Justice Information Sharing and the Courts: Courts Implementing the GJXDM
Nick Melnick, Administrative Office of the Pennsylvania Courts
Robert Rolls, Arizona Supreme Court
Joe Regis and Salley Coffelt, Lake County, IL
John Doktor and Larry Bernosky, Maricopa County, AZ
Shara Bunis, National Center for State Courts (Moderator)

Overview

Courts planning for justice information sharing have a heavy burden in terms of sending and receiving information as they are involved in the a large portion of the information exchanges in the justice community. And as the courts move into sharing information electronically with other agencies methods and policy must be developed to insure that they can do so in a reliable and cost effective way.

Sharing information reliably and efficiently requires the use of standards to ensure that parties at either end can consume and understand the information sent. The standard format for sharing information with other agencies electronically has become XML. XML is readily readable by both humans and computers. Additionally, several mechanisms exist to constrain XML documents to certain types of data. The Global JXDM is an XML standard designed specifically for criminal justice information exchanges, providing law enforcement, public safety agencies, prosecutors, public defenders, and the judicial branch with a tool to effectively share data and information in a timely manner.

So what are courts doing to implement and take advantage of the GJXDM standard for exchanging or sharing data and information? This session highlights four courts, Administrative Office of Pennsylvania Courts, Arizona Supreme Court, Lake County, IL, and Maricopa County, AZ, that have been working to implement XML based information exchanges that are GJXDM compliant. You
will learn not only what these courts are doing but also how they are doing it, the lessons learned along the way, and the expected efficiencies or return on investment that is expected once full implementation is accomplished.

Administrative Office of Pennsylvania Courts: Court Case Event

Court Automation Overview

The Administrative Office of Pennsylvania Courts (AOPC) has been providing access to court information in an electronic manner since 1993. The statewide Magisterial District Justice System (MDJS) links Pennsylvania’s Minor Judiciary providing the ability to consolidate information electronically and provide data to end users. Requests for information are received from a variety of state agencies, County Courts of Common Pleas, other county row offices, and local municipalities, to name a few. The AOPC is currently deploying a statewide, Common Pleas Criminal Case Management System (CPCMS) at the county level. This application provides all judicial districts with a uniform criminal court case management system that can access case information from the MDJS for summary appeal and criminal case processing and provides information to the statewide appellate court case management system, PACMS. When CPCMS is fully implemented, Pennsylvania will have a statewide integrated criminal court case processing system.

Message History

The JNET infrastructure was deployed to state criminal justice agencies in 1997. This implementation consisted of a hub and spoke messaging-based system using available tools such as Java Messaging Service, MQ Series and custom
database connectors to deploy a guaranteed message delivery system. Several initial XMLs and DTDs were developed which included fingerprint information from LiveScan devices and Court Disposition information (LivePost) from available court resources. Several resources developed the original messages and standards were not enforced, leading to disparate tag references, data formats and other anomalies. Efforts to reverse engineer a metadata repository and enforce specific standards to better manage conflict had limited success. After learning about the Global effort and participating in a variety of meetings and workshops over the last 3 years, JNET and partner agencies agreed to use the guideline as the standard for message development. The Court Case Event message is a refinement of the process needed to create a message that provides for multiple uses and multiple deployments.

**Court Case Event**

The Court Case Event message is a joint deployment of MDJS and CPCMS case information. The message structure is specifically designed to be reusable across both platforms and to make a common data interface, via a single schema, available to other criminal justice entities through the Pennsylvania Justice Network (JNET). JNET based messages are scrutinized for GJXDM compliance. A team of JNET and agency personnel is working on specific message development standards to insure consistency across the network. Through experience and review of existing documents and exchange mechanisms, developers created a schema set that can satisfy data requirements across a broad array of agency requirements. The current message targets four specific events: case initiation, filing of Bills of Information, warrant and disposition/sentencing. With our partners JNET and the
Pennsylvania State Police, AOPC is working toward a solution that will allow warrant information to be collected and entered into the state’s warrant repository, and eventually NCIC. In addition, the state police will use the disposition/sentencing event message to apply relevant data to the new state criminal history and mobile records management systems. JNET anticipates using the event message to enhance notification systems that provide time sensitive information to police, probation and sheriff units statewide.

**Arizona Supreme Court: JUSTIS Integration and GJXDM**

The Arizona Supreme Court has created JUSTIS (Judicial Statewide Information Services) which has been in production and evolving for over 5 years. The JUSTIS foundation includes a statewide data warehouse, subject area data marts, and messaging with IBM MQ Series. Recently, the GJXDM model has begun to play a larger role in the paths of integration that JUSTIS has been involved with. The solid foundation was created with JUSTIS, and now GJXDM implementation is building upon that foundation.

