

RedCrab the Calculator – update History

Version 4.14

20.05.2012

New features:

- **DTime** returns the **DateTime** value for date and time calculation
- **DTimeF** formats **DateTime** in year, month, day, hour, minute and second
- **DateTime** values can be displayed as formatted text in result boxes.
- **Det** returns the determinant of a 2x2 or 3x3 matrix.
- **Invx** inverse a 2x2 or 3x3 matrix.
- In field-definition you can optionally specify the increment of a ranges.
- Display of tables improved.

Version 4.13

12.04.2012

New features:

- Access to single cells in multidimensional fields.
- **Dim(x)** returns the number of dimensions of data fields.
- **Cols(x)** returns the number of columns of data fields.
- **Rows(x)** returns the number of rows of data fields.
- Input of binary- and octal numbers.
- Output of binary- and octal numbers in result boxes.

Bug-fixes:

- Runtime error by invalid input of: $x=x[1..4]$ fixed.
- Flickering of function panel (right) by pressing of **Ctrl + Enter** fixed.
- Runtime error by invalid option in result boxes fixed.

Version 4.12

19.03.2012

New features

By chart boxes, the option X/Y position allows the free definition of *X* and *Y* coordinates.

Bug-fixes:

Run time error fixed in display module: problem happened when displayed single-column field or more chart boxes.

Use of constant “e” results in a wrong error message.

Version 4.11

05.03.2012

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".

Bug-fixes

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

Bug-fix:

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.

Version4.0

18.12.2011

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

Version4.0.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 1st to 3rd quartiles.