Justice XML Structure Task Force

Justice XML Data Dictionary
JXDD Version 3.0

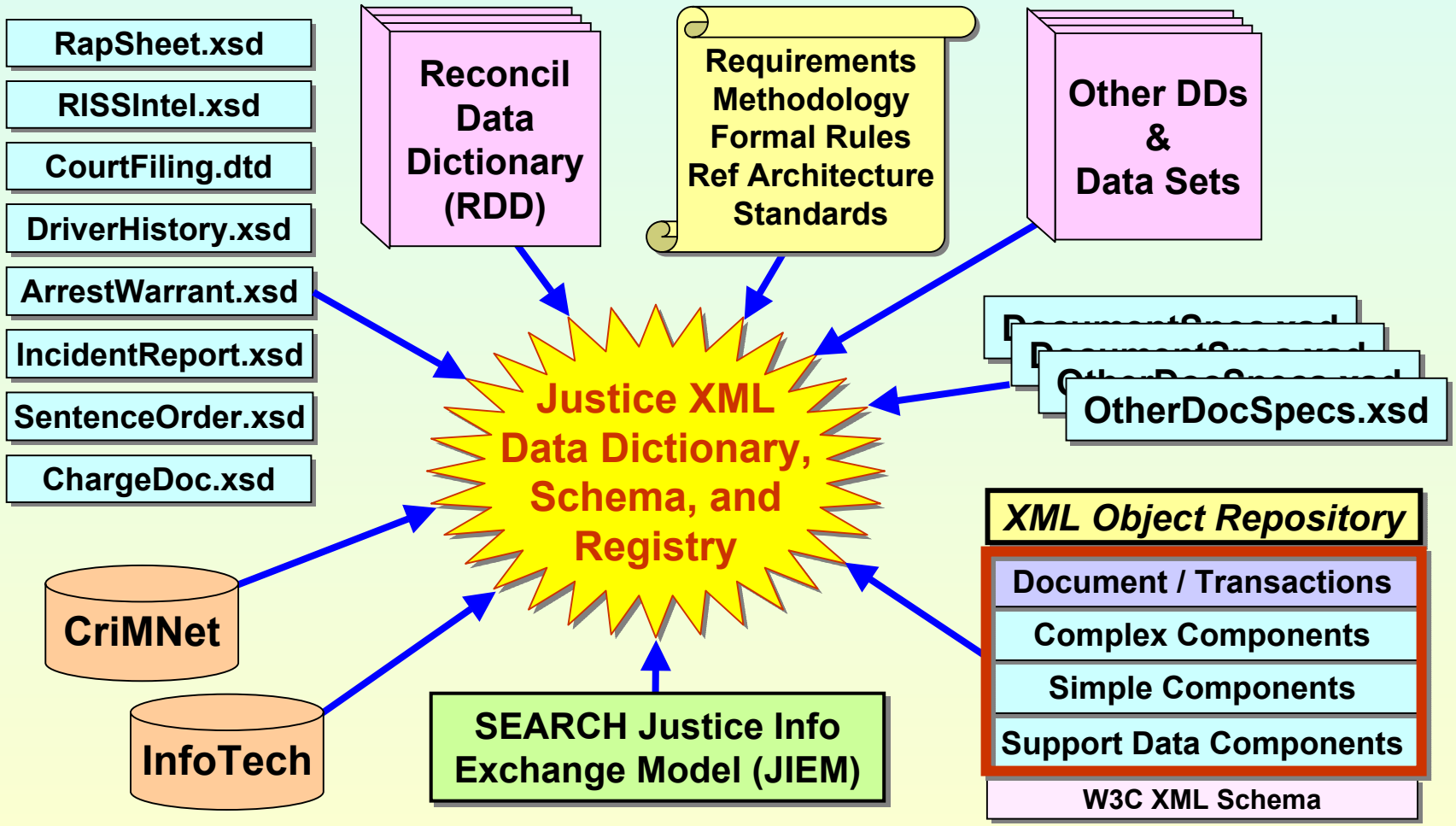
Status of Design & Development

17 December 2002

DAY 089

“I love it when a plan comes together!”

