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CompositorNodeCombRGBA(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeCombRGBA(CompositorNode)**

Deprecated

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

update()

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
- Node.type
- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.select
- Node.show_options
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll

- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance

- CompositorNode.poll
- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

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CompositorNodeCombHSVA(CompositorNode)
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CompositorNodeCombYCCA(CompositorNoc

CompositorNodeSunBeams(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeSunBeams(CompositorNode)**

Create sun beams based on image brightness

ray_length

Length of rays as a factor of the image size

TYPE:

float in [0, 100], default 0.0

source

Source point of rays as a factor of the image width and height

TYPE:

float array of 2 items in [-100, 100], default (0.0, 0.0)

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

update()

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
- Node.type
- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.select
- Node.show_options
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass

- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll
- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

CompositorNodeSwitch(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeSwitch(CompositorNode)**

Switch between two images using a checkbox

check

Off: first socket, On: second socket

TYPE:

boolean, default False

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

update()

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
- Node.type
- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.select
- Node.show_options
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons

- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll
- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

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CompositorNodeSwitchView(CompositorNoc

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CompositorNodeSwitchView(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeSwitchView(CompositorNode)**

Combine the views (left and right) into a single stereo 3D output

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

update()

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
- Node.type
- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.select
- Node.show_options
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll

- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance

- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

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CompositorNodeTexture(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeTexture(CompositorNode)**

Generate texture pattern from texture datablock

node_output

For node-based textures, which output node to use

TYPE:

int in [-32768, 32767], default 0

texture

TYPE:

Texture

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

update()

classmethod bl_rna_get_subclass(id, default=None)

PARAMETERS:

id (*str*) – The RNA type identifier.

RETURNS:

The RNA type or default when not found

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
- Node.type
- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.select
- Node.show_options
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py

- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll
- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

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CompositorNodeTime(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeTime(CompositorNode)**

Generate a factor value (from 0.0 to 1.0) between scene start and end time, using a curve mapping

curve

TYPE:

CurveMapping, (readonly)

frame_end

TYPE:

int in [-32768, 32767], default 0

frame_start

TYPE:

int in [-32768, 32767], default 0

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

update()

classmethod bl_rna_get_subclass(id, default=None)

PARAMETERS:

id (*str*) – The RNA type identifier

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`
- `Node.type`
- `Node.location`
- `Node.location_absolute`
- `Node.width`
- `Node.height`
- `Node.dimensions`
- `Node.name`
- `Node.label`
- `Node.inputs`
- `Node.outputs`
- `Node.internal_links`
- `Node.parent`
- `Node.warning_propagation`
- `Node.use_custom_color`
- `Node.color`
- `Node.color_tag`
- `Node.select`
- `Node.show_options`
- `Node.show_preview`
- `Node.hide`
- `Node.mute`
- `Node.show_texture`
- `Node.bl_idname`
- `Node.bl_label`
- `Node.bl_description`
- `Node.bl_icon`
- `Node.bl_static_type`
- `Node.bl_width_default`
- `Node.bl_width_min`
- `Node.bl_width_max`
- `Node.bl_height_default`
- `Node.bl_height_min`
- `Node.bl_height_max`

Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `Node.update`
- `Node.insert_link`
- `Node.init`
- `Node.copy`
- `Node.free`
- `Node.draw_buttons`
- `Node.draw_buttons_ext`
- `Node.draw_label`
- `Node.debug_zone_body_lazy_function_graph`
- `Node.debug_zone_lazy_function_graph`
- `Node.poll`

- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll
- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

CompositorNodeTonemap(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeTonemap(CompositorNode)**

Map one set of colors to another in order to approximate the appearance of high dynamic range

adaptation

If 0, global; if 1, based on pixel intensity

TYPE:

float in [0, 1], default 0.0

contrast

Set to 0 to use estimate from input image

TYPE:

float in [0, 1], default 0.0

correction

If 0, same for all channels; if 1, each independent

TYPE:

float in [0, 1], default 0.0

gamma

If not used, set to 1

TYPE:

float in [0.001, 3], default 0.0

intensity

If less than zero, darkens image; otherwise, makes it brighter

TYPE:

float in [-8, 8], default 0.0

key

The value the average luminance is mapped to

TYPE:

float in [0, 1], default 0.0

offset

Normally always 1, but can be used as an extra control to alter the brightness curve

TYPE:

float in [0.001, 10], default 0.0

tonemap_type

- RD_PHOTORECEPTOR R/D Photoreceptor – More advanced algorithm based on eye physiology, by Reinhard and Devlin.
- RH_SIMPLE Rh Simple – Simpler photographic algorithm by Reinhard.

TYPE:

enum in ['RD_PHOTORECEPTOR', 'RH_SIMPLE'], default 'RH_SIMPLE'

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

`NodeInternalSocketTemplate`

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

`NodeInternalSocketTemplate`

update()

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`
- `Node.type`
- `Node.select`
- `Node.show_options`

- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll
- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

CompositorNodeTrackPos(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeTrackPos(CompositorNode)**

Provide information about motion tracking points, such as x and y values

clip

TYPE:

MovieClip

frame_relative

Frame to be used for relative position

TYPE:

int in [-32768, 32767], default 0

position

Which marker position to use for output

- ABSOLUTE Absolute – Output absolute position of a marker.
- RELATIVE_START Relative Start – Output position of a marker relative to first marker of a track.
- RELATIVE_FRAME Relative Frame – Output position of a marker relative to marker at given frame number.
- ABSOLUTE_FRAME Absolute Frame – Output absolute position of a marker at given frame number.

TYPE:

enum in ['ABSOLUTE', 'RELATIVE_START', 'RELATIVE_FRAME', 'ABSOLUTE_FRAME'], default 'ABSOLUTE'

track_name

TYPE:

string, default "", (never None)

tracking_object

TYPE:

string, default "", (never None)

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

update()

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
- Node.type
- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.select
- Node.show_options
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll
- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

CompositorNodeTransform(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeTransform(CompositorNode)**

Scale, translate and rotate an image

filter_type

Method to use to filter transform

- NEAREST Nearest – Use Nearest interpolation.
- BILINEAR Bilinear – Use Bilinear interpolation.
- BICUBIC Bicubic – Use Cubic B-Spline interpolation.

