Migrating Older Scenes to Showcase 2013

With Showcase 2013 a lot of things have changed that affect the visuals of your scene when importing 2012 (or earlier) files.

It may almost seem like only the geometry from older files is retained when opening them with 2013, however there are good reasons for this; Showcase delivers better, more predictable visuals thanks to these changes to visual styles and lighting environments.

This document describes important information to know when opening older files with Showcase 2013.

Lighting environments

Lighting environments now use a single HDR map as input to generate image-based lighting (IBL) instead of three separate maps. This simplifies environment creation and enables users to access more content directly available on the web.

Standard shipping environments

When opening 2012 scenes, environments used in the scene are automatically replaced with their new versions in 2013. Any changes you may have made to these environments will have to be redone.

Custom environment conversion

Custom environments retain their backdrop, but the lighting by default is replaced with generic lighting from the library. You can manually update the lighting by pointing lighting HDR in the environment properties to the original HDR that was used to create the environment in earlier versions.

If the original HDR file is no longer available, you can alternatively use the reflection map of the environment and set the Exposure value to “Interior: Daylight and Artificial” which may simulate the lighting situation from earlier versions. One drawback to this workaround is that any additional lights placed in the scene may not behave as expected; for example, accent lights may look brighter than expected in daylight situations and darker than expected in nighttime or interior lighting scenarios.

Lighting

Accent light behavior has changed

Accent lights (formerly known as scene lights) now have an “Intensity” property that enables them to light scenes in a more accurate way. If you set this property to “Constant,” the light will simulate the physically correct effect in each lighting environment. The same intensity light in a

night environment will appear to be brighter than in a daylight lighting environment; think of it like the effect of a flashlight at night and by day.

Lights imported from older scenes will continue to behave as in earlier versions. They will always brighten the objects they are associated with no matter what lighting environment they are in. This behavior is always available to you by setting Intensity to “Environment dependent.”

Materials

Showcase Materials

Materials have been updated to reflect a more physically correct display model.

Material lighting overrides

All lighting overrides have been removed to avoid unpredictable material appearances between different lighting environments. So if the older scene used materials with lighting overrides, the overrides will be removed and the material will appear differently.

Reflection & Highlight parameters

Highlight parameters have been combined with Reflection parameters under the Reflection section of the material properties window. The parameters give a more physically correct appearance and are more intuitive.

When importing 2012 scenes the reflection type may be set to Non-Metallic but should be set to Custom to get a similar look to 2012.

Custom reflection maps

2012 materials using a custom reflection map will appear black. Custom reflection maps are currently unsupported, even though they appear in the Properties window.

Absorbance in Ray Tracing

The transparency absorbance unit has changed from meters to centimeters, which in ray tracing can make objects appear black. Adjust the absorbance value and multiply it by 100 to get the same results.

Additional new properties/functionality

Showcase materials now enables you to tint textures used on the color channel.

Reflections can be blurred in all visual styles (where applicable) which enables you to create material appearances that were not possible before. This property is resource-intensive and can impact ray tracing performance.

Autodesk Materials

The only change to Autodesk Materials is the addition of a new tint option. This does not affect any Autodesk material imported from a previous version.

Extended Showcase Materials

The extended material library is currently unavailable. This affects any scene from earlier versions that used extended materials, since as the texture files will be missing.

To fix the problem users will have to either update the missing textures manually or copy the Extended Materials directory to the new 2013 installation location without any XML files in the folder.

For example, copy:

C:\Program Files\Autodesk\Showcase 2012\support\ExtendedMaterials

To:

C:\Program Files\Autodesk\Showcase 2013\support\ExtendedMaterials

Note: XML files in the 2012 folder are not calibrated to work properly with Showcase 2013, but by copying the textures over, materials will look more complete.

X-Rite Materials

X-Rite materials are currently not supported in Showcase 2013.

Ray tracing

Ray tracing has changed significantly. The old names may still match the new names of the ray tracing settings, but they should be reviewed and reset when entering ray tracing visual style.

Camera changes

Tone Mapping

The Showcase 2013 release uses a full 32-bit linear pipeline throughout the whole application, which in turn requires and enables Showcase to tonemap the final image before it gets displayed on screen.

The main lighting exposures are set and defined in the lighting environments. Using camera properties you can, however, compensate for and overwrite the lighting environments settings globally. This enables you to brighten or darken the image (or individual areas of the image) in shadow or light areas. We have introduced different presets to make it easier for you to choose the look of your scene. By default Showcase can achieve a similar look to 2012, but this can be changed manually to a more physically correct look.

Publishing images

When publishing 2013 scenes to a low dynamic range image file format, Showcase tonemaps the output to represent the image on screen.

When publishing to a high dynamic range image file format, no tonemapping is applied and therefore the image may look different from what is seen onscreen.

Bloom

Bloom values used in 2012 will have to be adjusted to work with the new linear pipeline. Bloom used in 2012 scenes will look incorrect in 2013.

Shots

If you open an older scene in 2013, it is possible that multiple shots will not be publishable as imagery. If this happens recreate the shots and delete the shots that do not publish.