<u>Field Search:</u>

A Tool for Monitoring Sex Offenders

By Brian R. Higgins

Author's Note: Points of view expressed in this article do not necessarily represent the official position or policies of the U.S. Department of Justice.

Monitoring sex offenders' computer use can reinforce prohibitions on access to sexual material; help treatment agencies understand and treat offenders; and provide evidence of new crimes, such as possession of child pornography. A powerful tool called Field Search enables law enforcement and community corrections officers to deal with sex offenders' ready access to the Internet and to monitor and manage their computer use. Field Search is software designed to help law enforcement and public safety personnel who are not trained in computer forensics to quickly and efficiently search a computer and create detailed reports of their findings. Although it has not been scientifically validated, testimonials from probation officers indicate it may be useful in monitoring sex offenders in the community and effective in examining computers for evidence of other crimes. In addition, law enforcement agencies and correctional facilities use it to scan agency computers for evidence of abuse and to monitor computers that inmates can access.

The first version of the software was released in 2005. Since then, the National Institute of Justice's Corrections Technology Center of Excellence has released three improved versions. Version 3.0.35 was released in May 2009. The Corrections Technology Center of Excellence continues to support Field Search as a partner with NIJ's Weapons and Protective Systems Technology Center of Excellence.

The software is free and available only to public-sector criminal justice agencies. To date, more than 5,000 copies of Field Search have been distributed, and an estimated 12,000 copies are now in the field through software sharing.

Although the Corrections Technology Center of Excellence no longer sponsors in-person training, it has developed a two-pronged strategy to instruct law enforcement and community corrections personnel in the use of Field Search. The first is the Certified Field Search Instructors (CFSI) program. Under this program, the Corrections Technology Center of Excellence recruits individuals who are proficient in the use of Field Search and provides them with advanced training on the tool and a curriculum that they can use to deliver basic training to their colleagues. To date, 34 practitioners from 17 states have been trained as CFSIs. They have, in turn, provided basic instruction on Field Search to more than 200 law enforcement and correctional officers. The second approach is the development of an instructional video that provides step-by-step guidance on how to use Field Search.

Field Search Capabilities

Field Search blends preview functions with evidence-gathering and reporting functions. Both the Windows and the Mac versions allow users to search a computer's Internet browsing history and cookies, as well as image, media, and text files. Results of the search, including date/time stamps associated with history records and text search hits, are exported to standard Microsoft Excel spreadsheets for further analysis. In addition, items can be downloaded to removable media to be seized as evidence. With Field Search's built-in automatic report function, items can be selected for inclusion in the report with a single click of the mouse. Each item's associated path and date/time stamp are included in the report. The report, which also includes system information and additional space for identifying information and comments, can be printed or exported to removable media as either an RTF (rich text format) file or a PDF (portable document file).

Field Search's Internet search capability allows searches of Internet Explorer, Firefox, and Opera history and cookies, including orphaned (i.e., deleted) URLs. Results include the date and time the subject visited each Web site, and the information can be sorted in various ways to help officers understand an offender's surfing patterns.

The image search capability finds all logical .jpg, .bmp, .png and .gif files, including zipped files, and displays them in a gallery view. Any image in the gallery can be viewed in full size by double clicking on the image. In addition, officers can retrieve the full path; Created, Accessed, Modified (CAM) dates; and sizes for an image by a single mouse click.

Media search locates and plays video files. Text search allows searches for keywords and phrases in any logical file, including nonpassword-protected zipped files. Multiple strings can be searched simultaneously. Searches can be limited to certain file types, and header and footer dates can be searched to identify unique file types. Hits are displayed with date/time stamps, and hit lists can be filtered and sorted in multiple ways. Field Search version 3.0 automatically logs all files that have been opened, which provides a historical record that can be accessed later by examiners, if necessary.

The latest version allows users to view only the most recently used files, which enables probation and parole

officers to quickly monitor a sex offender's computer use since the last visit. They can also scan specific folders instead of the hard drive for quicker, targeted results. A full Windows search takes 25 to 30 minutes; a Mac search can be done in a little more than 1 minute. Both versions of Field Search can be carried on a single portable drive, so officers in the field can search any computer they might encounter.

User Satisfaction

A January 2008 survey of 269 Field Search users found that more than one-half of the respondents use Field Search primarily for probation/parole operations, and more than one-quarter use it primarily for law enforcement operations. More than 70 percent of respondents successfully used evidence captured by Field Search in a court proceeding, and 17 percent reported that the evidence was used to successfully prosecute new criminal charges. The respondents expressed their satisfaction with Field Search, primarily as a tool that can generate information used by treatment providers and provide a means of determining compliance with conditions of supervision.

The only concerns expressed by users were in regard to a "footprint" that Field Search leaves on the target computer. Because Field Search runs live on the target computer, it does not leave the computer exactly as it found it. Running Field Search will make changes to the computer's Pagefile, event logs and other folders. This footprint is limited, minimal and identifiable (i.e., it will always have the same effect on the target computer), and it does not change or add to the substance of what was on the computer. As a result, the footprint has not presented problems in technical violation/revocation hearings. Moreover, when used with proper investigative procedures and documentation of the search, Field Search poses no problem for forensic laboratories in the event evidence of a new crime is discovered. No survey results indicated that Field Search results were ever suppressed.

Success Stories

As the survey results indicate, many agencies have used Field Search to enforce conditions of supervision and/or detect evidence of new criminal behavior. For example, in three incidents involving convicted sex offenders in Iowa, New York and California, probation/parole officers used Field Search to scan the offenders' computers and found evidence of child pornography. In all three cases, the offenders were charged with possession of child pornography. In two cases, the offender pleaded guilty and was sentenced to 10 years in prison. In the third case, the offender, who had been convicted of kidnapping and molesting two children in separate incidents, now faces 25-years-to-life incarceration under California's three-strikes law, if convicted.

Although these cases involved child pornography, officers use Field Search every day to monitor offenders' computer use for evidence of other legal activities (e.g., to determine whether offenders are accessing legal pornography, dating sites, gang-related sites or other prohibited material). Conversely, Field Search can also confirm an offender's claims that he or she has been using the Internet to search for a job, obtain suitable housing or engage in some other productive activity.

The correctional component of the National Law Enforcement and Corrections Technology Center (NLECTC)-Rocky Mountain, now called the Corrections Technology Center of Excellence, developed Field Search with funding from NIJ's Office of Science and Technology. For more information, contact Joe Russo, assistant director of the Corrections Technology Center of Excellence, at Joe.Russo@nlectc-rm.org. To request a copy of the software, visit www.justnet.org/Pages/fieldsearch.aspx.

ENDNOTE

[1] FS-Windows version 3.0 works with Windows ME, 2000, XP and some editions of Windows 98SE. FS-Mac works with Mac OS X.

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