– COL Hannibal Smith, *The A-Team*



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Why JXDD Version 3.0?

- Aligned with standards (some were not available to RDD)
- Model-based → consistent
- Requirements-based – data elements, processes, documents
- Object-oriented → efficient extension and reuse
- Expanded domain (courts, corrections, juvenile, etc.)
- Extensions to activity objects / processes
- Relationships (to improve exchange information context)
- Can evolve / advance with emerging technology (RDF/OWL)
- Basis for an XML component registry that can provide
  - Searching / browsing components and metadata
  - Assistance for schema development / generation
  - Reference / cache XML schemas for validation
  - Interface (via std specs) to external XML registries

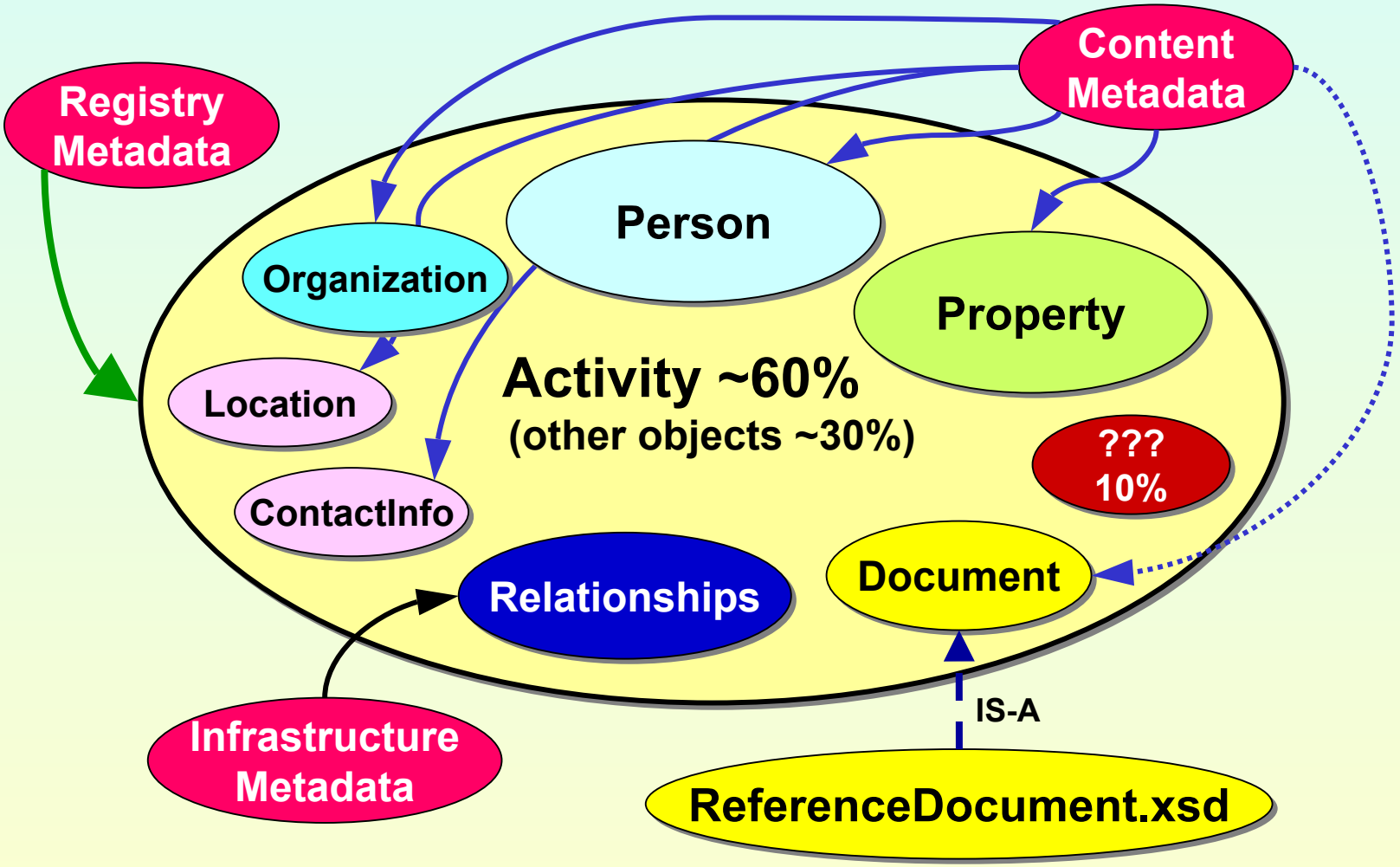
What Sources of Requirements Are Being Used?

