AnimData(bpy_struct)

base class — bpy_struct

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

Animation data for data-block

action

Active Action for this data-block

TYPE:

Action

action_blend_type

Method used for combining Active Action's result with result of NLA stack

- REPLACE Replace – The strip values replace the accumulated results by amount specified by influence.
- COMBINE Combine – The strip values are combined with accumulated results by appropriately using addition, multiplication, or quaterni math, based on channel type.
- ADD Add – Weighted result of strip is added to the accumulated results.
- SUBTRACT Subtract – Weighted result of strip is removed from the accumulated results.
- MULTIPLY Multiply – Weighted result of strip is multiplied with the accumulated results.

TYPE:

enum in ['REPLACE', 'COMBINE', 'ADD', 'SUBTRACT', 'MULTIPLY'], default 'REPLACE'

action_extrapolation

Action to take for gaps past the Active Action's range (when evaluating with NLA)

- NOTHING Nothing – Strip has no influence past its extents.
- HOLD Hold – Hold the first frame if no previous strips in track, and always hold last frame.
- HOLD_FORWARD Hold Forward – Only hold last frame.

TYPE:

enum in ['NOTHING', 'HOLD', 'HOLD_FORWARD'], default 'HOLD'

action_influence

Amount the Active Action contributes to the result of the NLA stack

TYPE:

float in [0, 1], default 1.0

action_slot

The slot identifies which sub-set of the Action is considered to be for this data-block, and its name is used to find the right slot when assigning Action

TYPE:

ActionSlot

action_slot_handle

A number that identifies which sub-set of the Action is considered to be for this data-block

TYPE:

int in [-inf, inf], default 0

action_suitable_slots

The list of slots in this animation data-block

TYPE:

bpy_prop_collection of ActionSlot, (readonly)

action_tweak_storage

Slot to temporarily hold the main action while in tweak mode

TYPE:

Action

drivers

The Drivers/Expressions for this data-block

TYPE:

AnimDataDrivers bpy_prop_collection of FCurve, (readonly)

last_slot_identifier

The identifier of the most recently assigned action slot. The slot identifies which sub-set of the Action is considered to be for this data-block, a its identifier is used to find the right slot when assigning an Action.

TYPE:

string, default "", (never None)

nla_tracks

NLA Tracks (i.e. Animation Layers)

TYPE:

NlaTracks bpy_prop_collection of NlaTrack, (readonly)

use_nla

NLA stack is evaluated when evaluating this block

TYPE:

boolean, default False

use_pin

TYPE:

boolean, default False

use_tweak_mode

Whether to enable or disable tweak mode in NLA

TYPE:

boolean, default False

nla_tweak_strip_time_to_scene(frame, *, invert=False)

Convert a time value from the local time of the tweaked strip to scene time, exactly as done by built-in key editing tools. Returns the input time unchanged if not tweaking.

PARAMETERS:

- **frame** (*float in [-1.04857e+06, 1.04857e+06]*) – Input time
- **invert** (*boolean, (optional)*) – Invert, Convert scene time to action time

RETURNS:

Converted time

RETURN TYPE:

float in [-1.04857e+06, 1.04857e+06]

fix_paths_rename_all(*, prefix='', old_name='', new_name='')

Rename the property paths in the animation system, since properties are animated via string paths, it's needed to keep them valid after properties has been renamed

PARAMETERS:

- **prefix** (*string, (optional, never None)*) – Prefix, Name prefix
- **old_name** (*string, (optional, never None)*) – Old Name, Old name
- **new_name** (*string, (optional, never None)*) – New Name, New name

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

- Armature.animation_data
- CacheFile.animation_data
- Camera.animation_data
- Curve.animation_data
- Curves.animation_data
- FreestyleLineStyle.animation_data
- GreasePencil.animation_data
- GreasePencilv3.animation_data
- ID.animation_data_create
- Key.animation_data
- Lattice.animation_data
- Light.animation_data
- LightProbe.animation_data
- Mask.animation_data
- Material.animation_data
- Mesh.animation_data
- MetaBall.animation_data
- MovieClip.animation_data
- NodeTree.animation_data
- Object.animation_data
- ParticleSettings.animation_data
- PointCloud.animation_data
- Scene.animation_data
- Speaker.animation_data
- Texture.animation_data
- Volume.animation_data
- World.animation_data