## **X3D4 Node Inventory Comparison**

	X3D4 Players and Tools Coverage		<b>External References</b>
tabs		websites	
1	X3D Players and Tools Coverage	6	Web3D Consortium
2	X3D Scene Access Interface (SAI) Codebases	7	X3D4 Highlights
3	X3D Model Validation Schemas and Tools	8	X3D4 Overview
4	X3D Nodes Profiles Components Levels	9	X3D4 Resources
5	X3D MPEG4 Profile	10	X3D4 Implementations
	X3D Architecture 4.0 additions highlighted in yellow	Maintained at	https://www.web3d.org/specifications

X3D Architecture version 4.0	X3D Players and Tools Coverage	updated	21 January 2023	https://www.web3d.org/specifications/X3d	NodeInventoryComparison.xlsx		
Node and Statement Support	X_ITE Player v8.4.4	FreeWRL v5.1	view3dscene (Castle Game Engine) v6.4	https://www.web3d.org/specifications/X3d X3DOM Player v1.8.1	NodeInventoryComparison.pdf InstantPlayer	Xj3D Player 2.1	X3D-Edit Authoring Tool 4.0
	X_ITE Player v8.4.4 Supported Nodes	Conformance	Standard X3D Nodes	Nodes Index	Node types	Xj3D viewer: NPS source	X3D-Edit Authoring 1001 4.0
AcousticProperties	Supported Nodes	comormance	Standard X3D Nodes	Nodes maex	Node types	AJSD VIEWEL: NEW STOCKE	AcousticProperties
Analyser							
Anchor	Anchor	Anchor	Anchor	Anchor	Anchor	Anchor	Anchor
Appearance	Appearance	Appearance	Appearance	Appearance	Appearance	Appearance	Appearance
Arc2D	Arc2D	Arc2D		Arc2D	Arc2D	Arc2D	Arc2D
ArcClose2D	ArcClose2D	ArcClose2D		ArcClose2D	ArcClose2D		ArcClose2D
AudioClip	AudioClip	AudioClip	AudioClip	AudioClip	AudioClip	AudioClip	AudioClip
AudioDestination  Background	Background	Background	Background	Background	Background	Background	Background
BallJoint	BallJoint	BallJoint	Background	BallJoint	Background	BallJoint	BallJoint
Billboard	Billboard	Billboard	Billboard	Billboard	Billboard	Billboard	Billboard
BiguadFilter	Simbourd	Sill Sulface and the sulface a	Emodra	Siliboura	Silibourd	Simbourd	Simbourd
BlendedVolumeStyle	BlendedVolumeStyle	BlendedVolumeStyle		BlendedVolumeStyle			BlendedVolumeStyle
BooleanFilter	BooleanFilter	BooleanFilter	BooleanFilter	BooleanFilter	BooleanFilter	BooleanFilter	BooleanFilter
BooleanSequencer	BooleanSequencer	BooleanSequencer	BooleanSequencer	BooleanSequencer	BooleanSequencer	BooleanSequencer	BooleanSequencer
BooleanToggle	BooleanToggle	BooleanToggle	BooleanToggle	BooleanToggle	BooleanToggle	BooleanToggle	BooleanToggle
BooleanTrigger	BooleanTrigger	BooleanTrigger	BooleanTrigger	BooleanTrigger	BooleanTrigger	BooleanTrigger	BooleanTrigger
BoundaryEnhancementVolumeStyle BoundedPhysicsModel	BoundaryEnhancementVolumeStyle BoundedPhysicsModel	BoundaryEnhancementVolumeStyle BoundedPhysicsModel		BoundaryEnhancementVolumeStyle			BoundaryEnhancementVolumeStyle
Box			Box	Box	De.:	Box	Dav.
BufferAudioSource	Вох	Box	DUA	DUX	Box	DUX	Box
CADAssembly	CADAssembly	CADAssembly	CADAssembly	CADAssembly	CADAssembly	CADAssembly	CADAssembly
CADFace	CADFace	CADFace	CADFace	CADFace	CADFace	CADASSETTIBLY	CADFace
CADLayer	CADLayer	CADLayer	CADLayer	CADLayer	CADLayer	CADLayer	CADLayer
CADPart	CADPart	CADPart	CADPart	CADPart	CADPart	CADPart	CADPart
CartoonVolumeStyle	CartoonVolumeStyle	CartoonVolumeStyle		CartoonVolumeStyle			CartoonVolumeStyle
ChannelMerger							
ChannelSelector							
ChannelSplitter							
Circle2D	Circle2D	Circle2D	Circle2D	Circle2D	Circle2D	an at	Circle2D
ClipPlane CollidableOffset	ClipPlane CollidableOffset	ClipPlane CollidableOffset	ClipPlane	ClipPlane	ClipPlane	ClipPlane CollidableOffset	ClipPlane CollidableOffset
CollidableShape	CollidableShape	CollidableShape		CollidableShape		CollidableShape	CollidableOffset
Collision	Collision	Collision	Collision	Collision	Collision	Collision	Collision
CollisionCollection	CollisionCollection	CollisionCollection	Compon	CollisionCollection	Compon	CollisionCollection	CollisionCollection
CollisionSensor	CollisionSensor	CollisionSensor		CollisionSensor		CollisionSensor	CollisionSensor
CollisionSpace	CollisionSpace	CollisionSpace				CollisionSpace	CollisionSpace
Color	Color	Color	Color	Color	Color	Color	Color
ColorChaser	ColorChaser	ColorChaser		ColorChaser	ColorChaser		ColorChaser
ColorDamper	ColorDamper	ColorDamper		ColorDamper	ColorDamper		ColorDamper
ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator
ColorRGBA	ColorRGBA	ColorRGBA	ColorRGBA	ColorRGBA	ColorRGBA	ColorRGBA	ColorRGBA
component ComposedCubeMapTexture	component ComposedCubeMapTexture	component	component ComposedCubeMapTexture	component	component ComposedCubeMapTexture	component	component
ComposedShader	ComposedShader	ComposedCubeMapTexture ComposedShader	ComposedCubeMapTexture	ComposedCubeMapTexture ComposedShader	ComposedShader		ComposedCubeMapTexture ComposedShader
ComposedTexture3D	ComposedTexture3D	ComposedTexture3D	ComposedTexture3D	ComposedTexture3D	ComposedTexture3D	ComposedTexture3D	ComposedTexture3D
ComposedVolumeStyle	ComposedVolumeStyle	ComposedVolumeStyle	composed exteress	ComposedVolumeStyle	composed rexteress	composed rextures b	ComposedVolumeStyle
Cone	Cone	Cone	Cone	Cone	Cone	Cone	Cone
ConeEmitter	ConeEmitter	ConeEmitter					
connect	connect	connect	connect	* required for X3D Immersive Profile	connect	connect	connect
Contact	Contact	Contact				Contact	Contact
Contour2D		Contour2D		Contour2D	Contour2D	Contour2D	Contour2D
ContourPolyline2D	ContourPolyline2D	ContourPolyline2D		ContourPolyline2D	ContourPolyline2D	ContourPolyline2D	ContourPolyline2D
Convolver	Considerate	Coordinate	Coordinate	Coordinate	Coordinate	Coordinate	Coordinate
Coordinate CoordinateChaser	Coordinate CoordinateChaser	Coordinate CoordinateChaser	coordinate	Coordinate	Coordinate CoordinateChaser	coordinate	Coordinate
CoordinateChaser CoordinateDamper	CoordinateChaser CoordinateDamper	CoordinateChaser CoordinateDamper	+	CoordinateDamper	CoordinateChaser CoordinateDamper	<del> </del>	CoordinateDamper
CoordinateDamper CoordinateDouble	CoordinateDamper	CoordinateDamper	* missing, suggested for HTML5	CoordinateDamper	CoordinateDamper	* missing, suggested for HTML5	CoordinateDamper
CoordinateDouble	CoordinateDouble	CoordinateDouble	CoordinateInterpolator	CoordinateBodble	CoordinateDouble	CoordinateInterpolator	CoordinateDouble
CoordinateInterpolator2D	CoordinateInterpolator2D	CoordinateInterpolator2D	CoordinateInterpolator2D	* missing, suggested for HTML5	CoordinateInterpolator2D	CoordinateInterpolator2D	CoordinateInterpolator2D
Cylinder	Cylinder	Cylinder	Cylinder	Cylinder	Cylinder	Cylinder	Cylinder
CylinderSensor	CylinderSensor	CylinderSensor	CylinderSensor	CylinderSensor	CylinderSensor	CylinderSensor	CylinderSensor
Delay							
DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight
DISEntityManager						DISEntityManager	DISEntityManager
DISEntityTypeMapping	<b>1</b>		ļ			DISEntityTypeMapping	DISEntityTypeMapping
Disk2D	Disk2D	Disk2D	-	Disk2D	Disk2D	Disk2D	Disk2D
DoubleAxisHingeJoint	DoubleAxisHingeJoint	DoubleAxisHingeJoint		DoubleAxisHingeJoint	<del>                                     </del>	DoubleAxisHingeJoint	DoubleAxisHingeJoint
DynamicsCompressor  FaseInFaseOut	FaseInFaseOut	FaseInFaseOut			EaseInEaseOut		
EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle	<del> </del>	EdgeEnhancementVolumeStyle	Lasemeaseout	1	EdgeEnhancementVolumeStyle
ElevationGrid	ElevationGrid	ElevationGrid	ElevationGrid	ElevationGrid	ElevationGrid	ElevationGrid	ElevationGrid
	Elevationalia	Elevation of Id	Economia	Elevationalia	Elevation of the	EspduTransform	EspduTransform
EspduTransform							
Espdu Fransform ExplosionEmitter	ExplosionEmitter	ExplosionEmitter				ExplosionEmitter	3-Sep-1

X3D Architecture version 4.0 Node and Statement Support	X3D Players and Tools Coverage	updated	21 January 2023	https://www.web3d.org/specifications/X3d https://www.web3d.org/specifications/X3d			
Node and Statement Support	X_ITE Player v8.4.4	FreeWRL v5.1	view3dscene (Castle Game Engine) v6.4	X3DOM Player v1.8.1	InstantPlayer	Xj3D Player 2.1	X3D-Edit Authoring Tool 4.0
	Supported Nodes	Conformance	Standard X3D Nodes	Nodes Index	Node types	Xi3D viewer: NPS source	X3D-Edit home
ExternProtoDeclare	ExternProtoDeclare	ExternProtoDeclare	ExternProtoDeclare	* required for X3D Immersive Profile	ExternProtoDeclare	ExternProtoDeclare	ExternProtoDeclare
Extrusion	Extrusion	Extrusion	Extrusion	Extrusion	Extrusion	Extrusion	Extrusion
field	field	field	field	field	field	field	field
fieldValue	fieldValue	fieldValue	fieldValue	* required for X3D Immersive Profile	fieldValue	fieldValue	fieldValue
FillProperties	FillProperties	FillProperties	* missina. sugaested for HTML5	* missing, suggested for HTML5	FillProperties	* missina. suagested for HTML5	FillProperties
FloatVertexAttribute	FloatVertexAttribute	FloatVertexAttribute	FloatVertexAttribute	FloatVertexAttribute	FloatVertexAttribute	3,33	FloatVertexAttribute
Fog	Eng	Fog	Fog	Fog	Egg	Fog	Fog
FogCoordinate	FogCoordinate	FogCoordinate	FogCoordinate		FogCoordinate	FogCoordinate	
FontStyle	FontStyle	FontStyle	FontStyle	FontStyle	FontStyle	FontStyle	FontStyle
ForcePhysicsModel	ForcePhysicsModel	ForcePhysicsModel					
Gain	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , , , , , , , , , , , , , ,					
GeneratedCubeMapTexture	GeneratedCubeMapTexture	GeneratedCubeMapTexture	GeneratedCubeMapTexture	GeneratedCubeMapTexture	GeneratedCubeMapTexture		
GeoCoordinate	GeoCoordinate	GeoCoordinate	* missina, suggested for HTML5	GeoCoordinate	GeoCoordinate	GeoCoordinate	GeoCoordinate
GeoElevationGrid	GeoElevationGrid	GeoElevationGrid	* missing, suggested for HTML5	GeoElevationGrid	GeoElevationGrid	GeoElevationGrid	GeoElevationGrid
GeoLocation	GeoLocation	GeoLocation	* missing, suggested for HTML5	GeoLocation	GeoLocation	GeoLocation	GeoLocation
GeoLOD	GeoLOD	GeoLOD	* missing, suggested for HTML5	GeoLOD	GeoLOD	GeoLOD	GeoLOD
GeoMetadata	GeoMetadata	GeoMetadata	* missing, suggested for HTML5	GeoMetadata	GeoMetadata	GeoMetadata	GeoMetadata
GeoOrigin	GeoOrigin	GeoOrigin	* missing, suggested for HTML5	GeoOrigin	GeoOrigin	GeoOrigin	GeoOrigin
GeoPositionInterpolator	GeoPositionInterpolator	GeoPositionInterpolator	* missing, suggested for HTML5	GeoPositionInterpolator	GeoPositionInterpolator	GeoPositionInterpolator	GeoPositionInterpolator
GeoProximitySensor	GeoProximitySensor	GeoProximitySensor	* missing, suggested for HTML5	* missing, suggested for HTML5	GeoProximitySensor	* missing, suggested for HTML5	GeoProximitySensor
GeoTouchSensor	GeoTouchSensor	GeoTouchSensor	* missing, suggested for HTML5	* missing, suggested for HTML5	GeoTouchSensor	GeoTouchSensor	GeoTouchSensor
GeoTransform	GeoTransform	GeoTransform	* missing, suggested for HTML5	GeoTransform	GeoTransform	GeoTransform	GeoTransform
GeoViewpoint	GeoViewpoint	GeoViewpoint	* missing, suggested for HTML5	GeoViewpoint	GeoViewpoint	GeoViewpoint	GeoViewpoint
Group	Group	Group	Group	Group	Group	Group	Group
HAnimDisplacer	HAnimDisplacer	HAnimDisplacer	HAnimDisplacer	HAnimDisplacer	HAnimDisplacer	HAnimDisplacer	HAnimDisplacer
HAnimHumanoid	HAnimHumanoid	HAnimHumanoid	HAnimHumanoid	HAnimHumanoid	HAnimHumanoid	HAnimHumanoid	HAnimHumanoid
HAnimJoint	HAnimJoint	HAnimJoint	HAnimJoint	HAnimJoint	HAnimJoint	HAnimJoint	HAnimJoint
HAnimMotion		HAnimMotion					HAnimMotion
HAnimSegment	HAnimSegment	HAnimSegment	HAnimSegment	HAnimSegment	HAnimSegment	HAnimSegment	HAnimSegment
HAnimSite	HAnimSite	HAnimSite	HAnimSite	HAnimSite	HAnimSite	HAnimSite	HAnimSite
head	head	head	head	head	head	head	head
ImageCubeMapTexture	ImageCubeMapTexture	ImageCubeMapTexture	ImageCubeMapTexture		ImageCubeMapTexture		
ImageTexture	ImageTexture	ImageTexture	ImageTexture	ImageTexture	ImageTexture	ImageTexture	ImageTexture
ImageTexture3D	ImageTexture3D	ImageTexture3D	ImageTexture3D	ImageTexture3D	ImageTexture3D		ImageTexture3D
IMPORT	IMPORT	IMPORT	IMPORT	* required for X3D Immersive Profile	* required for X3D Immersive Profile	* required for X3D Immersive Profile	IMPORT
IndexedFaceSet	IndexedFaceSet	IndexedFaceSet	IndexedFaceSet	IndexedFaceSet	IndexedFaceSet	IndexedFaceSet	IndexedFaceSet
IndexedLineSet	IndexedLineSet	IndexedLineSet	IndexedLineSet	IndexedLineSet	IndexedLineSet	IndexedLineSet	IndexedLineSet
IndexedQuadSet	IndexedQuadSet	IndexedQuadSet	IndexedQuadSet	IndexedQuadSet	IndexedQuadSet	IndexedQuadSet	IndexedQuadSet
IndexedTriangleFanSet	IndexedTriangleFanSet	IndexedTriangleFanSet	IndexedTriangleFanSet	* missing, suggested for HTML5	IndexedTriangleFanSet	IndexedTriangleFanSet	IndexedTriangleFanSet
IndexedTriangleSet	IndexedTriangleSet	IndexedTriangleSet	IndexedTriangleSet	IndexedTriangleSet	IndexedTriangleSet	IndexedTriangleSet	IndexedTriangleSet
IndexedTriangleStripSet	IndexedTriangleStripSet	IndexedTriangleStripSet	IndexedTriangleStripSet	IndexedTriangleStripSet	IndexedTriangleStripSet	IndexedTriangleStripSet	IndexedTriangleStripSet
Inline	Inline	Inline	Inline	Inline	Inline	Inline	Inline
IntegerSequencer	IntegerSequencer	IntegerSequencer	IntegerSequencer	IntegerSequencer	IntegerSequencer	IntegerSequencer	IntegerSequencer
IntegerTrigger	IntegerTrigger	IntegerTrigger	IntegerTrigger	IntegerTrigger	IntegerTrigger	IntegerTrigger	IntegerTrigger
IS	IS	IS	IS	* required for X3D Immersive Profile	IS	IS	IS
IsoSurfaceVolumeData	IsoSurfaceVolumeData	IsoSurfaceVolumeData		IsoSurfaceVolumeData			IsoSurfaceVolumeData
KeySensor	KeySensor	KeySensor	KeySensor	* missing, suggested for HTML5	KeySensor	KeySensor	KeySensor
Layer	Layer	Layer			Layer	Layer	
LayerSet	LayerSet	LayerSet			LayerSet	LayerSet	
Layout	Layout	Layout			Layout		
LayoutGroup	LayoutGroup	LayoutGroup			LayoutGroup		
LayoutLayer	LayoutLayer	LayoutLayer			LayoutLayer		
LinePickSensor	LinePickSensor	LinePickSensor					
LineProperties	LineProperties	LineProperties	LineProperties	LineProperties	LineProperties	LineProperties	LineProperties
LineSet	LineSet	LineSet	LineSet	LineSet	LineSet	LineSet	LineSet
ListenerPointSource							
LoadSensor	LoadSensor	LoadSensor	* missing, suggested for HTML5	* missing, suggested for HTML5	LoadSensor	LoadSensor	LoadSensor
LocalFog	LocalFog	LocalFog	LocalFog		LocalFog	LocalFog	LocalFog
LOD	LOD	LOD	LOD	LOD	LOD	LOD	LOD
Material	Material	Material	Material	Material	Material	Material	Material
Matrix3VertexAttribute	Matrix3VertexAttribute	Matrix3VertexAttribute	Matrix3VertexAttribute		Matrix3VertexAttribute		Matrix3VertexAttribute
Matrix4VertexAttribute	Matrix4VertexAttribute	Matrix4VertexAttribute	Matrix4VertexAttribute		Matrix4VertexAttribute		Matrix4VertexAttribute
meta	meta	meta	meta	meta	meta	meta	meta
MetadataBoolean	MetadataBoolean	MetadataBoolean	MetadataBoolean	MetadataBoolean	* missing, suggested for HTML5	MetadataBoolean	MetadataBoolean
MetadataDouble	MetadataDouble	MetadataDouble	MetadataDouble	MetadataDouble	MetadataDouble	MetadataDouble	MetadataDouble
MetadataFloat	MetadataFloat	MetadataFloat	MetadataFloat	MetadataFloat	MetadataFloat	MetadataFloat	MetadataFloat
MetadataInteger	MetadataInteger	MetadataInteger	MetadataInteger	MetadataInteger	MetadataInteger	MetadataInteger	MetadataInteger
MetadataSet	MetadataSet	MetadataSet	MetadataSet	MetadataSet	MetadataSet	MetadataSet	MetadataSet
MetadataString	MetadataString	MetadataString	MetadataString	MetadataString	MetadataString	MetadataString	MetadataString
MicrophoneSource							
MotorJoint		MotorJoint		MotorJoint		MotorJoint	MotorJoint
MovieTexture	MovieTexture	MovieTexture	MovieTexture	MovieTexture	MovieTexture	MovieTexture	MovieTexture
MultiTexture	MultiTexture	MultiTexture	MultiTexture	MultiTexture	MultiTexture	MultiTexture	MultiTexture
MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate	

