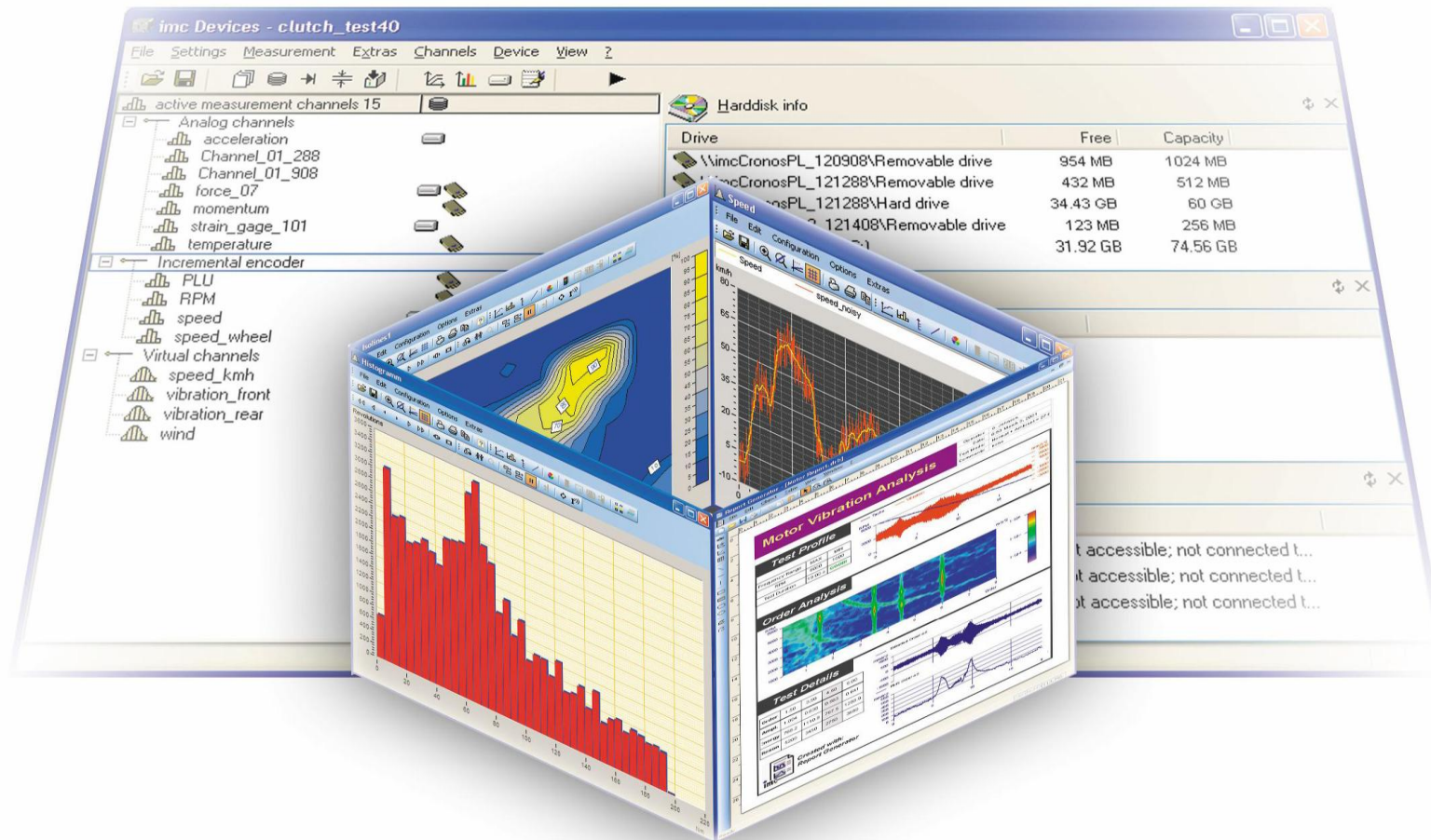


online calculation – our most important feature



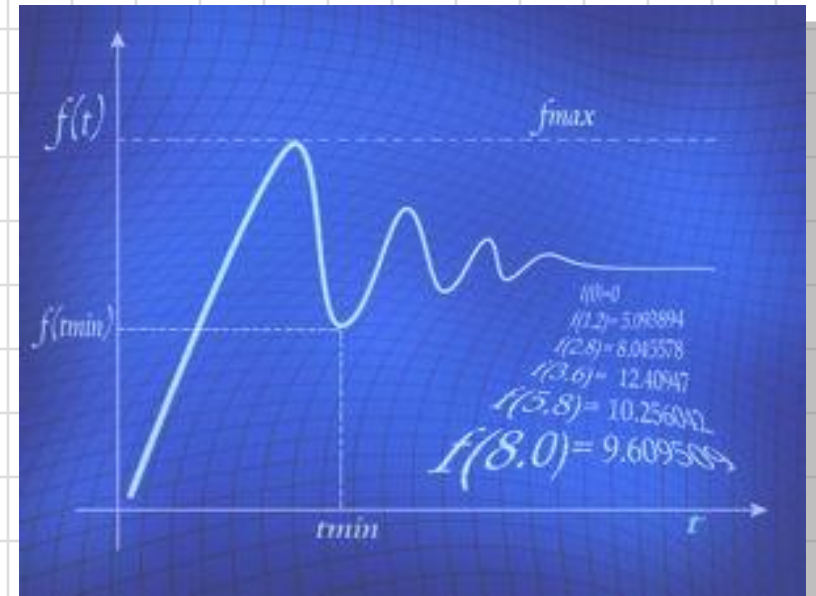
online calculation – our most important feature

Why and when do I need

Online Famos Professional?

What? Online Famos has limitations?

What are these limitations?



Why do I need it?

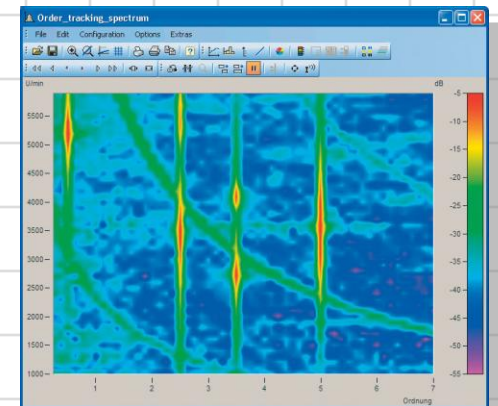
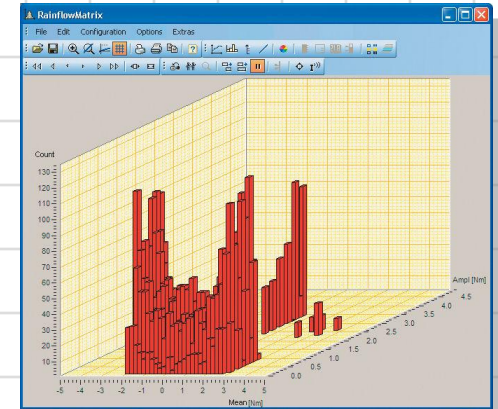
- Faster, up to +400%
- Excellent cost / performance ratio
- Use of hardware to its full capacity
- New two point controller & PID controller function
- Restore function
- More single values with new process variables
- Real-time interrupts, precise timing and synchronous calculation
- Up to 5 synchronous tasks from 100 μ s to 1 s



online calculation – our most important feature

Who needs this?

- Everybody who uses Online Famos
- All CRONOS PL with high channel count
- Everybody who uses more than 200kS/s
- Extensive mathematics or statistics calculations
- Test stand
- Noise and vibration

