is shown in the two chess clocks above the chess board.

The opponent's last move are marked with an arrow on the chess board. You make your own moves by dragging a piece with your mouse from the source to the destination square.

Tip: You can already enter your move while it is your opponent's turn. This is useful when there is only one obvious move, and it saves valuable seconds in blitz and bullet games. Your move is shown by a green arrow on the chess board.

At the bottom of the board window there is a toolbar with the most important functions.

- **Reconnect** - If you have lost your connection to the chess server you can click this button to re-establish the connection.

- **Resign** - This gives up the current game.
- **Applause** - You can applaud another player. The other player sees a message in his chat window and the server increases his applause count. This function is only available to users who have an account that has been gegistered and unlocked with a serial number.
- **Rematch** - After a game is completed, this offers to play another game against the same opponent.
- **Rematch OK** - This accepts your opponent's rematch offer.
- **Close Board** - This closes the board window. You can also close the board by clicking on the little X above the chess board.

Note: If the game is still running, closing the board window automatically resigns the game!

- **Offer Draw** - This offers a draw to the opponent.
- **Accept Draw** - This accepts a draw offered by the opponent.
- **Claim Win** - This claims victory in a game if the opponent is no longer connected to the chess server and he is no longer online.
- **Ping Opponent** - Check the connection of your Opponent

You can configure the display of the chess board. Click on the small arrow next to the "*Boards*" button.
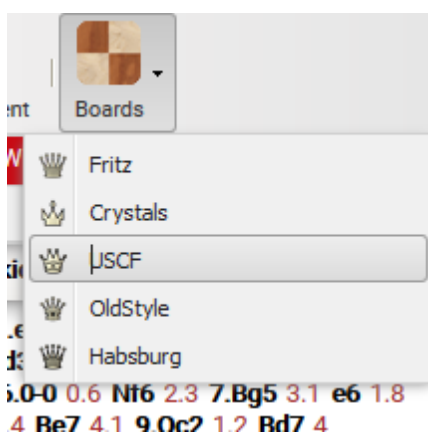
Choose a chess set from the list. The board layout is then loaded into the board window.

Entering moves
You can enter a move by dragging a piece from the source to the destination square, or by single click input (i.e. clicking on the destination square). You can also enter a move in advance while it is your opponent's turn.

This is useful when there is only one obvious move, and it saves valuable seconds in blitz and bullet games. Your move is shown by a green arrow on the chess board.

You can cancel a move made in advance by clicking on the same piece again or clicking outside the chess board.

Promotion
When promoting a pawn on the eighth row, click on the destination square and drag it

onto the piece you want to promote to.

Kibitzing

Watching other people play is almost as exciting as playing yourself. Chess players call someone who watches a game a kibitzer.

The program offers different ways to follow games as they are being played.

By double clicking on an element in the games list the game is loaded into the board window.

The easiest way to watch a game is to click "*Kibitz Blitz*", which loads the game being played by the strongest players into the board window.

This means you can easily watch the games being played by the strongest players at any time.

You can drag the window separators left and right of the board window to enlarge the board to whatever size you prefer.

You can use the chat window to send messages to other kibitzers.

There are differences in the buttons available in the board window when you play your own games.

The button "*Receiving Moves*" toggles the reception of moves from the game on and off. This is useful if you want to analyse a position with a chess engine.

The button "*Engine*" turns on a chess engine that runs in parallel to the game and gives a running analysis of the current position on the board.

Multiboards

It is possible to watch several games at the same time in multiboards. This makes it possible to kibitz several interesting games at the same time, for instance critical games in a tournament.

This is how to do it:

Open the games list by clicking on the Games tab.
Select the games you want to watch by clicking on games in the list while holding down the Control key.

Click on the button "*Watch Games*" to load the games as multiboards.

Clicking on the boards navigates from one board to the next. This is necessary, because you can only view the game notation of one game at a time.

Clicking on the button "*Live Games*" loads the four most popular games from current tournaments into multiboards.

3.9.3 Live Database

An important feature is the possibility to access the Online Database with your browser.

The full range of functions is only available after <u>registering a ChessBase account</u>.

The registration is free of charge, and the account can be used for all ChessBase Web Tools.

Clicking on *Live Database* in the Fritz Startscreen starts the program. This gives you access to an enormous database in which you can search for players or positions.

User Interface

At the top of the screen you can see the functions available in the application.

You can find information about the board window, notation list, sorting by columns and the Live Book in the description of the other applications.

Searching for players

After starting the application you can see an input field above the games list. This is where you can enter the search criteria that you want to use for searching in the Online database.
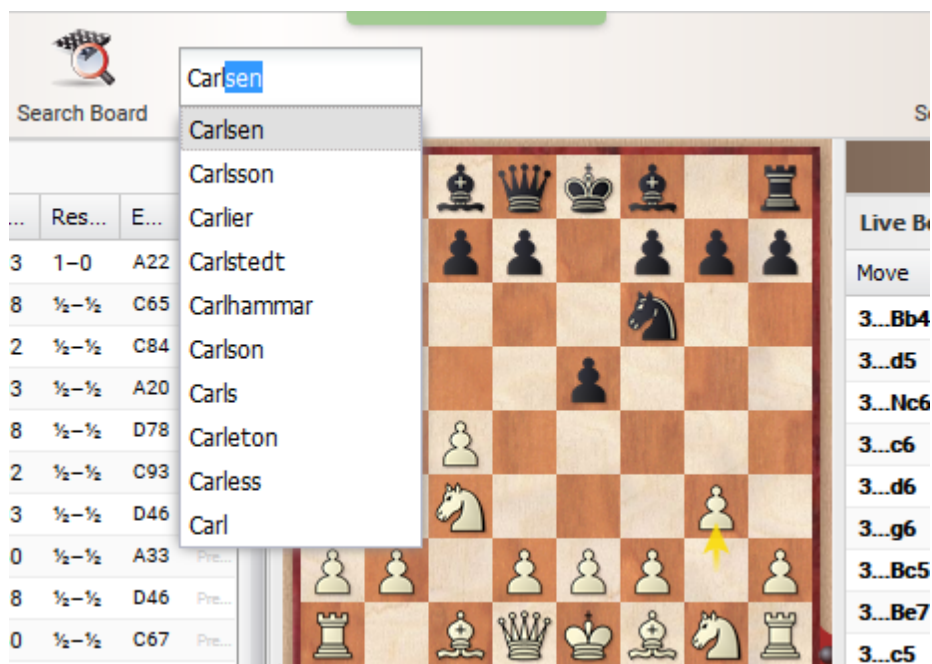
While you are entering text the program makes suggestions. These may be the names of players or tournaments, such as Hastings.

Searching for *Carlsen* lists all the games of the previous world champion. Clicking on the column headers can refine the search, for instance showing only games that he played as White.

If you click on a item you can replay the game in a board window and analyse it with the help of a chess engine.

Searching for board positions

It is possible to search for all games with the current board position in the online database. Click on the button *Search Board* to list all the games in the online database that match the board position.

In the list window there is a list of the games in which the board position occurs.
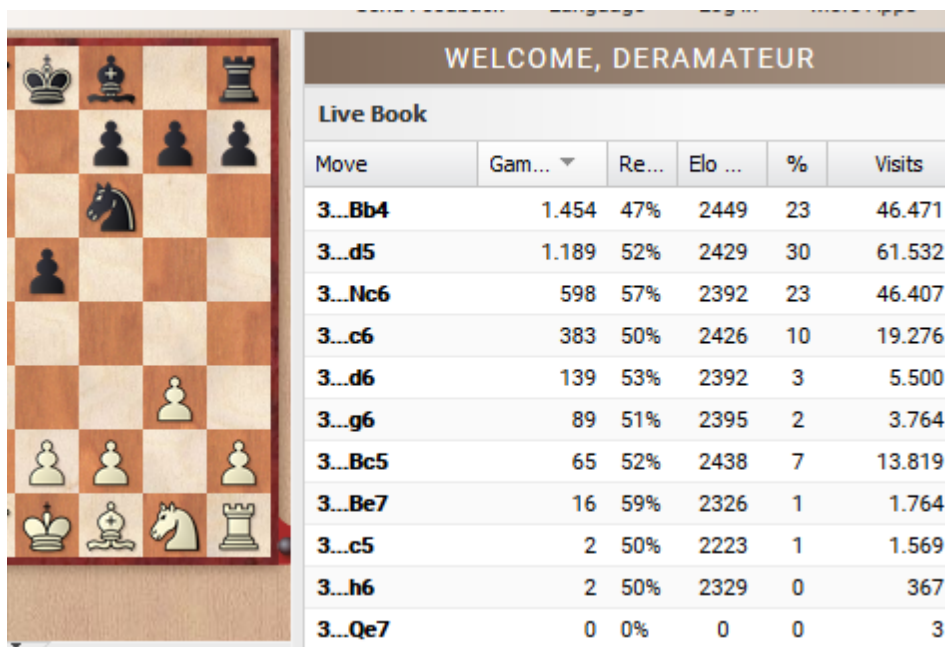
If you sort the list by columns you can adjust the display of the games list.

For instance, clicking on Elo White lists the games by White's playing strength. The list begins with the highest rating of the White player.

Note: You cannot combine the two search methods with one another.

Let's Check

Apart from the information in the Live Book the application allows access to Let's Check. This is a new analysis function in our programs with which many users have built up an enormous knowledge database. All positions that have ever been analysed by anyone have been voluntarily saved on our server. The engine variations are now available to everyone who looks at these positions.

In the display you can see the evaluation of the board position, the search depth and the engine that was used for the analysis.

You can load your stored Opening Repertoire!

3.9.4 My Own Games

An important new feature in our database software ChessBase 13 is the possibility to store databases not only on the computer's hard drive, but also externally on the ChessBase servers. This has the advantage that you can access your data wherever you are. It also means that already existing databases do not have to be copied and installed again. Furthermore, it is now possible to provide a database to be used by other users.

It is possible to use a cloud database from any computer with an Internet connection and a web browser, and from any mobile device with a simple login. A big advantage of using a cloud database is preparing training material to prepare for an upcoming tournament. Even if your team mates do not have a Windows PC you can supply them with information about their opponents' games and make suggestions to them.

Access / Logon

Just like the simple access to PlayChess.com, all you need to access the cloud is a ChessBase account. Here is a description of what possibilities are offered by the web based access to the cloud server.

Although access is free of charge, the full functionality of the cloud is only available if you have an active and unlocked PlayChess.com account. You can log in with your PlayChess.com account, or you can create a new account on the web site.

You can access the cloud server via the menu *More Tools   My Own Games*.
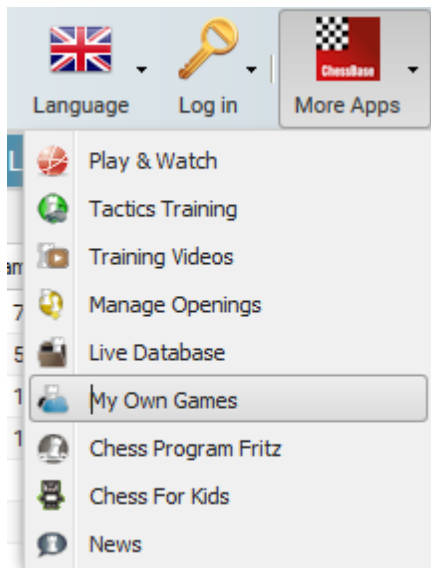
Depending on the type of ChessBase membership you have you can create a large number of databases which you can delete again at any time.

The databases "My Games", "Repertoire White" and "Repertoire Black" are always installed. If you attempt to delete these databases all the games are removed, but the databases themselves remain in place.

Guest access is pointless for this function, so you should create a ChessBase account if you don't already have one.

You can access the databases that you have saved on the cloud server with ChessBase 13 with any Internet web browser. The opposite is also possible. You can create data with the web application and then access them later with ChessBase 13.

Storage space for the cloud databases
The amount of storage space you can use depends on the type of PlayChess membership that you have. A free ChessBase account offers you 20 MB storage space. That is roughly 10,000 games. Basic membership offers you 100 MB. Premium membership offers you much more, a total of 250 MB.

Here are the most important functions offered by the web based application.

User Interface
The user interface is well structured. At the top of the screen the application's functions are listed. Apart from this there is a board window, a notation window, the game list and direct access to the Live Book, which contains embedded statistical information.

The windows can be resized using the small arrows in the separators.

On the graphic chess board in the board window you can either enter moves or replay games that you have loaded from databases.

You can configure the board window by picking a different chess set in the Boards menu.

The game list of the selected database and the statistical information about the board position are also displayed. The Live Book is described below.

Other important functions, such as taking a move back, flipping the board or loading a chess engine are available at the top of the screen.

Notations window
The notation window contains the moves in the current game and any available commentary.
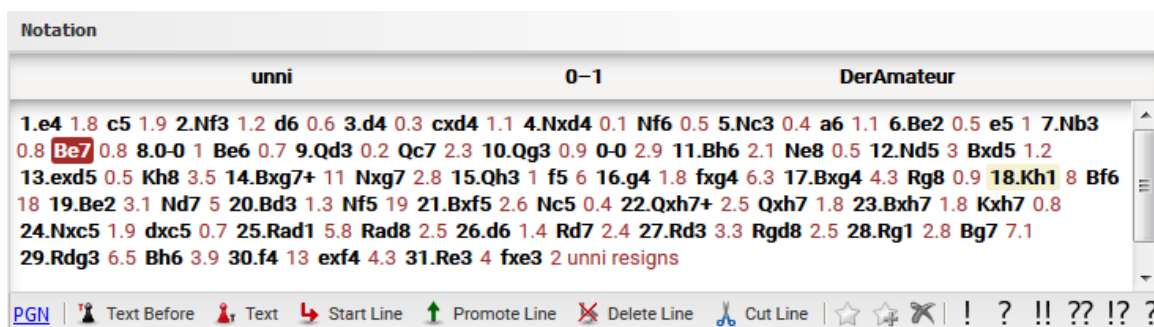
Clicking on a move in the notation loads that board position. There is a toolbar below the notation window with functions to edit the notation.

