### Plugin menu

- **Corona Sky** - creates Sky object with attached *Corona Sky* tag
- **Corona Sun** - creates *Corona Sun* object
- **Corona Light** - creates *Corona Light* object
- **Create Camera** - creates Camera with attached *Corona Camera* tag
- **About** - show About dialog
Render settings

Main settings

- **Progressive**
  Which render engine will be used. Currently, only the bucket and progressive engines are considered production ready, support all of the features, and perform optimally.
  - Progressive is the most efficient one and is therefore set as default.
  - Bidir/VCM is an experimental engine at this point, being a bit slower in general, but also being able to resolve complex light situations such as caustics faster than Progressive engine and in an unbiased manner.

- **GI/AA balance**
  The amount of GI samples per each AntiAliasing sample.
  Higher values will increase sampling of Global Illumination, resulting in cleaner indirect lighting, glossy reflections, refractions and translucency. Lower values will increase sampling of AntiAliasing and therefore improve quality of fine geometry edges, Depth of Field, and Motion Blur.
  Setting this value under 2 or above 64 is not recommended.

- **Light samples multiplier**
  The amount of direct lights samples per each GI sample.
  Increase this value in scenes where there is visible noise in the direct lighting. Default value of 2.0 works well in most cases.

- **Max sample intensity**
  The ratio between rendering performance and physical accuracy.
  Lowering it will result in clamping of the reflection and refraction caustics brightness, significantly reducing noise at the expense of bias. Increasing this value will reduce amount of clamping but also increase amount of noise. Default value of 20 works well in most scenes.
  Setting this value to 0 enables special unbiased mode where no clamping will occur. This mode will however often introduce fireflies that may never converge when using Progressive or Bucket render engine.
- **Max ray depth**
  The maximum possible number of light bounces.
  Lowering this value slightly improves performance, increasing it slightly improves accuracy. The change in Corona is however very small compared to other renderers, so keeping the default value is advised.

- **Primary solver**
  Which Global Illumination solver will be used for primary (first) light bounce.
  - None disables GI, leaving only direct lighting.
  - Path Tracing is an accurate brute force solution

- **Secondary solver**
  Which Global Illumination solver will be used for secondary (second, third, ...) light bounces.
  - None disables secondary GI, leaving only one bounce of GI.
  - Path tracing is an accurate brute force solution that is less efficient in scenarios with lots of indirect bouncing (e.g. interior scenes), or generally scenes with complicated paths between lights and the rendered surfaces. Therefore it is suggested to use this solver mostly in exterior situations.
  - HD Cache is a fast, interpolated, slightly less accurate solution, that works best in scenes with lot of light bouncing. Therefore it works best in interior scenes. HDcache may be inefficient in scenes with complicated geometry and non-complex lighting, such as grass fields, exterior nature, ... Beware that the current implementation of HDcache is prone to animation flickering in some scenarios.

- **Screen size**
  When selected, displacement tessellation will be performed adaptively in the screen space.
  This is usually a lot more efficient. Quality value sets the number of pixels each tesselated triangle spans in the image. Lower values will improve displacement quality at expense of memory usage and preprocessing time.

- **World size**
  When selected, displacement tessellation will be performed absolutely in the world space.
  This method is usually inefficient except for special cases (to prevent popping artifacts in animations). Quality value sets the size of each tesselated triangle in the world units. Lower values will improve displacement quality, at the expense of memory usage and render preprocessing time. Beware that setting this value too low and using this method on large objects may consume all the available memory and result in a crash.

- **Max subdiv per polygon**
  The maximum amount of displacement subdivisions performed on a single polygon. You can use this to limit unnecessarily dense displacement subdivision in some areas and therefore save some time and memory.
Exposure and color mapping

- **Exposure**
  Positive values increase exposure, negative values decrease it.

- **Highlight compression**
  This option compresses the highlights of the output image to reduce/remove burned out areas. Default value of 1.0 means output will be completely linear. Increasing the value removes burned out areas, decreasing it amplifies highlights. Beware that when composing render elements together, output must be LINEAR (1.0) to get the correct result.

- **Contrast**
  Values greater than 1 increase image contrast. Beware that when composing render elements together, output must be LINEAR (1.0) to get the correct result.

- **White balance**
  Sets the white balance point using Kelvin temperature scale. Often used in photography.

- **Color channels output**
  Multiplies value of R, G or B channels. Can be used to tweak color balance of the output image.
Progressive rendering

- **Time limit**
  The time limit after which the rendering will stop.

- **Render passes**
  The number of passes after which the rendering will stop. Each pass performs one antialiasing sample per pixel and a variable amount of secondary samples set by the GI/AA balance parameter.