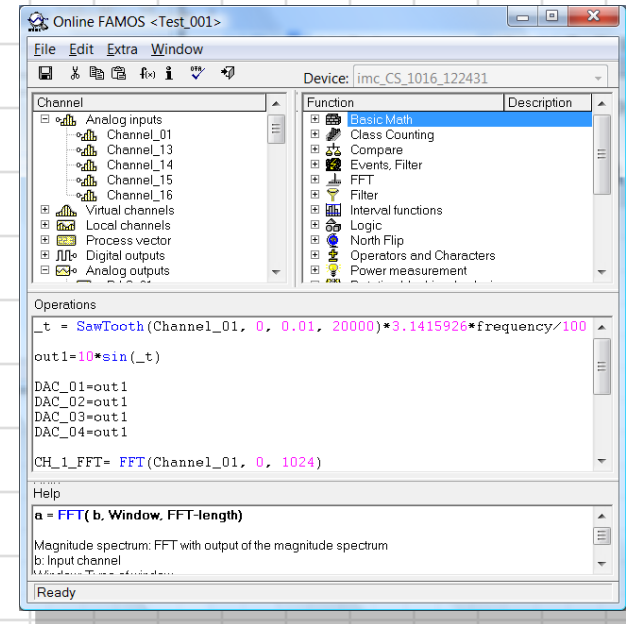
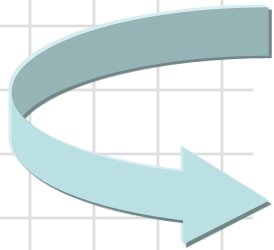


Simply all professional users



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How can I see the difference?

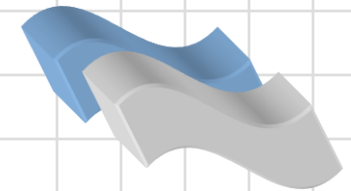
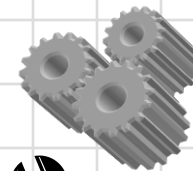
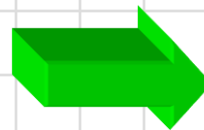
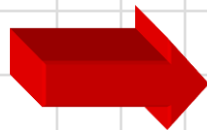
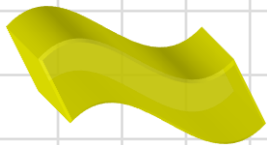


