

Combining OASIS Standards to Create a Repository and Assembly Mechanism for XML Schema Components

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Topics

- The need for a standards-based repository
- Some existing repositories
- The requirements
- The OASIS eGov TC proof of concept

- Large organizations need re-usable data items with known semantics
- These components are required as XML Schema components
- Components must be shared within and often outside the organization
- Components may use external components such as code lists

- A registry/repository that stores both XML schema components and metadata
- a standards-based approach to allow sharing

An early attempt

- The UK Government Data Standards Catalogue pre-dated most of the standards work
- An XML-based metadata catalogue linked to small XML schema documents
- Schema documents can be imported into other schemas

A slightly later version

- The UK MOD already had a data dictionary
 - SQL Server
 - several thousand data items
- Now needed to add XML Schema components
- Additional requirement was to assemble "message" schema documents from components

A slightly later version

- Quick solution was to create a text file of components
 - use "id" attribute to link to data dictionary
 - use "mod:Version" attribute to indicate component version
 - use a self-describing assembly mechanism

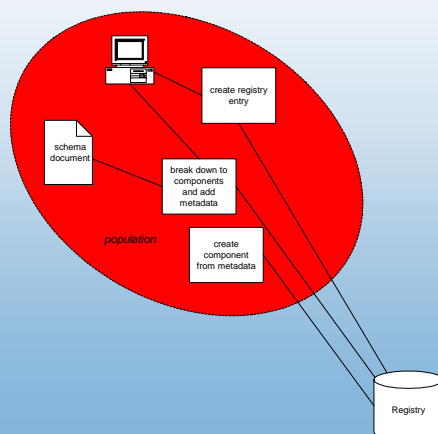
An MOD schema component

```
<xs:complexType name="NATostockNumberStructure"
  id="5897" mod:Version="1.0">
  <xs:sequence>
    <xs:element name="NATosupplyClassificationCode"
      type="NATosupplyClassificationCodeStructure"
      mod:Version="1.0"/>
    <xs:element name="NATOitemIdentificationNumber"
      type="NATOitemIdentificationNumberStructure"
      mod:Version="1.0"/>
  </xs:sequence>
</xs:complexType>
```

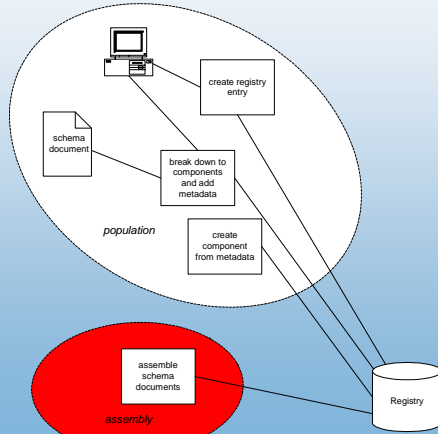
[createschema1.xslt](#)

[createschema2.xslt](#)

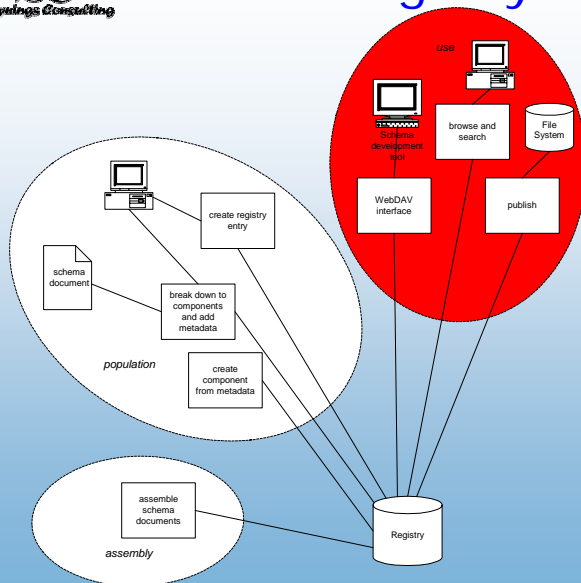
- From these and other projects around the world, we can get requirements relating to
 - repository population
 - schema assembly
 - schema use
 - import/export/federation
 - repository management



