

[Skip to content](#)

ViewLayer(bpy_struct)

base class — [bpy_struct](#)

class bpy.types.ViewLayer(bpy_struct)

View layer

active_aov

Active AOV

TYPE:

[AOV](#) , (readonly)

active_aov_index

Index of active AOV

TYPE:

int in [0, inf], default 0

active_layer_collection

Active layer collection in this view layer's hierarchy

TYPE:

[LayerCollection](#) , (never None)

active_lightgroup

Active Lightgroup

TYPE:

[Lightgroup](#) , (readonly)

active_lightgroup_index

Index of active lightgroup

TYPE:

int in [0, inf], default 0

aovs

TYPE:

[AOVs](#) [bpy_prop_collection](#) of [AOV](#) , (readonly)

cycles

Cycles ViewLayer Settings

TYPE:

[CyclesRenderLayerSettings](#) , (readonly)

depsgraph

Dependencies in the scene data

TYPE:

[Depsgraph](#) , (readonly)

eevee

View layer settings for EEVEE

TYPE:

`ViewLayerEEVEE`, (readonly, never None)

freestyle_settings

TYPE:

`FreestyleSettings`, (readonly, never None)

has_export_collections

At least one Collection in this View Layer has an exporter

TYPE:

boolean, default False, (readonly)

layer_collection

Root of collections hierarchy of this view layer, its 'collection' pointer property is the same as the scene's master collection

TYPE:

`LayerCollection`, (readonly, never None)

lightgroups

TYPE:

`Lightgroups` `bpy_prop_collection` of `Lightgroup`, (readonly)

material_override

Material to override all other materials in this view layer

TYPE:

`Material`

name

View layer name

TYPE:

string, default "", (never None)

objects

All the objects in this layer

TYPE:

`LayerObjects` `bpy_prop_collection` of `Object`, (readonly)

pass_alpha_threshold

Z, Index, normal, UV and vector passes are only affected by surfaces with alpha transparency equal to or higher than this threshold

TYPE:

float in [0, 1], default 0.0

pass_cryptomatte_depth

Sets how many unique objects can be distinguished per pixel

TYPE:

int in [2, 16], default 6

samples

Override number of render samples for this view layer, 0 will use the scene setting

TYPE:

int in [0, inf], default 0

use

Enable or disable rendering of this View Layer

TYPE:

boolean, default False

use_ao

Render Ambient Occlusion in this Layer

TYPE:

boolean, default False

use_freestyle

Render stylized strokes in this Layer

TYPE:

boolean, default False

use_motion_blur

Render motion blur in this Layer, if enabled in the scene

TYPE:

boolean, default False

use_pass_ambient_occlusion

Deliver Ambient Occlusion pass

TYPE:

boolean, default False

use_pass_combined

Deliver full combined RGBA buffer

TYPE:

boolean, default False

use_pass_cryptomatte_accurate

Generate a more accurate cryptomatte pass

TYPE:

boolean, default True

use_pass_cryptomatte_asset

Render cryptomatte asset pass, for isolating groups of objects with the same parent

TYPE:

boolean, default False

use_pass_cryptomatte_material

Render cryptomatte material pass, for isolating materials in compositing

TYPE:

boolean, default False

use_pass_cryptomatte_object

Render cryptomatte object pass, for isolating objects in compositing

TYPE:

boolean, default False

use_pass_diffuse_color

Deliver diffuse color pass

TYPE:

boolean, default False

use_pass_diffuse_direct

Deliver diffuse direct pass

TYPE:

boolean, default False

use_pass_diffuse_indirect

Deliver diffuse indirect pass

TYPE:

boolean, default False

use_pass_emit

Deliver emission pass

TYPE:

boolean, default False

use_pass_environment

Deliver environment lighting pass

TYPE:

boolean, default False

use_pass_glossy_color

Deliver glossy color pass

TYPE:

boolean, default False

use_pass_glossy_direct

Deliver glossy direct pass

TYPE:

boolean, default False

use_pass_glossy_indirect

Deliver glossy indirect pass

TYPE:

boolean, default False

use_pass_material_index

Deliver material index pass

TYPE:

boolean, default False

use_pass_refract

use_pass_mist

Deliver mist factor pass (0.0 to 1.0)

