

NATIONAL INFORMATION EXCHANGE MODEL (NIEM)

Vermont Judiciary VCase Courts Management System

Synopsis

The Vermont Judiciary operates with a case management system that is almost 20 years old, and the baseline code has been copied into each county over the years. The Judiciary has a project under way to purchase and convert to a modern, centralized, Web-based case management, document management, and e-filing system to support all courts in the Judiciary. The RFP for the new system, called VCase, was posted in June 2008, with the objective of starting work on the new system in mid-2009. The RFP requires that all exchanges in VCase will be NIEM-compliant. In addition to working with the National Center for State Courts (NCSC) on standards for the RFP, the VCase project team has started to get up to speed with NIEM training, as well as doing a second Justice Information Exchange Model (JIEM) analysis.

Agency Overview

The Vermont court system consists of seven state courts: the Supreme Court, the Superior Court, the District Court, the Family Court, the Probate Court, the Environmental Court, and the Vermont Judicial Bureau.

The state of Vermont Judiciary's current case management systems are all based on the original text-based Vermont Automated Docketing System (VTADS). VTADS was built originally by Relational Semantics in the 1980s and has been maintained and enhanced by the Judiciary's Research and Information Services Division (RIS) since 1990. VTADS has worked well, but its decentralized configuration and non-normalized data structure do not allow for viewing data on a statewide basis, do not easily provide court statistics and management reports, and do not meet data requests from other state agencies.

The Judiciary has a very small information technology (IT) staff of only seven programmers and network personnel who support approximately 350 Judiciary system users statewide.

Executive Summary

Challenge

Vermont Judiciary has a dated court case management system with a wide variety of business practices throughout the state. The Judiciary has a project under way to purchase and convert to a modern, centralized, statewide, Web-based case management, document management, and e-filing system to support all courts in the Judiciary. The RFP for the new system, called VCase, was posted in June 2008, with the objective of starting work on the new system in mid-2009. The RFP requires that all exchanges in VCase will be National Information Exchange Model (NIEM)-compliant.

Solution

Vermont Judiciary is currently procuring a case management system and is working to develop a common business model throughout the state. A series of meetings and education and training programs assisted stakeholders in understanding the value and benefits of information sharing standards, including NIEM.

Results

Exchange modeling has been a significant first step in moving the state toward common business practices. Over the next three years, the Vermont Judiciary is hoping to go from a court case management system that does no XML to one in which all exchanges are NIEM-compliant. In addition, the Judiciary intends to work with other justice departments in Vermont as they also upgrade their systems to exchange data in NIEM-compliant format.

Challenge

The Vermont Judiciary operates with a case management system that is almost 20 years old, and the system has been copied into each county over the years. The Judiciary has a project under way to purchase and convert to a modern, centralized, statewide, Web-based case management, document management, and e-filing system to support all courts in the Judiciary. The RFP for the new system, called VCase, was posted in June 2008, with the objective of starting work on the new system in mid-2009. The RFP requires that all exchanges in VCase be National Information Exchange Model (NIEM)-compliant.

As part of the RFP effort, the Judiciary has worked closely with the National Center for State Courts (NCSC) to help define the objectives of the project. One important objective is that the new system follow national standards. In particular, the Judiciary believes it is important to follow the NIEM standard for all exchanges.

However, at the start of this process in 2007, the Judiciary staff had little experience with Global Justice XML Data Model (GJXDM), Justice Information Exchange Model (JIEM), NIEM, or even eXtensible Markup Language (XML). Upper management assumed that building NIEM-compliant interfaces was as simple as just reworking the current flat-file interfaces with a simple new language. Little was known about the JIEM process or tool; in fact, it was assumed that the JIEM tool generated NIEM-compliant XML.

