

# RedCrab the Calculator – update History

## Version 4.11

15.01.2012

### New features

- The decimal key below the numeric keypad (point / comma) produces a decimal point always, regardless of the country setting.
- For the function "SUM ()" you can use alternate the Greek letter "Σ".

### Bugfix

CPU freezes when subscript symbols were behind a number.

Corrected error message when field definition is wrong [1..(a\*b)].

## Version 4.10

04.02.2012

### New features for field and financial calculation

*AddIn, AddTo, AddOn, MulIn, MulTo, MulAd, Patt*

### Bugfix:

When inserting columns, problems occurred when result was behind a formula.

Mouse pointer showed wrong symbol when leaving text box.

Runtime error under Linux OS / Wine fixed.

## Version 4.0

18.12.2011

Difference to 4.0 beta, improvements in details, particularly in display of chart boxes and tables.

## Version 4.0.beta News in Version 4.0:

05.12.2011

Calculation with multidimensional data fields.

Chart boxes to display results graphically.

Variable overload

Standard Functions:

**Round** rounded to the nearest whole number.

**Int** returns the integer part of a value.

**Frac** returns the fractional part of an argument.

**Rnd** returns a random integer number.

**Abs** returns the absolute value of numbers and fields.

Functions / operators of dynamic data fields:

**Join** connects one or two-dimensional fields with each other.

**Fill** fills all elements of a field with a specified value.

**Mulx** operator for multiplication of matrices.

**Trans** producing the transpose of a matrix .

**Min** return the minimum value of fields.

**Max** return the maximum value of fields.

**Count** returns the number of elements of fields.

**Aver** returns the mean values of successive elements of fields.

**URnd** fills a field with a series of unique random numbers.

Statistic functions

***Sum*** returns the sum of the elements in fields.  
***Prod*** returns the product of all elements of fields.  
***Cusum*** returns cumulative sum.  
***Sort*** sorts field elements from low to high values.  
***DSort*** sorts field elements from high to low values .  
***Median*** returns the median value of fields .  
***Mean*** returns the mean value of field.  
***Vari*** returns the variance of data fields .  
***SVari*** returns the variance of an example.  
***StDev*** returns the standard deviation of data fields.  
***SStDev*** returns the standard deviation of examples.  
***Diff*** returns the difference values of successive elements of fields.  
***LQuart*** returns the value of the first quartile.  
***UQuart*** returns the value of the third quartile.  
***QRan*** returns the area from the 1<sup>st</sup> to 3<sup>rd</sup> quartiles.

**Version 3.50.31** 17.09.2011 – Copy, Cut and Paste with ***Ctrl+C***, ***Ctrl+X*** and ***Ctrl+V*** keys provided.  
 – Bugfix in Display Modul.

**Version 3.50.30** 22.08.2011 Upgrades:  
 – *Virtual Keyboard* and *Function Panel* always stay on top  
 – Message boxes always stay on top  
 – Function keys groups can be switch on / off on function panel. The items in the menu "View" is deleted.  
 – New button on the toolbar to turn on / off *Virtual Keyboard* and *Functions Panel*.

Bugfixes:

- Root symbol was not displayed in the second row since version 3.50.10 .
- Occasional delay when switching between windows is fixed.

**Version 3.50.23** 28.07.2011 Bugfixes

- Solved problem by start with command line parameter. \_
- <Ctrl + Enter> key has written an invalid symbol.
- 3.50.20
- Resultboxes Prefix range.
- Display refresh by click on subscript- / superscript button.

**Version 3.50.00** 16.07.2011 The worksheet now has a fixed size of 256 x 256 cells. The *Options* menu to change the size between "72 x 72", "144 x 144" and "108 x 48" is removed.

To improve the type face, the cell format has been changed from 1 / 1.33 (width / height) to 1 / 1.50.

A new file format takes up less disk space.

The output to the printer has been revised and its functions expanded.