X3D Architecture version 4.0	X3D Players and Tools Coverage	updated	21 January 2023	https://www.web3d.org/specifications/X3df			
Node and Statement Support	_			https://www.web3d.org/specifications/X3df			
	X_ITE Player v8.4.4	FreeWRL v5.1			InstantPlayer	Xj3D Player 2.1	X3D-Edit Authoring Tool 4.0
	Supported Nodes	Conformance	Standard X3D Nodes	Nodes Index	Node types	Xj3D viewer: NPS source	X3D-Edit home
MultiTextureTransform	MultiTextureTransform	MultiTextureTransform	MultiTextureTransform		MultiTextureTransform	MultiTextureTransform	MultiTextureTransform
NavigationInfo	NavigationInfo	NavigationInfo	NavigationInfo	NavigationInfo	NavigationInfo	NavigationInfo	NavigationInfo
Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
NormalInterpolator	Normalinterpolator	NormalInterpolator	NormalInterpolator	NormalInterpolator	NormalInterpolator	Normalinterpolator	NormalInterpolator
NurbsCurve	NurbsCurve	NurbsCurve	NurbsCurve	NurbsCurve	NurbsCurve	NurbsCurve	NurbsCurve
NurbsCurve2D	NurbsCurve2D	NurbsCurve2D		NurbsCurve2D	NurbsCurve2D	NurbsCurve2D	NurbsCurve2D
NurbsOrientationInterpolator	NurbsOrientationInterpolator	NurbsOrientationInterpolator	NurbsOrientationInterpolator	NurbsOrientationInterpolator	NurbsOrientationInterpolator		NurbsOrientationInterpolator
NurbsPatchSurface	NurbsPatchSurface	NurbsPatchSurface	NurbsPatchSurface		NurbsPatchSurface	NurbsPatchSurface	NurbsPatchSurface
NurbsPositionInterpolator	NurbsPositionInterpolator	NurbsPositionInterpolator	NurbsPositionInterpolator	NurbsPositionInterpolator	NurbsPositionInterpolator		NurbsPositionInterpolator
NurbsSet	NurbsSet	NurbsSet			NurbsSet		NurbsSet
NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator		NurbsSurfaceInterpolator
NurbsSweptSurface	NurbsSweptSurface	NurbsSweptSurface			NurbsSweptSurface		NurbsSweptSurface
NurbsSwungSurface	NurbsSwungSurface	NurbsSwungSurface			NurbsSwungSurface		NurbsSwungSurface
NurbsTextureCoordinate	NurbsTextureCoordinate	NurbsTextureCoordinate			NurbsTextureCoordinate		NurbsTextureCoordinate
NurbsTrimmedSurface		NurbsTrimmedSurface	NurbsTrimmedSurface	NurbsTrimmedSurface	NurbsTrimmedSurface	NurbsTrimmedSurface	NurbsTrimmedSurface
OpacityMapVolumeStyle	OpacityMapVolumeStyle	OpacityMapVolumeStyle		OpacityMapVolumeStyle			OpacityMapVolumeStyle
OrientationChaser	OrientationChaser	OrientationChaser		OrientationChaser	OrientationChaser		OrientationChaser
OrientationDamper	OrientationDamper	OrientationDamper		OrientationDamper	OrientationDamper		OrientationDamper
OrientationInterpolator	OrientationInterpolator	OrientationInterpolator	OrientationInterpolator	OrientationInterpolator	OrientationInterpolator	OrientationInterpolator	OrientationInterpolator
OrthoViewpoint	OrthoViewpoint	OrthoViewpoint	OrthoViewpoint	OrthoViewpoint	OrthoViewpoint	OrthoViewpoint	OrthoViewpoint
OscillatorSource							
PackagedShader		PackagedShader					PackagedShader
ParticleSystem	ParticleSystem	ParticleSystem			İ	ParticleSystem	
PeriodicWave							
PhysicalMaterial	PhysicalMaterial	PhysicalMaterial					
PickableGroup	PickableGroup	PickableGroup				PickableGroup	
PixelTexture	PixelTexture	PixelTexture	PixelTexture	PixelTexture	PixelTexture	PixelTexture	PixelTexture
PixelTexture3D	PixelTexture3D	PixelTexture3D	PixelTexture3D	PixelTexture3D	PixelTexture3D	PixelTexture3D	PixelTexture3D
PlaneSensor	PlaneSensor	PlaneSensor	PlaneSensor	PlaneSensor	PlaneSensor	PlaneSensor	PlaneSensor
PointEmitter	PointEmitter	PointEmitter	T Idiresensor	Transaction	Tranesensor	PointEmitter	T lane Sensor
PointLight	PointLight	PointLight	PointLight	PointLight	PointLight	PointLight	PointLight
PointPickSensor	PointPickSensor	PointPickSensor	Tomteigne	Fointignt	Fointlight	FOIREIgnt	Fointeignt
PointProperties	PointProperties	PointProperties				PointProperties	
PointSet	PointSet	PointSet	PointSet	PointSet	PointSet	PointSet	PointSet
Polyline2D	Polyline2D	Polyline2D	Pointset	Polyline2D	Polyline2D	Polyline2D	Polyline2D
				Polyline2D	Polylinezo		Polylinezo
PolylineEmitter Polypoint2D	PolylineEmitter Polypoint2D	PolylineEmitter Polypoint2D		Polypoint2D	Polypoint2D	PolylineEmitter	Polypoint2D
PositionChaser	PositionChaser	Polypoint2D PositionChaser		PositionChaser	PositionChaser	Polypoint2D	PositionChaser
PositionChaser2D	PositionChaser2D	PositionChaser2D		PositionChaser2D	PositionChaser2D		PositionChaser2D
		PositionDamper		PositionDamper	PositionDamper PositionDamper2D		PositionDamper
PositionDamper	PositionDamper			PositionDamper2D			
PositionDamper2D	PositionDamper2D	PositionDamper2D			·		PositionDamper2D
PositionDamper2D PositionInterpolator	PositionDamper2D PositionInterpolator	PositionDamper2D PositionInterpolator	PositionInterpolator	PositionInterpolator	PositionInterpolator	PositionInterpolator	PositionInterpolator
PositionDamper2D PositionInterpolator PositionInterpolator2D	PositionDamper2D PositionInterpolator PositionInterpolator2D	PositionDamper2D PositionInterpolator PositionInterpolator2D	PositionInterpolator PositionInterpolator2D	PositionInterpolator PositionInterpolator2D	·	PositionInterpolator PositionInterpolator2D	
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor	PositionDamper2D PositionInterpolator	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor			PositionInterpolator PositionInterpolator2D	·	PositionInterpolator PositionInterpolator2D
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader		PositionInterpolator2D	PositionInterpolator	·	PositionInterpolator PositionInterpolator2D ProgramShader
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle	PositionInterpolator2D	PositionInterpolator2D ProjectionVolumeStyle	PositionInterpolator PositionInterpolator2D ProgramShader	PositionInterpolator2D	PositionInterpolator PositionInterpolator2D ProgramShader ProjectionVolumeStyle
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody	PositionDamper2D PositionInterpolator PositionInterpolator ZD PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody	PositionInterpolator2D  ProtoBody	PositionInterpolator2D ProjectionVolumeStyle * required for X3D Immersive Profile	PositionInterpolator PositionInterpolator2D ProgramShader ProtoBody	PositionInterpolator2D ProtoBody	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProjectionVolumeStyle ProtoBody ProtoBody	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProgramShader ProtoBody ProtoBody	PositionInterpolator2D  ProtoBody ProtoDeclare	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile * required for X3D Immersive Profile	PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDeclare	PositionInterpolator2D  ProtoBody ProtoDeclare	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProgramShader ProtebBody ProtoDeclare ProtoDintance	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInstance	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInstance	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile	PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDeclare ProtoInstance	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance	PositionInterpolator PositionInterpolator2D ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInstance
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoIntance ProtoIntance ProtoInterface	PositionDamper2D PositionInterpolator PositionInterpolator ZD PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoDoclare ProtoInterface ProtoInterface	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface	PositionInterpolator2D  ProjectionVolumeStyle  * required for X3D Immersive Profile	PositionInterpolator PositionInterpolator2D ProgramShader ProtoBody ProtoDeclare ProtoInterpolator2D	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface	PositionInterpolator PositionInterpolator2D ProgramShader ProjectionVolumeStyle ProtoBody ProtoDoddy ProtoDeclare ProtoInterface
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoBody ProtoBodrae ProtoInstance ProtoInterface ProximityGensor	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile	PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDeclare ProtoInstance ProtoInstance ProsimitySensor	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoBody ProtoBodistance ProtoInstance ProtoInterface ProsimitySensor
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProgramShader ProtoBoddy ProtoBoddy ProtoDeclare ProtoInterface ProximitySensor QuadSet	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoIntance ProtoIntance ProtoInterface	PositionDamper2D PositionInterpolator P PositionInterpolator P PositionInterpolator P PrositionInterpolator P ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProximitySensor QuadSet	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface	PositionInterpolator2D  ProjectionVolumeStyle  * required for X3D Immersive Profile	PositionInterpolator PositionInterpolator2D ProgramShader ProtoBody ProtoDeclare ProtoInterpolator2D	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface	PositionInterpolator PositionInterpolator2D ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProwintySensor QuadSet
PositionDamper2D  PositionInterpolator  PositionInterpolator2D  PrimitivePickSensor  ProgramShader  ProjectionVolumeStyle  ProtoBody  ProtoDeclare  ProtoIntance  ProtoIntance  ProtoInterface  ProximitySensor  QuadSet  ReceiverPdu	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody ProtoBody ProtoBodre ProtoInstance ProtoInstance ProtoInstance ProtoInstance ProtoInstance ProtoInstance ProtoInstance ProtoInstance ProtoInterface ProximitySensor QuadSet	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProgramShader ProtoBody ProtoBody ProtoBody ProtoBodre ProtoInstance ProtoInstance ProtoInstance ProtoInstance ProtoInterface	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile QuadSet	PositionInterpolator PositionInterpolator2D ProgramShader ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare Protoinstance Protointerface ProximitySensor QuadSet ReceiverPdu
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoBody ProtoBody ProtoBodrae ProtoInterface ProtoInterfa	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBoddy ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu Rectangle2D	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile QuadSet  Rectangle2D	PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDeclare ProtoInstance ProtoInstance ProsimitySensor	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor	PositionInterpolator PositionInterpolator2D ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProwintySensor QuadSet
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProgramShader ProtoEnder ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu Rectangle2D RigidBody	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet Rectangle2D RigidBody	PositionDamper2D PositionInterpolator PositionInterpolator P PositionInterpolator ZD PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu Rectangle2D RigidBody	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile CuadSet  Rectangle2D RigidBody	PositionInterpolator PositionInterpolator2D ProgramShader ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet Rectangle2D RigidBody	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoIntance ProtoInterface ProsimitySensor QuadSet Rectangle2D RegidBody
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoBody ProtoBody ProtoBodrae ProtoInterface ProtoInterfa	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBoddy ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu Rectangle2D	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile QuadSet  Rectangle2D	PositionInterpolator PositionInterpolator2D ProgramShader ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoIntance ProtoInterface ProsimitySensor QuadSet Rectangle2D RegidBody
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProgramShader ProtoEnder ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu Rectangle2D RigidBody	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet Rectangle2D RigidBody	PositionDamper2D PositionInterpolator PositionInterpolator P PositionInterpolator ZD PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu Rectangle2D RigidBody	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile CuadSet  Rectangle2D RigidBody	PositionInterpolator PositionInterpolator2D ProgramShader ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet Rectangle2D RigidBody	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoDeclare ProtoDeclare ProtoIntstance ProtoInterface ProximitySensor QuadSet ReceiverPdu Rectangle2D
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoBody ProtoBodrae ProtoInstance ProtoInstance ProtoInterface ProximitySensor QuadSet ReceiverPdu Rectangle 2D RigidBody Rigid	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody ProtoDeCare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBody RigidBody RigidBody RigidBody RigidBodyCollection	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoDeclare ProtoDeclare ProtoInstance ProtoInterface ProwinitySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidB	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D	PositionInterpolator2D  ProjectionVolumeStyle  * required for X3D Immersive Profile  Rectangle2D  RigidBody	PositionInterpolator PositionInterpolator2D ProgramShader ProtoBody ProtoDeclare ProtoInstance ProtoInstance ProtoInterface ProximitySensor QuadSet Rectangle2D	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoDeclare ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet RectiverPdu Rectangle2D RigidBody RigidBody RigidBody RigidBody Rocoline Roco
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoBody ProtoBody ProtoBodre ProtoInstance ProtoInterface ReceiverPdu Rectangle2D RigidBody RigidBody RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarChaser	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBoddy ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet Rectangle2D RigidBody RigidBodyCollection ROUTE	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoDeclare ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet ReceiverPdu Recetangle2D RigidBody RigidBody RigidBody RigidBodyCollection ROUTE	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D  ROUTE	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile CuadSet  Rectangle2D RigidBody NigidBodyCollection ROUTE	PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D  ROUTE	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody	PositionInterpolator PositionInterpolator2D ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidBodyCollection ROUTE
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProgramShader ProtoBody ProtoBody ProtoBody ProtoDeclare ProtoInterface ReceiveFdu ReceiveFdu Rectangle2D RigidBody RigidBodyCollection ROUTE ScalarChaser	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBodyCollection ROUTE ScalarChaser	PositionDamper2D PositionInterpolator PositionInterpolator P PositionInterpolator P PositionInterpolator P PrositionInterpolator P PrositionInterpolator P ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu Recetangle2D RigidBodyCollection ROUTE ScalarChaser	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile CuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE ScalarChaser	PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProsimitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProtoInterface ProsimitySensor QuadSet Rectangle2D Rectangle2D RigidBody RigidBody Ollection ROUTE ScalarChaser
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoBody ProtoBody ProtoBodre ProtoInstance ProtoInterface ReceiverPdu Rectangle2D RigidBody RigidBody RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarChaser	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBody RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidBody RigidBody RigidBody RigidBody RoutE ScalarChaser ScalarChaser ScalarChaser	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D  ROUTE	PositionInterpolator2D  ProjectionVolumeStyle  * required for X3D Immersive Profile  QuadSet  Rectangle2D  RigidBody  RigidB	PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDeclare ProtoInstance ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarDamper	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBody RigidBody RigidBody ROUTE	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoDeclare ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidBody RigidBody Route ROUTE ScalarChaser ScalarDamper
PositionDamper2D PositionInterpolator PositionInterpolator P PositionInterpolator P PositionInterpolator P PrositionInterpolator P ProgramShader ProgramShader Protoparation ProtoDeclare ProtoDeclare ProtoInstance ProtoInterface ScalarChaper ScalarChaper ScalarChaper ScalarInterpolator	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarInterpolator	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInstance ProtoInterface Pr	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInterface ProstoInterface ProsimitySensor QuadSet  Rectangle2D  ROUTE  Scalarinterpolator	PositionInterpolator2D  ProjectionVolumeStyle  * required for X3D Immersive Profile  Rectangle2D  RigidBody  RigidBody  RigidBody  RigidBody  Roult  ScalarThaser  ScalarThaser  ScalarThaser	PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarDamper ScalarInterpolator	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet Rectangle2D RigidBody RigidBody RigidBody Scalarinterpolator	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProtoInterface ProsimitySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidBody Collection ROUTE ScalarChaser ScalarDamper ScalarInerpolator
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProtgamShader ProtoBedare ProtoBedare ProtoDeclare ProtoInterface ProtoInter	PositionDamper2D PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBeclare ProtoBeclare ProtoInstance ProtoInstance ProtoInstance ProtoInstance ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RegidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper Scalarinterpolator Scene	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProtoDeclare ProtoDeclare ProtoDeclare ProtoInstance ProtoInstance ProtoInterface ProtoInte	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInterface ProstoInterface ProsimitySensor QuadSet  Rectangle2D  ROUTE  Scalarinterpolator	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile  * required for X3D Immersive Profile  CuadSet  Rectangle2D RigidBody Rigid	PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarDamper ScalarInterpolator	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet Rectangle2D RigidBody RigidBody RigidBody Scalarinterpolator	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProtoInterface ProsimitySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidBody Collection ROUTE ScalarChaser ScalarDamper ScalarInterpolator
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoBody ProtoBody ProtoBodre ProtoInstance ProtoInterface Interface Inte	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene ScreenFontStyle ScreenFontStyle ScreenGroup	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoDeclare ProtoDeclare ProtoInterface ProtoInterfac	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInterface ProstoInterface ProsimitySensor QuadSet  Rectangle2D  ROUTE  Scalarinterpolator	PositionInterpolator2D  ProjectionVolumeStyle  * required for X3D Immersive Profile  Rectangle2D  RigidBody  RigidBody  RigidBody  RigidBody  Roult  ScalarThaser  ScalarThaser  ScalarThaser	PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProtoInterface ProwinitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene  ScreenGroup	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProximitySensor QuadSet Rectangle2D RigidBody RigidBody RigidBody Scalarinterpolator	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProtoInterface ProsimitySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidBody Collection ROUTE ScalarChaser ScalarDamper ScalarInterpolator
PositionDamper2D PositionInterpolator PositionInterpolator P PositionInterpolator P PositionInterpolator P PositionInterpolator P PrositionInterpolator P ProgramShader ProgramShader ProtopactonVolumeStyle Protobeclare Protolnstance ProtoInstance ProtoInstance ProtoInterface ReceiverPdu ReceiverPdu Rectangle2D RigidBody RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarChaser ScalarDamper ScalarInterpolator Scene ScreenForoItyle ScreenForoItyle ScreenForoUp	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoDeCare ProtoDeCare ProtoInstance ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper Scalarinterpolator Scene ScreenFontStyle	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoDeclare ProtoDeclare ProtoInstance ProtoInterface ProintiySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidBody RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarChaser ScalarInterpolator Scene ScreenFontStyle ScreenForup Script	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProsinitySensor QuadSet  Rectangle2D  ROUTE  Scalarinterpolator Scene	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile  * required for X3D Immersive Profile  Rectangle2D RigidBody RigidBody RigidBody RigidBody RigidBody Route ScalarChaser ScalarChaser ScalarChaser ScalarChaser ScalarChaser ScalarGod for HTMLS * missing, suggested for HTMLS * required for X3D Immersive Profile	PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE  Scalarinterpolator Scene	PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProwinitySensor QuadSet Rectangle2D RigidBody RigidBody RigidBody RigidBody Route ScalarChaser ScalarInterpolator Scene
PositionDamper2D PositionInterpolator PositionInterpolator P PositionInterpolator P PositionInterpolator P PositionInterpolator P PrositionInterpolator P ProgramShader ProgramShader ProtopEclare ProtoDeClare ProtoDeClare ProtoInstance ProtoInstance ProtoInterface ReceiverPdu Rectangle 2D RigidBody RigidBody RigidBody RigidBody RoUTE ScalarChaser ScalarChaser ScalarChaser ScalarChaser ScalarInterpolator Scene ScreenFontStyle ScreenFontStyle ScreenForup Script SegmentedVolumeData	PositionDamper2D PositionInterpolator PositionInterpolator PositionInterpolator PositionInterpolator PositionInterpolator PositionInterpolator PositionInterpolator ProtoDeCalre ProtoDeCalre ProtoDeCalre ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBody RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene ScreenFontStyle ScreenGroup Script Script SegmentedVolumeData	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoDeclare ProtoDeclare ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu ReceiverPdu Rectangle2D RigidBody RigidBody RigidBody RigidBody RoUTE ScalarChaser ScalarDamper ScalarInterpolator Scene ScreenFortStyle ScreenForup Script SegmentedVolumeData	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProsinitySensor QuadSet  Rectangle2D  ROUTE  Scalarinterpolator Scene	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile  * required for X3D Immersive Profile  CuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene * missing, suggested for HTMLS * missing, suggested for HTMLS * required for X3D Immersive Profile SegmentedVolumeData	PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProtoInterface ProwinitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene  ScreenGroup	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE  Scalarinterpolator Scene	PositionInterpolator PositionInterpolator2D ProgramShader ProjectionVolumeStyle ProtoBody ProtoDody ProtoDody ProtoDoclare ProtoInstance ProtoInterface ProtoInterface ProsimitySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidBody Collection ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene
PositionDamper2D  PositionInterpolator  PositionInterpolator PositionInterpolator  PositionInterpolator Poriginary  ProjectionVolumeStyle  ProjectionVolumeStyle  ProtoDeClare  ProtoDeClare  ProtoInterface	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBedare ProtoBedare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBody RigidBody RigidBody RigidBody ScalarChaser ScalarInamper ScalarInamper Scalarinerpolator Scene ScreenFontStyle ScreenFontStyle ScreenFontStyle ScreenForup Script SegmentedVolumeData ShadedVolumeData	PositionInamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProtoBody Rectangle2D Rectangle2D Rectangle2D Rectangle2D RejdBody RigidBody RigidBody RotoBody R	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D  ROUTE  ScalarInterpolator Scene  Script	PositionInterpolator2D  ProjectionVolumeStyle  * required for X3D Immersive Profile  Rectangle2D  RigidBody  RigidBody  RigidBody  RigidBody  Roult  ScalarChaser  ScalarDamper  ScalarDamper  Scalarinerpolator  Scene  * missing, suggested for HTMLS  * missing, suggested for HTMLS  * required for X3D Immersive Profile  SegmentedVolumeData  ShadedVolumeStyle	PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProsimitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarOamper ScalarInterpolator Scene ScreenGroup Script	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE  Scalarinterpolator Scene	PositionInterpolator PositionInterpolator P PositionInterpolator 2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoDoctare ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProsimitySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidBody RigidBody Collection ROUTE ScalarChaser ScalarDamper ScalarDamper ScalarInterpolator Scene  Script Seript SegmentedVolumeData ShadedVolumeStyle
PositionDamper2D  PositionInterpolator  PositionInterpolator PositionInterpolator  PositionInterpolator Porition PositionInterpolator  ProjectionVolumeStyle  ProjectionVolumeStyle  ProtoBeclare  ProtoDeclare  ProtoInterface  ReceiverPdu  Rec	PositionDamper2D PositionInterpolator PositionInterpolator PositionInterpolator PositionInterpolator PositionInterpolator PositionInterpolator PositionInterpolator ProtoDeCalre ProtoDeCalre ProtoDeCalre ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBody RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene ScreenFontStyle ScreenGroup Script Script SegmentedVolumeData	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoBody ProtoBody ProtoBody ProtoBody ProtoBody ProtoBody ProtoPiclare ProtoInterface ReceiverPdu Rectangle2D RigidBody RigidBody RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarInterpolator ScalarChaser ScalarOamper ScalarInterpolator Scene ScreenFontStyle ScreenFortStyle ScreenF	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProsinitySensor QuadSet  Rectangle2D  ROUTE  Scalarinterpolator Scene	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile  * required for X3D Immersive Profile  CuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene * missing, suggested for HTMLS * missing, suggested for HTMLS * required for X3D Immersive Profile SegmentedVolumeData	PositionInterpolator PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarDamper Scalarinterpolator Scene ScreenGroup Script ShaderPart	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE  Scalarinterpolator Scene	PositionInterpolator PositionInterpolator PositionInterpolator2D ProgramShader ProjectionVolumeStyle ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu Recetangle2D RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene Script SegmentedVolumeData ShadedVolumeStyle ShaderPart
PositionDamper2D PositionInterpolator PositionInterpolator P PositionInterpolator 2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInstance ProtoInstance ProtoInstance ProtoInterface ProtoInstance ProtoInterface ReceiverPdu Rectangle2D RigidBody RigidBo	PositionDamper2D PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoDeCare ProtoDeCare ProtoInterface ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene ScreenFontStyle ScreenGroup Script SegmentedVolumeData ShadedVolumeStyle ShaderPart	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoDeclare ProtoDeclare ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu Recetangle2D RigidBody RigidBodyOllection ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene ScreenFontSyle ScreenFontSyle ScreenGroup Serjint ShaderPogram	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProtoInterface ProsinitySensor QuadSet  Rectangle2D  ROUTE  ScalarInterpolator Scene	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile CluadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarDamper ScalarInterpolator Scene * missing, suggested for HTML5 * missing, suggested for HTML5 * required for X3D Immersive Profile SegmentedVolumeData ShadedVolumeStyle ShaderPart	PositionInterpolator PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProwinitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene  ScreenGroup Script  ShaderPart ShaderProgram	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE  ScalarInterpolator Scene	PositionInterpolator PositionInterpolator2D ProgramShader ProjectionVolumeStyle ProtoBody ProtoDoclare ProtoInterface ReceiverPdu Recetangle2D RigidBody RigidBody Collection ROUTE ScalarChaser ScalarChaser ScalarThamper ScalarInterpolator Scene Script SegmentedVolumeData ShadedVolumeStyle ShaderProgram
PositionDamper2D  PositionInterpolator  PositionInterpolator PositionInterpolator  PositionInterpolator Poriginary  ProjectionVolumeStyle  ProjectionVolumeStyle  ProtoDeCare  ProtoDeCare  ProtoInterface  Pr	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBedare ProtoBedare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBody RigidBody RigidBody RigidBody ScalarChaser ScalarInamper ScalarInamper Scalarinerpolator Scene ScreenFontStyle ScreenFontStyle ScreenFontStyle ScreenForup Script SegmentedVolumeData ShadedVolumeData	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoDeclare ProtoDeclare ProtoInterace ReceiverPdu Rectangle2D RegidBody RegidBody RegidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene ScreenFontStyle ScreenFontStyle ScreenGroup Script SegmentedVolumeData ShadedPolumeStyle ShadedProgram Shape	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D  ROUTE  ScalarInterpolator Scene  Script	PositionInterpolator2D  ProjectionVolumeStyle  * required for X3D Immersive Profile  Rectangle2D  RigidBody  RigidBody  RigidBody  RigidBody  Roult  ScalarChaser  ScalarDamper  ScalarDamper  Scalarinerpolator  Scene  * missing, suggested for HTMLS  * missing, suggested for HTMLS  * required for X3D Immersive Profile  SegmentedVolumeData  ShadedVolumeStyle	PositionInterpolator PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarDamper Scalarinterpolator Scene ScreenGroup Script ShaderPart	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE  Scalarinterpolator Scene	PositionInterpolator PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProsimitySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidBody RigidBody Collection ROUTE ScalarChaser ScalarDamper ScalarDamper ScalarInterpolator Scene  Script SegmentedVolumeData ShadedVolumeStyle ShaderPart ShaderProgram Shader Program
PositionDamper2D PositionInterpolator PositionInterpolator P PositionInterpolator P PositionInterpolator P PrositionInterpolator P ProgramShader ProgramShader ProtoreamShader ProtoDeclare ProtoDeclare ProtoInstance ProtoInstance ProtoInterface ReceiverPdu Rectangle 2D RigidBody RigidBo	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ProtoInterface ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene ScreenFontStyle ScreenFontStyle ScreenForup Script SegmentedVolumeData ShadedVolumeStyle ShaderPart  Shape	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoDeclare ProtoDeclare ProtoInterface ReceiverPdu Rectangle2D RigidBody RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarInterpolator ScalarChaser ScalarInterpolator Scene ScreenFortStyle ScreenForup Script SegmentedVolumeData ShadedVolumeStyle ShaderPart ShaderPogram Shape SignalPdu	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProtoInterface ProsinitySensor QuadSet  Rectangle2D  ROUTE  ScalarInterpolator Scene	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile  * required for X3D Immersive Profile  Rectangle2D RigidBody RigidBodyCollection ROUTE  ScalarChaser  ScalarChaser  ScalarChaser  ScalarInterpolator Scene * missing, suggested for HTMLS * missing, suggested for HTMLS * required for X3D Immersive Profile SegmentedVolumeData ShadedVolumeStyle ShaderPart  Shape	PositionInterpolator PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProwinitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene  ScreenGroup Script  ShaderPart ShaderProgram	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE  ScalarInterpolator Scene	PositionInterpolator PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle Protobody Protobody Protobody Protobody Protobodsare ProtoInterface ProtoInterface ProsimitySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidBody Collection ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene  Script SegmentedVolumeData ShaderVolumeStyle Shader Part Shader Program Shape SignalPdu
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProgramShader ProtoBoddy ProtoBoddy ProtoBoddre ProtoIntance ProtoIntance ProtoIntance ProtoIntance ProtoIntance ProtoInterface Interface ScalarChamper ScalarChamper ScalarChamper ScalarChamper ScalarChamper ScreenfrontStyle ScreenfrontStyle Screenfroup Script SegmentedVolumeData ShadedVolumeStyle ShaderProgram Shader SignalPuc Signal	PositionDamper2D PositionInterpolator PositionInterpolator?D PrimitivePickSensor  ProjectionVolumeStyle Protobeclare Protobeclare Protolnstance Protoinstance Scalarinstance Scalarinstan	PositionInamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProtoDeclare ProtoDeclare ProtoDeclare ProtoInstance ProtoInstance ProtoInstance ProtoInstance ProtoInstance ProtoInterface ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidBody RigidBody Royller ScalarChaser ScalarDamper ScalarDamper ScalarDamper ScalarInterpolator Scene ScreenFontStyle ScreenFontStyle ScreenFontStyle ScreenFontStyle ScreenFord ShadedVolumeStyle ShaderPart ShaderPogram Shape SignalPdu SlihouetteEnhancementVolumeStyle	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProtoInterface ProsinitySensor QuadSet  Rectangle2D  ROUTE  ScalarInterpolator Scene	PositionInterpolator2D  ProjectionVolumeStyle  * required for X3D Immersive Profile  QuadSet  Rectangle2D  RigidBody  RigidBody  RigidBody  RigidBody  RigidBody  RoUTE  ScalarChaser  ScalarDamper  ScalarDamper  ScalarDamper  Scalarinerpolator  Seene  * missing, suggested for HTMLS  * missing, suggested for HTMLS  * required for X3D Immersive Profile  SegmentedVolumeData  ShadedVolumeStyle  ShaderPart  Shape	PositionInterpolator PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProwinitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene  ScreenGroup Script  ShaderPart ShaderProgram	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBody RigidBody Scalarinterpolator Scene  Script  Shape	PositionInterpolator PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoDeclare ProtoInterface ReceiverPdu Rectangle 2D RigidBody(Ollection ROUTE ScalarChaser ScalarChas
PositionDamper2D PositionInterpolator PositionInterpolator P PositionInterpolator P PositionInterpolator P PrositionInterpolator P ProgramShader ProgramShader ProtoBeclare ProtoBeclare ProtoBeclare ProtoInterface ReceiverPdu Rectangle2D RigidBody Rigi	PositionDamper2D PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor  ProjectionVolumeStyle ProtoDeclare ProtoDeclare ProtoInstance ProtoInstance ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarChaser ScalarInterpolator Scene ScreenFontStyle ScreenFontStyle ScreenForup Script SegmentedVolumeData ShadedVolumeStyle ShaderPart Shape SilhouetteEnhancementVolumeStyle SingleAwisHingeIoInt	PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProjectionVolumeStyle ProtoDeclare ProtoDeclare ProtoInstance ProtoInterface ReceiverPdu Rectangle2D RigidBody RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarChaser ScalarDamper ScalarInterpolator ScalarChaser Scala	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProtoInterface ProsinitySensor QuadSet  Rectangle2D  ROUTE  ScalarInterpolator Scene	PositionInterpolator2D  ProjectionVolumeStyle * required for X3D Immersive Profile  Rectangle2D RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarInterpolator ScalarInterpolator ScalarInterpolator Scalarinterpolator Scalar Missing, suggested for HTML5 * required for X3D Immersive Profile SegmentedVolumeData * required for X3D Immersive Profile SegmentedVolumeStyle ShaderPart  Shape  SilhouetteEnhancementVolumeStyle SingleAxisHingeJoint	PositionInterpolator PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProwinitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene  ScreenGroup Script  ShaderPart ShaderProgram	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBodyCollection ROUTE  ScalarInterpolator Scene  Script  Shape  SingleAxisHingeJoint	PositionInterpolator PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu ReceiverPdu Recetangle2D RigidBody RigidBodyCollection ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene  Script SegmentedVolumeData ShadedVolumeStyle ShaderProgram Shader Program Shape SignalPdu Sinlouestyle SingleAxishingeJoint SingleAxishingeJoint
PositionDamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProgramShader ProtoBoddy ProtoBoddy ProtoBoddre ProtoIntance ProtoIntance ProtoIntance ProtoIntance ProtoIntance ProtoInterface Interface ScalarChamper ScalarChamper ScalarChamper ScalarChamper ScalarChamper ScreenfrontStyle ScreenfrontStyle Screenfroup Script SegmentedVolumeData ShadedVolumeStyle ShaderProgram Shader SignalPuc Signal	PositionDamper2D PositionInterpolator PositionInterpolator?D PrimitivePickSensor  ProjectionVolumeStyle Protobeclare Protobeclare Protolnstance Protoinstance Scalarinstance Scalarinstan	PositionInamper2D PositionInterpolator PositionInterpolator2D PrimitivePickSensor ProgramShader ProtoDeclare ProtoDeclare ProtoDeclare ProtoInstance ProtoInstance ProtoInstance ProtoInstance ProtoInstance ProtoInterface ProtoInterface ProtoInterface ProximitySensor QuadSet ReceiverPdu Rectangle2D RigidBody RigidBody RigidBody Royller ScalarChaser ScalarDamper ScalarDamper ScalarDamper ScalarInterpolator Scene ScreenFontStyle ScreenFontStyle ScreenFontStyle ScreenFontStyle ScreenFord ShadedVolumeStyle ShaderPart ShaderPogram Shape SignalPdu SlihouetteEnhancementVolumeStyle	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInterface ProtoInterface ProsinitySensor QuadSet  Rectangle2D  ROUTE  ScalarInterpolator Scene	PositionInterpolator2D  ProjectionVolumeStyle  * required for X3D Immersive Profile  QuadSet  Rectangle2D  RigidBody  RigidBody  RigidBody  RigidBody  RigidBody  RoUTE  ScalarChaser  ScalarDamper  ScalarDamper  ScalarDamper  Scalarinerpolator  Seene  * missing, suggested for HTMLS  * missing, suggested for HTMLS  * required for X3D Immersive Profile  SegmentedVolumeData  ShadedVolumeStyle  ShaderPart  Shape	PositionInterpolator PositionInterpolator PositionInterpolator2D  ProgramShader  ProtoBody ProtoDoclare ProtoInterface ProtoInterface ProtoInterface ProtoInterface ProwinitySensor QuadSet  Rectangle2D  ROUTE ScalarChaser ScalarDamper ScalarInterpolator Scene  ScreenGroup Script  ShaderPart ShaderProgram	PositionInterpolator2D  ProtoBody ProtoDeclare ProtoInstance ProtoInstance ProtoInterface ProximitySensor QuadSet  Rectangle2D RigidBody RigidBody RigidBody Scalarinterpolator Scene  Script  Shape	PositionInterpolator PositionInterpolator PositionInterpolator2D  ProgramShader ProjectionVolumeStyle ProtoBody ProtoBody ProtoBody ProtoDeclare ProtoInterface ReceiverPdu Rectangle 2D RigidBody(Collection ROUTE ScalarChaser Scal