- **Text Before** - This adds a text in the notation before the selected move. You can enter the text in the input field at the bottom of the screen.
- **Text After** - This adds a text in the notation after the selected move.
- **Start Line** - This takes back the selected move and begins the input of a variation.
- **Promote Line** - This makes the selected variation the main line.
- **Delete Line** - This deletes the selected variation.
- **Cut Line** - This removes all the notation after the selected move.

Note: You can mark and add Moves directly to your Opening Repertoire! More information ....

Commentary Symbols - Chess games are often commented with standard international symbols.

These symbols can be added to any move in the game's notation.

Game List
The game list contains a list of the games stored in the database.

The window's title bar tells you what database you are using.

"*Cloud*:" tells you that it is a cloud database. The following diagram tells you that you are accessing a locally stored PGN database.

inline.pgn

#	White	Black	Event	Date	Result	ECO
1	Smyslov,V	Tal,M	*Candidates Tournament*	1959	½–½	B42
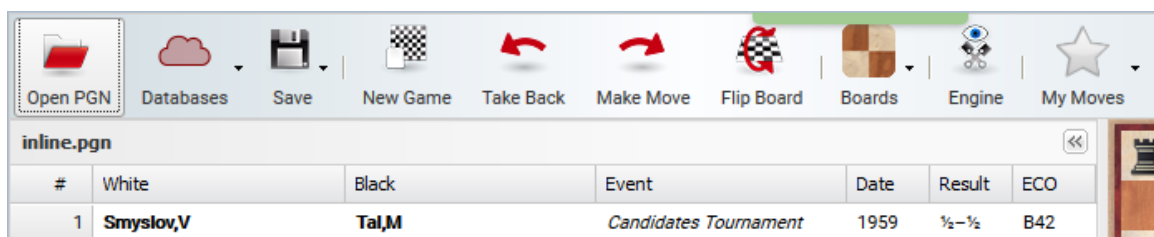
The following functions are available for working with the games list.
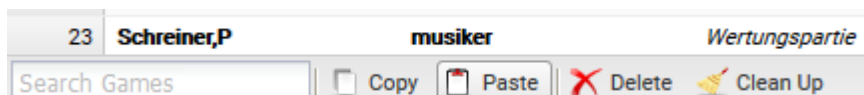
Copy/Paste: Select an element in the list by clicking on it. Copy copies the game into the clipboard. If you open another database you can insert the game into it by clicking Paste.

Delete/Clean Up: Delete marks a game in the games list as deleted, but it has not yet been removed from the database. Clean Up removes games that have been marked as deleted from the database. If you want to restore a deleted game to the database, select it and click Delete again. This is no longer possible after using Clean Up.

The imput field below the games list can be used to carry out searches in the database, for instance searching for all games by a particular player.

The program immediately lists all games in which the search data is found.

Manage Databases

You can use the application to work with chess games and positions on the cloud database server. You can create, open or delete databases.

Above the chess board there is a button entitled Databases. The small black arrow tells you that other functions are available.
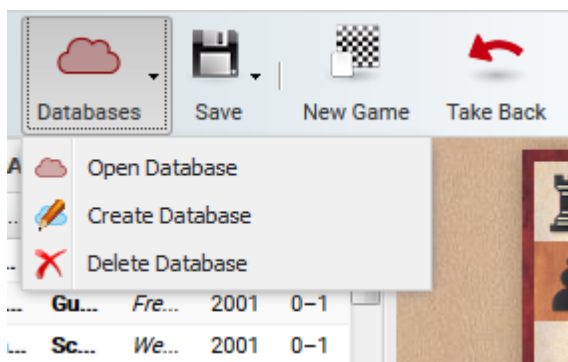
The button *Open PGN* allows you to open a database that you have stored locally on your own computer.

Clicking on *Create Database* opens a dialog window. Input the name of the new database and click OK. This will create a new database and store it on the cloud server.

Clicking on *Open Database* displays a list of the available databases.
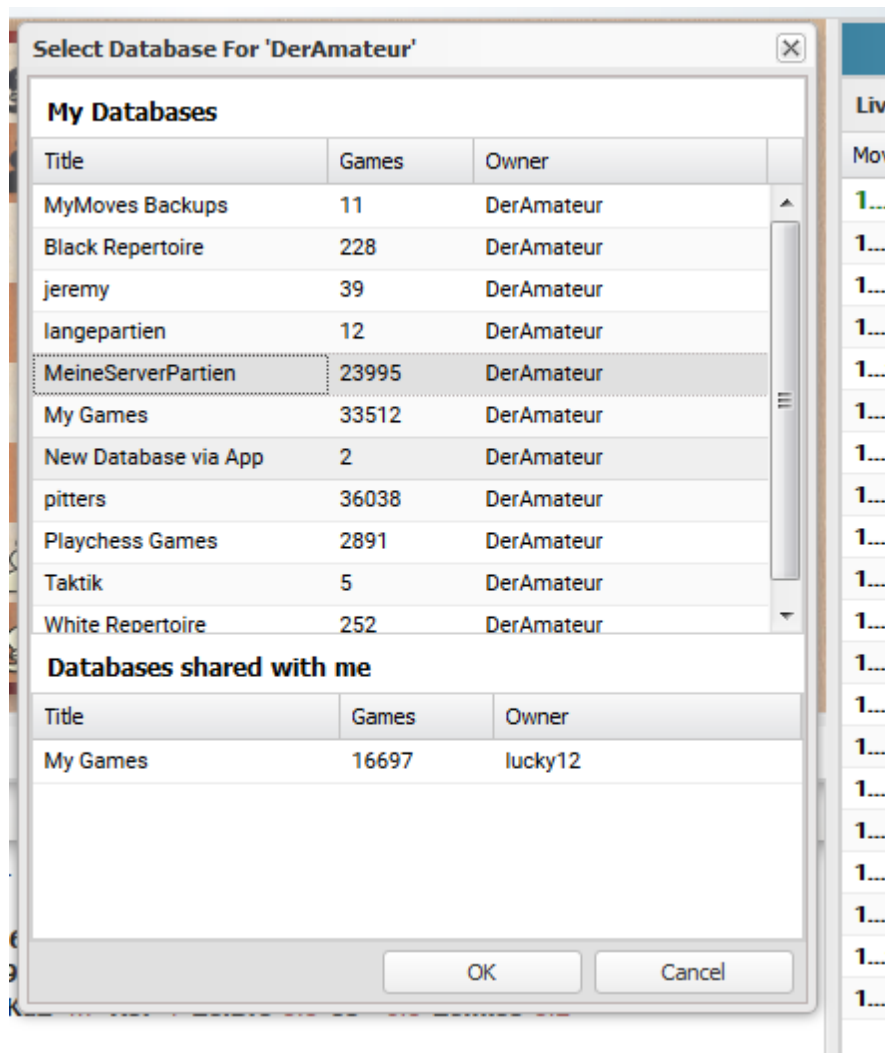
In the columns you can see the names of the databases, the number of games in each database, and the name of the person who owns each database.

Delete Database deletes a database from the cloud server. It cannot be undone!!!!

Building a database
There are several ways that you can add games to a database without using Chessbase 13. The following text explains how to do this using the application and a simple user account. Users who own Chessbase 13 and have a registered user account have many more possibilities with the complex database software.

You can enter moves on the graphic chess board and then save the game. Clicking on the Save button starts the following dialogue:

Before saving the game the program asks you to enter the game data. After entering the data click OK.

Save as New saves a game that you have edited as a new game in the database. By using Delete and Clean Up you can later remove duplicate entries from the games list.

New games are saved at the end of the database.

You can use Open PGN to open a PGN database that you have stored locally on your computer. The games list is now displayed.

Click on the games that you would like to copy into another database while holding down the Control key. Then click on the button Copy.

Now click on Open Database and select the database into which the games are to be copied. Click OK, and the previously selected games will be copied into the new database.

Analysis
While you are replaying a game or entering a new game you can use a chess engine to assist you with your analysis. To do this, click the button *Engine*.

An analysis engine is a chess program that always evaluates the current board position and displays the results. This gives you a good idea about the evaluation of the current board position.

In the engine window information about the evaluation of the position is displayed (always from the point of view of White), the main line, the evaluation depth and the evaluation time.

Fritz 14

＋ ─

18.Rxe5 Be6 19.Qf4 Re8
   Depth 11/11 NPS = 35kN/s, time = 6s
= (0.11) **13.Re2 Nd7 14.Rae1 Rfe8 15.h3 Nxe5 16.Bxe5 Bxe5 17.Rxe5 Rxe5**
18.Rxe5 Be6 19.Ne2 Re8 20.Qg5
   Depth 12/12 NPS = 51kN/s, time = 9s
= (0.16) **13.Re2 Nd7 14.Rae1 Rae8 15.Nxd7 Bxd7 16.Bxd6 Qxd6 17.Rxe8**
Rxe8 18.Rxe8+ Bxe8 19.Ne2 Bd7 20.Qf4 Qxf4 21.Nxf4 Bf5
   Depth 13/13 NPS = 55kN/s, time = 11s
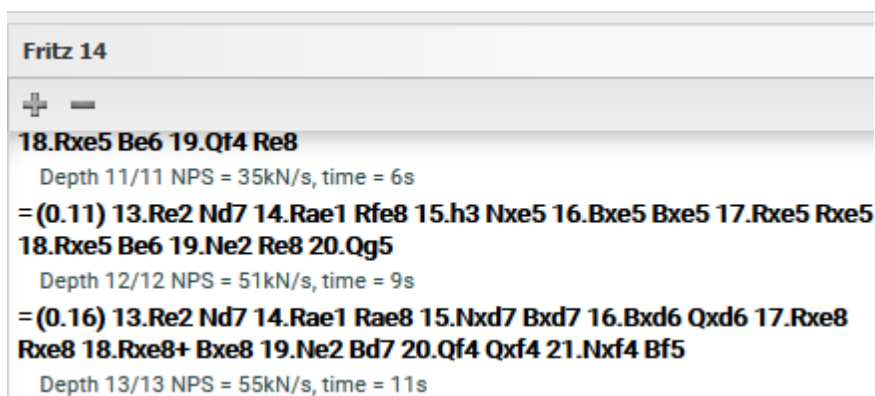
Book Window

The program also displays the Live Book in a window. This is an enormous openings tree that is based on the analyses of the Let's Check server. All the openings positions of the online database are contained, which makes the Live Book the most comprehensive and up to date source for openings theory. It is possible to play against it, or simply use it to look up a variation.

WELCOME, DERAMATEUR

Live Book (Premium Account)

Move	Gam... ▼	Re...	Elo...	%	Visits
1.e4	727.746	54%	2423	48	16.653....
1.d4	591.318	55%	2440	30	10.518....
1.Nf3**	167.691	55%	2437	8	2.737.8...
1.c4	114.302	56%	2440	7	2.430.0...

You can use the Live Book to get an impression of the quality of a continuation, which is a valuable aid when replaying games.

If you click on a move in the Live Book, the move is made on the chess board.

Tip: When entering moves in a game you can save yourself many mouse clicks if you enter the opening moves with the help of the Live Book. Clicking on "New Game" opens an empty board window for entering moves. Clicking on the moves displayed in the Live Book transfers the moves into the board window.

The Book view displays your own Opening moves with coloured Moves!

It is also possible to enter variations. Go back to the position where a variation should start and make a different move on the chess board. There is no variation dialogue. The new moves are immediately entered into the notation as a variation.

The information about the current board position is divided into columns.

Move: This shows all the possible moves in the position.

Games: This shows the number of games in which each move was played.

Result: This shows the success rate for each move from White's perspective.

Elo Avg: This shows the avarage Elo rating of the players in which each move was made.

[%]: This shows the number of games in which each move was made as a percentage.

Visits: This shows the number of times visitors have looked at the position resulting from each move.

Sorting by columns

When a list is opened, for instance the games list or the Live Book, all the information is divided into lists.

Clicking on a column header sorts the list by the data in this column. Clicking a second time reverses the order.

Example: Clicking on White in the games list sorts the games in alphabetical order. Clicking a second time sorts the games in reverse alphabetical order. Clicking on Games in the Live Book sorts the list by the most commonly played moves. Clicking a second time sorts the list so that the least commonly played moves are first.

3.9.5 FAQ My Own Games

Can I store the chess engine's analysis in the notation?
No. This is only possible if you are using the programs Chessbase or Fritz.

How can I replace a game notation after adding new commentary?
The menu Save - Save replaces the game with the new changes. Save - Save as New saves the game with the new notation in the database but retains the previous version.

How do I copy games from one database to another?
Select the games in the database. Hold down the Control key if you want to copy more than one game. Then click Copy. Open the destination database and click Paste. This copies the games, either from a locally stored PGN database or another cloud database.

Can I delete games from databases?
Yes. Select the games in the database. Hold down the Control key if you want to delete more than one game. Then click Delete. You may wonder why the games are still available and shown in inverse. The reason is that you have the possibility to undo the action. If you select inversely marked games and click Delete again the inverse marking of the games is removed.

If you want to delete games from the database permanently, click the button Clean Up. This deletes all the games that have been marked inversely in the database. It cannot be undone!

Can I open CBH and CBF databases with my browser?
No. The current version of the program only supports the formats *.cbcloud and PGN.

3.9.6 Chessprogram Fritz

Would you like to play a game of chess while you are away from home? That is not a problem with the web based version of our chess program Fritz.

More Tools   Chess Program Fritz starts the chess program.

You make moves on the chess board, and above the chess board you can see chess clocks for White and Black. The clocks show how much time each of the players has used.

The left clock is for White, the right clock is for Black.

Beneath the chessvoard there are buttons for functions to use the chess program. If you hover with your mouse over a button the function is displayed.

