JARVISS

By Mr. Andrew M. Marshall

The Joint Analytic Real-Time Virtual Information-Sharing System (JARVISS) platform includes a comprehensive law enforcement (LE) capability that provides directorates of emergency services (DESs) and provost marshals with the ability to monitor and track ongoing incidents and the capability to quickly generate detailed crime statistics and maps. JARVISS offers a wide range of features, including analytical tools, off-post (civilian) crime information, civilian LE office locations and contact information, live traffic data, Comparative Statistic Report (CompStat)® reports, crime mapping, Army Law Enforcement Reporting and Tracking System (ALERTS) data, and heat mapping. It offers a quick and easy way to download reports for current cases and pull the raw data as a comma-separated values file to enable the user to further sort the data. JARVISS also offers geospatial mapping of incidents; these maps can be combined with other data sets, and filtering options can provide users with the tools they need to make informed decisions. The sensitive LE Portal in JARVISS includes on-post and off-post criminal activity reports sourced directly from civilian LE agencies. JARVISS is a critical tool for all DES and military LE personnel.

Daily calls to service for more than 12,000 off-post LE jurisdictions are recorded in JARVISS. The data includes types, descriptions, dates/times, and locations of offenses. LE report data from ALERTS is also integrated into JARVISS, and a connection to computer-aided dispatch is planned once the system is fielded. All data pulled into JARVISS from other systems is scrubbed to exclude personally identifiable information in order to prevent any legal objections. The data resides in a stand-alone JARVISS LE Portal that is restricted to approved ALERTS users who have been verified through the Army Criminal Investigation Division. The inclusion of this data allows LE personnel to use geospatial location information in the analysis of historical crime data and for the tracking of incidents in real-time. JARVISS LE Portal users can view geospatial installation and off-post crime data overlain on maps containing building footprints and other points of interest. The information can be displayed in several ways, including installation or patrol zone pin maps and hot-spot maps (Figure 1). The JARVISS LE Portal also allows users to automatically generate crime reports that display detailed information about specific offenses and crime data over a specified period of time. These functions within JARVISS have been designed to save time for military police users and standardize reporting across the Army. Tailored reports can also be generated in response to requests from the U.S. Army Office of the Provost Marshal General and DES personnel at the headquarters and installation levels.

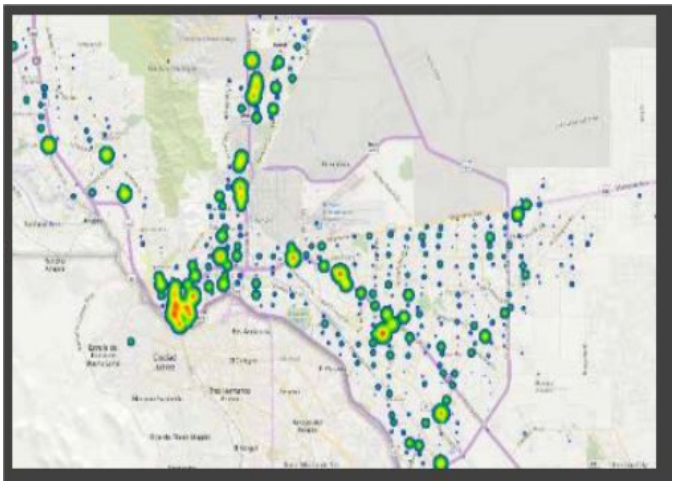

Figure 1: Hot-spot map of El Paso, Texas

"Reports" Tab

Under the "Reports" tab in JARVISS, LE users can access a preloaded on-post LE crime statistics report. This report incorporates unfiltered ALERTS data on all opened, closed, or ongoing cases within the selected timeframe. A new feature that allows users to download the raw data as a comma-separated value file was recently added to the system. The results of the report can be displayed in a detailed map (Figure 2).

"Workspace" Tab

The JARVISS "Workspace" tab provides users with a virtual battlespace from which to track on- and off-post crime.

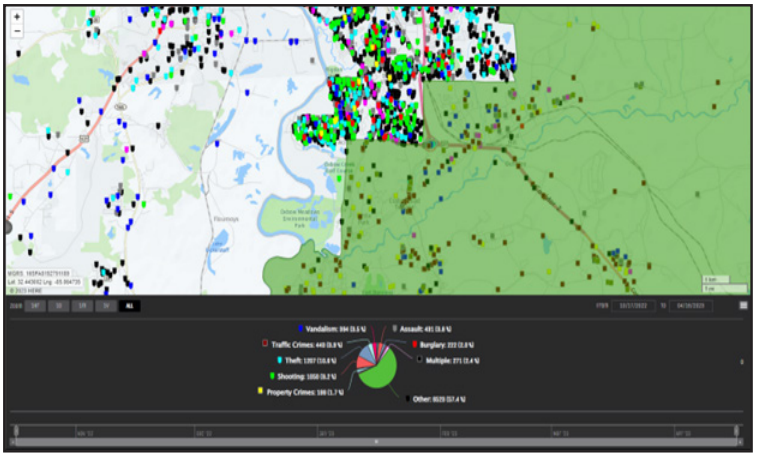

Figure 2: JARVISS LE Crime Statistics Report

The Workspace is designed to allow the user access to a complete, in-depth picture of the operating environment and the ability to pull reports on the data and share that information with other JARVISS users. Given the tools provided, the user can quickly convert data to a timeline or graph and subsequently identify trends. Users can then identify the top crimes on- and off-post and determine where these crimes are most prevalent. The results can be presented using a heat map (Figure 3).

