



COLUMNISTS

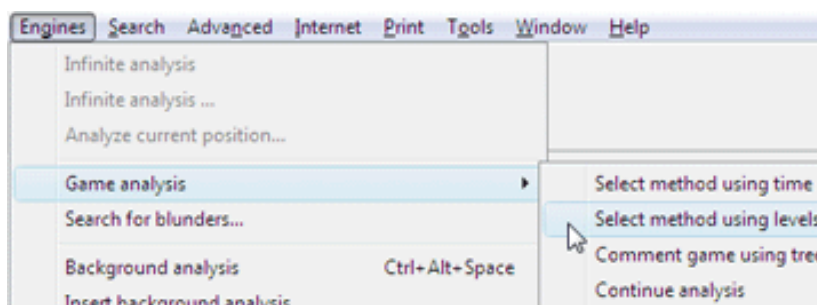
ChessOK
Cafe

Dadi Jonsson

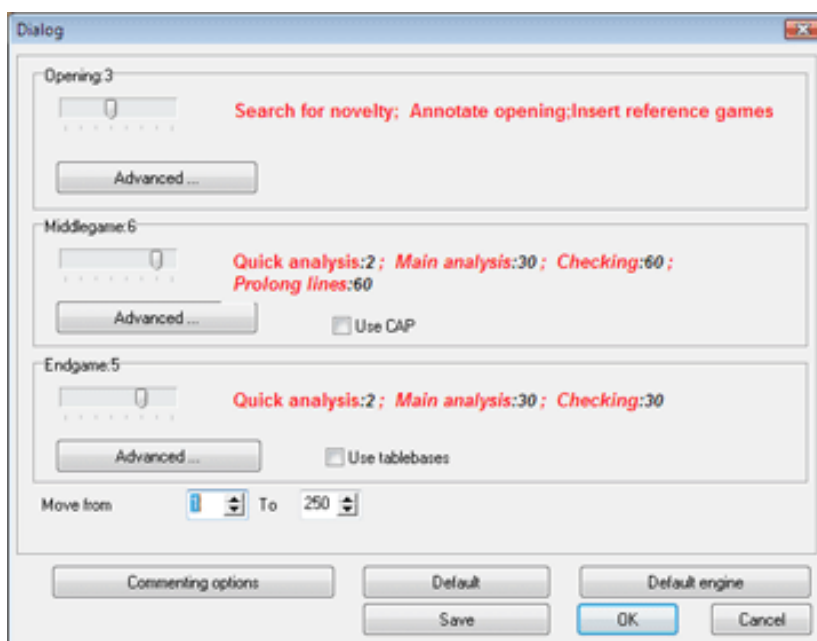


Game Analysis with Chess Assistant 9 Part Two

This month we continue our examination of the “Game analysis” function in *Chess Assistant 9*. Last [month](#) we saw how easy it is to perform advanced game analysis and the wealth of useful information that it can provide. The average user will normally accept the default parameters, and only tinker with the time setting or perhaps change the analysis engine. Yet, as mentioned last month, one can also fine tune the analysis by selecting different chess engines, time settings and analysis methods for each phase of a game (opening, middlegame, and endgame). In fact, by choosing the proper settings, advanced users can adjust the analysis algorithm almost any way they like. The key to this flexibility is “Select method using levels,” which is on the “Engines” menu under “Game analysis,” as shown below.



“Select method using levels” displays the following dialog box.



This dialog box features three group boxes, one for each phase of the game: opening, middlegame and endgame. Each box contains a slider, currently set at its default position. This is indicated in the label of the box (e.g. Opening:3). Each slider can be set to eight

ChessCafe.com is pleased to invite readers to a game of chess at Convekta's ChessOK Playing Zone!



Click here for the [Flash](#) version or here to download and install the [Full](#) version.

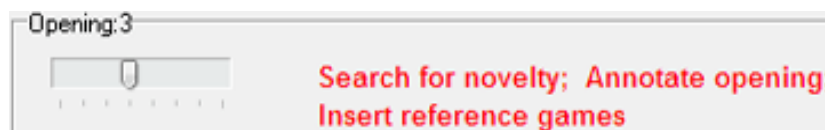
different positions (0-7). Setting a slider to the leftmost position (0) skips all analysis for that phase. Moving it to the right will give a more detailed and accurate analysis. The red text to the right of the slider describes the type of analysis that will be performed at the current setting, and it is updated interactively as the slider is moved.

