Federal, state and local governments depend on digital forensics to retrieve, document and preserve critical information.

Digital forensics involves the acquisition, scientific examination, and analysis of data pulled from digital devices such as computers, mobile phones, memory sticks, and even game consoles. The key is to ensure that information is retrieved, documented and preserved in such a way that it will hold up in court. To do this, law enforcement agencies need dedicated forensic workstations.
New York State Troopers
Forensic Investigation Center

Challenge
The New York State Police Crime Laboratory System (CLS) is widely acknowledged as one of the finest in the world—it is accredited by the American Society of Crime Laboratory Directors - Lab Accreditation Board (ASCLD/LAB). To become accredited, CLS had to demonstrate that its management, operations, and equipment comply with ASCLD/LAB standards. CLS relies on forensic workstations to do all the data crunching from information received from various devices. To stay compliant, CLS needed to identify and source the latest forensic technology with more capacity to retrieve data and manage evidence in the most advanced, yet cost-efficient way. Technical Lieutenant Mark Brown led the bid process for the new equipment, and while price was a factor, he also considered the reputation of the bidders, their history with forensic technology, and the quality of the products they offered. Ace Computers had been working with government agencies for more than 30 years. “I just couldn’t find anything negative on them,” Mark said.

Solution
Ace Computers built high-end forensic workstations with the capabilities that CLS needed at that time and would need into the future to recover, preserve and analyze the data from suspects’ computers and other digital devices. In addition to demonstrating who had access to the digital information being used as evidence, Ace Computers’ solution also considered the processing speed and number of processors, processor cores and amount of memory needed for processing; the type of media the system would need from which to acquire data and the appropriate type of write-protected data acquisition methods; the configuration of the RAID system or allowance of destination drive bays; and whether or not graphical processing units (GPUs) would need to be included. The solution required a lot of equipment and significant integration expertise, with the ability to scale up as necessary in the future.

Results
Since Ace Computers delivered its solution, Mark stated, “We have had very good response from the people that are using [the workstations]. They like the increased speed and features such as the built-in array. I would definitely recommend Ace Computers to other agencies and individuals. You get a lot of machine for the money—there was no skimping on quality or customer service. The next time we need forensic workstations, I plan to contact Ace.”

“We have had a very good response from the people using the workstations [provided by Ace Computers]—especially in regard to the increased speed.”
Mark Brown, Technical Lieutenant
New York State Troopers Forensic Investigation Center

Ace Computers’ forensic workstations are designed for the secure acquisition and examination of digital evidence sourced from a full array of digital and non-digital devices. Our workstations streamline gathering and downloading evidence, preserving it, and documenting the chain of possession so that it can be used as evidence in court. In addition to cutting-edge, standardized forensic workstations, servers and storage, our experts build highly customized versions that take advantage of the many hardware and software features currently available. They combine a high-speed, multi-core processor and ultra-fast memory with a high performance SSD. All technology is user-friendly and supports the full range of forensic platforms.