User handbook of Chess PDF browser v1.0

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# Introduction

The application Chess PDF browser can be used to help you read chess books in PDF format.

It allows you to open a book in PDF format so that you can browse its pages, offering the option to extract all the chess games in the book for their later treatment or use.

In the same way, it allows opening chess games in PGN format.

In both cases the application allows you to browse the moves, edit the games (by either creating new variants or editing the comments and data of the games—called TAGs in the PGN format), and set the initial position of the chess games.

# Quick start

## Working with a PGN file

1. Open the application Chess PDF browser by double clicking on the application .jar file which is located on: .../\_binary/chessPDF\_browser.jar
2. Open a new dialog to choose a file (Menu: File->Open).
3. Select the file with PGN format. The file must have the .pgn extension. If not, the application will not recognize it.
4. Browse the moves, and edit what you need to.
5. In case you require so, the file just opened can be saved again under the same or a different file name.

## Scanning for chess games in a book in PDF format

1. Open the Chess PDF browser by double clicking on the application .jar file which is located on: .../\_binary/chessPDF\_browser.jar
2. Open a new dialog to choose a file (Menu: File->Open).
3. Select a file with PDF format. The file must have the .pdf extension. If not, the application will not recognize it.
4. Once the file is loaded, a new window will be opened showing a page of the PDF book. This window allows browsing the PDF and also offers the option of extracting the chess games (by clicking the “Scan PDF for games” button).
5. After you click the butto, a new window will be opened which allows chosing the language of the games in the book. Choose the language and click the “Start” button.

At that moment the window will show the progress of the scan and, once finished, the application will show the games in the main window.

1. Work with the chess games.
2. It is possible to save the extracted chess games in PGN format.

NOTES:

Most likely you will have to make some editions to the extracted games in order to achieve exactly the same variants as in the PDF book.

* This version of the application does not recognize chess position schemes, so if the game does not start from the beginning the initial position must be set manually.
* Another case why the games may not be identical to the ones in the PDF is that when scanning for games, sometimes the application reaches points with ambiguities that cannot be solved automatically. The behaviour in this case is to split the game into separate blocks free of ambiguities.

It’s for that reason that some games may be splitted in parts and some ambiguous moves can disappear.

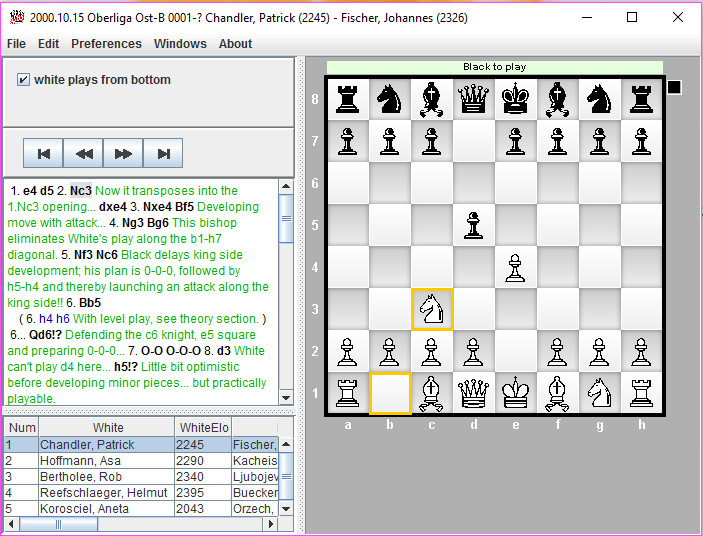
In a later point, we will show what to do to try to solve this issue:

6 - Sample edition of a scanned chess game with ambiguities

# Main window

In this section we will see the main window of the application.

After starting the graphical application and opening a PGN file with commented chess games, a window like this is shown:



We can see several elements in it:

* The menu bar

The menu bar with its options will be explained in a later chapter:

4 - Menu bar

* At the right side of the window, we can see the chess board which shows the current position.

Within the same panel there is a green zone which shows relevant information for that position.

The left side of the window is divided into several zones, which will be explained starting from top to bottom:

* A panel with the “White plays from bottom” option. This option allows you to choose the board orientation, that is, whether the white player plays from the bottom of the board or not.
* A panel with browsing buttons.

This panel has buttons which allow browsing through the moves of the game.

* A text area which shows the variants of the game, together with the comments (which can be deactivated through configuration).
* A list of the games. It shows the most relevant information of the games and allows switching the current game (by double clicking over the new game).

## Chess board panel

On the right panel a chess board is shown with the current position.

When the mouse pointer hovers over a piece for which there are legal movements, these moves are hinted with a green border in all possible destination squares.

Also the initial and final squares of the last move are shown with an orange border.

When there are possible legal moves, that piece can be moved to any legal destination square by dragging it from the initial position into the final position.

If the move was not among those of the game, a new variant will be created with the new move.

That move then becomes the current move.

The chess board panel also displays a green banner in which the most relevant information of the position is shown.

Additionally, other messages can be shown in the chess board if the game was not started in its initial position and one was not set.

A message of Illegal position could also pop up, if the current move is not legal (or if any of the previous moves of the variant was not legal).

## Text area with the moves of the game

A text area with the moves of the current game is shown below the navigation panel.

The variants are shown in that panel (the main one in bold, and the secondary ones in blue).

The comments of the move are also shown, if the application is set up to show them.

When you click on a move, this move becomes the current move, and the position just after it is shown on the board.

The current move is shown with a grey background, so that it can be distinguished from the rest.

When you click on a comment, the edit comment window is opened just as when clicking on the “Edit comment” pop-up menu option, as explained in the pop-up menu paragraph.

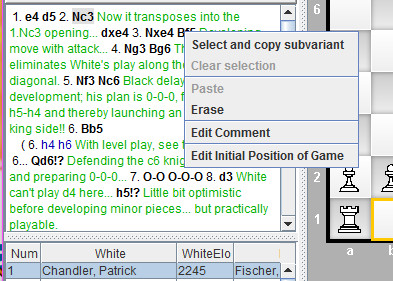
The application also allows selecting complete variants, to be copied and pasted, or to erase variants completely.

In case of selecting and copying a variant, the moves of the selected variant, are shown with a yellow background.

It exists the possibility that a move in the current game is not legal (owing to the initial position having been set in a wrong way, or because of some error in the game moves extracted from the PDF or loaded from a PGN file). In that case the move is shown with a red background.

### Pop-up menu

This element of the window has its own pop-up menu which is shown with a mouse right-click:



The menu options are the following:

* Select and copy a subvariant.

This option allows selecting and copying a variant, or changing the selection in case there was a variant selected previously.

When this option of the pop-up menu is clicked, the selected variant can be copied into another game or into another variant.

The ply numbers have to match for the copy to be allowed. If not, the application does not allow the replication of that variant in the new destination.

In case there is a previously selected variant, its moves are shown in a yellow background.

* Clear selection.

This option is used to deselect the previously selected variant.

* Paste (variant).

This option allows pasting the previously selected variant, right after the move which was right-clicked with the mouse.

* Erase.

This option allows erasing a variant.

* Edit comment.

This option allows opening the Edit comment window.

This window will be explained in section:

5.2 - Edit comment window

* Edit initial position of game.

This option allows opening a window to edit the initial position of the game.

This window will be explained in section:

5.4 - Window for editing the initial position

## List of chess games

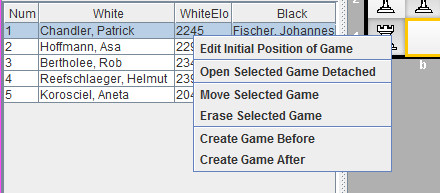
There is a list of the games on the bottom-left side of the main window.

That list shows the main data of every game, giving the possibility to add new games and erase or move them.

By double clicking on a game, this game becomes the current game, making it possible to browse its moves.

### Pop-up menu

This element of the window has its own pop-up menu which appears after a mouse right-click:



The menu options are the following:

* Edit initial position of the game.

It allows setting the initial position for the first of the selected games (which may not match the current game).

This option opens the initial position edition window.

This window will be explained in section:

5.4 - Window for editing the initial position

* Open selected game detached

This window allows opening the selected games in separate windows, to make it easier to copy/paste variants among themselves or the Text area which contains the moves of the current game.

The features of these windows are the same as the ones for the Text area containing the moves of the game (explained in the previous section).

It can also be seen in the next section:

5.6 - Window of detached chess game

* Move selected game.

It allows moving the selected games to their new position on the list (showed by a red line after a mouse right-click).

* Erase selected game.

It allows erasing the selected games.

* Create game before.

It allows creating a new game just before the position active at the time of the mouse right-click. The position where the new game is to be inserted is shown with a red line.

* Create game after.

It allows creating a new game just after the position active at the time of the mouse right-click. The position where the new game is to be inserted is shown with a red line.

## Browsing the moves with the cursor keys

When the main window has the focus, you can browse the moves of the current window with the cursor keys.

