

ABOUT MacEKG

What is it?

MacEKG is a Macintosh diagnostic program which performs advanced computer fault tests and utilizes an expert system that learns the individual aspects of any given system. As an early warning system, EKG provides the user with a virtual “dashboard” of their system and tells them when there is a problem worth looking into. Service technicians will find MacEKG indispensable for testing critical computer components and providing a standardized benchmark for complete testing of the Macintosh. Network managers will find EKG useful for monitoring individual computer configuration and overall system health.

MacEKG for the User

MacEKG provides the user with a powerful set of diagnostic tools for testing and watching over their system.

There are many valuable utilities available for correcting specific system problems. Norton Utilities™ is wonderful for correcting directory and other drive problems. Rival™ is excellent at locating viruses. DiskExpress™ is great at keeping your drive free of fragmentation. But the one utility missing is something that looks at the system as one entire entity. Something that learns the individual system configuration and remembers how that particular system should behave. Its personality, if you will. A product that can tell you EVERYTHING is OK.

Each Macintosh workstation is unique.

Let's suppose that Karen has a Macintosh Plus and Mike has a Macintosh II. Karen's Macintosh Plus may initially seem inferior to Mike's Macintosh II, however, Karen's machine has a high-speed accelerator and a lean system folder while Mike's Macintosh II is plodding along loaded with every extension known to mankind.

MacEKG was designed to be what its name implies—an electrocardiogram for Macintosh. Something which allows you to view and analyze your computer's “pulse” and other vital information. Just like a real EKG machine, MacEKG provides the user with a visual indication of the effect of certain operations.

Picture an imaginary user named Doug who has just discovered a fictional extension called the Daffy Duck Init. The purpose of this extension is to play a “quack” sound every time one quits from an application. Being an avid Daffy Duck fan, Doug finds this init indispensable, but what he may not realize is the programmer of this extension used drastic programming techniques to obtain his/her results by trapping every single call which occurs on the computer. While this may not be causing Doug's computer to misbehave in any noticeable fashion, his system performance may now have declined by 2%. A week later, Doug installs the sequels to the Daffy Duck Init respectively called Elmer Fudd Init and Yosemite Sam Init. These extensions use the same technique to play sounds when he cuts and pastes. Little does poor Doug know that his Mac's performance has now declined by 6%. By the time Doug makes his way up to the Bugs Bunny Init, his used-to-be-fast Macintosh II will be performing at Macintosh Plus speed. This degradation in performance could be so gradual, he might not even notice it happening. People with equivalent hardware systems might comment while using his machine, “Gee, Doug...my Macintosh is much faster than yours!”

MacEKG can help you avoid Doug's dilemma. Had Doug been running EKG, he would have been warned that his logic functions had degraded. By noticing this effect after installing a new modification, Doug would have learned that this particular extension may be costing him more in performance than it is worth in functionality.

MacEKG for the Service Technician

While MacEKG is very helpful to the user, EKG is also quite useful to the service technician. MacEKG features advanced chip-level diagnostics previously available only to Authorized Apple Technicians.

MacEKG also helps the technician in determining whether the problem is really related to hardware at all. Most hardware technicians spend a large portion of their time chasing down software problems. Mrs. Fletcher: "Every time I select the Alarm Clock DA when I'm in MicroWord Soft, I get a bomb with an ID -39. My consultant has looked it over and says it's a hardware problem." After spending much time looking at the boards and probing around, the technician might have discovered that a quick search through Mrs. Fletcher's system folder would have revealed the dreaded Daffy Duck Init and some new manifestation of its dubious code.

Using EKG and its ReActivator feature, the service technician can set up the machine to continually run EKG and repeatedly reboot. By setting MacEKG's sound preference control (see Control Panel) to Warnings Only, the technician can set up the UUT (Unit Under Test) to run EKG both continuously and silently until it finds a problem and calls their attention with a warning message. This allows the machine to be exercised automatically without attendance; freeing the technician to work on other machines while waiting for the UUT to fail. Once the machine has reported a failure, EKG's warning message and logs will point the technician in the direction of the problem.

MacEKG and ReActivator are also helpful after the repair. Intermittent failures are often quite hard to isolate, so many times the technician is forced to make an educated guess as to which part to replace. Then they must determine if the repair was actually successful. EKG allows the technician to exercise the UUT for a few hours or, better yet, overnight. If it is still running the next day, they can look over the logs to see if any of the performance anomalies which occurred before the repair had reoccurred overnight during EKG testing. This feature is especially valuable to technicians who repair power supplies as the boot routine is probably the most strenuous work the system must endure.

One of the most frequent tasks a technician is asked to do is install RAM. Though most RAM modules are free of defects, there are occasions when what appears to be a good piece of memory turns out to be faulty, especially after allowing the chips to become hot. MacEKG includes an advanced RAM test which can help you truly "road test" the RAM before the machine is returned to its owner. By catching a bad module before the customer does, you improve your shops efficiency and credibility. This is especially important if your facility makes house calls. A bad module means having to return to the site (often at no charge) to redo work previously done.

Another service which technicians often provide is evaluation testing. Someone is thinking of buying a used machine and would like it professionally checked for problems that could arise after purchase. This is much like having your mechanic friend look over a used car for you before you buy it. Before EKG there was not much a technician could do other than visually inspect the machine's components and run it through its paces. EKG allows technicians to truly evaluate the machine with very little effort on their part and provide the prospective buyer with a detailed report on the machine's overall health.

MacEKG for the Network Administrator

The name "network administrator" is deceiving as it implies those who only concern themselves with the communication's aspect of a given facility. Network administrators must know much more about their systems than simply connectivity protocol. Network administrators must know what everyone has running to insure network compatibility. They are often the first called to the scene when a node drops off from the network. Network administrators may also answer to the accounting department by being in charge of, and reporting, the network's equipment inventory.

EKG capsule files contain all the vital information one could possibly want on any given system. Network administrators can store thousands of capsules representing the entire network, much like a doctor stores patient records.

MacEKG for the Consultant

Consultants will find EKG extremely useful while on trouble calls. The program gives them a simple way of determining the client's machine health and finding the particular problem for which they were summoned. By comparing previous log files to tests performed on subsequent visits, the consultant can provide a monitoring service assuring the client a healthy system. MacEKG gives consultants the professional edge needed for repeat business.

MicroMat Computer Systems is developing a special consultant program that will refine the above points to a much greater degree. Contact MicroMat for more details on this program.