



X3D Abstract Specification Node Index	X3D Schema validation	X3D DTD validation	X3D Tooltips	X3D Schematron validation	VRML97 Specification <small>(Grey background = forward compatibility for .wrl VRML97)</small>	X3D-Edit <small>(X3DToVrm97.xslt)</small>	X3DOM v1.7 <small>Cobweb</small>	X3D
ISOSurfaceVolumeData	ISOSurfaceVolumeData	ISOSurfaceVolumeData	ISOSurfaceVolumeData	ISOSurfaceVolumeData	ISOSURFACEVOLUMEDATA	ISOSURFACEVOLUMEDATA	ISOSurfaceVolumeData	KeySensor
KeySensor	KeySensor	KeySensor	KeySensor	KeySensor	KEYSENSOR	KEYSENSOR	* suggested for HTML5 profile	KeySensor
Layer	Layer	Layer	Layer	Layer	LAYER	LAYER	Layer	Layer
LayerSet	LayerSet	LayerSet	LayerSet	LayerSet	LAYERSET	LAYERSET	* not yet implemented	LayerSet
Layout	Layout	Layout	Layout	Layout	LAYOUT	LAYOUT	* not yet implemented	Layout
LayoutGroup	LayoutGroup	LayoutGroup	LayoutGroup	LayoutGroup	LAYOUTGROUP	LAYOUTGROUP	* not yet implemented	LayoutGroup
LayoutLayer	LayoutLayer	LayoutLayer	LayoutLayer	LayoutLayer	LAYOUTLAYER	LAYOUTLAYER	* not yet implemented	LayoutLayer
LinePickSensor	LinePickSensor	LinePickSensor	LinePickSensor	LinePickSensor	LINEPICKSENSOR	LINEPICKSENSOR	* not yet implemented	LinePickSensor
LineProperties	LineProperties	LineProperties	LineProperties	LineProperties	LINEPROPERTIES	LINEPROPERTIES	* not yet implemented	LineProperties
LineSet	LineSet	LineSet	LineSet	LineSet	LINESET	LINESET	* suggested for HTML5 profile	LineSet
LoadSensor	LoadSensor	LoadSensor	LoadSensor	LoadSensor	LOADSENSOR	LOADSENSOR	* suggested for HTML5 profile	LoadSensor
LocalFog	LocalFog	LocalFog	LocalFog	LocalFog	LOCALFOG	LOCALFOG	* suggested for HTML5 profile	LocalFog
LOD	LOD	LOD	LOD	LOD	LOD	LOD	LOD	LOD
Material	Material	Material	Material	Material	MATERIAL	MATERIAL	Material	Material
Matrix3VertexAttribute	Matrix3VertexAttribute	Matrix3VertexAttribute	Matrix3VertexAttribute	Matrix3VertexAttribute	MATRIX3VERTEXATTRIBUTE	MATRIX3VERTEXATTRIBUTE	Matrix3VertexAttribute	Matrix3VertexAttribute
Matrix4VertexAttribute	Matrix4VertexAttribute	Matrix4VertexAttribute	Matrix4VertexAttribute	Matrix4VertexAttribute	MATRIX4VERTEXATTRIBUTE	MATRIX4VERTEXATTRIBUTE	Matrix4VertexAttribute	Matrix4VertexAttribute
meta	meta	meta	meta	meta	META	META	meta	meta
MetadataBoolean	MetadataBoolean	MetadataBoolean	MetadataBoolean	MetadataBoolean	METADATABOOLEAN	METADATABOOLEAN	MetadataBoolean	MetadataBoolean
MetadataDouble	MetadataDouble	MetadataDouble	MetadataDouble	MetadataDouble	METADATADOUBLE	METADATADOUBLE	MetadataDouble	MetadataDouble
MetadataFloat	MetadataFloat	MetadataFloat	MetadataFloat	MetadataFloat	METADATAFLOAT	METADATAFLOAT	MetadataFloat	MetadataFloat
MetadataInteger	MetadataInteger	MetadataInteger	MetadataInteger	MetadataInteger	METADATAINTEGER	METADATAINTEGER	MetadataInteger	MetadataInteger
MetadataSet	MetadataSet	MetadataSet	MetadataSet	MetadataSet	METADATASET	METADATASET	MetadataSet	MetadataSet
MetadataString	MetadataString	MetadataString	MetadataString	MetadataString	METADATASTRING	METADATASTRING	MetadataString	MetadataString
MotorJoint	MotorJoint	MotorJoint	MotorJoint	MotorJoint	MOTORJOINT	MOTORJOINT	MotorJoint	MotorJoint
MovieTexture	MovieTexture	MovieTexture	MovieTexture	MovieTexture	MOVIETEXTURE	MOVIETEXTURE	MovieTexture	MovieTexture
MultiTexture	MultiTexture	MultiTexture	MultiTexture	MultiTexture	MULTITEXTURE	MULTITEXTURE	MultiTexture	MultiTexture
MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate	MULTITEXTURECOORDINATE	MULTITEXTURECOORDINATE	MultiTextureCoordinate	MultiTextureCoordinate
MultiTextureTransform	MultiTextureTransform	MultiTextureTransform	MultiTextureTransform	MultiTextureTransform	MULTITEXTURETRANSFORM	MULTITEXTURETRANSFORM	MultiTextureTransform	MultiTextureTransform
NavigationInfo	NavigationInfo	NavigationInfo	NavigationInfo	NavigationInfo	NAVIGATIONINFO	NAVIGATIONINFO	NavigationInfo	NavigationInfo
Normal	Normal	Normal	Normal	Normal	NORMAL	NORMAL	Normal	Normal
NormalInterpolator	NormalInterpolator	NormalInterpolator	NormalInterpolator	NormalInterpolator	NORMALINTERPOLATOR	NORMALINTERPOLATOR	NormalInterpolator	NormalInterpolator
NurbsCurve	NurbsCurve	NurbsCurve	NurbsCurve	NurbsCurve	NURBSCURVE	NURBSCURVE	NurbsCurve	NurbsCurve
NurbsCurve2D	NurbsCurve2D	NurbsCurve2D	NurbsCurve2D	NurbsCurve2D	NURBSCURVE2D	NURBSCURVE2D	NurbsCurve2D	NurbsCurve2D
NurbsOrientationInterpolator	NurbsOrientationInterpolator	NurbsOrientationInterpolator	NurbsOrientationInterpolator	NurbsOrientationInterpolator	NURBSORIENTATIONINTERPOLATOR	NURBSORIENTATIONINTERPOLATOR	NurbsOrientationInterpolator	NurbsOrientationInterpolator
NurbsPatchSurface	NurbsPatchSurface	NurbsPatchSurface	NurbsPatchSurface	NurbsPatchSurface	NURBSPATCHSURFACE	NURBSPATCHSURFACE	NurbsPatchSurface	NurbsPatchSurface
NurbsPositionInterpolator	NurbsPositionInterpolator	NurbsPositionInterpolator	NurbsPositionInterpolator	NurbsPositionInterpolator	NURBSPOSITIONINTERPOLATOR	NURBSPOSITIONINTERPOLATOR	NurbsPositionInterpolator	NurbsPositionInterpolator