Solution

Beginning in 2007, the Judiciary began an education effort via several channels. In the spring of 2007, the Judiciary participated in the state's first JIEM Analysis. A contractor was hired to develop five Information Exchange Package Documentations (IEPDs) for high-priority exchanges between the state's Department of Public Safety, the State's Attorneys, and the Judiciary's criminal and traffic courts. Since the court staff was only a participant, the IT project management staff received limited exposure to the JIEM process and, as such, did not really understand the tools or the output.

The opportunity for more training came in the spring of 2008. The state's second JIEM Analysis project was conducted with Court Improvement Funds, and this time the project was managed by the Judiciary IT staff. Learning from the previous JIEM Analysis experience, the staff decided that not only would



the next Juvenile JIEM Analysis project focus on the analysis, but the Judiciary would also incorporate JIEM/NIEM/XML training so the team could better understand the deliverables and the work behind JIEM and developing an IEPD. With training timed to coincide with the first weeks of the JIEM Analysis project, all of the Judiciary IT programming staff and some members of other state departments became "JIEM-certified" and received an extensive introduction to XML, NIEM, and associated tools.

The RFP for the Juvenile JIEM Analysis project was awarded in May 2008 to the NCSC and its subcontractor, Waterhole Software. The Juvenile JIEM Analysis included the analysis project, as well as three days of additional NIEM follow-up training with the court IT staff. This follow-up training, "from start to zip files," provided the staff with additional opportunities to ask questions and practice more using the various NIEM-related tools.

The Juvenile JIEM Analysis project consisted of three subject-matter expert (SME) meetings. The first meeting focused on understanding the business challenges in Vermont specific to the juvenile docket. The second meeting focused on developing a graphical representation of Vermont juvenile exchanges. This exchange model served several functions. First, the model provided the project team with a comprehensive list of the documents most commonly exchanged in Vermont's juvenile system. The final inventory of 58 documents was reviewed by the steering committee, which identified the 12 exchanges that the group felt would provide the greatest benefit to the community. Further, the exchange model provided context for each IEPD so developers could understand the context within which it was intended to be

implemented.

