

Welcome to the Gumption PlugWare Plug-in catalog $\label{thm:power}$ The Reference Guide for extending the power of CINEMA 4D $^{\scriptscriptstyle TM}$

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Welcome to Gumption!

As a partner company of MAXON Computer, we're proud to introduce you to GUMPTION (http://www.gumption.de) the integrated service for the world of C.O.F.F.E.E. plug-ins - the additions that extend the power of the professional's 3D graphics environment: $\text{CINEMA 4D}^{\text{TM}}.$

GUMPTION will provide every information and service related to C.O.F.E.E. plug-ins to users who are looking for additional features for CINEMA $4D^{\rm TM}$ as well as to developers who want to create new plug-ins.

As for users interested in extending the features of CINEMA $4D^{\rm TM}$, GUMPTION will host the most comprehensive database that offers detailed and the most up-to-date information about all the available plugins with extensive search capabilities and instant downloads.

As for users who want to create their own plug-ins using the C.O.F.F.E.E. programming language, GUMPTION provides asstance during their entire development cycle - no matter if you're new to programming or a NASA software engineer blessed with a bunch of PhDs. In a nutshell, GUMPTION provides every developer with everything you need to plan, write and distribute C.O.F.F.E.E. plug-ins. In the stage of planning you'll be able to grasp ideas for new plug-ins as well as an overview over the worldwide C.O.F.F.E.E. plug-in market i.e. what's already available and what is the world begging for. In the stage of actually writing plug-ins GUMPTION is the place to get the official Software Development Kit (SDK) from. To enable rapid development you'll also find GUMPTION to be the source for sample code and hands-on-guides to act as entry points as well as to help you thru the most various programming problems. After your plug-in is ready to go GUMPTION will list it in the offical plug-in database and optionally handle marketing and sales if you want to sell your plug-in as a commercial product.

And the good news: basically developing plug-ins for CINEMA $4D^{\rm TM}$ is free! In cooperation with MAXON we offer the C.O.F.F.E.E. Home SDK with unlimited functionality free of charge and the C.O.F.F.E.E. Professional SDK with additional integrated compiler and extended technical reference manual for a registration fee of \$99. The Home SDK's idea is to provide everyone with a tool who wants to write plug-ins for CINEMA $4D^{\rm TM}$. The Professional SDK is the product of choice for developers who want to create commercial plug-ins which perform in greater speed and prevent their source code from being extracted directly or from reverse engineering.

All these features and further information can be accessed thru the GUMPTION.de Web Server (http://www.gumption.de) which hosts the official C.O.F.F.E.E. SDK, documentation, sample code and the plug-in database. In addition to the web service we want to point out that we're running GUMPTION is a living company which means that we will always take care of all our stakeholders' needs personally. In that sense our global philosophy is to integrate them into the company's evolution in order to create the best possible service for the world of C.O.F.F.E.E. plug-ins.

About this catalog

This catalog offers you an overview of all plug-ins currently listed in the official plug-in database. To obtain a plug-in contact the GUMPTION Web Server (http://www.gumption.de) and visit the Plug-In Database. Should you need a plug-in which doesn't exist, yet, just proceed to the Information Forum on our web server and enter your suggestion for a new plug-in or join the Developer Discussion and talk to the developers directly. This way you make you can get involved and make your own contribution to the world of C.O.F.F.E.E. plug-ins.

So come on in and join the Club...

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Axes Centre

Developed by Michael Kearns Plug-in is free of charge

These two plugins (axes2obj & obj2axes) allow you to centre the axes on the object, or the object on the axes, if you have moved the axes independently.

Ballnstick Pro 1.2

Developed by Mikael Sterner of XLent Plugs

Price: \$50

Attaches a ball-object to every point and a stick-object to every edge of an object. Useful to create ball-and-stick structures or to render objects as a grid (like the old "Surface render").

