

ICE's Cyber Crime Center Uses Case Management to Streamline Processes and Share Information

Using a unified case management solution, Immigrations and Customs Enforcement (ICE) can now collaborate with law enforcement officials throughout the country, contributing to the arrest of more than 5,400 child sex predators and the deportation of another 2,100 predators last year.

Using Oracle's CRM products, database and related portal development tools, ICE combats crimes committed online and electronically, providing a new avenue through which to pursue criminals, predators and child pornographers.

ICE is just one example of a federal organization striving to comply with regulatory mandates such as the Federal Enterprise Architecture (FEA), designed to promote government-wide performance improvements, the President's Management Agenda (PMA) and Electronic Government (E-Gov). Tight budgets, growing constituent expectations and stricter security requirements are forcing federal audiences to search for ways to deliver better, faster information access, along with streamlined, secure performance and the ability to measure the effectiveness of key operational processes.

As part of the government's ongoing effort to reduce costs and upgrade services through operational performance improvements, interagency taskforces have identified case management as key to improving both information-sharing and operational processes across the federal government. This is why the Office of Management and Budget (OMB) formed a Case Management Line of Business (LoB) initiative within PMA, to improve the effectiveness and efficiency of law enforcement, investigation, civil and criminal litigation case management processes.

Case Management LoB Goals

Using commercial off-the-shelf solutions and industry standards, case management enables information to be easily shared within and between agencies. The Case Management LoB has the following goals:

- Enable case management data to be shared within and across agencies.
- Improve effectiveness and efficiency of law enforcement, investigation, civil and criminal litigation case management processes.
- Identify common case management processes across components and agencies that will drive system and function consolidation.
- Address immediate and long-term case management needs and opportunities within federal agencies.
- Provide guidance for future case management investments across the federal government.
- Deliver insights on case trends for better planning and resource utilization.

Government organizations that process cases collect a tremendous amount of information over the lifespan of each case – all of which needs to be organized and made accessible. Inefficiency can cost any organization valuable time and money, but when it comes to locating missing children for example, time is of paramount importance.

ICE: A Case Study

This is why ICE's Cyber Crime Center (C3) is focused on providing online access to case information for members of law enforcement entities and other federal agencies and departments across the nation.

Created in March 2003, ICE is the largest investigative branch of the Department of Homeland Security (DHS). The agency was created after September 11, 2001, by combining the law enforcement arms of the former Immigration and Naturalization Service (INS) and the former U.S. Customs Service, to more effectively enforce immigration and customs laws and to protect the United States against terrorist attacks.

Before 9/11, immigration and customs authorities were not widely recognized as an effective counterterrorism tool. ICE changed this by

creating a host of new systems to better address national security threats and to detect potential terrorist activities. ICE targets the people, money and materials that support terrorist and criminal activity.

ICE's C3 is using Oracle applications and architecture to make operations more efficient and effective. Pamela Martinez is systems architect for C3. She came to the Center when it was still part of another agency in 1999. At that time, disparate systems were a prevalent problem, wreaking havoc

A case – all of the processes, resources, business rules, tasks and analysis as well as the details and evidence that must be captured and managed during a case, inquiry, event or investigative management process.

for investigators who wanted to see and do more with information either on paper or in any of its several disjointed systems.

Now, using Oracle's Case Management solution and Oracle Portal, ICE's C3 enables online access to information to help its agents combat child pornography, money laundering and trafficking of arms, drugs and stolen art as well as intellectual property rights violations.

C3 investigates domestic and international criminal activities occurring on or facilitated by the Internet. Federal agents working on those cases previously had to print summons and walk through the ICE offices to find a supervisor to sign the document. If supervisors weren't in the office at that time, the agent had to wait – creating delays. Now agents can log into the C3 portal, create a case, enter information about suspected targets and develop each case. As the case is worked and evidence collected it's included in the case file. By managing cases online, agents can create a summons and send notifications to supervisors, who can digitally sign a summons, then attach the approved summons to the case file. "This is a huge time saver," said Martinez.

