

X3D Validator



This Web application comprehensively checks X3D4 HTML5 model validity.

Choose a local .x3d model file

Browse... No file selected.

○Enter an online .x3d model url

Hello World .x3d

Validate

Local file X3D scene file name: HelloWorld4.x3d (length: 3451 bytes) (revalidation address)

------ Commence validation checks for HelloWorld4.x3d -------

Performing XML well-formed check... XML well-formed check: pass.

Performing DOCTYPE reference check...

found HTML page wrapping X3D model in original file: false [X3dDoctypeChecker] success: valid XML declaration found. [X3dDoctypeChecker] success: final X3D 4.0 DOCTYPE found. DOCTYPE reference check: **pass**.

Performing X3D DTD validation check (X3D DTD documentation) ... X3D DTD validation check: pass.

Performing X3D schema validation check (X3D schema documentation) ... X3D schema validation check: pass.

Performing X3dToClassicVrml.xslt conversion check (Quality Assurance (QA) overview) ...

X3dToClassicVrml.xslt conversion check: pass.

Performing <u>integer/float regular expression (regex)</u> check... integer/float regular expression (regex) check: pass.

Performing X3D Schematron check...

X3D version 4.0 is experimental and under development, focused on HTML5/DOM interoperabiliity. [/X3D, diagnostic] X3D/head/meta title (i.e. filename 'HelloWorld4.x3d') is expected at end of identifier (url) value [/X3D/head, warning] X3D Schematron check: **pass**.

Good practice is to fix errors and warnings wherever possible, and consider silencing harmless informational messages, so that important indicators remain noticeable.

Performing <u>X3D Tidy</u> check (<u>X3D Tidy Scene Cleanup, Corrections and Modifications</u>) ... X3D Tidy check: pass.

Performing X3D to XHTML pretty-print listing check (Quality Assurance (QA) overview) ...

Conversion complete, documentation appears below.

Authoring hints: Select url links to check the availability of online addresses. Comments are inserted with local links to document ROUTE connections. Node tooltips are also provided.

<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE X3D PUBLIC "ISO//Web3D//DTD X3D 4.0//EN" "http://www.web3d.org/specifications/x3d-4.0.dtd"> <X3D profile='Immersive' version='4.0' xmlns:xsd='http://www.w3.org/2001/XMLSchema-instance'

xsd:noNamespaceSchemaLocation =' http://www.web3d.org/specifications/x3d-4.0.xsd '>

<head>

<!-- Alternate encodings: VRML97, X3D ClassicVRML Encoding, X3D Compressed Binary Encoding (CBE), X3DOM, JSON -->

<meta name='title' content='HelloWorld4.x3d'/>

<meta name='description' content='Simple X3D model example: Hello World!'/>

<meta name='created' content='30 October 2000'/>

<meta name='modified' content='26 August 2020'/>

<meta name='creator' content='Don Brutzman'/>

<meta name='Image' content='HelloWorld.tall.png'/>

<meta name='reference' content=' <u>http://en.wikipedia.org/wiki/Hello_world</u> '/>

<meta name='reference' content=' https://en.wikipedia.org/wiki/Hello#.22Hello.2C World.22 computer program '/>

<meta name='reference' content=' "https://en.wikipedia.org/wiki/Hello,_World!_program" '/>

<meta name='reference' content=' http://en.wikibooks.org/w/index.php?title=Computer Programming/Hello world '/>

<meta content=" <u>http://www.HelloWorldExample.net</u> " name="reference"/>
<meta content=" <u>https://www.web3d.org</u> " name="reference"/>
<meta content=" https://www.web3d.org/realtime-3d/news/internationalization-x3d " name="reference"/>
<meta content=" <u>https://www.web3d.org/x3d/content/examples/HelloWorld.x3d</u> " name="reference"/>
<meta content=" http://X3dGraphics.com/examples/X3dForAdvancedModeling/HelloWorldScenes</td></tr><tr><td>/HelloWorld.x3d " name="reference"/>
<meta content=" http://X3dGraphics.com/examples/X3dForWebAuthors/Chapter01TechnicalOverview</td></tr><tr><td>/HelloWorld.x3d " name="identifier"/>
<meta content=" <u>https://www.web3d.org/x3d/content/examples/license.html</u> " name="license"/>
<meta content="X3D-Edit 3.3, <u>https://savage.nps.edu/X3D-Edit</u>" name="generator"/>
<meta content="HelloWorld.wrl" name="reference"/>
<meta content="HelloWorld.x3dv" name="reference"/>
<meta content="HelloWorld.x3db" name="reference"/>
<meta content="HelloWorld.xhtml" name="reference"/>
<meta content="HelloWorld.json" name="reference"/>

