Address Levels

Business Use Alignment

Introduction

- Objective is to provide layers of address granularity tailored to business use
- Address use levels
  - Level 0 = handwritten postal address – machine parsed
  - Level 1 = in country simple postal address – legacy
  - Level 2 = extended postal address – advanced features
  - Level 3 = shipping / delivery address; large organization
  - Level 4 = facilities management; universal / exotic / global
- Share common noun definitions
- Share validation rules and quality factors
- Provide means to manage the quality of address content
- Provide global language and format support

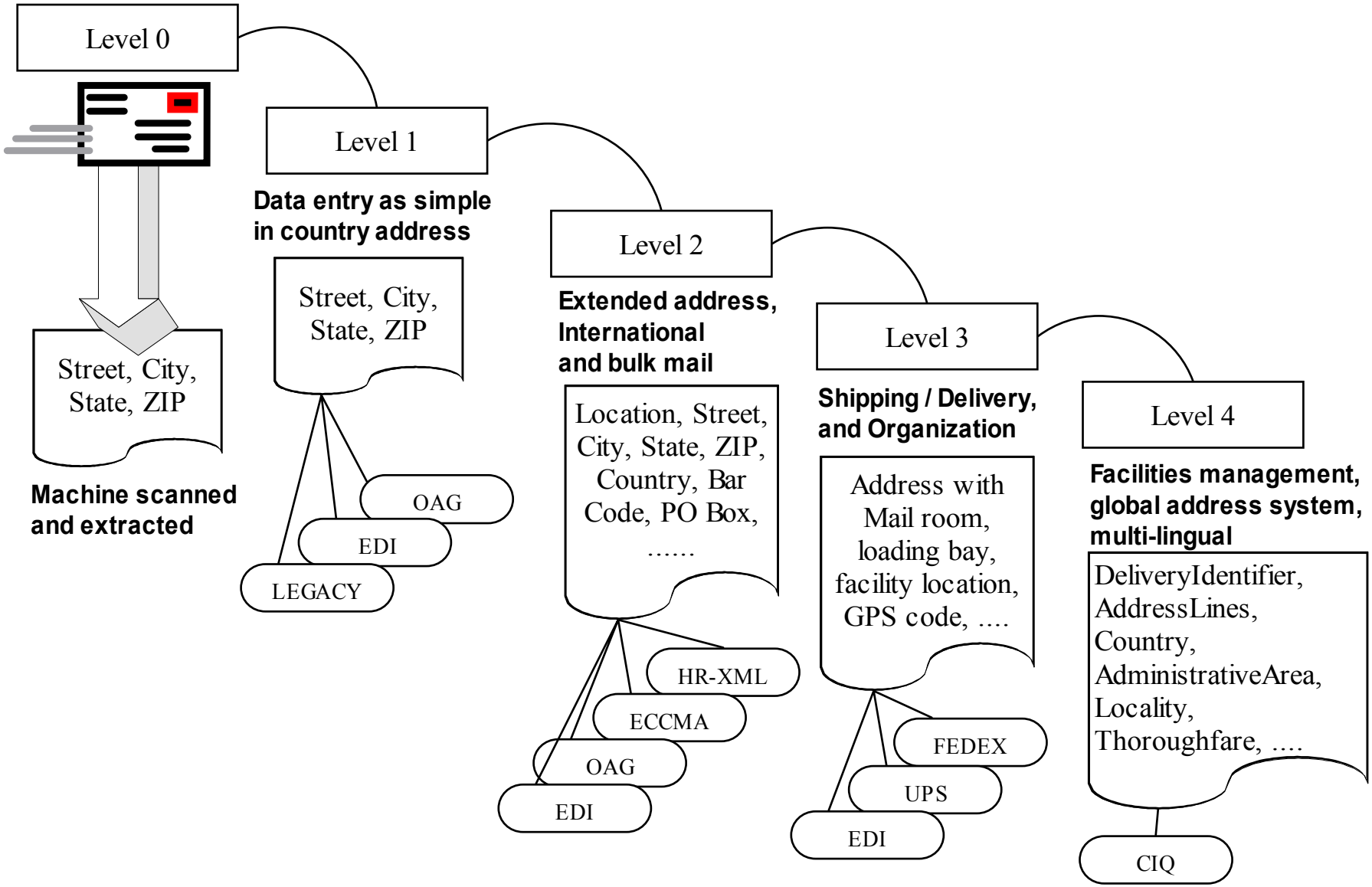
Delivery Quality Measurement

Score	Description
0	Multiple lines of unspecified address information
1	Identified lines of address information
2	Partial element identification (City-State-ZIP)
3	Full element identification
4	Full element identification with some validation (valid State)
5	Full element identification with some validation and cross validation (City within State)
6	Matching address to Postal Database (CASS certified address matching software used)
7	Complete and correct address (Delivery Point Validation)
8	Know recipient has not reported a move (Move Update)
9	Know delivered to person / entity
10	Know the delivery was made to the right person / entity

Technology

- Using W3C Schema to provide layers of increasingly refining definitions based on business use
- Use OAGIS V8 methods to restrict syntax to best-practice techniques
- Enable use of ebXML AssemblyDoc technology
- Provide migration from legacy address formats
- Harmonization of existing and emerging standards to single common base noun dictionary and use templates

Implementation Matrix



Syntax Objective

- Create single schema definition that is capable of support all four levels of use with increasing detail granularity
- Support and harmonize noun dictionaries across multiple legacy implementations by allowing substitution underneath parents
- Use of ebXML UID technique to equate like elements in dictionary

Technical Detail

- Address
  - Address Line — Simple text string
    - Line type
      - Building
        - » Number, Street Name, Street Type — Compound element
      - PO Box
        - » Number, Type — Compound element
      - Business Location
        - » Suite, Number, Street Name, Street Type — Compound element

Schema Overlay Definitions

XML Methods

- Two methods:
  - Derivation by extension: allows type B to extend type A without touching type A and without repeating the elements in type A
  - Replacement: substitute in another different structure within the hierarchy with the same parent name, but different elements
- We need to use both to achieve syntax goals

Schema limitations

- Schema can show you the complete set of all possible structure derivatives
  - A, (B | C), D, E, (F | G)
- Change denominated lists by restriction only
- Cannot tell you if you use C you must use G, i.e context rules and business rules
- Therefore - need to use ebXML AssemblyDoc templates

ebXML AssemblyDocs

- Consist of four parts
  - Assembly Structure(s)
  - Business Context Rules
  - Content type references
  - Data Validation rules
- Specification available end of May