# Wm Operators

bpy.ops.wm.alembic\_export(\*, filepath=", check\_existing=True, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=True, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, display\_type='DEFAULT', sort\_method='', filter\_glob='\*.abc', start=-2147483648, end=-2147483648, xsamples=1, gsamples=1, sh\_open=0.0, sh\_close=1.0, selected=False, visible\_objects\_only=False, flatten=False, collection=", uvs=True, packuv=True, normals=True, vcolors=False, orcos=True, face\_sets=False, subdiv\_schema=False, apply\_subdiv=False, curves\_as\_mesh=False, use\_instancing=True, global\_scale=1.0, triangulate=False, quad\_method='SHORTEST\_DIAGONAL', ngon\_method='BEAUTY', export\_hair=True, export\_particles=True, export\_custom\_properties=True, as background\_job=False, evaluation\_mode='RENDER', init\_scene\_frame\_range=True)

Export current scene in an Alembic archive

- **filepath** (*string*, (*optional*, *never None*)) File Path, Path to file
- check existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- filter\_blender (boolean, (optional)) Filter .blend files
- **filter backup** (boolean, (optional)) Filter .blend files
- **filter image** (boolean, (optional)) Filter image files
- **filter movie** (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- **filter sound** (boolean, (optional)) Filter sound files
- **filter text** (boolean, (optional)) Filter text files
- filter archive (boolean, (optional)) Filter archive files
- filter\_btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter\_alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter volume (boolean, (optional)) Filter OpenVDB volume files
- filter folder (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (enum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - $\begin{tabular}{ll} \bullet & \tt DEFAULT & \textbf{Default} \textbf{Automatically determine display type for files.} \end{tabular}$
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- **sort method** (*enum in* [], (*optional*)) File sorting mode
- start (int in [-inf, inf], (optional)) Start Frame, Start frame of the export, use the default value to take the start frame of the current scene
- end (int in [-inf, inf], (optional)) End Frame, End frame of the export, use the default value to take the end frame of the current scene
- xsamples (int in [1, 128], (optional)) Transform Samples, Number of times per frame transformations are sampled
- gramples (int in [1, 128], (optional)) Geometry Samples, Number of times per frame object data are sampled
- sh open (float in [-1, 1], (optional)) Shutter Open, Time at which the shutter is open
- sh close (float in [-1, 1], (optional)) Shutter Close, Time at which the shutter is closed
- **selected** (*boolean*, (*optional*)) Selected Objects Only, Export only selected objects

- **visible objects only** (boolean, (optional)) Visible Objects Only, Export only objects that are visible
- flatten (boolean, (optional)) Flatten Hierarchy, Do not preserve objects' parent/children relationship
- collection (string, (optional, never None)) Collection
- uvs (boolean, (optional)) UV Coordinates, Export UV coordinates
- packuv (boolean, (optional)) Merge UVs
- **normals** (boolean, (optional)) Normals, Export normals
- vcolors (boolean, (optional)) Color Attributes, Export color attributes
- orcos (boolean, (optional)) Generated Coordinates, Export undeformed mesh vertex coordinates
- face sets (boolean, (optional)) Face Sets, Export per face shading group assignments
- subdiv schema (boolean, (optional)) Use Subdivision Schema, Export meshes using Alembic's subdivision schema
- apply subdiv (boolean, (optional)) Apply Subdivision Surface, Export subdivision surfaces as meshes
- curves as mesh (boolean, (optional)) Curves as Mesh, Export curves and NURBS surfaces as meshes
- use\_instancing (boolean, (optional)) Use Instancing, Export data of duplicated objects as Alembic instances; speeds up the export and compatibility with other software
- global\_scale (float in [0.0001, 1000], (optional)) Scale, Value by which to enlarge or shrink the objects with respect to the world's orig
- triangulate (boolean, (optional)) Triangulate, Export polygons (quads and n-gons) as triangles
- quad method (enum in Modifier Triangulate Quad Method Items, (optional)) Quad Method, Method for splitting the quads into triangles
- ngon method (enum in Modifier Triangulate Ngon Method Items, (optional)) N-gon Method, Method for splitting the n-gons into triangles
- export\_hair (boolean, (optional)) Export Hair, Exports hair particle systems as animated curves
- export particles (boolean, (optional)) Export Particles, Exports non-hair particle systems
- export\_custom\_properties (boolean, (optional)) Export Custom Properties, Export custom properties to Alembic .userProperties
- as\_background\_job (boolean, (optional)) Run as Background Job, Enable this to run the import in the background, disable to block Blender while importing. This option is deprecated; EXECUTE this operator to run in the foreground, and INVOKE it to run as a background job
- evaluation\_mode (emm in ['RENDER', 'VIEWPORT'], (optional)) —

