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SpaceView3D(Space)

base classes — bpy_struct, Space

class bpy.types.**SpaceView3D(Space)**

3D View space data

camera

Active camera used in this view (when unlocked from the scene's active camera)

TYPE:

Object

clip_end

3D View far clipping distance

TYPE:

float in [1e-06, inf], default 1000.0

clip_start

3D View near clipping distance (perspective view only)

TYPE:

float in [1e-06, inf], default 0.01

icon_from_show_object_viewport

TYPE:

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

lens

Viewport lens angle

TYPE:

float in [1, 250], default 50.0

local_view

Display an isolated subset of objects, apart from the scene visibility

TYPE:

SpaceView3D, (readonly)

lock_bone

3D View center is locked to this bone's position

TYPE:

string, default "", (never None)

lock_camera

Enable view navigation within the camera view

TYPE:

boolean, default False

lock_cursor

3D View center is locked to the cursor's position

TYPE:

boolean, default False

lock_object

3D View center is locked to this object's position

TYPE:

Object

mirror_xr_session

Synchronize the viewer perspective of virtual reality sessions with this 3D viewport

TYPE:

boolean, default False

overlay

Settings for display of overlays in the 3D viewport

TYPE:

View3DOverlay, (readonly, never None)

region_3d

3D region for this space. When the space is in quad view, the camera region

TYPE:

RegionView3D, (readonly)

region_quadviews

3D regions (the third one defines quad view settings, the fourth one is same as 'region_3d')

TYPE:

bpy_prop_collection of RegionView3D, (readonly)

render_border_max_x

Maximum X value for the render region

TYPE:

float in [0, 1], default 0.0

render_border_max_y

Maximum Y value for the render region

TYPE:

float in [0, 1], default 0.0

render_border_min_x

Minimum X value for the render region

TYPE:

float in [0, 1], default 0.0

render_border_min_y

Minimum Y value for the render region

TYPE:

float in [0, 1], default 0.0

shading

Settings for shading in the 3D viewport

TYPE:

View3DShading, (readonly, never None)

show_bundle_names

Show names for reconstructed tracks objects

TYPE:

boolean, default False

show_camera_path

Show reconstructed camera path

TYPE:

boolean, default False

show_gizmo

Show gizmos of all types

TYPE:

boolean, default True

show_gizmo_camera_dof_distance

Gizmo to adjust camera focus distance (depends on limits display)

TYPE:

boolean, default False

show_gizmo_camera_lens

Gizmo to adjust camera focal length or orthographic scale

TYPE:

boolean, default False

show_gizmo_context

Context sensitive gizmos for the active item

TYPE:

boolean, default True

show_gizmo_empty_force_field

Gizmo to adjust the force field

TYPE:

boolean, default False

show_gizmo_empty_image

Gizmo to adjust image size and position

TYPE:

boolean, default False

show_gizmo_light_look_at

Gizmo to adjust the direction of the light

TYPE:

boolean, default False

show_gizmo_light_size

Gizmo to adjust spot and area size

TYPE:

boolean, default False

show_gizmo_modifier

Gizmos for the active modifier

TYPE:

boolean, default True

show_gizmo_navigate

Viewport navigation gizmo

TYPE:

boolean, default True

show_gizmo_object_rotate

Gizmo to adjust rotation

TYPE:

boolean, default False

show_gizmo_object_scale

Gizmo to adjust scale

TYPE:

boolean, default False

show_gizmo_object_translate

Gizmo to adjust location

TYPE:

boolean, default False

show_gizmo_tool

Active tool gizmo

TYPE:

boolean, default True

show_object_select_armature

Allow selection of armatures

TYPE:

boolean, default True

show_object_select_camera

Allow selection of cameras

TYPE:

boolean, default True

show_object_select_curve

Allow selection of curves

TYPE:

boolean, default True

show_object_select_curves

Allow selection of hair curves

TYPE:

boolean, default True

show_object_select_empty

Allow selection of empties

TYPE:

boolean, default True

show_object_select_font

Allow selection of text objects

TYPE:

boolean, default True

show_object_select_grease_pencil

Allow selection of Grease Pencil objects

TYPE:

boolean, default True

show_object_select_lattice

Allow selection of lattices

TYPE:

boolean, default True

show_object_select_light

Allow selection of lights

TYPE:

boolean, default True

show_object_select_light_probe

Allow selection of light probes

TYPE:

boolean, default True

show_object_select_mesh

Allow selection of mesh objects

TYPE:

boolean, default True

show_object_select_meta

Allow selection of metaballs

TYPE:

boolean, default True

show_object_select_pointcloud

Allow selection of point clouds

TYPE:
boolean, default True

show_object_select_speaker
Allow selection of speakers

TYPE:
boolean, default True

show_object_select_surf
Allow selection of surfaces

TYPE:
boolean, default True

show_object_select_volume
Allow selection of volumes

TYPE:
boolean, default True

show_object_viewport_armature
Show armatures

TYPE:
boolean, default True

show_object_viewport_camera
Show cameras

TYPE:
boolean, default True

show_object_viewport_curve
Show curves

TYPE:
boolean, default True

show_object_viewport_curves
Show hair curves

TYPE:
boolean, default True

show_object_viewport_empty
Show empties

TYPE:
boolean, default True

show_object_viewport_font
Show text objects

TYPE:
boolean, default True

show_object_viewport_grease_pencil

Show Grease Pencil objects

TYPE:

boolean, default True

show_object_viewport_lattice

Show lattices

TYPE:

boolean, default True

show_object_viewport_light

Show lights

TYPE:

boolean, default True

show_object_viewport_light_probe

Show light probes

TYPE:

boolean, default True

show_object_viewport_mesh

Show mesh objects

TYPE:

boolean, default True

show_object_viewport_meta

Show metaballs

TYPE:

boolean, default True

show_object_viewport_pointcloud

Show point clouds

TYPE:

boolean, default True

show_object_viewport_speaker

Show speakers

TYPE:

boolean, default True

show_object_viewport_surf

Show surfaces

TYPE:

boolean, default True

show_object_viewport_volume

Show volumes

TYPE:

TYPE:

boolean, default True

show_reconstruction

Display reconstruction data from active movie clip

TYPE:

boolean, default True

show_region_asset_shelf

TYPE:

boolean, default False

show_region_hud

TYPE:

boolean, default False

show_region_tool_header

TYPE:

boolean, default False

show_region_toolbar

TYPE:

boolean, default False

show_region_ui

TYPE:

boolean, default False

show_stereo_3d_cameras

Show the left and right cameras

TYPE:

boolean, default False

show_stereo_3d_convergence_plane

Show the stereo 3D convergence plane

TYPE:

boolean, default True

show_stereo_3d_volume

Show the stereo 3D frustum volume

TYPE:

boolean, default False

show_viewer

Display non-final geometry from viewer nodes

TYPE:

boolean, default True

stereo_3d_camera

TYPE:

enum in [‘LEFT’, ‘RIGHT’, ‘S3D’], default ‘S3D’

stereo_3d_convergence_plane_alpha

Opacity (alpha) of the convergence plane

TYPE:

float in [0, 1], default 0.15

stereo_3d_eye

Current stereo eye being displayed

TYPE:

enum in ['LEFT_EYE', 'RIGHT_EYE'], default 'LEFT_EYE', (readonly)

stereo_3d_volume_alpha

Opacity (alpha) of the cameras' frustum volume

TYPE:

float in [0, 1], default 0.05

tracks_display_size

Display size of tracks from reconstructed data

TYPE:

float in [0, inf], default 0.2

tracks_display_type

Viewport display style for tracks

TYPE:

enum in ['PLAIN_AXES', 'ARROWS', 'SINGLE_ARROW', 'CIRCLE', 'CUBE', 'SPHERE', 'CONE'], default 'PLAIN_AXES'

use_local_camera

Use a local camera in this view, rather than scene's active camera

TYPE:

boolean, default False

use_local_collections

Display a different set of collections in this viewport

TYPE:

boolean, default False

use_render_border

Use a region within the frame size for rendered viewport (when not viewing through the camera)

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

classmethod draw_handler_add(callback, args, region_type, draw_type)

Add a new draw handler to this space type. It will be called every time the specified region in the space type will be drawn. Note: All argume are positional only for now.

PARAMETERS:

- **callback** (*Callable[[Any, ...], Any]*) – A function that will be called when the region is drawn. It gets the specified arguments as input, it's return value is ignored.
- **args** (*tuple[Any, ...]*) – Arguments that will be passed to the callback.
- **region_type** (*str*) – The region type the callback draws in; usually `WINDOW`. (`bpy.types.Region.type`)
- **draw_type** (*str*) – Usually `POST_PIXEL` for 2D drawing and `POST_VIEW` for 3D drawing. In some cases `PRE_VIEW` can be used. `BACKDROP` can be used for backdrops in the node editor.

RETURNS:

Handler that can be removed later on.

RETURN TYPE:

object

classmethod draw_handler_remove(handler, region_type)

Remove a draw handler that was added previously.

PARAMETERS:

- **handler** (*object*) – The draw handler that should be removed.
- **region_type** (*str*) – Region type the callback was added to.

Inherited Properties

- `bpy_struct.id_data`
- `Space.show_locked_time`
- `Space.type`
- `Space.show_region_header`

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.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`
- `Space.bl_rna_get_subclass`

- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- Space.bl_rna_get_subclass_py
- Space.draw_handler_add
- Space.draw_handler_remove

References

- Object.local_view_get
- Object.local_view_set
- Object.visible_get
- Object.visible_in_viewport_get
- SpaceView3D.local_view