.

X3D Architecture version 4.0 Node and Statement Support	X3D Players and Tools Coverage	update	d 21 January 2023	https://www.web3d.org/specifications/ https://www.web3d.org/specifications/			
	X_ITE Player v8.4.4	FreeWRL v5.1	view3dscene (Castle Game Engine) v6.4	X3DOM Player v1.8.1	InstantPlayer	Xj3D Player 2.1	X3D-Edit Authoring Tool 4.0
	Supported Nodes	Conformance	Standard X3D Nodes	Nodes Index	Node types	Xj3D viewer: NPS source	X3D-Edit home
atialSound		SpatialSound					
here	Sphere	Sphere	Sphere	Sphere	Sphere	Sphere	Sphere
hereSensor	SphereSensor	SphereSensor	SphereSensor	SphereSensor	SphereSensor	SphereSensor	SphereSensor
linePositionInterpolator	SplinePositionInterpolator	SplinePositionInterpolator		SplinePositionInterpolator	SplinePositionInterpolator		
linePositionInterpolator2D	SplinePositionInterpolator2D	SplinePositionInterpolator2D			SplinePositionInterpolator2D		
olineScalarInterpolator	SplineScalarInterpolator	SplineScalarInterpolator			SplineScalarInterpolator		
not light	SpotLight	SpotLight	SpotLight	SpotLight	SpotLight	SpotLight	SpotLight
quadOrientationInterpolator	SquadOrientationInterpolator		Spottight	Spottight	SquadOrientationInterpolator	SpotLight	Spottignt
		SquadOrientationInterpolator	Contract of the Contract of th				
aticGroup	StaticGroup	StaticGroup	StaticGroup	StaticGroup	StaticGroup	StaticGroup	StaticGroup
reamAudioDestination							
reamAudioSource							
ringSensor	StringSensor	StringSensor	StringSensor	* missing, suggested for HTML5	StringSensor	StringSensor	StringSensor
ırfaceEmitter	SurfaceEmitter	SurfaceEmitter					
vitch	Switch	Switch	Switch	Switch	Switch	Switch	Switch
xCoordChaser2D	TexCoordChaser2D	TexCoordChaser2D			TexCoordChaser2D		TexCoordChaser2D
xCoordDamper2D	TexCoordDamper2D	TexCoordDamper2D		TexCoordDamper2D	TexCoordDamper2D		TexCoordDamper2D
xt	Text	Text	Text	Text	Text	Text	Text
xtureBackground	TextureBackground	TextureBackground	TextureBackground	* missina. suaaested for HTML5	TextureBackground	TextureBackground	TextureBackground
xtureBackground xtureCoordinate	TextureCoordinate	TextureCoordinate	TextureCoordinate	TextureCoordinate	TextureBackground	TextureCoordinate	TextureCoordinate
xtureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D
xtureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D	1	TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D
xtureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator
xtureProjector		TextureProjector					
xtureProjectorParallel		TextureProjectorParallel					
xtureProperties	TextureProperties	TextureProperties	TextureProperties	TextureProperties	TextureProperties	TextureProperties	TextureProperties
xtureTransform	TextureTransform	TextureTransform	TextureTransform	TextureTransform	TextureTransform	TextureTransform	TextureTransform
xtureTransform3D	TextureTransform3D	TextureTransform3D	TextureTransform3D	TextureTransform3D	TextureTransform3D	TextureTransform3D	TextureTransform3D
xtureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D	Texture management	TextureTransformMatrix3D
meSensor	TimeSensor	TimeSensor	TimeSensor	TimeSensor	TimeSensor	TimeSensor	TimeSensor
meTrigger	TimeTrigger	TimeTrigger	TimeTrigger	TimeTrigger	TimeTrigger	TimeTrigger	TimeTrigger
neMappedVolumeStyle	ToneMappedVolumeStyle	ToneMappedVolumeStyle		ToneMappedVolumeStyle			ToneMappedVolumeStyle
ouchSensor	TouchSensor	TouchSensor	TouchSensor	TouchSensor	TouchSensor	TouchSensor	TouchSensor
ansform	Transform	Transform	Transform	Transform	Transform	Transform	Transform
ansformSensor	TransformSensor	TransformSensor			TransformSensor		
ansmitterPdu		TransmitterPdu					TransmitterPdu
iangleFanSet	TriangleFanSet	TriangleFanSet	TriangleFanSet		TriangleFanSet	TriangleFanSet	TriangleFanSet
iangleSet	TriangleSet	TriangleSet	TriangleSet	TriangleSet	TriangleSet	TriangleSet	TriangleSet
iangleSet2D	TriangleSet2D	TriangleSet2D		TriangleSet2D	TriangleSet2D	TriangleSet2D	TriangleSet2D
iangleStripSet	TriangleStripSet		TriangleStripSet	TTaligle3et2D	TriangleStripSet	TriangleStripSet	TriangleStripSet
		TriangleStripSet	mangiestripset				
voSidedMaterial	TwoSidedMaterial	TwoSidedMaterial	<u> </u>	TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial
NIT	UNIT	UNIT	UNIT	* missing, suggested for HTML5	* missing, suggested for HTML5	* missing, suggested for HTML5	unit
niversalJoint		UniversalJoint		UniversalJoint		UniversalJoint	UniversalJoint
nlitMaterial	UnlitMaterial	UnlitMaterial					
ewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint
ewpointGroup	ViewpointGroup	ViewpointGroup	ViewpointGroup	* missing, suggested for HTML5	ViewpointGroup	* missing, suggested for HTML5	ViewpointGroup
ewport	Viewport	Viewport	·		Viewport		·
sibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor	1	VisibilitySensor	VisibilitySensor	VisibilitySensor
lumeData	VolumeData	VolumeData		VolumeData			VolumeData
lumeEmitter	VolumeEmitter	VolumeEmitter	1	Totalicoata		+	VO.G/IIEData
lumePickSensor	VolumePickSensor	VolumePickSensor	+	1	<u> </u>	+	+
			+	+			_
indPhysicsModel	WindPhysicsModel	WindPhysicsModel	+	1		WindPhysicsModel	<del>+</del>
orldinfo	Worldinfo	Worldinfo	Worldinfo	Worldinfo	WorldInfo	WorldInfo	WorldInfo
D	X3D	X3D	X3D	X3D	X3D	X3D	X3D
	·	·	·				·
ported nodes and statements:	87%	92%	52%	62%	71%	62%	80%
5	241	255	144	171	197	172	220
implemented nodes and statements:							
,	35	21	132	105	79	104	56
ferences	33	21	132	103	13	104	30
D v4.0 Architecture Draft Specification	X_ITE supported node list	FreeWRL supported node list	Castle Game Engine documentation	X3DOM supported node list X3DOM Node Types list	<u>InstantReality</u>	Xj3D SourceForge	X3D-Edit 4.0 Authoring Tool
TML5 support goals				NODOW NODE TYPES TISE			
	tool decolling on the Burgle of	2 - 1 - 1 1 - 2 - Cl 1	Seed of the Allen of the Beeffer of	42		2	
required for X3D Immersive Profile	includes all Immersive Profile nodes	includes all Immersive Profile nodes	includes all Immersive Profile nodes	12	2	2	includes all Immersive Profile no
suggested for HTML5 support	0	[0	14	13	2	[5	includes all suggested HTML5 no
priority nodes and statements missing:	0	0	14	25	4		

X3D Codebases for	X3D version 4.0	updated	16 January 2023		tions/X3dNodeInventoryCompariso		
Scene Access Interface (SAI)	Node and Statement Support				tions/X3dNodeInventoryCompariso		
X3D Nodes and Statements		Java X3DJSAIL	Python Package	C implementation	C++ implementation	C# implementation	Turtle, RDF encodings
X3D Unified Object Model (X3DUOM)	X3D to JSON Converter	X3DJSAIL	Python X3D Package	(work in progress)	(work in progress)	(work in progress)	X3D Ontology
AcousticProperties		AcousticProperties	AcousticProperties				AcousticProperties
Analyser		Analyser	Analyser				Analyser
Anchor		Anchor	Anchor				Anchor
Appearance	Can John Carlson's open-source	Appearance	Appearance				Appearance
Arc2D	X3DJSONLD be regularized to use	Arc2D	Arc2D	Example cod	ebase templates provided by Myeo	ng Won Lee.	Arc2D
ArcClose2D	our autogeneration capabilities	ArcClose2D	ArcClose2D				ArcClose2D
AudioClip	and match JavaScript SAI	AudioClip	AudioClip				AudioClip
AudioDestination	standard? These need to be	AudioDestination	AudioDestination	TODO apply VSDI IOM code	e-autogeneration patterns, similar	to Java Python and Turtle	AudioDestination
Background	designed consistently with the	Background	Background	TODO apply ASDOOM COU	e-autogeneration patterns, similar	to Java, rython and Turtie.	Background
BallJoint	draft X3D JSON encoding.	BallJoint	BallJoint				BallJoint
Billboard	draft ASD 130N efficulting.	Billboard	Billboard	https://sourceforge.ne	t/p/x3d/code/HEAD/tree/www.we	b3d.org/x3d/languages	Billboard
BiquadFilter		BiquadFilter	BiquadFilter				BiquadFilter
BlendedVolumeStyle		BlendedVolumeStyle	BlendedVolumeStyle				BlendedVolumeStyle
BooleanFilter		BooleanFilter	BooleanFilter				BooleanFilter
BooleanSequencer		BooleanSequencer	BooleanSequencer				BooleanSequencer
BooleanToggle		BooleanToggle	BooleanToggle				BooleanToggle
BooleanTrigger		BooleanTrigger	BooleanTrigger				BooleanTrigger
BoundaryEnhancementVolumeStyle		BoundaryEnhancementVolumeStyle	BoundaryEnhancementVolumeStyle				BoundaryEnhancementVolumeStyle
BoundedPhysicsModel		BoundedPhysicsModel	BoundedPhysicsModel				BoundedPhysicsModel
Box		Box	Вох				Box
BufferAudioSource		BufferAudioSource	BufferAudioSource				BufferAudioSource
CADAssembly		CADAssembly	CADAssembly				CADAssembly
CADFace		CADFace	CADFace				CADFace
CADLayer			CADLayer				CADLayer
CADPart		CADPart	CADPart				CADPart
CartoonVolumeStyle		CartoonVolumeStyle	CartoonVolumeStyle				CartoonVolumeStyle
ChannelMerger		ChannelMerger	ChannelMerger				ChannelMerger
ChannelSelector		ChannelSelector	ChannelSelector				ChannelSelector
ChannelSplitter		ChannelSplitter	ChannelSplitter				ChannelSplitter
		Circle2D	Circle2D				Circle2D
Circle2D ClipPlane		ClipPlane	ClipPlane				ClipPlane
CollidableOffset							CollidableOffset
		CollidableOffset	CollidableOffset				
CollidableShape		CollidableShape Collision	CollidableShape				CollidableShape Collision
Collision			Collision				
CollisionCollection		CollisionCollection	CollisionCollection				CollisionCollection
CollisionSensor		CollisionSensor	CollisionSensor				CollisionSensor
CollisionSpace		CollisionSpace	CollisionSpace				CollisionSpace
Color		Color	Color				Color
ColorChaser		ColorChaser	ColorChaser				ColorChaser
ColorDamper		ColorDamper	ColorDamper				ColorDamper
ColorInterpolator		ColorInterpolator	ColorInterpolator				ColorInterpolator
ColorRGBA		ColorRGBA	ColorRGBA				ColorRGBA
component		component	component				component
ComposedCubeMapTexture		ComposedCubeMapTexture	ComposedCubeMapTexture				ComposedCubeMapTexture
ComposedShader		ComposedShader	ComposedShader				ComposedShader
ComposedTexture3D		ComposedTexture3D	ComposedTexture3D				ComposedTexture3D
ComposedVolumeStyle		ComposedVolumeStyle	ComposedVolumeStyle				ComposedVolumeStyle
Cone		Cone	Cone				Cone
ConeEmitter		ConeEmitter	ConeEmitter				ConeEmitter
connect		connect	connect				connect
Contact		Contact	Contact				Contact
Contour2D		Contour2D	Contour2D				Contour2D
ContourPolyline2D		ContourPolyline2D	ContourPolyline2D				ContourPolyline2D
Convolver		Convolver	Convolver				Convolver
Coordinate		Coordinate	Coordinate				Coordinate
CoordinateChaser		CoordinateChaser	CoordinateChaser				CoordinateChaser
CoordinateDamper		CoordinateDamper	CoordinateDamper				CoordinateDamper
CoordinateDouble		CoordinateDouble	CoordinateDouble				CoordinateDouble
CoordinateInterpolator		CoordinateInterpolator	CoordinateInterpolator				CoordinateInterpolator
CoordinateInterpolator2D		CoordinateInterpolator2D	CoordinateInterpolator2D				CoordinateInterpolator2D
Cylinder		Cylinder	Cylinder				Cylinder
CylinderSensor		CylinderSensor	CylinderSensor				CylinderSensor
Delay		Delay	Delay				Delay
,		/	,				

