

Making Good on the Promise of NIEM

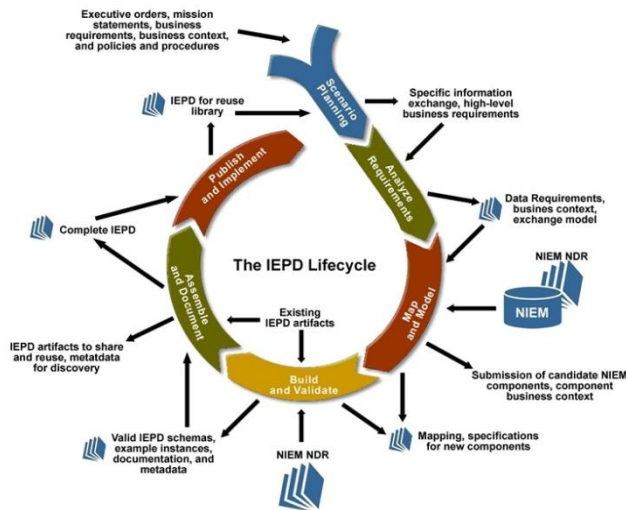
Building an IEPD from the Ground Up



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Building an IEPD from the Ground Up



Agenda

- IEPD, What is it?
- Development Life Cycle
- Technology
- Sample IEPD's
- Lessons Learned
- Q & A's



What is an IEPD?

An IEPD, or Information Exchange Package Documentation, is a collection of artifacts (i.e., documents, schemas, diagrams, sample XML, etc.) that describes from both a technical and functional perspective the requirements of a particular data exchange.



What is an IEPD?

IEPD Specification

Identifies baseline business requirements for IEPD's and outlines artifacts and metadata that should be included within the IEPD

For additional information see:

<http://niem.gtri.gatech.edu/niemtools/documentation.iepd>

IEPD [Specification](#)



What is an IEPD?

Artifact List:

- Master documentation (business requirements)
- Schemas (e.g., Exchange, Constraint xsd's)
- Sample XML exchange documents
- Wantlist (generated by Schema Subset Generation Tool, SSGT)
- Catalog
- Change Log
- Metadata
- Etc.