Analog output

Analog input

FFT

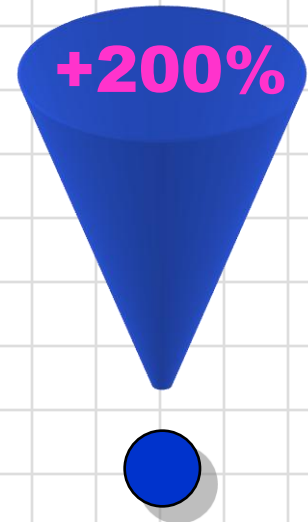
analysis



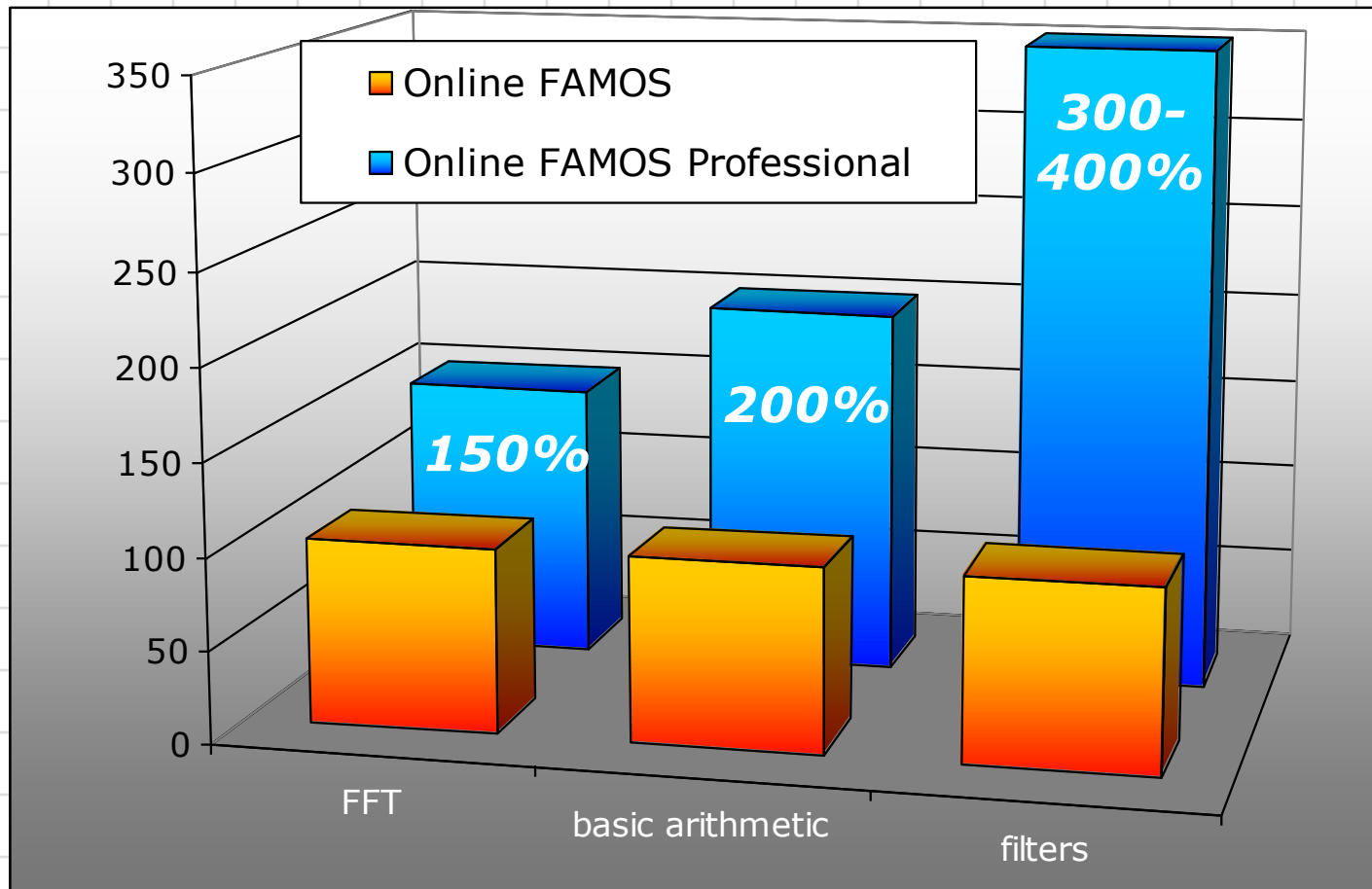
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FFT Results

FFT length	OFA	OFA Prof	difference
1024	3,66 ms	1,83 ms	200%
2048	7,19 ms	3,73 ms	193%
4096	14,76 ms	6,89 ms	214%
8192	30,09 ms	19,78 ms	152%



online calculation – our most important feature



Online Famos Professional

Synchronzied timing of several operations

Extension of OnTimer() function

Real interrupt handler

Precise timing

Direct access to input channels via process variable

Single value calculations

5 tasks taking from 100µs to 1s

PID / 2 Point controller ...

Loop control

The screenshot displays the 'Channel' configuration window. It is divided into two main sections: 'Channel' and 'Operations'.

Channel Section:

- Analog inputs:** Represented by a sine wave icon.
- Process-Vector variables:** A list of variables with numerical values in yellow boxes:
 - pv.speed: 22.3
 - pv.voltage: 22.3
 - pv.rotation: 22.3
- Digital outputs:** Represented by square wave icons. The variable 'DOUT01_Bit01' is highlighted in blue.