Equally important is the ability to collaborate with external organizations. The nightly importation of tips from the National Center for Missing and Exploited Children (NCMEC) enables C3 to proactively investigate leads, rather than waiting for agents to check with NCMEC by phone or email. Now tips are delivered every night, along with images and evidence, which provides another time saving advantage as well. "As we have learned, hours saved can be significant in terms of a child's safety," said Danita Moore, an Oracle consultant working with ICE on the case management implementation.

An Evolving Implementation

Whether working with 10,000 or a million records, the database required by C3 had to be flexible enough to accommodate large quantities of information. The Center needed not just robust applications, "but a database that was secure and would leverage reusable code to meet our operational requirements," said Martinez.

Also, because of its dealings with crime victims, the Center required systems featuring high levels of security so information is protected. There may, for example, be cases in which a piece of information isn't right for all eyes. "We needed a solution to help us separate that data and provide it to users based on their authorization and need to know," she explained.

The Center needed a solution that would function for five or more years, incorporated industry standard technologies and NIST-compliant security. C3 also wanted reusable components and interoperability built into the system. "When we prioritized our needs, security topped the list due to the extreme sensitivity of our case content. Meanwhile, the ability to share information via open standards such as XML was a second priority, and driving workflow processes to create artifacts became third most important," she explained. When it came time to choose, C3 found Oracle's commitment to security industry standards and certification levels (out the box) was unparalleled.

In 2001, C3 picked Oracle as its database supplier. Oracle's case management and knowledge management capabilities were added to the mix in 2003. "We knew Oracle's CRM offering was a 'forms-based application,' and the Center wanted to use HTML. Oracle's plan was to

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migrate to HTML. So we chose Oracle's standards-based technology to follow that roadmap," Martinez added.

Today, C3's front end is built on Oracle Portal, which is used to create cases, generate reports and perform summons. Oracle Portal also incorporates access to other databases, applications and legacy systems which enables users log on and fill out forms to complete each step in an investigation. Via the application now called eCrimes, Martinez maintains the C3 has created an enterprise architecture that enables users to gain access to primary applications, including eCrimes, the National Child Victim Identification System (NCVIS) and a computer forensic unit web application. There are about 35 agents and managers currently using the system, with plans for another 30 to 60 caseworkers to access the system in the future.

In all, through the use of Oracle's case management solution, C3 is able to achieve greater insight into daily operations. The case management system has empowered the agency to map its processes, providing critical tools to help automate some processes such as "employee on-boarding." Also, through information captured via Oracle's Case Management solution, officials can analyze case trends, case loads and report to Congress and GAO about how agency resources are driving results. "We must be able to show what we do. The General Accounting Office needs reports. Congress is investigating something. Using this platform we can provide the information needed, based on what's housed in our database," Martinez explained.

Most significant, however, is the system's ability to share and retrieve information that cuts across processes. Importing tips from NCMEC is a giant step forward in automation of a key investigative process. Previously, collecting tips from this organization created much duplication of effort, and it was difficult to tell whether information reached the right personnel. Now instead of going to two or more systems to collect viable tips, agents can log onto the portal. Both ICE and NCMEC can gather leads, receive calls, exchange emails and share information with FBI and other officials to quickly track down leads.

By using Oracle's solution, agency managers work more efficiently, rather than depending on piles of file folders sitting on desktops. Using the Oracle case management solution, caseworkers and supervisors now have a clear view of case information. Because cases tend to evolve, not progress in a step-by-step serial fashion, having a centralized repository enables users to gain a better view of the open cases. That way users can see what responses are due back by specific dates, so they can work other tips/angles, or other cases while information is being collected. "Instead of working as we once did, with stovepipe systems and procedures, figuring things out as we went along, we have created a community of knowledge that our agents can draw from," said Martinez.

