Problems with ShapeChange v2.0.0 20140529 generating XML schema for ISO implementation models

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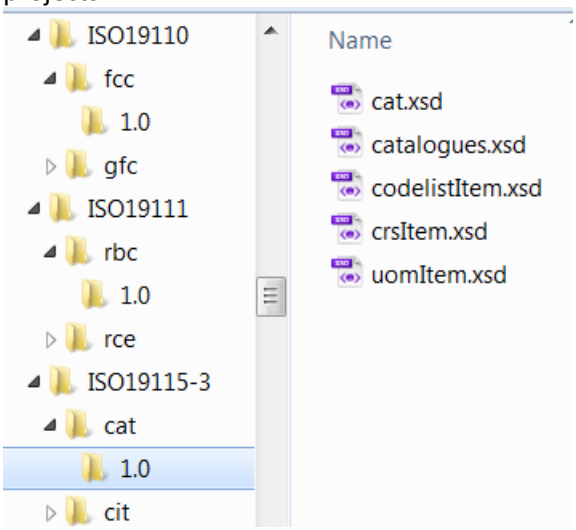
2014-07-21
Based on working on schema generation for suite of ISO projects required to create XML schema for ISO19115-1 and all its dependencies. Projects in the XML implementation workspace:
ISO19103, ISO19107, and ISO19108 are implemented using ShapeChange Map entries for the ISO19139_2007 implemenation rules.
ISO19110, ISO19111, ISO19115-3 (including 19115-1 and 19115-2), ISO19135, and ISO19157 (including quality elements from ISO19115-2)

The XML implementation workspace is under its own version control configuration, but the files are currently in the Drafts folder of the TC211 Harmonized model at
https://inspire-twg.jrc.ec.europa.eu/svn/iso/isotc211/Drafts/trunk/implementation-XML

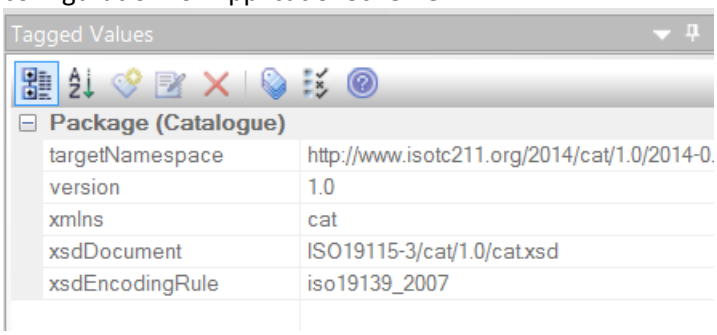
To work with the EA model, check out this repository (it's a stand-alone workspace, decoupled from the rest of the Harmonized model). Set up an EA version control configuration named 'implementation-XML' linked to this directory. Get packages in EA ('package control/get package' on context menu for root of the EA project table of contents), and select the 'implementation-XML' version control configuration, and then the 'implementation-XML' package. This should load the directory structure for the workspace in the EA project. Next, on the context menu for the model root, select 'Package Control/Get All Latest', and the models will load. You're ready to go.

Distribution of output schema files for multi-project management

The output schema are being loaded into a directory structure to manage the schema for various ISO projects.



Schema are loaded into this structure by specifying xsdLocation tagged values that use paths. This is the configuration for ApplicationScheme in EA:



and the output directory is set thus in the ShapeChange configuration file:

```
<targetParameter name="outputDirectory"
        value="E:\EPrograms\ShapeChange2.0.0-20140529\output\xsd\"/>
```

The import statements in the schema are generated correctly by xinclude'ing a 'standardNamespaces.xml' file in the ShapeChange configuration:

```
<!-- load schema location path relative to standard xml schema directory structure using xInclude
-->
        <xi:include href="StandardNamespaces.xml"/>
```

The contents of this file looks like this:

```
<xmlNamespaces xmlns="http://www.interactive-
        instruments.de/ShapeChange/Configuration/1.1">
    <XmlNamespace nsabr="cat" ns="http://www.isotc211.org/2014/cat/1.0/2014-07-11"
        location="../../../ISO19115-3/cat/1.0/cat.xsd"/>
     <XmlNamespace nsabr="cit" ns="http://www.isotc211.org/2014/cit/1.0/2014-07-11"
        location="../../../ISO19115-3/cit/1.0/cit.xsd"/>
    … for all namespaces.
```

This works fine because of the standardized directory structure

Issue 1.