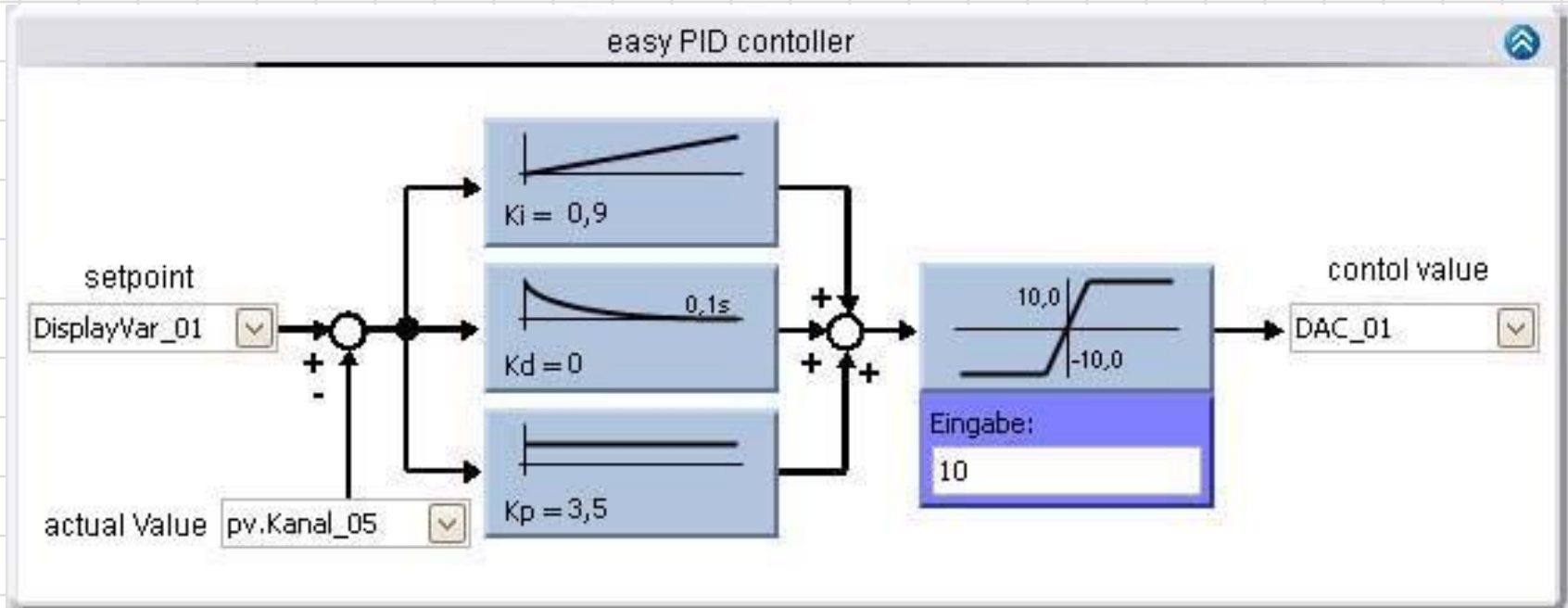
Operations Section:

```

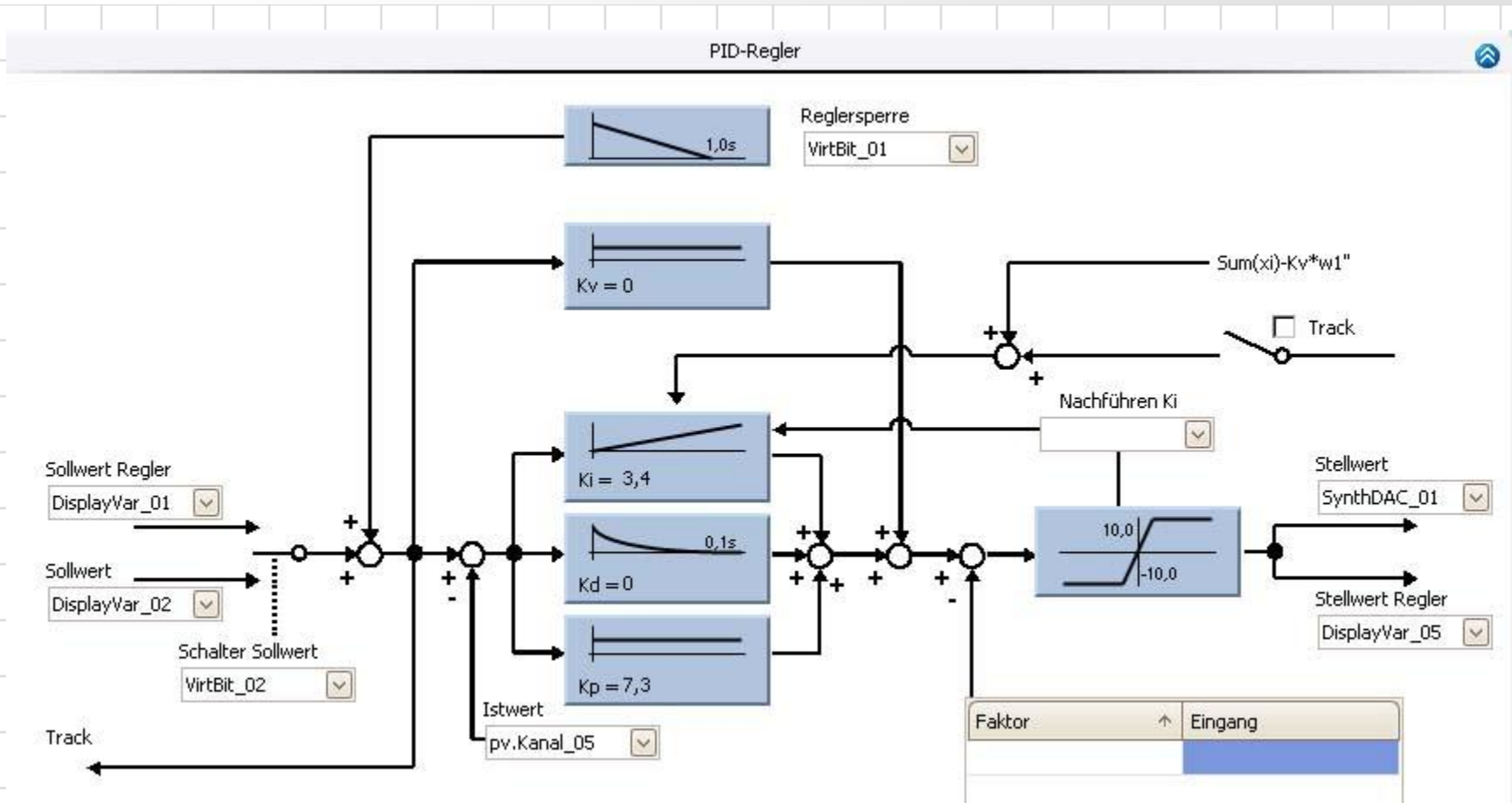
: Execution exactly aft
OnSyncTask( 0.01 )
  if pv.speed > 50
    DOUT01_Bit01=1
  else
    DOUT01_Bit01=0
  end
End
  