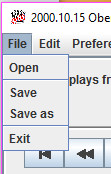
* Right arrow. It goes one move forward. If the previous move was the last one in the currently stored line of moves, this key will move forward along the main variant.
* Left arrow. It goes one move backwards.
* Up arrow. It has two behaviours:
* When the parent move has only one child (the current one), it goes to the previous move whose parent has more than one child.
* When the parent move has more than one child, the up arrow switches to the previous subvariant.
* Down arrow. It has two behaviours:
* When the parent move has only one child (the current one), it goes to the next move whose parent has more than one child, landing either on the child corresponding to the currently stored line of moves or, if that move is beyond the last move of this stored line of moves, on the first child (main variant).
* When the move has more than one child, the down arrow switches to the next subvariant.

# Menu bar

The options of the menu bar will be explained in this chapter.

## File menu

The File menu looks like this:



This menu has four options:

* Open. When you click on this menu element, a File dialog is opened.

The application recognizes two different file extensions:

* .pgn extension

The application allows opening games in PGN format.

If the PGN file does not have a .pgn extension, the application will not open the file even though the file might have a valid PGN format.

* .pdf extension

The application allows opening books in PDF format.

If the PDF file does not have a .pdf extension, the application will not open the file even though the file might have a valid PDF format.

When a PDF file is opened, the application shows another window which will be explained in a later chapter:

5.1 - PDF window

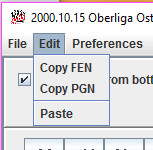
* Save. When you click on this menu element, the application will save the current set of games, overwriting the original file (the file that was open).

If the PDF book is scanned for games, the file name will be reset and the Save menu option will work just as the ‘Save as’ menu option.

* Save as. When clicking on this menu element, the application will open the File dialog to save the games in a PGN file, allowing a file name different from the current one.
* Exit. It exits the application.

## Edit menu

The Edit menu looks like this:



This menu has three options:

* Copy FEN. This option copies the FEN string of the current position to the clipboard.

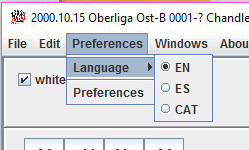
This can be useful to operate with another application which works with FEN strings.

It can also be used to copy a particular position, for instance, the initial position of another game (there is an option in the window for the edition of initial positions which allows pasting a FEN position).

* Copy PGN. This option copies the current game in PGN format to the clipboard.
* Paste. This option pastes the clipboard content (either a FEN position, a complete PGN, or a fragment of a PDF book, which will be added at the end of the current set of games).

## Preferences menu

The Preferences menu looks like this:



This menu has two options:

* Language. When clicking on this submenu, the available languages are shown.

It allows switching the language of the application.

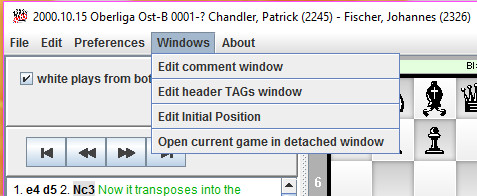
By default, the following languages are available:

* "EN". English
* "ES". Spanish
* "CAT". Catalan
* Preferences. This option shows a window which displays the options of the application.

This window will be explained in a later chapter: 5.5 - Preferences window

## Windows menu

The Windows menu looks like this:



This menu has four options:

* Edit comment window. This option opens a window where you can edit the comments and NAGs of the current move.

This window will be explained in a later chapter:

5.2 - Edit comment window

* Edit header TAGs window. This option opens a window for TAG edition, which can be used to include relevant information of the current game.

This window will be explained in a later chapter: 5.3 - Edit header TAGs window

* Edit initial position. This window opens a window where you can edit the initial position of the current game.

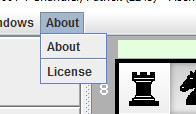
This window will be explained in a later chapter: 5.4 - Window for editing the initial position

* Open current game in detached window. This option opens the current game in a detached window, to make the copy/paste of variants among different games easier.

This window will be explained in a later chapter: 5.6 - Window of detached chess game

## About menu

The About menu looks like this:



This menu has two options:

* About. When this menu element is clicked, a window is shown with application’s greetings and contact data.

What this window looks like can be seen in a later chapter: 5.7 - About window

* License. When this menu element is clicked, a window is opened showing the license which was accepted the first time the application was run.

What this window looks like can be seen in a later chapter: 5.8 - License window

The text of the license can be read in the next chapter: 7.2 - Licence text

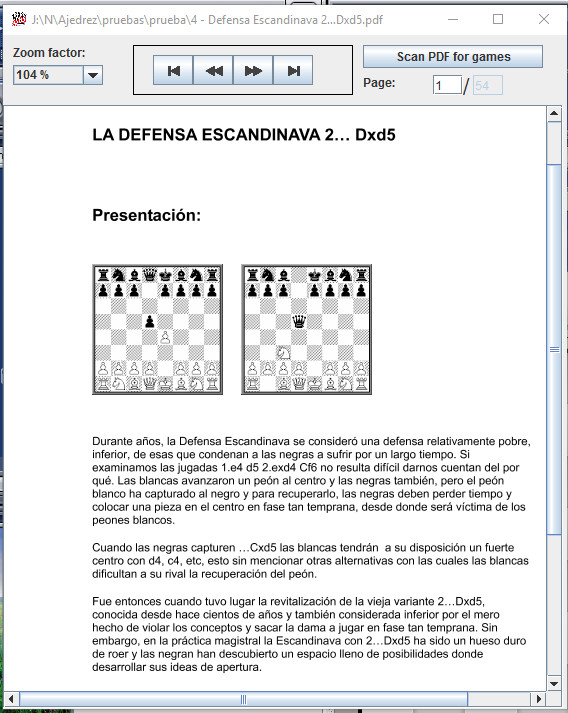
# Windows of the application

In this chapter we will see the different types of windows in the application.

## PDF window

When you open a PDF file, the application opens a new window where the pages of the book can be browsed and also offers an option to scan the PDF for games.

The window for browsing the PDF looks like this:



At the top of the window there are components which allow browsing the PDF book.

* Zoom factor

On the left side there is a combo box which allows zooming in and out the current page.

The zoom level varies between 25% and 400%.

* Navigation buttons.

The next component towards the right is a set of four buttons which allow browsing the pages of the PDF book.

The behaviour of the buttons is self-explanatory.

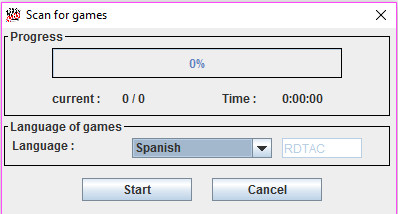
* Current page number.

When you browse the PDF book, the value of this text component is updated with the number of the current page.

Furthermore, it is possible to jump to a different page number if you enter it.

* Scan PDF for games.

When you click the “Scan PDF for games” button, a new window opens which looks like this:



The top of the window shows the progress bar of the scan process.

Below there is a combo box to select the language of the games in the book.

Finally, there are buttons to Start or Cancel the scan process.

The scan process can be cancelled once started.

Once the scan process ends, the “Cancel” button becomes “Close”.

You will not be able to access the main window of the application until this window is closed.

Once the games are extracted, the list of games in the main window is updated and it is then possible to browse them.

As a rule, it will be necessary to edit the result of the game extraction because many times there are ambiguous moves in the games which are difficult to solve automatically.

Furthermore, it will be necessary to set the initial position manually for those games that do not start from the standard initial position.

Besides, the previously mentioned ambiguities will have to be solved by joining those parts extracted during the scan that were split due to such ambiguities.

In the next point we will see how to achieve this with a practical case:

6 - Sample edition of a scanned chess game with ambiguities

* The mouse wheel

When the mouse pointer is located over this window, the mouse wheel has several uses:

* CTRL + wheel movement.

When the CTRL key is pressed while simultaneously moving the mouse wheel, the zoom factor is thus modified as if with the zoom combo box.

* SHIFT + wheel movement.

If the horizontal scroll bar is showing and the SHIFT key is then pressed while simultaneously moving the mouse wheel, then the position of the horizontal scroll bar changes thus..

* Wheel movement (neither SHIFT nor CTRL).

If the vertical scroll bar is showing while the wheel is moved (without pressing either SHIFT or CTRL), the position of the vertical scroll bar is changed.

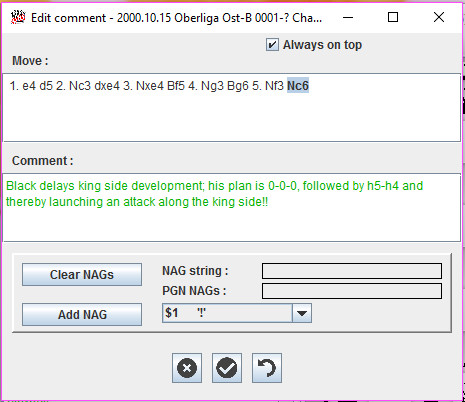
If the top of the page has been already reached and you continue moving the wheel upwards, then the previous page becomes the current one (unless you are on the first page!).