The program shows the last move that has been made with a yellow arrow. If required, the program offers a hint, which is marked with a green arrow on the chess board.

It is not possible to set time controls. At the beginning of the game the program moves immediately, without any delay. The reason is because at the beginning of a game the program uses an "openings book" and does not have to make any calculations. An openings book is a tree containing many well known opening positions in which the program finds information how often moves have been played and how successful they are.

It is also possible for the program to play a "friendly game". This is the best setting for hobby players. The program will attempt to play with the same strength as you.

3.9.7   Training Videos

On the start screen of Fritz 15 you can click on the entry "*Video Flat*" to launch your web browser, after which you can log on to watch many videos in the new Video Portal.

You can start the App also from the Login Menu.
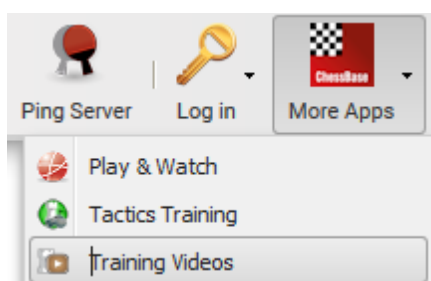
In this portal there are videos in various categories, such as training videos and reports from current tournaments.

The online ChessBase video library is a huge web archive of all chess broadcasts shown on the playchess.com server during the last years. Here you will find highlights such as Daniel King's "Power Play" show, Karsten Müller's "Endgame Magic Show" or TV ChessBase. At the moment about 300 videos are online and the number is constantly growing!

We highly recommend "Move by move". Selected grandmaster games help you to learn winning techniques move by move! Try to answer the questions of Daniel King or Simon Williams and you will understand the strategies behind the moves of the masters!

The video library also offers you access to ten videos from the "60 minute" series - for free! Well-known players and coaches explain opening concepts and inspire you with interesting ideas that help you to broaden your repertoire.

New videos will be added regularly.In order to use this offer it is necessary, as with all other Apps, to log in with a valid user account.

The fastest way to find what you want is to click on "*Categories*" on the main screen.
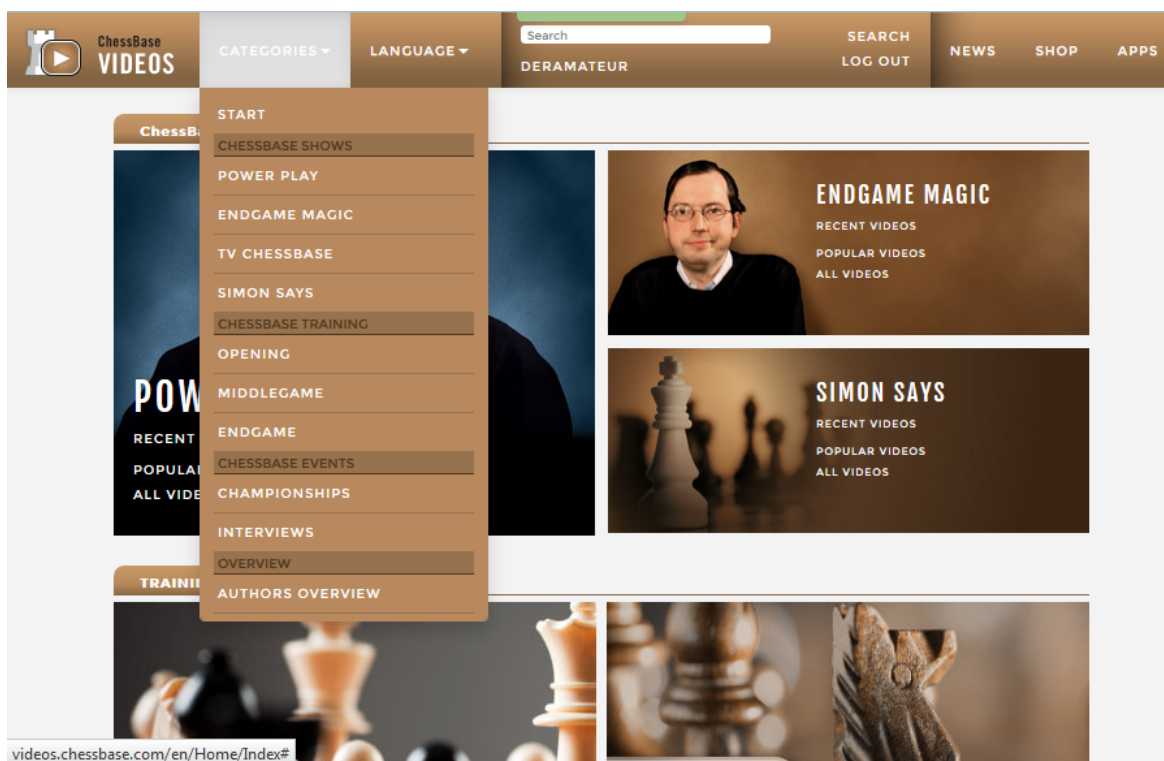
This shows the user a clearly structured overview of the contents of the video portal. Clicking on any element in the list displays the available videos, for instance a list of the Power Play Videos by GM Daniel King.

Clicking on any of the video names starts the video in the browser window.

You can use the navigation bar to adjust the volume and the video quality, select full screen mode or pause the video.

The categories under Training on the start screen should be interesting for most of our users.

There are many videos about the different phases of chess games, which should give pointers to what products are best tailored to your needs.

The list of videos can be sorted by Date, Number of Views and Popularity.
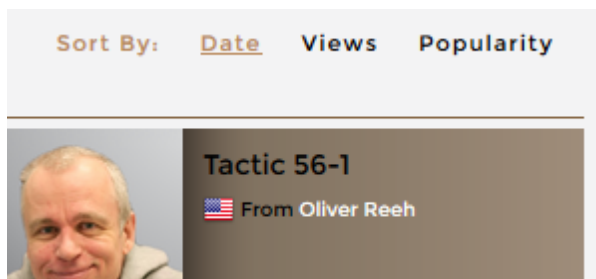
The video portal is ideal for browsing. The demonstration videos offer users orientation before deciding whether to buy one of our products.

3.9.8 Opening Training

Developing the opening repertoire is a big part of the training of any active player. The new App for opening training offers the user great support for learning an opening, and the user can also use the App for managing his opening repertoire.
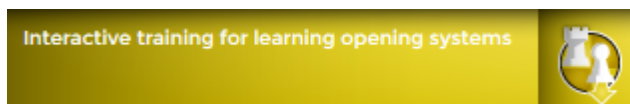
The repertoire for White and Black are stored in separate variation trees.

The App can be started wither from the home screen of Fritz 15 or directly from the Login Screen.

The user is given support in the main points of setting up his personal repertoire. Based on current opening theory, the App helps the user pick the appropriate moves for the repertoire and stores the opening variations in move trees, one for White and one for Black. Since the App runs in any web browser, if you have a connection to the Internet you can access your repertoire anywhere using a tablet, smartphone or PC. The App also offers training for memorising the variation tree.

After you have logged in you will see a toolbar with all the necessary functions above the graphic chess board. You can enter your moves either directly on the chess board or by clicking on the move in the Live Book displayed next to the chess board.

Let's use a few examples to show the assistance the App gives for openings training.

In the start position a repertoire for Black should be made to answer 1.e4 and 1.d4. Turn the board around so that you see the black pieces from your own perspective.

Clicking on the ribbon *"Load Black"* determines that the following moves are the black repertoire of the user, in this example the Najdorf Variation of Sicilian.

While entering moves the Live Book displays statistical data about each move, which gives information about the quality of different lines. The Live Book displays the main continuations for the current position, and the columns Elo, Percent, etc show how popular and successful a variation is.

Note: Your relevat own OPening moves are marked in the Live Book!!!!

Below the Live Book a list of the games in the online database is displayed in which this opening position was played. This list can also be sorted by clicking the column headers, for instance to display a list of all the games that were won by Black.

Clicking on an element in the games list loads the selected game into the notation window to be replayed. Clicking on "Load White/Black" loads the repertoire notation again.

At the bottom of the notation window there is a list of the important functions. You can insert comments in the text or remove all unnecessary moves from the notation.

Clicking on the ribbon "Mark Move" stores the move and the variation that led to it for further training purposes.

In reply to the move 1.d4 the following example shows the black repertoire for the Volga gambit. The notation looks like this:
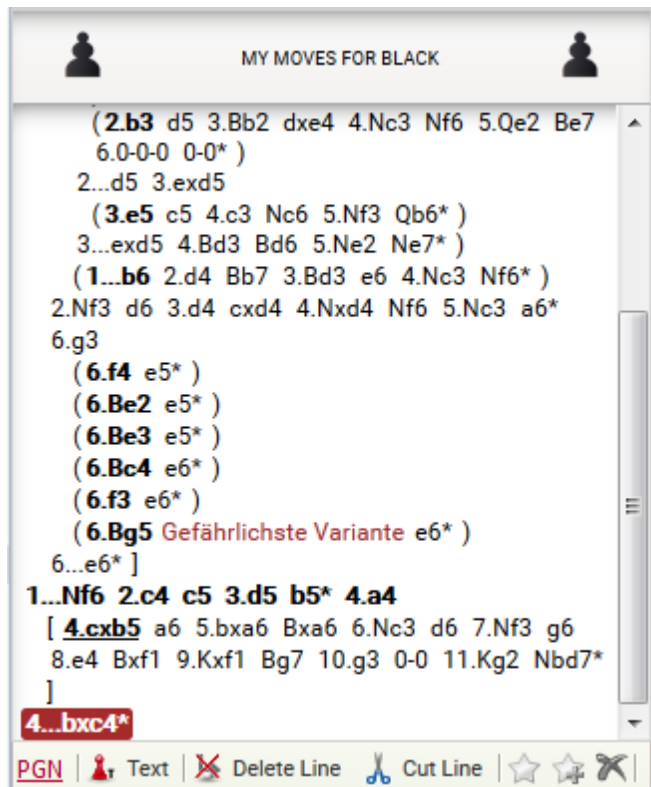
This shows that the App displays Black's repertoire in the form of a notation tree.

How can the repertoire be loaded at a later time?

Click on the button "Load White/Black". The notation window loads the appropriate variation tree. After logging in the App can associate the repertoire with the user that created it, and so the relevant repertoire moves are displayed in colour in the Live Book.

The coloured moves tell you which moves have been taken into your repertoire.

As you continue the variation tree can become very complex. In order to keep it clear for the user the program "folds" the notation and only displays the relevant variation.

MY MOVES FOR BLACK

1.e4
  [<u>1.d4</u> (...)]
  [<u>1.f4</u> (...)]
1...c5*
  [<u>1...e5</u> (...)]
  [<u>1...e6</u> (...)]
  [<u>1...b6</u> (...)]
2.Nf3 d6 3.d4 cxd4 4.Nxd4 Nf6 5.Nc3 a6* 6.g3
  [<u>6.f4</u> e5*]
  [<u>6.Be2</u> e5*]
  [<u>6.Be3</u> e5*]
  [<u>6.Bc4</u> e6*]
  [<u>6.f3</u> e6*]
  [<u>6.Bg5</u> Gefährlichste Variante e6*]
6...e6*

Memorise repertoires

It's essential for active tournament players to memorise opening variations. The App has a feature to drill yourself with the repertoires that you have stored. Click on the buttons "Drill White" or "Drill Black" to repeat the repertoire. You can either start the drill at the start position or in the middle of a variation tree.

The window display changes in this mode, and a new information window is displayed next to the chess board. If you make a move which is not in your repertoire the message is displayed, "Not in your moves". It is nevertheless possible to continue entering moves to try them out.

To assist you, after a while the piece to be moved is marked with a colour.

Advances in your studies are shown in the "Learned" bar. In addition you can see the number of moves in your repertoire and the number of games in the Online Database that use these moves.

If you don't know the continuation in a drill you can click on the button "End Drill" to return to the standard display of the Live Book, in which you can see the continuation moves displayed in colour.

Commenting with text and special symbols

In the Live Book the moves are displayed in colour that are relevant for your own repertoire. Within the notation you can show your preference with the option "*Mark Move*". You can select this option via the ribbon in the toolbar or by right clicking on the move in the notation.
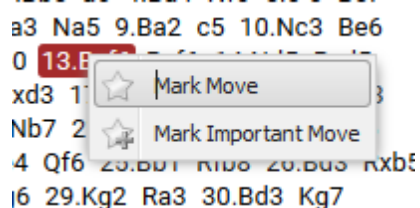
In the notation the move is marked with an asterisk **(*)** and the variation is marked as to be stored.

Another possibility is the option of marking a move as especially important. This is done with the option "*Mark Important Move*". This move is marked in the notation and the Live Book with two asterisks.

Move	Gam... ▼	Re...	Elo ...	%	Visits	Players
1.e4	727.746	54%	2423	48	16.674....	
1.d4	591.318	55%	2440	30	10.532....	
1.Nf3**	167.691	55%	2437	8	2.741.3...	
1.c4	114.302	56%	2440	7	2.433.5...	

This also changes the representation of the move in the variation tree.

Every move in the variation tree can be given a text or a special character. The function buttons to do this can be found at the bottom of the notation window.
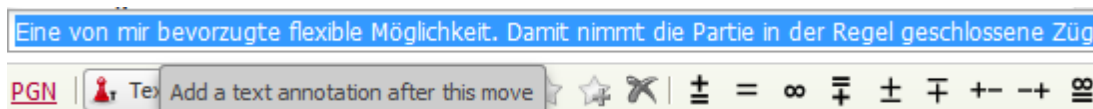
Clicking on "*After Move*" makes it possible to type a text, terminated by pressing the Enter key, which is added to the notation.

It's also possible to enter chess notation symbols (Initiative, Even, etc). These symbols are inserted not only in the notation, but also in your personal display of the Live Book!

Edit Variation Tree

You can delete individual moves or whole variations in the variation tree. The function buttons to do this can also be found at the bottom of the notation window.