One column cannot begin to describe all the possibilities offered by this analysis method, but we will summarize some of the more important options. Let's begin by describing the options that are specific to each phase of the game, and then examine the analysis methods that are available for all three phases.

The Opening

The following three methods are available for the opening stage:

- *Search for novelty.* The first new move that deviates from known games is noted. Moves that have previously been played in that position are shown and the relevant games are referenced.
- *Annotate opening.* The program will annotate the opening based on GM Kalinin's analysis in *Chess Openings 2006* and data from Convekta's CAP analysis.
- *Insert reference games.* Games that are important to the particular opening variation played in the game are inserted as comments.



By default opening analysis applies all three methods, as shown in the above image. This was also discussed in last [month's](#) column.

The Middlegame

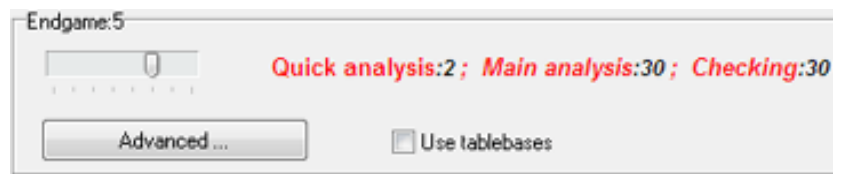
Middlegame analysis allows you to use CAP analysis for annotating the game. CAP is turned off by default, but you can activate it by clicking the "Use CAP" checkbox, as shown in the image below.



For further information about the CAP project see last [month's](#) column.

The Endgame

For the endgame analysis you can decide whether or not to use tablebases. Tablebases are endgame databases that store the results of all positions with a given material balance. The *Chess Assistant 9 Mega Package* comes with three Nalimov endgame tablebase DVDs containing all three-, four- and five-piece endings and select six-piece tablebases. They can also be bought separately or even downloaded from the Internet, although their size may not make it an attractive option for some users. Provided that you have installed the tablebases you can select the option "Use tablebases" in the Endgame group box, as shown in the image below.



Options Available for all Phases

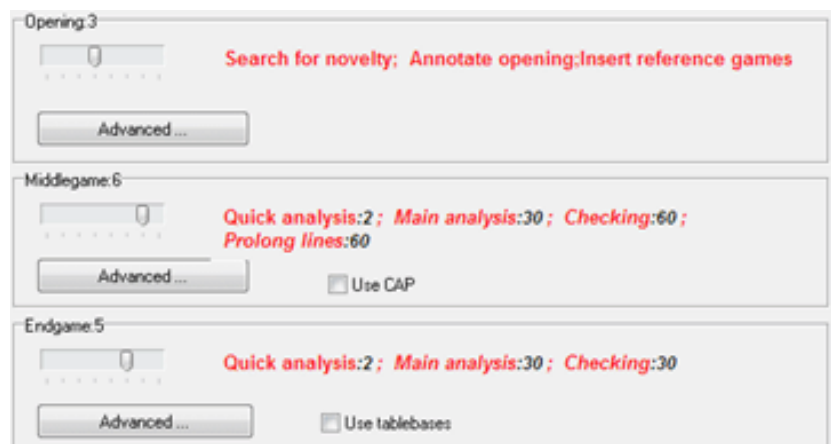
In addition to the specific analysis methods for each of the three stages of the game, there are six methods that are available for all three stages:

- *Search for blunders*. This is rather self-explanatory, although I have more or less abandoned this method in favor of the more advanced methods described below.
- *Quick analysis*. This method can be used to get an overview of how the game developed. The analysis (perhaps at one second per move) may show that the result of the game was clear long before the game ended. In that case the final stage of the game may not need to be analyzed further.
- *Main analysis*. This is usually the most time-consuming step in the analysis. The chess engine analyzes the moves of the game and suggests improvements. The following analysis methods concentrate on the improvements suggested in this step and no more time is spent on analyzing moves in the game where improvements are not likely to be found.
- *Checking*. The chess engine checks all improvements it has found in “Main analysis.” Since it only checks the suggested improvements, and not all moves in the game, more time can be allocated to analyzing each position. Interestingly, the chess engine may “change its mind” at this stage and reject earlier suggestions.
- *Prolong lines (autoplay)*. The chess engine analyzes the variations deeper and extends them by the number of plies (half-moves) specified by the user.
- *Alternative moves*. Instead of accepting the suggested improvement you can force the engine to analyze other possibilities. When a chess engine is forced to ignore a particular move and examine others, it may change its evaluation or replace a suggested improvement.

