

X3D Abstract Specification Node Index	X_ITE (Cobweb) Player v3.3	FreeWRL Player v4.0	view3dscene (Castle Game Engine)	X3DOM Player v1.7	InstantPlayer	X3D Player	X3D-Edit Authoring Tool
Anchor	Anchor	Anchor	Anchor	Anchor	Anchor	Anchor	Anchor
Appearance	Appearance	Appearance	Appearance	Appearance	Appearance	Appearance	Appearance
Arc2D	Arc2D	Arc2D	Arc2D	Arc2D	Arc2D	Arc2D	Arc2D
ArcClose2D	ArcClose2D	ArcClose2D	ArcClose2D	ArcClose2D	ArcClose2D	ArcClose2D	ArcClose2D
AudioClip	AudioClip	AudioClip	AudioClip	AudioClip	AudioClip	AudioClip	AudioClip
Background	Background	Background	Background	Background	Background	Background	Background
BallJoint	BallJoint	BallJoint	BallJoint	BallJoint	BallJoint	BallJoint	BallJoint
Billboard	Billboard	Billboard	Billboard	Billboard	Billboard	Billboard	Billboard
BlendedVolumeStyle	BlendedVolumeStyle	BlendedVolumeStyle	BlendedVolumeStyle	BlendedVolumeStyle	BlendedVolumeStyle	BlendedVolumeStyle	BlendedVolumeStyle
BooleanFilter	BooleanFilter	BooleanFilter	BooleanFilter	* required for X3D Immersive Profile	BooleanFilter	BooleanFilter	BooleanFilter
BooleanSequencer	BooleanSequencer	BooleanSequencer	BooleanSequencer	* required for X3D Immersive Profile	BooleanSequencer	BooleanSequencer	BooleanSequencer
BooleanToggle	BooleanToggle	BooleanToggle	BooleanToggle	* required for X3D Immersive Profile	BooleanToggle	BooleanToggle	BooleanToggle
BooleanTrigger	BooleanTrigger	BooleanTrigger	BooleanTrigger	* required for X3D Immersive Profile	BooleanTrigger	BooleanTrigger	BooleanTrigger
BoundaryEnhancementVolumeStyle	BoundaryEnhancementVolumeStyle	BoundaryEnhancementVolumeStyle	BoundaryEnhancementVolumeStyle	BoundaryEnhancementVolumeStyle	BoundaryEnhancementVolumeStyle	BoundaryEnhancementVolumeStyle	BoundaryEnhancementVolumeStyle
BoundedPhysicsModel	BoundedPhysicsModel	BoundedPhysicsModel	BoundedPhysicsModel	BoundedPhysicsModel	BoundedPhysicsModel	BoundedPhysicsModel	BoundedPhysicsModel
Box	Box	Box	Box	Box	Box	Box	Box
CADAssembly	CADAssembly	CADAssembly	CADAssembly	CADAssembly	CADAssembly	CADAssembly	CADAssembly
CADFace	CADFace	CADFace	CADFace	CADFace	CADFace	CADFace	CADFace
CADLayer	CADLayer	CADLayer	CADLayer	CADLayer	CADLayer	CADLayer	CADLayer
CADPart	CADPart	CADPart	CADPart	CADPart	CADPart	CADPart	CADPart
CartoonVolumeStyle	CartoonVolumeStyle	CartoonVolumeStyle	CartoonVolumeStyle	CartoonVolumeStyle	CartoonVolumeStyle	CartoonVolumeStyle	CartoonVolumeStyle
Circle2D	Circle2D	Circle2D	Circle2D	Circle2D	Circle2D	Circle2D	Circle2D
ClipPlane	ClipPlane	ClipPlane	ClipPlane	ClipPlane	ClipPlane	ClipPlane	ClipPlane
CollidableOffset	CollidableOffset	CollidableOffset	CollidableOffset	CollidableOffset	CollidableOffset	CollidableOffset	CollidableOffset
CollidableShape	CollidableShape	CollidableShape	CollidableShape	CollidableShape	CollidableShape	CollidableShape	CollidableShape
Collision	Collision	Collision	Collision	Collision	Collision	Collision	Collision
CollisionCollection	CollisionCollection	CollisionCollection	CollisionCollection	CollisionCollection	CollisionCollection	CollisionCollection	CollisionCollection
CollisionSensor	CollisionSensor	CollisionSensor	CollisionSensor	CollisionSensor	CollisionSensor	CollisionSensor	CollisionSensor
CollisionSpace	CollisionSpace	CollisionSpace	CollisionSpace	CollisionSpace	CollisionSpace	CollisionSpace	CollisionSpace
Color	Color	Color	Color	Color	Color	Color	Color
ColorChaser	ColorChaser	ColorChaser	ColorChaser	ColorChaser	ColorChaser	ColorChaser	ColorChaser
ColorDamper	ColorDamper	ColorDamper	ColorDamper	ColorDamper	ColorDamper	ColorDamper	ColorDamper
ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator
ColorRGBA	ColorRGBA	ColorRGBA	ColorRGBA	ColorRGBA	ColorRGBA	ColorRGBA	ColorRGBA
component	component	component	component	component	component	component	component
ComposedCubeMapTexture	ComposedCubeMapTexture	ComposedCubeMapTexture	ComposedCubeMapTexture	ComposedCubeMapTexture	ComposedCubeMapTexture	ComposedCubeMapTexture	ComposedCubeMapTexture
ComposedShader	ComposedShader	ComposedShader	ComposedShader	ComposedShader	ComposedShader	ComposedShader	ComposedShader
ComposedTexture3D	ComposedTexture3D	ComposedTexture3D	ComposedTexture3D	ComposedTexture3D	ComposedTexture3D	ComposedTexture3D	ComposedTexture3D
ComposedVolumeStyle	ComposedVolumeStyle	ComposedVolumeStyle	ComposedVolumeStyle	ComposedVolumeStyle	ComposedVolumeStyle	ComposedVolumeStyle	ComposedVolumeStyle
Cone	Cone	Cone	Cone	Cone	Cone	Cone	Cone
ConeEmitter	ConeEmitter	ConeEmitter	ConeEmitter	ConeEmitter	ConeEmitter	ConeEmitter	ConeEmitter
connect	connect	connect	connect	* required for X3D Immersive Profile	connect	connect	connect
Contact	Contact	Contact	Contact	Contact	Contact	Contact	Contact
Contour2D	Contour2D	Contour2D	Contour2D	Contour2D	Contour2D	Contour2D	Contour2D
ContourPolyline2D	ContourPolyline2D	ContourPolyline2D	ContourPolyline2D	ContourPolyline2D	ContourPolyline2D	ContourPolyline2D	ContourPolyline2D
Coordinate	Coordinate	Coordinate	Coordinate	Coordinate	Coordinate	Coordinate	Coordinate
CoordinateChaser	CoordinateChaser	CoordinateChaser	CoordinateChaser	CoordinateChaser	CoordinateChaser	CoordinateChaser	CoordinateChaser
CoordinateDamper	CoordinateDamper	CoordinateDamper	CoordinateDamper	CoordinateDamper	CoordinateDamper	CoordinateDamper	CoordinateDamper
CoordinateDouble	CoordinateDouble	CoordinateDouble	* missing, suggested for HTML5	* missing, suggested for HTML5	CoordinateDouble	* missing, suggested for HTML5	CoordinateDouble
CoordinateInterpolator	CoordinateInterpolator	CoordinateInterpolator	CoordinateInterpolator	CoordinateInterpolator	CoordinateInterpolator	CoordinateInterpolator	CoordinateInterpolator
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
DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight
DISEntityManager	DISEntityManager	DISEntityManager	DISEntityManager	DISEntityManager	DISEntityManager	DISEntityManager	DISEntityManager
DISEntityTypeMapping	DISEntityTypeMapping	DISEntityTypeMapping	DISEntityTypeMapping	DISEntityTypeMapping	DISEntityTypeMapping	DISEntityTypeMapping	DISEntityTypeMapping
Disk2D	Disk2D	Disk2D	Disk2D	Disk2D	Disk2D	Disk2D	Disk2D
DoubleAxisHingeJoint	DoubleAxisHingeJoint	DoubleAxisHingeJoint	DoubleAxisHingeJoint	DoubleAxisHingeJoint	DoubleAxisHingeJoint	DoubleAxisHingeJoint	DoubleAxisHingeJoint
EaseInEaseOut	EaseInEaseOut	EaseInEaseOut	EaseInEaseOut	EaseInEaseOut	EaseInEaseOut	EaseInEaseOut	EaseInEaseOut
EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle
ElevationGrid	ElevationGrid	ElevationGrid	ElevationGrid	ElevationGrid	ElevationGrid	ElevationGrid	ElevationGrid
EspduTransform	EspduTransform	EspduTransform	EspduTransform	EspduTransform	EspduTransform	EspduTransform	EspduTransform
ExplosionEmitter	ExplosionEmitter	ExplosionEmitter	ExplosionEmitter	ExplosionEmitter	ExplosionEmitter	ExplosionEmitter	ExplosionEmitter
EXPORT	EXPORT	EXPORT	EXPORT	* required for X3D Immersive Profile	* required for X3D Immersive Profile	* required for X3D Immersive Profile	EXPORT
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	* missing, suggested for HTML5	FillProperties	* missing, suggested for HTML5	* missing, suggested for HTML5	FillProperties	* missing, suggested for HTML5	FillProperties
FloatVertexAttribute	FloatVertexAttribute	FloatVertexAttribute	FloatVertexAttribute	FloatVertexAttribute	FloatVertexAttribute	FloatVertexAttribute	FloatVertexAttribute
Fog	Fog	Fog	Fog	Fog	Fog	Fog	Fog
FogCoordinate	FogCoordinate	FogCoordinate	FogCoordinate	FogCoordinate	FogCoordinate	FogCoordinate	FogCoordinate
FontStyle	FontStyle	FontStyle	FontStyle	FontStyle	FontStyle	FontStyle	FontStyle
ForcePhysicsModel	ForcePhysicsModel	ForcePhysicsModel	ForcePhysicsModel	ForcePhysicsModel	ForcePhysicsModel	ForcePhysicsModel	ForcePhysicsModel
GeneratedCubeMapTexture	GeneratedCubeMapTexture	GeneratedCubeMapTexture	GeneratedCubeMapTexture	GeneratedCubeMapTexture	GeneratedCubeMapTexture	GeneratedCubeMapTexture	GeneratedCubeMapTexture