JUSTIS deals with many forms of transactions that are received / sent from many different data sources. Some of the data sources include court case information (Criminal, Civil, and Protection Orders), court financial information, and Adult / Juvenile Probation data. JUSTIS not only deals with the Arizona Courts, it deals with external agencies such as Arizona Department of Public Safety (DPS), Arizona Motor Vehicle Division (MVD), and other external entities.
Overall, there have been triumphs and the tragedies that were met and overcome. With all the different types of transactions, there were many challenges that had to be addressed, for example, the format of transactions. Many transactions required analysis and research to determine the best solution for integration. These transactions brought with them a unique set of opportunities and issues that were new to the existing processes.

**Lake County, IL: Electronic Traffic Citation Proof of Concept Project**

With the ultimate goal of increasing public safety, Lake County is committed to improving its operations. It intends to use integrated technologies to advance the County’s information management and sharing process. This requires an overhaul of the current business practices.

Today, data is re-entered into multiple information systems as it moves from agency to agency increasing the likelihood of errors and requiring duplication of efforts. Additionally, the current manual business practices cause delays in information transmittal, access to information, and court scheduling.

The Lake County Integrated Justice Executive Committee, consisting of the Chief Judge, the State’s Attorney, the Circuit Clerk, the Sheriff, the Court Administrator, the Public Defender, and the CIO, has approved an architectural roadmap for justice integration. This roadmap has identified immediate, short-term and long-term efforts that will ultimately result in total integration. The electronic traffic citation project is a short-term effort with a potentially high return on investment.
In early 2005, the Clerk of the Circuit Court and the Waukegan Police Department agreed to participate in an electronic traffic citation proof of concept project. The primary goal of this project was to electronically transmit GJXDM compliant traffic citation data from Waukegan PD’s Records Management System, to create a court case, and to return the court case number to Waukegan PD. Due to process complexity, the project scope was limited to traffic and ordinance violation case types.

Towards this end, high-level requirements have been defined. The traffic citation schema has been developed, the test environments have been established, the business and technical issues are being addressed and resolved, and the web services are being developed to transmit and return citation data. The Clerk of the Circuit Court plans to expand this project to include other traffic case types as well as other police agencies.

The Lake County Integrated Justice Executive Committee is establishing a service-oriented environment that supports web services as the backbone for integrated justice. It is the Committee’s expectation that this environment will facilitate the exchange of information between the local law enforcement and the County justice agencies. The subject matter experts from eight police agencies, the Sheriff’s Office, the State’s Attorney’s Office, the Circuit Clerk’s Office, the Public Defender’s Office, and the Courts have spent 4,000 staff hours over a period of 18 months documenting justice exchanges. Approximately 450 adult criminal exchanges and 165 juvenile delinquency exchanges have been documented. It is the intention of the Lake County Integrated Justice Executive
Committee to implement these documented exchanges within the next several years.

Maricopa County, AZ: GJXDM Implementation Projects

GJXDM Implementation Strategy
The Global Justice XML Data Model (GJXDM) has been incorporated as a fundamental component in the building of data exchanges by the Integrated Criminal Justice Information Systems (ICJIS) and other Maricopa County Justice and Law Enforcement Agencies. The following reflects key objectives.

- Implementing data exchanges with XML and schemas which are in compliance with GJXDM without impact to deliverable schedules.
- Building XML schemas which reflect a balance of conformity with the GJXDM, efficiency and reusability.
- Providing leadership to promote the use of the GJXDM as the means for sharing information among justice agencies both inside and outside of Maricopa County.
- Maximizing the use of open source tools for building and using XML schemas and transactions.
- Evolving to a GJXDM/JXDD compatible data dictionary.
- Reducing enterprise costs to modify information exchanges through common GJXDM transformations.

Criminal Case Filing
This information exchange originates from the Maricopa County Attorney’s Office and includes the necessary fields for the Clerk of the Superior Court and Criminal Court Administration to initiate the case in Court’s case management system. After the case is filed with the Clerk of the Superior Court, the appropriate data is passed on to other agencies and notification of filing is returned to the County Attorney’s Office. The charging document and related packet are added to the information exchange from the County Attorney. The documents are then electronically reviewed by the judicial officer, then in one step filed in, docketed and added to the Clerk of the Court’s electronic document management system (EDMS). The document or the link to the document in EDMS (follow-on project) will then be sent to agencies receiving the data feed if desired.

**Criminal History Worksheet**

This project is being implemented to replace the fragmented and complex processes for querying criminal history records, receiving responses and presenting the judicial officer accurate criminal history on a defendant. The first of two components of this project is the Justice Web Interface (JWI) that provides the direct link for retrieving criminal history from the state criminal history repository and all other federal sources of criminal information on a defendant. Upon the receipt of the user inquiry they could elect to add the response information into a formatted worksheet (Adobe). With the consensus of the criminal bench the worksheet was divided into sections: Pending Matters, Felony Convictions, Misdemeanors Convictions and Arrested Disposition Unknown. The courts were interested in having the predefined sections and having the current information of charges and or cases pending; this was a benefit to the Initial Appearance Commissioner who was responsible for release decisions. The
overall benefit for the courts was that within a brief period of time the judge would have available to them an accurate, readable and understandable Criminal History Worksheet on the defendant before the court.