  Settings, Determines visibility of objects, modifier settings, and other areas where there are different settings for viewport and rendering
  - RENDER Render Use Render settings for object visibility, modifier settings, etc.
  - VIEWPORT Viewport Use Viewport settings for object visibility, modifier settings, etc.

bpy.ops.wm.alembic\_import(\*, filepath=", directory=", files=None, check\_existing=False, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=True, filter\_usd=False, filter\_obj=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, relative\_path=True, display\_type='DEFAULT', sort\_method=", filter\_glob='\*.abc', scale=1.0, set\_frame\_range=True, validate\_meshes=False, always\_add\_cache\_reader=False, is sequence=False, as background job=False)

Load an Alembic archive

- filepath (string, (optional, never None)) File Path, Path to file
- directory (string, (optional, never None)) Directory, Directory of the file
- files (bpy prop collection of OperatorFileListElement, (optional)) Files
- check\_existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- filter\_blender (boolean, (optional)) Filter .blend files
- filter backup (boolean, (optional)) Filter .blend files
- filter\_image (boolean, (optional)) Filter image files
- filter movie (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- **filter\_sound** (boolean, (optional)) Filter sound files
- **filter text** (boolean, (optional)) Filter text files
- filter archive (hoolean (antional)) Filter archive files

- Inter aremye (oootean, (optional)) i mei aremye mes
- **filter\_btx** (boolean, (optional)) Filter btx files
- filter\_collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter volume (boolean, (optional)) Filter OpenVDB volume files
- **filter folder** (boolean, (optional)) Filter folders
- filter blenlib (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- relative path (boolean, (optional)) Relative Path, Select the file relative to the blend file
- **display\_type** (*emum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)*) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - $\circ$  LIST\_HORIZONTAL Long List Display files as a detailed list.
  - $\circ$  THUMBNAIL Thumbnails Display files as thumbnails.
- **sort method** (*enum in* [], (*optional*)) File sorting mode
- scale (float in [0.0001, 1000], (optional)) Scale, Value by which to enlarge or shrink the objects with respect to the world's origin
- set\_frame\_range (boolean, (optional)) Set Frame Range, If checked, update scene's start and end frame to match those of the Alembic archive
- validate\_meshes (boolean, (optional)) Validate Meshes, Ensure the data is valid (when disabled, data may be imported which causes crashes displaying or editing)
- always\_add\_cache\_reader (boolean, (optional)) Always Add Cache Reader, Add cache modifiers and constraints to imported objects even if they are not animated so that they can be updated when reloading the Alembic archive
- is sequence (boolean, (optional)) Is Sequence, Set to true if the cache is split into separate files
- as\_background\_job (boolean, (optional)) Run as Background Job, Enable this to run the export in the background, disable to block Blender while exporting. This option is deprecated; EXECUTE this operator to run in the foreground, and INVOKE it to run as a background job

bpy.ops.wm.append(\*, filepath=", directory=", filename=", files=None, check\_existing=False, filter\_blender=True, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=True, filemode=1, display\_type='DEFAULT', sort\_method=", link=False, do\_reuse\_local\_id=False, clear\_asset\_data=False, autoselect=True, active\_collection=True, instance\_collections=False, instance\_object\_data=True, set\_fake=False, use\_recursive=True)

Append from a Library .blend file

- **filepath** (*string*, (*optional*, *never None*)) File Path, Path to file
- **directory** (*string*, (*optional*, *never* None)) Directory, Directory of the file
- filename (string, (optional, never None)) File Name, Name of the file
- files (bpy prop collection of OperatorFileListElement, (optional)) Files
- check\_existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- filter\_blender (boolean, (optional)) Filter .blend files
- **filter\_backup** (boolean, (optional)) Filter .blend files
- filter\_image (boolean, (optional)) Filter image files
- filter\_movie (boolean, (optional)) Filter movie files
- **filter\_python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- **filter sound** (boolean, (optional)) Filter sound files