NurbsSet	NurbsSet	NurbsSet	NurbsSet	NurbsSet	NURBSSET	NURBSSET	NurbsSet	NurbsSet
NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NURBSURFACEINTERPOLATOR	NURBSURFACEINTERPOLATOR	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator
NurbsSweptSurface	NurbsSweptSurface	NurbsSweptSurface	NurbsSweptSurface	NurbsSweptSurface	NURBSWEPTSURFACE	NURBSWEPTSURFACE	NurbsSweptSurface	NurbsSweptSurface
NurbsSwingSurface	NurbsSwingSurface	NurbsSwingSurface	NurbsSwingSurface	NurbsSwingSurface	NURBSWINGSURFACE	NURBSWINGSURFACE	NurbsSwingSurface	NurbsSwingSurface
NurbsTextureCoordinate	NurbsTextureCoordinate	NurbsTextureCoordinate	NurbsTextureCoordinate	NurbsTextureCoordinate	NURBSTEXTURECOORDINATE	NURBSTEXTURECOORDINATE	NurbsTextureCoordinate	NurbsTextureCoordinate
NurbsTrimmedSurface	NurbsTrimmedSurface	NurbsTrimmedSurface	NurbsTrimmedSurface	NurbsTrimmedSurface	NURBSTRIMMEDSURFACE	NURBSTRIMMEDSURFACE	NurbsTrimmedSurface	NurbsTrimmedSurface
OpacityMapVolumeStyle	OpacityMapVolumeStyle	OpacityMapVolumeStyle	OpacityMapVolumeStyle	OpacityMapVolumeStyle	OPACITYMAPVOLUMESTYLE	OPACITYMAPVOLUMESTYLE	OpacityMapVolumeStyle	OpacityMapVolumeStyle
OrientationChaser	OrientationChaser	OrientationChaser	OrientationChaser	OrientationChaser	ORIENTATIONCHASER	ORIENTATIONCHASER	OrientationChaser	OrientationChaser
OrientationDamper	OrientationDamper	OrientationDamper	OrientationDamper	OrientationDamper	ORIENTATIONDAMPER	ORIENTATIONDAMPER	OrientationDamper	OrientationDamper
OrientationInterpolator	OrientationInterpolator	OrientationInterpolator	OrientationInterpolator	OrientationInterpolator	ORIENTATIONINTERPOLATOR	ORIENTATIONINTERPOLATOR	OrientationInterpolator	OrientationInterpolator
OrthoViewpoint	OrthoViewpoint	OrthoViewpoint	OrthoViewpoint	OrthoViewpoint	ORTHOVIEWPOINT	ORTHOVIEWPOINT	OrthoViewpoint	OrthoViewpoint
PackageShader	PackageShader	PackageShader	PackageShader	PackageShader	PACKAGESHADER	PACKAGESHADER	PackageShader	PackageShader
ParticleSystem	ParticleSystem	ParticleSystem	ParticleSystem	ParticleSystem	PARTICLESYSTEM	PARTICLESYSTEM	ParticleSystem	ParticleSystem
PickableGroup	PickableGroup	PickableGroup	PickableGroup	PickableGroup	PICKABLEGROUP	PICKABLEGROUP	PickableGroup	PickableGroup
PixelTexture	PixelTexture	PixelTexture	PixelTexture	PixelTexture	PIXELTEXTURE	PIXELTEXTURE	PixelTexture	PixelTexture
PixelTexture3D	PixelTexture3D	PixelTexture3D	PixelTexture3D	PixelTexture3D	PIXELTEXTURE3D	PIXELTEXTURE3D	PixelTexture3D	PixelTexture3D
PlaneSensor	PlaneSensor	PlaneSensor	PlaneSensor	PlaneSensor	PLANESENSOR	PLANESENSOR	PlaneSensor	PlaneSensor
PointEmitter	PointEmitter	PointEmitter	PointEmitter	PointEmitter	POINTEmitter	POINTEmitter	PointEmitter	PointEmitter
PointLight	PointLight	PointLight	PointLight	PointLight	POINTLIGHT	POINTLIGHT	PointLight	PointLight
PointPickSensor	PointPickSensor	PointPickSensor	PointPickSensor	PointPickSensor	POINTPICKSENSOR	POINTPICKSENSOR	PointPickSensor	PointPickSensor
PointSet	PointSet	PointSet	PointSet	PointSet	POINTSET	POINTSET	PointSet	PointSet
Polyline2D	Polyline2D	Polyline2D	Polyline2D	Polyline2D	POLYLINE2D	POLYLINE2D	Polyline2D	Polyline2D
PolylineEmitter	PolylineEmitter	PolylineEmitter	PolylineEmitter	PolylineEmitter	POLYLINEEMITTER	POLYLINEEMITTER	PolylineEmitter	PolylineEmitter
Polypoint2D	Polypoint2D	Polypoint2D	Polypoint2D	Polypoint2D	POLYPOINT2D	POLYPOINT2D	Polypoint2D	Polypoint2D
PositionChaser	PositionChaser	PositionChaser	PositionChaser	PositionChaser	POSITIONCHASER	POSITIONCHASER	PositionChaser	PositionChaser
PositionChaser2D	PositionChaser2D	PositionChaser2D	PositionChaser2D	PositionChaser2D	POSITIONCHASER2D	POSITIONCHASER2D	PositionChaser2D	PositionChaser2D
PositionDamper	PositionDamper	PositionDamper	PositionDamper	PositionDamper	POSITIONDAMPER	POSITIONDAMPER	PositionDamper	PositionDamper
PositionDamper2D	PositionDamper2D	PositionDamper2D	PositionDamper2D	PositionDamper2D	POSITIONDAMPER2D	POSITIONDAMPER2D	PositionDamper2D	PositionDamper2D
PositionInterpolator	PositionInterpolator	PositionInterpolator	PositionInterpolator	PositionInterpolator	POSITIONINTERPOLATOR	POSITIONINTERPOLATOR	PositionInterpolator	PositionInterpolator
PositionInterpolator2D	PositionInterpolator2D	PositionInterpolator2D	PositionInterpolator2D	PositionInterpolator2D	POSITIONINTERPOLATOR2D	POSITIONINTERPOLATOR2D	* suggested for HTML5 profile	PositionInterpolator2D
PrimitivePickSensor	PrimitivePickSensor	PrimitivePickSensor	PrimitivePickSensor	PrimitivePickSensor	PRIMITIVEPICKSENSOR	PRIMITIVEPICKSENSOR	PrimitivePickSensor	PrimitivePickSensor
ProgramShader	ProgramShader	ProgramShader	ProgramShader	ProgramShader	PROGRAMSHADER	PROGRAMSHADER	ProgramShader	ProgramShader
ProjectionVolumeStyle	ProjectionVolumeStyle	ProjectionVolumeStyle	ProjectionVolumeStyle	ProjectionVolumeStyle	PROJECTIONVOLUMESTYLE	PROJECTIONVOLUMESTYLE	ProjectionVolumeStyle	ProjectionVolumeStyle
ProtoBody	ProtoBody	ProtoBody	ProtoBody	ProtoBody	PROTOBODY	PROTOBODY	* required for Immersive Profile	ProtoBody
