

## COLLADA tools and features

COLLADA is the standard 3D file format, used by the largest and most successful game studios. It is also increasingly used to exchange assets between Maya, 3ds Max, Google Earth, Photoshop and dozens of leading graphics applications.

Feeling Software's offerings for COLLADA include:

- [ColladaMax](#) and [ColladaMaya](#): full-featured translators for 3ds Max and Maya
- ColladaMotionBuilder (ColladaMB): export for MotionBuilder.
- [Feeling Viewer](#): the one and only COLLADA-compliant 3D engine and viewer, available for licensing in 3rd party applications or stand-alone
- COLLADA Premium Support: access to exclusive features, affordable custom development and daily bug fixes

### Feature set of Feeling COLLADA Tools

Legend:

Y = Yes, the feature is supported in the Standard and Premium versions

Y\* = The feature is supported in the Premium (commercial) version only

Y+ = The feature is a non-standard extension to COLLADA 1.4.x

Yi = The feature is only supported on import

Ye = The feature is only supported on export

TBA = This feature is in progress and should be available in coming months.

Empty space = The feature is not supported

Unless noted otherwise, a feature marked "Y" is fully supported as described in the COLLADA specification.

Features	FCollada	ColladaMax	ColladaMaya	ColladaMotionBuilder	Feeling Engine
Import COLLADA 1.4.1	Y	Y	Y	N	Y
Export COLLADA 1.4.1	Y	Y	Y	Y	Y
<b>Geometry</b>					
Mesh	Y	Y	Y	Ye	Y
Polygon	Y	Y	Y	N	Y
Polygon with holes	Y	N	Y	N	Y
Polygon list	Y	Y	Y	Ye	Y
Triangle list	Y	Y	Y	N	Y
Triangle fans	Y	Yi	Yi	N	Y
Triangle strips	Y	Yi	Yi	Ye	Y
Normals	Y	Y	Y	Ye	Y
Multiple color sets	Y	Y	Y	Ye	Y
Multiple texture coord sets	Y	Y	Y	N	Y
Multiple tangent sets	Y	Ye	Ye	N	Y
Extra data sets	Y	Y	Partial	N	n.a.
Splines	Y	Y	Y	N	Y
Linear interpolation	Y	Y(a)	Y(b)	N	Y
Cubic Bezier interpolation	Y	Y	Y(b)	N	Y
NURBS interpolation	Y	Y	Y	N	Y
Trimmed NURBS surfaces	Y+*	Y+*	Y+*	N	Y
<b>Animation</b>					
<b>Skinning and morphing</b>					
Skinned meshes	Y	Y	Y	Ye	Y
Morphed meshes (aka blend shapes)	Y	Y	Y	Ye	Y
Non-tesselated morph targets	Y	Y	Y	Ye	Y
Skinned + morphed	Y	Y	Y	Ye	Y
<b>General animation</b>					

Animated rotate, translate, scale	Y	Y	Y	Ye	Y
Bezier interpolation	Y	Y	Y	Ye	Y
Linear / step interpolation	Y	Y	Y	Ye	Y
TCB interpolation	N	Y	N	N	Y
COLLADA Physics	Y		Y(1)	N	Y(2)
Import	Y		Y	N	Y
Export	Y		Y	N	Y
Simulation	n/a		Y	N	Y
Rigid body	Y		Y	N	Y
Analytical shapes	Y		Y(3)	N	Y(3)
Rigid constraints	Y		Y	N	Y
Breakable constraints	Y+		Y+	N	Y+
COMMON materials					
Constant, Lambert, Blinn, Phong	Y	Y	Y	Ye	Y
Animated colors and coef.	Y	Y	Y	Ye	Y
Environment mapping					
Spherical	Y++	Y++	Y++	N	Y+
Cubic	Y++	Y++	Y++	N	Y+
Video Textures					
AVI (MS Windows)	Y	Ye	Ye	N	Y+
Image Sequences	Y	N	Ye	N	Y+
COLLADA FX					
Supported profiles					
NVIDIA Cg and CgFX	Y	Y	Y	N	Y
Real-time shader edition	n.a.	Y	Y	N	n.a.
Real-time parameter animation	n.a.	Y	Y	N	n.a.
Import	Y	Y	Y	N	Y
Export	Y	Y	Y	N	Y
Real-time display	Y	Y	Y	N	Y
Asset Standardization					
Triangulate on export	Y	Y	Y	Y	Y
Up axis	n.a.	Y	Y	Y	Y
Units	n.a.	Y	Y	Y	Y
Negative scale removal	Y	Y	Y	Y	Y
Other features					
File referencing	Y	Y	Y	N	Y
ID preservation	Y	Y	Y	N	Y
<extra> preservation	Y	TBA	Y	N	Y

## Supported platforms

Windows XP, Vista	Y	Y	Y	Y	Y
Mac OS X	Y	n.a.	Y	n.a.	Y
Linux (Redhat, FC, Ubuntu)	Y	n.a.	Y	n.a.	Y
Playstation 3	Y				Y

## Integration

ActiveX (IE)	Y				Y*
Firefox for Windows	Y				Y*
Firefox for Mac OS X	Y				Y*
COM (MS Office)	Y				Y*

## Notes:

1. Requires the Nima plug-in, currently only available for Windows and Linux.
2. Supports AGEIA PhysX engine. Bullet engine support is also almost complete.
3. The following shapes are not supported: tapered capsules and cylinders.
  - a. Converts to Bezier interpolation on import.
  - b. Converts to NURBS interpolation on import.

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