Discretic and Links	T I	Discostinuo II inht	Disectionalliabt		I	Discotionalliabt
DirectionalLight		DirectionalLight DISEntityManager	DirectionalLight DISEntity Manager			DirectionalLight DISEntityManager
DISEntityManager			DISEntityManager			
DISEntityTypeMapping		DISEntityTypeMapping	DISEntityTypeMapping			DISEntityTypeMapping
Disk2D		Disk2D	Disk2D			Disk2D
DoubleAxisHingeJoint		DoubleAxisHingeJoint	DoubleAxisHingeJoint			DoubleAxisHingeJoint
DynamicsCompressor		DynamicsCompressor	DynamicsCompressor			DynamicsCompressor
EaseInEaseOut		EaseInEaseOut	EaseInEaseOut			EaseInEaseOut
EdgeEnhancementVolumeStyle		EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle			EdgeEnhancementVolumeStyle
ElevationGrid		ElevationGrid	ElevationGrid			ElevationGrid
EspduTransform		EspduTransform	EspduTransform			EspduTransform
ExplosionEmitter		ExplosionEmitter	ExplosionEmitter			ExplosionEmitter
EXPORT		EXPORT	EXPORT			EXPORT
ExternProtoDeclare		ExternProtoDeclare	ExternProtoDeclare			ExternProtoDeclare
Extrusion		Extrusion	Extrusion			Extrusion
field		field	field			field
fieldValue		fieldValue	fieldValue			fieldValue
FillProperties		FillProperties	FillProperties			FillProperties
FloatVertexAttribute		FloatVertexAttribute	FloatVertexAttribute			FloatVertexAttribute
Fog		Fog	Fog			Fog
		0	ŭ			ū
FogCoordinate		FogCoordinate	FogCoordinate			FogCoordinate
FontStyle		FontStyle	FontStyle		ļ	FontStyle
ForcePhysicsModel		ForcePhysicsModel	ForcePhysicsModel			ForcePhysicsModel
Gain		Gain	Gain			Gain
GeneratedCubeMapTexture		GeneratedCubeMapTexture	GeneratedCubeMapTexture			GeneratedCubeMapTexture
GeoCoordinate		GeoCoordinate	GeoCoordinate			GeoCoordinate
GeoElevationGrid		GeoElevationGrid	GeoElevationGrid			GeoElevationGrid
GeoLocation		GeoLocation	GeoLocation			GeoLocation
GeoLOD		GeoLOD	GeoLOD			GeoLOD
GeoMetadata		GeoMetadata	GeoMetadata			GeoMetadata
GeoOrigin		GeoOrigin	GeoOrigin			GeoOrigin
GeoPositionInterpolator		GeoPositionInterpolator	GeoPositionInterpolator			GeoPositionInterpolator
GeoProximitySensor		GeoProximitySensor	GeoProximitySensor			GeoProximitySensor
GeoTouchSensor		GeoTouchSensor	GeoTouchSensor			GeoTouchSensor
GeoTransform		GeoTransform	GeoTransform			GeoTransform
GeoViewpoint		GeoViewpoint	GeoViewpoint			GeoViewpoint
Group		Group	Group			Group
HAnimDisplacer		HAnimDisplacer	HAnimDisplacer			HAnimDisplacer
						HAnimHumanoid
HAnimHumanoid HAnimJoint		HAnimHumanoid HAnimJoint	HAnimHumanoid HAnimJoint			HAnimJoint
HAnimMotion		HAnimMotion	HAnimMotion			HAnimMotion
HAnimSegment		HAnimSegment	HAnimSegment			HAnimSegment
HAnimSite		HAnimSite	HAnimSite			HAnimSite
head		head	head			head
ImageCubeMapTexture		ImageCubeMapTexture	ImageCubeMapTexture			ImageCubeMapTexture
ImageTexture		ImageTexture	ImageTexture			ImageTexture
ImageTexture3D		ImageTexture3D	ImageTexture3D			ImageTexture3D
IMPORT		IMPORT	IMPORT			IMPORT
IndexedFaceSet		IndexedFaceSet	IndexedFaceSet			IndexedFaceSet
IndexedLineSet		IndexedLineSet	IndexedLineSet			IndexedLineSet
IndexedQuadSet		IndexedQuadSet	IndexedQuadSet			IndexedQuadSet
IndexedTriangleFanSet		IndexedTriangleFanSet	IndexedTriangleFanSet			IndexedTriangleFanSet
IndexedTriangleSet		IndexedTriangleSet	IndexedTriangleSet			IndexedTriangleSet
IndexedTriangleStripSet		IndexedTriangleStripSet	IndexedTriangleStripSet			IndexedTriangleStripSet
Inline		Inline	Inline		<b> </b>	Inline
		IntegerSequencer	IntegerSequencer			IntegerSequencer
IntegerSequencer					-	
IntegerTrigger		IntegerTrigger	IntegerTrigger		<del> </del>	IntegerTrigger
In Conferent (along a Date)		In Conferent (alconomy)	In Conferent/aliment Date			In Conference (Section 1997)
IsoSurfaceVolumeData		IsoSurfaceVolumeData	IsoSurfaceVolumeData			IsoSurfaceVolumeData
KeySensor		KeySensor	KeySensor			KeySensor
Layer		Layer	Layer			Layer
LayerSet		LayerSet	LayerSet			LayerSet
Layout		Layout	Layout			Layout
LayoutGroup		LayoutGroup	LayoutGroup			LayoutGroup
LayoutLayer		LayoutLayer	LayoutLayer			LayoutLayer
LinePickSensor		LinePickSensor	LinePickSensor			LinePickSensor
LineProperties		LineProperties	LineProperties			LineProperties
LineSet		LineSet	LineSet			LineSet
				l .	1	1

ListenerPointSource	ListenerPointSource	ListenerPointSource		l	ListenerPointSource
LoadSensor	LoadSensor	LoadSensor			LoadSensor
LocalFog	LocalFog	LocalFog			LocalFog
LOD	LOD	LOD			LOD
Material	Material	Material			Material
Matrix3VertexAttribute	Matrix3VertexAttribute	Matrix3VertexAttribute			Matrix3VertexAttribute
Matrix4VertexAttribute	Matrix4VertexAttribute	Matrix4VertexAttribute			Matrix4VertexAttribute
meta	meta	meta			meta
MetadataBoolean	MetadataBoolean	MetadataBoolean			MetadataBoolean
MetadataDouble	MetadataDouble	MetadataDouble			MetadataDouble
MetadataFloat	MetadataFloat	MetadataFloat			MetadataFloat
MetadataInteger	MetadataInteger	MetadataInteger			MetadataInteger
MetadataSet	MetadataSet	MetadataSet			MetadataSet
MetadataString	MetadataString	MetadataString			MetadataString
MicrophoneSource	MicrophoneSource	MicrophoneSource			MicrophoneSource
MotorJoint	MotorJoint	MotorJoint			MotorJoint
MovieTexture	MovieTexture	MovieTexture			MovieTexture
MultiTexture	MultiTexture	MultiTexture			MultiTexture
MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate			MultiTextureCoordinate
MultiTextureTransform	MultiTextureTransform	MultiTextureTransform			MultiTextureTransform
NavigationInfo	NavigationInfo	NavigationInfo			NavigationInfo
Normal	Normal	Normal			Normal
NormalInterpolator	NormalInterpolator	NormalInterpolator			NormalInterpolator
NurbsCurve	NurbsCurve	NurbsCurve			NurbsCurve
NurbsCurve2D	NurbsCurve2D	NurbsCurve2D			NurbsCurve2D
NurbsOrientationInterpolator	NurbsOrientationInterpolator	NurbsOrientationInterpolator			NurbsOrientationInterpolator
NurbsPatchSurface	NurbsPatchSurface	NurbsPatchSurface			NurbsPatchSurface
NurbsPositionInterpolator	NurbsPositionInterpolator	NurbsPositionInterpolator			NurbsPositionInterpolator
NurbsSet	NurbsSet	NurbsSet			NurbsSet
NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator			NurbsSurfaceInterpolator
NurbsSweptSurface	NurbsSweptSurface	NurbsSweptSurface			NurbsSweptSurface
NurbsSwungSurface	NurbsSwungSurface	NurbsSwungSurface			NurbsSwungSurface
NurbsTextureCoordinate	NurbsTextureCoordinate	NurbsTextureCoordinate			NurbsTextureCoordinate
NurbsTrimmedSurface	NurbsTrimmedSurface	NurbsTrimmedSurface			NurbsTrimmedSurface
OpacityMapVolumeStyle	OpacityMapVolumeStyle	OpacityMapVolumeStyle			OpacityMapVolumeStyle
OrientationChaser	OrientationChaser	OrientationChaser			OrientationChaser
OrientationDamper	OrientationDamper	OrientationDamper			OrientationDamper
OrientationInterpolator	OrientationInterpolator	OrientationInterpolator			OrientationInterpolator
OrthoViewpoint	OrthoViewpoint	OrthoViewpoint			OrthoViewpoint
OscillatorSource	OscillatorSource	OscillatorSource			OscillatorSource
PackagedShader	PackagedShader	PackagedShader			PackagedShader
ParticleSystem	ParticleSystem	ParticleSystem			ParticleSystem
PeriodicWave PhysicalMaterial	PeriodicWave PhysicalMaterial	PeriodicWave			PeriodicWave
		Physical Material			Physical Material
PickableGroup PixelTexture	PickableGroup PixelTexture	PickableGroup PixelTexture			PickableGroup PixelTexture
					PixelTexture3D
PixelTexture3D PlaneSensor	PixelTexture3D PlaneSensor	PixelTexture3D PlaneSensor			PlaneSensor
PointEmitter	PointEmitter	PointEmitter	<del> </del>	<del> </del>	PointEmitter
PointLight	PointLight	PointLight	<u> </u>	<b> </b>	PointLight
PointPickSensor	PointPickSensor	PointPickSensor			PointPickSensor
PointProperties	 PointProperties	PointProperties			PointProperties PointProperties
PointSet	PointSet	PointSet			PointSet
Polyline2D	Polyline2D	Polyline2D	<u> </u>	<b> </b>	Polyline2D
PolylineEmitter	PolylineEmitter	PolylineEmitter			PolylineEmitter
Polypoint2D	Polypoint2D	Polypoint2D			Polypoint2D
PositionChaser	PositionChaser	PositionChaser			PositionChaser
PositionChaser2D	PositionChaser2D	PositionChaser2D			PositionChaser2D
PositionDamper	PositionDamper	PositionDamper			PositionDamper
PositionDamper2D	PositionDamper2D	PositionDamper2D			PositionDamper2D
PositionInterpolator	PositionInterpolator	PositionInterpolator			PositionInterpolator
PositionInterpolator2D	PositionInterpolator2D	PositionInterpolator2D			PositionInterpolator2D
PrimitivePickSensor	PrimitivePickSensor	PrimitivePickSensor			PrimitivePickSensor
ProgramShader	ProgramShader	ProgramShader			ProgramShader
ProjectionVolumeStyle	ProjectionVolumeStyle	ProjectionVolumeStyle			ProjectionVolumeStyle
-	ProtoBody	ProtoBody			ProtoBody
ProtoDeclare	ProtoDeclare	ProtoDeclare			ProtoDeclare

B	D.	B		D
ProtoInstance	ProtoInstance	ProtoInstance		ProtoInstance
President Consess	ProtoInterface	ProtoInterface		ProtoInterface
ProximitySensor	ProximitySensor	ProximitySensor		ProximitySensor
QuadSet	QuadSet	QuadSet		QuadSet
ReceiverPdu	ReceiverPdu	ReceiverPdu		ReceiverPdu
Rectangle2D	Rectangle2D	Rectangle2D		Rectangle2D
RigidBody	RigidBody	RigidBody		RigidBody
RigidBodyCollection	RigidBodyCollection	RigidBodyCollection		RigidBodyCollection
ROUTE	ROUTE	ROUTE		ROUTE
ScalarChaser	ScalarChaser	ScalarChaser		ScalarChaser
ScalarDamper	ScalarDamper	ScalarDamper		ScalarDamper
ScalarInterpolator	ScalarInterpolator	ScalarInterpolator		ScalarInterpolator
-	Scene	Scene		Scene
ScreenFontStyle	ScreenFontStyle	ScreenFontStyle		ScreenFontStyle
ScreenGroup	ScreenGroup	ScreenGroup		ScreenGroup
Script	Script	Script		Script
SegmentedVolumeData	SegmentedVolumeData	SegmentedVolumeData		SegmentedVolumeData
ShadedVolumeStyle	ShadedVolumeStyle	ShadedVolumeStyle		ShadedVolumeStyle
ShaderPart	ShaderPart	ShaderPart		ShaderPart
ShaderProgram	ShaderProgram	ShaderProgram		ShaderProgram
Shape	Shape	Shape		Shape
SignalPdu	SignalPdu	SignalPdu		SignalPdu
SilhouetteEnhancementVolumeStyle		SilhouetteEnhancementVolumeStyle		SilhouetteEnhancementVolumeStyle
SingleAxisHingeJoint	SingleAxisHingeJoint	SingleAxisHingeJoint		SingleAxisHingeJoint
SliderJoint	SliderJoint	SliderJoint		SliderJoint
Sound	Sound	Sound		Sound
Spatial Sound	 SpatialSound	SpatialSound		SpatialSound
		Sphere		
Sphere	Sphere	·		Sphere
SphereSensor	SphereSensor	SphereSensor		SphereSensor
SplinePositionInterpolator	SplinePositionInterpolator	SplinePositionInterpolator		SplinePositionInterpolator
SplinePositionInterpolator2D	SplinePositionInterpolator2D	SplinePositionInterpolator2D		SplinePositionInterpolator2D
SplineScalarInterpolator	SplineScalarInterpolator	SplineScalarInterpolator		SplineScalarInterpolator
SpotLight	SpotLight	SpotLight		SpotLight
SquadOrientationInterpolator	SquadOrientationInterpolator	SquadOrientationInterpolator		SquadOrientationInterpolator
StaticGroup	StaticGroup	StaticGroup		StaticGroup
StreamAudioDestination	StreamAudioDestination	StreamAudioDestination		StreamAudioDestination
StreamAudioSource	StreamAudioSource	StreamAudioSource		StreamAudioSource
StringSensor	StringSensor	StringSensor		StringSensor
SurfaceEmitter	SurfaceEmitter	SurfaceEmitter		SurfaceEmitter
Switch	Switch	Switch		Switch
TexCoordChaser2D	TexCoordChaser2D	TexCoordChaser2D		TexCoordChaser2D
TexCoordDamper2D	TexCoordDamper2D	TexCoordDamper2D		TexCoordDamper2D
Text	Text	Text		Text
TextureBackground	TextureBackground	TextureBackground		TextureBackground
TextureCoordinate	TextureCoordinate	TextureCoordinate		TextureCoordinate
TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D		TextureCoordinate3D
TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D		TextureCoordinate4D
TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator		TextureCoordinateGenerator
TextureProjector	TextureProjector	TextureProjector		TextureProjector
TextureProjectorParallel	TextureProjectorParallel	TextureProjectorParallel		TextureProjectorParallel
				TextureProperties
TextureProperties	TextureProperties	TextureProperties		rextureProperties
TextureProperties TextureTransform	TextureProperties TextureTransform	TextureProperties TextureTransform		
TextureTransform	TextureTransform	TextureTransform		TextureTransform
TextureTransform TextureTransform3D	TextureTransform TextureTransform3D	TextureTransform TextureTransform3D		TextureTransform TextureTransform3D
TextureTransform TextureTransform3D TextureTransformMatrix3D	TextureTransform TextureTransform3D TextureTransformMatrix3D	TextureTransform TextureTransform3D TextureTransformMatrix3D		TextureTransform TextureTransform3D TextureTransformMatrix3D
TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor		TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor
TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger		TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger
TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle		TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle
TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor		TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor
TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform		TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform
TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform TransformSensor	TextureTransform TextureTransform30 TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform TransformSensor		TextureTransform TextureTransform30 TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform
TextureTransform TextureTransformAD TextureTransformAD TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform TransformSensor TransmitterPdu	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform TransformSensor TransmitterPdu	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform TransformSensor TransmitterPdu		TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform TransformSensor TransmitterPdu
TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform TransformSensor TransformSensor TransmitterPdu TriangleFanSet	TextureTransform TextureTransformAD TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform TransformSensor TransmitterPdu TriangleFanSet	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform TransformSensor TransmitterPdu TriangleFanSet		TextureTransform TextureTransformAD TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform TransformSensor TransmitterPdu TriangleFanSet
TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform TransformSensor TransmitterPdu TriangleFanSet TriangleFanSet TriangleSet	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform TransformSensor TransmitterPdu TriangleFanSet TriangleSet	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform TransformSensor TransformSensor TransmitterPdu TriangleFanSet TriangleSet TriangleSet		TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform TransformSensor TransmitterPdu TriangleFanSet TriangleFanSet
TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform Transform TransformSensor TransmitterPdu TriangleFanSet TriangleSet TriangleSet TriangleSet2D	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform TransformSensor TransmitterPdu TriangleFanSet TriangleSet TriangleSet TriangleSet	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform TransformSensor TransformSensor TransmitterPdu TriangleFanSet TriangleSet TriangleSet TriangleSet2D		TextureTransform TextureTransform30 TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform TransformSensor TransmitterPdu TriangleFanSet TriangleSet TriangleSet TriangleSet
TextureTransform TextureTransform3D TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform Transform Transform TransformSensor TransmitterPdu TriangleFanSet TriangleSet TriangleSet2D TriangleStripSet	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform Transform TransformSensor TransmitterPdu TriangleFanSet TriangleSet TriangleSetZD TriangleStripSet	TextureTransform TextureTransform30 TextureTransform30 TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform Transform TransformEnsor TransmitterPdu TriangleFanSet TriangleSet TriangleSetZD TriangleStripSet		TextureTransform TextureTransform30 TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform Transform TransformSensor TransmitterPdu TriangleFanSet TriangleSet TriangleSet2D TriangleStripSet
TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform TransformSensor TransmitterPdu TriangleFanSet TriangleSet TriangleSet TriangleSet	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform TransformSensor TransmitterPdu TriangleFanSet TriangleSet TriangleSet TriangleSet2D	TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform TransformSensor TransformSensor TransmitterPdu TriangleFanSet TriangleSet TriangleSet TriangleSet2D		TextureTransform TextureTransform3D TextureTransformMatrix3D TimeSensor TimeTrigger ToneMappedVolumeStyle TouchSensor Transform Transform TransformSensor TransmitterPdu TriangleFanSet TriangleSet TriangleSet TriangleSet

UniversalJoint		UniversalJoint	UniversalJoint				UniversalJoint
UnlitMaterial		UnlitMaterial	UnlitMaterial				UnlitMaterial
Viewpoint		Viewpoint	Viewpoint				Viewpoint
ViewpointGroup		ViewpointGroup	ViewpointGroup				ViewpointGroup
Viewport		Viewport	Viewport				Viewport
VisibilitySensor		VisibilitySensor	VisibilitySensor				VisibilitySensor
VolumeData		VolumeData	VolumeData				VolumeData
VolumeEmitter		VolumeEmitter	VolumeEmitter				VolumeEmitter
VolumePickSensor		VolumePickSensor	VolumePickSensor				VolumePickSensor
WindPhysicsModel		WindPhysicsModel	WindPhysicsModel				WindPhysicsModel
WorldInfo		WorldInfo	Worldinfo				WorldInfo
X3D		X3D	X3D				X3D
Supported nodes and statements:	0%	100%	100%	0%	0%	0%	100%
276	0	276	276	0	0	0	276
Unimplemented nodes and statements:							
0	276	0	0	276	276	276	0