ProtoDeclare	ProtoDeclare	ProtoDeclare	ProtoDeclare	ProtoDeclare	PROTODECLARE	PROTODECLARE	* required for Immersive Profile	ProtoDeclare
ProtoInstance	ProtoInstance	ProtoInstance	ProtoInstance	ProtoInstance	PROTOINSTANCE	PROTOINSTANCE	* required for Immersive Profile	ProtoInstance
ProtoInterface	ProtoInterface	ProtoInterface	ProtoInterface	ProtoInterface	PROTOINTERFACE	PROTOINTERFACE	* required for Immersive Profile	ProtoInterface
ProximitySensor	ProximitySensor	ProximitySensor	ProximitySensor	ProximitySensor	PROXIMITYSENSOR	PROXIMITYSENSOR	* required for Immersive Profile	ProximitySensor
QuadSet	QuadSet	QuadSet	QuadSet	QuadSet	QUADSET	QUADSET	QuadSet	QuadSet
ReceiverPdu	ReceiverPdu	ReceiverPdu	ReceiverPdu	ReceiverPdu	RECEIVERPDU	RECEIVERPDU	ReceiverPdu	ReceiverPdu
Rectangle2D	Rectangle2D	Rectangle2D	Rectangle2D	Rectangle2D	RECTANGLE2D	RECTANGLE2D	Rectangle2D	Rectangle2D
RigidBody	RigidBody	RigidBody	RigidBody	RigidBody	RIGIDBODY	RIGIDBODY	RigidBody	RigidBody
RigidBodyCollection	RigidBodyCollection	RigidBodyCollection	RigidBodyCollection	RigidBodyCollection	RIGIDBODYCOLLECTION	RIGIDBODYCOLLECTION	RigidBodyCollection	RigidBodyCollection
ROUTE	ROUTE	ROUTE	ROUTE	ROUTE	ROUTE	ROUTE	ROUTE	ROUTE
ScalarChaser	ScalarChaser	ScalarChaser	ScalarChaser	ScalarChaser	SCALARCHASER	SCALARCHASER	ScalarChaser	ScalarChaser
ScalarDamper	ScalarDamper	ScalarDamper	ScalarDamper	ScalarDamper	SCALARDAMPER	SCALARDAMPER	ScalarDamper	ScalarDamper
ScalarInterpolator	ScalarInterpolator	ScalarInterpolator	ScalarInterpolator	ScalarInterpolator	SCALARINTERPOLATOR	SCALARINTERPOLATOR	ScalarInterpolator	ScalarInterpolator
Scene	Scene	Scene	Scene	Scene	SCENE	SCENE	Scene	Scene
ScreenFontStyle	ScreenFontStyle	ScreenFontStyle	ScreenFontStyle	ScreenFontStyle	SCREENFONTSTYLE	SCREENFONTSTYLE	ScreenFontStyle	ScreenFontStyle
ScreenGroup	ScreenGroup	ScreenGroup	ScreenGroup	ScreenGroup	SCREENGROUP	SCREENGROUP	ScreenGroup	ScreenGroup
Script	Script	Script	Script	Script	SCRIPT	SCRIPT	* required for Immersive Profile	Script
SegmentedVolumeData	SegmentedVolumeData	SegmentedVolumeData	SegmentedVolumeData	SegmentedVolumeData	SEGMENTEDVOLUMEData	SEGMENTEDVOLUMEData	SegmentedVolumeData	SegmentedVolumeData
ShadedVolumeStyle	ShadedVolumeStyle	ShadedVolumeStyle	ShadedVolumeStyle	ShadedVolumeStyle	SHADEDVOLUMESTYLE	SHADEDVOLUMESTYLE	ShadedVolumeStyle	ShadedVolumeStyle
ShaderPart	ShaderPart	ShaderPart	ShaderPart	ShaderPart	SHADERPART	SHADERPART	ShaderPart	ShaderPart
ShaderProgram	ShaderProgram	ShaderProgram	ShaderProgram	ShaderProgram	SHADERPROGRAM	SHADERPROGRAM	ShaderProgram	ShaderProgram
Shape	Shape	Shape	Shape	Shape	SHAPE	SHAPE	Shape	Shape
SignalPdu	SignalPdu	SignalPdu	SignalPdu	SignalPdu	SIGNALPDU	SIGNALPDU	SignalPdu	SignalPdu
SilhouetteEnhancementVolumeStyle	SilhouetteEnhancementVolumeStyle	SilhouetteEnhancementVolumeStyle	SilhouetteEnhancementVolumeStyle	SilhouetteEnhancementVolumeStyle	SILHOUETTEENHANCEMENTVOLUMEStyle	SILHOUETTEENHANCEMENTVOLUMEStyle	SilhouetteEnhancementVolumeStyle	SilhouetteEnhancementVolumeStyle
SingleAxisHingeJoint	SingleAxisHingeJoint	SingleAxisHingeJoint	SingleAxisHingeJoint	SingleAxisHingeJoint	SINGLEAXISHINGEJOINT	SINGLEAXISHINGEJOINT	SingleAxisHingeJoint	SingleAxisHingeJoint
SliderJoint	SliderJoint	SliderJoint	SliderJoint	SliderJoint	SLIDERJOINT	SLIDERJOINT	SliderJoint	SliderJoint
Sound	Sound	Sound	Sound	Sound	SOUND	SOUND	Sound	Sound
Sphere	Sphere	Sphere	Sphere	Sphere	SPHERE	SPHERE	Sphere	Sphere
SphereSensor	SphereSensor	SphereSensor	SphereSensor	SphereSensor	SPHERESENSOR	SPHERESENSOR	SphereSensor	SphereSensor
SplinePositionInterpolator	SplinePositionInterpolator	SplinePositionInterpolator	SplinePositionInterpolator	SplinePositionInterpolator	SPLINEPOSITIONINTERPOLATOR	SPLINEPOSITIONINTERPOLATOR	SplinePositionInterpolator	SplinePositionInterpolator
SplinePositionInterpolator2D	SplinePositionInterpolator2D	SplinePositionInterpolator2D	SplinePositionInterpolator2D	SplinePositionInterpolator2D	SPLINEPOSITIONINTERPOLATOR2D	SPLINEPOSITIONINTERPOLATOR2D	SplinePositionInterpolator2D	SplinePositionInterpolator2D
SplineScalarInterpolator	SplineScalarInterpolator	SplineScalarInterpolator	SplineScalarInterpolator	SplineScalarInterpolator	SPLINESCALARINTERPOLATOR	SPLINESCALARINTERPOLATOR	SplineScalarInterpolator	SplineScalarInterpolator
SpotLight	SpotLight	SpotLight	SpotLight	SpotLight	SPOTLIGHT	SPOTLIGHT	SpotLight	SpotLight
SquadOrientationInterpolator	SquadOrientationInterpolator	SquadOrientationInterpolator	SquadOrientationInterpolator	SquadOrientationInterpolator	SQUADORIENTATIONINTERPOLATOR	SQUADORIENTATIONINTERPOLATOR	SquadOrientationInterpolator	SquadOrientationInterpolator
StaticGroup	StaticGroup	StaticGroup	StaticGroup	StaticGroup	STATICGROUP	STATICGROUP	StaticGroup	StaticGroup
StringSensor	StringSensor	StringSensor	StringSensor	StringSensor	STRINGSENSOR	STRINGSENSOR	* suggested for HTML5 profile	StringSensor
SurfaceEmitter	SurfaceEmitter	SurfaceEmitter	SurfaceEmitter	SurfaceEmitter	SURFACEEMITTER	SURFACEEMITTER	* suggested for HTML5 profile	SurfaceEmitter

