Skip to content

Context Access (bpy.context)

The context members available depend on the area of Blender which is currently being accessed.

Note that all context values are read-only, but may be modified through the data API or by running operators.

Global Context

TYPE:

```
These properties are available in any contexts.
bpy.context.area
    TYPE:
        bpy.types.Area, (readonly)
bpy.context.asset
    TYPE:
        bpy.types.AssetRepresentation, (readonly)
bpy.context.blend_data
    TYPE:
        bpy.types.BlendData, (readonly)
bpy.context.collection
    TYPE:
        bpy.types.Collection,(readonly)
bpy.context.engine
    TYPE:
        string, default ", (readonly, never None)
bpy.context.gizmo_group
    TYPE:
        bpy.types.GizmoGroup, (readonly)
bpy.context.layer collection
    TYPE:
        bpy.types.LayerCollection, (readonly)
bpy.context.mode
    TYPE:
        enum in Context Mode Items, default 'EDIT_MESH', (readonly)
bpy.context.preferences
    TYPE:
        bpy.types.Preferences, (readonly)
bpy.context.region
    TYPE:
        bpy.types.Region, (readonly)
bpy.context.region_data
```

how types Pagion View 3D (readonly)

```
ppy.cypes.negronvrewop, (reacons)
bpy.context.region popup
    The temporary region for pop-ups (including menus and pop-overs)
    TYPE:
        bpy.types.Region, (readonly)
bpy.context.scene
    TYPE:
        bpy.types.Scene, (readonly)
bpy.context.screen
    TYPE:
        bpy.types.Screen, (readonly)
bpy.context.space data
    The current space, may be None in background-mode, when the cursor is outside the window or when using menu-search
    TYPE:
        bpy.types.Space, (readonly)
bpy.context.tool_settings
    TYPE:
        bpy.types.ToolSettings,(readonly)
bpy.context.view layer
    TYPE:
        bpy.types.ViewLayer, (readonly)
bpy.context.window
    TYPE:
        bpy.types.Window,(readonly)
bpy.context.window_manager
    TYPE:
        bpy.types.WindowManager, (readonly)
bpy.context.workspace
    TYPE:
        bpy.types.WorkSpace,(readonly)
Buttons Context
bpy.context.texture slot
    TYPE:
        bpy.types.TextureSlot
bpy.context.scene
    TYPE:
        bpy.types.Scene
bpy.context.world
```

TYPE:

```
bpy.types.World
bpy.context.object
   TYPE:
       bpy.types.Object
bpy.context.mesh
   TYPE:
       bpy.types.Mesh
bpy.context.armature
   TYPE:
       bpy.types.Armature
bpy.context.lattice
   TYPE:
       bpy.types.Lattice
bpy.context.curve
   TYPE:
       bpy.types.Curve
bpy.context.meta_ball
   TYPE:
       bpy.types.MetaBall
bpy.context.light
   TYPE:
       bpy.types.Light
bpy.context.speaker
   TYPE:
       bpy.types.Speaker
bpy.context.lightprobe
   TYPE:
       bpy.types.LightProbe
bpy.context.camera
   TYPE:
       bpy.types.Camera
bpy.context.material
   TYPE:
       bpy.types.Material
bpy.context.material_slot
   TYPE:
       bpy.types.MaterialSlot
bpy.context.texture
   TYPE:
       bpy.types.Texture
```

```
bpy.context.texture user
   TYPE:
        bpy.types.ID
bpy.context.texture_user_property
   TYPE:
        bpy.types.Property
bpy.context.texture_node
   TYPE:
        bpy.types.Node
bpy.context.bone
   TYPE:
        bpy.types.Bone
bpy.context.edit_bone
   TYPE:
        bpy.types.EditBone
bpy.context.pose bone
   TYPE:
        bpy.types.PoseBone
bpy.context. {\color{red} \boldsymbol{particle\_system}}
   TYPE:
        bpy.types.ParticleSystem
bpy.context. {\color{red} \boldsymbol{particle\_system\_editable}}
   TYPE:
        bpy.types.ParticleSystem
bpy.context.particle_settings
   TYPE:
        bpy.types.ParticleSettings
bpy.context.cloth
   TYPE:
        bpy.types.ClothModifier
bpy.context.soft body
   TYPE:
        bpy.types.SoftBodyModifier
bpy.context.fluid
   TYPE:
        bpy.types.FluidSimulationModifier
bpy.context.collision
   TYPE:
        bpy.types.CollisionModifier
```

