

HSCOrgRefData Validator

Support Documentation

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Introduction

This document provides guidance on how to use an implementation of an XML validator which validates a given XML file against the schema defined in its namespace declaration. The issuing authority doesn't mandate its use by consumers; rather it has been made available as a support tool which can be used to validate the content of any Health and Social Care Organisation Reference Data XML file.

The software is written in Java and is released under the Apache 2.0 license. Consumers **MUST** check the conditions of the Apache 2.0 license prior to deployment and use of the software.

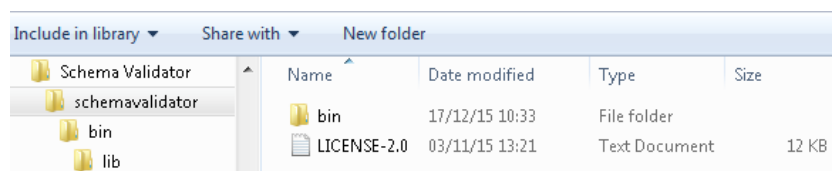
The guidance provided in this document applies to Windows 7 only.

Package Content

The compiled Java package (XMLvalidator.zip) has the following structure.

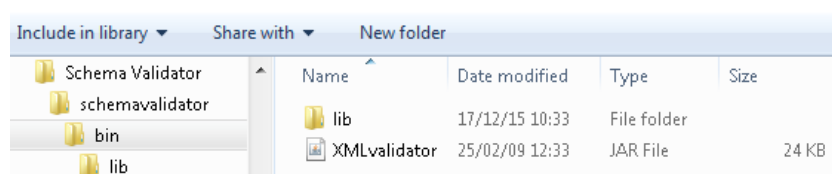
schemavalidator (Root Folder)	LICENSE-2.0.txt (Apache 2.0 License)		
	bin (Folder)	XMLvalidator.jar (Executable JAR file)	
	lib (Folder)	xercesImpl.jar	

root Folder



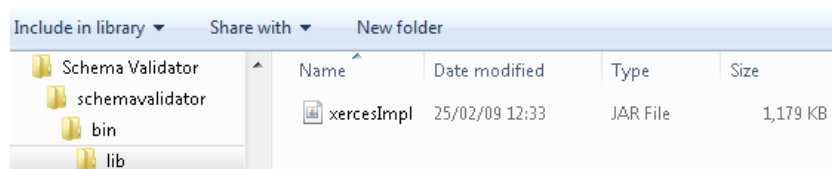
Name	Date modified	Type	Size
bin	17/12/15 10:33	File folder	
LICENSE-2.0	03/11/15 13:21	Text Document	12 KB

bin folder



Name	Date modified	Type	Size
lib	17/12/15 10:33	File folder	
XMLvalidator	25/02/09 12:33	JAR File	24 KB

lib folder



Name	Date modified	Type	Size
xercesImpl	25/02/09 12:33	JAR File	1,179 KB

Source Code

The source code for the XMLvalidator is also available under the Apache 2.0 license within XMLvalidator_source.zip.

How to Use

This guidance refers to the use of the compiled Java software within the package XMLvalidator.zip.

Pre-requisites

The software has been tested successfully on a Windows laptop PC with the following specification:

- Java jdk1.8.0_65 (it is advised to always have an up to date version of the JDK deployed)
- Java jre1.8.0_65 (it is advised to always have an up to date version of the JRE deployed)
- Windows 7 Professional (32 Bit)
- Core i5 3320M quad core processor running at 2.6GHz
- 4GB RAM

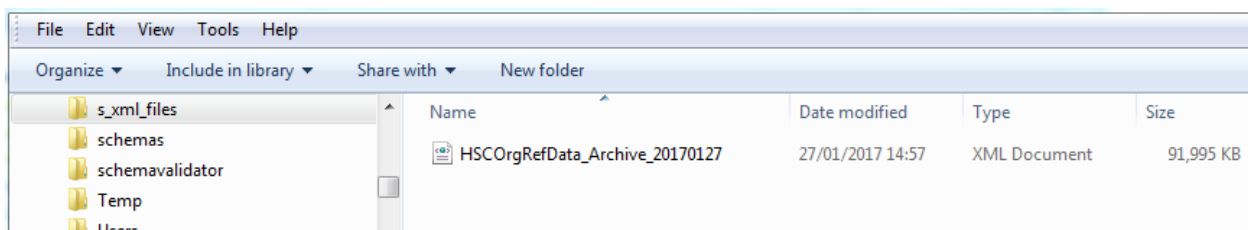
The specification doesn't serve as a warranted environment specification, but may be useful in helping to define a minimum specification under which consumers are able to run the software.

Using the Software to Validate XML

Please note that the example folders included in the steps below are not mandated but they are consistent with the command line arguments shown in the example in step 4.