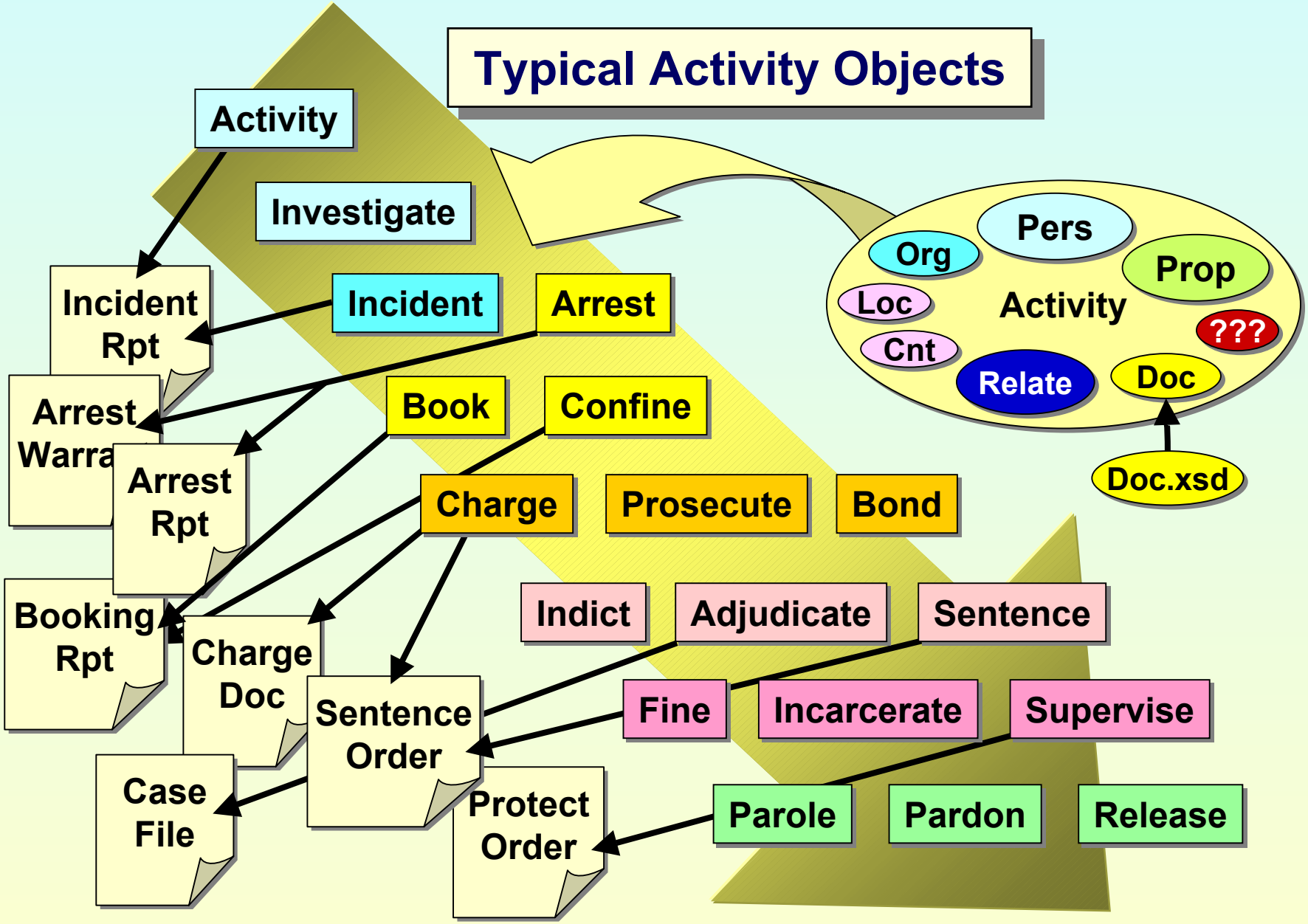
SPONSOR	SOURCE DOCUMENTS / SPECIFICATIONS
Global ISWG	Reconciliation Data Dictionary (RDD) v1.0.0
JTF for ICHTS	Rap Sheet v2.2 schema
RISS	RISSIntel v2.0 schema
LegalXML	CourtFiling v1.1 DTD
AAMVA	Driver History v1.02 schema
NIJ	InfoTech v2.0 Data Dictionary and schema
LA County CA	Incident Report schema
SEARCH	Justice Info Exchange Model (JIEM) data sets
LegalXML	Arrest Warrant schema
LegalXML	Charging Document schema
LegalXML	Sentencing Order schema
Minnesota	CriMNet v1.0 Data Dictionary and schema
NCSC	Data element spreadsheets (civil, criminal, juvenile)
Maricopa Co AZ	ICJIS Data Dictionary v1.3
CISA	Southwest Border States DD (TX, AZ, NM)
FBI	NCIC 2000 Data Dictionary and Code Tables
NIBRS	Incident Report schema