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GeoCoordinate	GeoCoordinate	GeoCoordinate	* missing, 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
HAnimDisplacer		HAnimDisplacer	HAnimDisplacer	HAnimDisplacer	HAnimDisplacer	HAnimDisplacer	HAnimDisplacer
HAnimHumanoid		HAnimHumanoid	HAnimHumanoid	HAnimHumanoid	HAnimHumanoid	HAnimHumanoid	HAnimHumanoid
HAnimJoint		HAnimJoint	HAnimJoint	HAnimJoint	HAnimJoint	HAnimJoint	HAnimJoint
HAnimSegment		HAnimSegment	HAnimSegment	HAnimSegment	HAnimSegment	HAnimSegment	HAnimSegment
HAnimSite		HAnimSite	HAnimSite	HAnimSite	HAnimSite	HAnimSite	HAnimSite
head	head	head	head	head	head	head	head
ImageCubeMapTexture	ImageCubeMapTexture	ImageCubeMapTexture	ImageCubeMapTexture	ImageTexture	ImageCubeMapTexture	ImageTexture	ImageTexture
ImageTexture	ImageTexture	ImageTexture	ImageTexture	ImageTexture	ImageTexture	ImageTexture	ImageTexture
ImageTexture3D	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	* required for X3D Immersive Profile	IntegerSequencer	IntegerSequencer	IntegerSequencer
IntegerTrigger	IntegerTrigger	IntegerTrigger	IntegerTrigger	* required for X3D Immersive Profile	IntegerTrigger	IntegerTrigger	IntegerTrigger
IS	IS	IS	IS	* required for X3D Immersive Profile	IS	IS	IS
IsoSurfaceVolumeData		IsoSurfaceVolumeData	KeySensor	* missing, suggested for HTML5	IsoSurfaceVolumeData	IsoSurfaceVolumeData	IsoSurfaceVolumeData
KeySensor	KeySensor	KeySensor	KeySensor	KeySensor	KeySensor	KeySensor	KeySensor
Layer	Layer	Layer	Layer	Layer	Layer	Layer	
LayerSet	LayerSet	LayerSet	LayerSet	LayerSet	LayerSet	LayerSet	
Layout	Layout	Layout	Layout	Layout	Layout		
LayoutGroup	LayoutGroup	LayoutGroup	LayoutGroup	LayoutGroup	LayoutGroup		
LayoutLayer	LayoutLayer	LayoutLayer	LayoutLayer	LayoutLayer	LayoutLayer		
LinePickSensor		LinePickSensor					
LineProperties	LineProperties	LineProperties	LineProperties	LineProperties	LineProperties	LineProperties	LineProperties
LineSet	LineSet	LineSet	LineSet	LineSet	LineSet	LineSet	LineSet
LoadSensor	LoadSensor	LoadSensor	* missing, suggested for HTML5	* missing, suggested for HTML5	LoadSensor	LoadSensor	LoadSensor
LocalFog	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	Matrix3VertexAttribute	Matrix3VertexAttribute
Matrix4VertexAttribute	Matrix4VertexAttribute	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
MotorJoint		MotorJoint		MotorJoint	MotorJoint		MotorJoint
MovieTexture	MovieTexture	MovieTexture	MovieTexture	MovieTexture	MovieTexture	MovieTexture	MovieTexture
MultiTexture		MultiTexture		MultiTexture	MultiTexture	MultiTexture	MultiTexture
MultiTextureCoordinate		MultiTextureCoordinate		MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate
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
NurbsCurve2D		NurbsCurve2D		NurbsCurve2D	NurbsCurve2D	NurbsCurve2D	NurbsCurve2D
NurbsOrientationInterpolator		NurbsOrientationInterpolator		NurbsOrientationInterpolator	NurbsOrientationInterpolator	NurbsOrientationInterpolator	NurbsOrientationInterpolator
NurbsPatchSurface		NurbsPatchSurface		NurbsPatchSurface	NurbsPatchSurface	NurbsPatchSurface	NurbsPatchSurface
NurbsPositionInterpolator		NurbsPositionInterpolator		NurbsPositionInterpolator	NurbsPositionInterpolator	NurbsPositionInterpolator	NurbsPositionInterpolator
NurbsSet		NurbsSet		NurbsSet	NurbsSet	NurbsSet	NurbsSet
NurbsSurfaceInterpolator		NurbsSurfaceInterpolator		NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator
NurbsSweptSurface		NurbsSweptSurface		NurbsSweptSurface	NurbsSweptSurface	NurbsSweptSurface	NurbsSweptSurface
NurbsSwungSurface		NurbsSwungSurface		NurbsSwungSurface	NurbsSwungSurface	NurbsSwungSurface	NurbsSwungSurface
NurbsTextureCoordinate		NurbsTextureCoordinate		NurbsTextureCoordinate	NurbsTextureCoordinate	NurbsTextureCoordinate	NurbsTextureCoordinate
NurbsTrimmedSurface		NurbsTrimmedSurface		NurbsTrimmedSurface	NurbsTrimmedSurface	NurbsTrimmedSurface	NurbsTrimmedSurface
OpacityMapVolumeStyle		OpacityMapVolumeStyle		OpacityMapVolumeStyle			OpacityMapVolumeStyle