TYPE:

enum in ['NEAREST', 'BILINEAR', 'BICUBIC'], default 'NEAREST'

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

update()

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
- Node.type
- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.select
- Node.show_options
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py

- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll
- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

CompositorNodeTranslate(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeTranslate(CompositorNode)**

Offset an image

interpolation

- NEAREST Nearest – Use Nearest interpolation.
- BILINEAR Bilinear – Use Bilinear interpolation.
- BICUBIC Bicubic – Use Cubic B-Spline interpolation.

TYPE:

enum in ['NEAREST', 'BILINEAR', 'BICUBIC'], default 'NEAREST'

use_relative

Use relative (fraction of input image size) values to define translation

TYPE:

boolean, default False

wrap_axis

Repeats image on a specific axis

- NONE None – No repeating.
- XAXIS X Axis – Repeats on the X axis.
- YAXIS Y Axis – Repeats on the Y axis.
- BOTH Both Axes – Repeats on both axes.

TYPE:

enum in ['NONE', 'XAXIS', 'YAXIS', 'BOTH'], default 'NONE'

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

classmethod output_template(index)

Output socket template

PARAMETERS:

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

update()

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
- Node.type
- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.select
- Node.show_options
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

- bpy_struct.as_pointer

- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll
- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

Skip to content

CompositorNodeTree(NodeTree)

base classes — bpy_struct, ID, NodeTree

class bpy.types.**CompositorNodeTree(NodeTree)**

Node tree consisting of linked nodes used for compositing

use_viewer_border

Use boundaries for viewer nodes and composite backdrop

TYPE:

boolean, default False

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
- ID.name
- ID.name_full
- ID.id_type
- ID.session_uid
- ID.is_evaluated
- ID.original
- ID.users
- ID.use_fake_user
- ID.use_extra_user
- ID.is_embedded_data
- ID.is_missing
- ID.is_runtime_data
- ID.is_editable
- ID.tag
- ID.is_library_indirect
- ID.library
- ID.asset_data
- ID.override_library
- ID.preview
- NodeTree.color_tag
- NodeTree.default_group_node_width
- NodeTree.view_center
- NodeTree.description
- NodeTree.animation_data
- NodeTree.nodes
- NodeTree.links
- NodeTree.grease_pencil
- NodeTree.type
- NodeTree.interface
- NodeTree.bl_idname
- NodeTree.bl_label
- NodeTree.bl_description
- NodeTree.bl_icon

- ID.library_weak_reference
- NodeTree.bl_use_group_interface

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- ID.rename
- ID.evaluated_get
- ID.copy
- ID.asset_mark
- ID.asset_clear
- ID.asset_generate_preview
- ID.override_create
- ID.override_hierarchy_create
- ID.user_clear
- ID.user_remap
- ID.make_local
- ID.user_of_id
- ID.animation_data_create
- ID.animation_data_clear
- ID.update_tag
- ID.preview_ensure
- ID.bl_rna_get_subclass
- ID.bl_rna_get_subclass_py
- NodeTree.interface_update
- NodeTree.contains_tree
- NodeTree.poll
- NodeTree.update
- NodeTree.get_from_context
- NodeTree.valid_socket_type
- NodeTree.debug_lazy_function_graph
- NodeTree.bl_rna_get_subclass
- NodeTree.bl_rna_get_subclass_py

CompositorNodeValToRGB(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeValToRGB(CompositorNode)**

Map values to colors with the use of a gradient

color_ramp

TYPE:

ColorRamp, (readonly)

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

update()

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:

PARAMETERS:

id (*str*) – The RNA type identifier.

RETURNS:

The class or default when not found.

RETURN TYPE:

type

Inherited Properties

- bpy_struct.id_data
- Node.type
- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.select
- Node.show_options
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext

- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll
- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

CompositorNodeValue(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeValue(CompositorNode)**

Input numerical values to other nodes in the node graph

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

update()

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
- Node.type
- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.select
- Node.show_options
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll

- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance

CompositorNode.poll

- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

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CompositorNodeVecBlur(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeVecBlur(CompositorNode)**

Uses the vector speed render pass to blur the image pixels in 2D

factor

Scaling factor for motion vectors (actually, 'shutter speed', in frames)

TYPE:

float in [0, 20], default 0.0

samples

TYPE:

int in [1, 256], default 0

speed_max

Maximum speed, or zero for none

TYPE:

int in [0, 1024], default 0

speed_min

Minimum speed for a pixel to be blurred (used to separate background from foreground)

TYPE:

int in [0, 1024], default 0

use_curved

Interpolate between frames in a Bézier curve, rather than linearly

TYPE:

boolean, default False

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

update()

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
- Node.type
- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.select
- Node.show_options
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll
- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

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CompositorNodeViewer(CompositorNode)

base classes — `bpy_struct`, `Node`, `NodeInternal`, `CompositorNode`

class bpy.types.**CompositorNodeViewer(CompositorNode)**

Visualize data from inside a node graph, in the image editor or as a backdrop

ui_shortcut

TYPE:

int in [-32768, 32767], default 0

use_alpha

Colors are treated alpha premultiplied, or colors output straight (alpha gets set to 1)

TYPE:

boolean, default False

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

`NodeInternalSocketTemplate`

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

`NodeInternalSocketTemplate`

update()

classmethod bl_rna_get_subclass(id, default=None)

PARAMETERS:

id (*str*) – The RNA type identifier.

