

Welcome to **CoDiC Converter for Maya®** .

CoDiC Converter for Maya® is an excellent model translation plug-in for **Maya® V5.x** that allows you to get **SEDRIS STF format** from Maya® format.

This beta version is limited to export static model without animation. It also will omit every 10th polygon from the translated model.

We make **CoDiC Converter for Maya®** easy to use and fast to work, so that it answers to your demand. We hope you get as much enjoyment from this plug-in as we had in making it.

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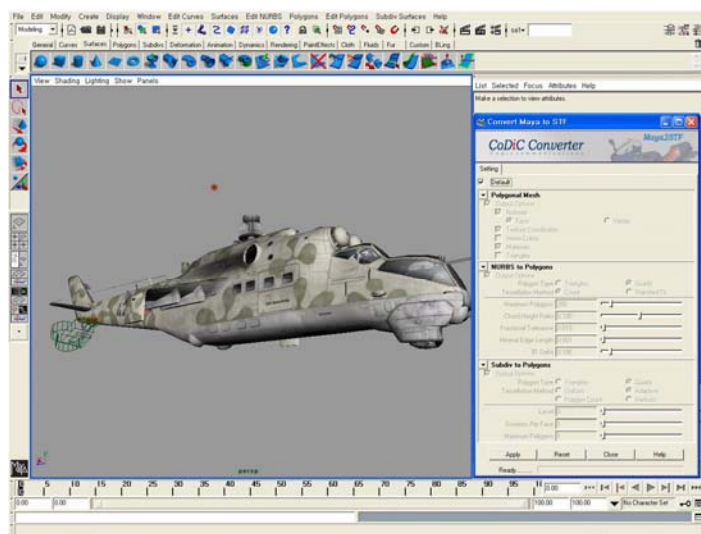
South Korea

Phone: +82-2-863-1376

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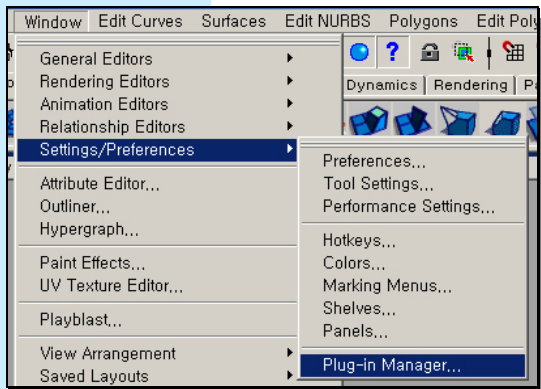
Website: www.CoDiC.co.kr



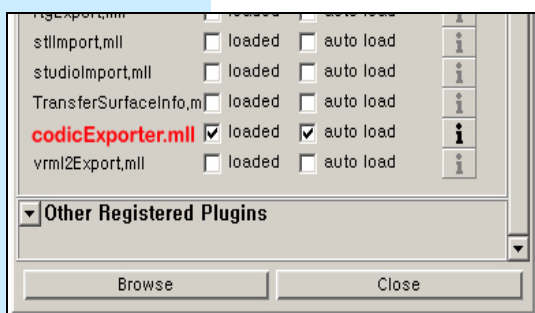
Installation

Please make sure you do the following steps:

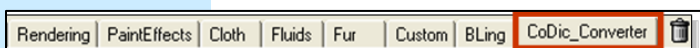
- To start the installation process just execute "**CodicSetup.exe**" file.
 - ✓ Determine the place on your hard disk where you want CoDiC Converter to be installed. Normally the proposed "C:\program files\CodicConverter" will do fine.
 - ✓ Select 'OK' and you're done! The installer will take care of all the work.
- Run Maya®
- Click "Plug-in Manager..." in 'Windows -> Settings/Preferences' menu in Maya®.