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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
PackagedShader		PackagedShader					PackagedShader
ParticleSystem	ParticleSystem	ParticleSystem				ParticleSystem	
PickableGroup		PickableGroup				PickableGroup	
PixelTexture	PixelTexture	PixelTexture	PixelTexture	PixelTexture	PixelTexture	PixelTexture	PixelTexture
PixelTexture3D		PixelTexture3D	PixelTexture3D	PixelTexture3D	PixelTexture3D	PixelTexture3D	PixelTexture3D
PlaneSensor	PlaneSensor	PlaneSensor	PlaneSensor	PlaneSensor	PlaneSensor	PlaneSensor	PlaneSensor
PointEmitter	PointEmitter	PointEmitter				PointEmitter	
PointLight	PointLight	PointLight	PointLight	PointLight	PointLight	PointLight	PointLight
PointPickSensor		PointPickSensor					
PointSet	PointSet	PointSet	PointSet	PointSet	PointSet	PointSet	PointSet
Polyline2D	Polyline2D	Polyline2D		Polyline2D	Polyline2D	Polyline2D	Polyline2D
PolylineEmitter	PolylineEmitter	PolylineEmitter				PolylineEmitter	
Polypoint2D	Polypoint2D	Polypoint2D		Polypoint2D	Polypoint2D	Polypoint2D	Polypoint2D
PositionChaser	PositionChaser	PositionChaser		PositionChaser	PositionChaser	PositionChaser	PositionChaser
PositionChaser2D	PositionChaser2D	PositionChaser2D		PositionChaser2D	PositionChaser2D	PositionChaser2D	PositionChaser2D
PositionDamper	PositionDamper	PositionDamper		PositionDamper	PositionDamper	PositionDamper	PositionDamper
PositionDamper2D	PositionDamper2D	PositionDamper2D		PositionDamper2D	PositionDamper2D	PositionDamper2D	PositionDamper2D
PositionInterpolator	PositionInterpolator	PositionInterpolator	PositionInterpolator	PositionInterpolator	PositionInterpolator	PositionInterpolator	PositionInterpolator
PositionInterpolator2D	PositionInterpolator2D	PositionInterpolator2D	PositionInterpolator2D	* missing, suggested for HTML5	PositionInterpolator2D	PositionInterpolator2D	PositionInterpolator2D
PrimitivePickSensor		PrimitivePickSensor					
ProgramShader		ProgramShader			ProgramShader		ProgramShader
ProjectionVolumeStyle		ProjectionVolumeStyle		ProjectionVolumeStyle			ProjectionVolumeStyle
-	ProtoBody	ProtoBody	ProtoBody	* required for X3D Immersive Profile	ProtoBody	ProtoBody	ProtoBody
ProtoDeclare	ProtoDeclare	ProtoDeclare	ProtoDeclare	* required for X3D Immersive Profile	ProtoDeclare	ProtoDeclare	ProtoDeclare
ProtoInstance	ProtoInstance	ProtoInstance	ProtoInstance	* required for X3D Immersive Profile	ProtoInstance	ProtoInstance	ProtoInstance
-	ProtoInterface	ProtoInterface	ProtoInterface	* required for X3D Immersive Profile	ProtoInterface	ProtoInterface	ProtoInterface
ProximitySensor	ProximitySensor	ProximitySensor	ProximitySensor	* required for X3D Immersive Profile	ProximitySensor	ProximitySensor	ProximitySensor
QuadSet	QuadSet	QuadSet	QuadSet	QuadSet	QuadSet	QuadSet	QuadSet
ReceiverPdu							ReceiverPdu
Rectangle2D	Rectangle2D	Rectangle2D	Rectangle2D	Rectangle2D	Rectangle2D	Rectangle2D	Rectangle2D
RigidBody		RigidBody		RigidBody		RigidBody	RigidBody
RigidBodyCollection		RigidBodyCollection		RigidBodyCollection		RigidBodyCollection	RigidBodyCollection
ROUTE	ROUTE	ROUTE	ROUTE	ROUTE	ROUTE	ROUTE	ROUTE
ScalarChaser	ScalarChaser	ScalarChaser		ScalarChaser	ScalarChaser	ScalarChaser	ScalarChaser
ScalarDamper	ScalarDamper	ScalarDamper		ScalarDamper	ScalarDamper	ScalarDamper	ScalarDamper
ScalarInterpolator	ScalarInterpolator	ScalarInterpolator	ScalarInterpolator	ScalarInterpolator	ScalarInterpolator	ScalarInterpolator	ScalarInterpolator
-	Scene	Scene	Scene	Scene	Scene	Scene	Scene
ScreenFontStyle	ScreenFontStyle	ScreenFontStyle					
ScreenGroup	ScreenGroup	ScreenGroup			ScreenGroup		
Script	Script		Script	* required for X3D Immersive Profile	Script	Script	Script
SegmentedVolumeData		SegmentedVolumeData		SegmentedVolumeData			SegmentedVolumeData
ShadedVolumeStyle		ShadedVolumeStyle		ShadedVolumeStyle			ShadedVolumeStyle
ShaderPart	ShaderPart	ShaderPart	ShaderPart	ShaderPart	ShaderPart	ShaderPart	ShaderPart
ShaderProgram		ShaderProgram			ShaderProgram		ShaderProgram
Shape	Shape	Shape	Shape	Shape	Shape	Shape	Shape
SignalPdu							SignalPdu
SilhouetteEnhancementVolumeStyle		SilhouetteEnhancementVolumeStyle		SilhouetteEnhancementVolumeStyle			SilhouetteEnhancementVolumeStyle
SingleAxisHingeJoint		SingleAxisHingeJoint		SingleAxisHingeJoint		SingleAxisHingeJoint	SingleAxisHingeJoint
SliderJoint		SliderJoint		SliderJoint		SliderJoint	SliderJoint
Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound
Sphere	Sphere	Sphere	Sphere	Sphere	Sphere	Sphere	Sphere
SphereSensor	SphereSensor	SphereSensor	SphereSensor	SphereSensor	SphereSensor	SphereSensor	SphereSensor
SplinePositionInterpolator	SplinePositionInterpolator	SplinePositionInterpolator		SplinePositionInterpolator		SplinePositionInterpolator	
SplinePositionInterpolator2D	SplinePositionInterpolator2D	SplinePositionInterpolator2D			SplinePositionInterpolator2D		
SplineScalarInterpolator	SplineScalarInterpolator				SplineScalarInterpolator		
SpotLight	SpotLight	SpotLight	SpotLight	SpotLight	SpotLight	SpotLight	SpotLight
SquadOrientationInterpolator	SquadOrientationInterpolator	SquadOrientationInterpolator			SquadOrientationInterpolator		
StaticGroup	StaticGroup	StaticGroup	StaticGroup	StaticGroup	StaticGroup	StaticGroup	StaticGroup
StringSensor	* missing, suggested for HTML5	StringSensor	StringSensor	* missing, suggested for HTML5	StringSensor		StringSensor
SurfaceEmitter	SurfaceEmitter	SurfaceEmitter					
Switch	Switch	Switch	Switch	Switch	Switch	Switch	Switch
TexCoordChaser2D	TexCoordChaser2D	TexCoordChaser2D			TexCoordChaser2D		TexCoordChaser2D
TexCoordDamper2D	TexCoordDamper2D	TexCoordDamper2D		TexCoordDamper2D	TexCoordDamper2D		TexCoordDamper2D
Text	Text	Text	Text	Text	Text	Text	Text
TextureBackground	TextureBackground	TextureBackground	TextureBackground	* missing, suggested for HTML5	TextureBackground	TextureBackground	TextureBackground
TextureCoordinate	TextureCoordinate	TextureCoordinate	TextureCoordinate	TextureCoordinate	TextureCoordinate	TextureCoordinate	TextureCoordinate
TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D
TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D
TextureCoordinateGenerator		TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator
TextureProperties	TextureProperties	TextureProperties	TextureProperties	TextureProperties	TextureProperties	TextureProperties	TextureProperties
TextureTransform	TextureTransform	TextureTransform	TextureTransform	TextureTransform	TextureTransform	TextureTransform	TextureTransform