X3D Abstract Specification Node Index	X3D Schema validation	X3D DTD validation	X3D Tooltips	X3D Schematron validation	VRML97 Specification (Grey background = forward compatibility for .wrl VRML97)	X3D-Edit	X3DOM v1.7	Cobweb	X3D
Switch	Switch	Switch	Switch	Switch	Switch	SWITCH	Switch	Switch	Switch
TexCoordChaser2D	TexCoordChaser2D	TexCoordChaser2D	TexCoordChaser2D	TexCoordChaser2D	TexCoordChaser2D	* not yet implemented	TexCoordChaser2D	TexCoordChaser2D	TexCoordChaser2D
TexCoordDamper2D	TexCoordDamper2D	TexCoordDamper2D	TexCoordDamper2D	TexCoordDamper2D	TexCoordDamper2D	TEXCOORDDAMPER2D	TexCoordDamper2D	TexCoordDamper2D	TexCoordDamper2D
Text	Text	Text	Text	Text	Text	TEXT	Text	Text	Text
TextureBackground	TextureBackground	TextureBackground	TextureBackground	TextureBackground	TextureBackground	TEXTUREBACKGROUND	* suggested for HTML5 profile	TextureBackground	TextureBackground
TextureCoordinate	TextureCoordinate	TextureCoordinate	TextureCoordinate	TextureCoordinate	TextureCoordinate	TEXTURECOORDINATE	TextureCoordinate	TextureCoordinate	TextureCoordinate
TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TEXTURECOORDINATE3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D
TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D	TEXTURECOORDINATE4D	TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D
TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TEXTURECOORDINATEGENERATOR	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator
TextureProperties	TextureProperties	TextureProperties	TextureProperties	TextureProperties	TextureProperties	TEXTUREPROPERTIES	TextureProperties	TextureProperties	TextureProperties
TextureTransform	TextureTransform	TextureTransform	TextureTransform	TextureTransform	TextureTransform	TEXTURETRANSFORM	TextureTransform	TextureTransform	TextureTransform
TextureTransform3D	TextureTransform3D	TextureTransform3D	TextureTransform3D	TextureTransform3D	TextureTransform3D	TEXTURETRANSFORM3D	TextureTransform3D	TextureTransform3D	TextureTransform3D
TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D	TEXTURETRANSFORMMATRIX3D	TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D
TimeSensor	TimeSensor	TimeSensor	TimeSensor	TimeSensor	TimeSensor	TIMESENSOR	TimeSensor	TimeSensor	TimeSensor
TimeTrigger	TimeTrigger	TimeTrigger	TimeTrigger	TimeTrigger	TimeTrigger (Prototype available)	TIMETRIGGER	* required for Immersive Profile	TimeTrigger	TimeTrigger
ToneMappedVolumeStyle	ToneMappedVolumeStyle	ToneMappedVolumeStyle	ToneMappedVolumeStyle	ToneMappedVolumeStyle	ToneMappedVolumeStyle	TONEMAPPEDVOLUMESTYLE	ToneMappedVolumeStyle	ToneMappedVolumeStyle	ToneMappedVolumeStyle
TouchSensor	TouchSensor	TouchSensor	TouchSensor	TouchSensor	TouchSensor	TOUCHSENSOR	TouchSensor	TouchSensor	TouchSensor
Transform	Transform	Transform	Transform	Transform	Transform	TRANSFORM	Transform	Transform	Transform
TransformSensor	TransformSensor	TransformSensor	TransformSensor	TransformSensor	TransformSensor	* not yet implemented	TransformSensor	TransformSensor	TransformSensor
TransmitterPdu	TransmitterPdu	TransmitterPdu	TransmitterPdu	TransmitterPdu	TransmitterPdu (Java Prototype available)	TRANSMITTERPDU	TransmitterPdu	TransmitterPdu	TransmitterPdu
TriangleFanSet	TriangleFanSet	TriangleFanSet	TriangleFanSet	TriangleFanSet	TriangleFanSet (Prototype available)	TRIANGLEFANSET	TriangleFanSet	TriangleFanSet	TriangleFanSet
TriangleSet	TriangleSet	TriangleSet	TriangleSet	TriangleSet	TriangleSet (Prototype available)	TRIANGLESET	TriangleSet	TriangleSet	TriangleSet
TriangleSet2D	TriangleSet2D	TriangleSet2D	TriangleSet2D	TriangleSet2D	TriangleSet2D (Prototype available)	TRIANGLESET2D	TriangleSet2D	TriangleSet2D	TriangleSet2D
TriangleStripSet	TriangleStripSet	TriangleStripSet	TriangleStripSet	TriangleStripSet	TriangleStripSet (Prototype available)	TRIANGLESTRIPSET	TriangleStripSet	TriangleStripSet	TriangleStripSet
TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial	TWOSIDEDMATERIAL	TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial
UNIT	unit	unit	unit	unit	unit	UNIT	* suggested for HTML5 profile	UNIT	* suggested for HTML5 profile
UniversalJoint	UniversalJoint	UniversalJoint	UniversalJoint	UniversalJoint	UniversalJoint	UNIVERSALJOINT	UniversalJoint	UniversalJoint	UniversalJoint
Viewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint	VIEWPOINT	Viewpoint	Viewpoint	Viewpoint
ViewpointGroup	ViewpointGroup	ViewpointGroup	ViewpointGroup	ViewpointGroup	ViewpointGroup	VIEWPOINTGROUP	* suggested for HTML5 profile	ViewpointGroup	* suggested for HTML5 profile
Viewport	Viewport	Viewport	Viewport	Viewport	Viewport	* not yet implemented	Viewport	Viewport	Viewport
VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor	VISIBILITIESENSOR	VisibilitySensor	VisibilitySensor	VisibilitySensor
VolumeData	VolumeData	VolumeData	VolumeData	VolumeData	VolumeData	VOLUMEData	VolumeData	VolumeData	VolumeData
VolumeEmitter	VolumeEmitter	VolumeEmitter	VolumeEmitter	VolumeEmitter	VolumeEmitter	* not yet implemented	VolumeEmitter	VolumeEmitter	VolumeEmitter
VolumePickSensor	VolumePickSensor	VolumePickSensor	VolumePickSensor	VolumePickSensor	VolumePickSensor	* not yet implemented	VolumePickSensor	VolumePickSensor	VolumePickSensor
WindPhysicsModel	WindPhysicsModel	WindPhysicsModel	WindPhysicsModel	WindPhysicsModel	WindPhysicsModel	* not yet implemented	WindPhysicsModel	WindPhysicsModel	WindPhysicsModel
WorldInfo	WorldInfo	WorldInfo	WorldInfo	WorldInfo	WorldInfo	WORLDINFO	WorldInfo	WorldInfo	WorldInfo
X3D	X3D	X3D	X3D	X3D	X3D	X3D	X3D	X3D	X3D