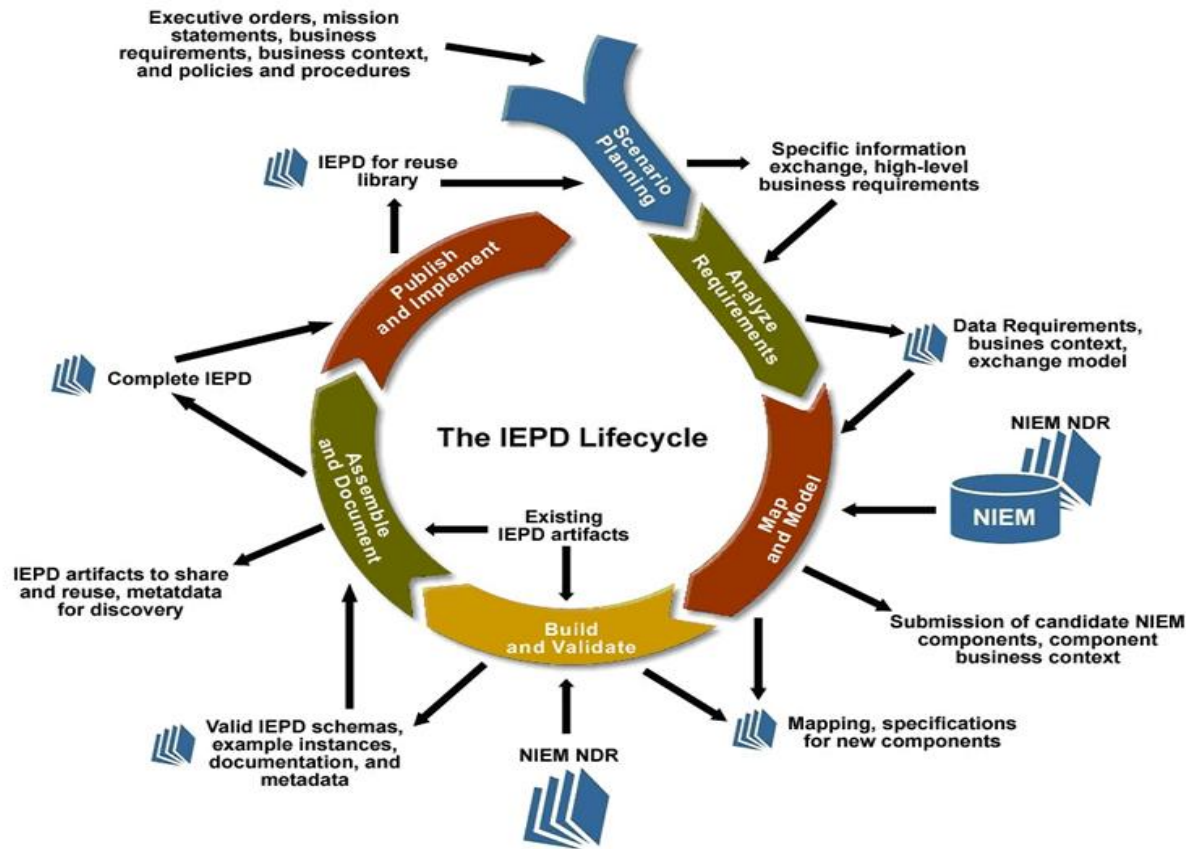


What is an IEPD?

Artifact List, Missouri's additions

- WSDL(s)
- Cascading Style Sheets
- Data Element List
- Security Policies (e.g., WS Security)
- Sample web service Client (optional)
- Exchange Dependency Diagram

IEPD Development Lifecycle (Step by Step)





IEPD Development Lifecycle (Step by Step)

NIEM Documentation maturity levels:

- Level 1 - Entry
Under development
- Level 2 - Complete
Being tested, limited use
- Level 3 - Production
Fully documented, endorsed for use



IEPD Development Lifecycle (Step by Step)

- Step 1 (Scenario Planning)
 - Identify Business needs of the exchange
 - Document Requirements (e.g., data elements, business rules, etc.)
 - Review Existing IEPD's
 - DOJ IEPD Clearinghouse
 - Previously developed IEPD



IEPD Development Lifecycle (Step by Step)

- Step 2 (Analyze Requirements)
 - Requirement Validation
 - Building Documentation
 - Data element list, etc.
 - Build Subset (SSGT)
 - Find data elements in NIEM
 - Generate Wantlist
 - Determine extensions if needed



IEPD Development Lifecycle (Step by Step)

- Step 3 (Map & Model)
 - Modify subset to enforce desired cardinality
 - (i.e., 1 to many, optional, mandatory)
 - Develop Constraint schema(s)
 - (i.e., build schema structures, substitution groups, associations, etc.)
 - Develop Enumeration schema(s)
 - (i.e., the values that an element can contain)
 - Code List Generator tool
 - Modify subset to use the enumeration schema



IEPD Development Lifecycle (Step by Step)

- Step 4 (Build & Validate)
 - Build Exchange Schema
 - Create Style Sheets
 - Create Sample Exchange Documents
 - Build Exchange Dependency Diagram
 - Build WSDL's
 - Develop Policy Documents



IEPD Development Lifecycle (Step by Step)

- Step 5 (Assemble Documentation)
 - Build Metadata
 - Include Change Log
 - Build Catalog
 - Organize the artifacts
 - Archive the IEPD – Cut a release



IEPD Development Lifecycle (Step by Step)

- Step 6 (Publish & Implement)
 - Initial Release with Exchange Partners
 - Publish Final IEPD
 - Missouri Exchange site
 - DOJ IEPD Clearinghouse
 - Make modifications as needed (return to Step 2)