If the bottom of the page has been already reached and you continue moving the wheel downwards, then the next page becomes the current one (unless you are on the last page!).

## Edit comment window

The window for editing comments can be opened either through the menu item (Windows->Edit comment window), by clicking on one of the game comments, or through the pop-up menu option which appears when right-clicking on one of the moves of the current game.

The window looks like this:



In the window there are several components which allow editing the comment or the NAGs of the move.

We will see these components below, starting from top to bottom.

* Always on top option.

It allows choosing whether the window is always on top (over the rest of windows, even when another one has the focus).

* Text area which shows the current move, to edit the comment and NAGs.
* Text area which shows the editable comment, in green.
* Panel for editing NAGs.
* Button for clearing NAGs. When this button is clicked, all the NAGs of the move are erased.
* Text component: “NAG string”. This is a non-editable text component, which shows the NAGs of the move as if after the move.
* Text component: PGN NAGs. This is a non-editable text component, which shows the NAGs as if written in a file with PGN format.
* Add NAGs. When this button is clicked, the NAG selected in the combo box will be added to the NAGs of the move.
* NGAs combo box. This combo box allows selecting NAGs to be added to the NGAs list of the move.

First the NAG is shown in PGN format, followed by the printable version of the NAG.

* Cross (cancel button). When you click on this button, the window is closed discarding all changes.
* ✓Check (accept button). When you click on this button, the changes are accepted and the window is closed.

If this button is not clicked, the changes will be lost once the current move changes or the window is closed.

* Arrow (revert button). If changes have been done and this button is clicked, the changes are lost and the original content is shown.

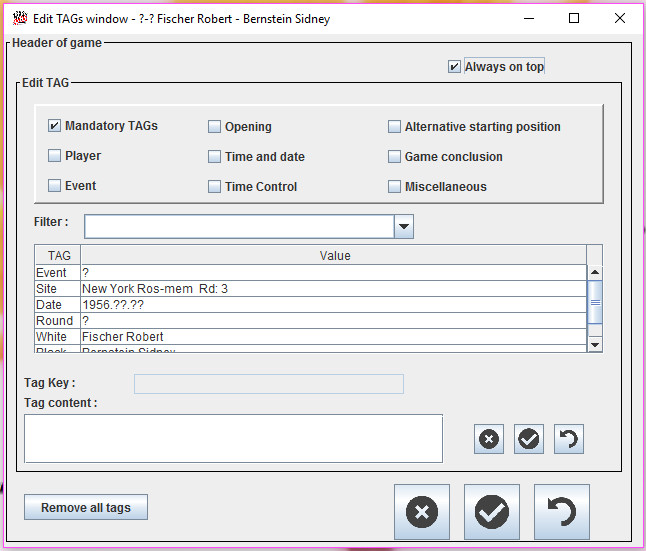
## Edit header TAGs window

TAGs are parameters which provide information on the game.

The window for editing TAGs can be opened and modified through the menu item (Windows->Edit header TAGs window).

The tags which can be modified are the ones of the PGN standard.

The window looks like this:



This window allows editing the game information divided in TAGs, as for instance: White (white player), Event (tournament), Site (place), Date (date), etc.

There are quite many TAGs, and to be able to work with them in a simple way, we have grouped the TAGs by the type of information they give.

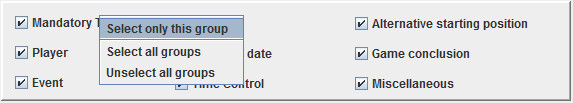
Only those TAGS of the checked groups will appear in the TAG table of the game. Besides, the TAGs shown have to match the current filter.

We will talk about TAG filtering below.

### Selecting groups of TAGs

The groups of TAGs can be selected/deselected individually or by means of the pop-up menu (by clicking the mouse right button).

When the mouse right wheel is clicked in this panel, the following pop-up menu is shown:



This menu has three options:

* Select this group only (checks the group over which the mouse was hovering, and unchecks all other groups).
* Select all groups.
* Unselect all groups.

### Filtering, selection and edition of TAGs

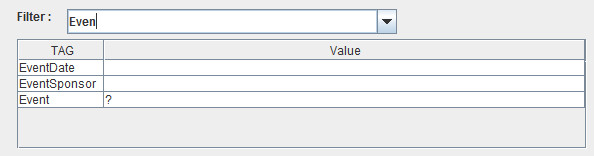
Filtering is done through a combo box in which new filters can be typed or previous filters can be selected from a list.

The simplest way for the filter to work, which we will use normally, is to show only those TAGs which contain the sequence of chars of the filter.

There is another, more advanced way to use the filter, but it is more difficult to use because it presupposes you have some knowledge of regular expressions. (Only the tags which match the regexp of the filter would be shown).

Anyway, as there are not that many TAGs, using advanced filters does not mean a substantial improvement, so if you do not know about regular expressions, do not worry.

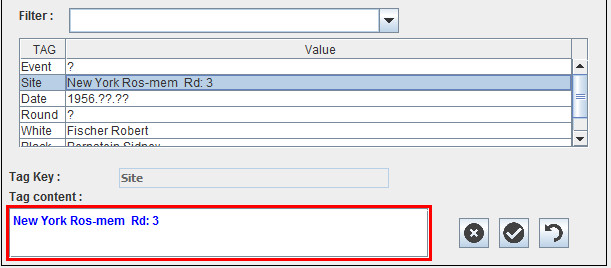
Provided the combo box has the focus, the filter is applied every time that either the return key is pressed a different element of the combo box is selected, or the focus goes out of the combo box.



To clean the filter you must delete all of its characters (empty string), which is equivalent to having no filter, and press return.

To select a particular TAG, simply click on it or move through the rows of the table with the cursor keys.

Every time a new TAG is selected its data are shown in the components below and, if the TAG is editable, the application allows so.



The value of the TAG can be edited in the text area marked with a red frame.

There are three buttons on the right side of this text area:

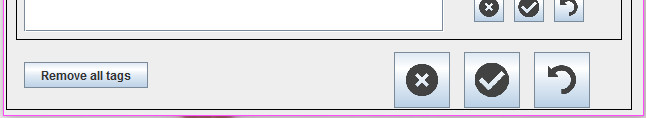
* Cross: Clear TAG, erases the contents of the TAG. It is equivalent to erasing the text and accepting the changes.
* ✓Check: Accept changes. The changes done to this TAG are accepted.
* Arrow: Revert changes to the original values (as of the time of selection).

### Accepting, discarding and reverting changes

The header data of the game can be changed by editing individual TAGs.

Nevertheless, these changes are not applied immediately but only once all changes have been done and accepted via the global buttons of the window (the global buttons are the big ones, at the bottom of the window).

At the bottom, there are four buttons:



* Remove all tags: When you press this button, the contents of all TAGs are erased.

After this change, you can continue editing TAGs.

Once the changes are accepted, these changes will be persistent and there will be no reversion options.

* Cross: Discard the changes.

When you click this button, the changes done until that moment will be discarded, and the value of the TAGs will be as when the TAGs edition window was opened.

After discarding the changes, the window will close.

* ✓Check: Accept changes.

After clicking this button, the modifications done in the TAG values turn to persistent and cannot be reverted.

After accepting, the window will close.

* Arrow: Revert changes.

When you click this button, the modifications done in the TAGs are discarded, and their values return to the ones as when the window was opened. The window does not close and allow continuing editing.

## Window for editing the initial position

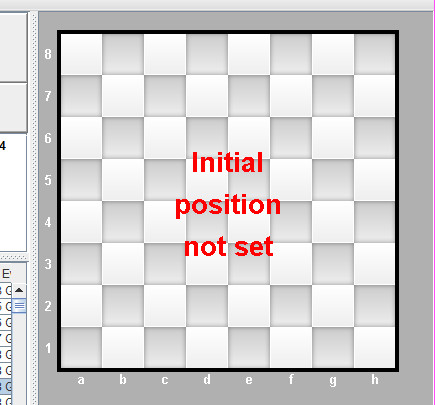
The application allows creating games from an arbitrary position that may not be the standard initial position.

This is useful because there are many games in books whose comments start at a position different from the standard initial position.

In that case, it is possible to set the initial position so that you can browse through the moves.

For this type of games, if you have not set the initial position, the application will show a message over the empty board to warn you that the initial position must be set before browsing the moves of that game.

This is the message shown in that case:



To solve this situation, we must open the Edit initial position window.