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TextureTransform3D	TextureTransform3D	TextureTransform3D	TextureTransform3D	TextureTransform3D	TextureTransform3D	TextureTransform3D	TextureTransform3D
TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D	TextureTransformMatrix3D
TimeSensor	TimeSensor	TimeSensor	TimeSensor	TimeSensor	TimeSensor	TimeSensor	TimeSensor
TimeTrigger	TimeTrigger	TimeTrigger	TimeTrigger	TimeTrigger	<i>* required for X3D Immersive Profile</i>	TimeTrigger	TimeTrigger
ToneMappedVolumeStyle	ToneMappedVolumeStyle	ToneMappedVolumeStyle	ToneMappedVolumeStyle	ToneMappedVolumeStyle	ToneMappedVolumeStyle	ToneMappedVolumeStyle	ToneMappedVolumeStyle
TouchSensor	TouchSensor	TouchSensor	TouchSensor	TouchSensor	TouchSensor	TouchSensor	TouchSensor
Transform	Transform	Transform	Transform	Transform	Transform	Transform	Transform
TransformSensor	TransformSensor	TransformSensor	TransformSensor	TransformSensor	TransformSensor	TransformSensor	TransformSensor
TransmitterPdu	TransmitterPdu	TransmitterPdu	TransmitterPdu	TransmitterPdu	TransmitterPdu	TransmitterPdu	TransmitterPdu
TriangleFanSet	TriangleFanSet	TriangleFanSet	TriangleFanSet	TriangleFanSet	TriangleFanSet	TriangleFanSet	TriangleFanSet
TriangleSet	TriangleSet	TriangleSet	TriangleSet	TriangleSet	TriangleSet	TriangleSet	TriangleSet
TriangleSet2D	TriangleSet2D	TriangleSet2D	TriangleSet2D	TriangleSet2D	TriangleSet2D	TriangleSet2D	TriangleSet2D
TriangleStripSet	TriangleStripSet	TriangleStripSet	TriangleStripSet	TriangleStripSet	TriangleStripSet	TriangleStripSet	TriangleStripSet
TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial
UNIT	UNIT	<i>* missing, suggested for HTML5</i>	UNIT	<i>* missing, suggested for HTML5</i>	<i>* missing, suggested for HTML5</i>	<i>* missing, suggested for HTML5</i>	unit
UniversalJoint	UniversalJoint	UniversalJoint	UniversalJoint	UniversalJoint	UniversalJoint	UniversalJoint	UniversalJoint
Viewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint
ViewpointGroup	ViewpointGroup	ViewpointGroup	ViewpointGroup	ViewpointGroup	<i>* missing, suggested for HTML5</i>	ViewpointGroup	<i>* missing, suggested for HTML5</i>
Viewport	Viewport	Viewport	Viewport	Viewport	Viewport	Viewport	Viewport
VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor
VolumeData	VolumeData	VolumeData	VolumeData	VolumeData	VolumeData	VolumeData	VolumeData
VolumeEmitter	VolumeEmitter	VolumeEmitter	VolumeEmitter	VolumeEmitter	VolumeEmitter	VolumeEmitter	VolumeEmitter
VolumePickSensor	VolumePickSensor	VolumePickSensor	VolumePickSensor	VolumePickSensor	VolumePickSensor	VolumePickSensor	VolumePickSensor
WindPhysicsModel	WindPhysicsModel	WindPhysicsModel	WindPhysicsModel	WindPhysicsModel	WindPhysicsModel	WindPhysicsModel	WindPhysicsModel
WorldInfo	WorldInfo	WorldInfo	WorldInfo	WorldInfo	WorldInfo	WorldInfo	WorldInfo
X3D	X3D	X3D	X3D	X3D	X3D	X3D	X3D

Supported nodes and statements: 73% 97% 57% 61% 78% 68% 87%
 251 182 244 144 154 197 219

Unimplemented nodes and statements: 0 69 7 107 97 54 80 32

References
[X3D v3.3 Specification](#) [Cobweb supported node list](#) [FreeWRL supported node list](#) [Castle Game Engine documentation](#) [X3DOM supported node list](#) [InstantReality](#) [Xj3D SourceForge](#) [X3D-Edit v3.3 Authoring Tool](#)

HTML5 support goals
** required for X3D Immersive Profile* includes all Immersive Profile nodes includes all Immersive Profile nodes includes all Immersive Profile nodes 19 2 2 includes all Immersive Profile nodes
** suggested for HTML5 support* 2 1 14 13 2 5 includes all suggested HTML5 nodes
** priority nodes and statements missing:* 2 1 14 32 4 7 0

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X3D Abstract Specification Node Index	X3D Schema validation	X3D DTD validation	X3D Tooltips	X3D Schematron validation	VRML97 Specification (Grey background = forward compatibility for .wrl VRML97)
Anchor	Anchor	Anchor	Anchor	Anchor	Anchor
Appearance	Appearance	Appearance	Appearance	Appearance	Appearance
Arc2D	Arc2D	Arc2D	Arc2D		(Prototype available) Arc2D
ArcClose2D	ArcClose2D	ArcClose2D	ArcClose2D		(Prototype available) ArcClose2D
AudioClip	AudioClip	AudioClip	AudioClip	AudioClip	AudioClip
Background	Background	Background	Background	Background	Background
BallJoint	BallJoint	BallJoint	BallJoint	BallJoint	
Billboard	Billboard	Billboard	Billboard	Billboard	Billboard
BlendedVolumeStyle	BlendedVolumeStyle	BlendedVolumeStyle	BlendedVolumeStyle	BlendedVolumeStyle	
BooleanFilter	BooleanFilter	BooleanFilter	BooleanFilter	BooleanFilter	(Prototype available) BooleanFilter
BooleanSequencer	BooleanSequencer	BooleanSequencer	BooleanSequencer	BooleanSequencer	(Prototype available) BooleanSequencer
BooleanToggle	BooleanToggle	BooleanToggle	BooleanToggle	BooleanToggle	(Prototype available) BooleanToggle
BooleanTrigger	BooleanTrigger	BooleanTrigger	BooleanTrigger	BooleanTrigger	(Prototype available) BooleanTrigger
BoundaryEnhancementVolumeStyle	BoundaryEnhancementVolumeStyle	BoundaryEnhancementVolumeStyle	BoundaryEnhancementVolumeStyle	BoundaryEnhancementVolumeStyle	
BoundedPhysicsModel	BoundedPhysicsModel	BoundedPhysicsModel	BoundedPhysicsModel	BoundedPhysicsModel	
Box	Box	Box	Box	Box	Box
CADAssembly	CADAssembly	CADAssembly	CADAssembly	CADAssembly	(Prototype available) CADAssembly
CADFace	CADFace	CADFace	CADFace	CADFace	(Prototype available) CADFace
CADLayer	CADLayer	CADLayer	CADLayer	CADLayer	(Prototype available) CADLayer
CADPart	CADPart	CADPart	CADPart	CADPart	(Prototype available) CADPart
CartoonVolumeStyle	CartoonVolumeStyle	CartoonVolumeStyle	CartoonVolumeStyle	CartoonVolumeStyle	
Circle2D	Circle2D	Circle2D	Circle2D		(Prototype available) Circle2D
ClipPlane	ClipPlane	ClipPlane	ClipPlane	ClipPlane	
CollidableOffset	CollidableOffset	CollidableOffset	CollidableOffset		
CollidableShape	CollidableShape	CollidableShape	CollidableShape		
Collision	Collision	Collision	Collision	Collision	Collision
CollisionCollection	CollisionCollection	CollisionCollection	CollisionCollection		
CollisionSensor	CollisionSensor	CollisionSensor	CollisionSensor		
CollisionSpace	CollisionSpace	CollisionSpace	CollisionSpace		
Color	Color	Color	Color	Color	Color
ColorChaser	ColorChaser	ColorChaser	ColorChaser	ColorChaser	
ColorDamper	ColorDamper	ColorDamper	ColorDamper	ColorDamper	
ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator	ColorInterpolator
ColorRGBA	ColorRGBA	ColorRGBA	ColorRGBA	ColorRGBA	(Prototype available) ColorRGBA
component	component	component	component	component	
ComposedCubeMapTexture	ComposedCubeMapTexture	ComposedCubeMapTexture	ComposedCubeMapTexture		
ComposedShader	ComposedShader	ComposedShader	ComposedShader	ComposedShader	
ComposedTexture3D	ComposedTexture3D	ComposedTexture3D	ComposedTexture3D		
ComposedVolumeStyle	ComposedVolumeStyle	ComposedVolumeStyle	ComposedVolumeStyle	ComposedVolumeStyle	
Cone	Cone	Cone	Cone	Cone	Cone
ConeEmitter	ConeEmitter	ConeEmitter	ConeEmitter		
connect	connect		connect	connect	
Contact	Contact	Contact	Contact		
Contour2D	Contour2D	Contour2D	Contour2D		(Prototype available) Contour2D
ContourPolyline2D	ContourPolyline2D	ContourPolyline2D	ContourPolyline2D	ContourPolyline2D	(Prototype available) ContourPolyline2D
Coordinate	Coordinate	Coordinate	Coordinate	Coordinate	Coordinate
CoordinateChaser	CoordinateChaser	CoordinateChaser	CoordinateChaser	CoordinateChaser	
CoordinateDamper	CoordinateDamper	CoordinateDamper	CoordinateDamper	CoordinateDamper	
CoordinateDouble	CoordinateDouble	CoordinateDouble	CoordinateDouble	CoordinateDouble	(Prototype available) CoordinateDouble
CoordinateInterpolator	CoordinateInterpolator	CoordinateInterpolator	CoordinateInterpolator	CoordinateInterpolator	CoordinateInterpolator
CoordinateInterpolator2D	CoordinateInterpolator2D	CoordinateInterpolator2D	CoordinateInterpolator2D	CoordinateInterpolator2D	(Prototype available) CoordinateInterpolator2D
Cylinder	Cylinder	Cylinder	Cylinder	Cylinder	Cylinder
CylinderSensor	CylinderSensor	CylinderSensor	CylinderSensor	CylinderSensor	CylinderSensor
DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight	DirectionalLight
DISEntityManager	DISEntityManager	DISEntityManager	DISEntityManager	DISEntityManager	
DISEntityTypeMapping	DISEntityTypeMapping	DISEntityTypeMapping	DISEntityTypeMapping	DISEntityTypeMapping	
Disk2D	Disk2D	Disk2D	Disk2D		(Prototype available) Disk2D
DoubleAxisHingeJoint	DoubleAxisHingeJoint	DoubleAxisHingeJoint	DoubleAxisHingeJoint		
EaseInEaseOut	EaseInEaseOut	EaseInEaseOut	EaseInEaseOut		
EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle	EdgeEnhancementVolumeStyle	
ElevationGrid	ElevationGrid	ElevationGrid	ElevationGrid	ElevationGrid	ElevationGrid