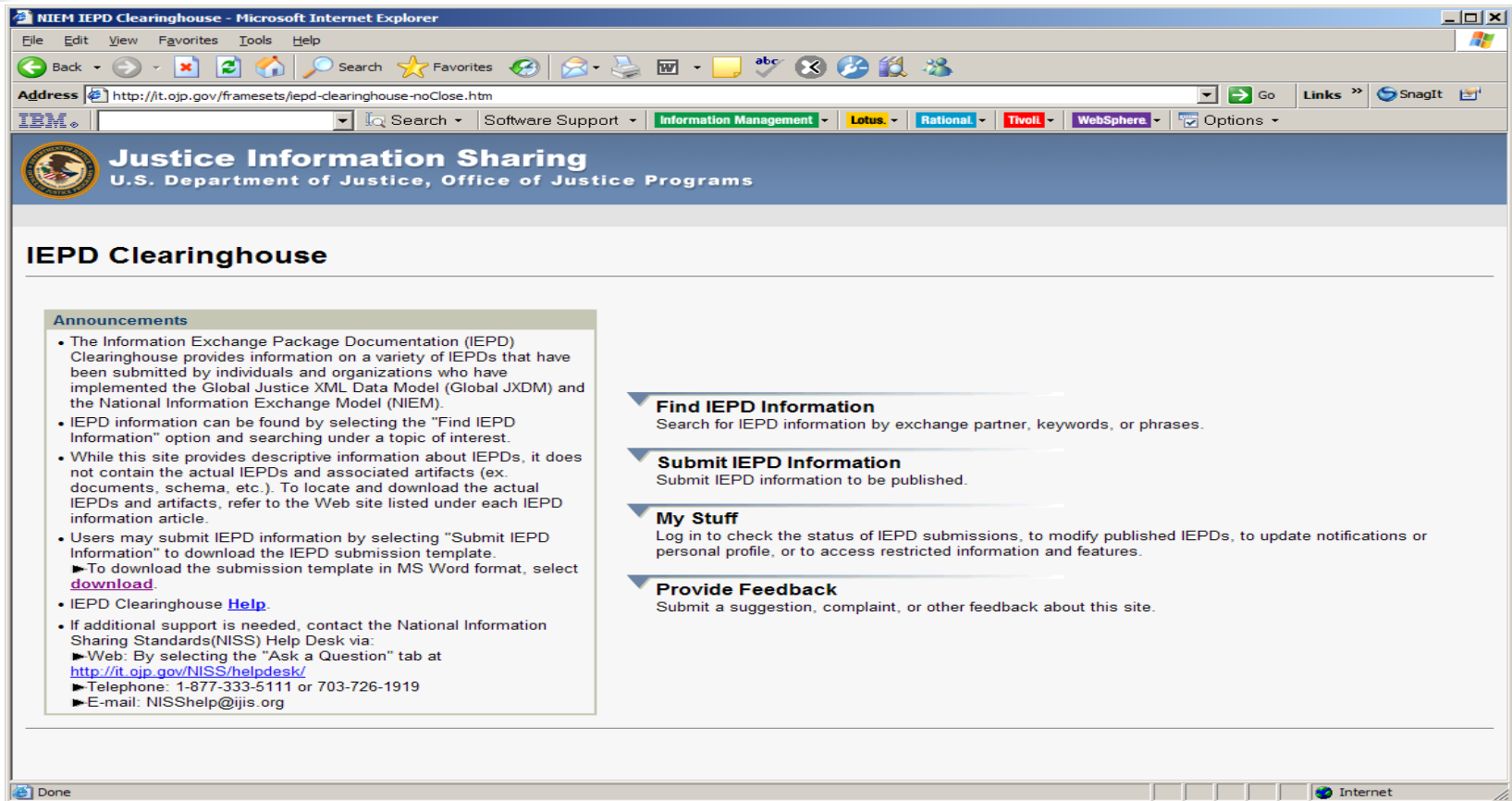


Missouri Exchanges Space

Publishing IEPD's with exchange partners:

- Validate IEPD for publishing
- [IEPD Clearinghouse](#)

Publishing an IEPD with DOJ



Publishing an IEPD with DOJ

The screenshot shows a Mozilla Firefox browser window displaying the NIEM IEPD Clearinghouse website. The browser's address bar shows the URL <http://www.it.ojp.gov/framesets/iepd-clearinghouse-noClose.htm>. The website header includes the DOJ seal and the text "Justice Information Sharing U.S. Department of Justice, Office of Justice Programs". Below the header is the "IEPD Clearinghouse" title and a navigation bar with links: "IEPD Clearinghouse Home", "Find IEPD Information", "Submit IEPD Information", "My Stuff", and "Help".

The main content area is titled "Identification" and contains a form with the following fields:

- User ID or Email Address:** A text input field with a note: "(Enter E-mail address if you do not have a user ID)".
- IEPD Data [Please copy Title and Summary from IEPD submission template]:** A section containing two text input fields:
 - Title:** A text input field.
 - Summary:** A larger text input field.
- Attach Filled.out IEPD Template:** A section with a file upload interface showing a file named "1" and buttons for "Browse..." and "Add Another Attachment".

