



“Since we’ve been using ElectricAccelerator, our build times have been reduced by more than 75%, and in the six months we’ve been using it, we haven’t had even one ElectricAccelerator-related build failure.”

— Trish Collins,
Release Engineer, Mercury Computer Systems

About Mercury

Mercury Computer Systems, Inc. (NASDAQ: MRCY) is the leading supplier of embedded high-performance, real-time image and digital signal processing (DSP) computer systems. The company’s systems process radar, sonar, and other signals in defense electronics applications; its medical systems speed the processing of magnetic resonance, computed tomography, and digital x-ray images; and its specialized computing solutions are used in communications and electronic design automation.

www.mrcy.com



Before Electric Cloud

Long, unreliable software builds drained development resources. Mercury’s build inefficiencies created a bottleneck in the development cycle that adversely affected the entire team. Not only did it require a Mercury release engineer’s time to correct, it also involved developers and QA engineers who had to wait for the next successful build. Mercury’s popular MCOE™ (multicomputer operating environment) is one of the company’s core offerings. With over one million lines of code, the MCOE platform is a complex application, which in turn has made its development process complex as well. Compounding the development demands, the software must be built across 12 different operating systems.

How did Electric Cloud Help?

Mercury looked to the ElectricAccelerator build acceleration solution. Using patented technology, EA optimizes software builds and reduces build times by as much as 20x. ElectricAccelerator identifies and monitors dependencies to get fast and accurate builds. Instead of running a build sequentially on a single machine, it distributes pieces of the build to run in parallel on a cluster of inexpensive servers.

- **Fast builds.** Build times were reduced by 75% and ROI as achieved in one quarter. By using the Electric Accelerator production solutions, Mercury has been able to dramatically reduce the time the team spends waiting for their builds to complete. For one build, the time dropped from four hours to less than one hour. For another, a 24- to 30-hour build went to less than eight hours.
- **Improved quality.** Mercury developers can now trust an incremental build to recompile correctly and consistently. The highest levels of software quality are easier and faster to attain, in part because Mercury engineers can now get feedback on their work more frequently with mid-day builds, and QA can test with “clean” builds with greater frequency.
- **Increased productivity.** With ElectricAccelerator, Mercury’s MCOE development team’s productivity has skyrocketed, allowing for valuable development resources to be allocated to additional business-critical projects.
- **Cost reduction and efficiency.** The software configuration management team from Mercury Computer Systems was able to break the build bottleneck, resulting in dramatically improved productivity, reduced costs, and ultimately better quality.

Type of Application

Enterprise Web/IT

Solution Implemented

ElectricAccelerator