If you look at the last five analysis methods in the above list, you will see that they are quite similar to those that might be used by a human player manually analyzing and annotating his games.

Setting the Analysis Options

The easiest way to adjust the analysis options for each phase of the game is by using the sliders. When you move the sliders, the red text shows which analysis methods will be applied, and how many seconds will be allocated to analyzing each position.

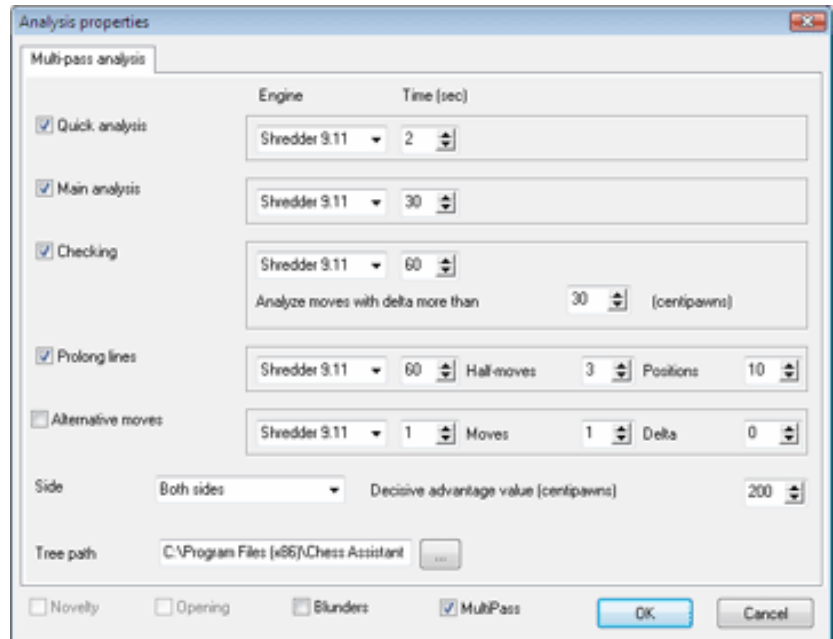


In this example no engine analysis will be performed in the opening phase of the game, although it will be annotated by looking up information in HugeBase and from opening

trees. Engine analysis based on “Quick analysis,” “Main analysis” and “Checking” will be applied to both the middlegame and the endgame. The only difference is that “Checking” will use sixty seconds for each position in the middlegame and thirty seconds in the endgame. In addition, “Prolong lines” will be applied to the middlegame.

The sliders offer you more control than simply using the default settings, but if you really want to take matters into your own hands, click one of the “Advanced...” buttons. The next image shows what the “Analysis properties” dialog box looks like for the middlegame.

We are looking at the “Multi-pass analysis” tab, which looks exactly the same for the opening and endgame, too. The five analysis methods discussed above are listed along the left side with a checkbox in front of each, allowing you to enable or disable individual methods.



In the “Engine” column you can choose the chess engine that you think is best for each task. One idea is to use a different engine for generating alternative moves, getting a “second opinion” of the analysis. You can also choose one engine to do all the middlegame analysis and another one for endgame analysis.

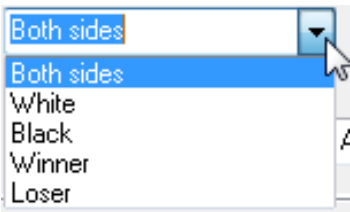
The “Time” column shows the number of seconds that the engine will use for analyzing each position. In this example each position will be analyzed for two seconds in “Quick analysis,” for thirty seconds in “Main analysis” and for sixty seconds in “Checking.” There is one more parameter that you can set for the “Checking” method. In this example it will not analyze moves where the evaluation of the suggested improvement differs less than thirty centipawns from the evaluation of the move played. You can, of course, set this parameter to any value you like. Setting it to zero will let the engine check all the improvements suggested by “Main analysis.”

“Prolong lines” has the additional parameters “Half-moves” and “Positions.” These define how many half-moves the suggested variation is extended and the total number of positions analyzed by this method.

