

Assign To:

[Myself]

Edit

Logged in as: brutzman (Don Brutzman - administrator) 2023-10-18 06:52

PDT

Project: X3D

2

Main My View View Issues Report Issue Change Log Roadmap Summary Edit News My Account Logout	Manage	
	Issue #	Jump

View Issue Details [Jump to Notes] [Send a reminder]			[>>]]	[Issue History] [Print]			
ID	Project	Category	View Status	Date Submitted	Last Update			
0001336	X3D	19775-1 (Abstract)	public	2021-01-14 10:13	2022-05-27 08:28			
Reporter	brutzman							
Assigned To	mkamburelis							
Priority	normal	Severity	feature	Reproducibility	always			
Status	confirmed	Resolution	open					
Summary	0001336: 17.4.2 EnvironmentLight - Khronos glTF extension for image based lighting							
Description	Support has been requested for							
	KhronosGroup/glTF/extensions/2.0/Vendor/EXT_lights_image_based https://github.com/KhronosGroup/glTF/tree/master/extensions/2.0/Vendor/EXT_lights_image_based							
	which likely will get implemented as EnvironmentLight							
Additional	Reaction by Michalis Kamburelis:							
Information	Please direct the commenter to https://github.com/michaliskambi/x3d-tests/wiki/Image-Based-Lighting-(EnvironmentLight-node)							
	I am extremely happy about this question, because it's a good question							
	Image-based lighting (in the form of "EnvironmentLight" node) is indeed something I planned, but ultimately didn't find the time to finalize to X3D 4.0. But I still very much want to have it. It is a feature I want to have in CGE, and as such I need X3D nodes for it anyway, and as such I will want to add it to X3D. I expect that after CGE 7.0 release (in March 2021) I will have time to sit to it more.							
	The initial design is there already, and the initial implementation in CGE is done too. But there are still important questions for the design, and important holes in my current implementation.							
	Indeed one of the goals is to make it compatible with https://github.com/KhronosGroup/glTF/tree/master/extensions/2.0/Vendor/EXT_lights_image_based							
	(Feel welcome to quote my answer to the commenter, or in public.)							

Change Status To:

assigned

Monitor

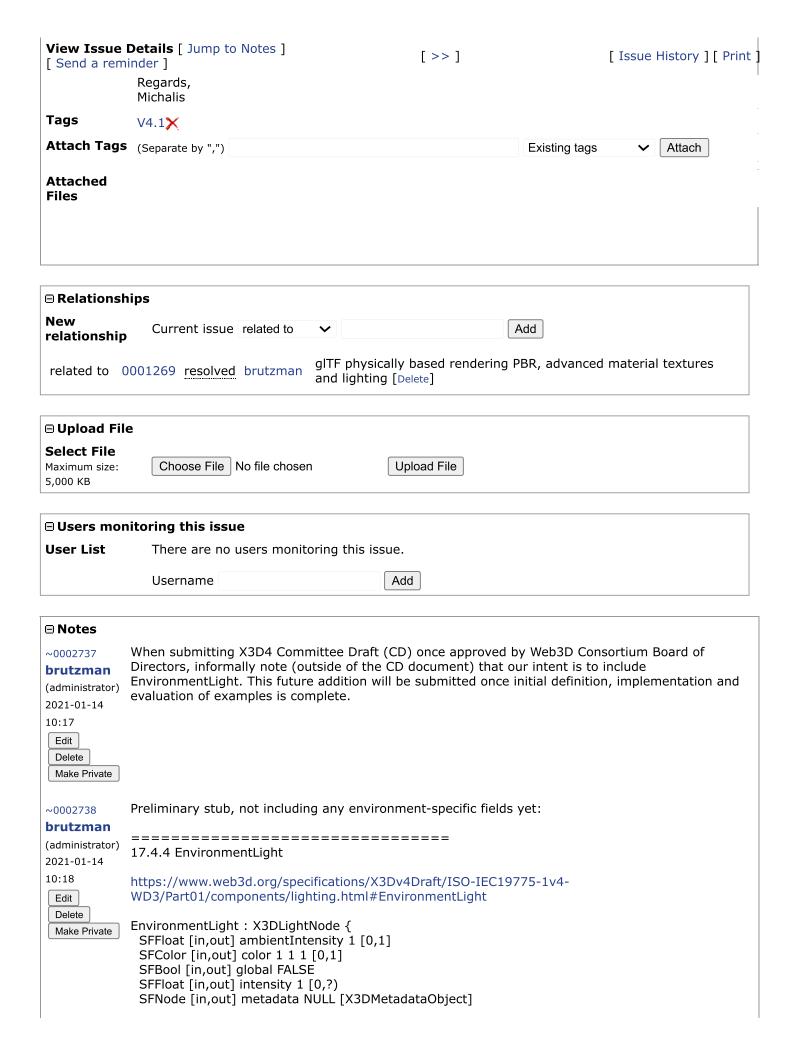
Stick

Clone

Close

Move

Delete



SFBool [in,out] on TRUE SFBool [in,out] shadows FALSE SFFloat [in,out] shadowIntensity 1 [0,1]