Below the file upload section, there is a note: "To download the IEPD submission template in MS Word format, select [download](#)." followed by a "When You are Done..." section with a "Continue..." button.

The browser's status bar at the bottom shows "Done" and weather information: "Now: Cloudy and 71°F", "Tonight: 61°F", and "Thu: 73°F".

Publishing an IEPD with DOJ

IEPD_Submission_Template.doc (Read-Only) - Microsoft Word

File Edit View Insert Format Tools Table Window Help

Normal + Verda Verdana 10 B U

Final Showing Markup Show

NIEM/GJXDM Information Exchange Package Documentation (IEPD)
Information Submission Template

*Title:		
*Summary (max 400 characters):		
*Web Site Link:		
Description:		
*Exchange Partners:	<div><input type="checkbox"/> Clerk's Office <input type="checkbox"/> Coroner <input type="checkbox"/> Corrections <input type="checkbox"/> Court <input type="checkbox"/> Crime lab <input type="checkbox"/> Defense <input type="checkbox"/> Diversion Provider <input type="checkbox"/> Emergency Management <input type="checkbox"/> FBI <input type="checkbox"/> Fire <input type="checkbox"/> Grand Jury <input type="checkbox"/> Juvenile Justice <input type="checkbox"/> Jail <input type="checkbox"/> Law Enforcement <input type="checkbox"/> Local Probation</div>	<div><input type="checkbox"/> Motor Vehicles <input type="checkbox"/> Pretrial Services <input type="checkbox"/> Prosecutor <input type="checkbox"/> Public Defender <input type="checkbox"/> Public Works <input type="checkbox"/> Service Agency <input type="checkbox"/> State Administrative Office of the Courts <input type="checkbox"/> State Probation and Parole <input type="checkbox"/> State Repository <input type="checkbox"/> Treatment Provider <input type="checkbox"/> Transportation <input type="checkbox"/> USCIS <input type="checkbox"/> Victim <input type="checkbox"/> Victim Services <input type="checkbox"/> Others (list below)</div>
Other Exchange Partners:		
*NIEM/GJXDM Version:	NIEM <input type="checkbox"/> 1.0 <input type="checkbox"/> 2.0 GJXDM <input type="checkbox"/> 3.0 <input type="checkbox"/> 3.0.2 <input type="checkbox"/> 3.0.3	
*Project Start Date:		
Last Revision Date:		
Next Revision Date:		
*Status:	<input type="checkbox"/> Planned <input type="checkbox"/> Under Development <input type="checkbox"/> Draft <input type="checkbox"/> Completed <input type="checkbox"/> Implemented	
Status Description:		
Schedule:		
*Participating Organizations:		
*Contact Name:		
*Contact E-mail:		

Page 1 Sec 1 1/2 At 0.5" Ln 1 Col 1 REC TRK EXT OVR French (Fra)



Technologies use to Develop IEPD

- Text editor (e.g., MS Word, Word Perfect, Open Office)
- NIEM Schema Subset Generation Tool (SSGT)
- NIEM Code List Generator Tool
- XML Editor (e.g., XMLSpy)
- UML Editor (e.g., ARGO, IBM RSA)