What Standards Are Being Applied?

XML.gov	Draft Federal XML Schema Developer's Guide (04/02)
ISO / IEC	11179 Specification & Standardization of Data Elements
UN / CEFACT	ebXML Core Components Technical Spec 1.85 (09/02)
FBI	Electronic Fingerprint Transmission Spec v7 (01/99)
ANSI / NIST	Data Format for Interchange of Fingerprint, Facial, & SMT
OASIS	XML Common Biometrics Format Committee (09/02)
Dept of Navy	Draft XML Registry Requirements (09/02)
DoD	DoD 5015.2-STD Design Criteria Std for E-RMS Apps (06/02)
W3C	XML Schema Specification (05/01)
W3C	RDF and RDF Schema Specification (02/99)

Justice Data Dictionary View





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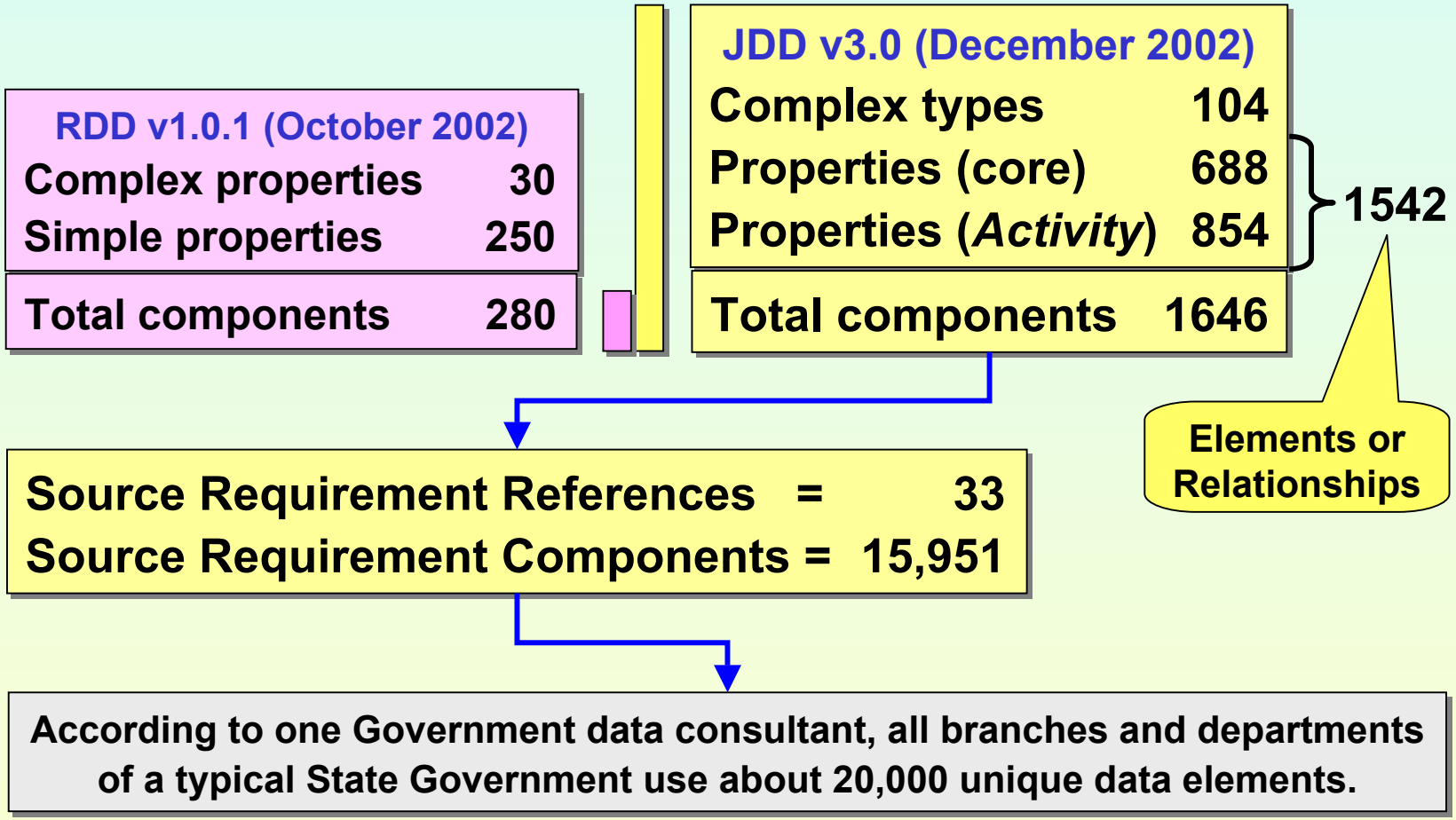
Justice Data Dictionary v3.0 Database Statistics