Supported nodes and statements:	100%	100%	100%	66%	33%	48%	85%	61%	68%
251	251	251	251	166	55	121	214	154	171
Unimplemented nodes and statements:	0	0	0	85	0	75	37	77	80
0	0	0	0	85	0	75	37	77	80

References: X3D v1.3 Specification, X3D Schema Validation, X3D DOCTYPE (DTD) Validation, X3D Resources- Tooltips, X3D Schematron validation, VRML prototypes total: 55, VRML+Java prototypes total: 15, 55 nodes in VRML97 Specification, 83 nodes in VRML97 Amendment 1, X3D-Edit v1.3 Authoring Tool, X3DOM supported node list, Cobweb supported node list, X3D SourceForge

HTML profile goals	VRML97	X3DOM v1.7	Cobweb	X3D
* required for Immersive Profile	0	19	2	5
* also suggested for HTML5 profile	0	3	5	2
* nodes needed for HTML5 profile	0	32	3	7
* node support needed for Full Profile	0	37	0	0



X3D v3.3 Node Profiles, Components and Levels

X3D Abstract Specification Node Index	Minimum Profile	Component	Component Level for Full Support	Notes
Anchor	<a href="#">Interactive</a>	<a href="#">Networking</a>	2	
Appearance	<a href="#">Interchange</a>	<a href="#">Shape</a>	1	textureTransform, fillProperties, lineProperties option until level 2
Arc2D	<a href="#">Full</a>	<a href="#">Geometry2D</a>	2	
ArcClose2D	<a href="#">Full</a>	<a href="#">Geometry2D</a>	2	
AudioClip	<a href="#">Immersive</a>	<a href="#">Sound</a>	1	
Background	<a href="#">Interchange</a>	<a href="#">EnvironmentalEffects</a>	1	
BallJoint	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	2	
Billboard	<a href="#">Immersive</a>	<a href="#">Navigation</a>	2	
BlendedVolumeStyle	<a href="#">Full</a>	<a href="#">VolumeRendering</a>	3	
BooleanFilter	<a href="#">Interactive</a>	<a href="#">EventUtilities</a>	1	
BooleanSequencer	<a href="#">Interactive</a>	<a href="#">EventUtilities</a>	1	
BooleanToggle	<a href="#">Interactive</a>	<a href="#">EventUtilities</a>	1	
BooleanTrigger	<a href="#">Interactive</a>	<a href="#">EventUtilities</a>	1	
BoundaryEnhancementVolumeStyle	<a href="#">Full</a>	<a href="#">VolumeRendering</a>	2	
BoundedPhysicsModel	<a href="#">Full</a>	<a href="#">ParticleSystems</a>	2	
Box	<a href="#">Interchange</a>	<a href="#">Geometry3D</a>	1	
CADAssembly	<a href="#">Full</a>	<a href="#">CADGeometry</a>	2	
CADFace	<a href="#">Full</a>	<a href="#">CADGeometry</a>	2	
CADLayer	<a href="#">Full</a>	<a href="#">CADGeometry</a>	2	
CADPart	<a href="#">Full</a>	<a href="#">CADGeometry</a>	2	
CartoonVolumeStyle	<a href="#">Full</a>	<a href="#">VolumeRendering</a>	3	
Circle2D	<a href="#">Full</a>	<a href="#">Geometry2D</a>	2	
ClipPlane	<a href="#">Full</a>	<a href="#">Rendering</a>	5	
CollidableOffset	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	1	
CollidableShape	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	1	
Collision	<a href="#">Immersive</a>	<a href="#">Navigation</a>	2	
CollisionCollection	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	1	
CollisionSensor	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	1	contacts_changed requires level 2
CollisionSpace	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	1	
Color	<a href="#">Interchange</a>	<a href="#">Rendering</a>	1	15,000 colors
ColorChaser	<a href="#">Full</a>	<a href="#">Followers</a>	1	
ColorDamper	<a href="#">Full</a>	<a href="#">Followers</a>	1	
ColorInterpolator	<a href="#">Interchange</a>	<a href="#">Interpolation</a>	2	
ColorRGBA	<a href="#">Interchange</a>	<a href="#">Rendering</a>	1	15,000 colors, alpha optional until level 4
COMPONENT	<a href="#">Core</a>	<a href="#">Core</a>	1	
ComposedCubeMapTexture	<a href="#">Full</a>	<a href="#">CubeMapTexturing</a>	1	
ComposedShader	<a href="#">Full</a>	<a href="#">Shaders</a>	1	
ComposedTexture3D	<a href="#">Full</a>	<a href="#">Texturing3D</a>	1	
ComposedVolumeStyle	<a href="#">Full</a>	<a href="#">VolumeRendering</a>	2	ordered field is treated as field unless level 2
Cone	<a href="#">Interchange</a>	<a href="#">Geometry3D</a>	1	
ConeEmitter	<a href="#">Full</a>	<a href="#">ParticleSystems</a>	1	
connect	<a href="#">Immersive</a>	<a href="#">Core</a>	1	in support of ProtoDeclare
Contact	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	2	
Contour2D	<a href="#">Full</a>	<a href="#">NURBS</a>	4	
ContourPolyline2D	<a href="#">Full</a>	<a href="#">NURBS</a>	3	
Coordinate	<a href="#">Interchange</a>	<a href="#">Rendering</a>	1	
CoordinateChaser	<a href="#">Full</a>	<a href="#">Followers</a>	1	
CoordinateDamper	<a href="#">Full</a>	<a href="#">Followers</a>	1	
CoordinateDouble	<a href="#">Full</a>	<a href="#">NURBS</a>	1	
CoordinateInterpolator	<a href="#">Interchange</a>	<a href="#">Interpolation</a>	1	
CoordinateInterpolator2D	<a href="#">Full</a>	<a href="#">Interpolation</a>	3	
Cylinder	<a href="#">Interchange</a>	<a href="#">Geometry3D</a>	1	
CylinderSensor	<a href="#">Interactive</a>	<a href="#">PointingDeviceSensor</a>	1	
DirectionalLight	<a href="#">Interchange</a>	<a href="#">Lighting</a>	1	Not scoped by parent Group or Transform
DISEntityManager	<a href="#">Full</a>	<a href="#">DIS</a>	2	
DISEntityTypeMapping	<a href="#">Full</a>	<a href="#">DIS</a>	2	
Disk2D	<a href="#">Full</a>	<a href="#">Geometry2D</a>	2	
DoubleAxisHingeJoint	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	2	
EaseInEaseOut	<a href="#">Full</a>	<a href="#">Interpolation</a>	4	
EdgeEnhancementVolumeStyle	<a href="#">Full</a>	<a href="#">VolumeRendering</a>	2	
ElevationGrid	<a href="#">Interactive</a>	<a href="#">Geometry3D</a>	3	
EspduTransform	<a href="#">Full</a>	<a href="#">DIS</a>	1	
ExplosionEmitter	<a href="#">Full</a>	<a href="#">ParticleSystems</a>	1	
EXPORT	<a href="#">Interactive</a>	<a href="#">Networking</a>	3	in support of Inline
ExternProtoDeclare	<a href="#">Core</a>	<a href="#">Core</a>	1	in support of ProtoDeclare
Extrusion	<a href="#">Immersive</a>	<a href="#">Geometry3D</a>	4	
field	<a href="#">Core</a>	<a href="#">Core</a>	1	Prototypes fields are Core, Script fields are Immersive
fieldValue	<a href="#">Core</a>	<a href="#">Core</a>	1	Optional until Interactive profile or Core component level 2
FillProperties	<a href="#">Full</a>	<a href="#">Shape</a>	3	
FloatVertexAttribute	<a href="#">Full</a>	<a href="#">Shaders</a>	1	
Fog	<a href="#">Immersive</a>	<a href="#">EnvironmentalEffects</a>	2	
FogCoordinate	<a href="#">Full</a>	<a href="#">EnvironmentalEffects</a>	4	
FontStyle	<a href="#">Immersive</a>	<a href="#">Text</a>	1	

