

Running Rapp and editing Rapp programs

2018-01-01, Stig Rosenlund

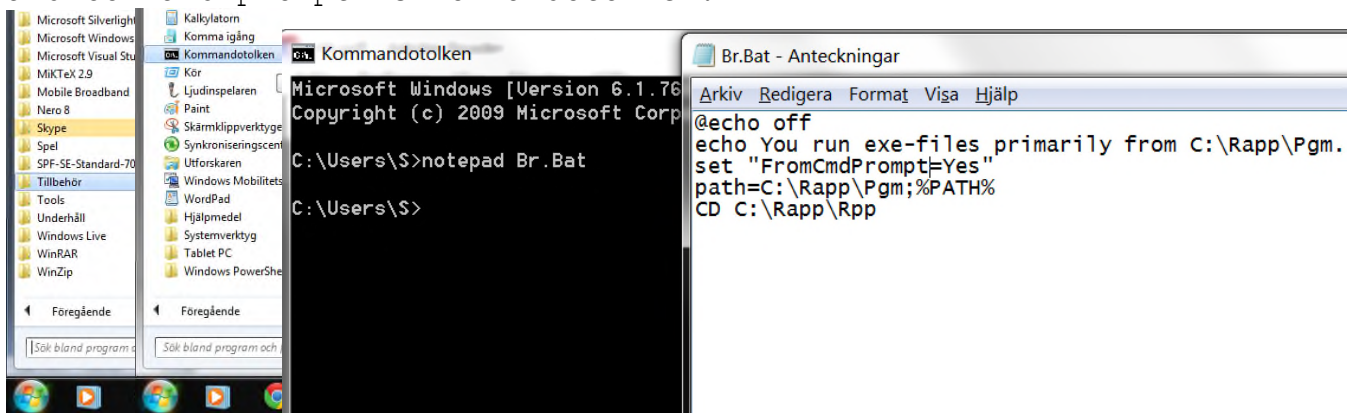
We assume you have created the folder C:\Rapp from the downloaded zipfile Rapp.zip or Rapp.zipx.

1. Run and edit Rapp.Exe without using Rappmenus.Exe

1.A. Running Rapp from the command prompt

Initiation: create an environment at the command prompt
Startmenu / All programs / Accessories / Command prompt

I illustrate how to do it below. In Swedish Accessories is Tillbehör and Command prompt is Kommandotolken.



Copy the five lines below.

```
@echo off
echo You run exe-files primarily from C:\Rapp\Pgm.
set "FromCmdPrompt=Yes"
path=C:\Rapp\Pgm;%PATH%
CD C:\Rapp\Rpp
```

At the prompt >, write

Notepad Br.Bat

Answer Yes to Create new file?

Paste the five lines into new file Br.Bat. Close up right and save.

Place a shortcut to Command prompt on the desktop or the Startmenu.

Daily use

When you are going to run a Rapp program, go into the Command prompt and write Br and press Enter.

For example there is a simple program C:\Rapp\Rpp\Helloworld.Rpp. Run it at the Command prompt by

Rapp Helloworld

1.B. Running Rapp from Windows Explorer

Initiation: Associate extent .Rpp to Rapp.Exe in Windows Explorer
 Either run Adapt Exe or

Click or rightclick in Windows Explorer on a Rapp-program with extent .Rpp (for example Init.Rpp), select Open / Choose Program / Browse / locate Rapp.Exe and tick Always use this program.

Daily use

Run a Rapp-program by doubleclick or click+return in Windows Explorer. When its done, press enter to exit Rapp.

Advantages and disadvantages of running Rapp from the command prompt

Advantages

1. It will always work, while the association in Windows Explorer might get lost and be difficult to restore due to authorization problems.
2. The working directory will always be C:\Rapp\Rpp. Some Rapp programs presume this. In Windows Explorer it might be something else.
3. As Rapp developer, I can make a sequence of versions of Rapp for testing some new feature, and run them quickly. For example I might make t1.exe, which is Rapp with some change, and run it in the command prompt with t1 tst1. That is inconvenient in Windows Explorer.

Disadvantages

1. It takes some time to write a long Rapp program name.
2. It has a feeling of being old and not elegant.

Disadvantage no 2 is just superficial, though.