Validation of JXDDS V3.0 RFC
December 2002

Complete *Person*
Organization
Location
ContactInformation
(personal)Property
and enough *Activity* objects to build …

Rap Sheet	RDD / NLETS
Sentence Order	CourtFiling
Incident Report	InfoTech
Driver History	RDD / AAMVA

What Work Remains To Be Done?

- Implement objects: *Activity*, *property*
- Map source data requirements
- Define data components (definitions)
- Identify / install internal enumerations
- Define / implement special constraints
  (e.g. partial values, nulls, etc.)
- Implement metadata (content, registry, infrastructure)
- Implement or refine user tools for database
- Document user interface, design, etc.
- Implement interface to an ebXML registry
- Designate namespaces (naming policy)
- Define policies, procedures, CONOPS

Where Are We Going and Why?
How Does It All Fit Together?

The Big Picture – An XML Registry/Repository

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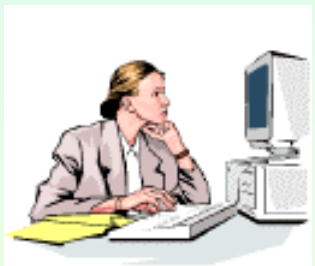
Why a Justice XML Registry/Repository?

- History shows that long term success of data exchange within and between communities of interest is facilitated by:
  - Discovery and re-use of standard vocabularies
  - Discovery and re-use of components
  - de facto standards due to voting “by feet”
- How is this different from the Justice Standards Registry?
  - Different scope, objectives, functional requirements, specifications, management scheme, and operational guidelines