This can be done in two ways:

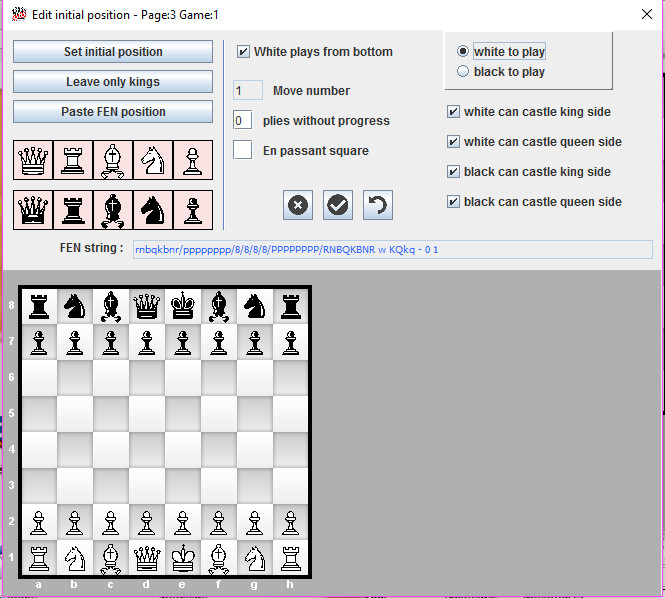
* From the main menu of the application:

Windows->Edit initial position

* From the pop-up menu in the table of the game list, in the main window.

When you right-click on the row of a game (pop-up menu -> Edit initial position of game).

The *Edit initial position* window looks like this:



The window is divided into two differentiated panels:

* Top panel: It contains the controls of the window, the pieces that can be dragged to the board, and the several parameters of a position which are not showable on the board.
* Bottom panel: It contains the board, which shows the position of the pieces.

### Assigning an initial position to the game

On the top-left side of the top panel there are three buttons which allow setting an initial position directly that can be modified later.



* Button: Set initial position. When you click this button, the standard initial position is set on the board.
* Button: Leave only kings. When you click this button, only the kings are left on the board, in their initial position.

This can be a good beginning to set the initial position for an end-game position.

* Button: Paste FEN position. When you click this button, the application expects to find a FEN string in the clipboard.

This FEN string must have been copied previously to the clipboard, either from another application or by copying the FEN string which is updated after every edition in the “FEN string” text component.

The “FEN string” text component, looks like this:



To copy the FEN string to the clipboard, you must select the full text string and copy it to the clipboard (Ctrl + C).

### Pieces to be moved to the chess board

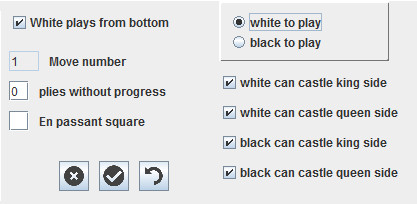
Below those buttons, there are two rows with images of pieces (one row for every color).



These pieces are there to be dragged with the mouse onto the board.

### Other controls to set up the position

There are other parameters which can be configured:



* To change the view of the board, it can be configured whether white or black play from the bottom. This check box has no effect over the resulting FEN position. Simply, it can be useful to change the point of view when setting the pieces on the board.
* Move number: It shows the number of the next move for the player who takes the turn (counting all moves made by the player from the start of the game).
* Moves without progress: It is the number of moves played from the last capture or pawn move. It is used for the 50 moves without progress rule (for draws).
* En passant square: This parameter shows the square that a white pawn in the 5th rank or a black pawn on the 4th rank can capture en passant, following a double pawn push.

The value that has to be set in this parameter is the code of the square which is just in the middle between the initial position of the pawn and the final position of the pawn which has advanced two ranks (as for the previous move).

If the previous move was not a two-square push, the value of this parameter must remain empty.

When the position is accepted, some checks are done to avoid invalid values for this parameter.

* Turn of the game: It indicates if the next turn is for white or black.
* Castle indicators: There are a set of indicators which say if the king or any of the rooks have moved from their initial position and have later returned there, thus leading to a position in which it cannot be deducted from the position of the pieces whether castling is still possible or not.

If these indicators are checked, the application will calculate from the position of the pieces whether the castling can or not be done (in that case, it will be supposed that the king and the rook have never been moved in this game).

If either the king or any of the rooks have been moved from their initial position to later return to it, the corresponding indicator should be unchecked, indicating that castling cannot be done even though the pieces seem to be in their initial position.

Besides the previous controls, there are three buttons which are used to discard, accept or revert the changes:

* Cross: Discard changes and close the window.
* ✓Check: Accept changes, consolidate them and close the window.
* Arrow: Revert the changes which have been produced since the window was opened and continue with the edition of the initial position.

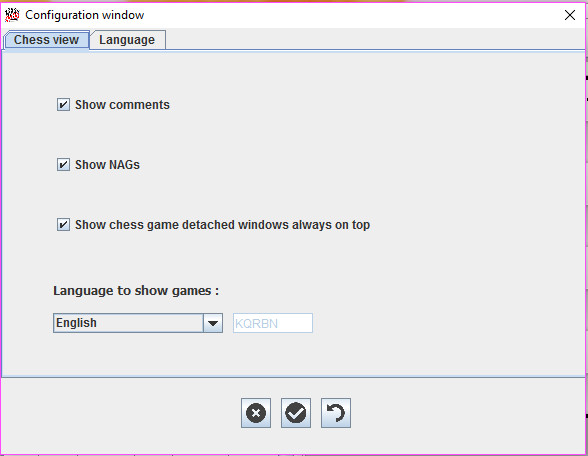
## Preferences window

In the preferences window some parameters can be configured that can modify the behaviour of the application.

We will see below the two tabs this window has.

### Chess view tab

This tab looks like this:



In this tab there are some configurable parameters:

* Show comments: If this parameter is checked, the comments of the games will be shown (this has nothing to do with extracting comments from the games of a PDF. The scanning of a PDF for games does not include in any case the extraction of comments).
* Show NAGs: If this parameter is checked, the NAGs of the games will be shown.
* Show chess game detached windows always on top: If this parameter is checked, the detached windows will always be shown over the rest of the windows (including the main window).
* Language to show games:

There are several predefined languages which can be selected from the combo box of languages.

The information needed to set a language amounts to knowing which letter is used to name every piece in the algebraic format of the movements.

The application also allows using a language which did not previously exist (by selecting the first element of the combo box (Custom)), and defining the letters which name the pieces in that language).

These letters must follow this order:

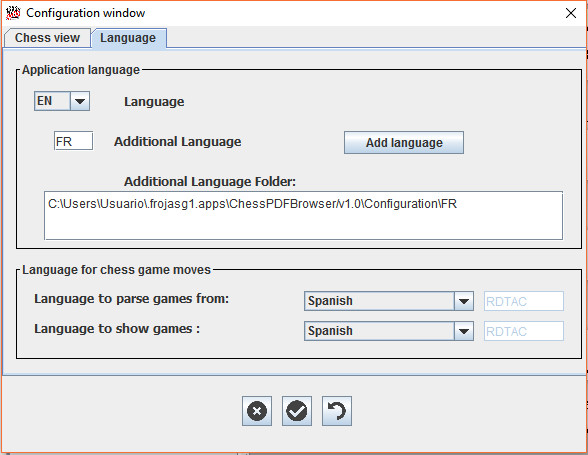
King, Queen, Rook, Bishop, Knight

This configuration option relates only to the letters which name the pieces in the moves of the games.

The comments, if any, are obviously not translated.

### Language tab

This tab looks like this:



We will see below the two panels which make up this tab.

### Application language subpanel

This panel allows switching the application’s interface language.

The languages available by default are:

* Spanish (ES)
* English (EN)
* Catalan (CAT).

To provide support to more languages not currently included, more languages can be added by typing the new language code in the “Additional language” text area and clicking on “Add language” the button.

When a new additional language is created, the files with the interface texts in English are copied in a specific folder for that new language (the long name of this folder appears in the *Additional Language Folder* text area).

The idea is for whoever wants to have the application in his or her own language to just translate these texts.

From that moment on, the application will give the possibility to switch to that language.

There are two kinds of files to translate:

* RTF files (In files of this kind all the text has to be translated, except for the url links (web page addresses).
* Properties files. For those who do not know this format:

A properties file has a title, and after that a number of labels with their value, like this:

# TITULO

# xxxxxxxxxx

LABEL1=text 1

LABEL2=text 2

...

The labels must remain without changes and the texts must be translated to the selected language.

If you would like that language to appear by default in the next version of the application, you can send the contents of the folder with the new language (the one which you have just translated) to: [frojasg1@hotmail.com](mailto:frojasg1@hotmail.com) with the subject: “New additional language for Chess PDF browser 1.0 (LANGUAGE)”, where you substitute the string LANGUAGE by the long name of the language you want to include and to which you have translated the texts.

### Language for chess games subpanel

In this panel you can change the language used for the chess games.

There are two combo boxes:

* The first of them allows selecting the language of the games to be scanned from the PDF book.
* The second one allows selecting the language in which the games will be shown in the text areas used for that.

The language of the chess games is configured by a string formed by the letters which name the pieces.

There are several predefined languages. If you want to set a different one, you can choose the first option (Custom), which allows setting directly the string which is formed by the letters naming the different pieces.