X3D v4.0 Architecture Draft Specification

X3D Model Validation	X3D version 4.0	updated	16 January 2023	https://www.web3d.org/specifications/				
X3D Abstract Specification Node Index	Node and Statement Support  X3D XML Schema validation	X3D XML DOCTYPE DTD validation	X3D JSON Schema	https://www.web3d.org/specifications/ X3D Tooltips	X3D Schematron validation	VRML97 Specification	X3dToVrml97.xslt	
X3D Abstract specification Node Index	(with basis for X3DUOM construction)	X3D XIVIE DOCTYPE DTD Validation	X3D JSON SCHEMA	X3D Toolups	X3D Schematron Vallaation		red or forward compatible, .wrl VRML97)	
AcousticProperties	AcousticProperties	AcousticProperties		AcousticProperties	AcousticProperties	(Grey background, unsupport	ed of forward compatible, .wif vitivity/	
Analyser	Analyser	Analyser	TODO update X3D JSON draft	Analyses	Analyser			
Anchor	Anchor	Anchor	schema once IETF RFC standard	Anchar	Anchor	Anchor	Anchor	
Appearance	Appearance	Appearance	applications, and command-line	Appearance	Appearance	Appearance	Appearance	
Arc2D	Arc2D	Arc2D	validation tools are finally available. TODO add link.	Arc2D	Arc2D	(Prototype available	e) Arc2D	
ArcClose2D	ArcClose2D	ArcClose2D	available. TODO add link.	ArcClose2D	ArcClose2D	(Prototype available	e) ArcClose2D	
AudioClip	AudioClip	AudioClip		AudioClip	AudioClip	AudioClip	AudioClip	
AudioDestination	AudioDestination	AudioDestination		AudioDestination				
Background	Background	Background		Background	Background	Background	Background	
BallJoint	BallJoint	BallJoint		BallJoint	BallJoint			
BiquadFilter	BiquadFilter	BiquadFilter		BiquadFilter				
Billboard	Billboard	Billboard		Billboard	Billboard	Billboard	Billboard	
BlendedVolumeStyle	BlendedVolumeStyle	BlendedVolumeStyle		BlendedVolumeStyle	BlendedVolumeStyle	(Dootstore or citable	A posterostino	
BooleanFilter	BooleanFilter	BooleanFilter		BooleanFilter	BooleanFilter	(Prototype available		
BooleanSequencer	BooleanSequencer	BooleanSequencer		BooleanSequencer	BooleanSequencer		e) BooleanSequencer	
BooleanToggle	BooleanToggle	BooleanToggle		BooleanToggle	BooleanToggle	(Prototype available		
BooleanTrigger BoundaryEnhancementVolumeStyle	BooleanTrigger	BooleanTrigger		BooleanTrigger	BooleanTrigger BoundaryEnhancementVolumeStyle	(Prototype available	e) boolealiffiggel	
BoundedPhysicsModel	BoundaryEnhancementVolumeStyle BoundedPhysicsModel	BoundaryEnhancementVolumeStyle BoundedPhysicsModel		BoundaryEnhancementVolumeStyle BoundedPhysicsModel	BoundaryEnhancementVolumestyle			
Box	Box	Box		Box	Roy	Box	Box	
BufferAudioSource	BufferAudioSource	BufferAudioSource		BufferAudioSource	Box	50A		
CADAssembly	CADAssembly	CADAssembly		CADAssembly	CADAssembly	(Prototype available	) CADAssembly	
CADFace	CADFace	CADFace		CADASSETTIDIY	CADASSETTIBLY	(Prototype available		
CADLayer	CADLayer	CADLayer		CADLayer	CADLayer	(Prototype available		
CADPart	CADPart	CADPart		CADPart	CADPart	(Prototype available		
CartoonVolumeStyle	CartoonVolumeStyle	CartoonVolumeStyle		CartoonVolumeStyle	CartoonVolumeStyle	(i rototype available	-, CABI UIT	
ChannelMerger	ChannelMerger	ChannelMerger		ChannelMerger	cartochrolamestyle			
ChannelSelector	ChannelSelector	ChannelSelector		ChannelSelector				
ChannelSplitter	ChannelSplitter	ChannelSplitter		ChannelSplitter				
Circle2D	Circle2D	Circle2D		Circle2D	Circle2D	(Prototype available	e) Circle2D	
ClipPlane	ClipPlane	ClipPlane		ClipPlane	ClipPlane	()	,	
CollidableOffset	CollidableOffset	CollidableOffset		CollidableOffset	CollidableOffset			
CollidableShape	CollidableShape	CollidableShape		CollidableShape	CollidableShape			
Collision	Collision	Collision		Collision	Collision	Collision	Collision	
CollisionCollection	CollisionCollection	CollisionCollection		CollisionCollection	CollisionCollection			
CollisionSensor	CollisionSensor	CollisionSensor		CollisionSensor	CollisionSensor			
CollisionSpace	CollisionSpace	CollisionSpace		CollisionSpace	CollisionSpace			
Color	Color	Color		Color	Color	Color	Color	
ColorChaser	ColorChaser	ColorChaser		ColorChaser	ColorChaser			
ColorDamper	ColorDamper	ColorDamper		ColorDamper	ColorDamper			
ColorInterpolator	ColorInterpolator	ColorInterpolator		ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator	
ColorRGBA	ColorRGBA	ColorRGBA		ColorRGBA	ColorRGBA	(Prototype available	e) ColorRGBA	
component	component	component		component	component			
ComposedCubeMapTexture	ComposedCubeMapTexture	ComposedCubeMapTexture		ComposedCubeMapTexture	ComposedCubeMapTexture			
ComposedShader	ComposedShader	ComposedShader		ComposedShader	ComposedShader			
ComposedTexture3D	ComposedTexture3D	ComposedTexture3D		ComposedTexture3D	ComposedTexture3D			
ComposedVolumeStyle	ComposedVolumeStyle	ComposedVolumeStyle		ComposedVolumeStyle	ComposedVolumeStyle			
Cone	Cone	Cone		Cone	Cone	Cone	Cone	
ConeEmitter	ConeEmitter	ConeEmitter		ConeEmitter				
connect	connect	connect		connect	connect			
Contact	Contact	Contact		Contact	Contact	(Drototupo - :-:	) Contour3D	
Contour2D ContourPolyline2D	ContourPolyline3D	Contour Polyling 2D		Contour Polyling 2D	ContourPolyline2D	(Prototype available	e) Contour2D e) ContourPolyline2D	
Convolver	ContourPolyline2D Convolver	ContourPolyline2D Convolver		ContourPolyline2D Convolver	Contour orynnezo	(FIOLOLYPE AVAIIABLE	., contourrolylliczb	
Coordinate	Coordinate	Coordinate		Coordinate	Coordinate	Coordinate	Coordinate	
CoordinateChaser	Coordinate	Coordinate		CoordinateChaser	CoordinateChaser	Coordinate	Coordinate	
CoordinateDamper	CoordinateChaser	CoordinateChaser		CoordinateDamper	CoordinateDamper			
CoordinateDamper	CoordinateDouble	CoordinateDouble		CoordinateDouble	CoordinateDouble	(Prototype available	e) CoordinateDouble	
CoordinateInterpolator	CoordinateInterpolator	CoordinateDouble		CoordinateInterpolator	CoordinateInterpolator	CoordinateInterpolator	,	
CoordinateInterpolator2D	CoordinateInterpolator2D	CoordinateInterpolator2D		CoordinateInterpolator2D	CoordinateInterpolator2D		e) CoordinateInterpolator2D	
Cylinder	Cylinder	Cylinder		Cylinder	Cylinder	Cylinder	Cylinder	
CylinderSensor	CylinderSensor	CylinderSensor		CylinderSensor	CylinderSensor	CylinderSensor	CylinderSensor	
Delay	Delay	Delay		Delay		.,	-,	
DirectionalLight	DirectionalLight	DirectionalLight		DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight	
DISEntityManager	DISEntityManager	DISEntityManager		DISEntityManager	DISEntityManager			
DISEntityTypeMapping	DISEntityTypeMapping	DISEntityTypeMapping		DISEntityTypeMapping	DISEntityTypeMapping			
Disk2D	Disk2D	Disk2D		Disk2D	Disk2D	(Prototype available	e) Disk2D	

X3D Model Validation	X3D version 4.0	update	d 16 January 2023		ns/X3dNodeInventoryComparison.xlsx			
	Node and Statement Support				ns/X3dNodeInventoryComparison.pdf			
X3D Abstract Specification Node Index	X3D XML Schema validation	X3D XML DOCTYPE DTD validation	X3D JSON Schema	X3D Tooltips	X3D Schematron validation	VRML97 Specification X3dToVrml97.xslt		
	(with basis for X3DUOM construction)					(Grey background: unsupported or forward compatible, .wrl VRM		
DoubleAxisHingeJoint	DoubleAxisHingeJoint	DoubleAxisHingeJoint		DoubleAxisHingeJoint	DoubleAxisHingeJoint			
DynamicsCompressor	DynamicsCompressor	DynamicsCompressor		DynamicsCompressor				
EaseInEaseOut	EaseInEaseOut	EaseInEaseOut		EaseInEaseOut	EaseInEaseOut			
EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle		EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle			
ElevationGrid	ElevationGrid	ElevationGrid		ElevationGrid	ElevationGrid	ElevationGrid ElevationGrid		
EspduTransform	EspduTransform	EspduTransform		EspduTransform	EspduTransform	(Java Prototype available) EspduTransform		
ExplosionEmitter	ExplosionEmitter	ExplosionEmitter		ExplosionEmitter				
EXPORT	EXPORT	EXPORT		EXPORT	EXPORT			
ExternProtoDeclare	ExternProtoDeclare	ExternProtoDeclare		ExternProtoDeclare	ExternProtoDeclare			
Extrusion	Extrusion	Extrusion		Extrusion	Extrusion	Extrusion Extrusion		
field	field	field		field	field			
fieldValue	fieldValue	fieldValue		fieldValue	fieldValue			
FillProperties	FillProperties	FillProperties		FillProperties	FillProperties			
FloatVertexAttribute	FloatVertexAttribute	FloatVertexAttribute		FloatVertexAttribute	FloatVertexAttribute			
Fog	Fog	Fog		Fog	Fog	Fog Fog		
FogCoordinate	FogCoordinate	FogCoordinate		FogCoordinate	FogCoordinate			
FontStyle	FontStyle	FontStyle		FontStyle	FontStyle	FontStyle FontStyle		
ForcePhysicsModel	ForcePhysicsModel	ForcePhysicsModel		ForcePhysicsModel				
Gain	Gain	Gain		Gain				
GeneratedCubeMapTexture	GeneratedCubeMapTexture	GeneratedCubeMapTexture		GeneratedCubeMapTexture	GeneratedCubeMapTexture			
GeoCoordinate	GeoCoordinate	GeoCoordinate		GeoCoordinate	GeoCoordinate	(Prototype available) GeoCoordinate		
GeoElevationGrid	GeoElevationGrid	GeoElevationGrid		GeoElevationGrid	GeoElevationGrid	(Prototype available) GeoElevationGrid		
GeoLocation	GeoLocation	GeoLocation		GeoLocation	GeoLocation	(Prototype available) GeoLocation		
GeoLOD	GeoLOD	GeoLOD		GeoLOD	GeoLOD	(Prototype available) GeoLOD		
GeoMetadata	GeoMetadata	GeoMetadata		GeoMetadata	GeoMetadata	(Prototype available) GeoMetadata		
GeoOrigin	GeoOrigin	GeoOrigin		GeoOrigin	GeoOrigin	(Prototype available) GeoOrigin		
GeoPositionInterpolator	GeoPositionInterpolator	GeoPositionInterpolator		GeoPositionInterpolator	GeoPositionInterpolator	(Prototype available) GeoPositionInterpolator		
GeoProximitySensor	GeoProximitySensor	GeoProximitySensor		GeoProximitySensor	GeoProximitySensor			
GeoTouchSensor	GeoTouchSensor	GeoTouchSensor		GeoTouchSensor	GeoTouchSensor	(Prototype available) GeoTouchSensor		
GeoTransform	GeoTransform	GeoTransform		GeoTransform	GeoTransform			
GeoViewpoint	GeoViewpoint	GeoViewpoint		GeoViewpoint	GeoViewpoint	(Prototype available) GeoViewpoint		
Group	Group	Group		Group	Group	Group Group		
HAnimDisplacer	HAnimDisplacer	HAnimDisplacer		HAnimDisplacer	HAnimDisplacer	(Prototype available) HAnimDisplacer		
HAnimHumanoid	HAnimHumanoid	HAnimHumanoid		HAnimHumanoid	HAnimHumanoid	(Prototype available) HAnimHumanoid		
HAnimJoint	HAnimJoint	HAnimJoint		HAnimJoint	HAnimJoint	(Prototype available) HAnimJoint		
HAnimMotion	HAnimMotion	HAnimMotion		HAnimMotion	HAnimMotion	(perhaps prototype is possible?)		
HAnimSegment	HAnimSegment	HAnimSegment		HAnimSegment	HAnimSegment	(Prototype available) HAnimSegment		
HAnimSite	HAnimSite	HAnimSite		HAnimSite	HAnimSite	(Prototype available) HAnimSite		
head	head	head		head	head			
ImageCubeMapTexture	ImageCubeMapTexture	ImageCubeMapTexture		ImageCubeMapTexture				
ImageTexture	ImageTexture	ImageTexture		ImageTexture	ImageTexture	ImageTexture ImageTexture		
ImageTexture3D	ImageTexture3D	ImageTexture3D		ImageTexture3D				
IMPORT	IMPORT	IMPORT		IMPORT	IMPORT			
IndexedFaceSet	IndexedFaceSet	IndexedFaceSet		IndexedFaceSet	IndexedFaceSet	IndexedFaceSet IndexedFaceSet		
IndexedLineSet	IndexedLineSet	IndexedLineSet		IndexedLineSet	IndexedLineSet	IndexedLineSet IndexedLineSet		
IndexedQuadSet	IndexedQuadSet	IndexedQuadSet		IndexedQuadSet	IndexedQuadSet	(Prototype available) IndexedQuadSet		
IndexedTriangleFanSet	IndexedTriangleFanSet	IndexedTriangleFanSet		IndexedTriangleFanSet	IndexedTriangleFanSet	(Prototype available) IndexedTriangleFanSet		
IndexedTriangleSet	IndexedTriangleSet	IndexedTriangleSet		IndexedTriangleSet	IndexedTriangleSet	(Prototype available) IndexedTriangleSet		
IndexedTriangleStripSet	IndexedTriangleStripSet	IndexedTriangleStripSet		IndexedTriangleStripSet	IndexedTriangleStripSet	(Prototype available) IndexedTriangleStripSet		
Inline	Inline	Inline		Inline	Inline	Inline Inline		
IntegerSequencer	IntegerSequencer	IntegerSequencer		IntegerSequencer	IntegerSequencer	(Prototype available) IntegerSequencer		
IntegerTrigger	IntegerTrigger	IntegerTrigger		IntegerTrigger	IntegerTrigger	(Prototype available) IntegerTrigger		
IS	IS	IS		IS	IS			
IsoSurfaceVolumeData	IsoSurfaceVolumeData	IsoSurfaceVolumeData		IsoSurfaceVolumeData	IsoSurfaceVolumeData			
KeySensor	KeySensor	KeySensor		KeySensor				
Layer	Layer	Layer		Layer				
LayerSet	LayerSet	LayerSet		LayerSet				
Layout	Layout	Layout		Layout				
LayoutGroup	LayoutGroup	LayoutGroup		LayoutGroup				
LayoutLayer	LayoutLayer	LayoutLayer		LayoutLayer				
LinePickSensor	LinePickSensor	LinePickSensor		LinePickSensor				
LineProperties	LineProperties	LineProperties		LineProperties	LineProperties			
LineSet	LineSet	LineSet		LineSet	LineSet	(Prototype available) LineSet		
ListenerPointSource	ListenerPointSource	ListenerPointSource		ListenerPointSource				
LoadSensor	LoadSensor	LoadSensor		LoadSensor	LoadSensor	(Prototype available) LoadSensor		
LocalFog	LocalFog	LocalFog		LocalFog	LocalFog			
	LOD	_						

X3D Model Validation	X3D version 4.0	update	d 16 January 2023		ons/X3dNodeInventoryComparison.xlsx		
	Node and Statement Support				ons/X3dNodeInventoryComparison.pdf		
X3D Abstract Specification Node Index	X3D XML Schema validation	X3D XML DOCTYPE DTD validation	X3D JSON Schema	X3D Tooltips	X3D Schematron validation	VRML97 Specification	X3dToVrml97.xslt
	(with basis for X3DUOM construction)					. ,	rted or forward compatible, .wrl VRML97)
Material	Material	Material		Material	Material	Material	Material
Matrix3VertexAttribute	Matrix3VertexAttribute	Matrix3VertexAttribute		Matrix3VertexAttribute	Matrix3VertexAttribute		
Matrix4VertexAttribute	Matrix4VertexAttribute	Matrix4VertexAttribute		Matrix4VertexAttribute	Matrix4VertexAttribute		
meta	meta	meta		meta	meta		
MetadataBoolean	MetadataBoolean	MetadataBoolean		MetadataBoolean	MetadataBoolean	, ,,	e) MetadataBoolean
MetadataDouble	MetadataDouble	MetadataDouble		MetadataDouble	MetadataDouble		e) MetadataDouble
MetadataFloat	MetadataFloat	MetadataFloat		MetadataFloat	MetadataFloat	(Prototype availab	
MetadataInteger	MetadataInteger	MetadataInteger		MetadataInteger	MetadataInteger		e) MetadataInteger
MetadataSet	MetadataSet	MetadataSet		MetadataSet	MetadataSet	(Prototype availab	
MetadataString	MetadataString	MetadataString		MetadataString	MetadataString	(Prototype availab	e) MetadataString
MicrophoneSource	MicrophoneSource	MicrophoneSource		MicrophoneSource			
MotorJoint	MotorJoint	MotorJoint		MotorJoint	MotorJoint		
MovieTexture	MovieTexture	MovieTexture		MovieTexture	MovieTexture	MovieTextu	re
MultiTexture	MultiTexture	MultiTexture		MultiTexture	MultiTexture		
MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate		MultiTextureCoordinate	MultiTextureCoordinate		
MultiTextureTransform	MultiTextureTransform	MultiTextureTransform		MultiTextureTransform	MultiTextureTransform		
NavigationInfo	NavigationInfo	NavigationInfo		NavigationInfo	NavigationInfo	NavigationInfo	NavigationInfo
Normal	Normal	Normal		Normal	Normal	Normal	Normal
NormalInterpolator	NormalInterpolator	NormalInterpolator		NormalInterpolator	NormalInterpolator	NormalInterpolator	NormalInterpolator
NurbsCurve	NurbsCurve	NurbsCurve		NurbsCurve	NurbsCurve	(Java Prototype availab	e) NurbsCurve
NurbsCurve2D	NurbsCurve2D	NurbsCurve2D		NurbsCurve2D		(Java Prototype availab	e) NurbsCurve2D
NurbsOrientationInterpolator	NurbsOrientationInterpolator	NurbsOrientationInterpolator		NurbsOrientationInterpolator			e) NurbsOrientationInterpolator
NurbsPatchSurface	NurbsPatchSurface	NurbsPatchSurface		NurbsPatchSurface	NurbsPatchSurface	(Java Prototype availab	
NurbsPositionInterpolator	NurbsPositionInterpolator	NurbsPositionInterpolator		NurbsPositionInterpolator			e) NurbsPositionInterpolator
NurbsSet	NurbsSet	NurbsSet		NurbsSet		(Java Prototype availab	
NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator		NurbsSurfaceInterpolator			e) NurbsSurfaceInterpolator
NurbsSweptSurface	NurbsSweptSurface	NurbsSweptSurface		NurbsSweptSurface		(Java Prototype availab	
NurbsSwungSurface	NurbsSwungSurface	NurbsSwungSurface		NurbsSwungSurface		(Java Prototype availab	
NurbsTextureCoordinate	NurbsTextureCoordinate	=		9			
NurbsTrimmedSurface		NurbsTextureCoordinate		NurbsTextureCoordinate	No selector and addressed		e) NurbsTextureCoordinate
	NurbsTrimmedSurface	NurbsTrimmedSurface		NurbsTrimmedSurface	NurbsTrimmedSurface	(Java Prototype availab	e) NurbsTrimmedSurface
OpacityMapVolumeStyle	OpacityMapVolumeStyle	OpacityMapVolumeStyle		OpacityMapVolumeStyle	OpacityMapVolumeStyle		
OrientationChaser	OrientationChaser	OrientationChaser		OrientationChaser	0.1-1-11-2		
OrientationDamper	OrientationDamper	OrientationDamper		OrientationDamper	OrientationDamper		
OrientationInterpolator	OrientationInterpolator	OrientationInterpolator		OrientationInterpolator	Out of the	OrientationInterpolator	OrientationInterpolator
OrthoViewpoint	OrthoViewpoint	OrthoViewpoint		OrthoViewpoint	OrthoViewpoint		
OscillatorSource	OscillatorSource	OscillatorSource		OscillatorSource			
PackagedShader	PackagedShader	PackagedShader		PackagedShader			
ParticleSystem	ParticleSystem	ParticleSystem		ParticleSystem	ParticleSystem		
PeriodicWave	PeriodicWave	PeriodicWave		PeriodicWave			
PeriodicWave	PeriodicWave	PeriodicWave		PeriodicWave			
PickableGroup	PickableGroup	PickableGroup		PickableGroup			
PixelTexture	PixelTexture	PixelTexture		PixelTexture	PixelTexture	PixelTexture	PixelTexture
PixelTexture3D	PixelTexture3D	PixelTexture3D		PixelTexture3D			
PlaneSensor	PlaneSensor	PlaneSensor		PlaneSensor	PlaneSensor	PlaneSensor	PlaneSensor
PointEmitter	PointEmitter	PointEmitter		PointEmitter			
PointLight	PointLight	PointLight		PointLight	PointLight	PointLight	PointLight
PointPickSensor	PointPickSensor	PointPickSensor		PointPickSensor			
PointProperties	PointProperties	PointProperties		PointProperties	PointProperties		
PointSet	PointSet	PointSet		PointSet	PointSet	PointSet	PointSet
Polyline2D	Polyline2D	Polyline2D		Polyline2D		(Prototype availab	e) Polyline2D
PolylineEmitter	PolylineEmitter	PolylineEmitter		PolylineEmitter			
Polypoint2D	Polypoint2D	Polypoint2D		Polypoint2D		(Prototype availab	e) Polypoint2D
PositionChaser	PositionChaser	PositionChaser		PositionChaser			
PositionChaser2D	PositionChaser2D	PositionChaser2D		PositionChaser2D			
PositionDamper	PositionDamper	PositionDamper		PositionDamper			
PositionDamper2D	PositionDamper2D	PositionDamper2D		PositionDamper2D			
PositionInterpolator	PositionInterpolator	PositionInterpolator		PositionInterpolator	PositionInterpolator	PositionInterpolator	PositionInterpolator
PositionInterpolator2D	PositionInterpolator2D	PositionInterpolator2D		PositionInterpolator2D	PositionInterpolator2D	(Prototype availab	e) PositionInterpolator2D
PrimitivePickSensor	PrimitivePicker	PrimitivePickSensor		PrimitivePickSensor	•		
ProgramShader	ProgramShader	ProgramShader		ProgramShader	ProgramShader		
ProjectionVolumeStyle	ProjectionVolumeStyle	ProjectionVolumeStyle		ProjectionVolumeStyle	ProjectionVolumeStyle		
- *	ProtoBody	ProtoBody		ProtoBody	ProtoBody		
ProtoDeclare	ProtoDeclare	ProtoDeclare		ProtoDeclare	ProtoDeclare		
ProtoInstance	ProtoInstance	ProtoInstance		ProtoInstance	ProtoInstance		
	Protoinstance	ProtoInstance		Protoinstance	Protoinstance		
ProximitySensor	ProximitySensor	ProximitySensor		ProximitySensor	ProximitySensor	ProximitySensor	ProximitySensor
QuadSet	QuadSet	QuadSet		QuadSet	QuadSet	(Prototype availab	
Quaudet	Quauser	Quauset		Quauser	Quauset	(Frototype availab	c) Quadaet