- filter\_text (boolean, (optional)) Filter text files
- filter\_archive (boolean, (optional)) Filter archive files
- filter btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter volume (boolean, (optional)) Filter OpenVDB volume files
- **filter folder** (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (enum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - LIST\_HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- **sort method** (*enum in* [], (*optional*)) File sorting mode
- link (boolean, (optional)) Link, Link the objects or data-blocks rather than appending
- do\_reuse\_local\_id (boolean, (optional)) Re-Use Local Data, Try to re-use previously matching appended data-blocks instead of appending a new copy
- clear\_asset\_data (boolean, (optional)) Clear Asset Data, Don't add asset meta-data or tags from the original data-block
- autoselect (boolean, (optional)) Select, Select new objects
- active collection (boolean, (optional)) Active Collection, Put new objects on the active collection
- instance\_collections (boolean, (optional)) Instance Collections, Create instances for collections, rather than adding them directly to the scene
- instance\_object\_data (boolean, (optional)) Instance Object Data, Create instances for object data which are not referenced by any objects
- set fake (boolean, (optional)) Fake User, Set "Fake User" for appended items (except objects and collections)
- use recursive (boolean, (optional)) Localize All, Localize all appended data, including those indirectly linked from other libraries

## bpy.ops.wmbatch rename(\*, data type='OBJECT', data source='SELECT', actions=None)

Rename multiple items at once

#### **PARAMETERS:**

- data\_type (enum in ['OBJECT', 'COLLECTION', 'MATERIAL', 'MESH', 'CURVE', 'META', 'VOLUME', 'GPENCIL', 'ARMATURE', 'LATTICE', 'LIGHT', 'LIGHT\_PROBE', 'CAMERA', 'SPEAKER', 'BONE', 'NODE', 'SEQUENCE\_STRIP', 'ACTION\_CLIP', 'SCENE', 'BRUSH'], (optional)) — Type, Type of data to rename
- data\_source (enum in ['SELECT', 'ALL'], (optional)) Source
- actions (bpy\_prop\_collection of BatchRenameAction, (optional)) actions

# FILE:

startup/bl\_operators/wm.py:3266

## bpy.ops.wm.blend strings utf8 validate()

Check and fix all strings in current .blend file to be valid UTF-8 Unicode (needed for some old, 2.4x area files)

## FILE:

startup/bl operators/file.py:289

bpy.ops.wm.call asset shelf popover(\*, name=")

Open a predefined asset shelf in a popup

#### **PARAMETERS:**

name (string, (optional, never None)) – Asset Shelf Name, Identifier of the asset shelf to display

bpy.ops.wm.call menu(\*, name=")

Open a predefined menu

#### **PARAMETERS:**

name (string, (optional, never None)) – Name, Name of the menu

bpy.ops.wm.call menu pie(\*, name=")

Open a predefined pie menu

#### **PARAMETERS:**

name (string, (optional, never None)) - Name, Name of the pie menu

bpy.ops.wm.call panel(\*, name=", keep open=True)

Open a predefined panel

#### **PARAMETERS:**

- name (string, (optional, never None)) Name, Name of the menu
- keep open (boolean, (optional)) Keep Open

bpy.ops.wm.clear\_recent\_files(\*, remove='ALL')

