

[Skip to content](#)

# WindowManager(ID)

base classes — `bpy_struct`, `ID`

**class** `bpy.types.WindowManager(ID)`

Window manager data-block defining open windows and other user interface data

## **addon\_filter**

Filter add-ons by category

### **TYPE:**

enum in [], default ‘’

## **addon\_search**

Filter by add-on name, author & category

### **TYPE:**

string, default ‘’, (never None)

## **addon\_support**

Display support level

- `OFFICIAL` Official – Officially supported.
- `COMMUNITY` Community – Maintained by community developers.

### **TYPE:**

enum set in {‘OFFICIAL’, ‘COMMUNITY’}, default {‘COMMUNITY’, ‘OFFICIAL’}

## **addon\_tags**

### **TYPE:**

`BlExtDummyGroup`, (readonly)

## **asset\_path\_dummy**

Full path to the Blender file containing the active asset

### **TYPE:**

string, default ‘’, (readonly, never None)

## **extension\_search**

Filter by extension name, author & category

### **TYPE:**

string, default ‘’, (never None)

## **extension\_show\_panel\_available**

Only show installed extensions

### **TYPE:**

boolean, default True

## **extension\_show\_panel\_installed**

Only show installed extensions

### **TYPE:**

boolean, default True

## **extension\_tags**

### **TYPE:**

`BlExtDummyGroup`, (readonly)

## **extension\_type**

Show extensions by type

- `ADDON` Add-ons – Only show add-ons.
- `THEME` Themes – Only show themes.

### **TYPE:**

enum in ['ADDON', 'THEME'], default 'ADDON'

## **extensions\_blocked**

Number of installed extensions which are blocked

### **TYPE:**

int in [-inf, inf], default 0

## **extensions\_updates**

Number of extensions with available update

### **TYPE:**

int in [-inf, inf], default 0

## **is\_interface\_locked**

If true, the interface is currently locked by a running job and data shouldn't be modified from application timers. Otherwise, the running job might conflict with the handler causing unexpected results or even crashes.

### **TYPE:**

boolean, default False, (readonly)

## **keyconfigs**

Registered key configurations

### **TYPE:**

`KeyConfigurations` `bpy_prop_collection` of `KeyConfig`, (readonly)

## **operators**

Operator registry

### **TYPE:**

`bpy_prop_collection` of `Operator`, (readonly)

## **poselib\_previous\_action**

### **TYPE:**

`Action`

## **preset\_name**

Name for new preset

### **TYPE:**

string, default "New Preset", (never None)

## **windows**

Open windows

### **TYPE:**

**FILE:**

`bpy_prop_collection` of `Window`, (readonly)

## **xr\_session\_settings**

**TYPE:**

`XrSessionSettings`, (readonly, never None)

## **xr\_session\_state**

Runtime state information about the VR session

**TYPE:**

`XrSessionState`, (readonly)

## **clipboard**

Clipboard text storage.

**TYPE:**

`str`

## **classmethod fileselect\_add(operator)**

Opens a file selector with an operator. The string properties ‘filepath’, ‘filename’, ‘directory’ and a ‘files’ collection are assigned when present in the operator. If ‘filter\_glob’ property is present in the operator and it’s not empty, it will be used as a file filter (example value: ‘.zip;.py;\*.exe’).

**PARAMETERS:**

`operator (Operator)` – Operator to call

## **classmethod modal\_handler\_add(operator)**

Add a modal handler to the window manager, for the given modal operator (called by `invoke()` with `self`, just before returning `{‘RUNNING_MODAL’}`)

**PARAMETERS:**

`operator (Operator)` – Operator to call

**RETURNS:**

Whether adding the handler was successful

**RETURN TYPE:**

`boolean`

## **event\_timer\_add(time\_step, \*, window=None)**

Add a timer to the given window, to generate periodic ‘TIMER’ events

**PARAMETERS:**

- `time_step (float in [0, inf])` – Time Step, Interval in seconds between timer events
- `window (Window, optional)` – Window to attach the timer to, or None

**RETURN TYPE:**

`Timer`

## **event\_timer\_remove(timer)**

`event_timer_remove`

## **classmethod gizmo\_group\_type\_ensure(identifier)**

Activate an existing widget group (when the persistent option isn’t set)