RETURNS:

The RNA type or default when not found

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
- Node.type
- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.select
- Node.show_options
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass
- Node.bl_rna_get_subclass_py

- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll
- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

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CompositorNodeZcombine(CompositorNode)

base classes — bpy_struct, Node, NodeInternal, CompositorNode

class bpy.types.**CompositorNodeZcombine(CompositorNode)**

Combine two images using depth maps

use_alpha

Take alpha channel into account when doing the Z operation

TYPE:

boolean, default False

use_antialias_z

Anti-alias the z-buffer to try to avoid artifacts, mostly useful for Blender renders

TYPE:

boolean, default False

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

NodeInternalSocketTemplate

update()

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
- Node.type
- Node.location
- Node.location_absolute
- Node.width
- Node.height
- Node.dimensions
- Node.name
- Node.label
- Node.inputs
- Node.outputs
- Node.internal_links
- Node.parent
- Node.warning_propagation
- Node.use_custom_color
- Node.color
- Node.color_tag
- Node.select
- Node.show_options
- Node.show_preview
- Node.hide
- Node.mute
- Node.show_texture
- Node.bl_idname
- Node.bl_label
- Node.bl_description
- Node.bl_icon
- Node.bl_static_type
- Node.bl_width_default
- Node.bl_width_min
- Node.bl_width_max
- Node.bl_height_default
- Node.bl_height_min
- Node.bl_height_max

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- Node.update
- Node.insert_link
- Node.init
- Node.copy
- Node.free
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.draw_label
- Node.debug_zone_body_lazy_function_graph
- Node.debug_zone_lazy_function_graph
- Node.poll
- Node.bl_rna_get_subclass

- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Node.socket_value_update
- Node.is_registered_node_type
- Node.poll
- Node.poll_instance
- Node.bl_rna_get_subclass_py
- NodeInternal.poll
- NodeInternal.poll_instance
- NodeInternal.update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeInternal.bl_rna_get_subclass
- NodeInternal.bl_rna_get_subclass_py
- CompositorNode.tag_need_exec
- CompositorNode.poll
- CompositorNode.update
- CompositorNode.bl_rna_get_subclass
- CompositorNode.bl_rna_get_subclass_py

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ConsoleLine(bpy_stru

ConsoleLine(bpy_struct)

base class — bpy_struct

class bpy.types.**ConsoleLine(bpy_struct)**

Input line for the interactive console

body

Text in the line

TYPE:

string, default “”, (never None)

current_character

TYPE:

int in [-inf, inf], default 0

type

Console line type when used in scrollback

TYPE:

enum in [‘OUTPUT’, ‘INPUT’, ‘INFO’, ‘ERROR’], default ‘OUTPUT’

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

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys

- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values

References

- SpaceConsole.history
- SpaceConsole.scrollback

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Constraint(bpy_struct)

base class — bpy_struct

subclasses — ActionConstraint, ArmatureConstraint, CameraSolverConstraint, ChildOfConstraint, ClampToConstraint, CopyLocationConstraint, CopyRotationConstraint, CopyScaleConstraint, CopyTransformsConstraint, DampedTrackConstraint, FloorConstraint, FollowPathConstraint, FollowTrackConstraint, KinematicConstraint, LimitDistanceConstraint, LimitLocationConstraint, LimitRotationConstraint, LimitScaleConstraint, LockedTrackConstraint, MaintainVolumeConstraint, ObjectSolverConstraint, PivotConstraint, PythonConstraint, ShrinkwrapConstraint, SplineIKConstraint, StretchToConstraint, TrackToConstraint, TransformCacheConstraint, TransformConstraint

class bpy.types.**Constraint(bpy_struct)**

Constraint modifying the transformation of objects and bones

active

Constraint is the one being edited

TYPE:

boolean, default False

enabled

Use the results of this constraint

TYPE:

boolean, default False

error_location

Amount of residual error in Blender space unit for constraints that work on position

TYPE:

float in [-inf, inf], default 0.0, (readonly)

error_rotation

Amount of residual error in radians for constraints that work on orientation

TYPE:

float in [-inf, inf], default 0.0, (readonly)

influence

Amount of influence constraint will have on the final solution

TYPE:

float in [0, 1], default 0.0

is_override_data

In a local override object, whether this constraint comes from the linked reference object, or is local to the override

TYPE:

boolean, default False, (readonly)

is_valid

Constraint has valid settings and can be evaluated

TYPE:

boolean, default False, (readonly)

boolean, default False, (readonly)

mute

Enable/Disable Constraint

TYPE:

boolean, default False

name

Constraint name

TYPE:

string, default "", (never None)

owner_space

Space that owner is evaluated in

- `WORLD` World Space – The constraint is applied relative to the world coordinate system.
- `CUSTOM` Custom Space – The constraint is applied in local space of a custom object/bone/vertex group.
- `POSE` Pose Space – The constraint is applied in Pose Space, the object transformation is ignored.
- `LOCAL_WITH_PARENT` Local With Parent – The constraint is applied relative to the rest pose local coordinate system of the bone, th including the parent-induced transformation.
- `LOCAL` Local Space – The constraint is applied relative to the local coordinate system of the object.

TYPE:

enum in ['WORLD', 'CUSTOM', 'POSE', 'LOCAL_WITH_PARENT', 'LOCAL'], default 'WORLD'

show_expanded

Constraint's panel is expanded in UI

TYPE:

boolean, default False

space_object

Object for Custom Space

TYPE:

`Object`

space_subtarget

Armature bone, mesh or lattice vertex group, …

TYPE:

string, default "", (never None)

target_space

Space that target is evaluated in

- `WORLD` World Space – The transformation of the target is evaluated relative to the world coordinate system.
- `CUSTOM` Custom Space – The transformation of the target is evaluated relative to a custom object/bone/vertex group.
- `POSE` Pose Space – The transformation of the target is only evaluated in the Pose Space, the target armature object transformation is ignored.
- `LOCAL_WITH_PARENT` Local With Parent – The transformation of the target bone is evaluated relative to its rest pose local coordina system, thus including the parent-induced transformation.
- `LOCAL` Local Space – The transformation of the target is evaluated relative to its local coordinate system.
- `LOCAL_OWNER_ORIENT` Local Space (Owner Orientation) – The transformation of the target bone is evaluated relative to its local coordinate system, followed by a correction for the difference in target and owner rest pose orientations. When applied as local transform

the owner produces the same global motion as the target if the parents are still in rest pose..