1.C. Editing Rapp programs

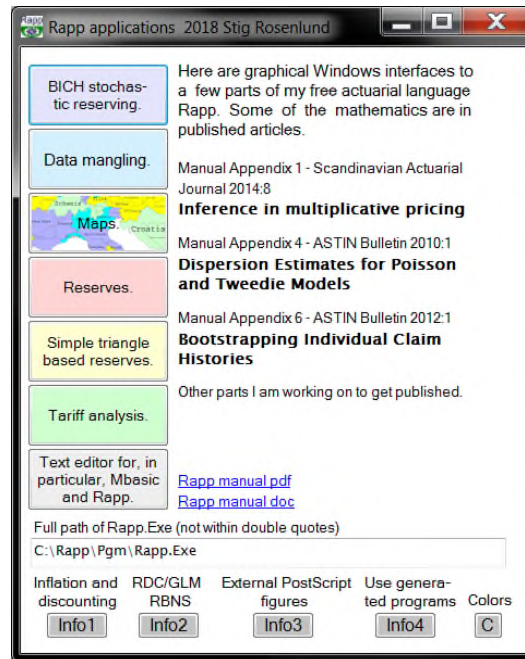
To write Rapp-programs you can use a text editor you're used to, such as the SAS source editor, Wordpad or Notepad. I recommend SPF Source Editor from CTC Command Technology Corporation. It costs some money, presently \$88 for perpetual use. Web site:

<http://www.commandtechnology.com>

2. Run and edit in Rappmenus.Exe.

Besides these ways there is Rappmenus.Exe, which generates and runs Rapp programs for certain applications dynamically. In 2017 it has been amended with a text editor, suitable for any text file. Rapp programs can be executed with a Run button. SPF is faster and has more capabilities, but takes some time to learn.

In Rappmenus, choose "Text editor for, in particular, Mbasic and Rapp." in the menu below.



The editor has coloring of special syntax words in Mbasic (part of Rapp, see Proc Mbasic in the manual) and Rapp in general. There is also syntax-sensitive coloring for C and for some of the keywords of SAS (those I used at Länsförsäkringar). I have emulated some of the functionality of SPF. An Mbasic- or general Rapp-program is run from the editor with a button. There are some useful template parmfiles to get you started in the folder Mbparm of the zip files Rapp.zip and Rapp.zipx. Place this folder on your computer as C:\Rapp\Mbparm. With syntax coloring the editing can take some time for large files, but you can turn off the coloring. Find, replace and sort are extensively implemented. There are special features which facilitate debugging your Mbasic-program.

Below an example where an Mbasic-program is in the edit screen.

```

/* Computes Euler constant 0.5772156649015... . Computation time
increases rapidly with n, but n <= 15 will not take too long.
Due to rounding errors the last few (about six) digits will be wrong.
If you want k correct digits, set digits to k + 9 or so. */
digits 306 // Maximum with Rapp - larger maximum with Rapp1008 etc.
double m n
mouble Hm One Sum Sumold Two Two_raised_to_n e_raised_to_Two_raised_to_n m01
Read n // The computation will have a remainder term O(1/(2**n * exp(2**n))).
One = 1
Two = 2 Sum = 1
Hm = 1
m01 = 1
Two_raised_to_n = Two**n
e_raised_to_Two_raised_to_n = exp(Two_raised_to_n)
For m=1 to 9999999999999999 // Infinite loop interrupted by condition below.
// Mouble variable One is needed for mouble precision.
Hm = Hm + One/(m+1) // Harmonic series 1 + 1/2 + 1/3 + 1/4 + 1/5 + ...
m01 = m01*Two_raised_to_n/(m+1)
Sum = Sum + m01*Hm
if Sum = Sumold then break endif // When the addition of m01*Hm is too small.
Sumold = Sum
Next m
// log(Two) is needed since log(2) will yield precision only double.
Sum = Sum*Two_raised_to_n/e_raised_to_Two_raised_to_n - n*log(Two)
print "Approximate value of Euler's constant is:" \n,%1.300 Sum \n
print to "C:\Rapp\Txt\Euler.Txt"
print %1.300 Sum \n
print to

```