Cut Line removes the replies to the selected move. *Delete Line* removes the complete line from the variation tree.

Markings can be removed and undone.

In practice it can easily happen that a hasty click accidentally deletes lines from the variation tree. These lines are not lost permanently, because the program creates a backup after every deletion which is stored in the Cloud Database.

How can these backups be accessed and be put back in the notation tree?

Open the App "My Games".

Click on the menu *Databases   Open Database*.

In the databases to be selected there is an entry called "My Moves Backup". Double clicking on this loads the stored backups with the original notation, and you can import the data to undo what you have deleted. The dates tell you exactly when you last worked with the database.

Mark the notation that you would like to import and select "My Moves".

The function "Insert game in My Moves" undoes what you previously deleted. Now return to the App "Openings Training".

Tip: In the Cloud Database there is another easy way to extend your repertoire database. Click on the button "*My Move*" at the bottom of the screen.

Summary

The openings training App offers you a simple tool to manage your repertoire.

Moves can be made either on the graphic chess board or my clicking on entries in the Live Book.

The openings repertoire is stored as a notation tree, separately for White and Black.

Using "*Mark Move*" you can move variations into your openings repertoire. Selected moves are marked in colour in the Live Book.

Either starting at the initial position or any move in a variation you can practise the moves and learn complex variations by heart. The program keeps you informed about your progress and warns you of possible errors. Alternative continuations can be recognised by quickly changing to the Live Book.

The game notation can be edited by using the function buttons at the bottom of the notation window or by right clicking in the notation itself. It is possible to delete individual moves or whole lines, It is possible to add text, variations or chess symbols.

The current variation is always displayed as the main line in the notation. This guarantees that the display remains easy to understand, even in the case of complex variation trees. Branches can be recognised by the brackets.

Clicking on hidden entries unfolds the notation.

The program creates backups, and you have the possibility to extend your repertoire while replaying games in the Cloud Database.

3.9.9 Tactics Training

"Chess is 99% tactics". This is the opinion of experts. An important part of practical playing strength is to have solid tactical capabilities.

The free tactics app offers an enormous selection of tactical positions. Even though the positions were generated by computers they are very relevant for practice, and solving them by yourself helps you to train your tactical abilities.

You need to register a player account to access this app. As is the case for all apps, the access is system independent. All you need is a web browser, regardless of what operating system you are using.

It is possible to use the tactics training as a Guest, but the full functionality is only available after registering a user account.

Before you start you should get to know the most important functions that you can select by using the toolbar.
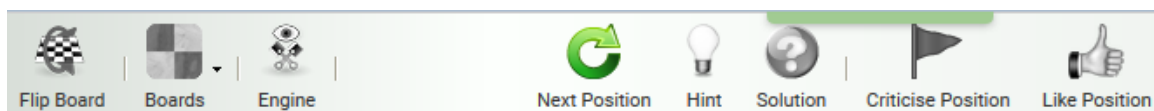
"Flip Board" determines how the board is displayed. The meaning of the other function buttons is obvious. The function "*Boards*" offers other sets of chess pieces.

The temptingly placed button "*Engine*" starts the analysis of a position with a chess engine. It isn't possible to cheat because the analysis engine only shows its evaluation after the user has tried to find a solution by himself.

The button "Next Position" loads the next tactical position. If you ignore the currently displayed position and jump to another position with "Next Position" points are deducted from your personal rating.

In the case of difficult positions there is an "Advice" button. The program offers the user more or less concrete tips on how to continue. The tips are given either as text or by marking pieces on the chess board.

The "*Solution*" button displays the solution immediately. This means the deduction of points, displayed in red letters, which are deducted from your personal rating.

The solution is displayed by a green arrow on the chess board.

If you are unhappy with a position you can send the developer a message with the "Criticise Position" button. If a position particularly pleases you you can rate it positively with the "Like" button.

On the right of the navigation bar there is a function button to send feedback to the app's developers. This function is intended for general tips and suggestions. The app is multilingual, so you only have to select the language.

After you have started the app you see the position to solve on the main screen. On the right you see additional information about the difficulty level and the number of solved positions, as well as your own rating and performance.

When you first start you have a rating of 1600 and the positions offered you are relatively easy to solve. The difficulty increases as you continue to solve positions. Even if you have a high rating, every time you start the app you will first be offered simple positions to "warm up".

Of you quit the app while a position hasn't been solved the position is registered as "unsolved", which has a negative effect on your personal rating. You can avoid this by not clicking on "***Next Position***" before you end the app. Just like blitz games, the rating changes after every training session.

On the right side of the screen there are two small information windows.

In the first window there is information about the difficulty of the position, and there is the following additional information in brackets:

The number of positions you have been given so far.
The average time needed to solve this position by other users.
The number of the position.

In the second window there is information about your results, e.g. the number of positions solved, your rank and your rating.

```
User:               DerAmateur
Positions Solved:   38/97
Your Rating:        1584
Your Rank:          -
Ranking Lists
```

After every problem the change in your rating is shown in green (increase) or red (decrease).

```
User:               DerAmateur
Positions Solved:   45/104
Your Rating:        1576 (+3.6)
```

If you click on "*Ranking List*" a table is displayed with the names and results of the users who are registered with the tactics app.

RANKING LIST

TACTICS.CHESSBASE.COM

POSITION	NAME	ELO	SOLVED	COUNTRY	TENDENCY	FRIEND	RANK
3301.	Xadres01	1577	92				Beginner
3302.	Haunebull	1577	80				Beginner
3303.	Amz	1577	58		➡		Beginner
3304.	Jacob Ginn	1577	31				-
3305.	odemaru	1577	24				-
3306.	**DerAmateur**	**1576**	**45**	🇩🇪	➡		-
3307.	calidoscopi	1575	170				Beginner
3308.	twan08	1575	87	🇳🇱			Beginner
3309.	Koflip	1574	491				Talent
3310.	kAGAn	1574	326		➡		Strong Apprentice
3311.	Miros	1574	55				Beginner
3312.	zuritex	1574	40		➡		-
3313.	hie	1573	442				Talent
3314.	Karl68	1573	310				Strong Apprentice
3315.	Lennie08	1573	166				Beginner

The list can be sorted by clicking in the column headers. For instance, if you click on ELO the users with the highest ratings are displayed. If you click on ELO again the sort order is reversed and the users with the lowest ratings are displayed. After solving at least 20 problems a player with a registered account is taken into the rating list.

How can you enter your own nationality? The program uses the country settings that have been set in the Playchess.com client.

3.10 Elo ratings

3.10.1 Elo ratings and lists

The Elo rating system was invented by Árpád Élö" (1903-1992), a Hungarian-born American physics professor, who spelled his name "Elo" after he left Hungary. So Elo is not an acronym and should not be wirtten ELO.

Here's a list of rating categories

Playing strength	Player category
1000-1600	Average club player
1600-2100	Strong club player
2100-2300	International league player
2300-2450	International Master (IM)
2450-2600	Grandmaster (GM)
2600-2850	Supergrandmaster, world champions, Kasparov

The world's strongest chess engines, running on fast hardware, today (2005) have an Elo rating of over 2800. They are a match for the strongest human chess players in the world.

The Elo ratings can also be used to evaluate chess engines. This program helps you to

do this by producing rating and ranking lists on the basis of engine tournaments. In fact, it contains a complete Elo management system. GM and IM norms are automatically recognized and titles awarded. The Elo calculation can be used to evaluate human performance, even for historical tournaments that were held long before the rating system was invented. If you have an existing Elo list, you can add a tournament to update the list.

Before you start rating tournaments you should create an Elo start list. This gives all players a plausible initial rating. After that, you must maintain the list by evaluating tournaments as they are played. To do this, mark the games of a tournament, right-click them, then select "Add to Elo list" in the menu that appears. If no Elo list is open, then a file selector appears, allowing you to select a list to add games to.

3.10.2 The Elo start list

Database Window - Rating   Create Elo Start List

Unix inventor and computer chess pioneer, *Ken Thompson*, has developed an algorithm which allows one to create an Elo rating list out of an arbitrary set of games. Any database of games can be treated as a gigantic tournament. Each player gets the same initial rating (e.g., 2400). After evaluating the results of all games in the database, each player gets a new rating. Using these new values, the games of the database are rated again. This is done over and over again, until the ratings of all players stabilize and the values remain constant.
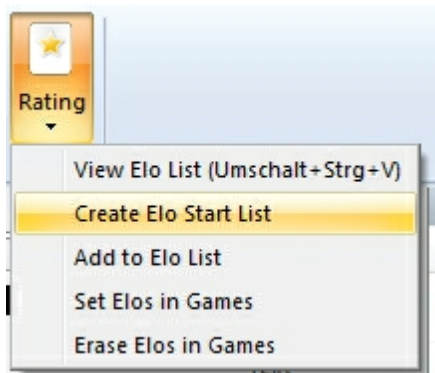
The Elo management in our chess program was implemented mainly in order to evaluate engine tournaments. But it is very interesting to use it on human results as well. It can also be quite exciting to create Elo lists for historical game data. For the system to work properly, it is absolutely critical that the players' names are completely unified. We recommend using the large high-quality databases from ChessBase (e.g., MegaDatabase) for the creation of historical Elo lists. Most other databases contain player names with different spellings and other inaccuracies. In addition, databases which do not contain complete tournaments will distort the ratings. For instance if they only have the best games of certain players these players will achieve very high ratings from the program.

For engine ratings, a good Elo list should be based on at least 300 to 500 games. Implausible values in the start list are not a big problem, because after a few engine tournaments, the programs will approach their real ratings (underrated engines will shoot up, grossly overrated ones will lose point very quickly).

This is how to generate an Elo list

▶   First, select all the games in a database list that should be used for calculation. If you want to use the whole database, press **Ctrl-A** to select them all.

▶   Click *Database   Ratings   Create Elo Start List*.

▶   The program prompts you for a file name. If you use an existing Elo list, its contents will be overwritten.

▶   If there are not enough games per player in the database, the program informs you, and does not calculate any ratings.

The Thompson algorithm calculates relative playing strengths. It assumes that the average rating of all the players in a rating list is 2400. This will normally not be the case. To get correct practical ratings, it is necessary to rescale or gauge the list by adding or subtracting a certain percentage from each player. The best way to do this is to take a very stable player with a known rating, and add or subtract an offset to make the rating equal his real rating. The program will then adjust the ratings of all other players accordingly.

3.10.3   Viewing the Elo list

At the bottom of the Elo list window there are a number of buttons. They allow you to sort the list alphabetically, according to ratings or number of games, etc.
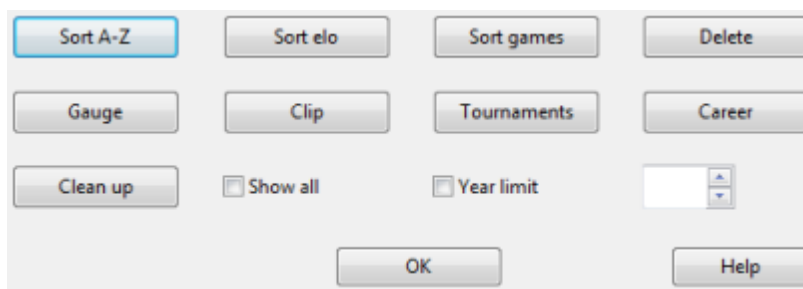
Here are what the buttons in the Elo rating display do:

▶   **Sort A-Z:** Sorts the list alphabetically according to the players' names.

▶   **Sort Elo:** Sorts the list according to Elo rating (default).

▶   **Sort games:** Sorts the list according to the number of tournament games.

▶   **Delete:** Allows you to mark players and remove them from the list.

▶   **Gauge:** Allows you to rescale or gauge the list by adding or subtracting a certain percentage from each player.

▶   **Clip:** Copies the whole list to the Windows clipboard. You can then paste it into a word processor or spread sheet.

▶ **Tournaments:** Displays a list of all the tournaments which were used to create the list.

▶ **Career:** Displays a list of the tournaments in which the selected player participated.

▶ **Clean up**: Removes all players who have been inactive for more than six years, counted from the last tournament that was evaluated from the list.

▶ **Show all:** Displays all players who were evaluated, including those for whom the number of games were too small for a correct rating.

▶ **Year limit**: Allows you to restrict the list to tournaments played before a certain period.

3.11 External hardware

3.11.1 Connect hardware

Board   DGT Board
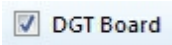
The program makes contact with the outside world via a serial cable to the outside world. Currently, two drivers are included:

▶ **DGT-Board:** This driver allows you to use the intelligent sensor board produced by the Dutch company DGT. The board can identify different pieces (i.e., it can tell whether there is a white bishop or a black knight on a square). If you switch on "Announce moves" in the Tools – Options – Multimedia menu, the program announces its moves verbally, so you don't even have to look at the screen.

The connection between the board and the PC can be over 10 meters long, and many of the functions (new game, setup position) can be executed without touching the PC.
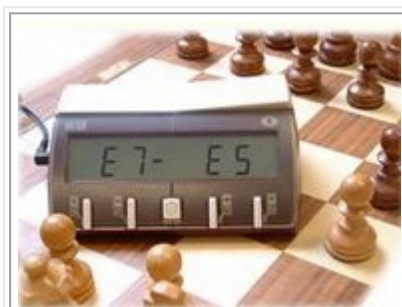
The program can also be connected to the *DGT XL Chess Clock*. This clock displays the time and also the moves that are played. This means you can play on the DGT board, with the clock attached, and you can read the moves of the chess engine off the display of the chess clock.

3.12 FAQ

3.12.1 Copy tree to hard disk not available

Menu Analysis - Copy tree to hard disk
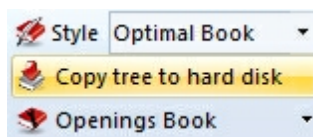
It only works when you have loaded a book from CD/DVD and does not yet exist on hard disk.