- By default, 64 columns per page are printed.
- If necessary, the worksheet is split into several pages.
- By entering a different value (columns per page), you can increase or decrease the printer output.
- *Center Selection* prints the selected area at the center of the page.
- With the check box *Fit to page* the print-out is adjusted to the page size. The *Columns per Page* setting is ignoring.
- Printing problems of result boxes and images with transparent backgrounds have been fixed.

Page Setup improved.

Bugfixes

**Version 3.40.00** *RedCrab* optimized for *Linux*. *RedCrab* can now be used on *Linux* OS with *Wine* runtime system. The extension has no influence in Microsoft Windows System.  
03.06.2011

#### **Long Term**

switch mode for long variable names. Example: "abc " is not interpreted as "a\*b\*c" rather as one word.

When Result boxes saved to file, they are pre-setted to *BringToFront* when the status was undefined.

Bug in save backup file by start from CD-ROM eliminated.

#### **Version 3.31.00 Reopen**

14.05.2011

The Clear function clears the worksheet and the undo list, without prompting. Data are stored in a backup file. If the *Clear* button was clicked by mistake, the worksheet can be restored with *Reopen* function.

#### **Remark**

Remark marks data in the worksheet as a comment

Root symbol without root line forbidden.( V3.30.20)

redcrab.con File upgrade.

Editor upgrade.

**Version 3.30.00** A Virtual Keyboard can switch on/off in menu View. This make easy input of special symbols like Greek character.  
27.03.2011

Error fixed in editor

**Version 3.21.00** Settings can either be stored in a file in the programs root directory, instead in the PC' s Windows registry. The settings are always available to the Program, also if RedCrab runs from USB stick on different computers.  
10.04.2011

Upgrade of the user interface.

Casually flickering of the menu bar / tool box by actions eliminated.

#### **Version 3.20.00 Result Boxes**

27.03.2011

With Result boxes you can display formatted result of calculations on any worksheet position. So you can insert results directly on technical drawings. Result boxes can displayed results with SI-Prefixes and units.

#### **Error fixed**

'Text to Image' does not work correctly,  
double click on Image box produce an error message  
buttons in message boxes vanished if ALT key pressed.

### **Version 3.10.00 Upgrades**

13.02.2011

Several expressions are written in a row.

Formulas can be written without space rows between themselves.

Import of Jpeg (\*.jpg) files.

Error messages upgrade.

### **Version 3.00.00 Upgrades**

10.01.2011

New user interface

New panels for numbers, operators and functions. Now you can use the mouse for most inputs.

Images are saved at compressed bitmap. This reduce file size up to 94% .

AC – Clears the mathematical expression at cursor position.

Programmer Functions:

AND - bitwise AND

OR - bitwise OR

XOR - bitwise XOR

SHL - bitwise shift left

SHR - bitwise shift right

NOT - bitwise negation

INCL - adds a bit to the integer operands

EXCL - exclude a bit from the integer operands

TRUNC – operands value are rounded toward zero

Function names will not distinguish between upper and lower case. Valid now e.g. SIN, sin or Sin.

Error fixed in TextToImage.

### **Version 2.10.00 Upgrades**

30.10.2010

User interface upgraded, undocked function panel.

In- and output of hexadecimal numbers.

Handling of fraction lines upgraded.

### **Version 2.00.00 Upgrades**

26.06.2010

New user interface

New Undo / Redo module with extended functions. Undo stores all changes of text / image boxes, grid on / off , font size, etc.

No limit by size of text boxes

Previous editing error of multiple roots now fixed.

## **Version 1.40.00 Upgrades**

11.06.2010

The format of mathematical expressions is now more flexible. You can write your formula with any format at any editor position. Example:  $17+4$ , or  $17+4=$ , or  $x=17+4$ , or  $x=17+4=$ . Toggle between single and extended mode exist no longer. Read more about this on user manual part 1.1

Several improvements for better handling of text and image boxes :

Text and Images boxes are now deleted with **Delete** on a pop up menu (click on right mouse button). The area to draw the text boxes is now displayed with a NW- mouse pointer. The pop up menu selections are saved to the data files. Delete box is disabled if **Page Lock** is enabled.

Select text boxes font with pop up menu.

New: Clear selection with **Ctrl + Delete** key.