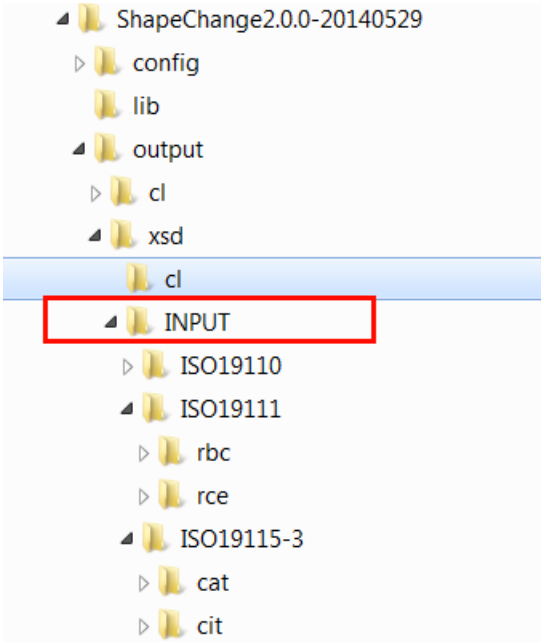
Abstract classes have ':' prefix in generated XML

isoMetadataDraft_standardMap.xml | abstract.xsd

```
1  <?xml version="1.0" encoding="UTF-8"?><schema xmlns="http://www.w3.org
2    <include schemaLocation="ISO19110/fcc/1.0/fcc.xsd"/>
3    <import namespace="http://www.isotc211.org/2005/gco" schemaLocation=
4    <!--XML Schema document created by ShapeChange - http://shapechange.
5    <element abstract="true" name=":Abstract_FeatureCatalogue" substitut
6    <complexType abstract="true" name=":Abstract_FeatureCatalogue_Type">
7      <complexContent>
8        <extension base="gco:AbstractObject_Type">
9          <sequence/>
10       </extension>
11     </complexContent>
12   </complexType>
13   <complexType name=":Abstract_FeatureCatalogue_PropertyType">
14     <sequence minOccurs="0">
15       <element ref="fcc:Abstract_FeatureCatalogue"/>
16     </sequence>
17     <attributeGroup ref="gco:ObjectReference"/>
```

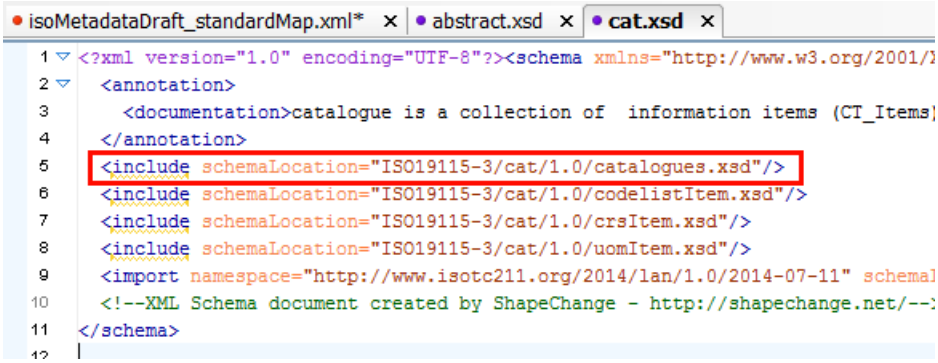
Issue 2

output files get put in directory called 'INPUT'.



Issue 3

Include statements in schema us the paths from the schemaLocation tagged value, not the correct relative path for how they're actually loaded in the directory structure.



This requires going through all schema and removing the path part. In the example above, the include should be

<include schemaLocation="catalogues.xsd"/>