bpy.context.brush

```
TYPE:
        bpy.types.Brush
bpy.context.dynamic_paint
   TYPE:
        bpy.types.DynamicPaintModifier
bpy.context.line_style
   TYPE:
        bpy.types.FreestyleLineStyle
bpy.context.collection
   TYPE:
        bpy.types.LayerCollection
bpy.context.gpencil
   TYPE:
        bpy.types.GreasePencil
bpy.context.grease_pencil
   TYPE:
        bpy.types.GreasePencilv3
bpy.context.curves
   TYPE:
        Hair Curves
bpy.context.volume
    TYPE:
        bpy.types.Volume
Clip Context
bpy.context. \textbf{edit} \underline{\quad movie clip}
   TYPE:
        bpy.types.MovieClip
bpy.context.edit_mask
    TYPE:
        bpy.types.Mask
File Context
bpy.context.active_file
   TYPE:
        bpy.types.FileSelectEntry
bpy.context.selected_files
    TYPE:
        sequence of bpy.types.FileSelectEntry
bpy.context.asset_library_reference
```

```
TYPE:
        bpy.types.AssetLibraryReference
bpy.context.selected_assets
    TYPE:
        \begin{tabular}{ll} \textbf{sequence of bpy.types.AssetRepresentation} \\ \end{tabular}
bpy.context.id
    TYPE:
        bpy.types.ID
bpy.context.selected ids
    TYPE:
        sequence of bpy.types.ID
Image Context
bpy.context.edit_image
    TYPE:
        bpy.types.Image
bpy.context.edit_mask
    TYPE:
        bpy.types.Mask
Node Context
bpy.context.selected_nodes
    TYPE:
        sequence of bpy.types.Node
bpy.context.active_node
    TYPE:
        bpy.types.Node
bpy.context.light
    TYPE:
        bpy.types.Light
bpy.context.material
    TYPE:
        bpy.types.Material
bpy.context.world
    TYPE:
        bpy.types.World
Screen Context
```

bpy.context.scene

TYPE:

bpy.types.Scene

```
bpy.context.view layer
   TYPE:
       bpy.types.ViewLayer
bpy.context.visible_objects
   TYPE:
       sequence of bpy.types.Object
bpy.context.selectable_objects
   TYPE:
       sequence of bpy.types.Object
bpy.context.selected_objects
   TYPE:
       sequence of bpy.types.Object
bpy.context.editable_objects
   TYPE:
       sequence of bpy.types.Object
bpy.context.selected editable objects
   TYPE:
       sequence of bpy.types.Object
bpy.context.objects_in_mode
   TYPE:
       sequence of bpy.types.Object
bpy.context.objects_in_mode_unique_data
   TYPE:
       sequence of bpy.types.Object
bpy.context.visible_bones
   TYPE:
       sequence of bpy.types.EditBone
bpy.context.editable_bones
   TYPE:
       sequence of bpy.types.EditBone
bpy.context.selected bones
   TYPE:
       sequence of bpy.types.EditBone
bpy.context.selected_editable_bones
   TYPE:
       sequence of bpy.types.EditBone
bpy.context.visible pose bones
   TYPE:
       sequence of bpy.types.PoseBone
```