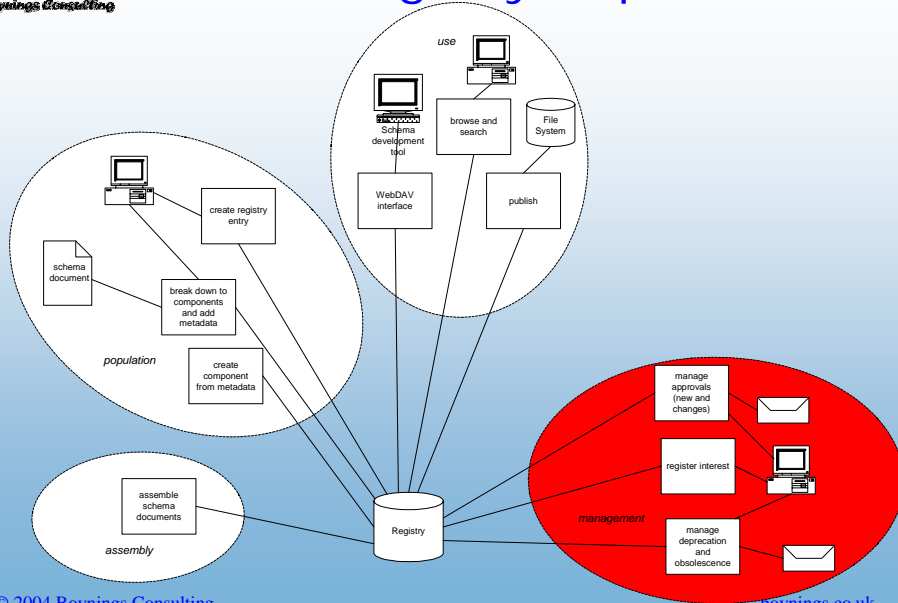
Registry requirements



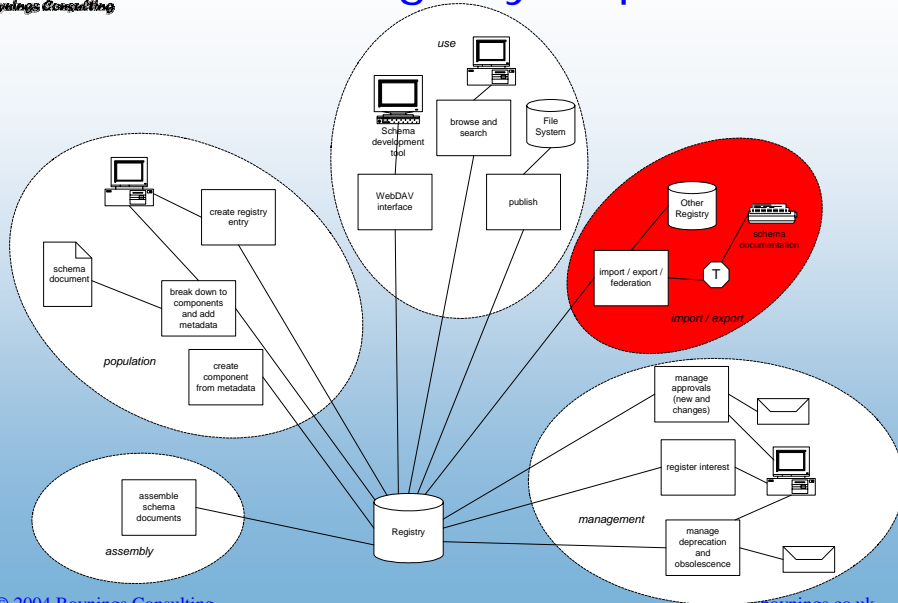
Registry requirements



Registry requirements



Registry requirements



OASIS eGov TC pilot project

- Discussion of the MOD work exposed a great deal of interest in OASIS
- eGov TC has approved a PoC / showcase to replace the planned MOD project

OASIS eGov TC pilot project

- Supported by UK OeE and MOD
- Main team
 - Paul Spencer
 - Farrukh Najmi, Sun Microsystems
 - Carl Mattocks, CHECKMi
- Many others involved from other organizations
- Using open source ebxmlrr as a base

- Will use
 - ebXML Registry specification
- Considering
 - CAM
 - W3C XML Schema Component Designators
 - Workflow standards

- Planning to have a system implementing major requirements in July
- Anyone can get involved by joining OASIS and the eGov TC
- Further information:
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