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X3D Abstract Specification Node Index	X3D Schema validation	X3D DTD validation	X3D Tooltips	X3D Schematron validation	VRML97 Specification (Java Prototype available)	
EspduTransform	EspduTransform	EspduTransform	EspduTransform	EspduTransform	(Grey background = forward compatibility for .wrl VRML97)	
ExplosionEmitter	ExplosionEmitter	ExplosionEmitter	ExplosionEmitter	ExplosionEmitter	EspduTransform	
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	ForcePhysicsModel		
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
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	ImageCubeMapTexture		
ImageTexture	ImageTexture	ImageTexture	ImageTexture	ImageTexture	ImageTexture	ImageTexture
ImageTexture3D	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	KeySensor		
Layer	Layer	Layer	Layer	Layer		
LayerSet	LayerSet	LayerSet	LayerSet	LayerSet		
Layout	Layout	Layout	Layout	Layout		
LayoutGroup	LayoutGroup	LayoutGroup	LayoutGroup	LayoutGroup		
LayoutLayer	LayoutLayer	LayoutLayer	LayoutLayer	LayoutLayer		
LinePickSensor	LinePickSensor	LinePickSensor	LinePickSensor	LinePickSensor		
LineProperties	LineProperties	LineProperties	LineProperties	LineProperties	LineProperties	LineProperties
LineSet	LineSet	LineSet	LineSet	LineSet	(Prototype available)	LineSet
LoadSensor	LoadSensor	LoadSensor	LoadSensor	LoadSensor	(Prototype available)	LoadSensor
LocalFog	LocalFog	LocalFog	LocalFog	LocalFog		
LOD	LOD	LOD	LOD	LOD	LOD	LOD
Material	Material	Material	Material	Material	Material	Material

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X3D Abstract Specification Node Index	X3D Schema validation	X3D DTD validation	X3D Tooltips	X3D Schematron validation	VRML97 Specification (Grey background = forward compatibility for .wrl VRML97)	
Matrix3VertexAttribute	Matrix3VertexAttribute	Matrix3VertexAttribute	Matrix3VertexAttribute	Matrix3VertexAttribute		
Matrix4VertexAttribute	Matrix4VertexAttribute	Matrix4VertexAttribute	Matrix4VertexAttribute	Matrix4VertexAttribute		
meta		meta		meta		
MetadataBoolean	MetadataBoolean	MetadataBoolean	MetadataBoolean	MetadataBoolean	(Prototype available)	MetadataBoolean
MetadataDouble	MetadataDouble	MetadataDouble	MetadataDouble	MetadataDouble	(Prototype available)	MetadataDouble
MetadataFloat	MetadataFloat	MetadataFloat	MetadataFloat	MetadataFloat	(Prototype available)	MetadataFloat
MetadataInteger	MetadataInteger	MetadataInteger	MetadataInteger	MetadataInteger	(Prototype available)	MetadataInteger
MetadataSet	MetadataSet	MetadataSet	MetadataSet	MetadataSet	(Prototype available)	MetadataSet
MetadataString	MetadataString	MetadataString	MetadataString	MetadataString	(Prototype available)	MetadataString
MotorJoint	MotorJoint	MotorJoint	MotorJoint			
MovieTexture	MovieTexture	MovieTexture	MovieTexture	MovieTexture	MovieTexture	
MultiTexture	MultiTexture	MultiTexture	MultiTexture	MultiTexture		
MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate	MultiTextureCoordinate			
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 available)	NurbsCurve
NurbsCurve2D	NurbsCurve2D	NurbsCurve2D	NurbsCurve2D		(Java Prototype available)	NurbsCurve2D
NurbsOrientationInterpolator	NurbsOrientationInterpolator	NurbsOrientationInterpolator	NurbsOrientationInterpolator		(Java Prototype available)	NurbsOrientationInterpolator
NurbsPatchSurface	NurbsPatchSurface	NurbsPatchSurface	NurbsPatchSurface	NurbsPatchSurface	(Java Prototype available)	NurbsPatchSurface
NurbsPositionInterpolator	NurbsPositionInterpolator	NurbsPositionInterpolator	NurbsPositionInterpolator		(Java Prototype available)	NurbsPositionInterpolator
NurbsSet	NurbsSet	NurbsSet	NurbsSet		(Java Prototype available)	NurbsSet
NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator	NurbsSurfaceInterpolator		(Java Prototype available)	NurbsSurfaceInterpolator
NurbsSweptSurface	NurbsSweptSurface	NurbsSweptSurface	NurbsSweptSurface		(Java Prototype available)	NurbsSweptSurface
NurbsSwungSurface	NurbsSwungSurface	NurbsSwungSurface	NurbsSwungSurface		(Java Prototype available)	NurbsSwungSurface
NurbsTextureCoordinate	NurbsTextureCoordinate	NurbsTextureCoordinate	NurbsTextureCoordinate		(Java Prototype available)	NurbsTextureCoordinate
NurbsTrimmedSurface	NurbsTrimmedSurface	NurbsTrimmedSurface	NurbsTrimmedSurface	NurbsTrimmedSurface	(Java Prototype available)	NurbsTrimmedSurface
OpacityMapVolumeStyle	OpacityMapVolumeStyle	OpacityMapVolumeStyle	OpacityMapVolumeStyle	OpacityMapVolumeStyle		
OrientationChaser	OrientationChaser	OrientationChaser	OrientationChaser			
OrientationDamper	OrientationDamper	OrientationDamper	OrientationDamper	OrientationDamper		
OrientationInterpolator	OrientationInterpolator	OrientationInterpolator	OrientationInterpolator		OrientationInterpolator	OrientationInterpolator
OrthoViewpoint	OrthoViewpoint	OrthoViewpoint	OrthoViewpoint	OrthoViewpoint		
PackagedShader	PackagedShader	PackagedShader	PackagedShader			
ParticleSystem	ParticleSystem	ParticleSystem	ParticleSystem	ParticleSystem		
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			
PointSet	PointSet	PointSet	PointSet	PointSet	PointSet	PointSet
Polyline2D	Polyline2D	Polyline2D	Polyline2D		(Prototype available)	Polyline2D
PolylineEmitter	PolylineEmitter	PolylineEmitter	PolylineEmitter			
Polypoint2D	Polypoint2D	Polypoint2D	Polypoint2D		(Prototype available)	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		(Prototype available)	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		
-	ProtoInterface	ProtoInterface	ProtoInterface	ProtoInterface		
ProximitySensor	ProximitySensor	ProximitySensor	ProximitySensor	ProximitySensor	ProximitySensor	ProximitySensor

