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NodeSocket(bpy_struct)

base class — [bpy_struct](#)

subclasses — [NodeSocketStandard](#)

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

Input or output socket of a node

bl_idname

TYPE:

string, default “”, (never None)

bl_label

Label to display for the socket type in the UI

TYPE:

string, default “”, (never None)

bl_subtype_label

Label to display for the socket subtype in the UI

TYPE:

string, default “”, (never None)

description

Socket tooltip

TYPE:

string, default “”, (never None)

display_shape

Socket shape

TYPE:

enum in [‘CIRCLE’, ‘SQUARE’, ‘DIAMOND’, ‘CIRCLE_DOT’, ‘SQUARE_DOT’, ‘DIAMOND_DOT’], default ‘CIRCLE’

enabled

Enable the socket

TYPE:

boolean, default False

hide

Hide the socket

TYPE:

boolean, default False

hide_value

Hide the socket input value

TYPE:

boolean, default False

identifier

Unique identifier for mapping sockets

TYPE:

string, default "", (readonly, never None)

is_linked

True if the socket is connected

TYPE:

boolean, default False, (readonly)

is_multi_input

True if the socket can accept multiple ordered input links

TYPE:

boolean, default False, (readonly)

is_output

True if the socket is an output, otherwise input

TYPE:

boolean, default False, (readonly)

is_unavailable

True if the socket is unavailable

TYPE:

boolean, default False, (readonly)

label

Custom dynamic defined socket label

TYPE:

string, default "", (readonly, never None)

link_limit

Max number of links allowed for this socket

TYPE:

int in [1, 4095], default 0

name

Socket name

TYPE:

string, default "", (never None)

node

Node owning this socket

TYPE:

[Node](#), (readonly)

pin_gizmo

Keep gizmo visible even when the node is not selected

TYPE:

boolean, default False

show_expanded

Socket links are expanded in the user interface

TYPE:

boolean, default False

type

Data type

TYPE:

enum in [Node Socket Type Items](#), default 'VALUE'

links

List of node links from or to this socket.

TYPE:

[NodeLinks](#)

Note

Takes $O(\text{len}(\text{nodetree.links}))$ time.

(readonly)

draw(context, layout, node, text)

Draw socket

PARAMETERS:

- **layout** ([UILayout](#), (never None)) – Layout, Layout in the UI
- **node** ([Node](#), (never None)) – Node, Node the socket belongs to
- **text** (*string*, (never None)) – Text, Text label to draw alongside properties

draw_color(context, node)

Color of the socket icon

PARAMETERS:

node ([Node](#), (never None)) – Node, Node the socket belongs to

RETURNS:

Color

RETURN TYPE:

float array of 4 items in [0, 1]

classmethod draw_color_simple()

Color of the socket icon. Used to draw sockets in places where the socket does not belong to a node, like the node interface panel. Also use to draw node sockets if draw_color is not defined.

RETURNS:

Color

RETURN TYPE:

float array of 4 items in [0, 1]

classmethod bl_ma_get_subclass(id, default=None)

PARAMETERS:

id (*str*) – The RNA type identifier.

RETURNS:

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

- `CompositorNodeOutputFileFileSlots.new`
- `CompositorNodeOutputFileFileSlots.remove`
- `CompositorNodeOutputFileLayerSlots.new`
- `CompositorNodeOutputFileLayerSlots.remove`
- `Node.inputs`
- `Node.outputs`
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- `NodeInputs.remove`
- `NodeLink.from_socket`
- `NodeLink.to_socket`
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