ZIROUS CASE STUDY

Advancing Criminal History Management:

Zirous Modernizes the State of Iowa's Computerized Criminal History System

ZIROUS STATE AGENCY

OVERVIEW

Discover how Zirous modernized Iowa's Computerized Criminal History (CCH) system using Oracle technologies, streamlining workflows, enhancing data dissemination, and improving criminal history management for the Department of Public Safety.

STATE AGENCY INFO

The Department of Public Safety (DPS) is a longstanding state agency in Iowa, established to ensure public safety and enforce the law. Headquartered in Des Moines, DPS comprises various divisions and units, including the Division of Criminal Investigation (DCI), which is tasked with managing criminal records and processing criminal history requests. The Computerized Criminal History (CCH) System is Iowa's primary digital platform for recording and managing criminal history information. This system supports the DPS's mission by providing comprehensive and reliable criminal history data, thereby enhancing public safety and justice across Iowa.

OVERVIEW

The Computerized Criminal History System (CCH) is a vital component of Iowa's criminal justice infrastructure, serving as the state's primary system for recording and managing criminal history information. It is designed to accommodate requests from a wide range of users, including public and private entities as well as individual citizens, ensuring broad access to crucial criminal history data. The CCH system is instrumental for the Division of Criminal Investigation (DCI), enabling the organization to maintain current and accurate records while efficiently processing rap sheet requests.

The system integrates with various local and federal agencies and units. It automatically receives and updates sentencing information through its connection with the unified court system and works with the state's multiple biometric identification system (MBIS) for fingerprinting information. Additionally, the system integrates with the FBI, Iowa's Department of Management, the State's Criminalistics Laboratory, the Department of Transportation, and more. The accuracy and efficiency of the CCH system, bolstered by its extensive integration with local and federal agencies, are essential for effectively supporting public safety and justice across Iowa.

THE CHALLENGE

The Department of Public Safety (DPS) faced critical challenges with their outdated 25-year-old system, which relied on deprecated software that could cause maintenance concerns. Their system was plagued by inefficiencies, including the need to navigate multiple screens to update a single field, lack of permission levels, no change tracking for subject records, and the absence of automatic reporting capabilities. Data was manually tracked in spreadsheets, and subject record redaction was done manually on paper outside of the system. To address these issues, Zirous implemented a fully customized solution, leveraging Agile project management to create a streamlined and effective system that would enhance user experience and ensure compliance with state and federal regulations.

THE SOLUTION

To address the complex challenges faced by the Department of Public Safety (DPS), Zirous implemented several solutions. One major improvement was the development of "Work Queues" for the Records Modification, Dissemination, and Fingerprinting teams.

TECHNOLOGIES INVOLVED

Oracle Database: The backbone of the system, enabling secure, scalable, and efficient data storage and management of criminal history records.

Oracle APEX (Application Express): Used for building the web interface, allowing users to interact with criminal history data through a streamlined, customizable interface.

Oracle Rest Data Services (ORDS): Facilitates communication between the criminal history system and various state and federal agencies, integrating multiple services for a seamless flow of data.

HIGHLIGHTS

Enhanced Workflow Automation: The introduction of "Work Queues" for different teams, like Records Modification and Fingerprinting, has streamlined task management, making it easier for staff to update over 3.5 million criminal records. The system allows for note-taking, history tracking, and efficient work assignment, improving both speed and accuracy in processing records.

Modernized Data Dissemination: Zirous implemented electronic redaction and automated processes that significantly speed up the delivery of rap sheets for non-criminal justice purposes. This new system cuts down the processing time by at least three days, eliminating cumbersome manual tasks and improving service delivery for the Division of Criminal Investigation.

Seamless Court System Integration: The CCH system is integrated with Iowa's unified court system, allowing for electronic receipt of disposition records and an impressive 95% arrest cycle completion rate. Automated workflows now apply dispositions, while more complex cases are routed to prioritized work queues, ensuring up-to-date and accurate criminal history records.

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Work Queues

With over 3.5 million criminal fingerprint records in the CCH database for the Records Modification team to maintain, Zirous created "Work Queues" for the Records Modification, Dissemination, and Fingerprinting teams, allowing them to check out work assignment records to help divide out their daily tasks of keeping criminal history records up to date. Within work queues, users can add notes, be linked directly to the subject record they're working on in a different screen, track past assignment history, and more.

Disseminating Rap Sheets

One significant challenge CCH was facing was the efficient dissemination of rap sheets for noncriminal justice purposes. The previous system made this process cumbersome and time-consuming using multiple systems and paper to accomplish the requests and research. To address this, Zirous implemented a solution that modernized, streamlined, and accelerated the process. The new system now supports electronic redaction, allowing users to review records electronically prior to dissemination. It consolidates all daily records for printing and mailing, generates necessary labels, and processes results electronically when applicable. For certain results that are able to be sent directly to an application for dissemination (rather than mailing), the system enhances the final customer information to be delivered at least three days faster than before, significantly improving both efficiency and service speed.

Integration with the Courts

Zirous continued the integration with Iowa's unified court system for CCH to receive disposition records electronically and enhanced the manual review process. This integration ensures that Iowa's criminal history records are updated promptly, achieving a 95% completion rate for arrest cycles with final dispositions. Leveraging state code and business logic, the system automatically applies dispositions when possible, while those that require manual review are routed to an electronic work queue for prioritization and application by the team. Once a record is in the work queue, the team can easily digest the data and make updates to subject records.

THE IMPACT

The new system has greatly advanced the capabilities of the Division of Criminal Investigation in Iowa, providing a host of improvements that enhance both efficiency and accuracy. Designed with a robust architecture, the system allows for future updates with minimal downtime, accommodating user preferences and changes in state code without disrupting operations.

The custom system features improved user access controls, tracking of record modifications, and versatile reporting capabilities with real-time data. The reporting and analytics capabilities are not only to track and maintain records, but to be proactive in outreach with stakeholders in identifying discrepancies/issues in subject records. The system includes dashboards for various time frames, year-to-year county audit data, and an internal notification mechanism to streamline communication between team members. Work queues and automated emails further enhance task management, while the system interfaces with arresting agencies for timely updates and generates customized rap sheets. Compliance with WCAG 2.2 ensures accessibility, making the system a comprehensive tool for delivering accurate and timely criminal history information efficiently. The new CCH system offers a transformative upgrade in managing criminal history data, providing unmatched customization, efficiency, precision, and accessibility, which strengthens overall support for public safety and justice.