TYPE:
enum in ['WORLD', 'CUSTOM', 'POSE', 'LOCAL_WITH_PARENT', 'LOCAL', 'LOCAL_OWNER_ORIENT'], default 'WORLD'

type

TYPE:
enum in Constraint Type Items, default 'CAMERA_SOLVER', (readonly)

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

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`

References

- `Object.constraints`
- `PoseBone.constraints`
- `ObjectConstraints.active`
- `PoseBoneConstraints.active`

- ObjectConstraints.active
- ObjectConstraints.copy
- ObjectConstraints.copy
- ObjectConstraints.new
- ObjectConstraints.remove
- Panel.custom_data
- PoseBoneConstraints.active
- PoseBoneConstraints.copy
- PoseBoneConstraints.copy
- PoseBoneConstraints.new
- PoseBoneConstraints.remove
- UILayout.template_constraint_header

ConstraintTarget(bpy_struct)

base class — bpy_struct

class bpy.types.**ConstraintTarget(bpy_struct)**

Target object for multi-target constraints

subtarget

Armature bone, mesh or lattice vertex group, …

TYPE:

string, default “”, (never None)

target

Target object

TYPE:

Object

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

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set

- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values

References

- PythonConstraint.targets

ConstraintTargetBone(bpy_struct)

base class — bpy_struct

class bpy.types.**ConstraintTargetBone(bpy_struct)**

Target bone for multi-target constraints

subtarget

Target armature bone

TYPE:

string, default “”, (never None)

target

Target armature

TYPE:

Object

weight

Blending weight of this bone

TYPE:

float in [0, 1], default 0.0

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

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert

- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values

References

- ArmatureConstraint.targets
- ArmatureConstraintTargets.new
- ArmatureConstraintTargets.remove

Skip to content

Context(bpy_struct)

base class — bpy_struct

class bpy.types.**Context(bpy_struct)**

Current windowmanager and data context

area

TYPE:

Area, (readonly)

asset

TYPE:

AssetRepresentation, (readonly)

blend_data

TYPE:

BlendData, (readonly)

collection

TYPE:

Collection, (readonly)

engine

TYPE:

string, default “”, (readonly, never None)

gizmo_group

TYPE:

GizmoGroup, (readonly)

layer_collection

TYPE:

LayerCollection, (readonly)

mode

TYPE:

enum in Context Mode Items, default ‘EDIT_MESH’, (readonly)

preferences

TYPE:

Preferences, (readonly)

region

TYPE:

Region, (readonly)

region_data

TYPE:

RegionView3D, (readonly)

region_popup

The temporary region for pop-ups (including menus and pop-overs)

TYPE:

Region, (readonly)

scene

TYPE:

Scene, (readonly)

screen

TYPE:

Screen, (readonly)

space_data

The current space, may be None in background-mode, when the cursor is outside the window or when using menu-search

TYPE:

Space, (readonly)

tool_settings

TYPE:

ToolSettings, (readonly)

view_layer

TYPE:

ViewLayer, (readonly)

window

TYPE:

Window, (readonly)

window_manager

TYPE:

WindowManager, (readonly)

workspace

TYPE:

WorkSpace, (readonly)

evaluated_depsgraph_get()

Get the dependency graph for the current scene and view layer, to access to data-blocks with animation and modifiers applied. If any data-blocks have been edited, the dependency graph will be updated. This invalidates all references to evaluated data-blocks from the dependency graph.

RETURNS:

Evaluated dependency graph

RETURN TYPE:

Depsgraph

copy()

path_resolve(path, coerce=True)

Returns the property from the path, raise an exception when not found.

PARAMETERS:

- **path** (*str*) – patch which this property resolves.
- **coerce** (*bool*) – optional argument, when True, the property will be converted into its Python representation.

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

temp_override(*, window=None, area=None, region=None, **keywords)

Context manager to temporarily override members in the context.

PARAMETERS:

- **window** (`bpy.types.Window`) – Window override or None.
- **screen** (`bpy.types.Screen`) –

  Screen override or None.

  Note

  Switching to or away from full-screen areas & temporary screens isn't supported. Passing in these screens will raise an exception, actions that leave the context such screens won't restore the prior screen.

  Note

  Changing the screen has wider implications than other arguments as it will also change the works-space and potentially the scene (when pinned).

- **area** (`bpy.types.Area`) – Area override or None.
- **region** (`bpy.types.Region`) – Region override or None.
- **keywords** – Additional keywords override context members.

RETURNS:

The context manager .

RETURN TYPE:

ContextTempOverride

Overriding the context can be used to temporarily activate another `window` / `area` & `region`, as well as other members such as the `active_object` or `bone`.

Notes:

- When overriding window, area and regions: the arguments must be consistent, so any region argument that's passed in must be contained b the current area or the area passed in. The same goes for the area needing to be contained in the current window.
- Temporary context overrides may be nested, when this is done, members will be added to the existing overrides.
- Context members are restored outside the scope of the context manager. The only exception to this is when the data is no longer available

- Context members are restored outside the scope of the context-manager. The only exception to this is when the data is no longer available In the event windowing data was removed (for example), the state of the context is left as-is. While this isn't likely to happen, explicit window operation such as closing windows or loading a new file remove the windowing data that was set before the temporary context wa created.

Overriding the context can be useful to set the context after loading files (which would otherwise by None). For example:

```
import bpy
from bpy import context

# Reload the current file and select all.
bpy.ops.wm.open_mainfile(filepath=bpy.data.filepath)
window = context.window_manager.windows[0]
with context.temp_override(window=window):
    bpy.ops.mesh.primitive_uv_sphere_add()
    # The context override is needed so it's possible to set edit-mode.
    bpy.ops.object.mode_set(mode='EDIT')
```

This example shows how it's possible to add an object to the scene in another window.

```
import bpy
from bpy import context

win_active = context.window
win_other = None
for win_iter in context.window_manager.windows:
    if win_iter != win_active:
        win_other = win_iter
        break

# Add cube in the other window.
with context.temp_override(window=win_other):
    bpy.ops.mesh.primitive_cube_add()
```

