nv4_disp-error

This is one example of nv4_disp related problems. I could have solved this quicker if it happened to my own PC, but this is how it went this time. System : XP, P4 3GHz, 2 Gb RAM, Nvidia card.

- Symptoms : Sudden freezing and occasionally recovers by itself but usually needs reboot. Sometimes BlueScreen and error-messages about memory loop caused by nv4_disp. Quite high CPU-cooler revs (I wasn't fully aware of this).
- Solution : Quick search with google revealed error-message indicating problems with display adapter and four main reasons for such symptoms :
 - 1. Adapter and motherboard chipset may not be fully compatible.
 - 2. There is not enough power to the adapter.
 - 3. Heat problems.
 - 4. Broken display adapter.

Problems with the card had started only few months ago and since the PC was five years old, this was hardly question of incompatibility. Drivers had also been updated and that didn't help. I knew the PSU had been replaced recently (some problems were already there) and therefore it should not be the cause in here.

At first I checked if there was any obvious reason for the card to overheat. There was not alarming mounts of dust present and the card's passive heatsink was looking clean enough. The CPU's cooler looked quite dusty but most of the dust was easily removed.

Because it started to look like the card itself being the problem, I decided to change it. After changing the card and reboot – hanging on boot. I was not absolute sure of my new card (used) and changed the old one back. Reboot and just after getting into windows – hanging again. Waited few minutes and entered BIOS during POST - and there it was : CPU temp was over 80 °C.

So I opened the case again and checked the CPU cooler more closely. This was an early model of stock cooler (picture 1.) attached with four screws and backplate behind the motherboard. Although the cooler seemed to be OK, one of the four screws was clearly broken (picture 2.).





Picture 1. Cooler

Picture 2. Cooler, detail

After changing the cooler to new (used) working one (newer model without backplate), all problems were gone. This is obviously not a solution to everybody, but it shows how the cause of the problem can also be found somewhere else rather than in the display adapter itself.