Uniting for Progress

Post-9/11, common justice-related data standards let states use open source software to effectively collaborate across agencies.

By Noelle Knell / Assistant Web Editor

A multistate criminal justice group is using open source software to develop plug-and-play solutions for functions like incident reporting, searching criminal histories and single sign-on.

The newly formed Open Justice Broker Consortium (OJBC) — dedicated to collaborating on open source, justice-related information sharing — includes Hawaii, Maine and Vermont. The group is using a shared Apache platform and toolkit to develop open source solutions for common criminal justice functions that can be quickly deployed by public safety agencies.

The group’s effort is the latest in a post-9/11 push to shore up public safety communication and information sharing capabilities. The OJBC is an offshoot of SEARCH, The National Consortium for Justice Information and Statistics.

Standard-setting work funded by the U.S. Department of Justice, along with the maturation of service oriented architecture and identity management technologies has laid important groundwork for better collaboration among public safety agencies, according to SEARCH Executive Director Scott Caine.

Those efforts are sparking interest in open source solutions. “As those standards matured, we saw efforts around the country to implement them,” Caine said. “We saw a lot of commonality in what they were doing, and a lot of potential for reuse.”

Years in the Making

Hawaii is leading the way on the ambitious OJBC project, which is already yielding some impressive results.

The Hawaii Integrated Justice Information Sharing (HIJIS) project operates under the motto “Pupukahi i Holomua,” which translated into English means “unite in order to progress.” The project seeks to enable information sharing among numerous agencies at all levels of government in order to improve public safety and strengthen homeland security.

Led by the state Attorney General’s office, HIJIS recognizes that while the goals of agencies operating in juvenile justice, missing children, criminal prosecution and human services, for example, may be different, there’s actually quite a lot of overlap in the kind of information they use. Partners collaborating under the umbrella of HIJIS include state, local and federal law enforcement groups, military, health, corrections, courts, motor vehicles and more.

In order to stitch together data from these various entities, state officials
initially considered a proprietary software solution, explained Clay Sato, data processing systems manager of the Hawaii Criminal Justice Data Center. But the project’s scope quickly drove the price beyond the budget. A single sign-on system for only 250 users could easily cost $30,000 in software alone, Sato said.

SEARCH officials proposed working through the OJBC using an open source solution that incorporated open justice standards that were already catching on in Hawaii.

According to Sato, several agencies are currently working on data standards that will allow them to participate in the system. Officials expect to launch the query portal at the end of 2013’s first quarter.

Among the other projects in progress is a searchable, statewide portal for firearms registration. Authorized staff who seek firearm information will be able to use the system to get comprehensive information from the case management system. On the civil side, the state also hopes to implement an applicant-tracking system that would monitor applicants for government jobs, prompting a notification if an applicant is arrested. For this system, Hawaii hopes to take advantage of work done in Maine to share incident reporting data across agencies.

Liane Moriyama, a criminal justice administrator for Hawaii who serves as a SEARCH delegate, said the open source solutions being used are a key element to the quick pace of progress, and have become necessary because traditional methods of software development are hard to finance. “With funding from both federal and state coffers declining, we had to look for partnerships and the ability to use open source software,” Moriyama said. “We really had to change the way we traditionally thought of developing systems.”

Power in Numbers

SEARCH’s Came emphasized that progress on common open standards also has enabled the OJBC’s usage of open source tools. “There’s really not a whole lot of difference between incident reports from Hawaii to Maine to Vermont to Florida to Alaska,” he said. “Recognizing that, we can reuse those integration components even if a prosecution case management system vendor is different from state to state; there’s still a lot of reuse you can get there.”

While success stories about open source use in the public sector are becoming more common, governments continue to struggle with staffing given the complexity of technical capabilities needed to implement common standards and integrate these solutions into an organization’s IT environment.

Recruiting staff with these highly specialized skills can be a tough sell budget-wise too, Came said.

The shared services model utilized by the OJBC, where technical expertise and staffing is shared as needed, is a solution that’s making the option viable for the participating states. The cost for accessing the consortium’s resources is $85,000 in yearly dues, “currently comparable to typical annual maintenance fees for proprietary/commercial enterprise service bus platforms,” according to the OJBC’s website. Membership comes with the added benefit of components that conform to existing standards that govern sharing of criminal justice data — functionality not typically included in an open source solution.

The OJBC members, through a board of directors, set priorities for staff. At the same time, each member is free to work on projects of their choice. The idea is that if a member finishes a new information exchange component, that product is added back into the consortium’s open platform, where other members can further modify it for their own use.

Came expects 2013 to be a year of growth for the OJBC. Several other states have expressed interest in becoming part of the consortium.

“I just think it’s really important for state and local governments to look for opportunities like this to share services and capabilities,” Came said. “It’s the only way we’re going to be able to move forward and do the things that our citizens are expecting.”