2022/06/25 16:03 (UTC) 1/3 Technical Jargon

I don't want to interfere with your well written article, so I will ad some things here that should be considered to be added to the article. Of course this is open for discussion.

- 1. Additions to the Common Symptoms section: RAM: Additional symptoms are kernel panics and segfaults in various programs without recognizable pattern
- PSU: Additional symptoms are unrecoverable system freezes (SysRq combos not working, no possibility to SSH into the system)
- HDD: Additional symptoms are clicking noises and constant spinup attempts
- CPU: On multicore CPUs kernel panics can occur when only one core is not working correctly

Additions to the Diagnostics section:

- RAM: Maybe it should be added that it is, especially on new system, mandatory to check the BIOS to make sure that the RAM is driven within its specified parameters. Some motherboards have problems to detect the correct parameters in AUTO-mode.
- PSU: I would recommend to alter the last sentence before the warning from " and wait for the warnings or sudden shutdown/reboot." to " and wait for the warnings or sudden shutdown/reboot/freezes."
- CMOS battery: Batteries are toxic way and shouldn't just be thrown away but brought to the appropriate collection point (or box) that exist in many countries.

Genral Additions: The whole topic about overheating systems seems to miss. It should be added:

- Symptoms: Slow downs, sudden shutdowns, freezes
- Diagnostics: Use Im_sensors or other monitor programs to check the temperatures while doing load-tests, check the fans and heatsinks for dust, check the heatsinks if they are proper mounted (esppecially on self-built machines and machines that were recently moved), check for dry thermal paste, check the case if there is proper airflow
- Solution: Clean the system, reseat the heatsink, apply a fresh layer of thermal paste (good article with information about that: http://www.techpowerup.com/printarticle.php?id=134), make sure that there is proper airflow, with adding fans if necessary

There should also be added a disclaimer at the beginning of the article to prevent lawsuits:

- before working in the machine the user should take care of the usual things, like removing the power plug, grounding himself, using proper tools, ...
- we are not responsible for any damages that occur during the diagnostics and repair process
- it is always better to let a professional do that work if the user feels himself not proficient enough before accidentally damaging hardware

Sorry, I don't know anything about this Wiki stuff, so I sign it now. — *Tobias Eichmann 2012/10/09* 10:32

I have implemented as many of these as I can, and I will give credit to the one who suggested this once they sign their comment. The main one I did not implement is checking the BIOS for RAM

parameters. My mobo does not have such an option, so I don't know how to do it, and I'm not sure it is safe unless you know what you are doing. Maybe it is better to update the BIOS instead. — *Johaan Strojandogg* 2012/10/09 10:20

Usually only OEM boards, like the one from Dell or HP, lack these options. On mainboards that the end-user can buy they are sometimes hidden in the over-clocking menus. But you are right, most of the time a BIOS update will fix such problems. — *Tobias Eichmann 2012/10/09 10:32*

My PSU has failed and I have added more info to these sections. — *Johaan Strojandogg 2012/11/22 07:10*

My mobo may have failed, and if I can confirm it, I will add random symptoms + memtest passes = mobo failure. — Johan Strojandogg 2013/01/16 09:45

Technical Jargon

I suggest we remove some "technical jargon" or otherwise colloquial terms such as "mobo". Why not use motherboard instead? — *Gerardo Zamudio 2013/01/22 08:39*

Agreed. Eric — Eric Hameleers 2013/01/22 13:12

Replaced all instances of 'mobo' with 'motherboard' and linked SysRq REISUB for clarity. — *Gerardo Zamudio 2013/01/23 11:02*

Sorry about the jargon, I just tend to use it without realizing it. I removed two things I added to the motherboard section, because I cannot confirm that my motherboard is dead, so it was not reliable information. — Johaan Strojandogg 2013/01/25 02:41

I have updated a few things and made a few corrections. — Johaan Strojandogg 2013/05/07 06:21

I removed some possibly incorrect symptoms of PSU failure. I added capacitor high-pitched squealing/screeching as a good predictor of hardware failure and of which component is the cause. — *Johaan Strojandogg 2013/09/06 03:32*

I would like to add info about how to reset the CMOS settings in case you have trouble booting a system. Typically instead of booting there is just a black screen without boot codes. See: http://www.linuxquestions.org/questions/showthread.php?p=5087708#post5087708 I will add it in a day or two if there is no response. — *Meta Schima* 2013/12/27 11:32

I will be adding a section on mouse problems and potential fixes. See: http://www.linuxquestions.org/questions/showthread.php?p=5093589 — *Meta Schima 2014/01/09* 11:49

I will be adding a section for power button failure as being separate from PSU failure. See: http://www.linuxquestions.org/questions/linux-hardware-18/instability-intel-i5-750-linked-to-cpu-clock-drive-voltage-4175490587/page2.html — *Meta Schima 2014/01/21 09:53*

2022/06/25 16:03 (UTC) 3/3 Technical Jargon

From:

https://docs.slackware.com/ - SlackDocs

Permanent link:

https://docs.slackware.com/talk:howtos:hardware:hardware_diagnostics

Last update: 2014/01/21 17:53 (UTC)