TYPE:

boolean, default False

use_pass_normal

Deliver normal pass

TYPE:

boolean, default False

use_pass_object_index

Deliver object index pass

TYPE:

boolean, default False

use_pass_position

Deliver position pass

TYPE:

boolean, default False

use_pass_shadow

Deliver shadow pass

TYPE:

boolean, default False

use_pass_subsurface_color

Deliver subsurface color pass

TYPE:

boolean, default False

use_pass_subsurface_direct

Deliver subsurface direct pass

TYPE:

boolean, default False

use_pass_subsurface_indirect

Deliver subsurface indirect pass

TYPE:

boolean, default False

use_pass_transmission_color

Deliver transmission color pass

TYPE:

boolean, default False

use_pass_transmission_direct

Deliver transmission direct pass

TYPE:

boolean, default False

boolean, default False

use_pass_transmission_indirect

Deliver transmission indirect pass

TYPE:

boolean, default False

use_pass_uv

Deliver texture UV pass

TYPE:

boolean, default False

use_pass_vector

Deliver speed vector pass

TYPE:

boolean, default False

use_pass_z

Deliver Z values pass

TYPE:

boolean, default False

use_sky

Render Sky in this Layer

TYPE:

boolean, default False

use_solid

Render Solid faces in this Layer

TYPE:

boolean, default False

use_strand

Render Strands in this Layer

TYPE:

boolean, default False

use_volumes

Render volumes in this Layer

TYPE:

boolean, default False

world_override

Override world in this view layer

TYPE:

World

classmethod update_render_passes()

Requery the enabled render passes from the render engine

update()

Update data tagged to be updated from previous access to data or operators

classmethod bl_rna_get_subclass(id, default=None)

PARAMETERS:

id (*str*) – The RNA type identifier.

RETURNS:

The RNA type or default when not found.

RETURN TYPE:

`bpy.types.Struct` subclass

classmethod bl_rna_get_subclass_py(id, default=None)

PARAMETERS:

id (*str*) – The RNA type identifier.

RETURNS:

The class or default when not found.

RETURN TYPE:

type

Inherited Properties

- `bpy_struct.id_data`

Inherited Functions

- | | |
|---|--|
| • <code>bpy_struct.as_pointer</code> | • <code>bpy_struct.items</code> |
| • <code>bpy_struct.driver_add</code> | • <code>bpy_struct.keyframe_delete</code> |
| • <code>bpy_struct.driver_remove</code> | • <code>bpy_struct.keyframe_insert</code> |
| • <code>bpy_struct.get</code> | • <code>bpy_struct.keys</code> |
| • <code>bpy_struct.id_properties_clear</code> | • <code>bpy_struct.path_from_id</code> |
| • <code>bpy_struct.id_properties_ensure</code> | • <code>bpy_struct.path_resolve</code> |
| • <code>bpy_struct.id_properties_ui</code> | • <code>bpy_struct.pop</code> |
| • <code>bpy_struct.is_property_hidden</code> | • <code>bpy_struct.property_overridable_library_set</code> |
| • <code>bpy_struct.is_property_overridable_library</code> | • <code>bpy_struct.property_unset</code> |
| • <code>bpy_struct.is_property_readonly</code> | • <code>bpy_struct.type_recast</code> |
| • <code>bpy_struct.is_property_set</code> | • <code>bpy_struct.values</code> |

References

- | | |
|---|--|
| • <code>bpy.context.view_layer</code> | • <code>Object.select_get</code> |
| • <code>Context.view_layer</code> | • <code>Object.select_set</code> |
| • <code>Depsgraph.view_layer</code> | • <code>Object.visible_get</code> |
| • <code>Depsgraph.view_layer_eval</code> | • <code>RenderEngine.register_pass</code> |
| • <code>ID.override_hierarchy_create</code> | • <code>RenderEngine.update_render_passes</code> |
| • <code>IDOverrideLibrary.resync</code> | • <code>Scene.statistics</code> |
| • <code>LayerCollection.has_selected_objects</code> | |

- `Object.hide_get`
- `Object.hide_set`
- `Object.holdout_get`
- `Object.indirect_only_get`

- `Scene.view_layers`
- `ViewLayers.new`
- `ViewLayers.remove`
- `Window.view_layer`

[Previous](#)
[View3DShading\(bpy_struct\)](#)
[Report issue on this page](#)

Copyright © Blender Authors
Made with [Furo](#)

[ViewLayerEevee\(bpy_struct\)](#)