DynamicPaintSurface(bpy_struct)

base class — `bpy_struct`

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

A canvas surface layer

brush_collection

Only use brush objects from this collection

TYPE:

`Collection`

brush_influence_scale

Adjust influence brush objects have on this surface

TYPE:

float in [0, 1], default 0.0

brush_radius_scale

Adjust radius of proximity brushes or particles for this surface

TYPE:

float in [0, 10], default 0.0

color_dry_threshold

The wetness level when colors start to shift to the background

TYPE:

float in [0, 1], default 0.0

color_spread_speed

How fast colors get mixed within wet paint

TYPE:

float in [0, 2], default 0.0

depth_clamp

Maximum level of depth intersection in object space (use 0.0 to disable)

TYPE:

float in [0, 50], default 0.0

displace_factor

Strength of displace when applied to the mesh

TYPE:

float in [-50, 50], default 0.0

displace_type

TYPE:

enum in ['DISPLACE', 'DEPTH'], default 'DISPLACE'

dissolve_speed

Approximately in how many frames should dissolve happen

TYPE:

    int in [1, 10000], default 0

drip_acceleration

    How much surface acceleration affects dripping

    TYPE:

        float in [-200, 200], default 0.0

drip_velocity

    How much surface velocity affects dripping

    TYPE:

        float in [-200, 200], default 0.0

dry_speed

    Approximately in how many frames should drying happen

    TYPE:

        int in [1, 10000], default 0

effect_ui

    TYPE:

        enum in ['SPREAD', 'DRIP', 'SHRINK'], default 'SPREAD'

effector_weights

    TYPE:

        EffectorWeights, (readonly)

frame_end

    Simulation end frame

    TYPE:

        int in [1, 1048574], default 0

frame_start

    Simulation start frame

    TYPE:

        int in [1, 1048574], default 0

frame_substeps

    Do extra frames between scene frames to ensure smooth motion

    TYPE:

        int in [0, 20], default 0

image_fileformat

    TYPE:

        enum in ['PNG', 'OPENEXR'], default 'PNG'

image_output_path

    Directory to save the textures

    TYPE:

        string, default '', (never None)

image_resolution

Output image resolution

> **TYPE:**
>
> int in [16, 4096], default 0

init_color

Initial color of the surface

> **TYPE:**
>
> float array of 4 items in [0, inf], default (0.0, 0.0, 0.0, 0.0)

init_color_type

> **TYPE:**
>
> enum in ['NONE', 'COLOR', 'TEXTURE', 'VERTEX_COLOR'], default 'NONE'

init_layername

> **TYPE:**
>
> string, default "", (never None)

init_texture

> **TYPE:**
>
> Texture

is_active

Toggle whether surface is processed or ignored

> **TYPE:**
>
> boolean, default False

is_cache_user

> **TYPE:**
>
> boolean, default False, (readonly)

name

Surface name

> **TYPE:**
>
> string, default "", (never None)

output_name_a

Name used to save output from this surface

> **TYPE:**
>
> string, default "", (never None)

output_name_b

Name used to save output from this surface

> **TYPE:**
>
> string, default "", (never None)

point_cache

> **TYPE:**
>
> PointCache , (readonly, never None)

shrink_speed

How fast shrink effect moves on the canvas surface

TYPE:

float in [0.001, 10], default 0.0

spread_speed

How fast spread effect moves on the canvas surface

TYPE:

float in [0.001, 10], default 0.0

surface_format

Surface Format

TYPE:

enum in ['VERTEX', 'IMAGE'], default 'VERTEX'

surface_type

Surface Type

TYPE:

enum in ['PAINT'], default 'PAINT'

use_antialiasing

Use 5× multisampling to smooth paint edges

TYPE:

boolean, default False

use_dissolve

Enable to make surface changes disappear over time

TYPE:

boolean, default False

use_dissolve_log

Use logarithmic dissolve (makes high values to fade faster than low values)

TYPE:

boolean, default False

use_drip

Process drip effect (drip wet paint to gravity direction)

TYPE:

boolean, default False

use_dry_log

Use logarithmic drying (makes high values to dry faster than low values)

TYPE:

boolean, default False

use_drying

Enable to make surface wetness dry over time

TYPE:

boolean, default False

use_incremental_displace

New displace is added cumulatively on top of existing

TYPE:

boolean, default False

use_output_a

Save this output layer

TYPE:

boolean, default False

use_output_b

Save this output layer

TYPE:

boolean, default False

use_premultiply

Multiply color by alpha (recommended for Blender input)

TYPE:

boolean, default False

use_shrink

Process shrink effect (shrink paint areas)

TYPE:

boolean, default False

use_spread

Process spread effect (spread wet paint around surface)

TYPE:

boolean, default False

use_wave_open_border

Pass waves through mesh edges

TYPE:

boolean, default False

uv_layer

UV map name

TYPE:

string, default "", (never None)

wave_damping

Wave damping factor

TYPE:

float in [0, 1], default 0.0

wave_smoothness

Limit maximum steepness of wave slope between simulation points (use higher values for smoother waves at expense of reduced detail)

TYPE:

float in [0, 10], default 0.0

wave_speed

Wave propagation speed

TYPE:

float in [0.01, 5], default 0.0

wave_spring

Spring force that pulls water level back to zero

TYPE:

float in [0, 1], default 0.0

wave_timescale

Wave time scaling factor

TYPE:

float in [0.01, 3], default 0.0

output_exists(object, index)

Checks if surface output layer of given name exists

PARAMETERS:

index (*int in [0, 1]*) – Index

RETURN TYPE:

boolean

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

- `DynamicPaintCanvasSettings.canvas_surfaces`
- `DynamicPaintSurfaces.active`

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