BioVision Import V 1.5

Developed by Christian Losch of Maxon Computer GmbH

Price: \$99

With this plug-in you can import the data which was record by a BioVision System. For example a dancing woman, which was connected to a laser motion detecting system. Import Format: BVH and BVA/VPM. Also you can use this plugin for importing Lifeforms animations. Included are two aditional plugins. ReduceKeys (only available with this package) reduces effectivly



the huge number of motion keys for easy manual manipulation. CopyAnimation lets you exchange motion capture data in seconds without the need to adjust or rebuild your object.

Bolt v1.0

Developed by Benjamin Johnson

Price: \$25

Bolt creates an animated "lightning bolt" effect, using a custom algorithm that mimics the way natural lightning follows its path. You have complete control over the shape, size, duration, and complexity.

Bumps

Developed by John Detch of 3D Gear Plug-in is free of charge

This shader creates spherical bumps for use in the bump channel in particular, but can be used anywhere.



BunnyShop

Developed by John Detch of 3D Gear Plug-in is free of charge

This macro is designed to help users duplicate large numbers of objects using a grid based concept. It will create a large number of objects.

Dialog 1: Number X: The number of objects to be placed in the X direction. Number Y: The number of objects to be placed in the Y direction. Number Z: The number of objects to be placed in the Z direction. Rand Rotation X: The maximum possible number of degrees of rotation in the X direction. Rand Rotation Y: The maximum possible number of degrees of rotation in the Y direction. Rand Rotation Z: The maximum possible number of degrees of rotation in the Z direction. Rand Scale: Percentage of randomness in the scale of each object. Seperate Children: If you have a group selected and want to randomly place one of the children at each grid point instead of the group, set this to 1.

Dialog 2: Offset X: The X spacing between the grid points. Offset Y: The Y spacing between the grid points. Offset Z: The Z spacing between the grid points. Rand Offset X: The maximum random offset for each object in the X direction. Rand Offset Y: The maximum random offset for each object in the Y direction. Rand Offset Z: The maximum random offset for each object in the Z direction. Rand Seed: Change this to change the start of the random number generator.

CineHaarSF

Developed by Stefan Bauer of Bauer Computergrafik Plug-in is free of charge

Makes plug-in with graviation and random features.



CopyAnimation

Developed by Christian Losch of Maxon Computer GmbH Plug-in is free of charge

This plugin allows you to easily transfer a complex animation from one hierarchical model to another. Simply type in the source and the destination object and all tracks and sequences will be copied. Attention: This works only if both objects have the same hierarchical structure. All tracks of the destination object will be erased before copying. And also be careful to use different names for the source and the destination object. Christian Losch (C) MAXON Computer GmbH 1998

DistCalc.cof

Plug-in is free of charge

Calculate distance between camera & object. It's useful when you want to set depth of field.

DPI

Developed by Christian Losch of Maxon Computer GmbH Plug-in is free of charge

Calculate pixel resolution from DPI and paper size.



EqualTangents

Developed by Christian Losch of Maxon Computer GmbH Plug-in is free of charge

Set all selected points of an hermite spline to the same lenght, defined by the user.

FACT Loader

Developed by John Detch of 3D Gear Plug-in is free of charge

Electric Image FACT File Importer/Exporter

Fillet

Plug-in is free of charge

Create a fillet blend, with specified radius, between two polygon objects. Bonus plugs: Inflate and Spline of Intersection.



FindAndReplace

Developed by Christian Losch of Maxon Computer GmbH Plug-in is free of charge

Find and Replace phrase of object names.

GenerateKeys

Developed by Christian Losch of Maxon Computer GmbH Plug-in is free of charge

Especially game designers want to use VRML files for their work. But VRML doesn't know anything about IK or Align to Path animations. So this plugin duplicates the selected object and generates for each child object a poisition, scale and direction key for every frame of the animations. If you save this object in VRML another VRML viwer can exactly play the animation. Christian Losch (C) MAXON Computer GmbH 1998

Grate

Developed by John Detch of 3D Gear Plug-in is free of charge

Shader for creating Grates.



Hanging Rope 1.2

Developed by Mikael Sterner of XLent Plugs

Price: \$50

Creates and animates a rope spline hanging between two control points. A third control point can be applied to make the rope swing. The spline follows the catenary curve proven to be the formula for a hanging rope in reality.