ForcePhysicsModel	<a href="#">Full</a>	<a href="#">ParticleSystems</a>	1	
GeneratedCubeMapTexture	<a href="#">Full</a>	<a href="#">CubeMapTexturing</a>	3	
GeoCoordinate	<a href="#">Full</a>	<a href="#">Geospatial</a>	1	
GeoElevationGrid	<a href="#">Full</a>	<a href="#">Geospatial</a>	1	
GeoLocation	<a href="#">Full</a>	<a href="#">Geospatial</a>	1	
GeoLOD	<a href="#">Full</a>	<a href="#">Geospatial</a>	1	
GeoMetadata	<a href="#">Full</a>	<a href="#">Geospatial</a>	1	
GeoOrigin	<a href="#">Full</a>	<a href="#">Geospatial</a>	1	
GeoPositionInterpolator	<a href="#">Full</a>	<a href="#">Geospatial</a>	1	
GeoProximitySensor	<a href="#">Full</a>	<a href="#">Geospatial</a>	2	
GeoTouchSensor	<a href="#">Full</a>	<a href="#">Geospatial</a>	1	
GeoTransform	<a href="#">Full</a>	<a href="#">Geospatial</a>	2	
GeoViewpoint	<a href="#">Full</a>	<a href="#">Geospatial</a>	1	
Group	<a href="#">Interchange</a>	<a href="#">Grouping</a>	1	addChildren, removeChildren optional until Interactive profile or component level 2
HAnimDisplacer	<a href="#">Full</a>	<a href="#">H-Anim</a>	1	
HAnimHumanoid	<a href="#">Full</a>	<a href="#">H-Anim</a>	1	
HAnimJoint	<a href="#">Full</a>	<a href="#">H-Anim</a>	1	
HAnimSegment	<a href="#">Full</a>	<a href="#">H-Anim</a>	1	
HAnimSite	<a href="#">Full</a>	<a href="#">H-Anim</a>	1	
head	<a href="#">Core</a>	<a href="#">Core</a>	1	
ImageCubeMapTexture	<a href="#">Full</a>	<a href="#">CubeMapTexturing</a>	2	
ImageTexture	<a href="#">Interchange</a>	<a href="#">Texturing</a>	1	
ImageTexture3D	<a href="#">Full</a>	<a href="#">Texturing3D</a>	2	
IMPORT	<a href="#">Interactive</a>	<a href="#">Networking</a>	3	in support of Inline
IndexedFaceSet	<a href="#">Interchange</a>	<a href="#">Geometry3D</a>	2	
IndexedLineSet	<a href="#">Interchange</a>	<a href="#">Rendering</a>	1	
IndexedQuadSet	<a href="#">Full</a>	<a href="#">CADGeometry</a>	1	
IndexedTriangleFanSet	<a href="#">Interchange</a>	<a href="#">Rendering</a>	3	
IndexedTriangleSet	<a href="#">Interchange</a>	<a href="#">Rendering</a>	3	
IndexedTriangleStripSet	<a href="#">Interchange</a>	<a href="#">Rendering</a>	3	
Inline	<a href="#">Interactive</a>	<a href="#">Networking</a>	2	Inline scene may require higher profile in parent scene. Optional support for load field.
IntegerSequencer	<a href="#">Interactive</a>	<a href="#">EventUtilities</a>	1	
IntegerTrigger	<a href="#">Interactive</a>	<a href="#">EventUtilities</a>	1	
IS	<a href="#">Immersive</a>	<a href="#">Core</a>	1	in support of ProtoDeclare
IsoSurfaceVolumeData	<a href="#">Full</a>	<a href="#">VolumeRendering</a>	2	
KeySensor	<a href="#">Interactive</a>	<a href="#">KeyDeviceSensor</a>	1	
Layer	<a href="#">Full</a>	<a href="#">Layering</a>	1	
LayerSet	<a href="#">Full</a>	<a href="#">Layering</a>	1	
Layout	<a href="#">Full</a>	<a href="#">Layout</a>	1	
LayoutGroup	<a href="#">Full</a>	<a href="#">Layout</a>	1	
LayoutLayer	<a href="#">Full</a>	<a href="#">Layout</a>	1	
LinePickSensor	<a href="#">Full</a>	<a href="#">Picking</a>	1	
LineProperties	<a href="#">Immersive</a>	<a href="#">Shape</a>	2	
LineSet	<a href="#">Interchange</a>	<a href="#">Rendering</a>	1	
LoadSensor	<a href="#">Immersive</a>	<a href="#">Networking</a>	3	
LocalFog	<a href="#">Full</a>	<a href="#">EnvironmentalEffects</a>	4	
LOD	<a href="#">Immersive</a>	<a href="#">Navigation</a>	2	
Material	<a href="#">Interchange</a>	<a href="#">Shape</a>	1	<a href="#">Some restrictions until level 2</a>
Matrix3VertexAttribute	<a href="#">Full</a>	<a href="#">Shaders</a>	1	
Matrix4VertexAttribute	<a href="#">Full</a>	<a href="#">Shaders</a>	1	
meta	<a href="#">Core</a>	<a href="#">Core</a>	1	
MetadataBoolean	<a href="#">Core</a>	<a href="#">Core</a>	1	
MetadataDouble	<a href="#">Core</a>	<a href="#">Core</a>	1	
MetadataFloat	<a href="#">Core</a>	<a href="#">Core</a>	1	
MetadataInteger	<a href="#">Core</a>	<a href="#">Core</a>	1	
MetadataSet	<a href="#">Core</a>	<a href="#">Core</a>	1	
MetadataString	<a href="#">Core</a>	<a href="#">Core</a>	1	
MotorJoint	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	2	
MovieTexture	<a href="#">Immersive</a>	<a href="#">Texturing</a>	3	
MultiTexture	<a href="#">Interchange</a>	<a href="#">Texturing</a>	2	
MultiTextureCoordinate	<a href="#">Interchange</a>	<a href="#">Texturing</a>	2	
MultiTextureTransform	<a href="#">Interchange</a>	<a href="#">Texturing</a>	2	
NavigationInfo	<a href="#">Interchange</a>	<a href="#">Navigation</a>	1	
Normal	<a href="#">Interchange</a>	<a href="#">Rendering</a>	2	
NormalInterpolator	<a href="#">Interchange</a>	<a href="#">Interpolation</a>	2	
NurbsCurve	<a href="#">Full</a>	<a href="#">NURBS</a>	1	
NurbsCurve2D	<a href="#">Full</a>	<a href="#">NURBS</a>	3	
NurbsOrientationInterpolator	<a href="#">Full</a>	<a href="#">NURBS</a>	1	
NurbsPatchSurface	<a href="#">Full</a>	<a href="#">NURBS</a>	1	
NurbsPositionInterpolator	<a href="#">Full</a>	<a href="#">NURBS</a>	1	
NurbsSet	<a href="#">Full</a>	<a href="#">NURBS</a>	2	
NurbsSurfaceInterpolator	<a href="#">Full</a>	<a href="#">NURBS</a>	1	
NurbsSweptSurface	<a href="#">Full</a>	<a href="#">NURBS</a>	3	
NurbsSwungSurface	<a href="#">Full</a>	<a href="#">NURBS</a>	3	
NurbsTextureCoordinate	<a href="#">Full</a>	<a href="#">NURBS</a>	1	
NurbsTrimmedSurface	<a href="#">Full</a>	<a href="#">NURBS</a>	4	
OpacityMapVolumeStyle	<a href="#">Full</a>	<a href="#">VolumeRendering</a>	2	
OrientationChaser	<a href="#">Full</a>	<a href="#">Followers</a>	1	
OrientationDamper	<a href="#">Full</a>	<a href="#">Followers</a>	1	
OrientationInterpolator	<a href="#">Interchange</a>	<a href="#">Interpolation</a>	1	
OrthoViewpoint	<a href="#">Full</a>	<a href="#">Navigation</a>	3	