Technologies, continued

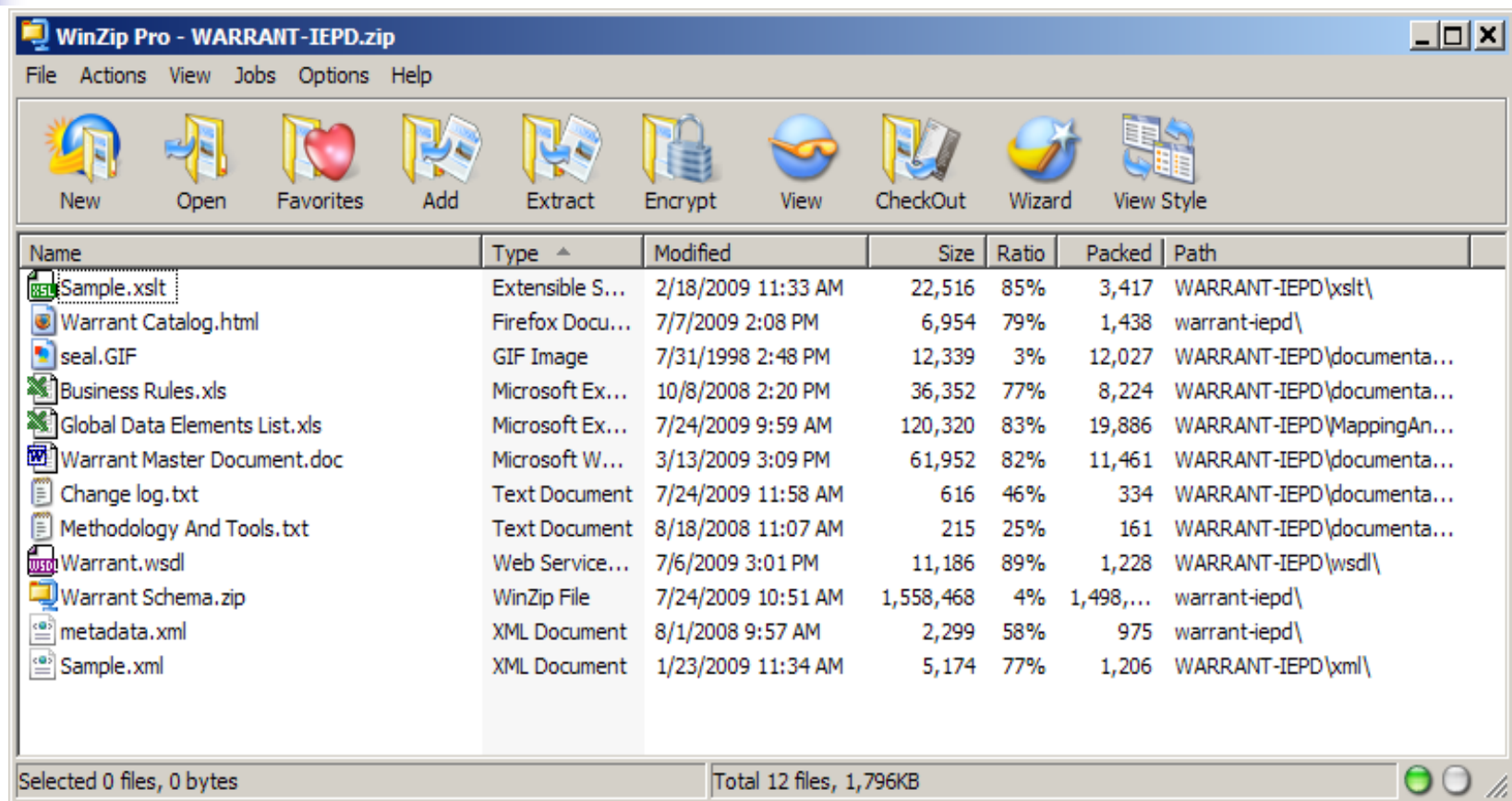
- Spreadsheet Editor (e.g., MS Excel)
- Diagram Tool (e.g., Visio)
- Archiving Tool (e.g., Winzip)
- Web Browser (e.g., Firefox)
- Style Sheet Editor (e.g., StyleVision)
- Issue Tracking (e.g., JIRA)



Missouri Sample IEPD's

- Warrant IEPD
- Protection Order IEPD

IEPD Archive





Lessons Learned

- Be prepared to not get it right the first time
- Clearly define the limits and expectations of the exchange
- Allow adequate time to plan the subset development
- Build an exchange that works for you and your exchange partners
- Allow adequate time for staff education
- Allow adequate time for your exchange partners to become educated on the required technologies
- Seek out experts



Questions & Answers





Resources

NIEM website:

- <http://www.niem.gov/index.php>

NIEM IEPD Specification

- <http://niem.gtri.gatech.edu/niemtools/documentation.iepd>

NIEM Subset Generation Tool

- <http://niem.gtri.gatech.edu/niemtools/ssgt/index.iepd>

NIEM Code List Generator Tool

- <http://niem.gtri.gatech.edu/niemtools/util/codelist/load.iepd>

Department of Justice - IEPD Clearinghouse

- <http://www.it.ojp.gov/framesets/iepd-clearinghouse-noClose.htm>

Missouri Exchange IEPD Clearinghouse

- <http://www.courts.mo.gov/exchanges>



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