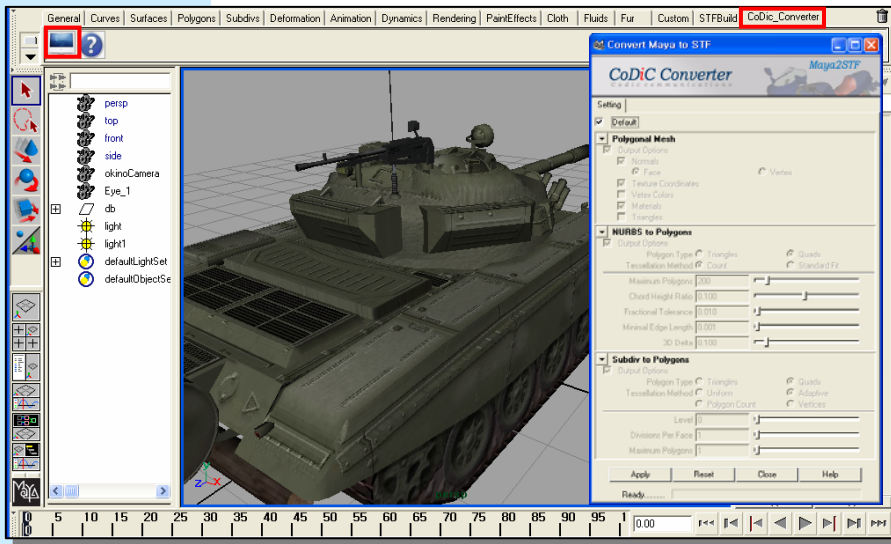
- Click 'loaded' and 'auto-load' check boxes beside the "CodicExporter.mll" plug-in.



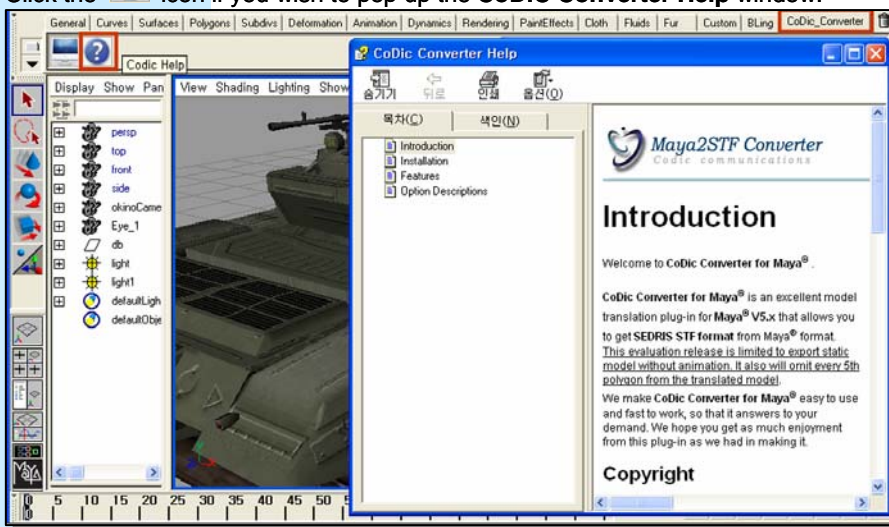
- If you click 'loaded' check box beside the "CodicExporter.mll" plug-in, CoDiC_Converter shelf will appear at "Shelves" tab



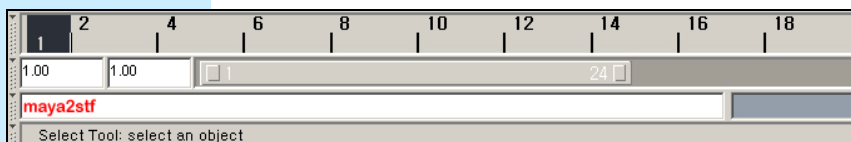
- Click the  icon if you wish to pop up the **CoDiC Converter for Maya®** dialog box.



- Click the  icon if you wish to pop up the **CoDiC Converter Help** window.



- To display the **CoDiC Converter for Maya®** dialog box, Type "**maya2stf**" in Maya® Command Line.



Features

This section describes which Maya[®] entities are exported by **CoDiC Converter for Maya[®]**.

- **Geometry**

Polygonal mesh and NURBS surface will be exported from Maya[®], along with these mesh attributes

- ✓ Face / Vertex Normals
- ✓ Vertex Colors
- ✓ Vertex (U,V) Texture Coordinates
- ✓ Materials, assigned either to the mesh node itself or to individual polygons

In addition, all NURBS surfaces will be converted to polygonal meshes during the export phase.

- **Materials**

The following Maya[®] material parameters will be mapped to equivalent material parameters in SEDRIS STF format.

- ✓ Blinn, Lambert and Phong Shader
- ✓ Ambient, Diffuse, Emissive and Specular Color
- ✓ Transparency

- **Texture Mapping**

- ✓ JPEG and IFF format

- **Animation** (This beta version does not support this feature)

The following animation channels are converted into the SEDRIS STF animation format.

