Hi Andrew,

Still working on creating HPGL.PLT toolpaths for the HP7580 pen plotter. QCAD has some trouble creating toolpaths. Too often it shuts itself down, or the PC gets stalled.

Recreating the same error however is possible. On a small drawing QCAD works fine. Creating multiple toolpath's -like the HpPenplotterTest.plt- has some issues. Succes or failure seems to be machine dependable.

To pinpoint the problem, I have exectuted a very small benchmark using several different PC's and OS, in conjunction with QCAD 3.21.3.14 and the HpPlotterTest-file.

As benchmark standard I used a very old PC (PC11), with the obsolete DOS 6.2, running a 32 bit CAD-application with a minimal amount of RAM memory.

Quick Benchmark			
Ref	**PC specs**	**Results**	**Remarks**
		File: HpPenPlottertest Load time : ...... Regenerate toolpath's time :	QCAD/CAM 3.21.3.14 DXF R27
PC11	Intel Pentium 4 3.00 GHz, 32 bit RAM 512 MB (65 MB accessable) DOS 6.2 AutoCAD 10	File as dwg: 70 kB Load dwg in editor: 2 seconds Regenerate HPGL.PLT: 5 seconds, 710 kB Export as DXF: 1 second, 120 kB	Setting Benchmark Standard
PC1	AMD Athlon 64 X2 Dual Core Speed: 2.1 GHz RAM: 1024 MB Kubuntu 14.04	Regenerating toolpath stalls time after time, PC stalls completely	Power switch reset
	AMD Phenom 9550 Quad Core Speed: 2,2 GHz RAM: 3,9 GB Kubuntu 14.04	DWG Regenerating stalls DXF Regenerating stalls PC stalls completely disk sleep	Power switch reset
PC31	HP Compaq Intel Celeron CPU 430, 1.8GHz RAM 1.9 GB Kubuntu 14.04 (x64)	.dwg : stalled after 10 minutes .DXF : 15:52...15:15 = 23 minutes = 1380 seconds	Regenerating finished. CPU 100%, While regenerating acces to menu's. Uses only 1,4 GB RAM
PC61 old laptop	AMD Athlon II P320 Dual Core RAM 3,6 GB Kubuntu 18.04	15:05...15:16 = 11 minutes = 660 seconds	Regenerating finished. CPU 100%, While regenerating acces to menu's. Uses 1,6 GB RAM, no Swap used
PC62	Intel Pentium 4, 3.00 GHz (32 bit) RAM 1 GB Kubuntu 16.04	Regenerate: 15:39...16:14 = 35 minutes = 2100 seconds	Regenerating finished

PC1 (Athlon) was the initial trigger for bug FS#1843. It seems impossible to regenerate the toolpaths. Because the PC becomes Locked In, only a Power On Reset will end this situation.

Lost in cyber space, guided by your response to the bug, I oriented myself with the latest QCAD and the test file on several other PC's.

The problem is not old hardware junk like PC62 and PC31. OK they are not fast or the newest, BUT they don't fail.
The problem is not the OS; several Linux-distro's tested; one fails where the other will not.
The problem is not a lack of RAM memory.

Monitoring with KSysGuard in graphical mode, it turns out all the Locked In PC's -while regenerating the toolpath's- do have Memory Full issue's. While generating used RAM Memory grows and grows untill all RAM is in use. Swap-memory kicks in, and also grows and grows; the PC becomes slower and slower untill it is stalled. In the historic DOS-computer era, a computer would terminate with the Error message 'Stack Overflow' or 'Memory Full'.

I recall from my programming years, after a program-part has ended, the used workspace has to be cleared to prevent memory full issue's. It seems the toolpath-generator is somewhere missing a small command for memory management to free workspace after use.

P.S. Testing the regenerate function, I noticed the lack of a Pop Up Dialog with progress indicator and the very much needed [CANCEL] -button.