**PARAMETERS:**

`identifier (string, (never None))` – Gizmo group type name

### **classmethod gizmo\_group\_type\_unlink\_delayed(identifier)**

Unlink a widget group (when the persistent option is set)

#### **PARAMETERS:**

**identifier** (*string, (never None)*) – Gizmo group type name

### **progress\_begin(min, max)**

Start progress report

#### **PARAMETERS:**

- **min** (*float in [-inf, inf]*) – min, any value in range [0,9999]
- **max** (*float in [-inf, inf]*) – max, any value in range [min+1,9998]

### **progress\_update(value)**

Update the progress feedback

#### **PARAMETERS:**

**value** (*float in [-inf, inf]*) – value, Any value between min and max as set in progress\_begin()

### **progress\_end()**

Terminate progress report

### **classmethod invoke\_props\_popup(operator, event)**

Operator popup invoke (show operator properties and execute it automatically on changes)

#### **PARAMETERS:**

- **operator** ([Operator](#)) – Operator to call
- **event** ([Event](#)) – Event

#### **RETURNS:**

result

#### **RETURN TYPE:**

enum set in [Operator Return Items](#)

### **classmethod invoke\_props\_dialog(operator, \*, width=300, title="", confirm\_text="", cancel\_default=False, text\_ctxt="", translate=True)**

Operator dialog (non-autoexec popup) invoke (show operator properties and only execute it on click on OK button)

#### **PARAMETERS:**

- **operator** ([Operator](#)) – Operator to call
- **width** (*int in [0, inf], (optional)*) – Width of the popup
- **title** (*string, (optional, never None)*) – Title, Optional text to show as title of the popup
- **confirm\_text** (*string, (optional, never None)*) – Confirm Text, Optional text to show instead to the default “OK” confirmation button text
- **cancel\_default** (*boolean, (optional)*) – cancel\_default
- **text\_ctxt** (*string, (optional)*) – Override automatic translation context of the given text
- **translate** (*boolean, (optional)*) – Translate the given text, when UI translation is enabled

#### **RETURNS:**

result

#### **RETURN TYPE:**

enum set in [Operator Return Items](#)

### **classmethod invoke\_search\_popup(operator)**

Operator search popup invoke which searches values of the operator's [bpv.types.Operator.bl\\_property](#) (which must be ar

EnumProperty), executing it on confirmation

#### PARAMETERS:

**operator** ([Operator](#)) – Operator to call

**classmethod invoke\_popup(operator, \*, width=300)**

Operator popup invoke (only shows operator's properties, without executing it)

#### PARAMETERS:

- **operator** ([Operator](#)) – Operator to call
- **width** (*int in [0, inf], (optional)*) – Width of the popup

#### RETURNS:

result

#### RETURN TYPE:

enum set in [Operator Return Items](#)

**classmethod invoke\_confirm(operator, event, \*, title="", message="", confirm\_text="", icon='NONE', text\_ctxt="", translate=True)**

Operator confirmation popup (only to let user confirm the execution, no operator properties shown)

#### PARAMETERS:

- **operator** ([Operator](#)) – Operator to call
- **event** ([Event](#)) – Event
- **title** (*string, (optional, never None)*) – Title, Optional text to show as title of the popup
- **message** (*string, (optional, never None)*) – Message, Optional first line of content text
- **confirm\_text** (*string, (optional, never None)*) – Confirm Text, Optional text to show instead to the default “OK” confirmation button text
- **icon** (*enum in ['NONE', 'WARNING', 'QUESTION', 'ERROR', 'INFO'], (optional)*) – Icon, Optional icon displayed in the dialog
- **text\_ctxt** (*string, (optional)*) – Override automatic translation context of the given text
- **translate** (*boolean, (optional)*) – Translate the given text, when UI translation is enabled

#### RETURNS:

result

#### RETURN TYPE:

enum set in [Operator Return Items](#)

**classmethod popmenu\_begin\_\_internal(title, \*, icon='NONE')**

popmenu\_begin\_\_internal

#### PARAMETERS:

**icon** (enum in [Icon Items](#), (optional)) – icon

#### RETURN TYPE:

[UIPopupMenu](#), (never None)

