METHOD AND SYSTEM FOR AUTOMATED TECHNICAL SUPPORT FOR COMPUTERS

ABSTRACT OF THE DISCLOSURE

method and system for integrated support for solving problems with personal computer systems comprises monitoring operating system functionality to determine if a computer system failure exists, to identify the computer system failure and to provide a solution of the computer system failure. Watchdog timers compare the time of hardware and operating system functionality, such as boot sequence operation, against predetermined time periods to determine whether or not a computer failure exists. A computer system failure is determined if a watchdog timer expires upon completion of a predetermined time period without being cleared. A hardware problem is identified on initial boot if the watchdog timer is not cleared by an operating system service routine. An operating system hang-up is determined if a watchdog timer is not cleared by an application run in association with the operating system. If a computer failure is detected, a service mode is initiated with a service mode operating system to allow in-depth analysis and problem resolution. Service mode operation is also monitored to detect problems. A service button also provides a user interface to request support. Pressing of the service button causes a bit to be set in a register in the chip set. Setting of the bit generates an interrupt signal that is received and processed in a manner dependent on whether the computer system is in a booting state or a non-booting state. If the computer system is in a booting state, a predetermined bit in the chip set is checked at a predetermined point in the booting sequence, and if set, a service application is initiated at that time. If the computer is not in a booting state, a second interrupt is generated, causing the service application to be initiated. A timer is initiated substantially with pressing of the service button, and if the service application reaches a predetermined point before the timer reaches a predetermined value, it will clear the timer. If not, the system will follow a predetermined reboot protocol.

Fig 1.