USDL Variant Management

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Agenda

1. Problem

2. Solution
   3. Tooling : Integration Knowledge Library
   4. Processes

3. Demo Scenario

4. Decision
Problem – Proliferation of B2B standards

Why?
• Too many semantic interpretations, terminologies of same business information
• > 60% of the represented information in these competing standards are similar, but they have different names and structures
• Achieving interoperability requires cost intensive mapping
Problem – Cost & Time Intensive Mappings

We argue that a similar proliferation will happen with USDL variants for specific industries, countries, etc.
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1. UN/CEFACT CCTS as canonical grammar to describe business documents

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Object Classes = ABIE (Aggregate Business Information Entity)
Attributes = BBIE (Basic Business Information Entity)
Associations = ASBIE (Association Business Information Entity)
2. UN/CEFACT Unified Context Methodology Technical Specification

UN/CEFACT Unified Context Methodology Technical Specification is *work in progress* and led by Oracle and SAP.
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3. Tooling: Integration Knowledge Library

Key Features:

- **Common Repository** based on CCTS grammar for canonical representation
- **Collaborative Access and Modeling** of repository contents
- Ensures **Controlled Vocabulary** by CCTS and consideration of synonyms
- Implements **Context Logic** to deal with dimensions of variability
- **Evolutionary Optimization** of repository contents
- Offers **Semi-automatic Mapping** to facilitate integration with back-end systems
3. Tooling: Common Repository based on CCTS grammar

All entities are contextualized, stored and provided by a common repository

Every user can query a subset view, according his context

Based on CCTS grammar

Context Specific Query

Context Specific Subset

Manufacturer

Retailer

Cosmetics

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3. Tooling: Integration Knowledge Library

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Variants of USDL

Variants along different dimensions

• Granularity
  • Attribute
  • Class/Relation
  • Whole Module

• Different representation terms
  • Terminology
  • Internationalization

• Contexts
  • Country
  • Industry
  • ...

• Origin / ownership
  • Normative
  • Proprietary, local, user-specific
Country-specific: Legal Module for the US
Country-specific: Legal Module for Germany
Demo

Disclaimer:

The following demo shows an older prototype called *Warp10*
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Notable Disadvantages

- CCTS
- Learning curve
- Need to transform Ecore to CCTS
  - Loss of expressiveness
  - Several man months of work
  - No support for software engineering
- Geared at describing business documents and messages
- No modularization
- No tooling

- Tooling
  - Only from SAP
  - Still a long way to a full-fledged product

- Global USDL Schema Repository has to be established
- Governance body has to be found

- How to develop tools (e.g. editor) when schema is a moving target?