bpy.context.selected pose bones

```
TYPE:
       sequence of bpy.types.PoseBone
bpy.context.selected_pose_bones_from_active_object
   TYPE:
       sequence of bpy.types.PoseBone
bpy.context.active_bone
   TYPE:
        bpy.types.EditBone or bpy.types.Bone
bpy.context.active_pose_bone
   TYPE:
        bpy.types.PoseBone
bpy.context.active_object
   TYPE:
        bpy.types.Object
bpy.context.object
   TYPE:
        bpy.types.Object
bpy.context.edit_object
   TYPE:
        bpy.types.Object
bpy.context.sculpt_object
   TYPE:
        bpy.types.Object
bpy.context.vertex_paint_object
   TYPE:
        bpy.types.Object
bpy.context.weight_paint_object
   TYPE:
        bpy.types.Object
bpy.context.image_paint_object
   TYPE:
        bpy.types.Object
bpy.context.particle_edit_object
   TYPE:
       bpy.types.Object
bpy.context. \color{red} \textbf{pose\_object}
   TYPE:
        bpy.types.Object
bpy.context.active_sequence_strip
```

TYPE:

```
bpy.types.Strip
bpy.context.sequences
   TYPE:
       sequence of bpy.types.Strip
bpy.context. {\bf selected\_sequences}
   TYPE:
       sequence of bpy.types.Strip
bpy.context.selected_editable_sequences
   TYPE:
       sequence of bpy.types.Strip
bpy.context.active_nla_track
   TYPE:
        bpy.types.NlaTrack
bpy.context.active nla strip
   TYPE:
        bpy.types.NlaStrip
bpy.context.selected_nla_strips
   TYPE:
       sequence of bpy.types.NlaStrip
bpy.context.selected movieclip tracks
   TYPE:
       sequence of bpy.types.MovieTrackingTrack
bpy.context.annotation data
   TYPE:
        bpy.types.GreasePencil
bpy.context. {\color{red} annotation\_data\_owner}
   TYPE:
       bpy.types.ID
bpy.context.active_annotation_layer
   TYPE:
        bpy.types.GPencilLayer
bpy.context.grease_pencil
   TYPE:
        bpy.types.GreasePencilv3
bpy.context.active operator
   TYPE:
        bpy.types.Operator
bpy.context.active_action
   TYPE:
        bpy.types.Action
```

bpy.context.selected visible actions TYPE: sequence of bpy.types.Action bpy.context.selected_editable_actions TYPE: sequence of bpy.types.Action bpy.context.visible fcurves TYPE: sequence of bpy.types.FCurve bpy.context.editable fcurves TYPE: sequence of bpy.types.FCurve bpy.context.selected visible fcurves TYPE: sequence of bpy.types.FCurve bpy.context.selected editable fcurves TYPE:

sequence of bpy.types.FCurve

bpy.context.active_editable_fcurve

TYPE:

bpy.types.FCurve

bpy.context.selected_editable_keyframes

TYPE:

sequence of bpy.types.Keyframe

bpy.context.ui list

TYPE:

bpy.types.UIList

bpy.context.property

TYPE:

```
bpy.types.AnyType or str or int
```

Get the property associated with a hovered button. Returns a tuple of the data-block, data path to the property, and array index.

Note

When the property doesn't have an associated bpy.types.ID non-ID data may be returned. This may occur when accessing windowing data, for example, operator properties.

```
# Example inserting keyframe for the hovered property.
active_property = bpy.context.property
if active property:
    datablock, data path, index = active property
   datablock.keyframe insert (data path=data path, index=index, frame=1)
```

```
bpy.context. {\color{red} asset\_library\_reference}
   TYPE:
        bpy.types.AssetLibraryReference
bpy.context.active_strip
   TYPE:
        bpy.types.Strip
bpy.context.strips
   TYPE:
        sequence of bpy.types.Strip
bpy.context.selected_strips
    TYPE:
        sequence of bpy.types.Strip
bpy.context.selected_editable_strips
    TYPE:
        sequence of bpy.types.Strip
Sequencer Context
bpy.context.edit_mask
    TYPE:
        bpy.types.Mask
Text Context
bpy.context.edit_text
    TYPE:
        bpy.types.Text
View3D Context
```

bpy.context.active_object

TYPE:

bpy.types.Object

bpy.context.selected_ids

TYPE:

sequence of bpy.types.ID

Previous Change Log

Report issue on this page

Copyright © Blender Authors Made with Furo

Data Access (bpy.da