By sharing information, C3 has become more effective, reduced stepping on the toes of other investigators or going down a path already traveled. From a tip sorting perspective, Martinez said migrating to a single source of information is critically important. "We can now share, deploy, integrate and secure information," she explained.

The application environment has created enterprise-wide application integration, Martinez explained. Using single sign on, the portal enables users to access the eCrimes database, create a case, search cases and gain access to other applications – providing a single source for all information. C3 can also report on operations, measuring performance by group, task, or activity.

Ultimately, the quality of data and visibility into what's going on in the Center has dramatically

Key Case Management Benefits

The advantages to implementing COTS-based case management automation include:

- Frees case officers, case managers, and auditors from managing paper forms, files and folders;
- Customizable portals give users access to the complete range of information for any case;
- Automated processes control access and automate email notifications;
- Built in file management system eliminates redundant file servers and helps manage evidence;
- Multiple, integrated points of entry let users access the same information via the Web, phone, email, or face-to-face;
- Integrated work management, notification and escalation engine supporting user-defined business rules provides increased efficiency;
- Integrated data quality management improves efficiency when searching records, screening and tracking candidates;
- Integrated knowledge management system helps case officials to assess infractions and determine appropriate investigative and enforcement actions.

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improved. Going from pad and pencil, or a small database, to producing detailed reports, sharing information and collaborating with other agencies and law enforcement entities is a giant step forward. C3 now touches postal, and state and local law enforcement via the Law Enforcement Support Center (LESC). Police send electronic queries to the LESL through a national telecommunications system and generally receive a response within 10 minutes. “We can share information with state and local agencies or the FBI,” Martinez added, adhering to the PMA’s Case Management LoB initiative and other key federal mandates, using industry standard XML technology to securely share information.

Oracle’s Advantages

Many federal agencies tasked with investigation or enforcement are still relying at least in part on systems built in the 1970’s and 1980’s. With inadequate, conflicting or inaccurate information, these agencies must somehow screen, track and investigate candidates who appear to be acting in contravention of the law. Oracle’s Case Management solutions offer a comprehensive, integrated, web-enabled set of applications that manage and automate all aspects of case management, freeing agents, managers and other administrators from focusing on document management, so they can focus on efficient, productive case resolution.

Oracle’s offerings are commercial-off-the-shelf (COTS) solutions built using the secure Oracle database and advanced data architecture Oracle Applications. Investigative and enforcement agencies can now manage cases with confidence and share information using portal and other web-based links. The need for COTS-based interoperability and integration of current production systems, along with a desire to implement service-oriented architectures (SOA) to bring web-based services to federal agencies, and adhere with federal mandates such as FEA and PMA’s LoB initiative is driving case management to the forefront, said Mark Johnson, senior vice president, Oracle Public Sector.

“In agencies dealing with healthcare, justice, homeland security, enforcement and incident response, the need for automation continues to grow,” Johnson explained. Since 1977, more than 2,000 governments at all levels have turned to Oracle for help in improving decision-making and accountability, enhancing constituent services, gaining control over expenses and complying with a myriad of federal mandates. Via the recent acquisition of Siebel Systems, for example, Oracle has gained more of the federal expertise needed to help agencies improve case management via COTS-based solutions. “For many agencies today, the goal is to make the systems currently in place talk to each other more seamlessly. SOA will help agencies achieve this goal,” said Johnson.

Oracle’s technologies, expertise and years of experience in the federal arena has positioned the software giant as a leader – assisting federal agencies in automating case management. “In the next few years, we will help those federal agencies and departments to automate, modernize and optimize performance by incorporating SOA to fulfill their critical mission goals,” Johnson explained.

Even if data resides in legacy systems that serve only one function or a single department, Oracle solutions can assist agencies to collect, transform and analyze that data, providing the critical information agencies and their constituents demand.

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