X3D Model Validation	X3D version 4.0	update	d 16 January 2023	https://www.web3d.org/specifications/			
	Node and Statement Support			https://www.web3d.org/specifications/			
X3D Abstract Specification Node Index	X3D XML Schema validation	X3D XML DOCTYPE DTD validation	X3D JSON Schema	X3D Tooltips	X3D Schematron validation	VRML97 Specification	X3dToVrml97.xslt
	(with basis for X3DUOM construction)						rted or forward compatible, .wrl VRML97)
ReceiverPdu	ReceiverPdu	ReceiverPdu		ReceiverPdu	ReceiverPdu	(Java Prototype availabl	
Rectangle2D	Rectangle2D	Rectangle2D		Rectangle2D		(Prototype available	le) Rectangle2D
RigidBody	RigidBody	RigidBody		RigidBody	RigidBody		
RigidBodyCollection	RigidBodyCollection	RigidBodyCollection		RigidBodyCollection	RigidBodyCollection		
ROUTE	ROUTE	ROUTE		ROUTE	ROUTE		
ScalarChaser	ScalarChaser	ScalarChaser		ScalarChaser			
ScalarDamper	ScalarDamper	ScalarDamper		ScalarDamper			
ScalarInterpolator	ScalarInterpolator	ScalarInterpolator		ScalarInterpolator	ScalarInterpolator	ScalarInterpolator	ScalarInterpolator
-	Scene	Scene		Scene	Scene		
ScreenFontStyle	ScreenFontStyle	ScreenFontStyle		ScreenFontStyle			
ScreenGroup	ScreenGroup	ScreenGroup		ScreenGroup			
Script	Script	Script		Script	Script	Script	Script
SegmentedVolumeData	SegmentedVolumeData	SegmentedVolumeData		SegmentedVolumeData	SegmentedVolumeData		
ShadedVolumeStyle	ShadedVolumeStyle	ShadedVolumeStyle		ShadedVolumeStyle	ShadedVolumeStyle		
ShaderPart	ShaderPart	ShaderPart		ShaderPart	ShaderPart		
ShaderProgram	ShaderProgram	ShaderProgram		ShaderProgram	ShaderProgram		
Shape	Shape	Shape		Shape	Shape	Shape	Shape
SignalPdu	SignalPdu	SignalPdu		SignalPdu	SignalPdu	(Java Prototype available	le) SignalPdu
SilhouetteEnhancementVolumeStyle	SilhouetteEnhancementVolumeStyle	SilhouetteEnhancementVolumeStyle		SilhouetteEnhancementVolumeStyle	SilhouetteEnhancementVolumeStyle		
SingleAxisHingeJoint	SingleAxisHingeJoint	SingleAxisHingeJoint		SingleAxisHingeJoint	SingleAxisHingeJoint		
SliderJoint	SliderJoint	SliderJoint		SliderJoint	SliderJoint		
Sound	Sound	Sound		Sound	Sound	Sound	Sound
SpatialSound	SpatialSound	SpatialSound		SpatialSound			
Sphere	Sphere	Sphere		Sphere	Sphere	Sphere	Sphere
SphereSensor	SphereSensor	SphereSensor		SphereSensor	SphereSensor	SphereSensor	SphereSensor
SplinePositionInterpolator	SplinePositionInterpolator	SplinePositionInterpolator		SplinePositionInterpolator			
SplinePositionInterpolator2D	SplinePositionInterpolator2D	SplinePositionInterpolator2D		SplinePositionInterpolator2D			
SplineScalarInterpolator	SplineScalarInterpolator	SplineScalarInterpolator		SplineScalarInterpolator			
SpotLight	SpotLight	SpotLight		SpotLight	SpotLight	SpotLight	SpotLight
SquadOrientationInterpolator	SquadOrientationInterpolator	SquadOrientationInterpolator		SquadOrientationInterpolator			
StaticGroup	StaticGroup	StaticGroup		StaticGroup	StaticGroup		
StreamAudioDestination	StreamAudioDestination	StreamAudioDestination		StreamAudioDestination			
StreamAudioSource	StreamAudioSource	StreamAudioSource		StreamAudioSource			
StringSensor	StringSensor	StringSensor		StringSensor			
SurfaceEmitter	SurfaceEmitter	SurfaceEmitter		SurfaceEmitter			
Switch	Switch	Switch		Switch	Switch	Switch	Switch
TexCoordChaser2D	TexCoordChaser2D	TexCoordChaser2D		TexCoordChaser2D	TexCoordChaser2D		
TexCoordDamper2D	TexCoordDamper2D	TexCoordDamper2D		TexCoordDamper2D			
Text	Text	Text		Text	Text	Text	Text
TextureBackground	TextureBackground	TextureBackground		TextureBackground	TextureBackground		
TextureCoordinate	TextureCoordinate	TextureCoordinate		TextureCoordinate	TextureCoordinate	TextureCoordinate	
TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D		TextureCoordinate3D	TextureCoordinate3D		
TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D		TextureCoordinate4D	TextureCoordinate4D		
TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator		TextureCoordinateGenerator	TextureCoordinateGenerator		
TextureProjector	TextureProjector	TextureProjector		TextureProjector	TextureProjector		
TextureProjectorParallel	TextureProjectorParallel	TextureProjectorParallel		TextureProjectorParallel	TextureProjectorParallel		
TextureProperties	TextureProperties	TextureProperties		TextureProperties	TextureProperties		
TextureTransform	TextureTransform	TextureTransform		TextureTransform	TextureTransform	TextureTransform	
TextureTransform3D	TextureTransform3D	TextureTransform3D		TextureTransform3D	TextureTransform3D		
TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D		TextureTransformMatrix3D	TextureTransformMatrix3D		
TimeSensor	TimeSensor	TimeSensor		TimeSensor		TimeSensor	TimeSensor
TimeTrigger	TimeTrigger	TimeTrigger		TimeTrigger	TimeTrigger	(Prototype availabl	le) TimeTrigger
ToneMappedVolumeStyle	ToneMappedVolumeStyle	ToneMappedVolumeStyle		ToneMappedVolumeStyle	ToneMappedVolumeStyle		
TouchSensor	TouchSensor	TouchSensor		TouchSensor	TouchSensor	TouchSensor	TouchSensor
Transform	Transform	Transform		Transform	Transform	Transform	Transform
TransformSensor	TransformSensor	TransformSensor		TransformSensor	TransformSensor		
TransmitterPdu	TransmitterPdu	TransmitterPdu		TransmitterPdu	TransmitterPdu	(Java Prototype availabl	le) TransmitterPdu
TriangleFanSet	TriangleFanSet	TriangleFanSet		TriangleFanSet	TriangleFanSet	(Prototype available	le) TriangleFanSet
TriangleSet	TriangleSet	TriangleSet		TriangleSet	TriangleSet	(Prototype available	
TriangleSet2D	TriangleSet2D	TriangleSet2D		TriangleSet2D		(Prototype available	
TriangleStripSet	TriangleStripSet	TriangleStripSet		TriangleStripSet	TriangleStripSet		le) TriangleStripSet
TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial		TwoSidedMaterial	TwoSidedMaterial		-
UNIT	unit	unit		unit	unit		
UniversalJoint	UniversalJoint	UniversalJoint		UniversalJoint	UniversalJoint		
UnlitMaterial	UnlitMaterial	UnlitMaterial		UnlitMaterial			
Viewpoint	Viewpoint	Viewpoint		Viewpoint	Viewpoint	Viewpoint	Viewpoint
ViewpointGroup	ViewpointGroup	ViewpointGroup		ViewpointGroup	ViewpointGroup		

X3D Model Validation	X3D version 4.0	update	ed 16 January 2023	https://www.web3d.org/specification	s/X3dNodeInventoryComparison.xlsx		
	Node and Statement Support			https://www.web3d.org/specification	s/X3dNodeInventoryComparison.pdf		
X3D Abstract Specification Node Index	X3D XML Schema validation	X3D XML DOCTYPE DTD validation	X3D JSON Schema	X3D Tooltips	X3D Schematron validation	VRML97 Specification	X3dToVrml97.xslt
	(with basis for X3DUOM construction)					(Grey background: unsupp	oorted or forward compatible, .wrl VRML97
Viewport	Viewport	Viewport		Viewport			
VisibilitySensor	VisibilitySensor	VisibilitySensor		VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor
VolumeData	VolumeData	VolumeData		VolumeData	VolumeData		
VolumeEmitter	VolumeEmitter	VolumeEmitter		VolumeEmitter			
VolumePickSensor	VolumePickSensor	VolumePickSensor		VolumePickSensor			
WindPhysicsModel	WindPhysicsModel	WindPhysicsModel		WindPhysicsModel			
WorldInfo	WorldInfo	Worldinfo		WorldInfo	WorldInfo	WorldInfo	WorldInfo
X3D	X3D	X3D		X3D	X3D	#VRML	#X3D, #VRML
Supported nodes and statements:	100%	100%		100%	73%	30%	44%
276	276	276		276	202	56	122
Unimplemented nodes and statements:							
0	0	0	276	0	74	-1	98
References						55 nodes in VRML97 Speci	<u>fication</u>
X3D v4.0 Architecture Draft Specification	X3D Schema Validation	X3D DOCTYPE (DTD) Validation		X3D Resources: Tooltips	X3D Schematron validation	83 nodes in VRML97 Amer	ndment 1
					VRML prototypes to	otal: 55	
HTML5 support goals					VRML+Java prototypes to	otal: 15	
*							

\* required for X3D Immersive Profile

\* suggested for HTML5 support

\* priority nodes and statements missing:

Component   Septiment   Version	X3D v4.0 Node and Statement Profiles, Compo	nents and	Levels	updated	updated 16 January 2023		
CADAse		First					
CAD Fiser         1.1         Full         CAD Generity         2.0         WSC Web Audio API           CAD Part         1.1         rull         CAD Sementry         2.1         Supports (TE 2.0)           CAD Part         1.1         rull         CAD Sementry         1.1         CAD Common (Texas)         1.1         CAD Common (Texas)         1.1         CAD Common (Texas)         1.2         Supports MIDI 2.0         Common (Texas)         1.2         Supports MIDI 2.0         Common (Texas)         1.2         Common (Texas)         1.2         Supports MIDI 2.0         Common (Texas)         1.2         Supports MIDI 2.0         Common (Texas)         1.2         Supports MIDI 2.0         Common (Texas)         1.2         Common (Texas)         1.2         Supports MIDI 2.0         Common (Texas)         1.2         MSC Web Audio API         Texas)         1.2         MSC Web Audio API         Texas)         Texas)         Texas)         Texas)         Texas) <th>X3D Abstract Specification Nodes, Statements</th> <th>Version</th> <th>Minimum Profile</th> <th>Component</th> <th>for Full Support</th> <th>Notes</th>	X3D Abstract Specification Nodes, Statements	Version	Minimum Profile	Component	for Full Support	Notes	
CADlayer	CADAssembly	<u>3.1</u>	<u>Full</u>	CADGeometry	2	W3C Web Audio API	
CADlayer	CADFace	<u>3.1</u>	<u>Full</u>	CADGeometry	2	W3C Web Audio API	
CADP-NT   Supports   TET   CADES-CONSTRUCT   C	CADLayer		Full	CADGeometry	2		
Indexendiquisates	-					Supports gITF 2.0	
Quadrel         1,1         Eull         Application         1         Supports MIDI 2.0           component         1,0         Immenies         Core         1         WSC Web Audio API           EttemProtockare         1,0         Core         1         WSC Web Audio API           field discover         1,0         Core         1         WSC Web Audio API           field year         1,0         Core         1         WSC Web Audio API           field year         1,0         Core         1         WSC Web Audio API           in metal         1,0         Core         2         Core         1         WSC Web Audio API           in MetadataBoolean         3,0         Core         Core         1         VSC Web Audio API           MetadataBoolean         1,0         Core         Core         1         VSC Web Audio API           MetadataBoolean         1,0         Core         Core         1         VSC Web Audio API           MetadataBoolean         1,0         Core         Core         1         VSC Web Audio API           MetadataBoolean         1,0         Core         Core         1         VSC Web Audio API           MetadataBoolean         1,0         Core	IndexedQuadSet			CADGeometry	1		
component         3.0         Core         Core         Cere         Core         1         Sopports MIDT JO         Connect           Excentrotoclacian         1.0         Core         Core         1         Workershorder	QuadSet	3.1		CADGeometry	1		
connect         3.0         Immensive Core         1         W3C W8b Audio API           EtterhProbledue         3.0         Core         1         alpha value optionally supported until level 4           field field will         3.0         Core         Core         1           head         3.0         Core         Core         1           NES         3.0         Immeriance         Core         1           Metadata Boolean         3.0         Core         Core         1           Metadata Solution Registration         3.0         Core         Core         1           Metadata Solution Registration         3.0         Core         Core         1         W3C Web Audio API           Metadata Solution Registration         3.0         Core         Core         1         W3C Web Audio API           Protobledare         3.0         Core         Core         1         W3C Web Audio API           Protobledare         3.0         Core	component		Core	Core	1	Supports MIDI 2.0	
field         3.0         Core         Core         1         Federal Field Mule         3.0         Core         Core         1         W3C Web Audio API           Is         3.0         Core         Core         1         W3C Web Audio API           Is         3.0         Core         1         Core         1         Core           Medadata Double         3.0         Core         Core         1         Core         1         Core           Medadata Double         3.0         Core         Core         1         <	connect		<u>Immersive</u>	Core	1	W3C Web Audio API	
field         3.0         Core         Core         1         Federal Field Mule         3.0         Core         Core         1         W3C Web Audio API           Is         3.0         Core         Core         1         W3C Web Audio API           Is         3.0         Core         1         Core         1         Core           Medadata Double         3.0         Core         Core         1         Core         1         Core           Medadata Double         3.0         Core         Core         1         <	ExternProtoDeclare	3.0	Core	<u>Core</u>	1	alpha value optionally supported until level 4	
fieldValue         3.0         Core         Gene         1         VAC Web Audio API           Ibad         3.0         Immersive         Core         1         VAC Web Audio API           Ib         3.0         Immersive         Core         1         VAC Web Audio API           MesdataBoolon         3.1         Core         Core         1         VAC Web Audio API           MesdataFlort         3.0         Core         Core         1         VAC Web Audio API           MesdataSet         3.0         Core         Core         1         VAC Web Audio API           MesdataString         3.0         Core         Core         1         VAC Web Audio API           Protosobody         3.0         Core         Core         1         VAC Web Audio API           ProtostrierAre         3.0         Core         Core         1         VAC Web Audio API           ProtostrierAre         3.0         Core         Core         1         VAC Web Audio API           Worldrift         3.0         Core         Core         1         VAC Web Audio API           X30         Core         Core         1         VAC Web Audio API           X30         Core         Core	field		Core	<u>Core</u>	1		
head         3.0         Core         Gore         1         Vac Web Audio API           IS         3.0         Immense         Core         1           meta         3.0         Core         Core         1           Metadatabolole         3.0         Core         Core         1           Metadatabolole         3.0         Core         Gore         1           Metadatabolole         3.0         Core         Gore         1           Metadatabolole         3.0         Core         Gore         1           MetadataString         3.0         Core         Gore         1           MetadataString         3.0         Core         Gore         Gore         MetadataString           ProtoBeder         1.0         Core         Gore         Gore         Gore         Gore           ProtoBeder         1.0         Core         Gore         Gore         Gore         Gore           Sementer         2.0         Core         Gore         1         Was Web Audio API           Worldinfo         2.1         Gore         Gore         1         Was Web Audio API           Worldinfo         2.2         Gore         Gore	fieldValue		Core	Core	1		
meta         30         Core         Core         1           MetadataBoolean         33         Gone         Core         1           MetadataFootal         30         Core         Core         1           MetadataFoat         30         Core         Core         1           MetadataSer         30         Core         Core         1           MetadataString         30         Core         Core         1           Protobody         30         Core         Core         1         W3C Web Audio API           Protobedra         30         Core         Core         1         W3C Web Audio API           Protoinstrace         30         Core         Core         1         W3C Web Audio API           ROUTE         30         Core         Core         1         W3C Web Audio API           Worldinfo         30         Core         Core         1         W3C Web Audio API           X3D         Core         Core         1         W3C Web Audio API           X3D         Core         Core         1         W3C Web Audio API           X3D         Core         Core         1         W3C Web Audio API <t< td=""><td>head</td><td></td><td>Core</td><td><u>Core</u></td><td>1</td><td>W3C Web Audio API</td></t<>	head		Core	<u>Core</u>	1	W3C Web Audio API	
MetadataBoolen         3.3         Core         Core         1           MetadataFloat         3.0         Core         Core         1           MetadataFloat         3.0         Core         Core         1           MetadataSer         3.0         Core         Core         1           MetadataSer         3.0         Core         Core         1           MetadataSer         3.0         Core         Core         1           Protolor         2.0         Core         Core         1           Protolor         3.0         Core         Core         1           Protolinistance         3.0         Core         Core         1           ROUTE         3.0         Core         Core         1           Sene         3.0         Core         Core         1         W3C Web Audio API           Worldinfo         3.0         Core         Core         1         W3C Web Audio API           X3D         3.0         Core         Core         1         W3C Web Audio API           Worldinfo         3.0         Core         Core         1         W3C Web Audio API           X3D         3.0         Core	IS	<u>3.0</u>	<u>Immersive</u>	<u>Core</u>	1		
Metadata Double         3,0         Core         Core         1           Metadata Toat         3,0         Core         Core         1           Metadata Set         3,0         Core         Core         1           Metadata Set         3,0         Core         Core         1           Metadata Set         3,0         Core         Core         1           Protobelor         3,0         Core         Core         1           Protobedra         3,0         Core         Core         1           Protoberrace         3,0         Core         Core         1           Protobristance         3,0         Core         Core         1           ROUTE         3,0         Core         Core         1           Sene         3,0         Core         Core         1         W3C Web Audio API           Volidinfo         3,0         Core         Core         1         W3C Web Audio API           X3D         Core         Core         Core         1         W3C Web Audio API           X3D         Core         Core         Core         1         W3C Web Audio API           X3D         Core         Core	meta		Core	<u>Core</u>	1		
Metadata Double         3,0         Core         Core         1           Metadata Toat         3,0         Core         Core         1           Metadata Set         3,0         Core         Core         1           Metadata Set         3,0         Core         Core         1           Metadata Set         3,0         Core         Core         1           Protobelor         3,0         Core         Core         1           Protobedra         3,0         Core         Core         1           Protoberrace         3,0         Core         Core         1           Protobristance         3,0         Core         Core         1           ROUTE         3,0         Core         Core         1           Sene         3,0         Core         Core         1         W3C Web Audio API           Volidinfo         3,0         Core         Core         1         W3C Web Audio API           X3D         Core         Core         Core         1         W3C Web Audio API           X3D         Core         Core         Core         1         W3C Web Audio API           X3D         Core         Core	MetadataBoolean		Core	Core	1		
Metadatianteger         3.0         Core         Core         1           MetadataString         3.0         Core         Core         1           MetadataString         3.0         Core         Core         1           ProtoBoeldy         3.0         Core         Core         1           ProtoInstance         3.0         Core         Core         1           ProtoInstance         3.0         Core         Core         1           ROUTE         3.0         Core         Core         1           ROUTE         3.0         Core         Core         1           Worldinfo         3.0         Core         Core         1           Worldinfo         3.0         Core         Core         1         W3C Web Audio API           ComposedCubeMapTexture         3.1         Full         CubeMapTexturing         3         V3C Web Audio API           DISEntityManager         3.2         Full         CubeMapTexturing         3         V3C Web Audio API           DISEntityManager         3.2         Full         Dis         2         V3C Web Audio API           StephurTransform         3.0         Full         CubeMapTexturing         3	MetadataDouble		Core	Core	1		
MetadataSet         3,0         Core         Core         1           MetadataString         3,0         Core         Core         1         W3C Web Audio API           ProtoBodry         3,0         Core         Core         1         W3C Web Audio API           ProtoInstance         3,0         Core         Core         1         ProtoInstance           ROUTE         3,0         Core         Core         1         Pactive Audio API           Scene         3,0         Core         Core         1         W3C Web Audio API           Worldinfo         3,0         Core         Core         1         W3C Web Audio API           ComposedCubeMapTexture         3,1         Full         QubeMapTexturing         3         W3C Web Audio API           ComposedCubeMapTexture         3,1         Full         QubeMapTexturing         3         W3C Web Audio API           DISEntifyManager         3,2         Full         QubeMapTexturing         3         V3C Web Audio API           DISEntifyManager         3,2         Full         QubeMapTexturing         2         V3C Web Audio API           DISEntifyManager         3,2         Full         QubeMapTexturing         2         V3C Web Audio API	MetadataFloat	3.0	Core	<u>Core</u>	1		
MetadataSet         3,0         Core         Core         1           MetadataString         3,0         Core         Core         1         W3C Web Audio API           ProtoBodry         3,0         Core         Core         1         W3C Web Audio API           ProtoInstance         3,0         Core         Core         1         ProtoInstance           ROUTE         3,0         Core         Core         1         Pactive Audio API           Scene         3,0         Core         Core         1         W3C Web Audio API           Worldinfo         3,0         Core         Core         1         W3C Web Audio API           ComposedCubeMapTexture         3,1         Full         QubeMapTexturing         3         W3C Web Audio API           ComposedCubeMapTexture         3,1         Full         QubeMapTexturing         3         W3C Web Audio API           DISEntifyManager         3,2         Full         QubeMapTexturing         3         V3C Web Audio API           DISEntifyManager         3,2         Full         QubeMapTexturing         2         V3C Web Audio API           DISEntifyManager         3,2         Full         QubeMapTexturing         2         V3C Web Audio API	MetadataInteger	<u>3.0</u>	<u>Core</u>	<u>Core</u>	1		
ProtoBody         3,0         Core         Core         1         W3C Web Audio API           ProtoDiclare         3,0         Core         Core         1           ProtoInstance         3,0         Core         Core         1           ProtoInstance         3,0         Core         Core         1           SCOR         3,0         Core         Core         1           SCENE         3,0         Core         Core         1         W3C Web Audio API           Worldinfo         3,0         Core         Core         1         W3C Web Audio API           X3D         ScenetaceGubeMapTexture         3.1         Full         CubeMapTexturing         1         W3C Web Audio API           DISEntityManager         3.2         Full         DIS         2         V3C Web Audio API           Sepolarisate (Warage Pexture         3.1         Full	MetadataSet		Core	<u>Core</u>	1		
ProtoBody         3,0         Core         Core         1         W3C Web Audio API           ProtoDiclare         3,0         Core         Core         1           ProtoInstance         3,0         Core         Core         1           ProtoInstance         3,0         Core         Core         1           SCOR         3,0         Core         Core         1           SCENE         3,0         Core         Core         1         W3C Web Audio API           Worldinfo         3,0         Core         Core         1         W3C Web Audio API           X3D         ScenetaceGubeMapTexture         3.1         Full         CubeMapTexturing         1         W3C Web Audio API           DISEntityManager         3.2         Full         DIS         2         V3C Web Audio API           Sepolarisate (Warage Pexture         3.1         Full	MetadataString	3.0	Core	<u>Core</u>	1		
Protointsance         3.0         Core         Core         1           Protointerface         3.0         Core         Core         1           ROUTE         3.0         Core         Core         1           Scene         3.0         Core         1         W3C Web Audio API           Worldinfo         3.0         Core         Core         1         W3C Web Audio API           X3D         3.0         Core         Core         1         W3C Web Audio API           X3D         3.0         Core         Core         1         W3C Web Audio API           X3D         3.0         Core         Core         1         W3C Web Audio API           X3D         3.0         Core         Core         1         W3C Web Audio API           X3D         3.0         Core         Core         1         W3C Web Audio API           X3D         3.0         Full         CubeMapTexturing         3         ***           Beactered CubeMapTexture         3.1         Full         CubeMapTexturing         2         **           DISEntityManager         3.2         Full         DIS         1         **         **           Sepduir ransor	ProtoBody	3.0	Core	<u>Core</u>	1	W3C Web Audio API	
ProtoInterface         3,0         Core         1           ROUTE         3,0         Core         1           Scene         3,0         Core         1           Scene         3,0         Core         1           unit         3,3         Core         Core         1         W3C Web Audio API           WorldInfo         3,0         Core         Core         1         W3C Web Audio API           X3D         3,0         Core         Core         1         W3C Web Audio API           ComposedCubeMapTexture         3,1         Full         CubeMapTexturing         1         W3C Web Audio API           GeneratedCubeMapTexture         3,1         Full         CubeMapTexturing         1         W3C Web Audio API           ImageCubeMapTexture         3,1         Full         CubeMapTexturing         2         Cure         Cure </td <td>ProtoDeclare</td> <td>3.0</td> <td>Core</td> <td><u>Core</u></td> <td>1</td> <td></td>	ProtoDeclare	3.0	Core	<u>Core</u>	1		
ROUTE         3.0         Core         Core         1           Scene         3.0         Core         Core         1         W3C Web Audio API           WorldInfo         3.0         Core         Core         1         W3C Web Audio API           X3D         Ozore         Core         1         W3C Web Audio API           X3D         Discover         Discover         1         W3C Web Audio API           X3D         Discover         Discover         1         W3C Web Audio API           X3D         Discover         Discover         2         V3C Web Audio API           X3D         Discover         Discover         2         V3C Web Audio API           X3D         Discover         Discover         Discover         Discover         Discover         Discover         Discover         Discover         Discover         Discover <td< td=""><td>ProtoInstance</td><td><u>3.0</u></td><td><u>Core</u></td><td><u>Core</u></td><td>1</td><td></td></td<>	ProtoInstance	<u>3.0</u>	<u>Core</u>	<u>Core</u>	1		
Scene         3.0         Core         Core         1         W3C Web Audio API           unit         3.3         Core         Core         1         W3C Web Audio API           Worldinfo         3.0         Core         Core         1         W3C Web Audio API           X3D         3.1         Full         CubeMapTexturing         1         W3C Web Audio API           GeneratedCubeMapTexture         3.1         Full         CubeMapTexturing         3         Temperaturing         4         Temperaturing         4         Temperaturing         4         Temperaturing         4         Temperaturing <t< td=""><td>ProtoInterface</td><td>3.0</td><td><u>Core</u></td><td><u>Core</u></td><td>1</td><td></td></t<>	ProtoInterface	3.0	<u>Core</u>	<u>Core</u>	1		
unit         3.3         Core         Core         1         W3C Web Audio API           WorldInfo         3.0         Core         Core         1         W3C Web Audio API           X3D         3.0         Core         Core         1         W3C Web Audio API           ComposedCubeMapTexture         3.1         Full         CubeMapTexturing         3         V3C Web Audio API           GeneratedCubeMapTexture         3.1         Full         CubeMapTexturing         3         V3C Web Audio API           DISEntityManager         3.2         Full         CubeMapTexturing         3         V3C Web Audio API           DISEntityManager         3.1         Full         CubeMapTexturing         3         V3C Web Audio API           DISEntityManager         3.2         Full         CubeMapTexturing         3         V3C Web Audio API           DISEntityManager         3.2         Full         CubeMapTexturing         3         V3C Web Audio API           DISEntityManager         3.2         Full         DIS         V3C Web Audio API           DISEntityManager         3.2         Full         DIS         V3C Web Audio API           ReceiverAudio         3.2         Full         DIS         V3C Web Audio API	ROUTE	3.0	<u>Core</u>	<u>Core</u>	1		
WorldInfo         3.0         Core         Core         1         W3C Web Audio API           X3D         Core         Core         1         W3C Web Audio API           Composed/UseMapTexture         3.1         Full         CubeMapTexturing         3           ImageCubeMapTexture         3.1         Full         CubeMapTexturing         2           DISEntityManager         3.2         Full         DIS         2           USEntityTypeMapping         3.2         Full         DIS         2           EspduTransform         3.0         Full         DIS         1         Contacts_changed requires level 2           SignalPdu         3.0         Full         DIS         1         1         1,5000 colors minimum           ReceiverPdu         3.0         Full         DIS         1         1,5000 colors minimum           SignalPdu         3.0         Interchange         EnvironmentalEffects         2         1         5,000 colors minimum           Background         3.0         Interchange         EnvironmentalEffects         2         4         1         15,000 colors minimum, alpha optional until level 4           LocalFog         5.0         Intercative         EnvironmentalEffects         3	Scene		<u>Core</u>	<u>Core</u>	1		
X3D         Core         Core         1         W3C Web Audio API           ComposeCubeMapTexture         3.1         Full         CubeMapTexturing         1           ImageCubeMapTexture         3.1         Full         CubeMapTexturing         2           DISEntityPManager         3.2         Full         DIS         2           DISEntityPMapaping         3.2         Full         DIS         2           EspduTransform         3.0         Full         DIS         1         contacts_changed requires level 2           SignalPdu         3.0         Full         DIS         1         contacts_changed requires level 2           TransmitterPdu         3.0         Full         DIS         1         15,000 colors minimum           Background         3.0         Interchange         EnvironmentalEffects         1         1           Fog         3.0         Interchange         EnvironmentalEffects         4         15,000 colors minimum, alpha optional until level 4           LocalFog         3.1         Full         EnvironmentalEffects         3         X3D statement           TransformSensor         3.2         Full         EnvironmentalEffects         3         X3D statement           TransformSensor <td>unit</td> <td><u>3.3</u></td> <td><u>Core</u></td> <td><u>Core</u></td> <td>1</td> <td>W3C Web Audio API</td>	unit	<u>3.3</u>	<u>Core</u>	<u>Core</u>	1	W3C Web Audio API	
ComposedCubeMapTexture3.1FullCubeMapTexturing3GeneratedCubeMapTexture3.1FullCubeMapTexturing3ImageCubeMapTexture3.2FullDIS2DISEntityManager3.2FullDIS2DISEntityTypeMapping3.2FullDIS2EspduTransform3.0FullDIS1ReceiverPdu3.0FullDIS1SignalPdu3.0FullDIS1TransmitterPdu3.0FullDIS1Background3.0FullDIS1Fog3.0IntercatingeEnvironmentalEffects1FogCoordinate3.0ImmersiveEnvironmentalEffects2LocalFog3.1FullEnvironmentalEffects415,000 colors minimum, alpha optional until level 4ProximitySensor3.1FullEnvironmentalEffects415,000 colors minimum, alpha optional until level 4TransformSensor3.0InteractiveEnvironmentalEffects33D statementTransformSensor3.0ImmersiveEnvironmentalEffects33D statementTransformSensor3.0ImmersiveEnvironmentalEffects34D statementTransformSensor3.0ImmersiveEnvironmentalEffects34D statementTransformSensor3.0ImmersiveEnvironmentalEffects34D statementTotal Fertilities3.0ImmersiveEnvironmentalEffects <td>WorldInfo</td> <td><u>3.0</u></td> <td><u>Core</u></td> <td><u>Core</u></td> <td>1</td> <td>W3C Web Audio API</td>	WorldInfo	<u>3.0</u>	<u>Core</u>	<u>Core</u>	1	W3C Web Audio API	
GeneratedCubeMapTexture 3.1 Full CubeMapTexturing 3.1 Full CubeMapTexturing 3.2 Full DISEntityNanager 3.2 Full DIS SpatityTypeMapping 3.3 Full DIS SpatityTypeMapping 3.4 Full DIS SpatityTypeMapping 3.5 Full DIS SpatityTypeMapping 3.6 Full DIS SignalPdu 3.0 Full DIS SignalPdu 3.0 Full DIS SignalPdu 3.0 Full DIS SignalPdu 3.0 Full DIS SpatityTypeMapping 3.0 Interchange 4. Interchange 4. Interchange 4. Interchange 5. Interchange 6. Int	X3D		<u>Core</u>	<u>Core</u>	1	W3C Web Audio API	
ImageCubeMapTexture     3.1     Full     CubeMapTexturing     2       DISEntityManager     3.2     Full     DIS     2       DISEntityTypeMapping     3.2     Full     DIS     2       EspduTransform     3.0     Full     DIS     1       ReceiverPdu     3.0     Full     DIS     1     contacts_changed requires level 2       SignalPdu     3.0     Full     DIS     1     5,000 colors minimum       Background     3.0     Interchange     EnvironmentalEffects     1     15,000 colors minimum       Fog     3.0     Immersive     EnvironmentalEffects     2     1       FogCordinate     3.1     Full     EnvironmentalEffects     4     15,000 colors minimum, alpha optional until level 4       LocalFog     3.1     Full     EnvironmentalEffects     4     15,000 colors minimum, alpha optional until level 4       ProximitySensor     3.0     Full     EnvironmentalEffects     3     X3D statement       ProximitySensor     3.0     Interactive     EnvironmentalSensor     3     X3D statement       VisibilitySensor     3.0     Interactive     EnvironmentalSensor     3     Y3D statement       BooleanSequencer     3.0     Interactive     EventUtilities     1	ComposedCubeMapTexture	<u>3.1</u>	<u>Full</u>	CubeMapTexturing	1		
DISEntity/TypeMapping 3.2 Full DIS 2  EspduTransform 3.0 Full DIS 1  ReceiverPdu 3.0 Full DIS 1  SignalPdu 3.0 Full DIS 1  TransmitterPdu 3.0 Full DIS 1  Fog 0 Interchange InvironmentalEffects 1  Fog 0 3.0 Immersive InvironmentalEffects 2  LocalFog 3.1 Full InvironmentalEffects 4  LocalFog 3.1 Full InvironmentalEffects 4  LocalFog 3.1 Full InvironmentalEffects 4  TextureBackground 3.0 Interchange InvironmentalEffects 3  TransformSensor 3.0 Interactive InvironmentalEffects 3  TransformSensor 3.0 Interactive InvironmentalEnsor 3  VisibilitySensor 3.0 Interactive InvironmentalEnsor 2  BooleanSequencer 3.0 Interactive EventUtilities 1  To ordered field is treated as field unless level 2	GeneratedCubeMapTexture	<u>3.1</u>	<u>Full</u>	CubeMapTexturing	3		
DISEntityTypeMapping3.2FullDIS2EspduTransform3.0FullDIS1ReceiverPdu3.0FullDIS1contacts_changed requires level 2SignalPdu3.0FullDIS115,000 colors minimumTransmitterPdu3.0FullDIS115,000 colors minimumBackground3.0InterchangeEnvironmentalEffects1Fog3.0ImmersiveEnvironmentalEffects2LocalFog3.1FullEnvironmentalEffects4LocalFog3.1FullEnvironmentalEffects4TextureBackground3.0FullEnvironmentalEffects3X3D statementProximitySensor3.0InteractiveEnvironmentalSensor1TransformSensor3.0InteractiveEnvironmentalSensor3VisibilitySensor3.0ImmersiveEnvironmentalSensor3BooleanFelter3.0InteractiveEventUtilities1ordered field is treated as field unless level 2BooleanSequencer3.0InteractiveEventUtilities1ordered field is treated as field unless level 2	ImageCubeMapTexture		<u>Full</u>	CubeMapTexturing	2		
EspduTransform3.0FullDIS1ReceiverPdu3.0FullDIS1SignalPdu3.0FullDIS1TransmitterPdu3.0FullDIS1Background3.0InterchangeEnvironmentalEffects1Fog3.0InmersiveEnvironmentalEffects2FogCoordinate3.1FullEnvironmentalEffects4LocalFog3.1FullEnvironmentalEffects4TextureBackground3.0FullEnvironmentalEffects3X3D statementProximitySensor3.0InteractiveEnvironmentalSensor1TransformSensor3.2FullEnvironmentalSensor1VisibilitySensor3.2FullEnvironmentalSensor1VisibilitySensor3.0InmersiveEnvironmentalSensor2BooleanFilter3.0InteractiveEnvironmentalSensor2BooleanFelter3.0InteractiveEnvironmentalSensor2BooleanFelter3.0InteractiveEventUtilities1ordered field is treated as field unless level 2	DISEntityManager	<u>3.2</u>	<u>Full</u>	<u>DIS</u>	2		
ReceiverPdu3.0FullDIS1contacts_changed requires level 2SignalPdu3.0FullDIS1TransmitterPdu3.0FullDIS115,000 colors minimumBackground3.0InterchangeEnvironmentalEffects1Fog3.0ImmersiveEnvironmentalEffects2FogCoordinate3.1FullEnvironmentalEffects4LocalFog3.1FullEnvironmentalEffects4TextureBackground3.0FullEnvironmentalEffects3X3D statementProximitySensor3.0InteractiveEnvironmentalSensor1TransformSensor3.2FullEnvironmentalSensor3X3D statementVisibilitySensor3.0InteractiveEnvironmentalSensor3Y3D statementBooleanFilter3.0InteractiveEnvironmentalSensor3Y3D statementBooleanFilter3.0InteractiveEnvironmentalSensor3Y3D statementBooleanFilter3.0InteractiveEnvironmentalSensor3Y3D statementBooleanFilter3.0InteractiveEnvironmentalSensor3Y3D statementBooleanFilter3.0InteractiveEnvironmentalSensor3Y3D statementBooleanFilter3.0InteractiveEnvironmentalSensor3Y3D statementBooleanFilter3.0InteractiveEnvironmentalSensor3Y3D statementBooleanFilter3.0<	DISEntityTypeMapping		<u>Full</u>		2		
SignalPdu3.0FullDIS1TransmitterPdu3.0FullDIS115,000 colors minimumBackground3.0InterchangeEnvironmentalEffects1Fog3.0ImmersiveEnvironmentalEffects2FogCoordinate3.1FullEnvironmentalEffects4LocalFog3.1FullEnvironmentalEffects4TextureBackground3.0FullEnvironmentalEffects3X3D statementProximitySensor3.0InteractiveEnvironmentalSensor1TransformSensor3.2FullEnvironmentalSensor3VisibilitySensor3.0ImmersiveEnvironmentalSensor3BooleanFilter3.0InteractiveEventUtilities1BooleanSequencer3.0InteractiveEventUtilities1	EspduTransform				1		
TransmitterPdu 3.0 Full DIS 1 5,000 colors minimum  Background 3.0 Interchange EnvironmentalEffects 1 Fog 3.0 Immersive EnvironmentalEffects 2 FogCoordinate 3.1 Full EnvironmentalEffects 4 LocalFog 3.1 Full EnvironmentalEffects 4 LocalFog 3.0 Full EnvironmentalEffects 4 TextureBackground 3.0 Full EnvironmentalEffects 3 TextureBackground 3.0 Interactive EnvironmentalEffects 3 TransformSensor 3.0 Interactive EnvironmentalSensor 1 TransformSensor 3.0 Immersive EnvironmentalSensor 3 VisibilitySensor 3.0 Interactive EnvironmentalSensor 2 BooleanFilter 3.0 Interactive EventUtilities 1 BooleanSequencer 3.0 Interactive EventUtilities 1  To ordered field is treated as field unless level 2  BooleanSequencer 1  TransformSensor 3.0 Interactive EventUtilities 1  TransformSensor 3.0 Interactive EventUtilities 1  TransformSensor 3.0 Interactive EventUtilities 1	ReceiverPdu			DIS	1	contacts_changed requires level 2	
Background3.0InterchangeEnvironmentalEffects1Fog3.0ImmersiveEnvironmentalEffects2FogCoordinate3.1FullEnvironmentalEffects4LocalFog3.1FullEnvironmentalEffects415,000 colors minimum, alpha optional until level 4TextureBackground3.0FullEnvironmentalEffects3X3D statementProximitySensor3.0InteractiveEnvironmentalSensor1TransformSensor3.2FullEnvironmentalSensor3VisibilitySensor3.0ImmersiveEnvironmentalSensor2BooleanFilter3.0InteractiveEventUtilities1ordered field is treated as field unless level 2BooleanSequencer3.0InteractiveEventUtilities1	SignalPdu		<u>Full</u>	· · · · · · · · · · · · · · · · · · ·			
Fog3.0ImmersiveEnvironmentalEffects2FogCoordinate3.1FullEnvironmentalEffects4LocalFog3.1FullEnvironmentalEffects415,000 colors minimum, alpha optional until level 4TextureBackground3.0FullEnvironmentalEffects3X3D statementProximitySensor3.0InteractiveEnvironmentalSensor1TransformSensor3.2FullEnvironmentalSensor3VisibilitySensor3.0InmersiveEnvironmentalSensor2BooleanFilter3.0InteractiveEventUtilities1ordered field is treated as field unless level 2BooleanSequencer3.0InteractiveEventUtilities1	TransmitterPdu		<u>Full</u>	<u>DIS</u>	1	15,000 colors minimum	
FogCoordinate 3.1 Full EnvironmentalEffects 4 LocalFog 3.1 Full EnvironmentalEffects 4 15,000 colors minimum, alpha optional until level 4 TextureBackground 3.0 Full EnvironmentalEffects 3 X3D statement ProximitySensor 3.0 Interactive EnvironmentalSensor 1 TransformSensor 3.2 Full EnvironmentalSensor 3 VisibilitySensor 3.0 Immersive EnvironmentalSensor 2 BooleanFilter 3.0 Interactive EventUtilities 1 ordered field is treated as field unless level 2 BooleanSequencer 3.0 Interactive EventUtilities 1	Background	3.0	<u>Interchange</u>				
LocalFog3.1FullEnvironmentalEffects415,000 colors minimum, alpha optional until level 4TextureBackground3.0FullEnvironmentalEffects3X3D statementProximitySensor3.0InteractiveEnvironmentalSensor1TransformSensor3.2FullEnvironmentalSensor3VisibilitySensor3.0ImmersiveEnvironmentalSensor2BooleanFilter3.0InteractiveEventUtilities1ordered field is treated as field unless level 2BooleanSequencer3.0InteractiveEventUtilities1	Fog						
TextureBackground3.0FullEnvironmentalEffects3X3D statementProximitySensor3.0InteractiveEnvironmentalSensor1TransformSensor3.2FullEnvironmentalSensor3VisibilitySensor3.0ImmersiveEnvironmentalSensor2BooleanFilter3.0InteractiveEventUtilities1ordered field is treated as field unless level 2BooleanSequencer3.0InteractiveEventUtilities1							
ProximitySensor     3.0 Interactive     EnvironmentalSensor     1       TransformSensor     3.2 Full     EnvironmentalSensor     3       VisibilitySensor     3.0 Immersive     EnvironmentalSensor     2       BooleanFilter     3.0 Interactive     EventUtilities     1 ordered field is treated as field unless level 2       BooleanSequencer     3.0 Interactive     EventUtilities     1							
TransformSensor3.2FullEnvironmentalSensor3VisibilitySensor3.0ImmersiveEnvironmentalSensor2BooleanFilter3.0InteractiveEventUtilities1ordered field is treated as field unless level 2BooleanSequencer3.0InteractiveEventUtilities1	•					X3D statement	
VisibilitySensor     3.0 Immersive     EnvironmentalSensor     2       BooleanFilter     3.0 Interactive     EventUtilities     1 ordered field is treated as field unless level 2       BooleanSequencer     3.0 Interactive     EventUtilities     1	•						
BooleanFilter 3.0 Interactive EventUtilities 1 ordered field is treated as field unless level 2 BooleanSequencer 3.0 Interactive EventUtilities 1		<u>3.2</u>					
BooleanSequencer 3.0 Interactive EventUtilities 1	•						
	BooleanFilter		<u>Interactive</u>	<u>EventUtilities</u>	1	ordered field is treated as field unless level 2	
BooleanToggle <u>3.0</u> Interactive EventUtilities 1	BooleanSequencer		<u>Interactive</u>				
	BooleanToggle	<u>3.0</u>	<u>Interactive</u>	<u>EventUtilities</u>	1		

X3D v4.0 Node and Statement Profiles, Compo	nents and	Levels	<u> </u>	ed 16 January 2023	
	First			Component Level	
X3D Abstract Specification Nodes, Statements	Version	Minimum Profile	Component	for Full Support	Notes
CADAssembly	<u>3.1</u>	<u>Full</u>	CADGeometry	2	W3C Web Audio API
BooleanTrigger	<u>3.0</u>	<u>Interactive</u>	<b>EventUtilities</b>	1	supports ProtoDeclare statement
IntegerSequencer	<u>3.0</u>	<u>Interactive</u>	<b>EventUtilities</b>	1	
IntegerTrigger	<u>3.0</u>	<u>Interactive</u>	<b>EventUtilities</b>	1	
TimeTrigger	<u>3.0</u>	<u>Interactive</u>	<b>EventUtilities</b>	1	
ColorChaser	<u>3.3</u>	<u>Full</u>	<u>Followers</u>	1	W3C Web Audio API
ColorDamper	<u>3.2</u>	<u>Full</u>	<u>Followers</u>	1	
CoordinateChaser	<u>3.3</u>	<u>Full</u>	<u>Followers</u>	1	
CoordinateDamper	<u>3.2</u>	<u>Full</u>	<u>Followers</u>	1	
OrientationChaser	<u>3.2</u>	<u>Full</u>	<u>Followers</u>	1	
OrientationDamper	<u>3.2</u>	<u>Full</u>	<u>Followers</u>	1	
PositionChaser	<u>3.2</u>	<u>Full</u>	<u>Followers</u>	1	
PositionChaser2D	3.2	<u>Full</u>	<u>Followers</u>	1	
PositionDamper	<u>3.2</u>	<u>Full</u>	<u>Followers</u>	1	
PositionDamper2D	<u>3.2</u>	<u>Full</u>	<u>Followers</u>	1	W3C Web Audio API
ScalarChaser	<u>3.2</u>	<u>Full</u>	<u>Followers</u>	1	Not scoped by parent Group or Transform
ScalarDamper	<u>3.3</u>	<u>Full</u>	<u>Followers</u>	1	
TexCoordChaser2D	<u>3.3</u>	<u>Full</u>	<u>Followers</u>	1	
TexCoordDamper2D	<u>3.2</u>	<u>Full</u>	<u>Followers</u>	1	
Arc2D	<u>3.0</u>	<u>Full</u>	Geometry2D	2	
ArcClose2D	3.0	<u>Full</u>	Geometry2D	2	W3C Web Audio API
Circle2D	3.0	<u>Full</u>	Geometry2D	2	
Disk2D	<u>3.0</u>	<u>Full</u>	Geometry2D	2	
Polyline2D	<u>3.0</u>	<u>Immersive</u>	Geometry2D	1	
Polypoint2D	3.0	<u>Immersive</u>	Geometry2D	1	
Rectangle2D	<u>3.0</u>	<u>Immersive</u>	Geometry2D	1	
TriangleSet2D	<u>3.0</u>	<u>Full</u>	Geometry2D	1	supports Inline event passing for scalable world animation
Box	<u>3.0</u>	<u>Interchange</u>	Geometry3D	1	statement supports ProtoDeclare statement
Cone	<u>3.0</u>	<u>Interchange</u>	Geometry3D	1	
Cylinder	<u>3.0</u>	<u>Interchange</u>	Geometry3D	1	Prototypes fields are Core, Script fields are Immersive
ElevationGrid	3.0	<u>Interactive</u>	Geometry3D	3	Optional until Interactive profile or Core component level 2
Extrusion	3.0	<u>Immersive</u>	Geometry3D	4	
IndexedFaceSet	3.0	<u>Interchange</u>	Geometry3D	2	
Sphere	3.0	<u>Interchange</u>	Geometry3D	1	
GeoCoordinate	<u>3.0</u>	<u>Full</u>	Geospatial	1	
GeoElevationGrid	<u>3.0</u>	<u>Full</u>	Geospatial	1	
GeoLocation	<u>3.0</u>	<u>Full</u>	Geospatial	1	
GeoLOD	<u>3.0</u>	<u>Full</u>	Geospatial	1	W3C Web Audio API
GeoMetadata	3.0	<u>Full</u>	Geospatial	1	
GeoOrigin	3.0	<u>Full</u>	Geospatial	1	
GeoPositionInterpolator	3.0	<u>Full</u>	Geospatial	1	
GeoProximitySensor	<u>3.2</u>	<u>Full</u>	Geospatial	2	
GeoTouchSensor	<u>3.0</u>	<u>Full</u>	Geospatial	1	
GeoTransform	3.2	<u>Full</u>	Geospatial	2	
GeoViewpoint	<u>3.0</u>	<u>Full</u>	Geospatial	1	
Group	<u>3.0</u>	<u>Interchange</u>	Grouping	1	
StaticGroup	<u>3.0</u>	<u>Full</u>	Grouping	3	
Switch	<u>3.0</u>	<u>Interactive</u>	Grouping	2	
Transform	<u>3.0</u>	<u>Interchange</u>	Grouping	1	