If you want to copy a book from CD/DVD drive, then load it first. You can do this by clicking on the tab "Openings book" on top of the annotation window.
If there is already a book loaded, right click on an empty spot in the window pane and select "Close book file". A button "Load book" appears.

Click on the button and select the book from CD. The file should have the extension ***. ctg**

After you have loaded the book, the function "*Copy tree to hard disk*" will be available.

3.12.2   Problems in the display of the list window?

Menu File - Options - Design

In rare cases there can be problems with the display in the list windows or in the notation window.

If, e.g., what is printed in the lists does not appear until you have scrolled up or down the list or till you have used the **ALT - TAB key** combination, then a change in the options dialog for the program will help.

In the dialog box there is the option "*Notation in high quality*".
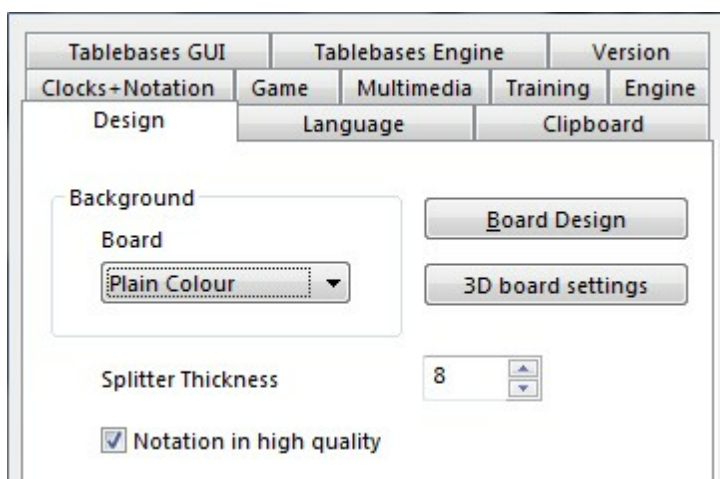
Tablebases GUI		Tablebases Engine		Version
Clocks+Notation	Game	Multimedia	Training	Engine
Design		Language		Clipboard

Background

Board

Plain Colour ▾   Board Design

3D board settings

Splitter Thickness   8 ⬍

☑ Notation in high quality

If you deactivate this setting, then the problems with text display which have been described will no longer occur.

3.12.3   3D board problems

Although the 3D board has been tested on a variety of different graphical cards, errors may occur on cards on which the program has not been tested. This part is rather complex and the programmer needs a lot of information in order to find a solution. For this reason, a special function has been build in the program which sents all the necessary information straight to the programmer.

Below the 3D board is the button "*Settings*". In the dialog, click on tab "*Info*".
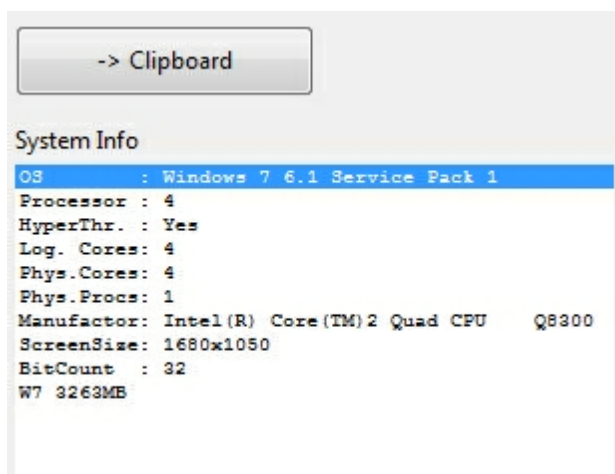
It is helpfull if you add a description of the problem in this mail before you actually sent it. Or use the -> Clipboard button. Open your mail program and use **Ctrl-V** to paste this information into the textfield.

3.12.4 Letters on the board ?

You get letters on the board instead of pieces ? The Fonts are not installed correctly.

In case you notice letters instead of chess pieces on the board, please try to reinstall the program.

3.12.5 Reference database

You set a database as the Reference database in the Full analysis, but the program does not use it ?

The database which is used as the reference database needs to have an openings key installed.

You can easily check this in the database window. Click on the tab "Openings". If there is no key installed, you will see 4 buttons to install one. It is best to either select the Big key or install one from the Mega database, the Big database or the database which is delivered with the chess playing program.

If you click on the button "Select key" you will be looking for a file with the extension ***.cko** which should be present in one of the mentioned databases.

3.12.6 How do I upgrade my program ?

It is important that you use the last upgrade of the program for many reasons. Problems may be fixed in newer versions, but the functionality of the program can also be increased.

You must first activate your Program to get Program updates.
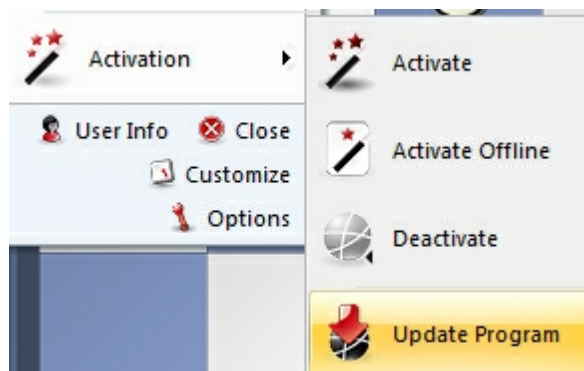
Click *Update Program*. As soon as you have done this, the program will inform you if an upgrade is available.

After the download of the upgrade file, the program will ask to log off. Do this and wait patiently until the program responds with the message "Internet upgrade ok".

3.12.7 Admin Tool

In the program folder you will find the separate program "*ChessBaseAdminTool.exe*".

This application is started automatically after the program is started and informs you about the activation status of the installed programs.

In the case of problems with the activation the program can be started manually by double cliclicking on the EXE file in the program folder.

Activate starts the dialog for the program activation.

Activate Offline starts the dialog for the program activation on a computer without Internet access.

Deactivate deactivates the selected program version.

3.12.8 Improve the responsiveness of the computer while the engine runs

There are several ways to keep your computer more responsive while Kommodo is thinking:

•   Run the engine at "Lower than normal" priority. Most chess GUI will provide this option, for example: Fritz/ChessBase has a "Priority Below Normal" checkbox in the dialog for creating the UCI engine.

•   If you want to use your computer for other purposes while analyzing chess positions, set the "Threads" configuration option to a value smaller than the the number of physical cores of your computer - for example, use 3 on a quad-core computer. This will leave one core available for other applications while the chess analysis runs in the background.

3.12.9 Which Hash Size should I use at various time controls?

Forinfinite analysis or long Time Control matches you should use the largest hash possible - typically about half of the total RAM memory of your computer. For example, on a system with 4 GB of memory you can use up to 2048 MB hash size, on a 12 GB RAM system you can use up to 8192 MB.

For shorter games, e.g. 3 to 5 minute games, it's better to use 256 MB or 512 MB as this will provide the best performance. For 16 min games 1024 or 2048 MB hash size should be fine.

If you know the average move time T (in seconds) and the average node speed of your hardware S (in kN/s), you can compute the optimal hash size with the formula: (T x S / 100) MB.

For example if you use a Time Control of 10 minutes for 40 moves repeating, the average move time T = 15 seconds. On hardware that produces about 2,000 kN/s the optimal hash size would then be approximately (15 x 2,000 / 100) = 300 MB, in other words 256 MB or 512 MB would be the recommended values.

3.12.10 Deep Position Analysis feature

If you use the Deep Position Analysis feature, it is possible that Kommodo analysis went down risky lines without taking note of drawing/equalizing chances almost every move. Is that to be expected?

If you want Kommodo to favor drawing lines, you should consider putting Houdini's "Contempt" value to 0.

ChessBase runs its deep position analysis by simulating game conditions. This means that Houdini thinks that it's in a game instead of an analysis, and activates the contempt (default value 1). To avoid this, it's best to put the Contempt value to 0 when using the deep position analysis in ChessBase.

3.12.11 Examples

3.12.11.1 Optimising move entry

Menu File - Options - Game - "Premove"

This function helps save you time in blitz or rapid chess. Whilst it is your opponent's move and he is thinking about his reply, you can already execute the planned move on the board. This makes particular sense when you have obvious counter moves and it saves valuable seconds of thinking time in blitz or bullet games.

The counter move is displayed on the board with a green arrow. In an ending, it can make sense to enter several moves in succession, e.g. a pawn breakthrough such as e3-e4-e5-e6-e7-e8. In this case the moves are automatically executed as soon as your opponent has moved. When this is done, promotion is always to a queen.

Tip: If your opponent has not yet replied and you want to delete your entry, you can delete any pre-entered list of moves with a right click on the graphical chess board.

What is the effect of the individual parameters? The setting Off is easy to understand. It deactivates the function.

- **Normal** = With this setting, it is always the first move on the list which is executed. If the move is not a legal one, the list is deleted and you have to make your own reply.

- **Aggressive** = With this setting, an attempt is always made to execute the first move on the list. If the move is not legal, then only this move is deleted and the next possible move from the list is played.

The feature and the logic behind it require some practice. It could also be said jokingly that this is a certain way to lose every game, and to do so unbelievably quickly.
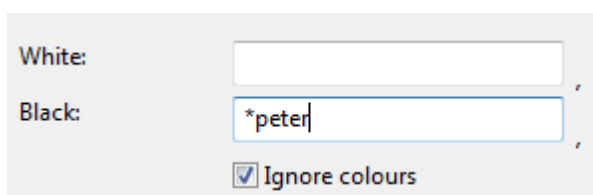
Tip: Before trying out this feature on the chess server and risking valuable ratings points, you should play with the function against a chess engine such as Kommodo. The option also works in classical play against chess engines.

3.12.11.2 Database search – watch out for small or capital letters

If you use the search mask in Kommodo to look for specific players, the program only selects from the database those entries is which the player's name begins with a capital letter. But when you play games on the chess server or get game data from the internet, then a lot of players' names are written with a lower case letter at the start. Is there any way to collect from the database entries for players whose names start with a lower case letter?

The search function in the program or ChessBase considers that all names start with a capital letter. If, e.g., you are looking for "*peter*", the program changes the search criterion to "*Peter*". This procedure actually offers a lot of advantages when you are searching for names.

But, since there are a lot of games in, e.g., the database MyInternetGames with names in lower case, there must be some way to home in on these and select them.

White:	
Black:	*peter
☑ Ignore colours	

Solution: In your search, enter a * in front of the names. So in the aforementioned example, you should enter simply "**peter** into the search mask.

3.12.11.3 Displaying thinking time

The chess clock with Fritz displays elapsed thinking time for both sides.

The left hand clock is for White and the one on the right shows the time used by Black.
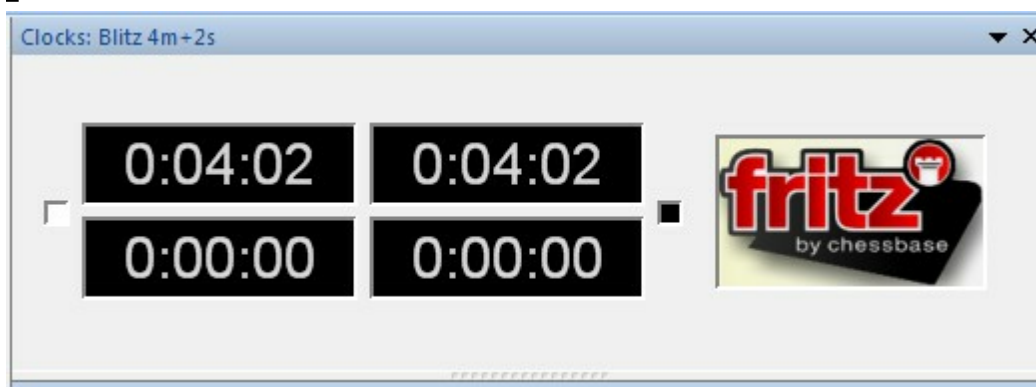
The program has two sorts of chess clock, digital and analog, and you can choose between them with a right click in the clock window. The window for the chess clock can also display the logo for the engine which is working (right click on the window). What is particularly informative is to make use of the chess clock with double digital display. The simplest way to call this up is with a right click in the clock window when you will find the entry "Double digital" which displays it. The upper clock always shows the complete time and the lower one the time you are spending per move.

You can also choose to display on the clock the specific difference in thinking time between the two players, either when playing against Kommodo or on Playchess.com. This informative representation of difference in thinking time is especially useful when playing blitz or bullet games on Playchess.com.
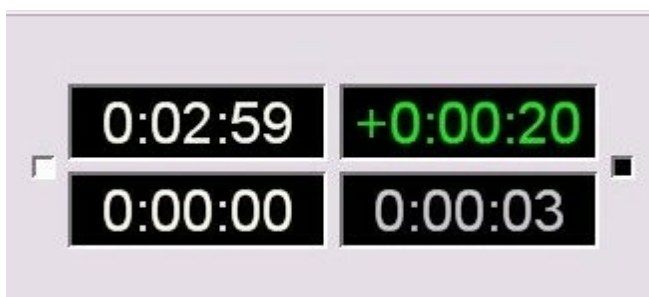
The value displayed in green figures shows a positive value. In this display, White has a concrete time advantage of 20 seconds over his opponent. A similar negative value would be expressed in red figures.
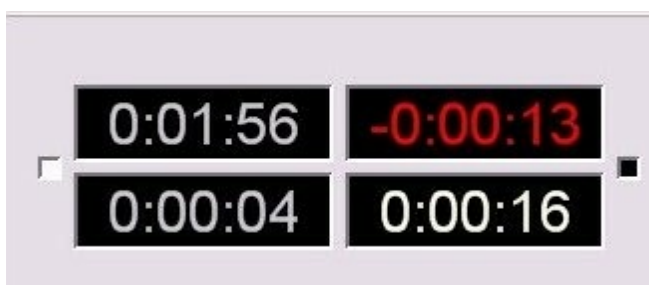
This display can be set up either with a right click on the clock and via the context menu or alternatively via the options dialog under "*Menu File - Options   Clocks + Notation*".