Clear the recent files list

#### **PARAMETERS:**

**remove** (enum in ['ALL', 'MISSING'], (optional)) – Remove

bpy.ops.wmcollada\_export(\*, filepath=", check\_existing=True, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=True, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, display\_type='DEFAULT', sort\_method="', filter\_glob='\*.dae', prop\_bc\_export\_ui\_section='main', apply\_modifiers=False, export\_mesh\_type=0, export\_mesh\_type\_selection='view', export\_global\_forward\_selection='Y', export\_global\_up\_selection='Z', apply\_global\_orientation=False, selected=False, include\_children=False, include\_armatures=False, include\_shapekeys=False, deform\_bones\_only=False, include\_animations=True, include\_all\_actions=True, export\_animation\_type\_selection='sample', sampling\_rate=1, keep\_smooth\_curves=False, keep\_keyframes=False, keep\_flat\_curves=False, active\_uv\_only=False, use\_texture\_copies=True, triangulate=True, use\_object\_instantiation=True, use\_blender\_profile=True, sort\_by\_name=False, export\_object\_transformation\_type=0, export\_object\_transformation\_type\_selection='matrix', export\_animation\_transformation\_type=0, export\_animation\_transformation\_type\_selection='matrix', open\_sim=False, limit\_precision=False, keep\_bind\_info=False)

Save a Collada file

- filepath (string, (optional, never None)) File Path, Path to file
- check existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- **filter blender** (boolean, (optional)) Filter .blend files
- **filter backup** (boolean, (optional)) Filter .blend files
- filter\_image (boolean, (optional)) Filter image files
- filter\_movie (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- **filter sound** (boolean, (optional)) Filter sound files
- filter\_text (boolean, (optional)) Filter text files
- filter archive (boolean, (optional)) Filter archive files

- **filter btx** (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter\_usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter\_volume (boolean, (optional)) Filter OpenVDB volume files
- **filter folder** (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- filemode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (emm in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- sort method (enum in [], (optional)) File sorting mode
- prop\_bc\_export\_ui\_section (enum in ['main', 'geometry', 'armature', 'animation', 'collada'], (optional)) Export Section, Only for User Interface organization
  - main Main Data export section.
  - geometry Geom-Geometry export section.
  - armature Arm-Armature export section.
  - animation Anim-Animation export section.
  - o collada Extra Collada export section.
- apply modifiers (boolean, (optional)) Apply Modifiers, Apply modifiers to exported mesh (non destructive)
- export\_mesh\_type (int in [-inf, inf], (optional)) Resolution, Modifier resolution for export
- $\bullet \ \ \textbf{export\_mesh\_type\_selection} \ (\textit{enum in ['view', 'render'], (optional)}) \\$

Resolution, Modifier resolution for export

- view Viewport Apply modifier's viewport settings.
- render Render Apply modifier's render settings.
- **export\_global\_forward\_selection** (*enum in ['X', 'Y', 'Z', '-X', '-Y', '-Z'], (optional)*) –

Global Forward Axis, Global Forward axis for export

- ∘ X X Global Forward is positive X Axis.
- ∘ Y Y − Global Forward is positive Y Axis.
- $\circ$  Z Z Global Forward is positive Z Axis.
- ∘ -X -X Global Forward is negative X Axis.
- -Y -Y -Global Forward is negative Y Axis.
- ∘ -Z -Z-Global Forward is negative Z Axis.
- export\_global\_up\_selection (emm in ['X', 'Y', 'Z', '-X', '-Y', '-Z'], (optional)) –

Global Up Axis, Global Up axis for export

- ∘ X X Global UP is positive X Axis.
- ∘ Y Y − Global UP is positive Y Axis.
- ∘ Z Z Global UP is positive Z Axis.
- ∘ -X -X Global UP is negative X Axis.
- ∘ -Y -Y -Global UP is negative Y Axis.
- $\circ$  -Z -Z-Global UP is negative Z Axis.

- apply\_global\_orientation (boolean, (optional)) Apply Global Orientation, Rotate all root objects to match the global orientation settings otherwise set the global orientation per Collada asset
- **selected** (boolean, (optional)) Selection Only, Export only selected elements
- include children (boolean, (optional)) Include Children, Export all children of selected objects (even if not selected)
- include armatures (boolean, (optional)) Include Armatures, Export related armatures (even if not selected)
- include shapekeys (boolean, (optional)) Include Shape Keys, Export all Shape Keys from Mesh Objects
- deform bones only (boolean, (optional)) Deform Bones Only, Only export deforming bones with armatures
- include\_animations (boolean, (optional)) Include Animations, Export animations if available (exporting animations will enforce the decomposition of node transforms into <translation> <rotation> and <scale> components)
- include\_all\_actions (boolean, (optional)) Include all Actions, Export also unassigned actions (this allows you to export entire animation libraries for your character(s))
- export\_animation\_type\_selection (enum in ['sample', 'keys'], (optional)) —