X3D v4.0 Node and Statement Profiles, Compor	nents and	Levels	updated	16 January 2023	
	First			Component Level	
X3D Abstract Specification Nodes, Statements	Version	Minimum Profile	Component	for Full Support	Notes
CADAssembly	<u>3.1</u>	<u>Full</u>	CADGeometry	2	W3C Web Audio API
HAnimDisplacer	3.0	<u>Full</u>	<u>H-Anim</u>	1	
HAnimHumanoid	3.0	<u>Full</u>	<u>H-Anim</u>	2	addChildren, removeChildren optional until Interactive profile or component level 2
HAnimJoint	<u>3.0</u>	<u>Full</u>	<u>H-Anim</u>	1	
HAnimMotion	<u>4.0</u>	<u>Full</u>	<u>H-Anim</u>	3	X3D 4.0 supports HAnim 2.0, level 2 adds skin geometry
HAnimSegment	<u>3.0</u>	<u>Full</u>	<u>H-Anim</u>	1	
HAnimSite	3.0	<u>Full</u>	<u>H-Anim</u>	1	Supports BVH motion capture (mocap) conversion
ColorInterpolator	<u>3.0</u>	<u>Interchange</u>	<u>Interpolation</u>	2	
CoordinateInterpolator	<u>3.0</u>	<u>Interchange</u>	<u>Interpolation</u>	1	
CoordinateInterpolator2D	<u>3.0</u>	<u>Full</u>	<u>Interpolation</u>	3	matches HTML5 head statement for document meta information
EaseInEaseOut	<u>3.2</u>	<u>Full</u>	<u>Interpolation</u>	4	
NormalInterpolator	3.0	<u>Interchange</u>	<u>Interpolation</u>	2	
OrientationInterpolator	<u>3.0</u>	<u>Interchange</u>	<u>Interpolation</u>	1	
PositionInterpolator	<u>3.0</u>	<u>Interchange</u>	<u>Interpolation</u>	1	supports Inline event passing for scalable world animation
PositionInterpolator2D	<u>3.0</u>	<u>Full</u>	<u>Interpolation</u>	3	
ScalarInterpolator	<u>3.0</u>	<u>Interchange</u>	<u>Interpolation</u>	1	
SplinePositionInterpolator	<u>3.2</u>	<u>Full</u>	<u>Interpolation</u>	4	
SplinePositionInterpolator2D	<u>3.2</u>	<u>Full</u>	<u>Interpolation</u>	4	
SplineScalarInterpolator	<u>3.2</u>	<u>Full</u>	<u>Interpolation</u>	4	
SquadOrientationInterpolator	<u>3.2</u>	<u>Full</u>	<u>Interpolation</u>	5	
KeySensor	<u>3.0</u>	<u>Interactive</u>	<u>KeyDeviceSensor</u>	1	Inline can require higher profile to match parent scene. Optional support for load, refresh.
StringSensor	<u>3.0</u>	<u>Interactive</u>	<u>KeyDeviceSensor</u>	2	
Layer	<u>3.2</u>	<u>Full</u>	Layering	1	
LayerSet	<u>3.2</u>	<u>Full</u>	Layering	1	in support of ProtoDeclare statement
Viewport	<u>3.2</u>	<u>Full</u>	Layering	1	
Layout	3.2	<u>Full</u>	<u>Layout</u>	1	
LayoutGroup	<u>3.2</u>	<u>Full</u>	<u>Layout</u>	1	
LayoutLayer	<u>3.2</u>	<u>Full</u>	<u>Layout</u>	1	
ScreenFontStyle	<u>3.2</u>	<u>Full</u>	Layout	2	
ScreenGroup	<u>3.2</u>	<u>Full</u>	Layout	2	
DirectionalLight	3.0	<u>Interchange</u>	Lighting	1	
PointLight	3.0	<u>Interactive</u>	Lighting	2	
SpotLight	<u>3.0</u>	<u>Interactive</u>	Lighting	2	Supports gITF 2.0
Billboard	3.0	<u>Immersive</u>	Navigation	2	
Collision	3.0	<u>Immersive</u>	Navigation	2	W3C Web Audio API
LOD	3.0	<u>Immersive</u>	Navigation	2	
NavigationInfo	<u>3.0</u>	<u>Interchange</u>	<u>Navigation</u>	1	
OrthoViewpoint	3.2	<u>Full</u>	Navigation	3	0 1 175 0 0
Viewpoint	3.0	Interchange	Navigation	1	Supports gITF 2.0
ViewpointGroup	<u>3.2</u>	<u>Full</u>	Navigation	3	
Anchor	3.0	<u>Interactive</u>	Networking	2	The state of the s
EXPORT	<u>3.0</u>	Interactive	Networking Networking	3	matches HTML5 head statement for document meta information
IMPORT	<u>3.0</u>	<u>Interactive</u>	Networking	3	
Inline	3.0	<u>Interactive</u>	Networking	2	
LoadSensor	<u>3.0</u>	<u>Immersive</u>	Networking	3	
Contour2D	3.0	<u>Full</u>	NURBS	4	and the standard of the standa
ContourPolyline2D	<u>3.0</u>	<u>Full</u>	NURBS	3	can construct and validate strictly typed metadataa vocabularies
CoordinateDouble	<u>3.0</u>	<u>Full</u>	NURBS	1	MOCMAL A. P. ADI
NurbsCurve	<u>3.0</u>	<u>Full</u>	NURBS	1	W3C Web Audio API

X3D v4.0 Node and Statement Profiles, Compo	nents and	Levels	updated	d 16 January 2023	
	First			Component Level	
X3D Abstract Specification Nodes, Statements	Version	Minimum Profile	Component	for Full Support	Notes
CADAssembly	<u>3.1</u>	<u>Full</u>	<u>CADGeometry</u>	2	W3C Web Audio API
NurbsCurve2D	<u>3.0</u>	<u>Full</u>	<u>NURBS</u>	3	
NurbsOrientationInterpolator	<u>3.0</u>	<u>Full</u>	<u>NURBS</u>	1	
NurbsPatchSurface	3.0	<u>Full</u>	<u>NURBS</u>	1	
NurbsPositionInterpolator	<u>3.0</u>	<u>Full</u>	<u>NURBS</u>	1	
NurbsSet	<u>3.0</u>	<u>Full</u>	<u>NURBS</u>	2	
NurbsSurfaceInterpolator	3.0	<u>Full</u>	<u>NURBS</u>	1	
NurbsSweptSurface	<u>3.0</u>	<u>Full</u>	<u>NURBS</u>	3	
NurbsSwungSurface	<u>3.0</u>	<u>Full</u>	<u>NURBS</u>	3	
NurbsTextureCoordinate	<u>3.0</u>	<u>Full</u>	<u>NURBS</u>	1	
NurbsTrimmedSurface	<u>3.0</u>	<u>Full</u>	<u>NURBS</u>	4	
BoundedPhysicsModel	<u>3.2</u>	<u>Full</u>	<u>ParticleSystems</u>	2	
ConeEmitter	3.2	<u>Full</u>	<u>ParticleSystems</u>	1	
ExplosionEmitter	<u>3.2</u>	<u>Full</u>	<u>ParticleSystems</u>	1	
ForcePhysicsModel	<u>3.2</u>	<u>Full</u>	<u>ParticleSystems</u>	1	
ParticleSystem	<u>3.2</u>	<u>Full</u>	<u>ParticleSystems</u>	1	
PointEmitter	<u>3.2</u>	<u>Full</u>	<u>ParticleSystems</u>	1	
PolylineEmitter	<u>3.2</u>	<u>Full</u>	<u>ParticleSystems</u>	1	
SurfaceEmitter	<u>3.2</u>	<u>Full</u>	<u>ParticleSystems</u>	2	
VolumeEmitter	<u>3.2</u>	<u>Full</u>	<u>ParticleSystems</u>	2	
WindPhysicsModel	<u>3.2</u>	<u>Full</u>	<u>ParticleSystems</u>	1	
LinePickSensor	<u>3.2</u>	<u>Full</u>	<u>Picking</u>	1	
PickableGroup	<u>3.2</u>	<u>Full</u>	<u>Picking</u>	1	
PointPickSensor	<u>3.2</u>	<u>Full</u>	<u>Picking</u>	1	
PrimitivePickSensor	<u>3.2</u>	<u>Full</u>	<u>Picking</u>	2	
VolumePickSensor	<u>3.2</u>	<u>Full</u>	<u>Picking</u>	3	W3C Web Audio API
CylinderSensor	<u>3.0</u>	<u>Interactive</u>	<u>PointingDeviceSensor</u>	1	
PlaneSensor	3.0	<u>Interactive</u>	<u>PointingDeviceSensor</u>	1	Need level 3 for geometry field
SphereSensor	3.0	<u>Interactive</u>	<u>PointingDeviceSensor</u>	1	W3C Web Audio API
TouchSensor	<u>3.0</u>	<u>Interactive</u>	<u>PointingDeviceSensor</u>	1	Supports gITF 2.0
ClipPlane	3.2	<u>Full</u>	Rendering	5	
Color	3.0	<u>Interchange</u>	Rendering	1	
ColorRGBA	<u>3.0</u>	<u>Interchange</u>	Rendering	1	
Coordinate	<u>3.0</u>	<u>Interchange</u>	Rendering	1	
IndexedLineSet	3.0	<u>Interchange</u>	Rendering	1	anding antiquelly assessment linear attacks to
IndexedTriangleFanSet	<u>3.0</u>	<u>Interchange</u>	Rendering	3	radius optionally supported, linear attenuation
IndexedTriangleSet	3.0	<u>Interchange</u>	Rendering	3 3	Supports alTF 2.0
IndexedTriangleStripSet	3.0	Interchange	Rendering		Supports gITF 2.0
LineSet	3.0	Interchange	Rendering	1	
Normal	<u>3.0</u>	<u>Interchange</u>	Rendering	2 1	
PointSet	<u>3.0</u>	<u>Interchange</u>	Rendering		
Triangle Fan Set	3.0 3.0	Interchange Interchange	Rendering	3 3	
TriangleStripSot	3.0 3.0		Rendering  Rendering	3	
TriangleStripSet		<u>Interchange</u>	Rendering  Rigid Red w Physics		
BallJoint Callidable Officet	<u>3.2</u>	<u>Full</u>	RigidBodyPhysics	2 1	
CollidableOffset	3.2	<u>Full</u>	RigidBodyPhysics	=	
CollicionCollection	3.2 3.2	<u>Full</u> Full	RigidBodyPhysics	1 1	
CollisionCollection	3.2 3.2		RigidBodyPhysics RigidBodyPhysics	1	Non-uniform scale not supported until level 3
CollisionSensor	<u>3.2</u>	<u>Full</u>	RIGIUDOUYPHYSICS	1	Non-uniform scale flot supported until level 5

X3D v4.0 Node and Statement Profiles, Compor	nents and	Levels	updated	16 January 2023	
	First			Component Level	
X3D Abstract Specification Nodes, Statements	Version	Minimum Profile	Component	for Full Support	Notes
CADAssembly	<u>3.1</u>	<u>Full</u>	CADGeometry	2	W3C Web Audio API
CollisionSpace	3.2	<u>Full</u>	<u>RigidBodyPhysics</u>	1	
Contact	<u>3.2</u>	<u>Full</u>	<u>RigidBodyPhysics</u>	2	
DoubleAxisHingeJoint	3.2	<u>Full</u>	<u>RigidBodyPhysics</u>	2	Optional until Interactive profile or Core component level 2
MotorJoint	<u>3.2</u>	<u>Full</u>	<u>RigidBodyPhysics</u>	2	Optional until Interactive profile or Core component level 2
RigidBody	3.2	<u>Full</u>	<u>RigidBodyPhysics</u>	2	Optional until Interactive profile or Core component level 2
RigidBodyCollection	3.2	<u>Full</u>	<u>RigidBodyPhysics</u>	2	Optional until Interactive profile or Core component level 2
SingleAxisHingeJoint	3.2	<u>Full</u>	RigidBodyPhysics	2	position_changed, orientation_changed optional until level 2
SliderJoint	3.2	<u>Full</u>	RigidBodyPhysics	2	
UniversalJoint	<u>3.2</u>	<u>Full</u>	<u>RigidBodyPhysics</u>	2	
Script	<u>3.0</u>	<u>Immersive</u>	Scripting	1	
ComposedShader	<u>3.1</u>	<u>Full</u>	<u>Shaders</u>	1	
FloatVertexAttribute	<u>3.1</u>	<u>Full</u>	<u>Shaders</u>	1	
Matrix3VertexAttribute	<u>3.1</u>	<u>Full</u>	<u>Shaders</u>	1	
Matrix4VertexAttribute	<u>3.1</u>	<u>Full</u>	<u>Shaders</u>	1	
PackagedShader	<u>3.1</u>	<u>Full</u>	<u>Shaders</u>	1	
ProgramShader	<u>3.1</u>	<u>Full</u>	<u>Shaders</u>	1	
ShaderPart	<u>3.1</u>	<u>Full</u>	<u>Shaders</u>	1	X3D statement in XML encoding (implicit in ClassicVRML, VRML97)
ShaderProgram	<u>3.1</u>	<u>Full</u>	<u>Shaders</u>	1	
Appearance	<u>3.0</u>	<u>Interchange</u>	<u>Shape</u>	1	
FillProperties	<u>3.0</u>	<u>Full</u>	<u>Shape</u>	3	
LineProperties	3.0	<u>Immersive</u>	<u>Shape</u>	2	
Material	<u>3.0</u>	<u>Interchange</u>	<u>Shape</u>	1	Use level 4 for full capabilities
PhysicalMaterial	<u>4.0</u>	<u>Full</u>	<u>Shape</u>	2	
PointProperties PointProperties PointProperties	<u>4.0</u>	<u>Full</u>	<u>Shape</u>	5	
Shape	<u>3.0</u>	<u>Interchange</u>	<u>Shape</u>	1	
TwoSidedMaterial	<u>3.2</u>	<u>Full</u>	<u>Shape</u>	4	
<u>UnlitMaterial</u>	4.0	<u>Full</u>	<u>Shape</u>	1	
AcousticProperties	4.0	<u>Full</u>	<u>Sound</u>	2	
Analyser	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	
AudioClip	<u>3.0</u>	<u>Immersive</u>	<u>Sound</u>	1	
AudioDestination	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	W3C Web Audio API, adding full 3D spatial auralization
AudioDestination	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	
BufferAudioSource	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	
ChannelMerger	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	
ChannelSelector	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	
ChannelSplitter	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	
Convolver	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	beamWidth optionally supported. radius optionally supported, linear attenuation
Delay	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	
DynamicsCompressor	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	
Gain	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	W3C Web Audio API
ListenerPointSource	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	W3C Web Audio API
MicrophoneSource	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	
OscillatorSource	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	
PeriodicWave	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	
Sound	<u>3.0</u>	<u>Immersive</u>	<u>Sound</u>	1	
SpatialSound	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	
StreamAudioDestination	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	
StreamAudioSource	<u>4.0</u>	<u>Full</u>	<u>Sound</u>	2	

X3D v4.0 Node and Statement Profiles, Compone	ents and	Levels	updated	16 January 2023	
	First			Component Level	
X3D Abstract Specification Nodes, Statements	Version	Minimum Profile	Component	for Full Support	Notes
CADAssembly	<u>3.1</u>	<u>Full</u>	CADGeometry	2	W3C Web Audio API
FontStyle	3.0	<u>Immersive</u>	<u>Text</u>	1	
Text	3.0	<u>Immersive</u>	<u>Text</u>	1	
TextureProjector	<u>4.0</u>	<u>Full</u>	<u>TextureProjection</u>	1	
TextureProjectorParallel	4.0	<u>Full</u>	<u>TextureProjection</u>	2	
ImageTexture	3.0	<u>Interchange</u>	<u>Texturing</u>	1	component renamed (previously TextureProjector)
MovieTexture	3.0	<u>Immersive</u>	Texturing	3	component renamed (previously TextureProjector)
MultiTexture	3.0	<u>Interchange</u>	<u>Texturing</u>	2	
MultiTextureCoordinate	3.0	<u>Interchange</u>	Texturing	2	
MultiTextureTransform	<u>3.0</u>	<u>Interchange</u>	Texturing	2	
PixelTexture	3.0	<u>Interchange</u>	Texturing	1	
TextureCoordinate	3.0	<u>Interchange</u>	<u>Texturing</u>	1	
TextureCoordinateGenerator	3.0	<u>Interchange</u>	<u>Texturing</u>	2	
TextureProperties	<u>3.2</u>	<u>Full</u>	<u>Texturing</u>	2	
TextureTransform	<u>3.0</u>	<u>Interchange</u>	<u>Texturing</u>	1	
ComposedTexture3D	<u>3.1</u>	<u>Full</u>	Texturing3D	1	addChildren, removeChildren optional until Interactive profile or component level 2
ImageTexture3D	<u>3.1</u>	<u>Full</u>	Texturing3D	2	
PixelTexture3D	<u>3.1</u>	<u>Full</u>	Texturing3D	1	
TextureCoordinate3D	<u>3.1</u>	<u>Full</u>	Texturing3D	1	
TextureCoordinate4D	<u>3.1</u>	<u>Full</u>	Texturing3D	1	
TextureTransform3D	<u>3.1</u>	<u>Full</u>	Texturing3D	1	
TextureTransformMatrix3D	<u>3.1</u>	<u>Full</u>	Texturing3D	1	
TimeSensor	3.0	<u>Interchange</u>	<u>Time</u>	1	Deprecated
BlendedVolumeStyle	3.3	<u>Full</u>	VolumeRendering	3	X3D statement
BoundaryEnhancementVolumeStyle	<u>3.3</u>	<u>Full</u>	VolumeRendering	2	
CartoonVolumeStyle	<u>3.3</u>	<u>Full</u>	VolumeRendering	3	Supports gITF 2.0
ComposedVolumeStyle	3.3	<u>Full</u>	VolumeRendering	2	
EdgeEnhancementVolumeStyle	<u>3.3</u>	<u>Full</u>	VolumeRendering	2	
IsoSurfaceVolumeData	3.3	<u>Full</u>	VolumeRendering	2	
OpacityMapVolumeStyle	<u>3.3</u>	<u>Full</u>	VolumeRendering	2	
ProjectionVolumeStyle	3.3	<u>Full</u>	VolumeRendering	2	
SegmentedVolumeData	3.3	<u>Full</u>	VolumeRendering	2	
ShadedVolumeStyle	<u>3.3</u>	<u>Full</u>	VolumeRendering	3	
SilhouetteEnhancementVolumeStyle	<u>3.3</u>	<u>Full</u>	VolumeRendering	2	
ToneMappedVolumeStyle	<u>3.3</u>	<u>Full</u>	VolumeRendering	2	
VolumeData	3.3	<u>Full</u>	VolumeRendering	1	X3D statement

Reference:

X3D v4.0 Architecture Draft 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	* not included by MPEG	
BooleanSequencer	* not included by MPEG	
BooleanToggle	* not included by MPEG	
BooleanTrigger	* not included by MPEG	
Box	Вох	
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	* not included by MPEG	
IndexedTriangleSet	* not included by MPEG	
IndexedTriangleStripSet	* not included by MPEG	
Inline	Inline	
IntegerSequencer	* not included by MPEG	
IntegerTrigger	* not included by MPEG	
KeySensor	* not included by MPEG	
LineSet	LineSet	
Material	Material	
MetadataBoolean	* not included by MPEG	
MetadataDouble	MetadataDouble	
MetadataFloat	MetadataFloat	
MetadataInteger	MetadataInteger	
MetadataSet	MetadataSet	
MetadataString	MetadataString	
MultiTexture	* not included by MPEG	
MultiTextureCoordinate	* not included by MPEG	
MultiTextureTransform	* not included by MPEG	
NavigationInfo	NavigationInfo	
Normal	* not included by MPEG	
NormalInterpolator	NormalInterpolator	

## X3D Interactive, X3D MPEG4 Interactive Profile Comparison

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

X3D Interactive Profile	MPEG4 Interactive Profile	To be added
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	* not included by MPEG	
Switch	Switch	
TextureCoordinate	TextureCoordinate	
TextureCoordinateGenerator	* not included by MPEG	
TextureTransform	TextureTransform	
TimeSensor	TimeSensor	
TimeTrigger	* not included by MPEG	
TouchSensor	TouchSensor	
Transform	Transform	
TriangleFanSet	* not included by MPEG	
TriangleSet	* not included by MPEG	
TriangleStripSet	* not included by MPEG	
Viewpoint	Viewpoint	
VisibilitySensor	* not included by MPEG	
WorldInfo	WorldInfo	
Total nodes:		
70	48	0
Missing nodes:	22	0
0	22	0
References:	fications/19775-1/V3.3/Part01/interacti	

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