Basic Overview of Using a Metadata Registry



1 Developer needs XML tags, schema, stylesheet, etc.

2 Developer Queries Justice Metadata Registry

3 Results returned based on the components stored in repositories

Domain A Repository

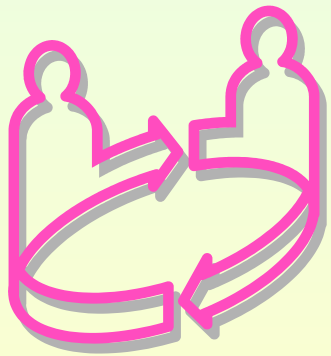
Domain B Repository

Justice XML Metadata Registry

4 Developer either uses an existing component, or builds a new component and registers it for others to use

UDDI Registry

Justice XML Component Repository



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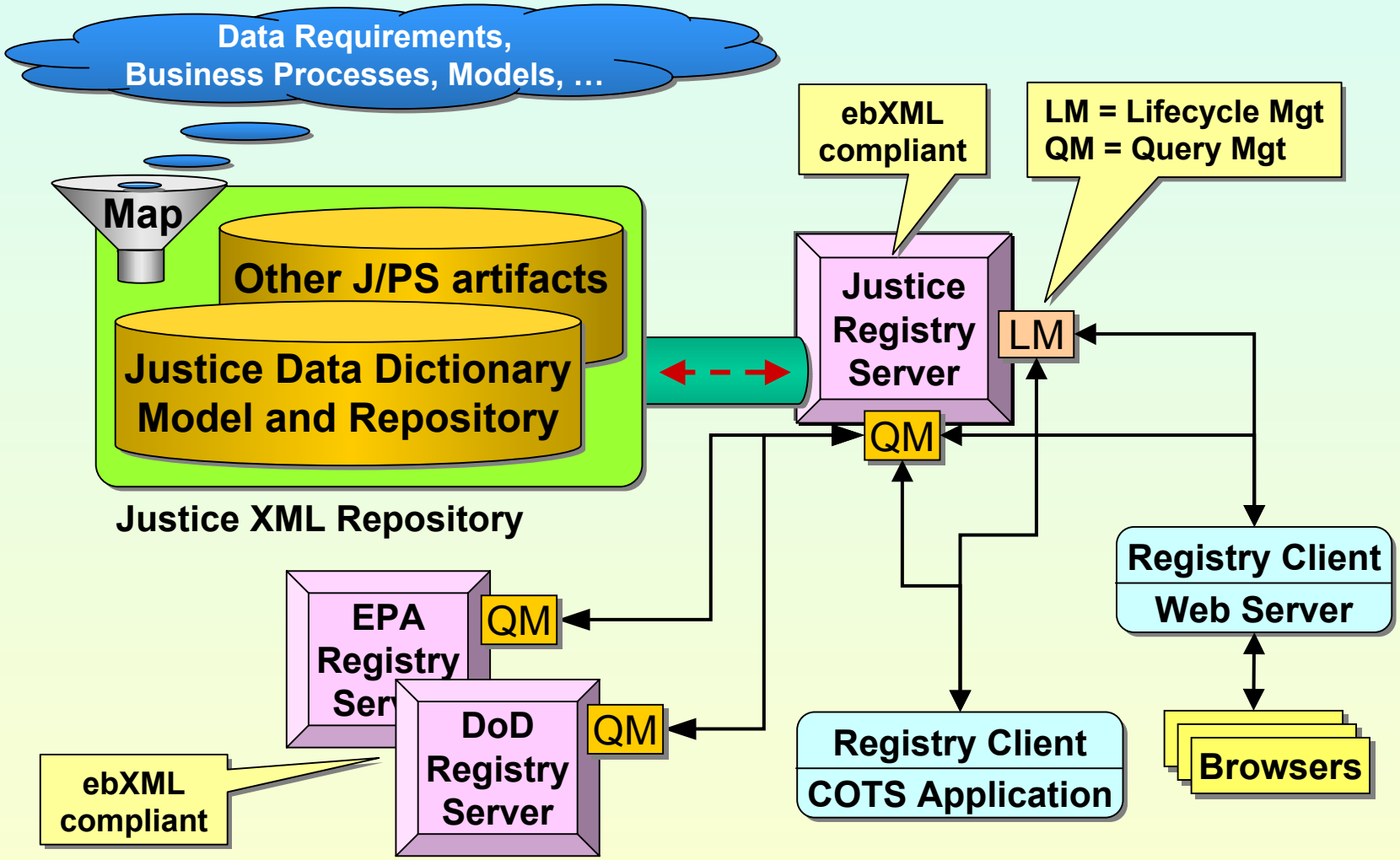
Justice XML Data Dictionary Registry/Repository Model



