Winboard extensions for Rebel Century

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Introduction

In order to maintain compatibility with winboard and still been able to provide a rich user interface for the Rebel Century specific features some additional commands have been defined.

setvar

The **setvar** command is used to set various variables. The general syntax is:

setvar name value

where **name** is the name of the variable and **value** the value of the variable. The name should not contain spaces, the value may contain spaces and terminates at end of the line.
For a list of variables see further in this document.
If the variable is successfully changed its new value is output in the format as described in the **getvar** command. When the variable does not exist or there is an error setting the variable a standard winboard error messages is given.

getvar

This command is used to retrieve the current value of a variable, general syntax:

getvar name

When successful the engine returns the variable in the following format:
var:name=value or in case of array variables each array entry is returned as:
var:name[1/3]=value
var:name[2/3]=value
var:name[3/3]=value

When a nonexisting variable is specified then a standard winboard error messages is returned.

A asterix * may be used as wildcard, e.g. **getvar *** returns all variables, each variable is returned on its own line.

Type of variables

Basically variables are send as strings but for presenting them in a GUI the following types are defined:

Action	This is not really a variable but merely causes some action to happen. This could be something like clearing hashtables etc.
Filename	The variable represents a filename. Usefull to know for GUI.
Directory	Variable represents a directory, also usefull for GUI.
Integer	A integer value.
String	A ascii string

In addition to this basic types a variable may be an array, in that case append a pair of square brackets to the name of the variable. e.g. **name[n]** where **n** the array index. Note that 1 is the first element. When variables are returned a second parameter can be given that indicates the number of elements. e.g. **name[n/m]** here **m** is the number of elements.

setlevel type p1 p2 p3 p4 p5

Special command to set the level, the **setlevel** command has one to 6 parameters, the first parameter is always the type of level.

type = 0	Fixed ply depth, **p1** is the depth in ply's.
type = 1	Tournament level **p1**=moves until first time control, **p2**=time in seconds ,**p3**=moves untill second timecontrol ,**p4**=time in second.
type = 2	Fixed time per move, **p1** is time in seconds.
type = 3	Search for check mate, **p1** is the depth in ply's.
type = 4	Average time per move, **p1** is time in seconds.
type = 5	Fisher clock **p1**=initial time in seconds, **p2**=increment
type = 6	Infinite time.

List of variables

Name	Type	Comment
begin	Action	Can be send when multiple variables must be set. When the last variable is send the **end** keyword is sent.
end	Action	Last command in a set of setvar commands.
personality	Filename	Sets the personality. This is a full path name.
antigm	Integer (0 – 3)	Anti grandmaster 0 = Off 1 = Active 2 = Strong 3 = Smart Default = 0
playstyle	Integer (0 – 4)	Playing style 0 = Aggressive 1 = Active 2 = Normal 3 = Solid 4 = Defensive Default = 2
playstrength	Integer (0 - 2)	Playing strength 0 = Novice 1 = Club player 2 = Strong
eocuse	Integer (0 – 3)	Makes use of EOC 0 = None 1 = Moderate 2 = Strong 3 = Book
ecofile	Filename	Name of EOC file
bookfile	Filename	Name of opening book in MVS format
curmov	String	This is a readonly variable and is automatically send during thinking. See explanation below. Only send when in rebel mode.
bookmoves	String	Read only variable which returns the bookmoves for the current position. Retreive when it is the players turn with the **getvar bookmoves** command.

Additional thinking output

There are two additional variables defined to enhance the thinking output.

var:curmov=2 5 12 e2e4

This means processing move number 5 of 12 at ply depth 2, move is e2e4

var:bookmoves[n/m]=e2e4 priority=3 score=10

Bookmoves, are send in response of the **getvar bookmoves** command. For winboard compatability it is also returned in response of the **bk** command. Format is a array of bookmoves, each move is on its own line. The moves, contains a string with keyword value pairs . e.g

> "var:bookmoves[1/2]=e4 Priority=3 Score=20 Plydepth=10"
> "var:bookmoves[2/2]=d4 Priority=1 Score=10 Plydepth=10"

In principle all keyword are optional. For a list of keyword see the *ChessPartner book manager interface* document.

Variable definitions in .cpeini file

Variables can be defined in a ini file which must be named:
> **engine.cpeini**

where **engine** must be the same name as the engines executable filename.

The variables are defined in the **[Variables]** section.

General syntax is: **name=type**

name is the name of the variable, **type** is what kind of variable.

The following basic types are defined:

Integer   is a simple integer value. when the integer can only take a range of values or even enumerated values this can be specified in brackets. e.g. (0-9) only values 0 to 9 allowed or (0,1,4) only 0, 1, and 4 are valid. The values may be given labels for display purposes. e.g. (0=Test1,2=Another test) etc.

String   is a simple string value, in between brackets predefined values may be given e.g. : Stringvar=String(t1=Test1,t2=Test2,t3=Test3)

Filename   is a file, in brackets the file mask may be give, this can be used for display in a file dialog. e.g. personality=Filename(Rebel Personalities (*.eng)|*.ENG)

Directory   is a directory selector.