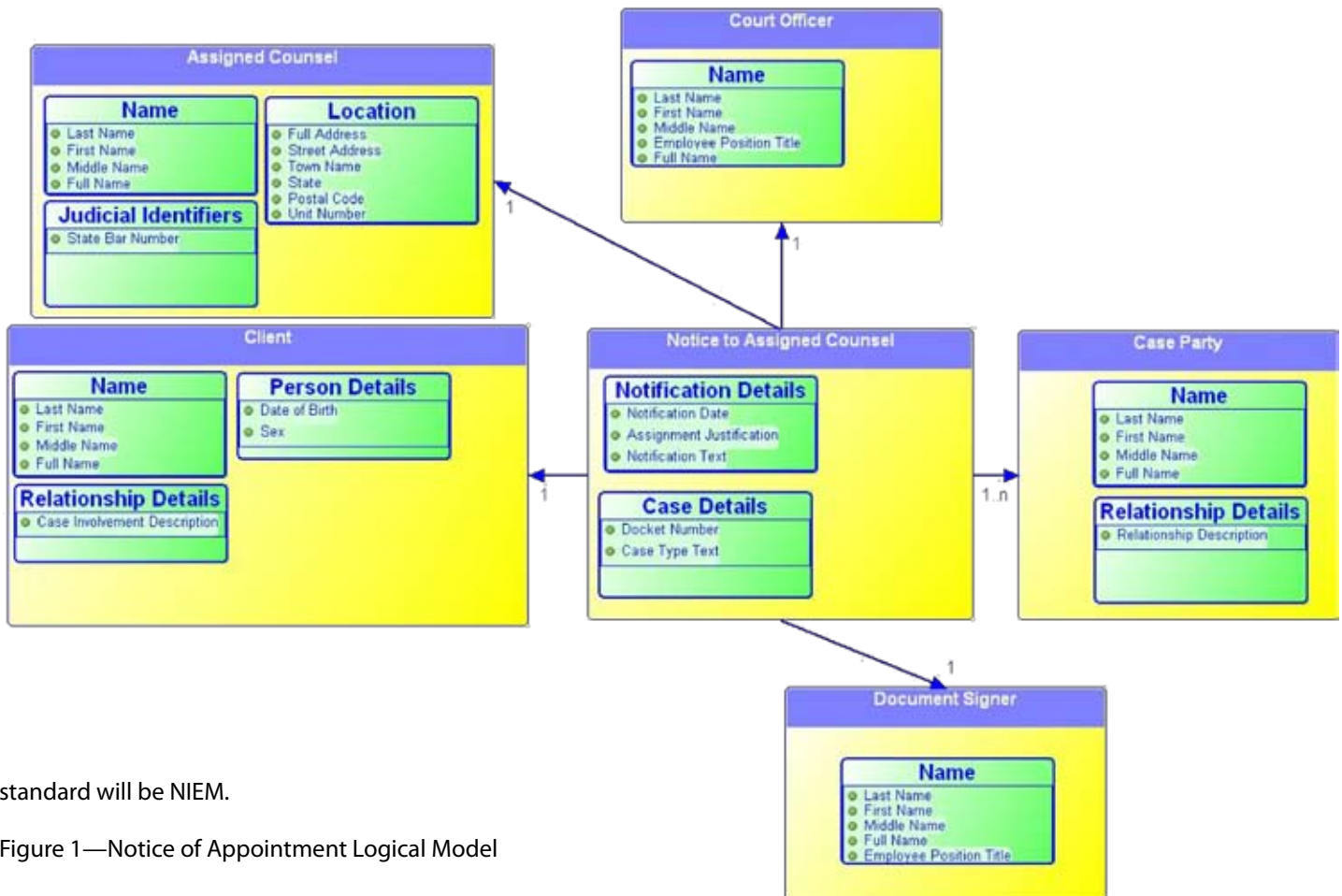
Waterhole Software consultants collected samples of each document and translated them into a series of logical data models. These models provide a graphical representation of the data requirements for each document. They are intended to clearly communicate to the business practitioner the data requirements contained within each document. The third meeting focused on a review of each of these logical models to further refine the model and document how they will be used in the course of business.

Following acceptance of the logical data models, Waterhole Software proceeded to translate each model into a physical

data model. This physical data model allows the developer to plan how data requirements will be represented in NIEM. When complete, the model provides a visual representation of the layout of the IEPD schema. Finally, this physical model was mapped to NIEM, schema subsets were generated, and a document schema was assembled.

Throughout the process, the project team sought to leverage national reference models developed by the NCSC and Waterhole Software for child welfare. The team used an innovative approach to extending the national model for the Juvenile Petition by organizing the Juvenile Petition schema into two sections. The first section contains the national

Message_Notice of Appointment_Notice of Appointment: Logical Model



standard will be NIEM.

Figure 1—Notice of Appointment Logical Model

reference model in its unaltered format, and the second section isolates the data elements specifically required for Vermont. In this way, Vermont simultaneously maintains its ability to exchange petition information with other states, while ensuring that its own data requirements are met.

Results

The meetings were an excellent mix of both IT and functional staff from the juvenile docket. Out of these meetings, more than 60 exchanges were identified, which were then prioritized. The priority list identified nine high-priority IEPDs that will be completed by the NCSC and Waterhole Software. These IEPDs, which are due to be published to the IEPD Clearinghouse Web site, are Affidavit, Care Order, Case Plan, Disposition Order, Findings and Order, Juvenile Petition, Notice of Appointment, Notice of Hearing, and TPR Petition.

Over the next three years, the Vermont Judiciary is hoping to go from a court case management system that does no XML to one in which exchanges are NIEM-compliant. In addition, the Judiciary intends to work with other justice departments in Vermont as they also upgrade their systems to exchange data in NIEM-compliant format. No systems in Vermont currently exchange any data in GJXDM or NIEM format, so the Vermont