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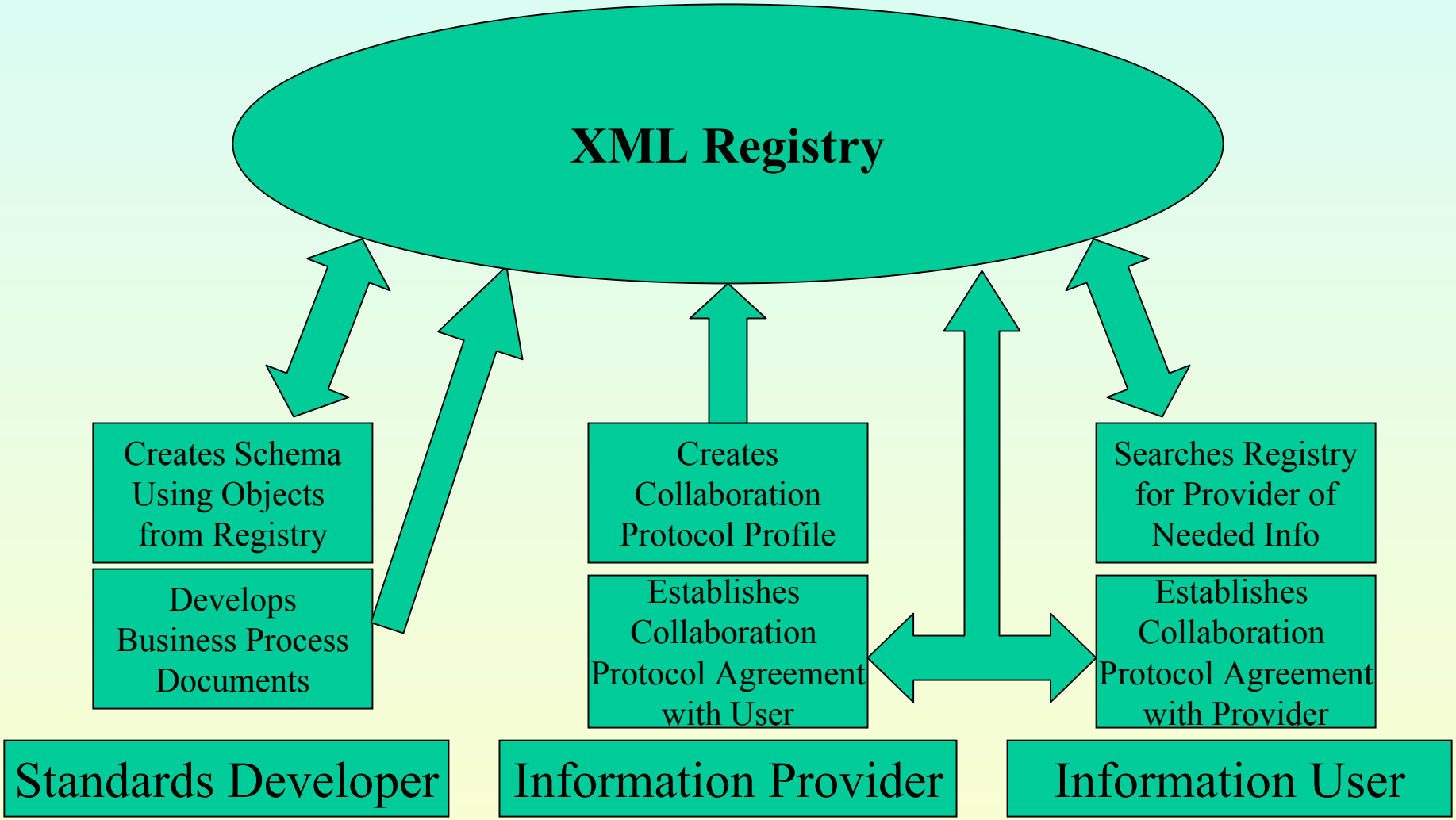
XML Development Using the Registry



Potential Issues for I/SWG

- Prioritize and evaluate registry features.
- Establish validation/approval processes
  - New components
  - Modifications of components
  - Criteria for different approval schemes
- Recommend operational oversight body
- Proposing and maintaining a stable funding process
  - Implementation, operation, maintenance
- Namespace management recommendations