Inherited Properties

- bpy_struct.id_data

Inherited Functions

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

References

- AssetShelf.draw_context_menu
- AssetShelf.poll
- FileHandler.poll_drop
- Gizmo.draw
- Gizmo.draw_select
- Gizmo.exit
- Gizmo.invoke
- Gizmo.modal
- Gizmo.test_select
- GizmoGroup.draw_prepare
- GizmoGroup.invoke_prepare
- GizmoGroup.poll
- GizmoGroup.refresh
- GizmoGroup.setup
- Header.draw
- KeyingSetInfo.generate
- KeyingSetInfo.iterator
- KeyingSetInfo.poll
- Macro.draw
- Macro.poll
- Menu.draw
- Menu.poll
- Node.draw_buttons
- Node.draw_buttons_ext
- Node.init
- Node.socket_value_update
- NodeInternal.draw_buttons
- NodeInternal.draw_buttons_ext
- NodeSocket.draw
- NodeSocket.draw_color
- NodeSocketStandard.draw
- NodeSocketStandard.draw_color
- NodeTree.get_from_context
- NodeTree.interface_update
- NodeTree.poll
- NodeTreeInterfaceSocket.draw
- NodeTreeInterfaceSocketBool.draw
- NodeTreeInterfaceSocketCollection.draw
- NodeTreeInterfaceSocketColor.draw
- NodeTreeInterfaceSocketFloat.draw
- NodeTreeInterfaceSocketFloatAngle.draw
- NodeTreeInterfaceSocketFloatColorTemperature.draw
- NodeTreeInterfaceSocketFloatDistance.draw
- NodeTreeInterfaceSocketFloatFactor.draw
- NodeTreeInterfaceSocketFloatFrequency.draw
- NodeTreeInterfaceSocketInt.draw
- NodeTreeInterfaceSocketIntFactor.draw
- NodeTreeInterfaceSocketIntPercentage.
- NodeTreeInterfaceSocketIntUnsigned.dr
- NodeTreeInterfaceSocketMaterial.draw
- NodeTreeInterfaceSocketMatrix.draw
- NodeTreeInterfaceSocketMenu.draw
- NodeTreeInterfaceSocketObject.draw
- NodeTreeInterfaceSocketRotation.draw
- NodeTreeInterfaceSocketShader.draw
- NodeTreeInterfaceSocketString.draw
- NodeTreeInterfaceSocketStringFilePath
- NodeTreeInterfaceSocketTexture.draw
- NodeTreeInterfaceSocketVector.draw
- NodeTreeInterfaceSocketVectorAccelera
- NodeTreeInterfaceSocketVectorDirectio
- NodeTreeInterfaceSocketVectorEuler.dr
- NodeTreeInterfaceSocketVectorTranslat
- NodeTreeInterfaceSocketVectorVelocity
- NodeTreeInterfaceSocketVectorXYZ.draw
- Operator.cancel
- Operator.check
- Operator.description
- Operator.draw
- Operator.execute
- Operator.invoke
- Operator.modal
- Operator.poll
- Panel.draw
- Panel.draw_header
- Panel.draw_header_preset
- Panel.poll
- RenderEngine.draw
- RenderEngine.view_draw
- RenderEngine.view_update
- UIList.draw_filter
- UIList.draw_item
- UIList.filter_items
- XrSessionState.action_binding_create
- XrSessionState.action_create
- XrSessionState.action_set_create
- XrSessionState.action_state_get
- XrSessionState.active_action_set_set
- XrSessionState.controller_aim_locatio
- XrSessionState.controller_aim_rotatio

- NodeTreeInterfaceSocketFloatPercentage.draw
- NodeTreeInterfaceSocketFloatTime.draw
- NodeTreeInterfaceSocketFloatTimeAbsolute.draw
- NodeTreeInterfaceSocketFloatUnsigned.draw
- NodeTreeInterfaceSocketFloatWavelength.draw
- NodeTreeInterfaceSocketGeometry.draw
- NodeTreeInterfaceSocketImage.draw
- XrSessionState.controller_grip_locati
- XrSessionState.controller_grip_rotati
- XrSessionState.controller_pose_action
- XrSessionState.haptic_action_apply
- XrSessionState.haptic_action_stop
- XrSessionState.is_running
- XrSessionState.reset_to_base_pose

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CopyLocationConstraint(Constraint)

base classes — bpy_struct, Constraint

class bpy.types.**CopyLocationConstraint(Constraint)**

Copy the location of the target

head_tail

Target along length of bone: Head is 0, Tail is 1

TYPE:

float in [0, 1], default 0.0

invert_x

Invert the X location

TYPE:

boolean, default False

invert_y

Invert the Y location

TYPE:

boolean, default False

invert_z

Invert the Z location

TYPE:

boolean, default False

subtarget

Armature bone, mesh or lattice vertex group, …

TYPE:

string, default “”, (never None)

target

Target object

TYPE:

Object

use_bbone_shape

Follow shape of B-Bone segments when calculating Head/Tail position

TYPE:

boolean, default False

use_offset

Add original location into copied location

TYPE:

boolean, default False

use_x

Copy the target's X location

TYPE:
boolean, default False

use_y

Copy the target's Y location

TYPE:
boolean, default False

use_z

Copy the target's Z location

TYPE:
boolean, default False

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`
- `Constraint.name`
- `Constraint.type`
- `Constraint.is_override_data`
- `Constraint.owner_space`
- `Constraint.target_space`
- `Constraint.space_object`
- `Constraint.space_subtarget`
- `Constraint.mute`
- `Constraint.enabled`
- `Constraint.show_expanded`
- `Constraint.is_valid`
- `Constraint.active`
- `Constraint.influence`
- `Constraint.error_location`
- `Constraint.error_rotation`

Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`

- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Constraint.bl_rna_get_subclass
- Constraint.bl_rna_get_subclass_py

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Context(bpy_struct)

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CopyRotationConstraint(Constrai

Report issue on this page

CopyRotationConstraint(Constraint)

base classes — bpy_struct, Constraint

class bpy.types.**CopyRotationConstraint(Constraint)**

Copy the rotation of the target

euler_order

Explicitly specify the euler rotation order

- AUTO Default – Euler using the default rotation order.
- XYZ XYZ Euler – Euler using the XYZ rotation order.
- XZY XZY Euler – Euler using the XZY rotation order.
- YXZ YXZ Euler – Euler using the YXZ rotation order.
- YZX YZX Euler – Euler using the YZX rotation order.
- ZXY ZXY Euler – Euler using the ZXY rotation order.
- ZYX ZYX Euler – Euler using the ZYX rotation order.