- ✓ Bone / Joint animation
- ✓ Skinning animation
 - This channel is converted to CoDiC's own format , as SEDRIS API does not support this feature.
- ✓ Extract specific frame range where you want.

- **Maya[®] DAG Hierarchy will be mapped to STF Hierarchy Structure.**

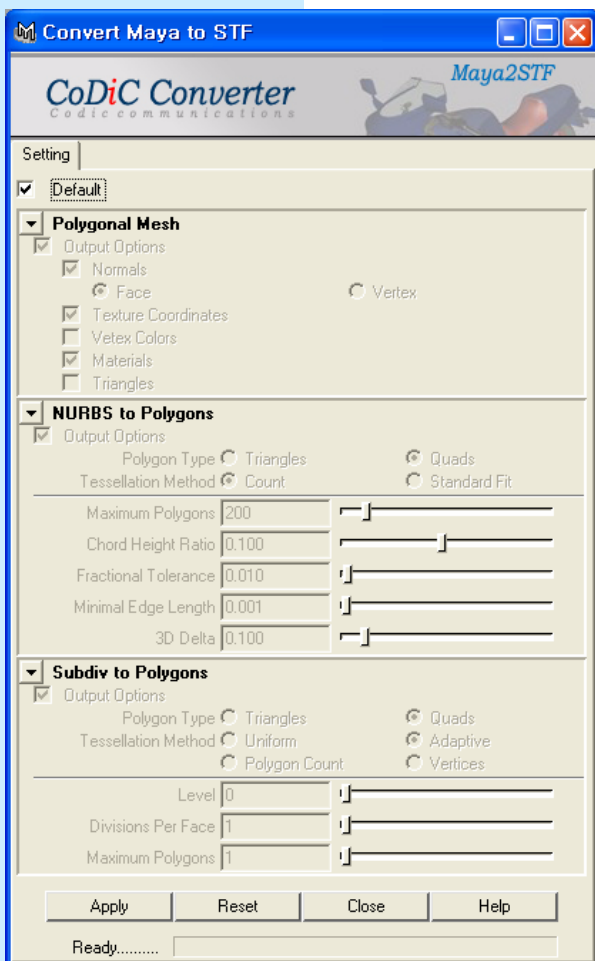
- **The instanced geometry will be reused after storing in DRM Model Library.**



Option Descriptions

The following sections describe the options on the CoDiC Converter for Maya[®] dialog box. This dialog box controls how Maya[®] Model is converted from Maya[®] into SEDRIS STF format.

- To load the CoDiC Converter for Maya[®] plug-in module, Click 'loaded' and 'auto-load' check boxes beside the "**CodicExporter.mll**" in the 'Plug-in Manager...' dialog box.
- To display the **CoDiC Converter for Maya[®]** dialog box, Type "**maya2stf**" in Maya[®] Command Line.



- **Default**

If this checkbox is checked, conversion options are set as the following default values.

Polygonal Mesh Output Options

Face Normal

Texture Coordinates

Materials

NURBS to Polygons

Triangle Polygon

Tessellation is set as Maya[®] default tessellation parameters

Subdiv to Polygons

Quads Polygon

Tessellation is set as Maya[®] default tessellation parameters

- **Apply**

If this button is clicked, 'Save As Window' will pop up. After you type a file name, the Maya[®] data is exported to SEDRIS STF format according to adjusted value of options.

- **Polygonal Mesh**

- ✓ **Output Options**

If this checkbox is checked, mesh will be exported.

- ✓ **Normals**

If this checkbox is checked, face normal or vertex normal will be exported along with the mesh

- ✓ **Texture Coordinates**

If this checkbox is checked, (u,v) vertex texture coordinates will be exported along with the mesh.

✓ **Vertex Colors**

If this checkbox is checked, all the colors assigned to each and every vertex will be exported along with the mesh.

✓ **Materials**

If this checkbox is checked, materials will be exported along with any associated texture maps.

● **NURBS to Polygons**

✓ **Output Options**

If this checkbox is checked, NURBS surface will be exported.

✓ **Polygon Type**

All NURBS surfaces will be converted to polygonal meshes during the export phase.

Triangles

If this option is enabled, NURBS surface will be converted to triangle polygon mesh.