This is a preliminary placeholder, these fields and other fields are TBD }

Editors note: inclusion of this node is not guaranteed.

The EnvironmentLight node is under consideration for possible implementation in X3D4 as possible support for Khronos Image Based Lighting in

https://github.com/KhronosGroup/glTF/tree/master/extensions/2.0/Vendor/EXT_lights_image_based

Editors Notes describing work in progress remain fundamentally important for the next specification

~0002746

brutzman

(administrator)

2021-01-30

16:00

Last edited:

2021-01-30

16:01

View 2

revisions

Initial-draft EnvironmentLight node definition checked in, combining fields from X3DOM and Castle

* Mantis [x3d-public] draft EnvironmentLight signature needed http://web3d.org/pipermail/x3d-public_web3d.org/2021-January/014637.html

Recent un-archived email discussion thread appended to prior thread.

Edit

Delete Make Private

Related email thread:

submission to ISO.

Game Engine.

* [x3d-public] Comment of X3D V4, gITF, and Lighting http://web3d.org/pipermail/x3d-public web3d.org/2021-January/014459.html

Further email threads can be found over the past 14 months.

~0002750

Reviewed draft satisfactorily, TODO add preliminary node and field descriptions.

brutzman (administrator)

2021-02-04

10:47



Make Private

~0002764

Need update to versionContent indicating all fields and contained nodes.

https://www.web3d.org/specifications/X3Dv4Draft/ISO-IEC19775-1v4-

brutzman

(administrator) 2021-02-21

13:29



~0002765

brutzman (administrator)

2021-02-21

Last edited:

13:45

2021-02-22

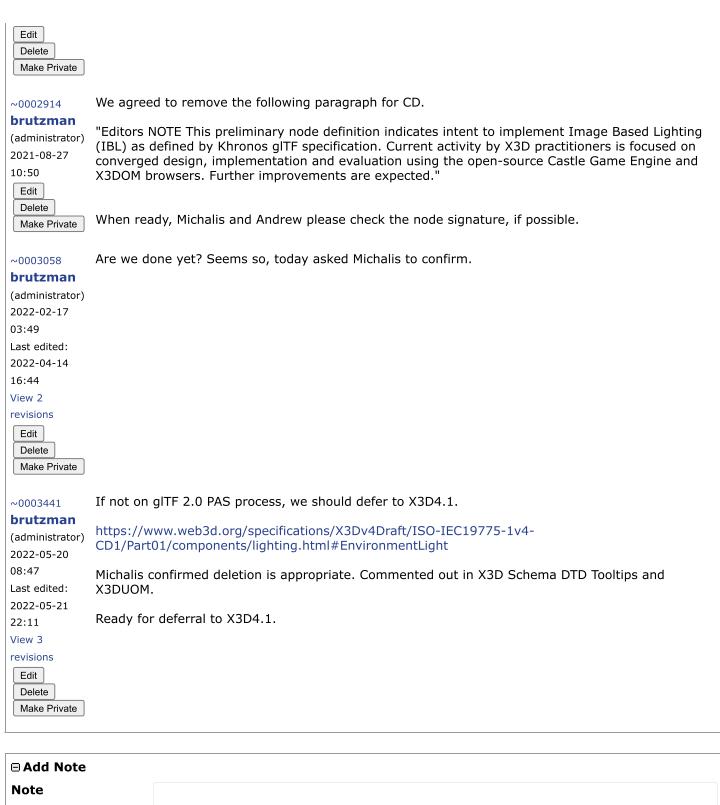
09:05 View 2 revisions

diffuseTexture and specularTexture field type definitions of X3DEnvironmentTextureNode do not match type given elsewhere.

diffuse field is confusingly named and not defined.

CD/Part01/versionContent.html#EnvironmentLight

It is important to minimize ambiguity, hopefully aligning as closely as possible to gITF to avoid misunderstandings.



□ Add Note		
Note		
	li di	
View Status	□ private	
	Add Note	
I		1