TYPE:

enum in ['AUTO', 'XYZ', 'XZY', 'YXZ', 'YZX', 'ZXY', 'ZYX'], default 'AUTO'

invert_x

Invert the X rotation

TYPE:

boolean, default False

invert_y

Invert the Y rotation

TYPE:

boolean, default False

invert_z

Invert the Z rotation

TYPE:

boolean, default False

mix_mode

Specify how the copied and existing rotations are combined

- REPLACE Replace – Replace the original rotation with copied.
- ADD Add – Add euler component values together.
- BEFORE Before Original – Apply copied rotation before original, as if the constraint target is a parent.
- AFTER After Original – Apply copied rotation after original, as if the constraint target is a child.
- OFFSET Offset (Legacy) – Combine rotations like the original Offset checkbox. Does not work well for multiple axis rotations..

TYPE:

enum in ['REPLACE', 'ADD', 'BEFORE', 'AFTER', 'OFFSET'], default 'REPLACE'

subtarget

Armature bone, mesh or lattice vertex group, …

TYPE:

string, default “”, (never None)

target

Target object

TYPE:

Object

use_offset

DEPRECATED: Add original rotation into copied rotation

TYPE:

boolean, default False

use_x

Copy the target’s X rotation

TYPE:

boolean, default False

use_y

Copy the target’s Y rotation

TYPE:

boolean, default False

use_z

Copy the target’s Z rotation

TYPE:

boolean, default False

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
- Constraint.name
- Constraint.type
- Constraint.mute
- Constraint.enabled
- Constraint.show_expanded

- Constraint.is_override_data
- Constraint.owner_space
- Constraint.target_space
- Constraint.space_object
- Constraint.space_subtarget
- Constraint.is_valid
- Constraint.active
- Constraint.influence
- Constraint.error_location
- Constraint.error_rotation

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Constraint.bl_rna_get_subclass
- Constraint.bl_rna_get_subclass_py

CopyScaleConstraint(Constraint)

base classes — bpy_struct, Constraint

class bpy.types.**CopyScaleConstraint(Constraint)**

Copy the scale of the target

power

Raise the target's scale to the specified power

TYPE:

float in [-inf, inf], default 1.0

subtarget

Armature bone, mesh or lattice vertex group, …

TYPE:

string, default "", (never None)

target

Target object

TYPE:

Object

use_add

Use addition instead of multiplication to combine scale (2.7 compatibility)

TYPE:

boolean, default False

use_make_uniform

Redistribute the copied change in volume equally between the three axes of the owner

TYPE:

boolean, default False

use_offset

Combine original scale with copied scale

TYPE:

boolean, default False

use_x

Copy the target's X scale

TYPE:

boolean, default False

use_y

Copy the target's Y scale

TYPE:

boolean, default False

use_z

Copy the target's Z scale

TYPE:
boolean, default False

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`
- `Constraint.name`
- `Constraint.type`
- `Constraint.is_override_data`
- `Constraint.owner_space`
- `Constraint.target_space`
- `Constraint.space_object`
- `Constraint.space_subtarget`
- `Constraint.mute`
- `Constraint.enabled`
- `Constraint.show_expanded`
- `Constraint.is_valid`
- `Constraint.active`
- `Constraint.influence`
- `Constraint.error_location`
- `Constraint.error_rotation`

Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `Constraint.bl_rna_get_subclass`
- `Constraint.bl_rna_get_subclass_py`

CopyTransformsConstraint(Constraint)

base classes — bpy_struct, Constraint

class bpy.types.**CopyTransformsConstraint(Constraint)**

Copy all the transforms of the target

head_tail

Target along length of bone: Head is 0, Tail is 1

TYPE:

float in [0, 1], default 0.0

mix_mode

Specify how the copied and existing transformations are combined

- REPLACE Replace – Replace the original transformation with copied.
- BEFORE_FULL Before Original (Full) – Apply copied transformation before original, using simple matrix multiplication as if the constrai target is a parent in Full Inherit Scale mode. Will create shear when combining rotation and non-uniform scale..
- BEFORE Before Original (Aligned) – Apply copied transformation before original, as if the constraint target is a parent in Aligned Inherit Scale mode. This effectively uses Full for location and Split Channels for rotation and scale..
- BEFORE_SPLIT Before Original (Split Channels) – Apply copied transformation before original, handling location, rotation and scale separately, similar to a sequence of three Copy constraints.
- AFTER_FULL After Original (Full) – Apply copied transformation after original, using simple matrix multiplication as if the constraint target is a child in Full Inherit Scale mode. Will create shear when combining rotation and non-uniform scale..
- AFTER After Original (Aligned) – Apply copied transformation after original, as if the constraint target is a child in Aligned Inherit Scale mode. This effectively uses Full for location and Split Channels for rotation and scale..
- AFTER_SPLIT After Original (Split Channels) – Apply copied transformation after original, handling location, rotation and scale separately, similar to a sequence of three Copy constraints.

TYPE:

enum in ['REPLACE', 'BEFORE_FULL', 'BEFORE', 'BEFORE_SPLIT', 'AFTER_FULL', 'AFTER', 'AFTER_SPLIT'], default 'REPLACE'

remove_target_shear

Remove shear from the target transformation before combining

TYPE:

boolean, default False

subtarget

Armature bone, mesh or lattice vertex group, …

TYPE:

string, default "", (never None)

target

Target object

TYPE:

Object

use_bbone_shape

Follow shape of B-Bone segments when calculating Head/Tail position

TYPE:

boolean, default False

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`
- `Constraint.name`
- `Constraint.type`
- `Constraint.is_override_data`
- `Constraint.owner_space`
- `Constraint.target_space`
- `Constraint.space_object`
- `Constraint.space_subtarget`
- `Constraint.mute`
- `Constraint.enabled`
- `Constraint.show_expanded`
- `Constraint.is_valid`
- `Constraint.active`
- `Constraint.influence`
- `Constraint.error_location`
- `Constraint.error_rotation`

Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `Constraint.bl_rna_get_subclass`
- `Constraint.bl_rna_get_subclass_py`

CorrectiveSmoothModifier(Modifier)

base classes — bpy_struct, Modifier

class bpy.types.**CorrectiveSmoothModifier(Modifier)**

Correct distortion caused by deformation

factor

Smooth effect factor

TYPE:

float in [-inf, inf], default 0.5

invert_vertex_group

Invert vertex group influence

TYPE:

boolean, default False

is_bind

TYPE:

boolean, default False, (readonly)

iterations

TYPE:

int in [0, 32767], default 5

rest_source

Select the source of rest positions

- `ORCO` Original Coords – Use base mesh vertex coordinates as the rest position.
- `BIND` Bind Coords – Use bind vertex coordinates for rest position.