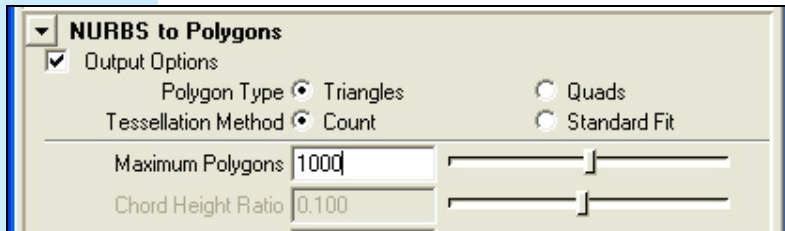
Quads

If this option is enabled, NURBS surface will be converted to quad polygon mesh.

✓ **Tessellation Method**

Count

This Tessellation Method uses the Count slider to determine how many polygons the surface can be tessellated into.



Standard Fit

Standard Fit is "adaptive" tessellation, meaning that the following options are used to determine when to stop the tessellation.

Chord Height Ratio

The sub option is the ratio between the maximum distance of the curve from the polygon edge used to approximate it and the chord length. The chord length is the linear distance between two polygon vertices. Valid values range between 0 and 1, where larger values result in fewer polygon vertices.

Fractional Tolerance

The sub option determines the degree of accuracy maintained between the original surface and the interpolated polygonal surfaces. The default is to be accurate to within 0.01 units, where a unit refers to

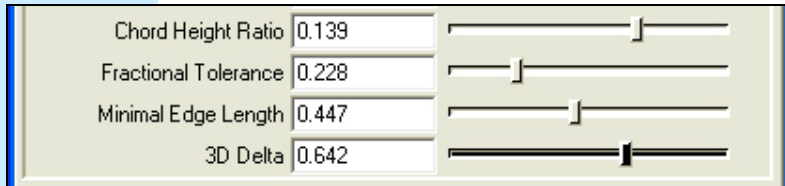
the current unit of linear measure.

Minimal Edge Length

The sub option sets the minimum length of the edges of the triangles or quads that are created.

3D Delta

The sub option determines the 3D spacing for U and V isoparms on a surface that makes up the initial grid for the tessellation.



- **Subdiv to Polygons**

- ✓ **Output Options**

If this checkbox is checked, Subdivision will be exported.

- ✓ **Polygon Type**

All Subdivisions will be converted to polygonal meshes during the export phase.

Triangles

If this option is enabled, Subdivision will be converted to triangle polygon mesh.

Quads

If this option is enabled, Subdivision will be converted to quad polygon mesh.

- ✓ **Tessellation Method**

Uniform

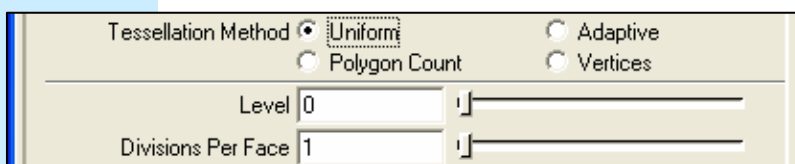
1 face will tessellate into approximately: $2 * 4^{(\text{depth}-1)} * \text{samples}^2$ triangles in the uniform case.

Level

The depth at which constant-depth tessellates the surface.

Divisions Per Face

The number of samples per face.



Adaptive

This Tessellation Method uses the Division Per Face slider to determine how many polygons the surface can be tessellated into.

Divisions Per Face

The number of samples per face

The screenshot shows a control panel for tessellation. At the top, 'Tessellation Method' has three radio buttons: 'Uniform', 'Polygon Count', and 'Adaptive'. The 'Adaptive' radio button is selected. Below this, there are two rows of controls. The first row has a 'Level' input field with the value '0' and a slider to its right. The second row has a 'Divisions Per Face' input field with the value '1' and a slider to its right.

Polygon Count

This Tessellation Method uses the Maximum Polygons slider to determine how many polygons the surface can be tessellated into.

Polygon Count

The maximum number of polygons at which by polygons tessellates.

The screenshot shows the same control panel as above, but with 'Polygon Count' selected as the 'Tessellation Method'. The 'Level' and 'Divisions Per Face' controls remain the same. A new control, 'Maximum Polygons', is added with an input field containing the value '1' and a slider to its right.

Vertices

This Tessellation Method uses Vertices slider to determine how many polygons the surface can be tessellated into.

Level

The depth at which constant-depth tessellates the surface

The screenshot shows the control panel with 'Vertices' selected as the 'Tessellation Method'. The 'Level' control is present with a value of '0' and a slider. The 'Maximum Polygons' control is no longer visible.

- **Reset**

This button initializes the value of all options.