All data contained in the Workspace can be used to generate a report by selecting "Show Reports." JARVISS provides a variety of export options to meet a wide range of user needs. Excel® files and comma-separated values are most commonly selected.

JARVISS geospatial tracking is ideal for use with the ever-changing operating environment, allowing DES and commanders to stay up to date on current crime trends and make well-informed, data-driven decisions.

Recent Partnerships

The JARVISS Team, Office of the Provost Marshal General, continuously pursues collaborative partnerships across the Army protection community. For example, JARVISS has been integrated into U.S. Army Military Police School (USAMPS) Fort Leonard Wood, Missouri, training, provided field service support to Army commands, and used to support to special-event security.

USAMPS

The JARVISS Team has closely collaborated with the Police Intelligence Operations Division at USAMPS. The focus of this partnership has been to integrate JARVISS into courses at USAMPS, especially those conducted by the Police Intelligence Operations Division. JARVISS has been regularly featured at the Crime and Criminal Intelligence Analyst Course and the Advanced Police Administration Course at USAMPS and the Law Enforcement Senior Leaders Forum at a location determined annually. This collaboration has driven system development, resulting in new JARVISS features. The JARVISS Team works with USAMPS to incorporate these enhancements. JARVISS was recently presented at the Protective Service Detail Training Course and the Antiterrorism Officer Basic Course at USAMPS; efforts are also being made to incorporate it into the course training plans.

IMCOM LE Division

The JARVISS Team also works closely with the U.S. Army Installation Management Command (IMCOM) to provide support to the field. The ability of JARVISS to quickly generate an on-post crime report is ideal for commanders, provost marshal offices, and DESs. Through continued coordination with IMCOM, a new CompStat report template that will be used to more easily identify top crimes and trends, build charts, and link to the Workspace is in development. In addition, information about JARVISS is now presented at the DES and Chief of Police Courses, Fort Sam Houston, Texas, and the JARVISS Team hosts monthly virtual meetings for IMCOM personnel to present

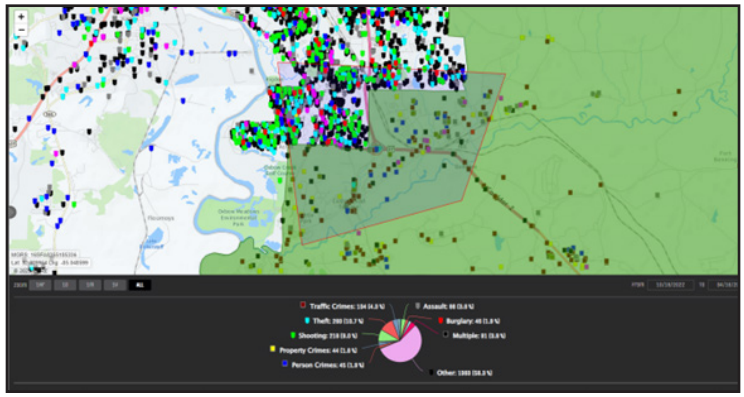

Figure 3: Workspace screenshot: Local crime and ALERTS layer with heat map.

new functionality requests and identify any issues and for the training team to assist users in getting the most out of the system.

127th Boston Marathon

The 211th Military Police Battalion, Massachusetts Army National Guard, used JARVISS for planning, coordination, and live-incident tracking for the 127th running of the Boston Marathon this year. Before race day, the JARVISS Workspace was used to identify the race route, areas of responsibility (AOR), and troop consolidation points (Figure 4). Commanders briefed with a live image, highlighting their AORs as they walked through the operation. On race day, JARVISS was used in the tactical operations center to track live incidents and troop movement, providing up-to-date situational awareness. As Soldiers occupied and vacated their AORs, the common operating picture was updated to display the current force on the ground, allowing for quick, easy briefings to very important visitors. Post-race day, the project was saved in JARVISS—and next year, it will be used to help leaders prepare for the 128th running of the Boston Marathon.

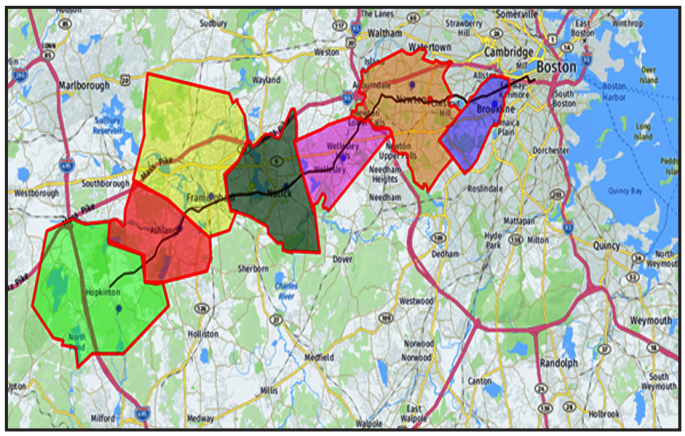

Figure 4: JARVISS Workspace screenshot: Boston Marathon project—AORs and race route

Mr. Marshall is an LE subject matter expert who supports JARVISS. He has more than 10 years of experience in the military police field. As a certified crime and criminal-intelligence analyst, he regularly teaches at Fort Leonard Wood.