3.12.11.4 Correct promotion!

Problem: Every time it is your move, the program automatically promotes to a queen whenever a pawn reaches the eighth rank. The option of underpromotion is not offered, although you have deactivated the option "Always promote to queen" under *Menu File - Options - Game.*

A pawn is always promoted to a queen whenever the preset "*Single click entry - Aggressive*" has been selected. This makes sense especially in bullet games on the chess server, when you would not like to waste too much time responding.

You can always force the dialog for promotion by holding down Ctrl-Shift before moving the pawn to the final rank.

3.12.11.5 Notes on rated games

You can play rated games against the program. In this mode you can specify at which estimated Elo strength Kommodo should play.

You call up the dialog for rated games by *Training   Rated Game*.

The point of rated games is that both sides start from the same conditions.

If, for a game, you set a human bonus of xx seconds per move, then, unlike in normal games, this is not taken into account in rated games. Nor is the taking back of moves accepted in games in this mode.

This is not a mistake; it has been done on purpose. In any serious match or tournament game, then the rules do not allow a time bonus to the advantage of one side or the other. If that were the case, then the idea of equal playing conditions and the point of rated games would not be respected.

3.12.11.6 Chess training with Theme Blitz

Chess training can be carried out efficiently with the option "Theme Blitz".

What is the point of this option? One recognised method of improving playing strength consists of acquiring as much experience as possible with specific types of position. This function allows you to play against the computer from specific positions. It does not matter whether these are positions from the opening, the middlegame or the endgame. The function is similar to opening training, except that in every case you start from the latest position on the board.

An interesting option here is "*Learn moves*". When this is activated the game starts from the very beginning, from the starting position.
If you enter a move which deviates from the opening moves which lead to the chosen position, the coach is called up, just as happens in Opening Training. The coach points out that a move has been played which does not fit into the particular variation which leads to the position you have selected.
If you deactivate the option "Learn moves", then each game will start directly from the basic position which you pre-defined during the dialog "Starting position".

The option "*Change sides*" also makes a lot of sense. You can deepen your understanding of how to treat specific types of position by getting to know the strategies employed by both sides. So with this function switched on, every time you start a new game you have to change sides.

3.12.11.7 Fine-tuning openings books

According to the opening, it can happen that a chess program does not perform at its best because it has fallen into an unfavourable opening variation.

Let us assume that over time you have put together a database of games in which a computer program was defeated by its opponent because of an unfavourable opening variation. So that this situation is not repeated, you can arm the engine against this line.

From the main screen we load Openings book and select from Edit – Openings Book the option *Learn from Database* .
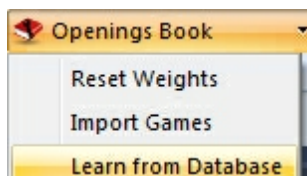
You then enter into the dialog box the path of the database which contains the aforementioned defeats and the following dialog is called up:
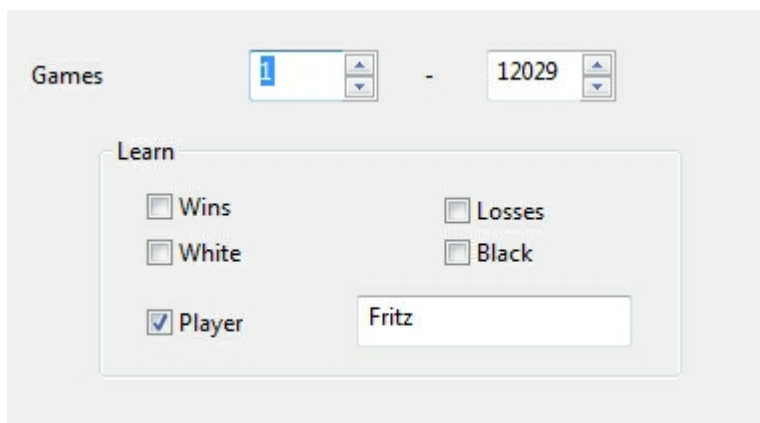
We can now specify which information from the database Kommodo & Co should take into account. These options (which can all be combined) assimilate the weightings into the openings book, just as if the engine had itself played the games in question.

In normal circumstances the program alters the weightings given to each move in the openings book according to the experience gained from its own games. These weightings decide the probability with which any specific move will be played. This process of automatically adjusting these weightings after winning with a specific variation is called "*Learning*".

This feature has other practical uses. Many computer chess freaks are committed to playing with their chess engines in the engine room of the chess server playchess. com.

3.12.11.8 Alternative piece designs

In addition to the standard set of pieces, the program offers some alternative ways of displaying the pieces on the board. The simplest way to change them is by Right click -- Board Design from the board.

The Board design dialog contains the entry "*Pieces*".

This allows you to select the set of pieces you wish; it will then be used to display the pieces on the board.
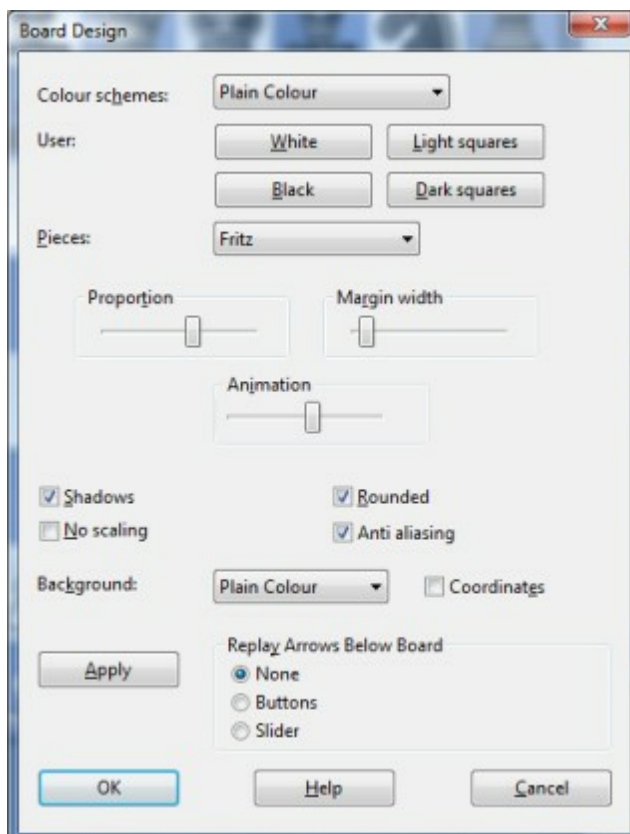
Under *Board - Pieces* you can select the pieces too.

3.12.11.9 Producing opening references

The program offers numerous innovative functions to help you analyse games effectively. Under the automated Full Analysis of games there is the option of integrating not only variations and text comments but also references to the opening being played.
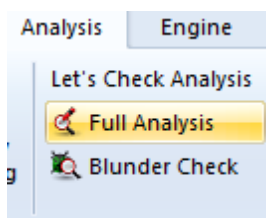
For that there is the box "*Opening reference*".
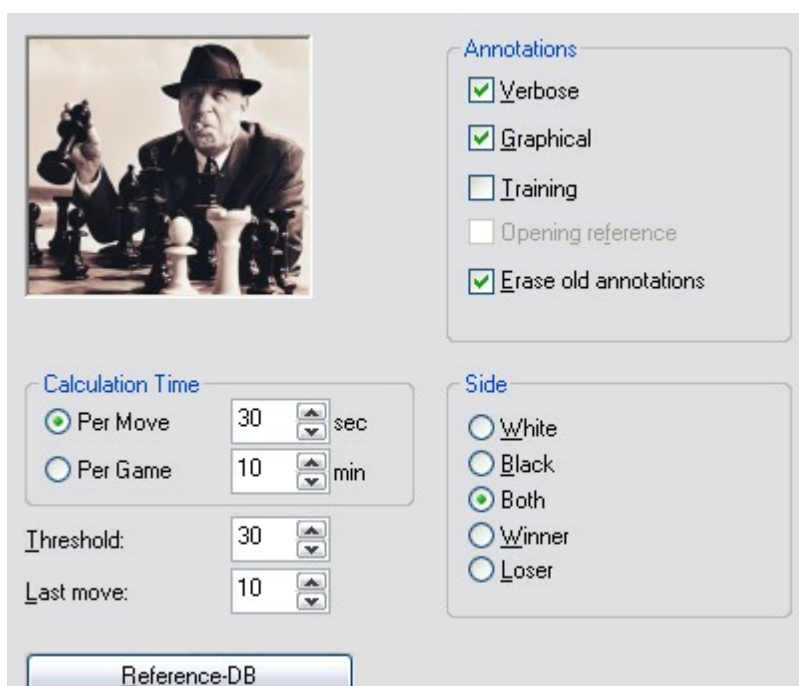
With the help of a reference database, Kommodo can classify the game. The program integrates actual games for comparison and marks the point at which the game which is being analysed deviates from opening theory.

Some users have found it irritating when the entry for the reference database is greyed out and the function cannot be activated.

This option is only activated if you have selected a reference database, Click on the button *"Reference-DB"* and select a database from the list offered.

Note: The DVD ROM contains a large database of games which you can set as your reference database.

3.12.11.1 The move list

Under Training there is the function Explain All Moves.

This function offers you a list of all possible legal moves and short textual explanations.

Of course, this function is in the first place aimed at beginners. But it can also render useful service in the analysis of a position.

The order of the moves as listed is based on the quality of the continuations. The program puts the best moves at the top of the list, whereas the not so good continuations find their way to the bottom. That can, e.g., be helpful when analysing opening moves.

4 Chess rules (FIDE)

4.1 Preface

FIDE Laws of Chess cover over-the-board play. The English text is the authentic version of the Laws of Chess which was adopted at the 67th FIDE Congress at Yerevan September-October 1996, coming into force on 1 July 1997. In these Laws the words 'he', 'him' and 'his' include 'she' and 'her'.
The FIDE Rules and Regulations and other official documents are the property of FIDE and the FIDE member federations and may be dealt with by each under their own national law. The General Assembly urges the member-federations to make the FIDE Rules and Regulations widely available in their countries in an appropriate manner. The name "Official / Authorized Rules and Regulations of FIDE" and the FIDE logo may not be used without the consent of FIDE.
FIDE stands for Federation Internationale D'Echecs.

Preface

The Laws of Chess cannot cover all possible situations that may arise during a game, nor can they regulate all administrative questions. Where cases are not precisely regulated by an Article of the Laws, it should be possible to reach a correct decision by studying analogous situations which are discussed in the Laws. The Laws assume that arbiters have the necessary competence, sound judgement and absolute objectivity. Too detailed a rule might deprive the arbiter of his freedom of judgement and thus prevent him from finding the solution to a problem dictated by fairness, logic and special factors.

FIDE appeals to all chess players and federations to accept this view.

A member federation is free to introduce more detailed rules provided they:

(a) do not conflict in any way with the official FIDE Laws of Chess
(b) are limited to the territory of the federation in question; and
(c) are not valid for any FIDE match, championship or qualifying event, or for a FIDE title or rating tournament.

4.2 1: Nature and objectives of chess

1.1. The game of chess is played between two opponents who move pieces alternately on a square board called a 'chessboard'. The player with the white pieces commences the game. A player is said to 'have the move', when his opponent's move has been completed.

1.2. The objective of each player is to place the opponent's king 'under attack' in such a way that the opponent has no legal move which would avoid the 'capture' of the king on the following move. The player who achieves this is said to have 'checkmated' the opponent and to have won the game. The opponent who has been checkmated has lost the game.

1.3. If the position is such that neither player can possibly checkmate, the game is drawn.

4.3 2: Initial position on the chessboard

2.1. The chessboard is composed of an 8x8 grid of 64 equal squares alternately light (the 'white' squares) and dark (the 'black' squares). The chessboard is placed between the players in such a way that the near corner square to the right of the player is white.

2.2. At the beginning of the game one player has 16 light-coloured pieces (the 'white' pieces); the other has 16 dark-coloured pieces (the 'black' pieces).

These pieces are as follows:

A white king	A black king
A white queen	A black queen
Two white rooks	Two black rooks
Two white bishops	Two black bishops
Two white knights	Two black knights
Eight white pawns	Eight black pawns

2.3. The initial position of the pieces on the chessboard is as follows:

2.4. The eight vertical columns of squares are called 'files'. The eight horizontal rows of squares are called 'ranks'. A straight line of squares of the same colour, touching corner to corner, is called a 'diagonal'.

4.4   3: The moves of the pieces

3.1. No piece can be moved to a square occupied by a piece of the same colour. If a piece moves to a square occupied by an opponent's piece the latter is captured and removed from the chessboard as part of the same move. A piece is said to attack a square if the piece could make a capture on that square according to Articles 3.2 to 3.5.

3.2. (a) The queen moves to any square along the file, the rank or a diagonal on which it stands.
(b) The rook moves to any square along the file or the rank on which it stands.
(c) The bishop moves to any square along a diagonal on which it stands.

When making these moves the queen, rook or bishop cannot move over any intervening pieces
.
3.3. The knight moves to one of the squares nearest to that on which it stands but not on the same rank, file or diagonal. It does not pass directly over any intervening square.

3.4. (a) The pawn moves forward to the unoccupied square immediately in front of it on the same file, or
(b) on its first move the pawn may advance two squares along the same file provided both squares are unoccupied, or
(c) the pawn moves to a square occupied by an opponent's piece which is diagonally in front of it on an adjacent file, capturing that piece.
(d) A pawn attacking a square crossed by an opponent's pawn which has advanced two squares in one move from its original square may capture this opponent's pawn as though the latter had been moved only one square. This capture can be made only on the move following this advance and is called an 'en passant' capture.
(e) When a pawn reaches the rank furthest from its starting position it must be exchanged as part of the same move for a queen, rook, bishop or knight of the same colour. The player's choice is not restricted to pieces that have been captured previously. This exchange of a pawn for another piece is called 'promotion' and the effect of the new piece is immediate.