Those letters have to be placed in the correct order:

In English these letters would be:

KQRBN

(King – Queen – Rook – Bishop – Knight)

### Common panel to accept the changes

As seen in each of the tab images of the preferences window, there is a common panel at the bottom which has three buttons:



* Cross: Discard changes and close the configuration window.
* ✓Check: Accept changes, consolidate them and close the configuration window.
* Arrow: Revert the configuration settings to their values as of opening the preferences window, and continue editing the configuration parameters.

## Window of detached chess game

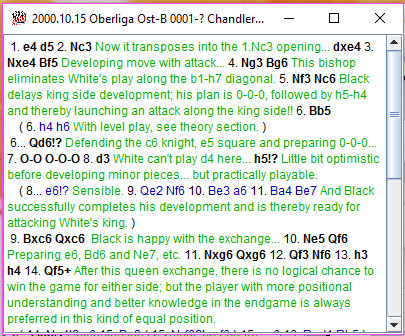
To edit, copy or paste variants from one game to others (which is many times necessary to solve the ambiguities arising from scanning a PDF for games), it is useful to have the tree of variants of the several games available in detached windows, all of them visible at once.

Owing to the necessity to open that type of windows, there are two menu options which allow opening a game in a detached window.

* In the pop-up menu of the games table in the main window.
* In the Windows main menu.

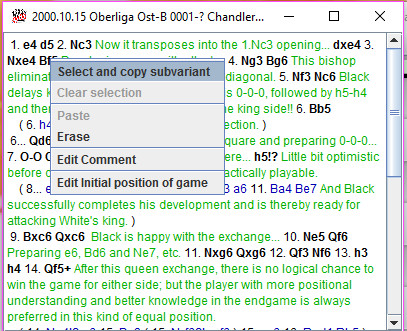
This kind of detached window can be configured to be always on top, over the main window (although this behaviour can be changed from the preferences window).

A window of this type looks like this:



### Pop-up menu

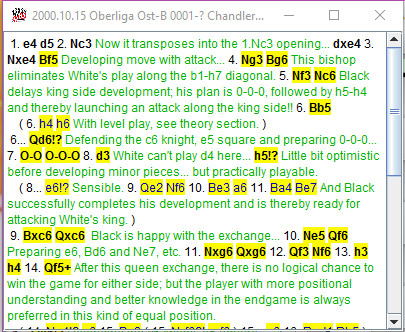
The component which has the list of variants in the main window has been reused here, and it also has the same pop-up menu:



This menu was already explained in the section on the main window, although in this section we will see more details for the edition of games:

* Select and copy subvariant: When this option is chosen, the subvariant is selected that started in the move which received the mouse right-click .

After choosing this option, the subvariant will appear in the detached window with a yellow background.



* Clear selection. It allows deselecting the previously selected subvariant.
* Paste. It allows pasting the selected subvariant (with a yellow background), after the move which received the mouse right-click.

In this case, the move number and player’s turn are checked, to avoid making inconsistent copies of subvariants.

* Erase. It allows erasing the subvariant starting at the move which received the mouse right-click.

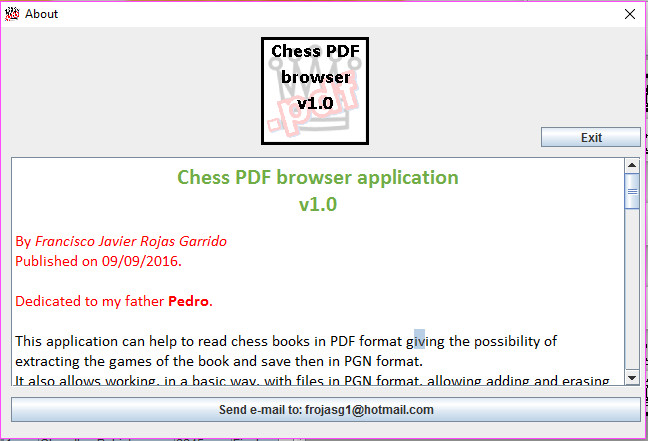
The menu options for pasting and erasing a subvariant cannot be undone, so you have to be especially careful to avoid making mistakes.

It is possible to paste a selected subvariant into a different game (which can be opened in a detached window), or it can also paste this subvariant into the text area of the game in the main window.

## About window

In the about window the greetings and urls of the web sites are shown from which any article, source or resource has been used.

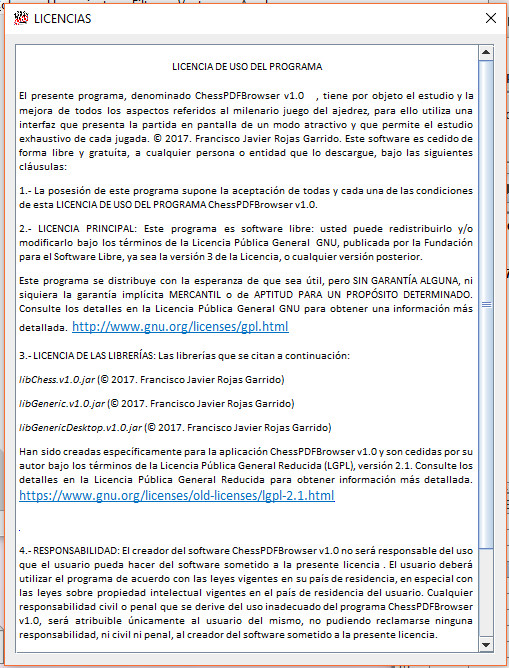
The window looks like this:



## License window

In the license window, the license that was accepted the first time the application run is shown.

The window looks like this:



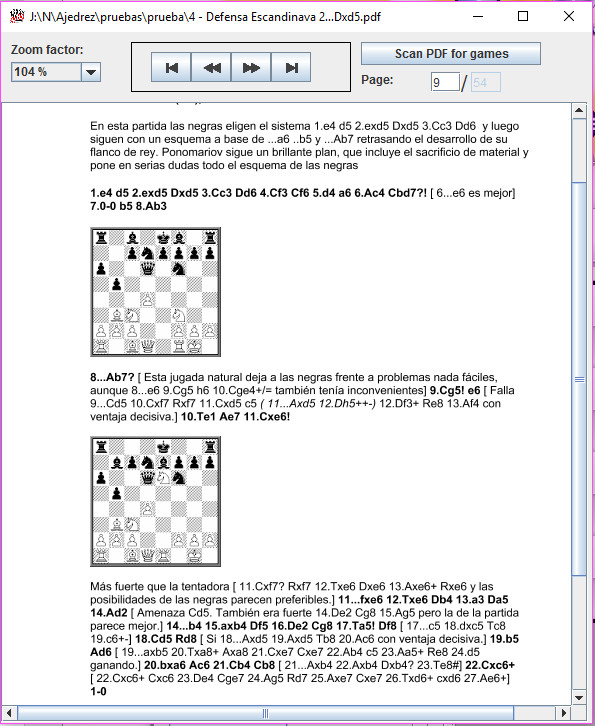
# Sample edition of a scanned chess game with ambiguities

## Practical case

In this section we will see an easy example on how to solve the limitations of the *scan PDF for games* module.

We will see how to join the different parts in which the game was split due to the ambiguities which could not be solved automatically.

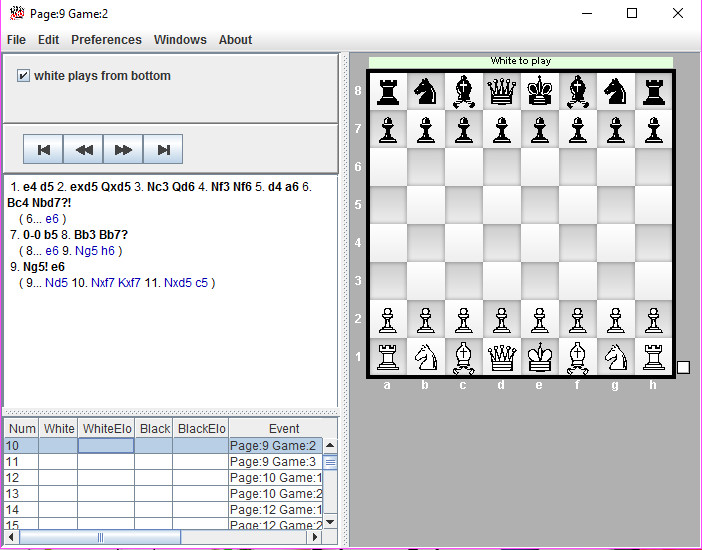
The game of the example is this one:



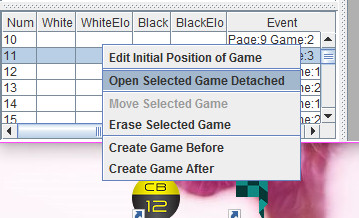
After having scanned the games of the PDF, we see that the game was split in two parts, and between these two parts there is a fragment which could not be extracted.