```


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PID controller principle



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How can we do this?

OnInitAll

RPM_CON = CtPID(2, 5, 0) ; means P = 2; I=5; D=0

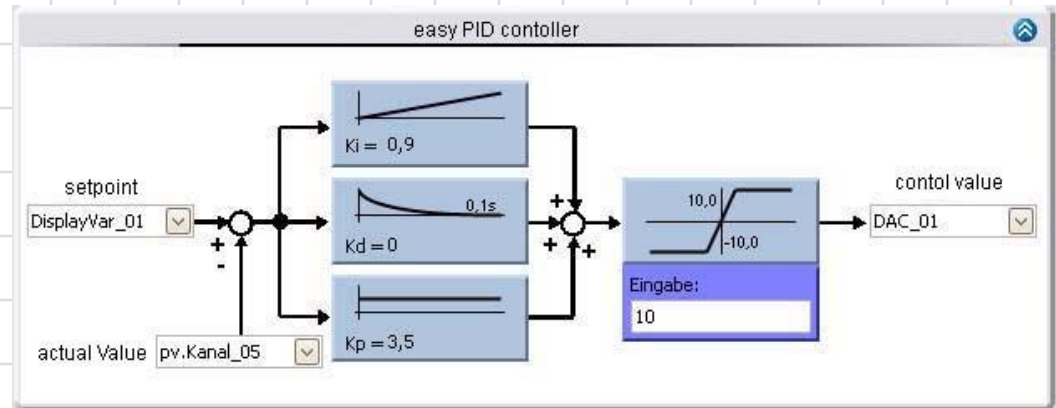
End

OnSyncTask(0.001) ; means every 1ms

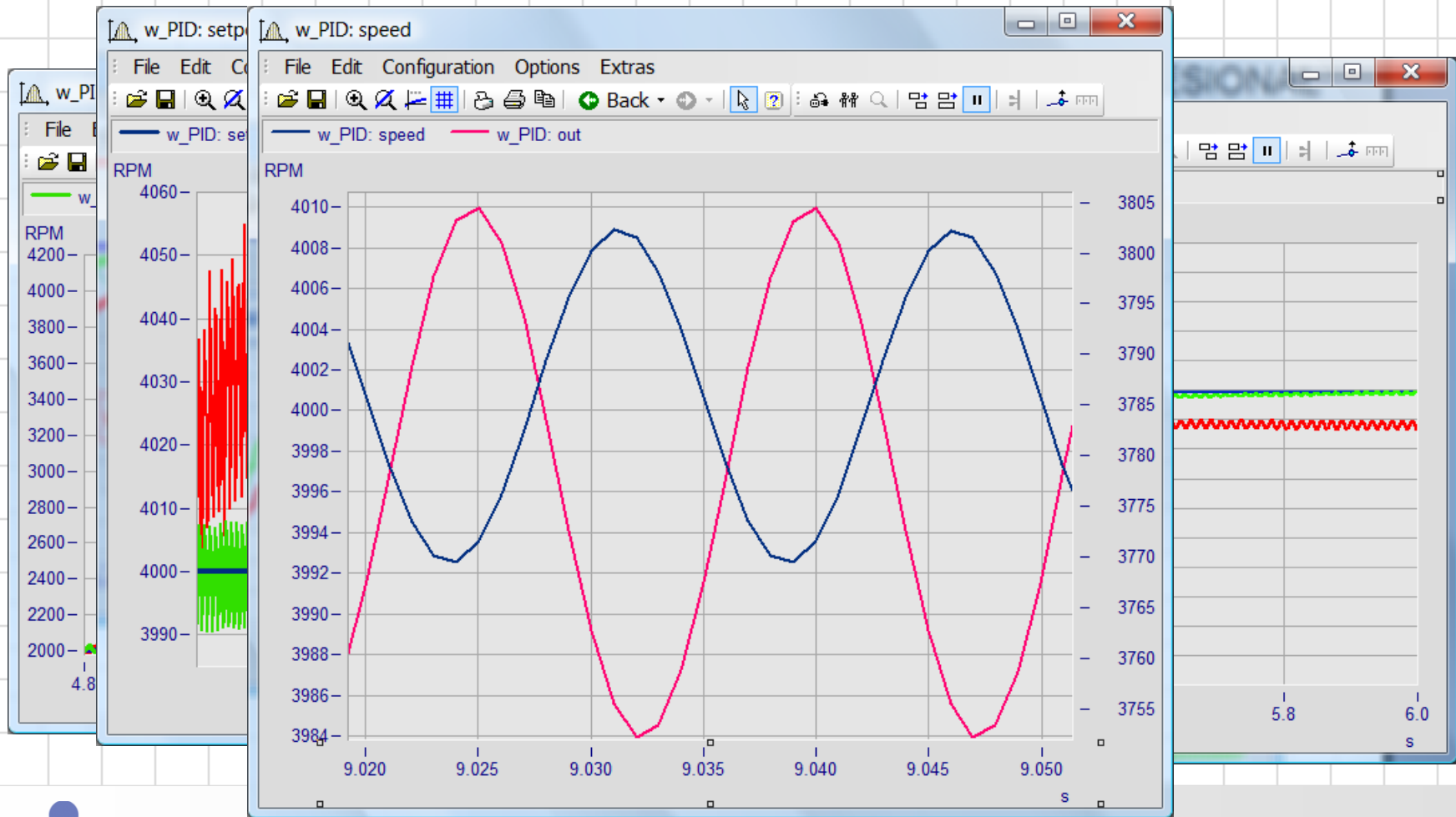
RPM_CON.setpoint=pv.setpoint ; setpoint

DAC_01 = RPM_CON.calc(pv.speed) ; output / input

End



online calculation – our most important feature



online calculation – our most important feature

Excellent cost / performance ratio

Example 1:

CS7008 = 9.350 EUR

Surcharge for update to Online FAMOS Professional: +770 EUR

For +8.2 % extra, you get up to +400 % more performance.

Example 2:

Cronos PL16 + 8 x UNI-8 = 39.880 EUR

Surcharge for update to Online FAMOS Professional: +770 EUR

For +1.9 % extra, you get up to +400 % more performance.

A deal you'll be sorry you missed.



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Thank you