Key Type, Type for exported animations (use sample keys or Curve keys)

- sample Samples Export Sampled points guided by sampling rate.
- keys Curves Export Curves (note: guided by curve keys).
- sampling\_rate (int in [1, inf], (optional)) Sampling Rate, The distance between 2 keyframes (1 to key every frame)
- **keep\_smooth\_curves** (*boolean, (optional*)) Keep Smooth curves, Export also the curve handles (if available) (this does only work when the inverse parent matrix is the unity matrix, otherwise you may end up with odd results)
- **keep\_keyframes** (*boolean*, (*optional*)) Keep Keyframes, Use existing keyframes as additional sample points (this helps when you want to keep manual tweaks)
- keep\_flat\_curves (boolean, (optional)) All Keyed Curves, Export also curves which have only one key or are totally flat
- active\_uv\_only (boolean, (optional)) Only Selected UV Map, Export only the selected UV Map
- use\_texture\_copies (boolean, (optional)) Copy, Copy textures to same folder where the .dae file is exported
- triangulate (boolean, (optional)) Triangulate, Export polygons (quads and n-gons) as triangles
- use object instantiation (boolean, (optional)) Use Object Instances, Instantiate multiple Objects from same Data
- use\_blender\_profile (boolean, (optional)) Use Blender Profile, Export additional Blender specific information (for material, shaders, bone etc.)
- sort by name (boolean, (optional)) Sort by Object name, Sort exported data by Object name
- export\_object\_transformation\_type (int in [-inf, inf], (optional)) Transform, Object Transformation type for translation, scale and rotation
- export\_object\_transformation\_type\_selection (emum in ['matrix', 'decomposed'], (optional)) —

Transform, Object Transformation type for translation, scale and rotation

- $\verb| o matrix Matrix-Use < | matrix> | representation for exported transformations. \\$
- $\verb| o decomposed-Use < rotate>|, < translate>| and < scale>| representation for exported transformations. \\$
- export\_animation\_transformation\_type (int in [-inf, inf], (optional)) Transform, Transformation type for translation, scale and rotation Note: The Animation transformation type in the Animation transformation type in the Geom tab
- export\_animation\_transformation\_type\_selection (enum in ['matrix', 'decomposed'], (optional)) —

Transform, Transformation type for translation, scale and rotation. Note: The Animation transformation type in the Anim Tab is always equal to the Object transformation type in the Geom tab

- $\verb| o matrix Matrix-Use < matrix> representation for exported transformations. \\$
- decomposed Decomposed Use <rotate>, <translate> and <scale> representation for exported transformations.
- open\_sim(boolean, (optional)) Export to SL/OpenSim, Compatibility mode for Second Life, OpenSimulator and other compatible online
  worlds
- limit precision (boolean, (optional)) Limit Precision, Reduce the precision of the exported data to 6 digits
- **keep\_bind\_info** (*boolean, (optional*)) Keep Bind Info, Store Bindpose information in custom bone properties for later use during Collada export

bpy.ops.wm.collada\_import(\*, filepath="', check\_existing=False, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False,

filter\_btx=False, filter\_collada=True, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, display\_type='DEFAULT', sort\_method='', filter\_glob='\*.dae', import\_units=False, custom\_normals=True, fix\_orientation=False, find\_chains=False, auto\_connect=False, min\_chain\_length=0, keep bind info=False)

