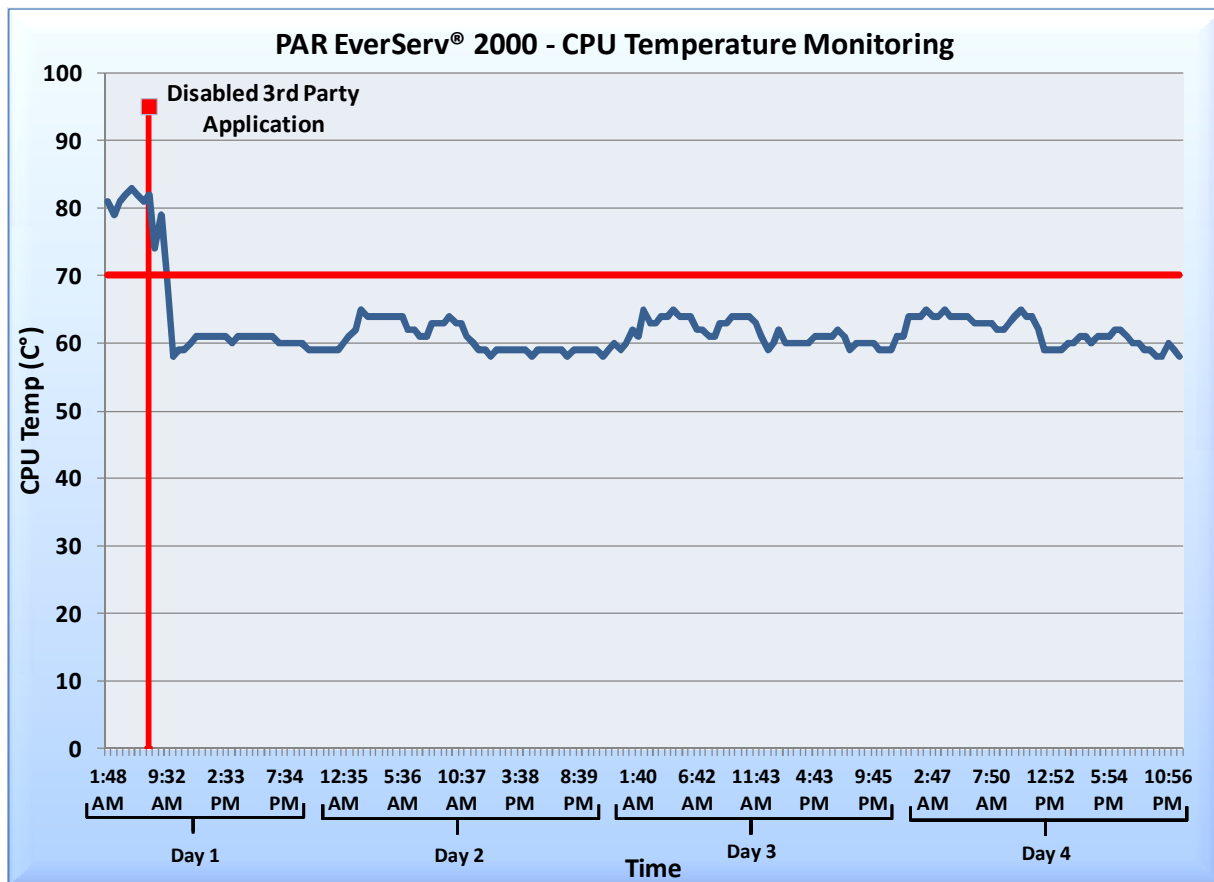


PAR EverServ® Remote Care Case Study - Hardware Health Monitoring

One of the features of PAR EverServ Remote Care is the ability to monitor the internal health of the POS Hardware. Depending on the hardware and software platform Remote Care is able to monitor such health parameters as system board and CPU temperature, fan speed, system board and CPU voltages. A real world example of how this information has been used to prevent a hardware failure was with one of PAR's EverServ 2000 terminals. Through the monitoring of this terminal hardware, an alert was generated because the CPU temp was rising above the acceptable threshold.

This alert was received by PAR's Managed Services group who investigated the alert by calling the site to see if the restaurant building temperature was higher than average, that the location of the terminal was not near a heat source and to check that terminals case vents were not blocked. After verifying that there were no obvious causes, the issue was then escalated to PAR's Tier 2 support group to look into the root cause. Tier 2 found that the cause of the high CPU temperature was not due to a problem with the hardware. The root cause was a 3rd party application loaded by the customer that was "misbehaving." The 3rd party application was causing the CPU to constantly run at 80-90% capacity which caused the CPU to heat up. The PAR Tier 2 representative was able to disable the application from running, which enabled the CPU temperature to resume a normal operating range (below 70° C).



Since the terminal was being monitored by PAR Remote Care the alert was received and the root cause was found quickly and resolved remotely before serious failure occurred. Preventing a failure that would have required the hardware being repaired saved the customer a costly repair bill and system downtime.

In addition, using the Asset Management function within Remote Care enabled PAR to query other sites looking for the same 3rd party application and apply additional monitoring to ensure it wasn't causing any problems currently or in the future. This information was also escalated to PAR's Account Management group to follow-up with the customer and was added to the PAR Customer Support knowledgebase for future troubleshooting.