We will see how to edit the missing fragments and how to paste the second part of the game in the appropriate position of the first part extracted, as well as how to have all variants together in the same game.

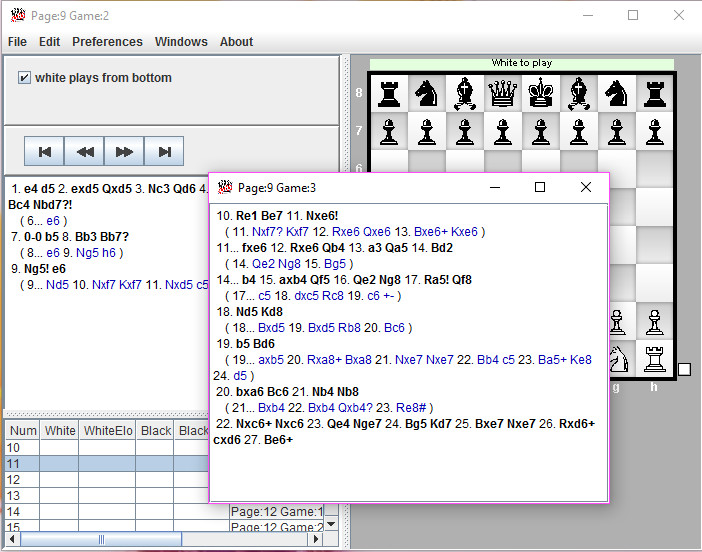
* We get the first part of the game in the main window (by double clicking on the game in the game table):



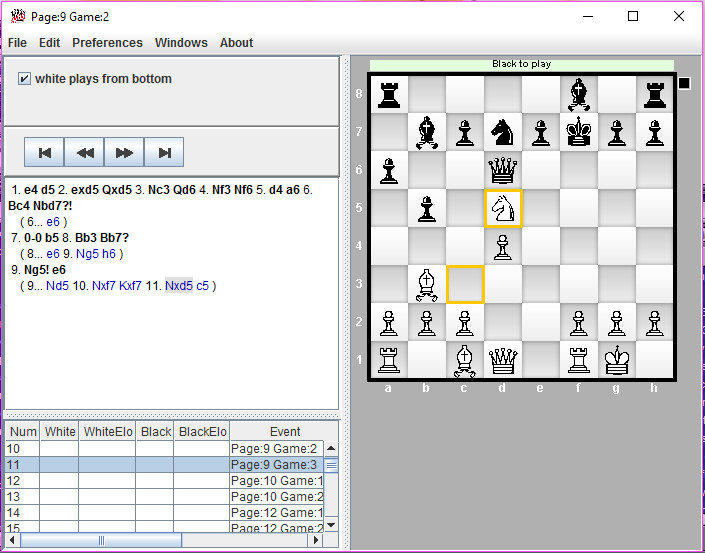
* We open the second part of the game in a detached window:



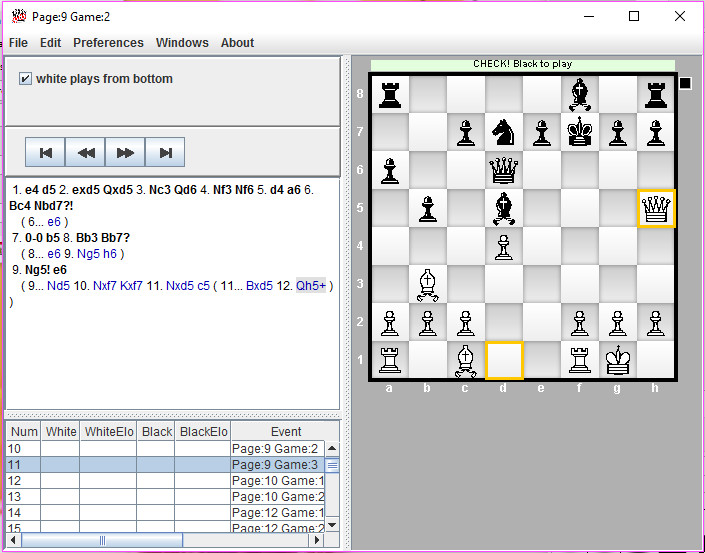
* This is what it will look like after opening the second part of the game:



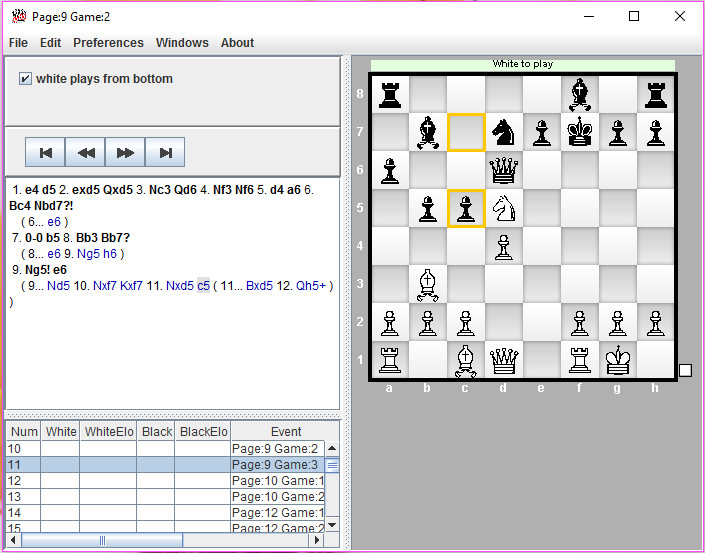
* We stand on the move where we have to reproduce the moves of the first missing variant (11… Bxd5 12. Qh5+ +-) [the equivalent in Spanish, as in the source: (11 … Axd5 12. Dh5+ +-)], so we have to stand in the move: 11. Nxd5 (Spanish: 11. Cxd5) (the move of the current position has a grey background, to be distinguished):



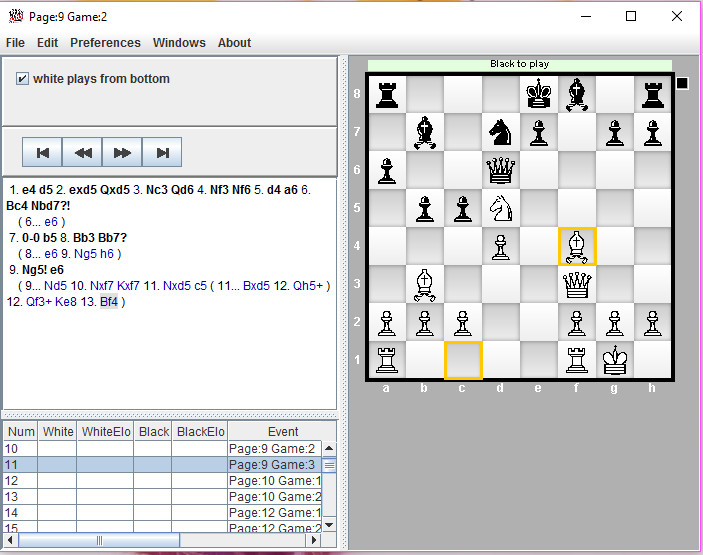
* On the board, we reproduce by hand the two moves of the first missing subvariant (11… Bxd5 12. Qh5+ +-) [the equivalent in Spanish, as in the source: (11 … Axd5 12. Dh5+ +- )]:



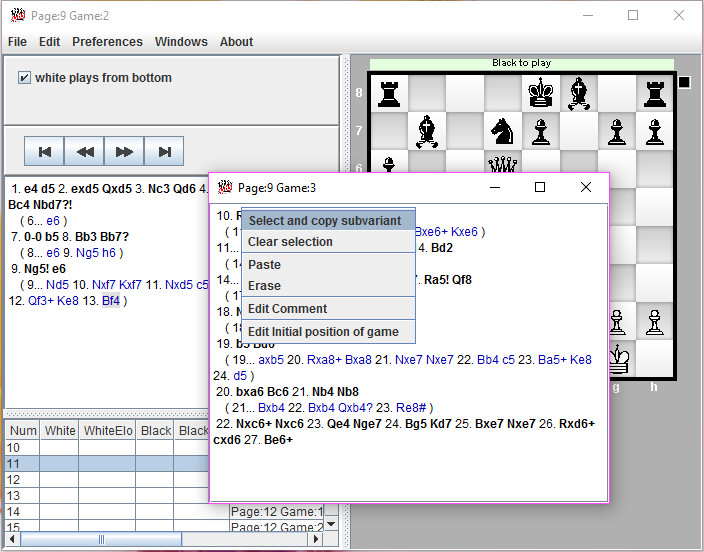
* We stand on the move (11… c5), where we can start to add the second missing subvariant (12. Qf3+ Ke8 13. Bf4) [The Spanish equivalent: (12. Df3+ Re8 13.Af4 )]:



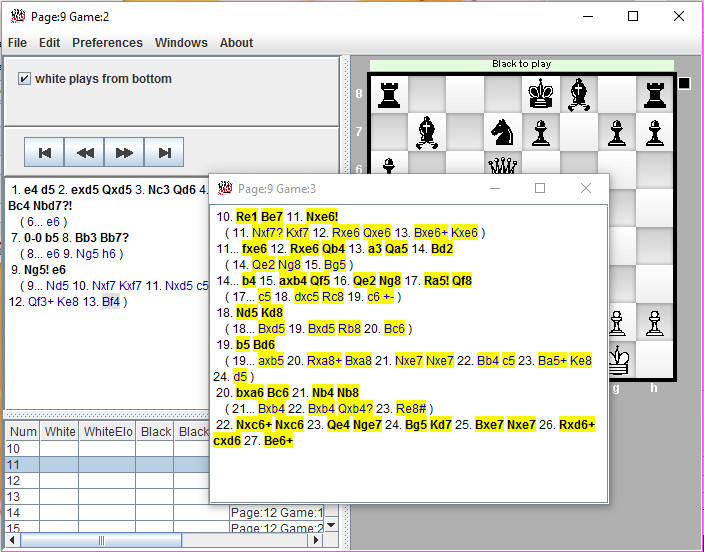
* We reproduce the subvariant by hand (dragging the pieces with the mouse to make the moves):



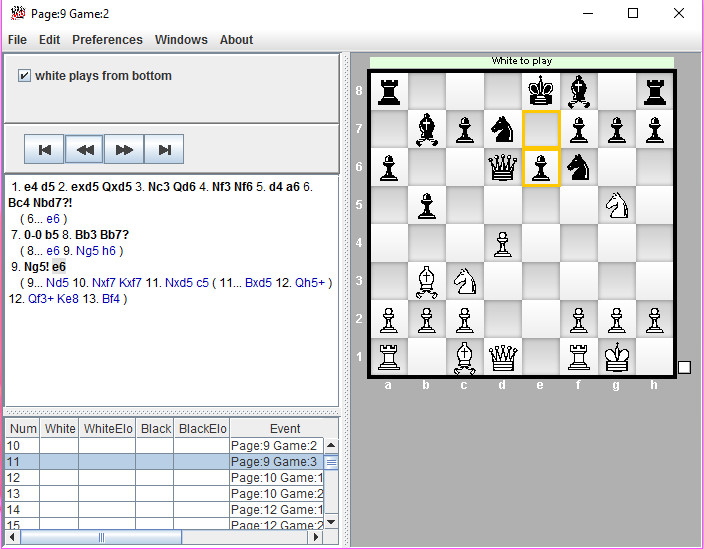
* We select the second part of the game (which we had in the detached window):



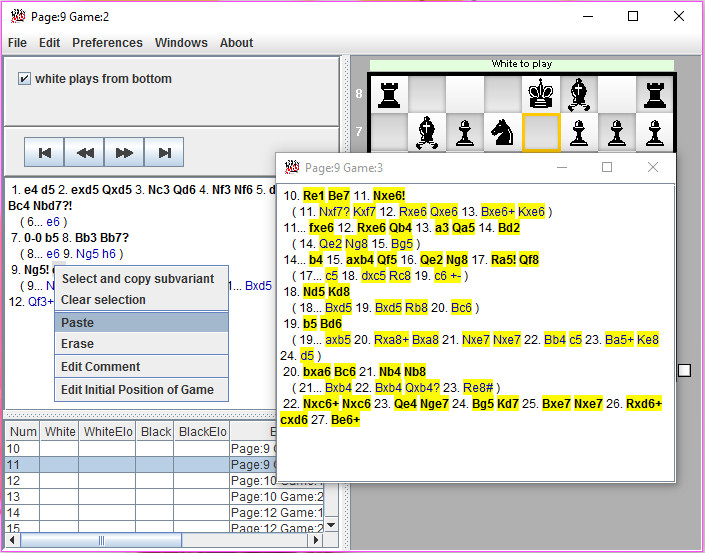
* After selecting the whole variant of that game, we will have the next image:



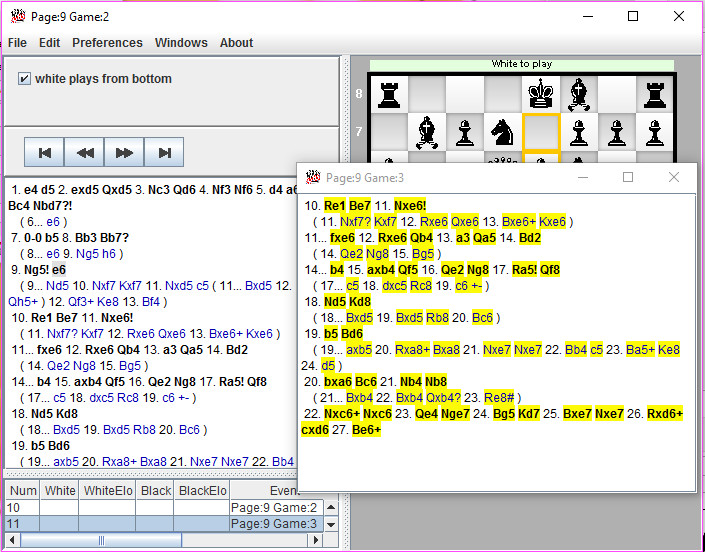
* We stand on the appropriate move to paste the second part of the game, which we had already selected ( 9… e6):



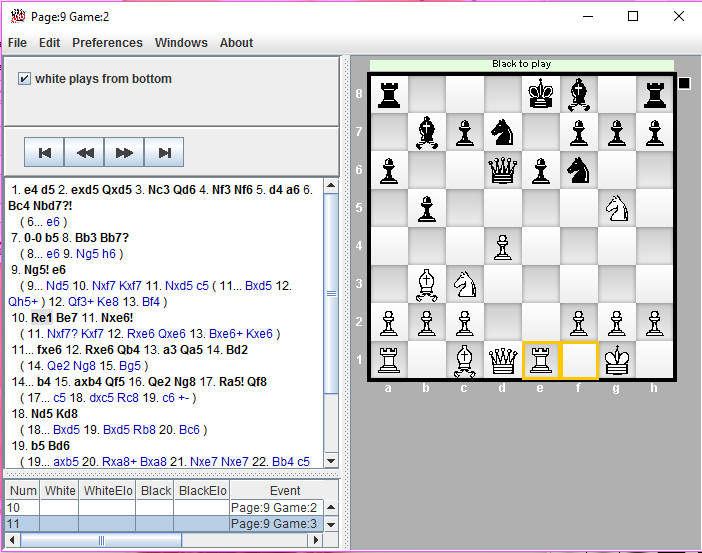
* We paste the selection in that position (we must go over that move and open the pop-up menu by right-clicking):



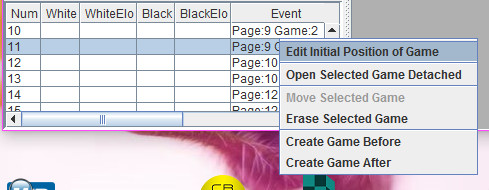
* This is how it looks after pasting the second part of the game onto the move of the previous figure:



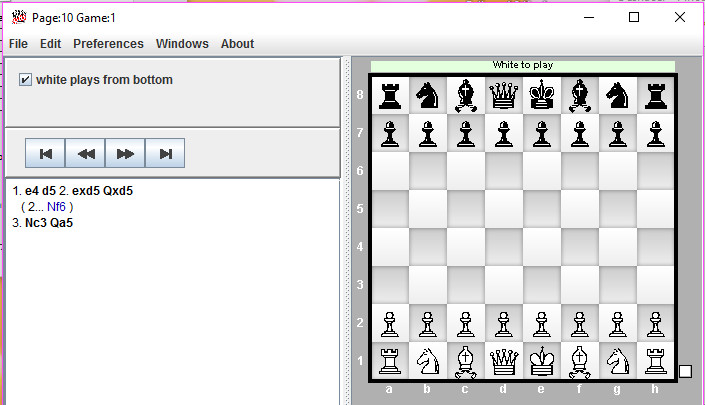
* We hover over the first move of the variant that we have just pasted (only as an easy check):



* After having the whole game joined, we have to erase the game that contains the second part of the game of the example (which we have just pasted over the current game):



* After erasing that game (which was no longer useful), the following game will become the current one:



## Another more complex case

In this section we will see another example of the limitations in the module for the extraction of games.

In this case the game has a more complex variant tree, and the application has made a mistake when obtaining the variant to which some moves belonged to.

In this case it is obvious that there are mistakes, because some illegal moves are produced.