Load a Collada file

## **PARAMETERS:**

- **filepath** (*string*, (*optional*, *never None*)) File Path, Path to file
- check\_existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- **filter blender** (boolean, (optional)) Filter .blend files
- filter backup (boolean, (optional)) Filter .blend files
- filter image (boolean, (optional)) Filter image files
- filter movie (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- **filter sound** (boolean, (optional)) Filter sound files
- **filter\_text** (boolean, (optional)) Filter text files
- filter archive (boolean, (optional)) Filter archive files
- filter btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter\_usd (boolean, (optional)) Filter USD files
- filter\_obj (boolean, (optional)) Filter OBJ files
- **filter volume** (boolean, (optional)) Filter OpenVDB volume files
- filter folder (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (enum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - $\begin{tabular}{ll} \bullet & \texttt{DEFAULT} & \textbf{Default} \textbf{Automatically determine display type for files.} \\ \end{tabular}$
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- **sort\_method** (*enum in* [], (*optional*)) File sorting mode
- import\_units (boolean, (optional)) Import Units, If disabled match import to Blender's current Unit settings, otherwise use the settings from the Imported scene
- custom\_normals (boolean, (optional)) Custom Normals, Import custom normals, if available (otherwise Blender will compute them)
- fix\_orientation (boolean, (optional)) Fix Leaf Bones, Fix Orientation of Leaf Bones (Collada does only support Joints)
- find\_chains (boolean, (optional)) Find Bone Chains, Find best matching Bone Chains and ensure bones in chain are connected
- auto\_connect (boolean, (optional)) Auto Connect, Set use\_connect for parent bones which have exactly one child bone
- min\_chain\_length (int in [0, inf], (optional)) Minimum Chain Length, When searching Bone Chains disregard chains of length below this value
- **keep\_bind\_info** (boolean, (optional)) Keep Bind Info, Store Bindpose information in custom bone properties for later use during Collada export

# bpy.ops.wm.collection export all()

Invoke all configured exporters for all collections

bpy.ops.wm.context collection boolean set(\*, data path iter=", data path item=", type='TOGGLE')

Set boolean values for a collection of items

#### **PARAMETERS:**

- data path iter (string, (optional, never None)) data path iter, The data path relative to the context, must point to an iterable
- data path item (string, (optional, never None)) data path item, The data path from each iterable to the value (int or float)
- type (enum in ['TOGGLE', 'ENABLE', 'DISABLE'], (optional)) Type

#### FILE:

startup/bl\_operators/wm.py:875

bpy.ops.wm.context cycle array(\*, data path=", reverse=False)

Set a context array value (useful for cycling the active mesh edit mode)

## **PARAMETERS:**

- data\_path (string, (optional, never None)) Context Attributes, Context data-path (expanded using visible windows in the current .blend file)
- reverse (boolean, (optional)) Reverse, Cycle backwards

## FILE:

startup/bl operators/wm.py:673

bpy.ops.wm.context cycle enum(\*, data path=", reverse=False, wrap=False)

Toggle a context value

#### **PARAMETERS:**

- data\_path (string, (optional, never None)) Context Attributes, Context data-path (expanded using visible windows in the current .blend file)
- reverse (boolean, (optional)) Reverse, Cycle backwards
- wrap (boolean, (optional)) Wrap, Wrap back to the first/last values

## FILE:

startup/bl operators/wm.py:624

bpy.ops.wm.context\_cycle\_int(\*, data\_path=", reverse=False, wrap=False)

Set a context value (useful for cycling active material, shape keys, groups, etc.)

## **PARAMETERS:**

- data\_path (string, (optional, never None)) Context Attributes, Context data-path (expanded using visible windows in the current .blend file)
- reverse (boolean, (optional)) Reverse, Cycle backwards
- wrap (boolean, (optional)) Wrap, Wrap back to the first/last values

#### FILE:

startup/bl operators/wm.py:584

bpy.ops.wm.context menu enum(\*, data path=")

Undocumented, consider contributing.

#### **PARAMETERS:**

data\_path (string, (optional, never None)) - Context Attributes, Context data-path (expanded using visible windows in the current .blend file)

#### FILE:

startup/bl operators/wm.py:703

bpy.ops.wm.context\_modal\_mouse(\*, data\_path\_iter=", data\_path\_item=", header\_text=", input\_scale=0.01, invert=False, initial\_x=0)

Adjust arbitrary values with mouse input

- data path iter (string, (optional, never None)) data path iter, The data path relative to the context, must point to an iterable
- data\_path\_item (string, (optional, never None)) data\_path\_item, The data path from each iterable to the value (int or float)
- header text (string, (optional, never None)) Header Text, Text to display in header during scale
- input scale (float in [-inf, inf], (optional)) input scale, Scale the mouse movement by this value before applying the delta
- invert (boolean, (optional)) invert, Invert the mouse input
- initial x (int in [-inf, inf], (optional)) initial x

#### FILE:

startup/bl operators/wm.py:1014

bpy.ops.wm.context pie enum(\*, data path=")

Undocumented, consider contributing.