1. Download the XML release file that needs to be validated

Unpack the file and make a note of where it has been saved, e.g. c:\s_xml_files\

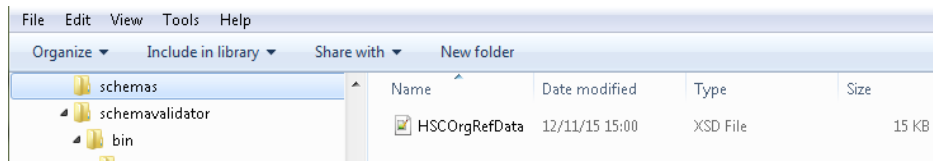


2. Acquire the HSCOrgRefData schema file

The XML schema file can be downloaded from the NHS Digital website alongside the release files or directly from <http://refdata.hscic.gov.uk/org/v2-0-0/HSCOrgRefData.xsd>. Note that the "v2-0-0" portion of the URI may be different depending on the schema version

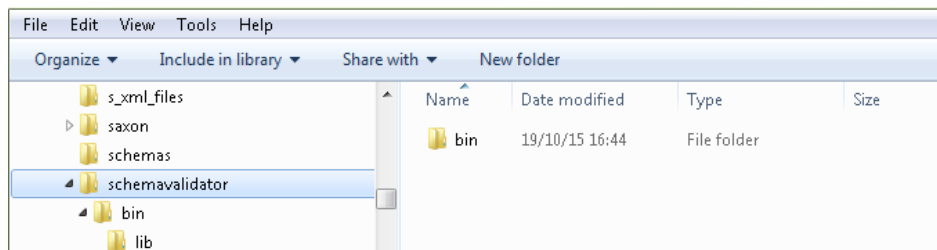
to which the file conforms. The schema version that the XML data complies with can be found in the manifest of XML file acquired in Step 1 (note that it is possible to read the head of the XML file using the preview pane in Windows Explorer).

Make a note of where the file has been saved, e.g. c:\schemas\



3. Download and unpack the Compiled Java Package

The Compiled Java Package is available from the NHS Digital website. Download the package and unzip the archive. Make a note of where the files within the package have been extracted, e.g. c:\schemavalidator\



4. Execute the validation process

Open a command prompt (run as administrator). Navigate to the bin directory of the schema validator folder (c:\schemavalidator\bin).

The command must follow the syntax and structure below:

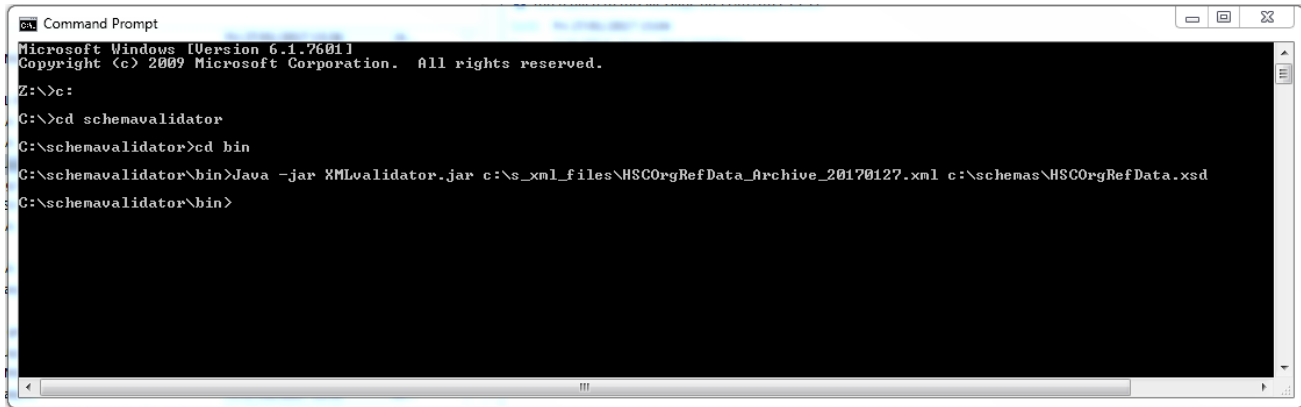
Java -jar XMLvalidator.jar <xml file> <schema file> > [<output file>]

Command element	Description
Java	Invokes the Java interpreter
-jar	Java command line argument informing Java that it will be handling a jar file
XMLvalidator.jar	The compiled Java file to be executed
xml file	The XML file to be validated
schema file	The schema file against which validation will be done
Filename	Optional argument to pipe the output to stdout rather than to the console

For the file layout shown in previous steps the following command would execute the validation of a file called **HSCOrgRefData_Archive_20170127.xml** against the schema file **HSCOrgRefData.xsd**.

```
Java -jar XMLvalidator.jar  
c:\s_xml_files\HSCOrgRefData_Archive_20170127.xml  
c:\schemas\HSCOrgRefData.xsd
```

The full process of navigating to the bin folder and running the command can be seen below:



```
Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

Z:\>c:
C:\>cd schemavalidator
C:\schemavalidator>cd bin
C:\schemavalidator\bin>Java -jar XMLvalidator.jar c:\s_xml_files\HSCOrgRefData_Archive_20170127.xml c:\schemas\HSCOrgRefData.xsd
C:\schemavalidator\bin>
```

The example below includes the optional filename parameter:

```
Java -jar XMLvalidator.jar  
c:\s_xml_files\HSCOrgRefData_Archive_20170127.xml  
c:\schemas\HSCOrgRefData.xsd  
> validation.log
```

Tip! A common error is to omit the `-jar` argument which results in the following error being reported:

Error: Could not find or load main class XMLvalidator.jar

On a machine with the specification listed in the Pre-requisites section this takes approximately 20 seconds to validate a file of around 400MB in size. The cursor will flash whilst the validation takes place. Note that successful validation isn't explicitly reported and the process will return to the DOS prompt on successful completion of the validation process.

If error(s) are found these are reported to the console (or the optional output file if that is specified in the command) and the validation process is halted.