3.5. (a)The king can move in two different ways, by:
(i) moving to any adjoining square that is not attacked by one or more of the opponent's pieces,
or
(ii) 'castling'. This is a move of the king and either rook of the same colour on the same rank, counting as a single move of the king and executed as follows: the king is transferred from its original square two squares towards the rook, then that rook is transferred over the king to the square the king has just crossed.
(1) Castling is illegal:
[a] if the king has already been moved, or
[b] with a rook that has already been moved
(2) Castling is prevented for the time being:
[a] if the square on which the king stands, or the square which it must cross, or the square which it is to occupy, is attacked by one or more of the opponent's pieces.
[b] if there is any piece between the king and the rook with which castling is to be effected.
(b) The king is said to be 'in check', if it is under attack by one or more of the

opponent's pieces, even if such pieces cannot themselves move.
Declaring a check is not obligatory.
A player must not make a move which places or leaves his own king in check.

4.5 4: The act of moving the pieces

4.1. Each move must be made with one hand only.

4.2. Provided that he first expresses his intention (e.g. by saying "j'adoube"), the player having the move may adjust one or more pieces on their squares.

4.3. Except as provided in Article 4.2, if the player having the move deliberately touches on the chessboard
(a) one or more pieces of the same colour, he must move or capture the first piece touched that can be moved or captured, or
(b) one piece of each colour, he must capture the opponent's piece with his piece or, if this is illegal, move or capture the first piece touched which can be moved or captured. If it is unclear the player's own piece shall be considered to have been touched before his opponent's.

4.4. (a) If a player deliberately touches his king and a rook he must castle on that side if it is legal.
(b) If a player deliberately touches a rook and then his king he is not allowed to castle on that side on that move and the situation shall be governed by Article 4.3.
(c) If a player, intending to castle touches the king or king and a rook at the same time, but castling on that side is illegal, the player must choose either to castle on the other side, provided that castling on that side is legal, or to move his king. If the king has no legal move, the player is free to make any legal move.

4.5. If none of the pieces touched can be moved or captured, the player may make any legal move.

4.6. If the opponent violates Article 4.3 or 4.4 the player cannot claim this after he himself deliberately touches a piece.

4.7. When, as a legal move or part of a legal move, a piece has been released on a square, it cannot then be moved to another square. The move is considered to be made when all the relevant requirements of Article 3 have been fulfilled.

4.6 5: The completed game

5.1. (a) The game is won by the player who has checkmated his opponent's king with a legal move. This immediately ends the game.
(b) The game is won by the player whose opponent declares he resigns. This immediately ends the game.

5.2. The game is drawn when the player to move has no legal move and his king is not in check. The game is said to end in 'stalemate'. This immediately ends the game.

5.3. The game is drawn upon agreement between the two players during the game. This immediately ends the game. (See Article 9.1)

5.4. The game may be drawn if the identical position is about to appear or has appeared on the chessboard three times. (See Article 9.2)

5.5. The game may be drawn if the last 50 consecutive moves have been made by each player without the movement of any pawn and without the capture of any piece. (See Article 9.3)

4.7   6: The chess clock

6.1. 'Chess clock' means a clock with two time displays, connected to each other in such a way that only one of them can run at one time. 'Clock' in the Laws of Chess means one of the two time displays.
'Flag fall' means the expiry of the allotted time for a player.

6.2. When using a chess clock, each player must make a certain number or all moves in an allotted period of time; or may be allocated an additional amount of time after each move. All this must be specified in advance. The time saved by a player during one period is added to his time available for the next period, except in the 'time delay' mode.
In the time delay mode both players receive an alloted 'main thinking time'. They also receive a 'fixed extra time' for every move. The count down of the main time only commences after the fixed time has expired. Provided the player stops his clock before the expiry of the fixed time, the main thinking time does not change, irrespective of the proportion of the fixed time used.

6.3. Each time display has a 'flag'. Immediately after a flag falls, the requirements of Article 8.1 must be checked.

6.4. The arbiter decides where the chess clock is placed.

6.5. At the time determined for the start of the game the clock of the player who has the white pieces is started.

6.6. The player shall lose the game if he arrives at the chessboard more than one hour after the scheduled start of the session (unless the rules of the competition specify or the arbiter decides otherwise).

6.7. (a) During the game each player, having made his move on the chessboard, shall stop his own clock and start his opponent's clock. A player must always be allowed to stop his clock. His move is not considered to have been completed until he has done so, unless the made move ends the game. (See Articles 5.1, 5.2 and 5.3)
The time between making the move on the chessboard and stopping his own clock and starting his opponent's clock is regarded as part of the time allotted to the player.
(b) A player must stop his clock with the same hand as that with which he made his move. It is forbidden to keep the finger on the button or to 'hover' over it.
(c) The players must handle the chess clock properly. It is forbidden to punch it forcibly, to pick it up or to knock it over. Improper clock handling shall be penalised in accordance with Article 13.4.

6.8. A flag is considered to have fallen when the arbiter observes the fact or when a valid claim to that effect has been made by either player.

6.9. Except where Articles 5.1, 5.2 and 5.3 apply, if a player does not complete the prescribed number of moves in the allotted time, the game is lost by the player. However, the game is drawn, if the position is such that the opponent cannot checkmate the player by any possible series of legal moves (i.e. by the most unskilled counterplay).

6.10. Every indication given by the clocks is considered to be conclusive in the absence of any evident defect. A chess clock with an evident defect shall be replaced. The arbiter shall use his best judgement when determining the times to be shown on the replacement chess clock.

6.11. If both flags have fallen and it is impossible to establish which flag fell first, the game shall continue.

6.12. (a) If the game needs to be interrupted, the arbiter shall stop the clocks.

(b) A player may stop the clocks in order to seek the arbiter's assistance.
(c) The arbiter shall decide when the game is to be restarted.

6.13. If an irregularity occurs and/or the pieces have to be restored to a previous position, the arbiter shall use his best judgement to determine the times to be shown on the clocks.

6.14. Screens, monitors, or demonstration boards showing the current position on the chessboard, the moves and the number of moves made, and clocks which also show the number of moves, are allowed in the playing hall. However, the player may not make a claim based on anything shown in this manner.

4.8   7: Illegal positions

7.1. (a) If during a game it is found that the initial position of the pieces was incorrect, the game shall be cancelled and a new game played.
(b) If during a game it is found that the only error is that the chessboard has been placed contrary to Article 2.1, the game continues but the position reached must be transferred to a correctly placed chessboard.

7.2. If a game has begun with colours reversed then it shall continue, unless the arbiter rules otherwise.

7.3. If a player displaces one or more pieces, he shall re-establish the correct position on his own time. If necessary the opponent has the right to restart the player's clock without making a move in order to make sure the player re-establishes the correct position on his own time.

7.4. If during a game it is found that an illegal move has been made, or that pieces have been displaced from their squares, the position before the irregularity shall be re-instated. If the position immediately before the irregularity cannot be identified the game shall continue from the last identifiable position prior to the irregularity. The clocks shall be adjusted according to Article 6.13 and, in the case of an illegal move, Article 4.3 applies to the move replacing the illegal move. The game shall then continue.

4.9   8: The recording of the moves

8.1. In the course of play each player is required to record his own moves and those of his opponent, move after move, as clearly and legibly as possible, in the algebraic notation (Appendix E), on the scoresheet prescribed for the competition.
A player may reply to his opponent's move before recording it, if he so wishes. He must record his previous move before making another. The offer of a draw must be recorded on the scoresheet by both players.(Appendix E.12) If a player due to physical or religious reasons, is unable to keep score, an amount of time, decided by the arbiter, shall be deducted from his allotted time at the beginning of the game.

8.2. The scoresheet shall be visible to the arbiter at all times.

8.3. The scoresheets are the property of the organisers of the event.

8.4. If a player has less than five minutes left on his clock and does not have additional time of 30 seconds or more added with each move, then he is not obliged to meet the requirements of Article 8.1. Immediately after one flag has fallen the player must update his scoresheet completely.

8.5. (a) If neither player is required to keep score under Article 8.4, the arbiter or an assistant should try to be present and keep score. In this case, immediately after one flag has fallen, the arbiter shall stop the clocks. Then both players shall update their scoresheets, using the arbiter's or the opponent's scoresheet.
(b) If only one player is not required to keep score under Article 8.4, he must update his scoresheet completely as soon as a flag has fallen. Provided it is the player's move, he may use his opponent's scoresheet. The player is not permitted to move until after he has completed his own scoresheet and returned his opponent's.
(c) If no complete scoresheet is available, the players must reconstruct the game on a second chessboard under the control of the arbiter or an assistant, who shall first record the actual game position before reconstruction takes place.

8.6. If the scoresheets cannot be brought up to date showing that a player has overstepped the allotted time, the next move made shall be considered as the first of the following time period, unless there is evidence that more moves have been made.

4.10   9: The drawn game

9.1. A player can propose a draw after making a move on the chessboard. He must do so before stopping his own clock and starting his opponent's clock. An offer at any other time during play is still valid, but Article 12.5 must be considered. No conditions can be attached to the offer. In both cases the offer cannot be withdrawn and remains valid until the opponent accepts it, rejects it orally, rejects it by making a move, or the game is concluded in some other way.
The offer of a draw shall be noted by each player on his scoresheet with the symbol (=).

9.2. The game is drawn, upon a correct claim by the player having the move, when the same position, for at least the third time (not necessarily by repetition of moves)

(a) is about to appear, if he first writes his move on his scoresheet and declares to the arbiter his intention to make this move, or

(b) has just appeared.
Positions as in (a) and (b) are considered the same, if the same player has the move, pieces of the same kind and colour occupy the same squares, and the possible moves of all the pieces of both players are the same. Positions are not the same if a pawn could have been captured en passant or if the right to castle immediately or in the future has been changed.

9.3. The game is drawn, upon a correct claim by the player having the move, if
(a) he writes on his scoresheet, and declares to the arbiter his intention to make a move which shall result in the last 50 moves having been made by each player without the movement of any pawn and without the capture of any piece, or
(b) the last 50 consecutive moves have been made by each player without the movement of any pawn and without the capture of any piece.

9.4. If the player makes a move without having claimed the draw he loses the right to claim, as in Article 9.2 or 9.3, on that move .

9.5. If a player claims a draw as in Article 9.2 or 9.3 he shall immediately stop both clocks. He is not allowed to withdraw his claim.
(a) If the claim is found to be correct the game is immediately drawn.
(b) If the claim is found to be incorrect, the arbiter shall deduct half of the claimant's remaining time up to a maximum of three minutes and add three minutes to the opponent's remaining time. Then the game shall continue and the intended move must be made.

9.6. The game is drawn when a position is reached from which a checkmate cannot occur by any possible series of legal moves, even with the most unskilled play. This immediately ends the game.

4.11   10: Quickplay Finish

10.1. A 'quickplay finish' is the last phase of a game, when all the remaining moves must be made in a limited time.

10.2. If the player has less than two minutes left on his clock, he may claim a draw before his flag falls. He shall stop the clocks and summon the arbiter.
(a) If the arbiter is satisfied the opponent is making no effort to win the game by normal means, or that it is not possible to win by normal means, then he shall declare the game drawn. Otherwise he shall postpone his decision.
(b) If the arbiter postpones his decision, the opponent may be awarded two extra minutes thinking time and the game shall continue in the presence of the arbiter.
(c) Having postponed his decision, the arbiter may subsequently declare the game drawn, even after a flag has fallen.

10.3. Illegal moves do not necessarily lose. After the action taken under Article 7.4, for a first illegal move by a player the arbiter shall give two minutes extra time to his opponent; for a second illegal move by the same player the arbiter shall give another two minutes extra time to his opponent; for a third illegal move by the same player, the arbiter shall declare the game lost by the player who played incorrectly.

10.4. If both flags have fallen and it is impossible to establish which flag fell first the game is drawn.

4.12   11: Scoring

11.1. A player who wins his game scores one point (1), a player who loses his game scores no points (0) and a player who draws his game scores a half point (½).

4.13   12: The conduct of the players

12.1. High standards of etiquette are expected of the players.

12.2. During play the players are forbidden to make use of any notes, sources of information, advice, or to analyse on another chessboard.
The scoresheet shall be used only for recording the moves, the times of the clocks, the offer of a draw, and matters relating to a claim.

12.3. No analysis is permitted in the playing room when play is in progress, whether by players or spectators. Players who have finished their games shall be considered to be spectators.

12.4. The players are not allowed to leave the 'playing venue' without permission from the arbiter. The playing venue is defined as the playing area, rest rooms, refreshment area, area set aside for smoking and other places as designated by the arbiter. The player having the move is not allowed to leave the playing area without permission of the arbiter.

12.5. It is forbidden to distract or annoy the opponent in any manner whatsoever; this includes the persistent offer of a draw.

12.6. Infraction of any part of the Articles 12.2 to 12.5 shall lead to penalties in accordance with Article 13.4.

12.7. The game is lost by a player who persistently refuses to comply with the Laws of Chess. The opponent's score shall be decided by the arbiter.

12.8. If both players are found guilty according to Article 12.7, the game shall be declared lost by both players.

4.14   13: The role of the arbiter

13.1. The arbiter shall see that the Laws of Chess are strictly observed.

13.2. The arbiter shall act in the best interest of the competition. He should ensure that a good playing environment is maintained and that the players are not disturbed. He shall supervise the progress of the competition.

13.3. The arbiter shall observe the games, especially when the players are short of time, enforce decisions he has made and impose penalties on players where appropriate.

13.4. Penalties open to the arbiter include:
(a) a warning,
(b) increasing the remaining time of the opponent,
(c) reducing the remaining time of the offending player,

(d) declaring the game to be lost,
(e) expulsion from the event.