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X3D Abstract Specification Node Index	X3D Schema validation	X3D DTD validation	X3D Tooltips	X3D Schematron validation	VRML97 Specification	
QuadSet	QuadSet	QuadSet	QuadSet	QuadSet	(Grey background = forward compatibility for .wrl VRML97)	
ReceiverPdu	ReceiverPdu	ReceiverPdu	ReceiverPdu	ReceiverPdu	(Prototype available) QuadSet	
Rectangle2D	Rectangle2D	Rectangle2D	Rectangle2D		(Java Prototype available) ReceiverPdu	
RigidBody	RigidBody	RigidBody	RigidBody	RigidBody	(Prototype available) Rectangle2D	
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) SignalPdu	
SilhouetteEnhancementVolumeStyle	SilhouetteEnhancementVolumeStyle	SilhouetteEnhancementVolumeStyle	SilhouetteEnhancementVolumeStyle	SilhouetteEnhancementVolumeStyle		
SingleAxisHingeJoint	SingleAxisHingeJoint	SingleAxisHingeJoint	SingleAxisHingeJoint	SingleAxisHingeJoint		
SliderJoint	SliderJoint	SliderJoint	SliderJoint			
Sound	Sound	Sound	Sound	Sound	Sound	Sound
Sphere	Sphere	Sphere	Sphere	Sphere	Sphere	Sphere
SphereSensor	SphereSensor	SphereSensor	SphereSensor	SphereSensor	SphereSensor	SphereSensor
SplinePositionInterpolator	SplinePositionInterpolator	SplinePositionInterpolator	SplinePositionInterpolator	SplinePositionInterpolator		
SplinePositionInterpolator2D	SplinePositionInterpolator2D	SplinePositionInterpolator2D	SplinePositionInterpolator2D	SplinePositionInterpolator2D		
SplineScalarInterpolator	SplineScalarInterpolator	SplineScalarInterpolator	SplineScalarInterpolator			
SpotLight	SpotLight	SpotLight	SpotLight	SpotLight	SpotLight	SpotLight
SquadOrientationInterpolator	SquadOrientationInterpolator	SquadOrientationInterpolator	SquadOrientationInterpolator			
StaticGroup	StaticGroup	StaticGroup	StaticGroup	StaticGroup		
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	
TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D	TextureCoordinate3D		
TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D	TextureCoordinate4D		
TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator	TextureCoordinateGenerator		
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	
TimeTrigger	TimeTrigger	TimeTrigger	TimeTrigger	TimeTrigger	(Prototype available) TimeTrigger	
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 available) TransmitterPdu	
TriangleFanSet	TriangleFanSet	TriangleFanSet	TriangleFanSet		(Prototype available) TriangleFanSet	
TriangleSet	TriangleSet	TriangleSet	TriangleSet		(Prototype available) TriangleSet	
TriangleSet2D	TriangleSet2D	TriangleSet2D	TriangleSet2D		(Prototype available) TriangleSet2D	
TriangleStripSet	TriangleStripSet	TriangleStripSet	TriangleStripSet		(Prototype available) TriangleStripSet	
TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial	TwoSidedMaterial		
UNIT	unit	unit	unit	unit		
UniversalJoint	UniversalJoint	UniversalJoint	UniversalJoint			

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<i>X3D Abstract Specification Node Index</i>	<i>X3D Schema validation</i>	<i>X3D DTD validation</i>	<i>X3D Tooltips</i>	<i>X3D Schematron validation</i>	<i>VRML97 Specification</i>	(Grey background = forward compatibility for .wrl VRML97)	
Viewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint	Viewpoint
ViewpointGroup	ViewpointGroup	ViewpointGroup	ViewpointGroup	ViewpointGroup	ViewpointGroup		
Viewport	Viewport	Viewport	Viewport	Viewport			
VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor	VisibilitySensor
VolumeData	VolumeData	VolumeData	VolumeData	VolumeData	VolumeData		
VolumeEmitter	VolumeEmitter	VolumeEmitter	VolumeEmitter	VolumeEmitter			
VolumePickSensor	VolumePickSensor	VolumePickSensor	VolumePickSensor	VolumePickSensor			
WindPhysicsModel	WindPhysicsModel	WindPhysicsModel	WindPhysicsModel	WindPhysicsModel			
WorldInfo	WorldInfo	WorldInfo	WorldInfo	WorldInfo	WorldInfo	WorldInfo	WorldInfo
X3D	X3D	X3D	X3D	X3D	X3D	#VRML	#X3D, #VRML
Supported nodes and statements:	100%	100%	100%	66%	33%	48%	
251	251	251	251	166	55	121	
Unimplemented nodes and statements:				85	0	75	
0	0	0	0	85	0	75	
References					55 nodes in VRML97 Specification		
X3D v3.3 Specification	X3D Schema Validation	X3D DOCTYPE (DTD) Validation	X3D Resources: Tooltips	X3D Schematron validation	83 nodes in VRML97 Amendment 1		
HTML5 support goals					VRML prototypes total: 55		
* <i>required for X3D Immersive Profile</i>					VRML+Java prototypes total: 15		
* <i>suggested for HTML5 support</i>							
* <i>priority nodes and statements missing:</i>							

X3D v3.3 Node and Statement Profiles, Components and Levels

<i>X3D Abstract Specification Nodes, Statements</i>	<i>Version</i>	<i>Minimum Profile</i>	<i>Component</i>	<i>Component Level for Full Support</i>	<i>Notes</i>
Anchor	3.0	Interactive	Networking	2	
Appearance	3.0	Interchange	Shape	1	textureTransform, fillProperties, lineProperties option until level 2
Arc2D	3.0	Full	Geometry2D	2	
ArcClose2D	3.0	Full	Geometry2D	2	
AudioClip	3.0	Immersive	Sound	1	alpha value optionally supported until level 4
Background	3.0	Interchange	EnvironmentalEffects	1	
BallJoint	3.2	Full	RigidBodyPhysics	2	
Billboard	3.0	Immersive	Navigation	2	
BlendedVolumeStyle	3.3	Full	VolumeRendering	3	
BooleanFilter	3.0	Interactive	EventUtilities	1	
BooleanSequencer	3.0	Interactive	EventUtilities	1	
BooleanToggle	3.0	Interactive	EventUtilities	1	
BooleanTrigger	3.0	Interactive	EventUtilities	1	
BoundaryEnhancementVolumeStyle	3.3	Full	VolumeRendering	2	
BoundedPhysicsModel	3.2	Full	ParticleSystems	2	
Box	3.0	Interchange	Geometry3D	1	
CADAssembly	3.1	Full	CADGeometry	2	
CADFace	3.1	Full	CADGeometry	2	
CADLayer	3.1	Full	CADGeometry	2	
CADPart	3.1	Full	CADGeometry	2	
CartoonVolumeStyle	3.3	Full	VolumeRendering	3	
Circle2D	3.0	Full	Geometry2D	2	
ClipPlane	3.2	Full	Rendering	5	
CollidableOffset	3.2	Full	RigidBodyPhysics	1	
CollidableShape	3.2	Full	RigidBodyPhysics	1	
Collision	3.0	Immersive	Navigation	2	
CollisionCollection	3.2	Full	RigidBodyPhysics	1	
CollisionSensor	3.2	Full	RigidBodyPhysics	1	contacts_changed requires level 2
CollisionSpace	3.2	Full	RigidBodyPhysics	1	
Color	3.0	Interchange	Rendering	1	15,000 colors
ColorChaser	3.3	Full	Followers	1	
ColorDamper	3.2	Full	Followers	1	
ColorInterpolator	3.0	Interchange	Interpolation	2	
ColorRGBA	3.0	Interchange	Rendering	1	15,000 colors, alpha optional until level 4
component	3.0	Core	Core	1	X3D statement
ComposedCubeMapTexture	3.1	Full	CubeMapTexturing	1	
ComposedShader	3.1	Full	Shaders	1	
ComposedTexture3D	3.1	Full	Texturing3D	1	
ComposedVolumeStyle	3.3	Full	VolumeRendering	2	ordered field is treated as field unless level 2
Cone	3.0	Interchange	Geometry3D	1	
ConeEmitter	3.2	Full	ParticleSystems	1	
connect	3.0	Immersive	Core	1	in support of ProtoDeclare statement
Contact	3.2	Full	RigidBodyPhysics	2	
Contour2D	3.0	Full	NURBS	4	
ContourPolyline2D	3.0	Full	NURBS	3	
Coordinate	3.0	Interchange	Rendering	1	
CoordinateChaser	3.3	Full	Followers	1	
CoordinateDamper	3.2	Full	Followers	1	
CoordinateDouble	3.0	Full	NURBS	1	
CoordinateInterpolator	3.0	Interchange	Interpolation	1	
CoordinateInterpolator2D	3.0	Full	Interpolation	3	
Cylinder	3.0	Interchange	Geometry3D	1	
CylinderSensor	3.0	Interactive	PointingDeviceSensor	1	
DirectionalLight	3.0	Interchange	Lighting	1	Not scoped by parent Group or Transform