## **PARAMETERS:**

**data\_path** (*string, (optional, never None)*) – Context Attributes, Context data-path (expanded using visible windows in the current .blend file)

## FILE:

startup/bl\_operators/wm.py:735

bpy.ops.wm.context scale float(\*, data path=", value=1.0)

Scale a float context value

#### **PARAMETERS:**

- data\_path (string, (optional, never None)) Context Attributes, Context data-path (expanded using visible windows in the current .blend file)
- value (float in [-inf, inf], (optional)) Value, Assign value

# FILE:

startup/bl\_operators/wm.py:338

bpy.ops.wm.context\_scale\_int(\*, data\_path=", value=1.0, always\_step=True)

Scale an int context value

## **PARAMETERS:**

- data\_path (string, (optional, never None)) Context Attributes, Context data-path (expanded using visible windows in the current .blend file)
- value (float in [-inf, inf], (optional)) Value, Assign value
- always step (boolean, (optional)) Always Step, Always adjust the value by a minimum of 1 when 'value' is not 1.0

## FILE:

startup/bl\_operators/wm.py:376

bpy.ops.wm.context\_set\_boolean(\*, data\_path=", value=True)

Set a context value

## **PARAMETERS:**

- data\_path (string, (optional, never None)) Context Attributes, Context data-path (expanded using visible windows in the current .blend file)
- value (boolean, (optional)) Value, Assignment value

#### FILE:

startup/bl operators/wm.py:267

bpy.ops.wm.context\_set\_enum(\*, data\_path=", value=")

Set a context value

- data\_path (string, (optional, never None)) Context Attributes, Context data-path (expanded using visible windows in the current .blend file)
- value (string, (optional, never None)) Value, Assignment value (as a string)

#### FILE:

startup/bl\_operators/wm.py:267

bpy.ops.wmcontext\_set\_float(\*, data\_path=", value=0.0, relative=False)

Set a context value

## **PARAMETERS:**

- data\_path (string, (optional, never None)) Context Attributes, Context data-path (expanded using visible windows in the current .blend file)
- value (float in [-inf, inf], (optional)) Value, Assignment value
- relative (boolean, (optional)) Relative, Apply relative to the current value (delta)

#### FILE:

startup/bl\_operators/wm.py:267

bpy.ops.wm.context set id(\*, data path=", value=")

Set a context value to an ID data-block

#### **PARAMETERS:**

- data\_path (string, (optional, never None)) Context Attributes, Context data-path (expanded using visible windows in the current .blend file)
- value (string, (optional, never None)) Value, Assign value

#### FILE:

startup/bl operators/wm.py:817

bpy.ops.wm.context set int(\*, data path=", value=0, relative=False)

Set a context value

### **PARAMETERS:**

- data\_path (string, (optional, never None)) Context Attributes, Context data-path (expanded using visible windows in the current .blend file)
- value (int in [-inf, inf], (optional)) Value, Assign value
- relative (boolean, (optional)) Relative, Apply relative to the current value (delta)

# FILE:

startup/bl operators/wm.py:267

bpy.ops.wm.context\_set\_string(\*, data\_path=", value=")

Set a context value

## **PARAMETERS:**

- data\_path (string, (optional, never None)) Context Attributes, Context data-path (expanded using visible windows in the current .blend file)
- value (string, (optional, never None)) Value, Assign value

# FILE:

startup/bl operators/wm.py:267

bpy.ops.wm.context set value(\*, data path=", value=")

Set a context value

## PARAMETERS:

• data nath (string, (ontional, never None)) - Context Attributes. Context data-nath (expanded using visible windows in the current blend

file)

• value (string, (optional, never None)) – Value, Assignment value (as a string)

#### FILE:

startup/bl operators/wm.py:480

bpy.ops.wm.context toggle(\*, data path="', module="')

Toggle a context value

## **PARAMETERS:**

- data\_path (string, (optional, never None)) Context Attributes, Context data-path (expanded using visible windows in the current .blend file)
- module (string, (optional, never None)) Module, Optionally override the context with a module