TYPE:

enum in ['ORCO', 'BIND'], default 'ORCO'

scale

Compensate for scale applied by other modifiers

TYPE:

float in [-inf, inf], default 1.0

smooth_type

Method used for smoothing

- `SIMPLE` Simple – Use the average of adjacent edge-vertices.
- `LENGTH_WEIGHTED` Length Weight – Use the average of adjacent edge-vertices weighted by their length.

TYPE:

enum in ['SIMPLE', 'LENGTH_WEIGHTED'], default 'SIMPLE'

use_only_smooth

Apply smoothing without reconstructing the surface

TYPE:

boolean, default False

use_pin_boundary

Excludes boundary vertices from being smoothed

TYPE:

boolean, default False

vertex_group

Name of Vertex Group which determines influence of modifier per point

TYPE:

string, default “”, (never None)

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
- Modifier.name
- Modifier.type
- Modifier.show_viewport
- Modifier.show_render
- Modifier.show_in_editmode
- Modifier.show_on_cage
- Modifier.show_expanded
- Modifier.is_active
- Modifier.use_pin_to_last
- Modifier.is_override_data
- Modifier.use_apply_on_spline
- Modifier.execution_time
- Modifier.persistent_uid

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset

- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.type_recast
- bpy_struct.values
- Modifier.bl_rna_get_subclass
- Modifier.bl_rna_get_subclass_py

CrossStrip(EffectStrip)

base classes — bpy_struct, Strip, EffectStrip

class bpy.types.**CrossStrip(EffectStrip)**

Cross Sequence

input_1

First input for the effect strip

TYPE:

Strip, (never None)

input_2

Second input for the effect strip

TYPE:

Strip, (never None)

input_count

TYPE:

int in [0, inf], default 0, (readonly)

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
- Strip.name
- Strip.type
- Strip.select
- Strip.select_left_handle
- Strip.select_right_handle
- Strip.mute
- Strip.lock
- Strip.frame_final_duration
- Strip.color_tag
- Strip.modifiers
- Strip.use_cache_raw
- Strip.use_cache_preprocessed
- Strip.use_cache_composite
- Strip.override_cache_settings
- Strip.show_retiming_keys
- EffectStrip.use_deinterlace
- EffectStrip.alpha_mode

- Strip.frame_duration
- Strip.frame_start
- Strip.frame_final_start
- Strip.frame_final_end
- Strip.frame_offset_start
- Strip.frame_offset_end
- Strip.channel
- Strip.use_linear_modifiers
- Strip.blend_type
- Strip.blend_alpha
- Strip.effect_fader
- Strip.use_default_fade
- EffectStrip.use_flip_x
- EffectStrip.use_flip_y
- EffectStrip.use_float
- EffectStrip.use_reverse_frames
- EffectStrip.color_multiply
- EffectStrip.multiply_alpha
- EffectStrip.color_saturation
- EffectStrip.strobe
- EffectStrip.transform
- EffectStrip.crop
- EffectStrip.use_proxy
- EffectStrip.proxy

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Strip.strip_elem_from_frame
- Strip.swap
- Strip.move_to_meta
- Strip.parent_meta
- Strip.invalidate_cache
- Strip.split
- Strip.bl_rna_get_subclass
- Strip.bl_rna_get_subclass_py
- EffectStrip.bl_rna_get_subclass
- EffectStrip.bl_rna_get_subclass_py

CryptomatteEntry(bpy_struct)

base class — bpy_struct

class bpy.types.**CryptomatteEntry(bpy_struct)**

encoded_hash

TYPE:

float in [-inf, inf], default 0.0, (readonly)

name

TYPE:

string, default “”, (readonly, never None)

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

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

References

- `CompositorNodeCryptomatteV2.entries`

Curve(ID)

base classes — `bpy_struct`, `ID`

subclasses — `SurfaceCurve`, `TextCurve`

class bpy.types.**Curve(ID)**

Curve data-block storing curves, splines and NURBS

animation_data

Animation data for this data-block

TYPE:

`AnimData`, (readonly)

bevel_depth

Radius of the bevel geometry, not including extrusion

TYPE:

float in [-inf, inf], default 0.0

bevel_factor_end

Define where along the spline the curve geometry ends (0 for the beginning, 1 for the end)

TYPE:

float in [0, 1], default 1.0

bevel_factor_mapping_end

Determine how the geometry end factor is mapped to a spline

- `RESOLUTION` Resolution – Map the geometry factor to the number of subdivisions of a spline (U resolution).
- `SEGMENTS` Segments – Map the geometry factor to the length of a segment and to the number of subdivisions of a segment.
- `SPLINE` Spline – Map the geometry factor to the length of a spline.

TYPE:

enum in ['RESOLUTION', 'SEGMENTS', 'SPLINE'], default 'RESOLUTION'

bevel_factor_mapping_start

Determine how the geometry start factor is mapped to a spline

- `RESOLUTION` Resolution – Map the geometry factor to the number of subdivisions of a spline (U resolution).
- `SEGMENTS` Segments – Map the geometry factor to the length of a segment and to the number of subdivisions of a segment.
- `SPLINE` Spline – Map the geometry factor to the length of a spline.

TYPE:

enum in ['RESOLUTION', 'SEGMENTS', 'SPLINE'], default 'RESOLUTION'

bevel_factor_start

Define where along the spline the curve geometry starts (0 for the beginning, 1 for the end)

TYPE:

float in [0, 1], default 0.0

bevel_mode

Determine how to build the curve's bevel geometry

- `ROUND` Round – Use circle for the section of the curve's bevel geometry

- ROUND Round – Use circle for the section of the curve's bevel geometry.
- OBJECT Object – Use an object for the section of the curve's bevel geometry segment.
- PROFILE Profile – Use a custom profile for each quarter of curve's bevel geometry.

