The temperature of a laptop's internal cooling system is managed by an internal fan that makes the air in the laptop cool, and a "heatsink" device connected to a microprocessor chip that absorbs heat from the laptop and releases it into the air. The heatsink and microprocessor chip are held firmly in place by thermal grease. Motherboard sensors monitor a laptop's temperature and will shut off the computer if it gets hotter than the machine can handle. You can adjust the temperature by maintaining these components of the cooling system and monitoring the laptop to make sure it is within the safe threshold -- usually a maximum of 55 degrees Celsius.

Step 1

Make sure the laptop is always placed in a way that maximizes ventilation. The ventilation passages should be unrestricted with air flowing freely.

Step 2

Locate the hardware technical specifications portion of the laptop manual to find the recommended temperature for your computer. This information is also available on the manufacturer's website.

Step 3

Select, download and install a temperature monitoring system, such as CoreTemp, HWMonitor or SpeedFan. These utilities can keep track of the internal temperature and adjust it before the motherboard sensor has to shut the laptop down automatically. Make sure you are logged into the laptop as an administrator to perform this task.

Step 4

Run the utility and go through any configuration and registration prompts for the specific program you are using. Some utilities will ask you which core processors to track, and some will ask you how to save and display statistical reports of temperature information.

Step 5

Verify how the utility will notify you if there is a problem. Some will display periodic reports on how hot your laptop is getting, but some will require you to monitor this in other ways.

Step 6

Check the reports from the utility program and compare it to the recommended temperature. Most of these utilities communicate with the computer in the case of impending overheating or they will direct you to another solution.

Step 7

Investigate the temperature. If the laptop is overheating, one way to adjust the temperature is to take the computer apart and re-apply the thermal paste. You may need to adjust the temperature by cleaning inside the laptop or replacing cooling system components. The Resource link can tell you how to do this for specific laptop brands.

Key Concepts

- adjust laptop cooling
- laptop cooling system
- adjust laptop temperature

References

- TechTarget: Heatsinks [http://searchcio-midmarket.techtarget.com/definition/heatsink]
- I-Hacked: Reducing Laptop Temperatures [http://www.i-hacked.com/content/view/129/42/]
- Hardware Secrets: Maximum CPU Temperature [http://www.hardwaresecrets.com/article/143]
- The HeatSink Guide: All About PC Cooling [http://www.heatsink-guide.com/]

Resources (Further Reading)

- Repair 4 Laptop: Notebook Fan [http://repair4laptop.org/notebook_fan.html]