PackagedShader	<a href="#">Full</a>	<a href="#">Shaders</a>	1	
ParticleSystem	<a href="#">Full</a>	<a href="#">ParticleSystems</a>	1	Need level 3 for geometry field
PickableGroup	<a href="#">Full</a>	<a href="#">Picking</a>	1	
PixelTexture	<a href="#">Interchange</a>	<a href="#">Texturing</a>	1	
PixelTexture3D	<a href="#">Full</a>	<a href="#">Texturing3D</a>	1	
PlaneSensor	<a href="#">Interactive</a>	<a href="#">PointingDeviceSensor</a>	1	
PointEmitter	<a href="#">Full</a>	<a href="#">ParticleSystems</a>	1	
PointLight	<a href="#">Interactive</a>	<a href="#">Lighting</a>	2	<i>radius</i> optionally supported, linear attenuation
PointPickSensor	<a href="#">Full</a>	<a href="#">Picking</a>	1	
PointSet	<a href="#">Interchange</a>	<a href="#">Rendering</a>	1	
Polyline2D	<a href="#">Immersive</a>	<a href="#">Geometry2D</a>	1	
PolylineEmitter	<a href="#">Full</a>	<a href="#">ParticleSystems</a>	1	
Polypoint2D	<a href="#">Immersive</a>	<a href="#">Geometry2D</a>	1	
PositionChaser	<a href="#">Full</a>	<a href="#">Followers</a>	1	
PositionChaser2D	<a href="#">Full</a>	<a href="#">Followers</a>	1	
PositionDamper	<a href="#">Full</a>	<a href="#">Followers</a>	1	
PositionDamper2D	<a href="#">Full</a>	<a href="#">Followers</a>	1	
PositionInterpolator	<a href="#">Interchange</a>	<a href="#">Interpolation</a>	1	
PositionInterpolator2D	<a href="#">Full</a>	<a href="#">Interpolation</a>	3	
PrimitivePickSensor	<a href="#">Full</a>	<a href="#">Picking</a>	2	Non-uniform scale not supported until level 3
ProgramShader	<a href="#">Full</a>	<a href="#">Shaders</a>	1	
ProjectionVolumeStyle	<a href="#">Full</a>	<a href="#">VolumeRendering</a>	2	
ProtoBody				Optional until Interactive profile or Core component level 2
ProtoDeclare	<a href="#">Core</a>	<a href="#">Core</a>	1	Optional until Interactive profile or Core component level 2
ProtoInstance	<a href="#">Core</a>	<a href="#">Core</a>	1	Optional until Interactive profile or Core component level 2
ProtoInterface	<a href="#">Core</a>	<a href="#">Core</a>	1	Optional until Interactive profile or Core component level 2 position_changed, orientation_changed optional until level 2
ProximitySensor	<a href="#">Interactive</a>	<a href="#">EnvironmentalSensor</a>	1	
QuadSet	<a href="#">Full</a>	<a href="#">CADGeometry</a>	1	
ReceiverPdu	<a href="#">Full</a>	<a href="#">DIS</a>	1	
Rectangle2D	<a href="#">Immersive</a>	<a href="#">Geometry2D</a>	1	
RigidBody	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	2	
RigidBodyCollection	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	2	
ROUTE	<a href="#">Core</a>	<a href="#">Core</a>	1	
ScalarChaser	<a href="#">Full</a>	<a href="#">Followers</a>	1	
ScalarDamper	<a href="#">Full</a>	<a href="#">Followers</a>	1	
ScalarInterpolator	<a href="#">Interchange</a>	<a href="#">Interpolation</a>	1	
-				
ScreenFontStyle	<a href="#">Full</a>	<a href="#">Layout</a>	2	
ScreenGroup	<a href="#">Full</a>	<a href="#">Layout</a>	2	
Script	<a href="#">Immersive</a>	<a href="#">Scripting</a>	1	
SegmentedVolumeData	<a href="#">Full</a>	<a href="#">VolumeRendering</a>	2	
ShadedVolumeStyle	<a href="#">Full</a>	<a href="#">VolumeRendering</a>	3	Use level 4 for full capabilities
ShaderPart	<a href="#">Full</a>	<a href="#">Shaders</a>	1	
ShaderProgram	<a href="#">Full</a>	<a href="#">Shaders</a>	1	
Shape	<a href="#">Interchange</a>	<a href="#">Shape</a>	1	
SignalPdu	<a href="#">Full</a>	<a href="#">DIS</a>	1	
SilhouetteEnhancementVolumeStyle	<a href="#">Full</a>	<a href="#">VolumeRendering</a>	2	
SingleAxisHingeJoint	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	2	
SliderJoint	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	2	
Sound	<a href="#">Immersive</a>	<a href="#">Sound</a>	1	
Sphere	<a href="#">Interchange</a>	<a href="#">Geometry3D</a>	1	
SphereSensor	<a href="#">Interactive</a>	<a href="#">PointingDeviceSensor</a>	1	
SplinePositionInterpolator	<a href="#">Full</a>	<a href="#">Interpolation</a>	4	
SplinePositionInterpolator2D	<a href="#">Full</a>	<a href="#">Interpolation</a>	4	
SplineScalarInterpolator	<a href="#">Full</a>	<a href="#">Interpolation</a>	4	beamWidth optionally supported. radius optionally supported, linear attenuation
SpotLight	<a href="#">Interactive</a>	<a href="#">Lighting</a>	2	
SquadOrientationInterpolator	<a href="#">Full</a>	<a href="#">Interpolation</a>	5	
StaticGroup	<a href="#">Full</a>	<a href="#">Grouping</a>	3	
StringSensor	<a href="#">Interactive</a>	<a href="#">KeyDeviceSensor</a>	2	
SurfaceEmitter	<a href="#">Full</a>	<a href="#">ParticleSystems</a>	2	
Switch	<a href="#">Interactive</a>	<a href="#">Grouping</a>	2	
TexCoordChaser2D	<a href="#">Full</a>	<a href="#">Followers</a>	1	
TexCoordDamper2D	<a href="#">Full</a>	<a href="#">Followers</a>	1	
Text	<a href="#">Immersive</a>	<a href="#">Text</a>	1	
TextureBackground	<a href="#">Full</a>	<a href="#">EnvironmentalEffects</a>	3	
TextureCoordinate	<a href="#">Interchange</a>	<a href="#">Texturing</a>	1	
TextureCoordinate3D	<a href="#">Full</a>	<a href="#">Texturing3D</a>	1	
TextureCoordinate4D	<a href="#">Full</a>	<a href="#">Texturing3D</a>	1	
TextureCoordinateGenerator	<a href="#">Interchange</a>	<a href="#">Texturing</a>	2	
TextureProperties	<a href="#">Full</a>	<a href="#">Texturing</a>	2	
TextureTransform	<a href="#">Interchange</a>	<a href="#">Texturing</a>	1	
TextureTransform3D	<a href="#">Full</a>	<a href="#">Texturing3D</a>	1	
TextureTransformMatrix3D	<a href="#">Full</a>	<a href="#">Texturing3D</a>	1	
TimeSensor	<a href="#">Interchange</a>	<a href="#">Time</a>	1	
TimeTrigger	<a href="#">Interactive</a>	<a href="#">EventUtilities</a>	1	
ToneMappedVolumeStyle	<a href="#">Full</a>	<a href="#">VolumeRendering</a>	2	
TouchSensor	<a href="#">Interactive</a>	<a href="#">PointingDeviceSensor</a>	1	

