DME Forensics Uses Dotfuscator to Protect Proprietary Logic and Underlying DVR Storage Structures

ABOUT DME FORENSICS

DME Forensics is an innovative technology and services company focused on providing digital and multimedia evidence solutions to the criminal and civil justice communities. Their technologies are designed to help investigators quickly and easily retrieve and preserve critical video evidence in a forensically sound manner. By using proprietary knowledge and technology, investigators can recover evidence that otherwise may never be recovered. From such, they are able to assist investigators in a variety of cases such as: terrorism, civil unrest, homicide, property crimes, and child exploitation.

Their technology has helped retrieve critical video footage in events such as the Boston Marathon bombing and the assault on the U.S. Capital.

ANTI-TAMPER AND ANTI-DEBUG PROTECTION

Given the nature of the industry, DME Forensics needed their technology to be fool-proof in order to present the most accurate evidence in court hearings. As a former Forensics Examiner for the FBI, DME Forensics’ Founder and CTO, Jimmy Schroering was all too familiar with the associated challenges of recovering footage and knew they needed to increase their backend security protection.

When vetting different vendors, it was critical their technology had anti-tamper and anti-debug safeguards to protect the proprietary logic that recovers deleted or damaged footage from DVR machines. They also wanted to protect the underlying storage structures to avoid any meddling or spoofing of evidence that didn’t actually exist.

Dotfuscator provides features and functionalities that are important to them, including: U.S. based support, strong obfuscation, runtime checks that work offline (anti-debugger, anti-tamper, shelf-life), .NET 5 support, Docker support, and assembly linking.

Bart Wolczyk, DME Forensics’ Senior Technology Engineer, notes choosing Dotfuscator was a fairly easy one. “I’ve used you guys in my previous [work] life. Dotfuscator has been the gold standard in obfuscation for years. Compared to other options, the decompiled code had a lot more strings replaced, a lot more mappings, and the logic was harder to follow.”

DECISION TO RENEW

DME Forensics had been a PreEmptive customer since 2016. When it came time to renew, they evaluated competitor solutions and decided PreEmptive products and support were still the best solution on the market.

“The support has always been great,” says Wolczyk. “The few issues we did have were fixed immediately and we didn’t have to do anything on our end.”

“[Dotfuscator] is a perfect way to protect your intellectual property that can't hide behind a thin client.”

BART WOLCZYK
SENIOR TECHNOLOGY ENGINEER AT DME FORENSICS