DIGITAL FORENSICS

Minneapolis Police Department Finds Evidence with Rimage Systems

Customer
Digital Forensics, City of Minneapolis Police Department

Challenge
- Automate process for examining evidence discs
- Improve the crime lab's workflow

Solution
Rimage Evidence Disc System (EDS)

"With any warrant we do, we can begin to process discs right away. Depending on the quantity, we can have a report in 1-3 hours and we'll know within 24-36 hours exactly what is on those discs."

Dale Hansen, Computer Forensics Officer, City of MPLS Police Dept.

Dale Hansen is a Computer Forensics Officer with the City of Minneapolis Police Department. His team works in the crime lab, processing and analyzing criminal data on computers, cellular phones and removable digital media. Most of the media that enters the lab is in the form of CDs and DVDs. The crime lab must closely examine these discs, searching for evidence that can convict criminals. Hansen and his team recently faced a significant backlog; nearly eight months of evidence discs were sitting on the lab's shelves. This overflow of media, along with a steady stream of new discs coming in, prompted Hansen to search for an automated solution that would not only help the crime lab examine discs, but improve the forensics department's workflow.

The Challenge

A typical crime investigator plays a wide variety of roles and examines various types of evidence, but digital forensics officers focus exclusively on digital media and internet crimes. A major focus of Hansen and his forensics team is child pornography distribution and possession crimes. When an investigator issues a warrant in this type of case, mass amounts of digital media are apprehended for evidence, the largest ratio of which consists of CDs and DVDs. These discs must be closely examined by the crime lab, ensuring that illegal content does not go unnoticed.

The amount of media entering the crime lab can be overwhelming, often reaching 300 to 500 discs per case. Before Hansen found Rimage's solution, the examination of optical media had to be done by hand, a long and tedious process that kept skilled forensics officers from more imperative work. As Hansen explains, "To manually go through all of those items is a monstrous task...along with the backlog that we have, it's just not feasible to go through all those discs, and we don't have a department that we can assign that work to." The digital forensics team needed a solution that would automate the media examination process.

The Solution

Hansen was already familiar with Rimage's reputation as a leader in the disc publishing industry. So when he began searching the marketplace for an automated forensics solution, he quickly turned to the Rimage Evidence Disc System (EDS). The EDS is specifically designed to automate the analysis of optical media evidence. Using robotics, CD/DVD/Blu-ray Disc™ recorders and an integrated digital camera, the system automatically picks evidence discs from input bins, photographs the top of each disc, ingests and examines the recorded content and then prepares a report by disc and case. The EDS completes this procedure fully unattended and without altering or compromising the evidence. The digital forensics team saw immediate results with the EDS. "It just seemed to be improving all the time," says Hansen. Before the EDS, it took 25 minutes or more for the forensics department to publish a single disc. Now up to 300 CDs, DVDs or BDs can be analyzed at a time; the EDS processes discs 87% faster than manual methods.

The Results

Simplified Workflow

Rimage's easy-to-use software makes processing digital evidence simple, and all data exports directly into forensic analysis software, where it can be combined with other case information. Once discs are loaded into the EDS, the system scans the files and puts them directly into a comprehensive report, allowing forensics officers to focus only on the evidence discs that require further inspection. The EDS also performs double duty as a network CD/DVD/BD disc publisher. After a disc is processed, a clear, high-quality label can be printed on the disc in a matter of minutes. The disc(s) can then be distributed and the case can move forward.

Hard Evidence

Not only has the system allowed the lab to tackle their media backlog and review old cases, but it has significantly increased the likelihood of finding evidence in active investigations. Hansen is no longer concerned about the overwhelming amounts of optical media that come through the crime lab. With the Rimage EDS, officers can take almost every piece of non-commercial media found in an investigation and bring it back for evaluation.

Partners In Crime

The Minneapolis Police Department's digital forensics team has found an ideal working partner with Rimage, and Hansen says that Rimage's customer support is second to none. "Rimage customer service and support is spectacular. If there is an area that we think could be improved, they are very willing to make that change and try to move toward a solution that works for everyone." Not only does the crime lab always have the support that they need, when they need it, but Rimage's technology has proven to be an invaluable asset in streamlining workflow and sealing cases. As Hansen simply says of the Rimage EDS, "It makes great evidence."

"We have no problem examining the discs because the machine will take care of it for us…I can take more which increases the chances of finding more evidence, and we can tie it right back to the subject."

Dale Hansen, Computer Forensics Officer, City of MPLS Police Dept.

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