Helix 1.2

Developed by Mikael Sterner of XLent Plugs

Price: \$50

Creates and animates a spline along another spline. Control the radius and the number of rotations of the helix. You can also scale the spline towards the end or have a small non-helix part in the start and the end. (new in 1.2)

Julia Shader

Plug-in is free of charge

A fractal Julia shader



MapTemplate2

Developed by Yoshihiro Manabe

Price: \$30

Create template image for texture mapping. This plug-in can create template for Spherical or Cylindrical mapping.

Mikael's Magic Bundle 1.2

Developed by Mikael Sterner of XLent Plugs

Price: \$399

A bundle of all my seven plugs: MSA 1.2, Splinerounding 1.2, Ballnstick Pro 1.2, Torpedo 1.2, Helix 1.2, Morphkey 1.2 and Hanging Rope 1.2. You get \$11 rebate from the original price.

Morph Master

Developed by Christian Losch of Maxon Computer GmbH Plug-in is free of charge

You can specify up to 5 morph targets in 1 key. The morph amount for each target can be set individually. Allows smooth mixing between different expressions e.g. angry face and happy face. You get thousands of new expressions out of 10 morph targets. The sample file shows a very simple example of a speaking mouth.



Morphkey 1.2

Developed by Mikael Sterner of XLent Plugs

Price: \$50

Normally it is a lot of work to morph an object in XL. Morphkey automates the process which saves a lot of time. I can't live without it! Can you?

MPControl

Developed by Christian Losch of Maxon Computer GmbH Plug-in is free of charge

Simple plugin wich lets you switch off and on the use of multiple cpu when rendering. Can be useful if you only want the raytracer to work with 1 cpu while working with another program. Makes sense only when you have a machine with more than 1 cpu!

Multiple Splineattach 1.2

Developed by Mikael Sterner of XLent Plugs

Price: \$80

Let's you attach one or several objects in a row to a spline. Just select a group and enter some settings and you can easily get a more flexible loft or an automatic chain. Attach a single object and create keyframes for advanced motion. Only your imagination sets the limit! Many options are available.



Power Magnet

Developed by John Detch of 3D Gear Plug-in is free of charge

This C.O.F.F.E.E. script turns any object or multible objects into a magnet tool affecting a polygonal object. Positive numbers pull at the object's points, Negative numbers push at the object's points.

Quaternion

Developed by Christian Losch of Maxon Computer GmbH Plug-in is free of charge

Animation plugin for improved rotation animation. Allows smooth rotations between keys, fully independent of a specific coordinate system. Therefore you have no singularities as with Euler angles (e.g. a pitch of 90 degrees allows unlimited combinations of heading and bank for specifying the same orientation) For each key you can specify a rotation axis and a rotation angle. There are the following limimits at the moment: * The interpolation is only linear, there will be some kind of spline interpolation in the future. * The plugins ignores time curves. This will be working when the SDK allows full access to all animation parameters.



RAW Files

Developed by Christian Losch of Maxon Computer GmbH Plug-in is free of charge

Simple Loader/Saver for POV RAW files.

Rename

Developed by Michel Goubet Plug-in is free of charge

Rename and renumber objects (in a hierarchy or alone)

ResolveLoops

Developed by Christian Losch of Maxon Computer GmbH Plug-in is free of charge

Resolve a loop sequence in a sequence without loops. You can select a sequence, track or an entire object.



Reveal Tangents

Developed by Christian Losch of Maxon Computer GmbH Plug-in is free of charge

Set all selected zero tangents to non-zero values.

Roll It

Developed by Benjamin Johnson

Price: \$20

Roll It is a plugin which assists in determining how an object should rotate as it moves along a path. If you've ever tried to animate a ball rolling along a floor, you've probably struggled trying to get the rotation just right. Well, no more! With Roll It, this process is now pain-free.

Screen Shader

Developed by John Detch of 3D Gear Plug-in is free of charge

Screen Shader.