13.5. The arbiter may award either or both players additional time in the event of external disturbance of the game.

13.6. The arbiter must not intervene in a game to indicate the number of moves made, except in applying Article 8.5, when at least one player has used all his time. The arbiter shall refrain from informing a player that his opponent has made a move, or that he has failed to press his clock.

13.7. Spectators and players in other games are not to speak about or otherwise interfere in a game. If necessary, the arbiter may expel offenders from the playing room.

4.15   14: FIDE

14.1. Member federations may ask FIDE* to give an official decision about problems relating to the Laws of Chess.
* FIDE = Federation Internationale D'Echecs.

4.16   A: Adjourned games

A1. (a) If a game is not finished at the end of the time prescribed for play, the arbiter shall require the player having the move to 'seal' that move. The player must write his move in unambiguous notation on his scoresheet, put his scoresheet and that of his opponent in an envelope, seal the envelope and only then stop his clock without starting the opponent's clock. Until he has stopped the clocks, the player retains the right to change his sealed move. If, after being told by the arbiter to seal his move, the player makes a move on the chessboard, he must write that same move on his scoresheet as his sealed move.
(b) A player having the move, who adjourns the game before the end of the playing session, shall be considered to have sealed at the nominal time for the end of the session.
A2. The following shall be indicated upon the envelope:
(a) the names of the players
(b) the position immediately before the sealed move
(c) the time used by each player
(d) the name of the player who has sealed the move
(e) the number of the sealed move
(f) the offer of a draw, if the proposal was made before the adjournment of the game
(g) the date, time and venue of resumption of play.
A3. The arbiter shall check the accuracy of the information on the envelope and is responsible for the safe-keeping of it.
A4. If a player proposes a draw after his opponent has sealed his move, the offer is valid until the opponent has accepted it or rejected it as in Article 9.1.
A5. Before the game is to be resumed, the position immediately before the sealed move shall be set up on the chessboard, and the times used by each player when the game was adjourned shall be indicated on the clocks.
A6. If prior to the resumption the game is agreed drawn, or if one of the players notifies the arbiter that he resigns, the game is concluded.
A7. The envelope shall be opened only when the player who must reply to the sealed

move is present.

A8. Except in the cases mentioned in Article 6.9 and 9.6, the game is lost by a player whose recording of his sealed move

(a) is ambiguous, or

(b) is false, in such a way that its true significance is impossible to establish, or

(c) is illegal.

A9. If, at the agreed resumption time

(a) the player having to reply to the sealed move is present, the envelope is opened, the sealed move made on the chessboard and his clock started.

(b) the player having to reply to the sealed move is not present, his clock shall be started. On his arrival, he may stop his clock and summon the arbiter. The envelope is then opened and the sealed move made on the chessboard. His clock is then restarted.

(c) the player who sealed the move is not present, his opponent has the right to record his reply on the scoresheet, seal his scoresheet in a fresh envelope, stop his clock and start his opponent's clock instead of making his reply in the normal manner. If so, the envelope shall be handed to the arbiter for safe-keeping and opened on the opponent's arrival.

A10. The game is lost by the player who arrives more than one hour late for the resumption of an adjourned game. However, if the player who made the sealed move is the late player, the game is decided otherwise, if:

(a) the absent player has won the game by virtue of the fact that the sealed move is checkmate, or

(b) the absent player has produced a drawn game by virtue of the fact that the sealed move is stalemate, or a position as described in Article 9.6 has arisen on the chessboard, or

(c) the player present at the chessboard has lost the game according to Article 6.9.

A11. (a) If the envelope containing the sealed move is missing, the game shall continue from the adjourned position, with the clock times recorded at the time of adjournment. If the time used by each player cannot be re-established the clocks shall be set by the arbiter. The player who sealed the move makes the move he states he sealed on the chessboard.

(b) If it is impossible to re-establish the position, the game is annulled and a new game must be played.

A12. If, upon resumption of the game, either player points out before making his first move, that the time used has been incorrectly indicated on either clock, the error must be corrected. If the error is not then established the game continues without correction unless the arbiter feels that the consequences will be too severe.

A13. The duration of each resumption session shall be controlled by the arbiter's time piece. The starting time and finishing time shall be announced in advance.

4.17 B: Rapidplay

B1. A 'rapidplay game' is one where all the moves must be made in a fixed time between 15 to 60 minutes.

B2. Play shall be governed by the FIDE Laws of Chess, except where they are overridden by the following Laws.

B3. Players do not need to record the moves.

B4. Once each player has made three moves, no claim can be made regarding incorrect piece placement, orientation of the chessboard or clock setting.

B5. The arbiter shall make a ruling according to Articles 4 and 10, only if requested to do so by one or both players.

B6. The flag is considered to have fallen when a valid claim to that effect has been made by a player. The arbiter shall refrain from signalling a flag fall.

B7. To claim a win on time, the claimant must stop both clocks and notify the arbiter. For the claim to be successful, the claimant's flag must remain up and his opponent's flag down after the clocks have been stopped.

B8. If both flags have fallen, the game is drawn.

4.18 C: Blitz

C1. A 'blitz game' is one where all the moves must be made in a fixed time less than 15 minutes.

C2. Play shall be governed by the Rapidplay Laws as in Appendix B except where they are overridden by the following Laws.

C3. An illegal move is completed once the opponent's clock has been started. The opponent is then entitled to claim a win before making his own move. Once the opponent has made his own move, an illegal move cannot be corrected.

C4. In order to win, a player must have 'mating potential'. This is defined as adequate forces eventually to produce a position legally, possibly by 'helpmate', where an opponent having the move cannot avoid being checkmated in one move. Thus two knights and a king against a lone king is insufficient, but a rook and king against a knight and king is sufficient.

C5. Article 10.2 does not apply.

4.19 D: Quickplay finishes with no arbiter

D1. Where games are played as in Article 10, a player may claim a draw when he has less than two minutes left on his clock and before his flag falls. This concludes the game. He may claim on the basis
(a) that his opponent cannot win by normal means, or
(b) that his opponent has been making no effort to win by normal means.
In (a) the player must write down the final position and his opponent verify it.
In (b) the player must write down the final position and submit an up-to-date scoresheet which must be completed before play has ceased. The opponent shall verify both the scoresheet and the final position.
The claim shall be referred to an arbiter whose decision shall be final.

4.20 E: Algebraic notation

Description of the Algebraic System

E1. Each piece is indicated by the first letter, a capital letter, of its name. Example: K = king, Q = queen, R = rook, B = bishop, N = knight. (In the case of the knight, for the

sake of convenience, N is used.)

E2. For the first letter of the name of a piece, each player is free to use the first letter of the name which is commonly used in his country. Examples: F = fou (French for bishop), L = loper (Dutch for bishop). In printed periodicals, the use of figurines for the pieces is recommended.

E3. Pawns are not indicated by their first letter, but are recognized by the absence of such a letter. Examples: e5, d4, a5.

E4. The eight files (from left to right for White and from right to left for Black) are indicated by the small letters, a, b, c, d, e, f, g and h, respectively.

E5. The eight ranks (from bottom to top for White and from top to bottom for Black) are numbered 1, 2, 3, 4, 5, 6, 7 and 8, respectively. Consequently, in the initial position the white pieces and pawns are placed on the first and second ranks; the black pieces and pawns on the eighth and seventh ranks.

E6. As a consequence of the previous rules, each of the sixty four squares is invariably indicated by a unique combination of a letter and a number.

E7. Each move of a piece is indicated by (a) the first letter of the name of the piece in question and (b) the square of arrival. There is no hyphen between (a) and (b). Examples: Be5, Nf3, Rd1. In the case of pawns, only the square of arrival is indicated. Examples: e5, d4, a5.

E8. When a piece makes a capture, an x is inserted between

(a) the first letter of the name of the piece in question and
(b) the square of arrival.
Examples: Bxe5, Nxf3, Rxd1.
When a pawn makes a capture, not only the square of arrival but also the file of departure must be indicated, followed by an x. Examples: dxe5, gxf3, axb5. In the case of an "en passant" capture, the square of arrival is given as the square on which the capturing pawn finally rests and "e.p." is appended to the notation.

E9. If two identical pieces can move to the same square, the piece that is moved is indicated as follows:
(1) If both pieces are on the same rank: by
(a) the first letter of the name of the piece,
(b) the rank of the square of departure, and
(c) the square of arrival.
(2) If both pieces are on the same file: by
(a) the first letter of the name of the piece,
(b) the rank of the square of departure, and
(c) the square of arrival.
(3) If the pieces are on different ranks and files, method (1) is preferred. In the case of capture, an x must be inserted between (b) and (c).
Examples:
(1) There are two knights, on the squares g1 and d2, and one of them moves to the square f3: either Ngf3 or Ndf3, as the case may be.
(2) There are two knights, on the squares g5 and g1, and one of them moves to the square f3: either N5f3 or N1f3, as the case may be.

(3) There are two knights, on the squares h2 and d4, and one of them moves to the square f3: either Nhf3 or Ndf3, as the case may be.
If a capture takes place on the square f3, the previous examples are changed by the insertion of an x:
(1) either Ngxf3 or Ndxf3,
(2) either N5xf3 or N1xf3,
(3) either Nhxf3 or Ndxf3, as the case may be.

E10. If two pawns can capture the same piece or pawn of the opponent, the pawn that is moved is indicated by
(a) the letter of the file of departure,
(b) an x,
(c) the square of arrival.
Example: If there are white pawns on squares c4 and e4 and a black pawn or piece on the square d5, the notation for White's move is either cxd5 or exd5, as the case may be.

E11. In the case of the promotion of a pawn, the actual pawn move is indicated, followed immediately by the first letter of the new piece. Examples: d8Q, f8N, b1B, g1R.
Essential Abbreviations:
0-0 : castling with rook h1 or rook h8 (kingside castling)
0-0-0 : castling with rook a1 or rook a8 (queenside castling)
x : captures
+ : check
++ : checkmate
e.p. : captures "en passant"
Sample game: 1.d4 Nf6 2.c4 e6 3.Nc3 Bb4 4.Bd2 0-0 5.e4 d5 6.exd5 exd5 7.cxd5 Bxc3 8.Bxc3 Nxd5 9.Nf3 b6 10.Qb3 Nxc3 11.bxc3 c5 12.Be2 cxd4 13.Nxd4 Re8 14.0-0 Nd7 15.a4 Nc5 16.Qb4 Bb7 17.a5 ... etc.

E12. The offer of a draw shall be marked as (=).

4.21 F: Visually handicapped players

These rules are to be applied as a supplement to FIDE Rules to accomodate the needs of the visually impaired in competitive games between visually impaired and sighted players, and between visually handicapped players.

Tournament directors shall have the power to adapt the following rules according to local circumstances. In competitive chess between sighted and visually handicapped players (legally blind) either player may demand the use of two boards, the sighted player using a normal board, the visually handicapped player using one specially constructed.

The specially constructed board must meet the following requirements:

(a) At least twenty centimeters by twenty centimeters;
(b) The black squares slightly raised;
(c) A securing aperture in each square;
(d) Every piece provided with a peg that fits into the securing aperture;
(e) Pieces of Staunton design, the black pieces being specially marked.

GENERAL RULES

1. The moves shall be announced clearly, repeated by the opponent, and executed on his board. To make the announcement as clear as possible, the use of the following names are suggested instead of the corresponding letters, the algebraic notation to be used:

A~Anna B~Belia C~Ceasar D~David
E~Eva F~Felix G~Gustav H~Hector

Ranks from white to black receive the German numbers:

1~Eins 2~Zwei 3~Drei 4~Vier
5~Fuenf 6~Sechs 7~Sieben 8~Acht

Castling is announced "Lange Rochade" (German for long castling) and "Kurtze Rochade" (German for short castling).

The pieces bear the names: Koenig, Dame, Turm, Laeufer, Springer, Bauer.

When promoting a pawn the player must announce which piece is chosen.

2. On the visually handicapped player's board a piece shall be considered "touched" when it has been taken out of the securing aperture.

3. A move shall be considered "executed" when:

(a) In the case of capture, the captured piece has been removed from the board of the player whose turn it is to move;

(b) A piece is placed into a different securing aperture;

(c) The move has been announced.

Only then shall the opponent's clock be started.

As far as points 2 and 3 are concerned the normal rules are valid for the sighted player.

4. A specially constructed chess clock for the visually handicapped shall be admissible. It shall incorporate the following features:

(a) A dial fitted with reinforced hands, with every five minutes marked with one dot, and every fifteen minutes by two raised dots.

(b) A flag that can be easily felt. Care should be taken that the flag is so arranged as to allow the player to feel the minute hand during the last five minutes of the full hour.

5. The visually handicapped player must keep score of the game in Braille, or longhand, or record the moves on a tape recorder.

6. A slip of the tongue in the announcement of a move must be corrected immediately and before the clock of the opponent is started.

7. If during a game different positions arise on the two boards, they must be corrected with the assistance of the controller, and by consulting both players' game scores. If the two game scores correspond with each other, the player who has written the correct move, but executed the wrong one, must adjust his position to correspond with the move on the game scores.

8. If, when such differences occur and the game scores are found to differ, the moves shall be retracted to the point where the two scores agree, and the controller shall readjust the clocks accordingly.

9. The visually handicapped player shall have the right to make use of an assistant who shall have any or all of the following duties:

(a) Make either player's move on the board of the opponent.

(b) Announce the moves of both players.

(c) Keep the game score of the visually handicapped player and start his opponent's clock (Note Rule 3.c).

(d) Inform the visually handicapped player, only at his request, of the number of moves completed, and the time used up by both players.

(e) Claim the game in cases where the time limit has been exceeded and inform the controller when the sighted player has touched one of his pieces.

(f) Carry out the necessary formalities in case the game is adjourned.

10. If the visually handicapped player does not make use of an assistant, the sighted player may make use of one who shall carry out the duties mentioned under points (9. a) and (9.b).

IBSA Technical Rulebook Chess

Index

- E -

- F -

- G -

- H -

- I -

- K -

- L -

- T -

- U -

- V -

- W -