X3D v3.3 Node and Statement Profiles, Components and Levels

<i>X3D Abstract Specification Nodes, Statements</i>	<i>Version</i>	<i>Minimum Profile</i>	<i>Component</i>	<i>Component Level for Full Support</i>	<i>Notes</i>
Anchor	3.0	Interactive	Networking	2	
DISEntityManager	3.2	Full	DIS	2	
DISEntityTypeMapping	3.2	Full	DIS	2	
Disk2D	3.0	Full	Geometry2D	2	
DoubleAxisHingeJoint	3.2	Full	RigidBodyPhysics	2	
EaseInEaseOut	3.2	Full	Interpolation	4	
EdgeEnhancementVolumeStyle	3.3	Full	VolumeRendering	2	
ElevationGrid	3.0	Interactive	Geometry3D	3	
EspduTransform	3.0	Full	DIS	1	
ExplosionEmitter	3.2	Full	ParticleSystems	1	
EXPORT	3.0	Interactive	Networking	3	X3D statement in support of Inline
ExternProtoDeclare	3.0	Core	Core	1	X3D statement in support of ProtoDeclare statement
Extrusion	3.0	Immersive	Geometry3D	4	
field	3.0	Core	Core	1	Prototypes fields are Core, Script fields are Immersive
fieldValue	3.0	Core	Core	1	Optional until Interactive profile or Core component level 2
FillProperties	3.0	Full	Shape	3	
FloatVertexAttribute	3.1	Full	Shaders	1	
Fog	3.0	Immersive	EnvironmentalEffects	2	
FogCoordinate	3.1	Full	EnvironmentalEffects	4	
FontStyle	3.0	Immersive	Text	1	
ForcePhysicsModel	3.2	Full	ParticleSystems	1	
GeneratedCubeMapTexture	3.1	Full	CubeMapTexturing	3	
GeoCoordinate	3.0	Full	Geospatial	1	
GeoElevationGrid	3.0	Full	Geospatial	1	
GeoLocation	3.0	Full	Geospatial	1	
GeoLOD	3.0	Full	Geospatial	1	
GeoMetadata	3.0	Full	Geospatial	1	
GeoOrigin	3.0	Full	Geospatial	1	
GeoPositionInterpolator	3.0	Full	Geospatial	1	
GeoProximitySensor	3.2	Full	Geospatial	2	
GeoTouchSensor	3.0	Full	Geospatial	1	
GeoTransform	3.2	Full	Geospatial	2	
GeoViewpoint	3.0	Full	Geospatial	1	
Group	3.0	Interchange	Grouping	1	addChildren, removeChildren optional until Interactive profile or component level 2
HAnimDisplacer	3.0	Full	H-Anim	1	
HAnimHumanoid	3.0	Full	H-Anim	1	
HAnimJoint	3.0	Full	H-Anim	1	
HAnimSegment	3.0	Full	H-Anim	1	
HAnimSite	3.0	Full	H-Anim	1	
head	3.0	Core	Core	1	X3D statement
ImageCubeMapTexture	3.1	Full	CubeMapTexturing	2	
ImageTexture	3.0	Interchange	Texturing	1	
ImageTexture3D	3.1	Full	Texturing3D	2	
IMPORT	3.0	Interactive	Networking	3	X3D statement in support of Inline
IndexedFaceSet	3.0	Interchange	Geometry3D	2	
IndexedLineSet	3.0	Interchange	Rendering	1	
IndexedQuadSet	3.1	Full	CADGeometry	1	
IndexedTriangleFanSet	3.0	Interchange	Rendering	3	
IndexedTriangleSet	3.0	Interchange	Rendering	3	
IndexedTriangleStripSet	3.0	Interchange	Rendering	3	
Inline	3.0	Interactive	Networking	2	Inline scene may require higher profile in parent scene. Optional support for load field.
IntegerSequencer	3.0	Interactive	EventUtilities	1	

X3D v3.3 Node and Statement Profiles, Components and Levels

<i>X3D Abstract Specification Nodes, Statements</i>	<i>Version</i>	<i>Minimum Profile</i>	<i>Component</i>	<i>Component Level for Full Support</i>	<i>Notes</i>
Anchor	3.0	Interactive	Networking	2	
IntegerTrigger	3.0	Interactive	EventUtilities	1	
IS	3.0	Immersive	Core	1	in support of ProtoDeclare statement
IsoSurfaceVolumeData	3.3	Full	VolumeRendering	2	
KeySensor	3.0	Interactive	KeyDeviceSensor	1	
Layer	3.2	Full	Layering	1	
LayerSet	3.2	Full	Layering	1	
Layout	3.2	Full	Layout	1	
LayoutGroup	3.2	Full	Layout	1	
LayoutLayer	3.2	Full	Layout	1	
LinePickSensor	3.2	Full	Picking	1	
LineProperties	3.0	Immersive	Shape	2	
LineSet	3.0	Interchange	Rendering	1	
LoadSensor	3.0	Immersive	Networking	3	
LocalFog	3.1	Full	EnvironmentalEffects	4	
LOD	3.0	Immersive	Navigation	2	
Material	3.0	Interchange	Shape	1	Some restrictions until level 2
Matrix3VertexAttribute	3.1	Full	Shaders	1	
Matrix4VertexAttribute	3.1	Full	Shaders	1	
meta	3.0	Core	Core	1	X3D statement
MetadataBoolean	3.3	Core	Core	1	
MetadataDouble	3.0	Core	Core	1	
MetadataFloat	3.0	Core	Core	1	
MetadataInteger	3.0	Core	Core	1	
MetadataSet	3.0	Core	Core	1	
MetadataString	3.0	Core	Core	1	
MotorJoint	3.2	Full	RigidBodyPhysics	2	
MovieTexture	3.0	Immersive	Texturing	3	
MultiTexture	3.0	Interchange	Texturing	2	
MultiTextureCoordinate	3.0	Interchange	Texturing	2	
MultiTextureTransform	3.0	Interchange	Texturing	2	
NavigationInfo	3.0	Interchange	Navigation	1	
Normal	3.0	Interchange	Rendering	2	
NormalInterpolator	3.0	Interchange	Interpolation	2	
NurbsCurve	3.0	Full	NURBS	1	
NurbsCurve2D	3.0	Full	NURBS	3	
NurbsOrientationInterpolator	3.0	Full	NURBS	1	
NurbsPatchSurface	3.0	Full	NURBS	1	
NurbsPositionInterpolator	3.0	Full	NURBS	1	
NurbsSet	3.0	Full	NURBS	2	
NurbsSurfaceInterpolator	3.0	Full	NURBS	1	
NurbsSweptSurface	3.0	Full	NURBS	3	
NurbsSwungSurface	3.0	Full	NURBS	3	
NurbsTextureCoordinate	3.0	Full	NURBS	1	
NurbsTrimmedSurface	3.0	Full	NURBS	4	
OpacityMapVolumeStyle	3.3	Full	VolumeRendering	2	
OrientationChaser	3.2	Full	Followers	1	
OrientationDamper	3.2	Full	Followers	1	
OrientationInterpolator	3.0	Interchange	Interpolation	1	
OrthoViewpoint	3.2	Full	Navigation	3	
PackagedShader	3.1	Full	Shaders	1	
ParticleSystem	3.2	Full	ParticleSystems	1	Need level 3 for geometry field
PickableGroup	3.2	Full	Picking	1	
PixelTexture	3.0	Interchange	Texturing	1	