<!--

Index for DEF nodes : ImageCloudlessEarth, MaterialLightBlue, TextMessage, ViewUpClose

-->

<Scene>

```
<!-- Example scene to illustrate X3D nodes and fields (XML elements and attributes) -->
<WorldInfo info=""Example scene to illustrate a simple X3D model" title='Hello World!'/>
<Group bboxDisplay='false' visible='true'>
    <Viewpoint DEF='ViewUpClose' centerOfRotation='0 -1 0' description='Hello world!' position='0 -1
   7' nearClippingPlane='-1' farClippingPlane='-1' viewAll='false'/>
   <Transform rotation='0 1 0 3' bboxDisplay='false' visible='true'>
       <Shape bboxDisplay='false' visible='true'>
           <Sphere/>
           <Appearance>
               <Material DEF='MaterialLightBlue' diffuseColor='0.1 0.5 1'/>
               <ImageTexture DEF='ImageCloudlessEarth' load='true' refresh='0'
                url=' "earth-topo.png" "earth-topo.jpg" "earth-topo-small.gif" "https://www.web3d.org/x3d/content
               /examples/Basic/earth-topo.png" "https://www.web3d.org/x3d/content/examples/Basic/earth-topo.jpg"
               "https://www.web3d.org/x3d/content/examples/Basic/earth-topo-small.gif" '/>
           </Appearance>
       </Shape>
```

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</Transform>
           <Transform translation='0 -2 0' bboxDisplay='false' visible='true'>
              <Shape bboxDisplay='false' visible='true'>
                  <Text DEF='TextMessage' string='"Hello" "world!"'>
                      <FontStyle justify=""MIDDLE" "MIDDLE""/>
                  </Text>
                  <Appearance>
                      <Material USE='MaterialLightBlue'/>
                  </Appearance>
              </Shape>
           </Transform>
       </Group>
   </Scene>
</X3D>
<!--
                 Index for DEF nodes : ImageCloudlessEarth, MaterialLightBlue, TextMessage, ViewUpClose
-->
       <!-- Color key: <X3dNode DEF='idName' field='value'/> matches <XmlElement DEF='idName' attribute='value'/>
  (Light blue background: behavior node) (Grey background: inserted documentation) (Magenta background: X3D Extensibility)
                                                            -->
     <!-- Additional help information about X3D scenes: X3D Resources, X3D Scene Authoring Hints and X3D Tooltips -->
X3D to XHTML pretty-print listing check: pass.
------ Validation checks complete for HelloWorld4.x3d -------
The Authoring Support section of the X3D Resources page lists numerous additional resources that provide support for authoring
X3D.
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Help with X3D

Here are resources that can help troubleshoot problems with X3D scenes.

- X3D Resources: Authoring Support provides links to the X3D Specification, Schema & DTD documentation, and other assets.
- X3D Scene Authoring Hints provides author guidance for producing X3D scenes.
- X3D Tooltips provide summary descriptions and authoring hints for each X3D node (element) and field (attribute). Multilingual versions are available.
- <u>x3d-public@web3d.org</u> open mailing list (<u>subscribe</u>) (<u>archive</u>) is a good place to discuss X3D authoring and scene improvement.

X3D Validator Status

- The X3D Validator is maintained online at https://savage.nps.edu/X3dValidator
- The <u>Quality Assurance (QA)</u> section of the <u>X3D Resources</u> page provides further information about these validation tests.
- The same functionality is available locally on your desktop by using the checkmark button in the $\underline{X3D-Edit}$ authoring tool.
- X3D Validator analysis of a given scene can be invoked via url, for example: https://savage.nps.edu/X3dValidator?url=http://X3dGraphics.com/examples/X3dForWebAuthors/Chapter02-GeometryPrimitives/Box.x3d

Security note: currently no scenes or errors are saved by the server. Future versions may support submitting error reports of general interest.

Development Details

- This project is developed and deployed using <u>Netbeans</u>.
- This codebase is published under an open-source license (.txt), available on SourceForge, and undergoing continued development.
- Source code is available for subversion checkout at svn co https://svn.code.sf.net/p/x3d/code/www.web3d.org/x3d/tools/X3dQualityAssurance/X3dValidator X3dValidator
- Using Netbeans, first run target all.get to obtain additional code, then all.run the project to compile and launch locally. Then run target all.deploy to publish (requires server-side permissions).

Contact

- Questions, suggestions and comments about these resources are welcome. Please send them to Don Brutzman (brutzman at nps.edu)
- If you find this service useful, please consider providing a testimonial comment for our <u>Web3D Consortium news announcement</u>.
- Updated: 26 August 2020 (revision log)

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