TYPE:

enum in ['ROUND', 'OBJECT', 'PROFILE'], default 'ROUND'

bevel_object

The name of the Curve object that defines the bevel shape

TYPE:

Object

bevel_profile

The path for the curve's custom profile

TYPE:

CurveProfile, (readonly)

bevel_resolution

The number of segments in each quarter-circle of the bevel

TYPE:

int in [0, 32], default 4

cycles

Cycles mesh settings

TYPE:

CyclesMeshSettings, (readonly)

dimensions

Select 2D or 3D curve type

- 2D 2D – Clamp the Z axis of the curve.
- 3D 3D – Allow editing on the Z axis of this curve, also allows tilt and curve radius to be used.

TYPE:

enum in ['2D', '3D'], default '2D'

eval_time

Parametric position along the length of the curve that Objects 'following' it should be at (position is evaluated by dividing by the 'Path Length' value)

TYPE:

float in [-inf, inf], default 0.0

extrude

Length of the depth added in the local Z direction along the curve, perpendicular to its normals

TYPE:

float in [0, inf], default 0.0

fill_mode

Mode of filling curve

TYPE:

enum in ['FULL', 'BACK', 'FRONT', 'HALF'], default 'FULL'

is_editmode

True when used in editmode

TYPE:

boolean, default False, (readonly)

materials

TYPE:

IDMaterials bpy_prop_collection of Material, (readonly)

offset

Distance to move the curve parallel to its normals

TYPE:

float in [-inf, inf], default 0.0

path_duration

The number of frames that are needed to traverse the path, defining the maximum value for the 'Evaluation Time' setting

TYPE:

int in [1, 1048574], default 100

render_resolution_u

Surface resolution in U direction used while rendering (zero uses preview resolution)

TYPE:

int in [0, 1024], default 0

render_resolution_v

Surface resolution in V direction used while rendering (zero uses preview resolution)

TYPE:

int in [0, 1024], default 0

resolution_u

Number of computed points in the U direction between every pair of control points

TYPE:

int in [1, 1024], default 12

resolution_v

The number of computed points in the V direction between every pair of control points

TYPE:

int in [1, 1024], default 12

shape_keys

TYPE:

Key, (readonly)

splines

Collection of splines in this curve data object

TYPE:

CurveSplines bpy_prop_collection of Spline, (readonly)

taper_object

Curve object name that defines the taper (width)

TYPE:

Object

taper_radius_mode

Determine how the effective radius of the spline point is computed when a taper object is specified

- OVERRIDE Override – Override the radius of the spline point with the taper radius.
- MULTIPLY Multiply – Multiply the radius of the spline point by the taper radius.
- ADD Add – Add the radius of the bevel point to the taper radius.

TYPE:

enum in ['OVERRIDE', 'MULTIPLY', 'ADD'], default 'OVERRIDE'

texspace_location

TYPE:

mathutils.Vector of 3 items in [-inf, inf], default (0.0, 0.0, 0.0)

texspace_size

TYPE:

mathutils.Vector of 3 items in [-inf, inf], default (1.0, 1.0, 1.0)

twist_mode

The type of tilt calculation for 3D Curves

- Z_UP Z-Up – Use Z-Up axis to calculate the curve twist at each point.
- MINIMUM Minimum – Use the least twist over the entire curve.
- TANGENT Tangent – Use the tangent to calculate twist.

TYPE:

enum in ['Z_UP', 'MINIMUM', 'TANGENT'], default 'MINIMUM'

twist_smooth

Smoothing iteration for tangents

TYPE:

float in [-inf, inf], default 0.0

use_auto_texspace

Adjust active object's texture space automatically when transforming object

TYPE:

boolean, default True

use_deform_bounds

Option for curve-deform: Use the mesh bounds to clamp the deformation

TYPE:

boolean, default False

use_fill_caps

Fill caps for beveled curves

TYPE:

boolean, default False

use_map_taper

Map effect of the taper object to the beveled part of the curve

TYPE:

boolean, default False

use_path

Enable the curve to become a translation path

TYPE:

boolean, default False

use_path_clamp

Clamp the curve path children so they can't travel past the start/end point of the curve

TYPE:

boolean, default False

use_path_follow

Make curve path children rotate along the path

TYPE:

boolean, default False

use_radius

Option for paths and curve-deform: apply the curve radius to objects following it and to deformed objects

TYPE:

boolean, default True

use_stretch

Option for curve-deform: make deformed child stretch along entire path

TYPE:

boolean, default False

transform(matrix, *, shape_keys=False)

Transform curve by a matrix

PARAMETERS:

- **matrix** (`mathutils.Matrix` of 4 * 4 items in [-inf, inf]) – Matrix
- **shape_keys** (*boolean, (optional)*) – Transform Shape Keys

validate_material_indices()

Validate material indices of splines or letters, return True when the curve has had invalid indices corrected (to default 0)

RETURNS:

Result

RETURN TYPE:

boolean

update_gpu_tag()

update_gpu_tag

classmethod bl_rna_get_subclass(id, default=None)

PARAMETERS:

id (*str*) – The RNA type identifier

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`
- `ID.name`
- `ID.name_full`
- `ID.id_type`
- `ID.session_uid`
- `ID.is_evaluated`
- `ID.original`
- `ID.users`
- `ID.use_fake_user`
- `ID.use_extra_user`
- `ID.is_embedded_data`
- `ID.is_missing`
- `ID.is_runtime_data`
- `ID.is_editable`
- `ID.tag`
- `ID.is_library_indirect`
- `ID.library`
- `ID.library_weak_reference`
- `ID.asset_data`
- `ID.override_library`
- `ID.preview`

Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `ID.rename`
- `ID.evaluated_get`
- `ID.copy`
- `ID.asset_mark`
- `ID.asset_clear`
- `ID.asset_generate_preview`
- `ID.override_create`
- `ID.override_hierarchy_create`
- `ID.user_clear`
- `ID.user_remap`
- `ID.make_local`
- `ID.user_of_id`
- `ID.animation_data_create`
- `ID.animation_data_clear`
- `ID.update_tag`

- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- ID.preview_ensure
- ID.bl_rna_get_subclass
- ID.bl_rna_get_subclass_py

References

- bpy.context.curve
- BlendData.curves
- BlendDataCurves.new
- BlendDataCurves.remove
- Object.to_curve