Select Row/Column

Developed by John Detch of 3D Gear Plug-in is free of charge

Using the edge tool to select a single edge on a polygonal model. Then use the plugin (Tools->Plugins->Select Row/Column).

Selective Subdivide

Plug-in is free of charge

Allows subdivision of a selected set of points in a polygon mesh, with proper transition at the boundary.

SelectWithSpline

Developed by Yoshihiro Manabe

Price: \$20

With this plug-in, you can select non-rectangle area.



ShrinkWrap

Plug-in is free of charge

Wraps a closed mesh, like a rubber sheet, around a group of perfect spheres. Sort of like metaballs, only different.

Sierpinski's Shader

Developed by John Detch of 3D Gear Plug-in is free of charge

This is a shader designed to build a rough estimate of a mathematical idea called Sierpinski's Carpet.

SmoothMesh

Developed by Yoshihiro Manabe

Price: \$20

This plug-in gives a smooth to Polygon Object. Before you select the SmoothMesh command, please select points you want to smooth with point tool. This plug-in tends to shrink the object. So if you don't want to move surface edge (that means the edge which contribute to only one polygon), set "Protect edge" parameter to 1.



Spark

Developed by Benjamin Johnson

Price: \$20

Spark creates an animated "Jacob's Ladder" type effect. You have complete control of the diameter of the bolt, the length, the complexity, color, and amount of movement.

Spark, Roll It and Starfield Bundle

Developed by Benjamin Johnson

Price: \$50

This package contains Spark, Roll It and Starfield plug-ins. Please see the individual plug-ins in the list for more info and demos for each.

Spiral

Plug-in is free of charge

An animated spiral texture. The user can decide the color, the size, the direction and the speed of the spiral.



Splinerounding 1.2

Developed by Mikael Sterner of XLent Plugs

Price: \$80

Rounds or offsets one or many splines. Together these two functions provide a useful modelling tool. You can easily create rounded or bevelled objects or create a bottle with true thickness from a "single walled" spline.

SplineTools

Developed by John Detch of 3D Gear Plug-in is free of charge

This is a set of tools to help create the splines required to stitch object together.

Starfield

Developed by Benjamin Johnson

Price: \$20

Starfield creates a 3D spherical starfield. You have complete control of the size of the stars, their color, and the size of the field's diameter itself.



SteerMaster

Developed by Christian Losch of Maxon Computer GmbH

Price: \$20

Often it is difficult to estimate the right angles for wheels when driving a curve because the angles of the left and the right wheels are different and depend heavily on the dimensions of the car. This plugin simulates the correct steering angles of the wheels of a car when driving. It was designed for a driving school to show the learner the behaviour of the car. The plugin automatically animates the front wheels, the axle and the track rod.

Strut

Developed by John Detch of 3D Gear Plug-in is free of charge

This is a shader I wrote so that I could build bridges & such using cubes & have them rendered as if they were made with struts.

SubDivMaster

Developed by Yoshihiro Manabe

Price: \$50

This is an enhanced subdivide tool. You can do selective, smooth, directional subdivide.



Sync Plug-in

Developed by André Koppany of GUMPTION - PlugWare Plug-in is free of charge

You can choose one object which an animation track. Any changes of the position of the sync object will automatically change the object self too.

Torpedo 1.2

Developed by Mikael Sterner of XLent Plugs

Price: \$50

This plug makes it possible to use a lensflare as a torpedo by automatically rotating and scaling it depending on its distance from the camera (a tedious work manually).

Waves

Developed by Michel Goubet Plug-in is free of charge

Waves animation for polygon objects (a plane). An other object can control the position of the waves



WindowSize Plug-in

Plug-in is free of charge

It let's you to change the Editor window size to any custom size you want. It creates a new custom preference file with the new, user-specified Edxitor window size. Say, you want 640x480 Editor window to work with, just type the dimentions into the plug-in's window, specify the file name for the new preference file..and restart XL from that new preference file - you'll have the desired Editor window size. NOTE: The versions for Mac and Windows are different!!! Make sure to download the right one for your platform.