The **Clear** function are now confirmed with a message box, instead the **Enter** button.

The handling of Insert and Delete with Undo / Redo are improved.

Error fixed:

Problems with Paste of space signs from external files are fixed.

Previous Insert and Delete move multiple rows simultaneously is now fixed.

## **Version 1.33.40 Upgrades**

30.05.2010

**Superscript / Subscript** mode disabled if you enter a non alpha numeric sign. Same thing if you select cells.

<F3> key enable / disable **Superscript** mode

<F4> key enable / disable **Subscript** mode

If **Superscript / Subscript** is activated when the cursor is on a character, the character under the cursor changed from normal letters in **superscript / subscript**.

As described above you can change selected cells to **superscript / subscript** or reset.

It's now possible to select **Unlock Cell**, if **Page Lock** disabled.

The underscore of selected unlocked field is displayed as well, if **Page Lock** is disabled

**Error fixed**

***Insert Row*** was blocked, if cells selected by ***Unlock Cell***

The file name in the headline was cut, if the file name includes non alpha numeric symbols.

**Version 1.33.30 Upgrades**

22.05.2010

Insert, Delete and Paste function upgraded and previous problems solved.

Fixed cell size if the grid on/off function is switched

RedCrab saves the setting of Grid on/off current worksheet and reset it if the file is reloaded.

**Version 1.33 Upgrades**

03.05.2010

Upgrade the compatibility of older Windows\* XP Systems (SP2 or older).

Previous problems with access to Windows registry (program end) and display of space sign now solved.

**Version 1.31 New Features**

07.04.2010

Menu to search online for updates.

**Upgrades**

Save user preferences in windows registry

**Version 1.30 New Features**

14.03.2010

You can now print a whole page or a certain selected area.

**Upgrades**

Previous problems with save of textboxes now solved. Previously it could happened that the textboxes lost their format settings when the page saved.

**Version 1.23 Upgrades**

04.03.2010

Error fixed regarding roots. It could happen that the root calculation was aborted without an error message.

**Version 1.22 Upgrades**

26.02.2010

Display revised: problems with the display of the grid, especially on Windows 7 have been corrected.

Format of the cells was changed to improve the compatibility and representation on printers. (printer functions are available from version 1.3).

**Version 1.21 Upgrades**

14.02.2010

Extension of front size up to 256.

Display of symbols upgraded.

Previous problem with Copy and Paste of Integral symbol solved.

**Version 1.20 New Features**

18.01.2010

Integral Calculate the area of a curvilinear region

**Version 1.10 New Features**

22.12.2009

**Copy / Paste :** Copy and insert data within RedCrab or from/to external programs.



**Paste To Box** : *Paste To Box* imports images or formatted text from external programs into a freely positioned box.

**Cut** : *Cut* and *Paste* selected data.

**Delete** : *Deletes* selected data.

Load text files into freely positioned boxes.

### **More Upgrades**

New display unit for results

### **Version 1.01**

30.11.2009

#### **New Features**

**Page Lock** : With *Page Lock* on the menu Extras, the editors page will be blocked for additional entries. This function protects unintentional changes made. For data input the cells can be unlocked with *Unlock Cell*.

**Unlock Cell** : With *Unlock Cell* on menu Extras marked cells in a locked page (selected by mouse), are unlocked for data entry . The unlocked fields are marked with an underscore.

**DIV** : The *DIV* operator returns the result of a integer number division without remainder. If there are floating point numbers are entered, the **DIV** operator cuts the digits after the decimal point before executing the division **DIV**.

Example :

$$11 \quad \mathbf{DIV} \ 3 \ = 3$$

$$11 \quad \mathbf{DIV} \ 3.9 = 3$$

**MOD** : The *MOD* operator returns the remainder of the division of two integer numbers. If there are floating point numbers are entered, the **MOD** operator cuts the digits after the decimal point before executing the division **MOD**

Example :

$$11 \quad \mathbf{MOD} \ 3 \ = 2$$

$$11 \quad \mathbf{MOD} \ 3.9 = 2$$

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