Transform	<a href="#">Interchange</a>	<a href="#">Grouping</a>	1	addChildren, removeChildren optional until Interactive profile or component level 2
TransformSensor	<a href="#">Full</a>	<a href="#">EnvironmentalSensor</a>	3	
TransmitterPdu	<a href="#">Full</a>	<a href="#">DIS</a>	1	
TriangleFanSet	<a href="#">Interchange</a>	<a href="#">Rendering</a>	3	
TriangleSet	<a href="#">Interchange</a>	<a href="#">Rendering</a>	3	
TriangleSet2D	<a href="#">Full</a>	<a href="#">Geometry2D</a>	1	
TriangleStripSet	<a href="#">Interchange</a>	<a href="#">Rendering</a>	3	
TwoSidedMaterial	<a href="#">Full</a>	<a href="#">Shape</a>	4	
UNIT	<a href="#">Core</a>	<a href="#">Core</a>	1	
UniversalJoint	<a href="#">Full</a>	<a href="#">RigidBodyPhysics</a>	2	
Viewpoint	<a href="#">Interchange</a>	<a href="#">Navigation</a>	1	
ViewpointGroup	<a href="#">Full</a>	<a href="#">Navigation</a>	3	
Viewport	<a href="#">Full</a>	<a href="#">Layering</a>	1	
VisibilitySensor	<a href="#">Immersive</a>	<a href="#">EnvironmentalSensor</a>	2	
VolumeData	<a href="#">Full</a>	<a href="#">VolumeRendering</a>	1	
VolumeEmitter	<a href="#">Full</a>	<a href="#">ParticleSystems</a>	2	
VolumePickSensor	<a href="#">Full</a>	<a href="#">Picking</a>	3	
WindPhysicsModel	<a href="#">Full</a>	<a href="#">ParticleSystems</a>	1	
WorldInfo	<a href="#">Core</a>	<a href="#">Core</a>	1	
X3D	<a href="#">Core</a>	<a href="#">Core</a>	1	

[X3D v3.3 Specification](#)



## X3D Interactive, X3D MPEG4 Interactive Profile Comparison

<http://www.web3d.org/specifications/X3dNodeInventoryComparison-X3dInteractiveMpeg4Interactive.pdf>

X3D Interactive Profile	MPEG4 Interactive Profile	To be added
Anchor	Anchor	
Appearance	Appearance	
Background	Background	
BooleanFilter	<i>* not included by MPEG</i>	
BooleanSequencer	<i>* not included by MPEG</i>	
BooleanToggle	<i>* not included by MPEG</i>	
BooleanTrigger	<i>* not included by MPEG</i>	
Box	Box	
Color	Color	
ColorInterpolator	ColorInterpolator	
ColorRGBA	ColorRGBA	
Cone	Cone	
Coordinate	Coordinate	
CoordinateInterpolator	CoordinateInterpolator	
Cylinder	Cylinder	
CylinderSensor	CylinderSensor	
DirectionalLight	DirectionalLight	
ElevationGrid	ElevationGrid	
Group	Group	
ImageTexture	ImageTexture	
IndexedFaceSet	IndexedFaceSet	
IndexedLineSet	IndexedLineSet	
IndexedTriangleFanSet	<i>* not included by MPEG</i>	
IndexedTriangleSet	<i>* not included by MPEG</i>	
IndexedTriangleStripSet	<i>* not included by MPEG</i>	
Inline	Inline	
IntegerSequencer	<i>* not included by MPEG</i>	
IntegerTrigger	<i>* not included by MPEG</i>	
KeySensor	<i>* not included by MPEG</i>	
LineSet	LineSet	
Material	Material	
MetadataBoolean	MetadataBoolean	
MetadataDouble	MetadataDouble	
MetadataFloat	MetadataFloat	
MetadataInteger	MetadataInteger	
MetadataSet	MetadataSet	
MetadataString	MetadataString	
MultiTexture	<i>* not included by MPEG</i>	
MultiTextureCoordinate	<i>* not included by MPEG</i>	
MultiTextureTransform	<i>* not included by MPEG</i>	
NavigationInfo	NavigationInfo	

Normal	<i>* not included by MPEG</i>
NormalInterpolator	NormalInterpolator
OrientationInterpolator	OrientationInterpolator
PixelTexture	PixelTexture
PlaneSensor	PlaneSensor
PointLight	PointLight
PointSet	PointSet
PositionInterpolator	PositionInterpolator
ProximitySensor	ProximitySensor
ScalarInterpolator	ScalarInterpolator
Shape	Shape
Sphere	Sphere
SphereSensor	SphereSensor
SpotLight	SpotLight
StringSensor	<i>* not included by MPEG</i>
Switch	Switch
TextureCoordinate	TextureCoordinate
TextureCoordinateGenerator	<i>* not included by MPEG</i>
TextureTransform	TextureTransform
TimeSensor	TimeSensor
TimeTrigger	<i>* not included by MPEG</i>
TouchSensor	TouchSensor
Transform	Transform
TriangleFanSet	<i>* not included by MPEG</i>
TriangleSet	<i>* not included by MPEG</i>
TriangleStripSet	<i>* not included by MPEG</i>
Viewpoint	Viewpoint
VisibilitySensor	<i>* not included by MPEG</i>
WorldInfo	WorldInfo

**Total nodes:**

70	49
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**Missing nodes:**

0	21	0
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**References:**

- <http://www.web3d.org/files/specifications/19775-1/V3.3/Part01/interactive.html>
- <http://www.web3d.org/files/specifications/19775-1/V3.3/Part01/MPEG4interactive.html>