
Information Technology Interoperability Standardization for Justice/Public Safety/Homeland Security

Outputs

- Support to Global Justice Information Sharing Initiative.
- Administration of Justice Standards Clearinghouse on-line.
- XML Data Model and Data Dictionary development.

ITS is conducting a technical program aimed at facilitating effective interoperability and information sharing among dissimilar information systems within the justice/public safety/homeland security community. The primary focal points of the program are: (1) the identification and delineation of applicable information sharing architectures, (2) coordination between major Federal players and local and State public safety practitioners to collegially develop a nationwide strategic plan for information sharing, and (3) the identification and/or development of standards that address the community's requirements and are in conjunction with the strategic plan. All efforts are aimed at allowing local, State, and Federal agencies to exchange information, without requiring substantial changes to internal systems or procedures.

The ITS program is sponsored by a number of different Federal departments and programs that have a keen interest in public safety interoperability, including: National Institute of Standards and Technology (NIST) Office of Law Enforcement Standards (OLEs), National Institute of Justice (NIJ) AGILE Program, and the Department of Justice Office of Community Oriented Policing Service (COPS).

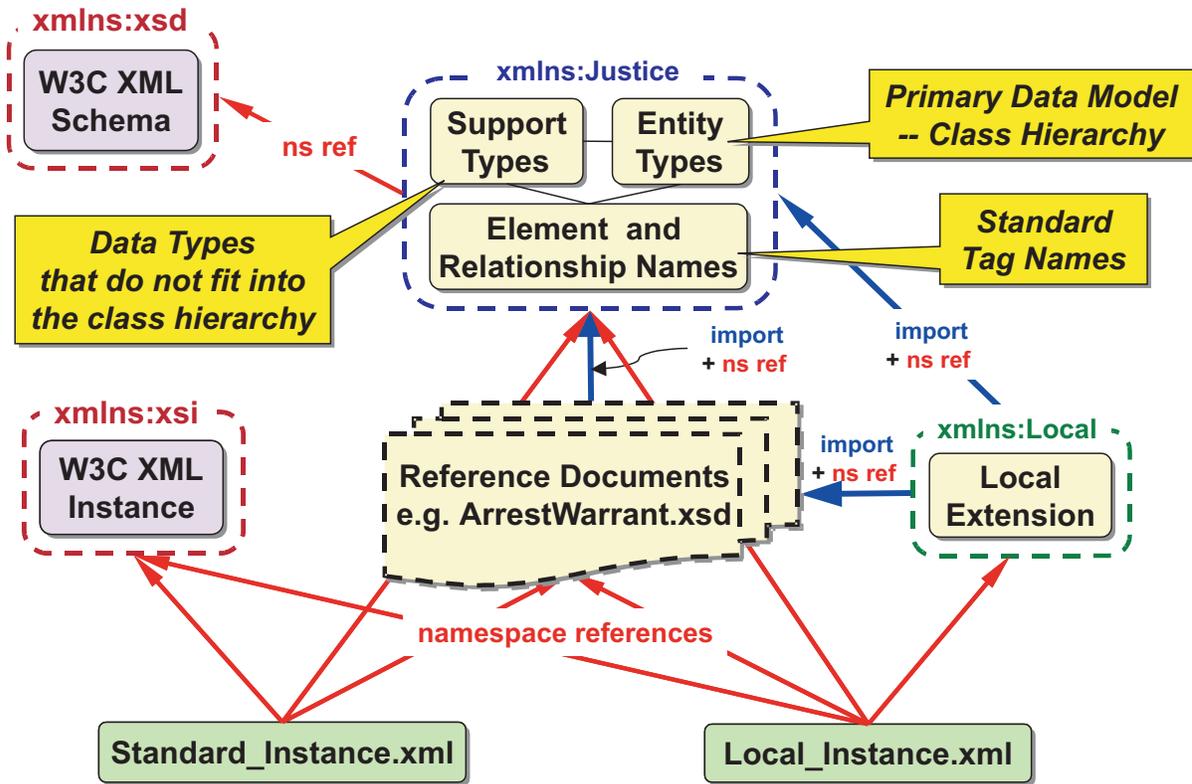
Support to Global Justice Information Sharing Initiative

The Global Justice Information Sharing Initiative (Global) is a group of groups representing all practitioners in the justice community (e.g., law enforcement, courts, corrections, prosecutors, defenders, etc.; see <http://it.ojp.gov/global/index.html>). In particular, ITS worked with Global's Infrastructure/Standards Working Group (GI/SWG) on a wide variety of tasks. The most significant of those is the background work needed to develop a nationwide architecture for information sharing among the justice and public safety communities. Significant progress has been made on the architectural framework and related strategic plan. The GI/SWG is currently in an iterative process to ensure that the elements of the framework can accommodate current and future information sharing requirements of the practitioners at the local, State, Federal, and tribal levels.

Administration of the Justice Standards Clearinghouse On-Line

Also in conjunction with Global, ITS designed and tested the prototype web page and search engine for the Justice Standards Clearinghouse (JSC), a repository of IT and communication standards and specifications. The JSC is designed to assist public safety agencies in sharing information and communicating productively through increased awareness and accessibility of standards. This has been achieved by making the technical specifications and standards — as well as user comments regarding those standards — available to the practitioners via an online standards clearinghouse. The clearinghouse is hosted on the Office of Justice Programs (OJP) Website at <http://it.ojp.gov/jsr/public/index.jsp>.

Currently there are more than 70 standards and specifications available for public access in the clearinghouse, and ITS is playing an ongoing role in the addition of new standards through administration of the site and validation of the data that is entered there.



Structure of the justice/public safety/homeland security XML Data Model.

XML Data Model and Data Element Dictionary Development

In prior years, ITS had played a significant role in providing technical assistance and coordination in the initial development of an XML Data Element Dictionary that can provide common “words” for a common “language” to be used by the justice/public safety/homeland security community. In FY 2003, the XML development work skyrocketed, with an order of magnitude increase in the size of the Data Element Dictionary and the development of an associated Data Model.

The development of an XML Data Model is a significant step forward in achieving information sharing among members of the justice and public safety community. It provides a foundation for the structure of a consistent Data Element Dictionary, documents to be exchanged, and messages to be passed. The figure above shows the structure of the justice/public safety/homeland security XML Data Model. The core of the Data Model is the XML Data Element

Dictionary and the corresponding “Justice” namespace. Users and developers use the “words” of the Data Dictionary to build documents that represent a particular information exchange. Based on their requirements, they can import the words by reference and can extend or restrict the definitions.

The significantly-expanded Data Dictionary contains over 2000 elements and is expected to meet over 90% of the information sharing requirements of the justice/public safety/homeland security community. A beta version of the dictionary is currently available for public comment at <http://it.ojp.gov/jxdd>.

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