**classmethod popmenu\_end\_\_internal(menu)**

popmenu\_end\_\_internal

**classmethod popover\_begin\_\_internal(\*, ui\_units\_x=0, from\_active\_button=False)**

popover\_begin\_\_internal

#### PARAMETERS:

- **ui\_units\_x** (*int in [0, inf], (optional)*) – ui\_units\_x
- **from\_active\_button** (*boolean, (optional)*) – Use Button, Use the active button for positioning

#### RETURN TYPE:

`UIPopover`, (never None)

**classmethod** `popover_end__internal(menu, *, keymap=None)`

`popover_end__internal`

**PARAMETERS:**

**keymap** (`KeyMap`, (optional)) – Key Map, Active key map

**classmethod** `piemenu_begin__internal(title, *, icon='NONE', event=None)`

`piemenu_begin__internal`

**PARAMETERS:**

**icon** (enum in [Icon Items](#), (optional)) – icon

**RETURN TYPE:**

`UIPieMenu`, (never None)

**classmethod** `piemenu_end__internal(menu)`

`piemenu_end__internal`

**classmethod** `operator_properties_last(operator)`

`operator_properties_last`

**RETURN TYPE:**

`OperatorProperties`, (never None)

**print\_undo\_steps()**

`print_undo_steps`

**classmethod** `tag_script_reload()`

Tag for refreshing the interface after scripts have been reloaded

**popover(draw\_func, \*, ui\_units\_x=0, keymap=None, from\_active\_button=False)**

**popup\_menu(draw\_func, \*, title='', icon='NONE')**

Popup menus can be useful for creating menus without having to register menu classes.

Note that they will not block the scripts execution, so the caller can't wait for user input.

```
import bpy

def draw(self, context):
    self.layout.label(text="Hello World")

bpy.context.window_manager.popup_menu(draw, title="Greeting", icon='INFO')
```

**popup\_menu\_pie(event, draw\_func, \*, title='', icon='NONE')**

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**PROPERTY API**

**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_cursor_add(callback, args, space_type, region_type)`

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

**PARAMETERS:**

- **callback** (*Callable*[[*Any*, ..., *tuple*[*int*, *int*]], *Any*]) – A function that will be called when the cursor is drawn. It gets the specified arguments as input with the mouse position (tuple) as last argument.
- **args** (*tuple*[*Any*, ...]) – Arguments that will be passed to the callback.
- **space\_type** (*str*) – The space type the callback draws in; for example `VIEW_3D`. (`bpy.types.Space.type`)
- **region\_type** (*str*) – The region type the callback draws in; usually `WINDOW`. (`bpy.types.Region.type`)

**RETURNS:**

Handler that can be removed later on.

**RETURN TYPE:**

object

**classmethod** `draw_cursor_remove(handler)`

Remove a draw cursor handler that was added previously.

**PARAMETERS:****handler** (*object*) – The draw cursor handler that should be removed.

## Inherited Properties

- `bpy_struct.id_data`
- `ID.name`
- `ID.name_full`
- `ID.id_type`
- `ID.session_uid`
- `ID.is_evaluated`
- `ID.original`
- `ID.users`
- `ID.use_fake_user`
- `ID.use_extra_user`
- `ID.is_embedded_data`
- `ID.is_missing`
- `ID.is_runtime_data`
- `ID.is_editable`
- `ID.tag`
- `ID.is_library_indirect`
- `ID.library`
- `ID.library_weak_reference`
- `ID.asset_data`
- `ID.override_library`
- `ID.preview`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.type_recast`

- `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.values`
- `ID.rename`
- `ID.evaluated_get`
- `ID.copy`
- `ID.asset_mark`
- `ID.asset_clear`
- `ID.asset_generate_preview`
- `ID.override_create`
- `ID.override_hierarchy_create`
- `ID.user_clear`
- `ID.user_remap`
- `ID.make_local`
- `ID.user_of_id`
- `ID.animation_data_create`
- `ID.animation_data_clear`
- `ID.update_tag`
- `ID.preview_ensure`
- `ID.bl_rna_get_subclass`
- `ID.bl_rna_get_subclass_py`

## References

- `BlendData.window_managers` • `Context.window_manager`