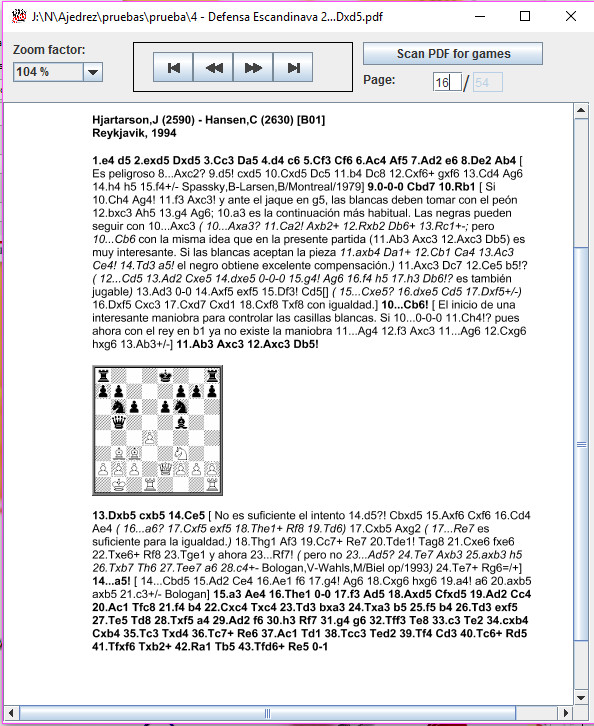
These illegal moves are detected by the application, and they are marked in a red background.

In more complex cases, some errors can be produced which the application may not be able to detect because they would be legal in the variants they had been placed in.

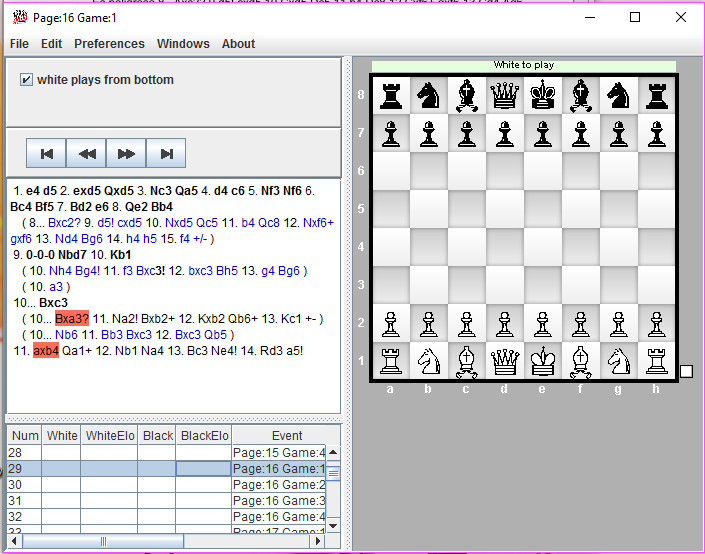
In a normal situation this should not happen, but it could easily happen in the case of games with many variants, because there are some situations in which the application cannot deduce rightly which variant the move belonged to (mainly because it does not expect to find brackets when extracting the games from the PDFs —which would help to know which subvariant the move belongs to— because it is possible that those brackets won’t appear).

It is thus very difficult to determine which variant a move belongs to when the game has a complex tree of variants.

The game of this example is this (in Spanish):



* The first part of the game is this:



Two illegal positions can be observed in the tree of variants obtained.

This means that when one of the moves with a red background is selected (or any of their derived subvariants), the following message will appear in the board of the main window:



It is recommended to solve illegal positions by hand.

If there are too many errors in the game, all the parts of the game might be discarded (erasing the parts obtained) and a new game created, this time making all the moves by hand.

It is not necessary to solve all illegal moves before saving the list of games, because the application allows saving them anyway.

When games with illegal positions are loaded, the backgrounded red indications will appear again, and also the messages of Illegal position.

It is possible though that, if a resulting PGN saved with this application has illegal positions or unset initial positions some problems appear when trying to load it with another application.

# Annexes

## Concepts used in the handbook

In this chapter we will see some concepts to better understand the handbook and how the application works.

* Comment.

Explanatory text that may enrich a move.

The useful comments are those that have been written by a chess expert who could analyse the particular position.

* NAG.

It is the way to refer to a series of standard comments inside a PGN file.

NAGs are optional signs which follow a move, indicating its quality.

Some possible NAGs are:

|  |  |
| --- | --- |
| NAG | Interpretation |
| $0 | null annotation |
| $1 | good move (traditional "!") |
| $2 | poor move (traditional "?") |
| $3 | very good move (traditional "!!") |
| $4 | very poor move (traditional "??") |
| $5 | speculative move (traditional "!?") |
| $6 | questionable move (traditional "?!") |

* PDF.

It is a standard file format which allows storing text and images making up documents and books.

* PGN.

It is a standard file format which allows storing a list of chess games with their variants.

The information of each game contains a header with details about the game (organized in TAGs) followed by the body of the game (a list of moves organized in variants).

It allows including comments and NAGs in every move.

* TAG.

A TAG is a simple parameter which provides information about the game (name of the players, their ELO, location, event, round, etc.).

The header of a game (in PGN format) is made of TAGs.

There are seven mandatory TAGs. The rest of TAGs are optional.

These are the mandatory TAGs:

1) Event (the name of the tournament or match event)

2) Site (the location of the event)

3) Date (the starting date of the game)

4) Round (the game’s round ordinal number)

5) White (the player of the white pieces)

6) Black (the player of the black pieces)

7) Result (the result of the game)

## Licence text

This is the text of the licence that must be accepted in order to use the application:

USE LICENCE OF THE SOFTWARE

The present software, provided under the name of ChessPDFBrowser v1.0, intends to study and analyse every aspect referred to the millennial game of chess, using to that end a graphic interface that displays the game in an attractive way, while allowing for the in-depth analysis of each move. © 2017. Francisco Javier Rojas Garrido. This software is to be freely provided to any person or entity who downloads it, under the following governing provisions:

1.- Being in possession of this software entails the full acceptance of each and every provision under this USE LICENCE OF THE SOFTWARE ChessPDFBrowser v1.0.

2.- MAIN LICENCE: ***(ChessPDFbrowser.v1.0.jar)*.** This is free software: you may redistribute and/or modify it under the terms of the GNU General Public Licence, as published by the Free Software Foundation, either in the Licence version 3 or any later version thereof.

This software is distributed AS IS, in the hope of its being useful, but WITH NO GUARANTEE WHATSOEVER, not even an implied MERCANTILE guarantee or a guarantee for FITNESS FOR A PARTICULAR PURPOSE. Check the details of the GNU General Public Licence to obtain more detailed information: <http://www.gnu.org/licenses/gpl.html>

3.- LICENCE OF INTERNAL LIBRERIES: The following libraries

***libChess.v1.0.jar***(© 2017. Francisco Javier Rojas Garrido)

***libGeneric.v1.0.jar***(© 2017. Francisco Javier Rojas Garrido)

***libGenericDesktop.v1.0.jar***(© 2017. Francisco Javier Rojas Garrido)

have been created specially for the ChessPDFBrowser v1.0 application and provided by their author under the terms of the Lesser General Public Licence (LGPL), version 3.0. Check the details of the Lesser General Public Licence to obtain more detailed information: <http://www.gnu.org/licenses/lgpl-3.0.txt>

4.- SOURCE CODE: The source code of ChessPDFBrowser v1.0 is in the free domain, available for anyone interested at the following urls:

5.- USE AND LICENCE OF EXTERNAL LIBRARIES: The application ChessPDFBrowser v1.0 requires the use of external libraries not specifically developed for such application. The libraries used by the ChessPDFBrowser v1.0 application, along with their use licences, are the ones given below:

**bcpkix-jdk15on-1.47-sources.jar (**Copyright (c) 2000 - 2017 The Legion of the Bouncy Castle Inc. (https://www.bouncycastle.org))

<http://grepcode.com/snapshot/repo1.maven.org/maven2/org.bouncycastle/bcpkix-jdk15on/1.47>

Licence: [Bouncy Castle Licence](http://www.bouncycastle.org/licence.html) (MIT License). For further information, check:

<https://www.bouncycastle.org/licence.html>

**bcprov-jdk15on-1.47-sources.jar (**Copyright (c) 2000 - 2017 The Legion of the Bouncy Castle Inc. (https://www.bouncycastle.org))

<http://grepcode.com/snapshot/repo1.maven.org/maven2/org.bouncycastle/bcprov-jdk15on/1.47>

Licence: [Bouncy Castle Licence](http://www.bouncycastle.org/licence.html) (MIT license). For further information, check:

<https://www.bouncycastle.org/licence.html>

**fontbox.2.0.0.jar (**Copyright © 2009-2017 Apache Software Foundation)

<https://www.versioneye.com/java/org.apache.pdfbox:fontbox/2.0.0>

Licence: [Apache-2.0](http://www.apache.org/licenses/LICENSE-2.0.txt) For further information, check:

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**JBIG2-Image-Decoder-master.jar (**Copyright (c) 2008, IDRsolutions)

<https://github.com/Borisvl/JBIG2-Image-Decoder>

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