X3D v3.3 Node and Statement Profiles, Components and Levels

X3D Abstract Specification Nodes, Statements	Version	Minimum Profile	Component	Component Level for Full Support	Notes
Anchor	3.0	Interactive	Networking	2	
PixelTexture3D	3.1	Full	Texturing3D	1	
PlaneSensor	3.0	Interactive	PointingDeviceSensor	1	
PointEmitter	3.2	Full	ParticleSystems	1	
PointLight	3.0	Interactive	Lighting	2	<i>radius</i> optionally supported, linear attenuation
PointPickSensor	3.2	Full	Picking	1	
PointSet	3.0	Interchange	Rendering	1	
Polyline2D	3.0	Immersive	Geometry2D	1	
PolylineEmitter	3.2	Full	ParticleSystems	1	
Polypoint2D	3.0	Immersive	Geometry2D	1	
PositionChaser	3.2	Full	Followers	1	
PositionChaser2D	3.2	Full	Followers	1	
PositionDamper	3.2	Full	Followers	1	
PositionDamper2D	3.2	Full	Followers	1	
PositionInterpolator	3.0	Interchange	Interpolation	1	
PositionInterpolator2D	3.0	Full	Interpolation	3	
PrimitivePickSensor	3.2	Full	Picking	2	Non-uniform scale not supported until level 3
ProgramShader	3.1	Full	Shaders	1	
ProjectionVolumeStyle	3.3	Full	VolumeRendering	2	
ProtoBody	3.0	Core	Core	1	Optional until Interactive profile or Core component level 2
ProtoDeclare	3.0	Core	Core	1	Optional until Interactive profile or Core component level 2
ProtoInstance	3.0	Core	Core	1	Optional until Interactive profile or Core component level 2
ProtoInterface	3.0	Core	Core	1	Optional until Interactive profile or Core component level 2
ProximitySensor	3.0	Interactive	EnvironmentalSensor	1	position_changed, orientation_changed optional until level 2
QuadSet	3.1	Full	CADGeometry	1	
ReceiverPdu	3.0	Full	DIS	1	
Rectangle2D	3.0	Immersive	Geometry2D	1	
RigidBody	3.2	Full	RigidBodyPhysics	2	
RigidBodyCollection	3.2	Full	RigidBodyPhysics	2	
ROUTE	3.0	Core	Core	1	
ScalarChaser	3.2	Full	Followers	1	
ScalarDamper	3.3	Full	Followers	1	
ScalarInterpolator	3.0	Interchange	Interpolation	1	
Scene	3.0	Core	Core	1	X3D statement in XML encoding (implicit in ClassicVRML, VRML97)
ScreenFontStyle	3.2	Full	Layout	2	
ScreenGroup	3.2	Full	Layout	2	
Script	3.0	Immersive	Scripting	1	
SegmentedVolumeData	3.3	Full	VolumeRendering	2	
ShadedVolumeStyle	3.3	Full	VolumeRendering	3	Use level 4 for full capabilities
ShaderPart	3.1	Full	Shaders	1	
ShaderProgram	3.1	Full	Shaders	1	
Shape	3.0	Interchange	Shape	1	
SignalPdu	3.0	Full	DIS	1	
SilhouetteEnhancementVolumeStyle	3.3	Full	VolumeRendering	2	
SingleAxisHingeJoint	3.2	Full	RigidBodyPhysics	2	
SliderJoint	3.2	Full	RigidBodyPhysics	2	
Sound	3.0	Immersive	Sound	1	
Sphere	3.0	Interchange	Geometry3D	1	
SphereSensor	3.0	Interactive	PointingDeviceSensor	1	
SplinePositionInterpolator	3.2	Full	Interpolation	4	
SplinePositionInterpolator2D	3.2	Full	Interpolation	4	
SplineScalarInterpolator	3.2	Full	Interpolation	4	
SpotLight	3.0	Interactive	Lighting	2	beamWidth optionally supported. radius optionally supported, linear attenuation
SquadOrientationInterpolator	3.2	Full	Interpolation	5	

X3D v3.3 Node and Statement Profiles, Components and Levels

<i>X3D Abstract Specification Nodes, Statements</i>	<i>Version</i>	<i>Minimum Profile</i>	<i>Component</i>	<i>Component Level for Full Support</i>	<i>Notes</i>
Anchor	3.0	Interactive	Networking	2	
StaticGroup	3.0	Full	Grouping	3	
StringSensor	3.0	Interactive	KeyDeviceSensor	2	
SurfaceEmitter	3.2	Full	ParticleSystems	2	
Switch	3.0	Interactive	Grouping	2	
TexCoordChaser2D	3.3	Full	Followers	1	
TexCoordDamper2D	3.2	Full	Followers	1	
Text	3.0	Immersive	Text	1	
TextureBackground	3.0	Full	EnvironmentalEffects	3	
TextureCoordinate	3.0	Interchange	Texturing	1	
TextureCoordinate3D	3.1	Full	Texturing3D	1	
TextureCoordinate4D	3.1	Full	Texturing3D	1	
TextureCoordinateGenerator	3.0	Interchange	Texturing	2	
TextureProperties	3.2	Full	Texturing	2	
TextureTransform	3.0	Interchange	Texturing	1	
TextureTransform3D	3.1	Full	Texturing3D	1	
TextureTransformMatrix3D	3.1	Full	Texturing3D	1	
TimeSensor	3.0	Interchange	Time	1	
TimeTrigger	3.0	Interactive	EventUtilities	1	
ToneMappedVolumeStyle	3.3	Full	VolumeRendering	2	
TouchSensor	3.0	Interactive	PointingDeviceSensor	1	
Transform	3.0	Interchange	Grouping	1	addChildren, removeChildren optional until Interactive profile or component level 2
TransformSensor	3.2	Full	EnvironmentalSensor	3	
TransmitterPdu	3.0	Full	DIS	1	
TriangleFanSet	3.0	Interchange	Rendering	3	
TriangleSet	3.0	Interchange	Rendering	3	
TriangleSet2D	3.0	Full	Geometry2D	1	
TriangleStripSet	3.0	Interchange	Rendering	3	
TwoSidedMaterial	3.2	Full	Shape	4	
unit	3.3	Core	Core	1	X3D statement
UniversalJoint	3.2	Full	RigidBodyPhysics	2	
Viewpoint	3.0	Interchange	Navigation	1	
ViewpointGroup	3.2	Full	Navigation	3	
Viewport	3.2	Full	Layering	1	
VisibilitySensor	3.0	Immersive	EnvironmentalSensor	2	
VolumeData	3.3	Full	VolumeRendering	1	
VolumeEmitter	3.2	Full	ParticleSystems	2	
VolumePickSensor	3.2	Full	Picking	3	
WindPhysicsModel	3.2	Full	ParticleSystems	1	
WorldInfo	3.0	Core	Core	1	
X3D	3.0	Core	Core	1	X3D statement

[X3D v3.3 Specification](#)

X3D Interactive, X3D MPEG4 Interactive Profile Comparison

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

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

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	<i>* not included by MPEG</i>	
Switch	Switch	
TextureCoordinate	TextureCoordinate	
TextureCoordinateGenerator	<i>* not included by MPEG</i>	
TextureTransform	TextureTransform	
TimeSensor	TimeSensor	
TimeTrigger	<i>* not included by MPEG</i>	
TouchSensor	TouchSensor	
Transform	Transform	
TriangleFanSet	<i>* not included by MPEG</i>	
TriangleSet	<i>* not included by MPEG</i>	
TriangleStripSet	<i>* not included by MPEG</i>	
Viewpoint	Viewpoint	
VisibilitySensor	<i>* not included by MPEG</i>	
WorldInfo	WorldInfo	
Total nodes:		
70	48	0
Missing nodes:		
0	22	0
References:		
http://www.web3d.org/files/specifications/19775-1/V3.3/Part01/interactive.html		
http://www.web3d.org/files/specifications/19775-1/V3.3/Part01/MPEG4interactive.html		