Modeling Code Lists

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Problem

• Modeling Classifiers that have registered identifiers
• Examples:
  – diagnostic and treatment codes
  – hazardous material classifications
  – vehicle models
• Registered identifiers form a "Code List"
Codes and Code Lists

- **Code** = standardized name or identifier for an individual Thing
  - associated with a definition/description of the thing
  - names the thing as an instance of some Class

- **Code List** = a set of codes that identify instances of some Class
  - subject to change over time, as new Things are added to the class
  - can be a regulatory classification scheme
  - not necessarily comprehensive:
    - the Code List may correspond to the extension of a subclass
    - that is distinguished only by having members that have those codes
A Bad Model
A Better Model
A Reference Model: ISO 11179
Simple Codes Model

The Combination of Code value and CodeList identifier uniquely identifies a Code, and thus an individual Object within some Classification.
Codes Model as ISO 11179

![Diagram of Codes Model as ISO 11179]
Example: Country Codes
Example: Country Codes (definition)
Example: Manufactured Parts
Example: Catalog as Registry
Summary

• The basic CodeList and Code model is a good model for identifiers
  – simple, but not simplistic
  – consistent with ISO 11179 standard for codes management

• The basic Codes model is extensible to (consistent with) other aspects of code management
  – definitions
  – synonyms
  – changes to the list
  – reference documents
  – registration authorities