**Actions**

- **Reset to default**
  Sets all render settings to default values
Global camera settings, used when no camera is selected (i.e. when using editor camera). Otherwise, its setting is overridden by settings in Camera object and Corona Camera tag.

- **F-stop**
  Photographic parameter - This parameter affects the Depth of Field effect. Decreasing this value increases the Depth of Field effect amount and vice versa.
  Standard values used in photography are: 0.7 - 1 - 1.4 - 2 - 2.8 - 4 - 5.6 - 8 - 11 - 16 - 22 - 32

- **Shutter speed**
  Photographic parameter - This parameter affects the length of the Motion Blur effect. The input value is reciprocal of the result, so to set shutter speed to 1/125 s, input 125. Decreasing this value increases exposure and Motion Blur length and vice versa.

- **Sensor width**
  Photographic parameter - This parameter affects the amount of Depth of Field effect. Increasing this value increases the Depth of Field effect size. This is useful for matching other parameters and output to various real world cameras.
  Typical values are 35mm for full-frame digital SLR and 25mm for APS-C digital SLR.

- **Aperture shape**
  - Circle - When selected, an idealised, circular aperture is used for generating the Depth of Field effect.
  - Bladed - When selected, the Depth of Field effect is generated using a polygonal aperture shape with given number of sides (blades).
    - Blades - The number of blades used to generate DoF effect when using Bladed aperture shape.
    - Rotation - The rotational offset of camera aperture shape when using Bladed aperture.

- **Enable camera**
  Enables motion blur generated by the movement of camera. For a complete Motion Blur solution you need to enable geometry Motion Blur as well.
- **Enable geometry**
  Enables motion blur generated by the movement of scene geometry. For complete Motion Blur solution you need to enable camera Motion Blur as well.

- **Transformation segments**
  The quality of the non-linear rigid (transformation) motion blur. Increasing this value increases the quality at the expense of some rendering speed and memory usage. Setting this value too low can result in movement stutter and/or artifacts.

- **Frame offset**
  Offsets the time interval out of which the Motion Blur effect is generated. The value is defined in frames, with 0 meaning that the center of the interval is exactly in the current frame, -1 meaning that the entire interval happens just before the current frame, and 1 meaning the entire interval happens just after the current frame.

**Secondary GI: HD cache**

- **Precomp density**
  The number of precomputation passes performed before the rendering. Increasing this value can make the precomputation phase longer, but the resulting cache will be more complete and can speed up the rendering in the long run.

- **Record quality**
  The quality of individual HD cache records. Increasing this value increases accuracy of the HD cache records and can eliminate flickering in animation, but makes the precomputation longer.

- **Max records**
  Limits the maximum number of records in the cache. Too low value can cause insufficient coverage of the scene with records, too high value can produce too dense cache, resulting in too big overhead. Default value works well in almost all scenes.

- **Do previz**
  Shows the visualization of the cache during precomputation.
- **Interpolation accuracy**
  Defines sensitivity of the cache to different error factors (how much can the interpolated point differ from the cache record point when interpolating).
  - Direction - Directional sensitivity determines how much can the directions of interpolated and cached ray differ on glossy surfaces
  - Position - Position sensitivity determines how much can the positions of interpolated and cached point differ
  - Normal - Normal sensitivity defines how much can the normals differ between interpolated and cached point

**VFB settings**

- **VFB Type**
  Sets the Frame buffer type used for rendering.
  - Cinema4D Picture Viewer - Native C4D picture viewer

- **Image Filter Type**
  Image filters reduce noise and remove moire in the image by slightly blurring the picture. "None" disables the filtering, while other filters give comparable results, with "Tent" being the most reliable and hence used by default

- **Width**
  The radius of the filter interpolation in pixels. Larger value will reduce the noise at the cost of image sharpness and vice-versa. The default value of 1.5 works fine in most cases.

- **Internal resolution**
  Internally multiplies the rendered resolution by a given factor. Using value higher than 1 increases memory consumption significantly, but when used, it is possible to antialias very bright edges of lights. Use default value of 1 unless light edges antialiasing is needed, in that case set it to 2.

- **Render stamp**
  When enabled, a text with render informations will be added to the bottom right corner of the rendered output. Click the "?" button to see the list of all available variables.
Corona Material

Properties

- **Properties**
  - Direct - whether material is visible directly from camera
  - Reflections - whether material is visible in reflected rays
  - Refractions - whether material is visible in refracted rays
  - Normal - whether material is visible for diffuse light transport
  - Shadows - whether material casts shadows

- **Rounded corners** - simulates rounded corners
  - Radius - radius
  - Samples - number of samples used for normal estimation
Refraction
Translucency
Emission
Bumpmapping
Displacement
Corona Light