“Alternative moves” allow you to set the number of alternatives (“Moves”) that are generated and tested against an improvement found earlier in the analysis. If a better move is found, the new variation replaces the old one. The value of “Delta” is used to terminate the search for alternative moves in a given position, when further search is likely to be futile. Let’s say that you have set “Moves” to four, and the value of “Delta” to 200 centipawns. If

the evaluation of the second alternative is more than 200 centipawns below the evaluation of the best move, then the search is terminated. This saves the time that it would have taken to generate and test the third and the fourth alternatives.

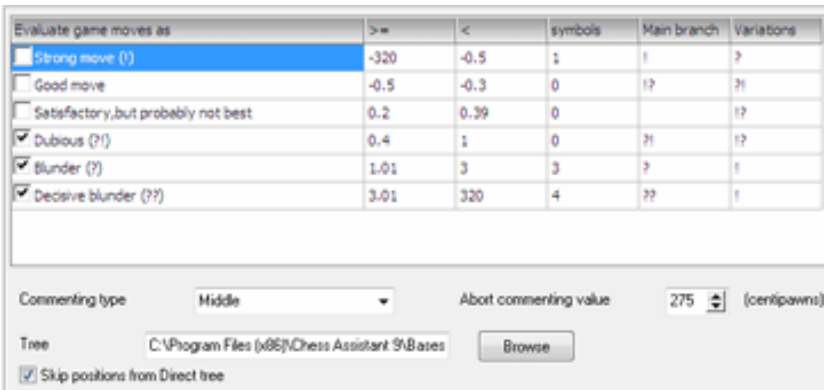
Near the bottom of the dialog box you can select for which side the moves are analyzed. The default is to analyze moves for both sides, but this image shows the available options:



Finally, you have the option to decide what constitutes a decisive advantage (“Decisive advantage value (centipawns)”). In the “Analysis properties” image above, it is set to 200, meaning that a two pawn advantage is considered decisive. However, I often set it to 300 or even 400. The only downside to a higher value is that the analysis will take slightly longer, as this is the cutoff value used in “Quick analysis.”

The “!” and “?” Symbols

The exclamation mark and the question mark are often arbitrarily applied in game annotations. Some books lavishly scatter them throughout the games, while others use them very sparingly. *Chess Assistant* “Game analysis” allows you to use these symbols consistently throughout the analysis, but you can adapt their usage to your own preferences using the dialog box shown in this image. To access this function, click the “Commenting options” button on the “Select method using levels” dialog box (shown in the second image above).



The Excel-like table in this dialog box defines how the exclamation and question marks are awarded. For example, suppose that you want to adjust when a move is decorated by a question mark (see the second line from the bottom in the table). Currently, if the engine’s evaluation of the position is from 1.01 pawns up to 3 pawns above the evaluation of the played move, then it will be awarded a question mark. If you want to change the lower limit to say 0.81 pawns, just modify the value in the “>=“ column. Remember that for consistency you should also change the “<“ column in the “Dubious (!)” line to 0.8.

This concludes our discussion of “Game analysis” in *Chess Assistant*. It should be clear from last [month’s](#) column that even beginners can utilize this powerful function, while this month’s column discusses how advanced users can fine tune *Chess Assistant’s* analysis methods. However, keep in mind that while some of the analysis options have been described in detail, there are many others to explore on your own.

All the Chess Assistant software described by Dadi in this column, as well as many more Chess Assistant programs, are available in the [USCFSales Online Catalog](#).

Dadi wants your questions!! Send it along and perhaps it will be answered in an upcoming column. Please include your name and country of residence. [Yes, I have a question for Dadi!](#)

 [TOP OF PAGE](#)

 [HOME](#)

 [COLUMNS](#)

 [LINKS](#)

 [ARCHIVES](#)

 [ABOUT THE
CHESS CAFE](#)

[\[ChessCafe Home Page\]](#) [\[Book Review\]](#) [\[Columnists\]](#)
[\[Endgame Study\]](#) [\[The Skittles Room\]](#) [\[Archives\]](#)
[\[Links\]](#) [\[Online Bookstore\]](#) [\[About ChessCafe.com\]](#) [\[Contact Us\]](#)

© 2007 CyberCafes, LLC. All Rights Reserved.

"**ChessCafe.com®**" is a registered trademark of Russell Enterprises, Inc.