## FILE:

startup/bl\_operators/wm.py:504

bpy.ops.wm.context\_toggle\_enum(\*, data\_path=", value\_1=", value\_2=")

Toggle a context value

## **PARAMETERS:**

- data\_path (string, (optional, never None)) Context Attributes, Context data-path (expanded using visible windows in the current .blend file)
- value\_1 (string, (optional, never None)) Value, Toggle enum
- value\_2 (string, (optional, never None)) Value, Toggle enum

## FILE:

startup/bl operators/wm.py:545

bpy.ops.wm.debug\_menu(\*, debug\_value=0)

Open a popup to set the debug level

## **PARAMETERS:**

debug\_value (int in [-32768, 32767], (optional)) – Debug Value

bpy.ops.wm.doc\_view(\*, doc\_id=")

Open online reference docs in a web browser

# **PARAMETERS:**

doc id (string, (optional, never None)) – Doc ID

FILE:

 $startup/bl\_operators/wm.py:1358$ 

bpy.ops.wm.doc\_view\_manual(\*, doc\_id=")

Load online manual

#### **PARAMETERS:**

**doc id** (string, (optional, never None)) – Doc ID

FILE:

startup/bl\_operators/wm.py:1331

bpy.ops.wm.doc\_view\_manual\_ui\_context()

View a context based online manual in a web browser

bpy.ops.wm.drop\_blend\_file(\*, filepath=")

Undocumented, consider contributing.

#### **PARAMETERS:**

filepath (string, (optional, never None)) - filepath

#### FILE:

startup/bl operators/wm.py:3627

bpy.ops.wm.drop import file(\*, directory='', files=None)

Operator that allows file handlers to receive file drops

#### **PARAMETERS:**

- directory (string, (optional, never None)) Directory, Directory of the file
- files (bpy prop collection of OperatorFileListElement, (optional)) Files

bpy.ops.wmgrease\_pencil\_export\_pdf(\*, filepath='', check\_existing=True, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=True, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, display\_type='DEFAULT', sort\_method='', use\_fill=True, selected\_object\_type='ACTIVE', stroke\_sample=0.0, use\_uniform\_width=False, frame\_mode='ACTIVE')

Export Grease Pencil to PDF

- **filepath** (*string*, (*optional*, *never* None)) File Path, Path to file
- check existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- filter\_blender (boolean, (optional)) Filter .blend files
- filter backup (boolean, (optional)) Filter .blend files
- filter image (boolean, (optional)) Filter image files
- filter movie (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- **filter sound** (boolean, (optional)) Filter sound files
- **filter text** (boolean, (optional)) Filter text files
- **filter archive** (boolean, (optional)) Filter archive files
- filter btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- **filter\_usd** (boolean, (optional)) Filter USD files
- filter\_obj (boolean, (optional)) Filter OBJ files
- filter\_volume (boolean, (optional)) Filter OpenVDB volume files
- **filter\_folder** (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- filemode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (emm in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - $\verb| \circ LIST_VERTICAL| Short List-Display files as short list. \\$
  - $\circ \ \ \mbox{LIST\_HORIZONTAL}$  Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- sort\_method (enum in [], (optional)) File sorting mode
- use\_fill (boolean, (optional)) Fill, Export strokes with fill enabled
- selected\_object\_type (enum in ['ACTIVE', 'SELECTED', 'VISIBLE'], (optional)) Object. Which objects to include in the export

- ACTIVE Active Include only the active object.
- $\verb| OBLECTED| Selected-Include selected objects. \\$
- VISIBLE Visible Include all visible objects.
- stroke\_sample (float in [0, 100], (optional)) Sampling, Precision of stroke sampling. Low values mean a more precise result, and zero disables sampling
- use uniform width (boolean, (optional)) Uniform Width, Export strokes with uniform width
- frame mode (enum in ['ACTIVE', 'SELECTED', 'SCENE'], (optional)) —

Frames, Which frames to include in the export

- ACTIVE Active Include only active frame.
- SELECTED Selected Include selected frames.
- SCENE Scene Include all scene frames.

bpy.ops.wm.grease\_pencil\_export\_svg(\*, filepath="', check\_existing=True, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=True, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, display\_type='DEFAULT', sort\_method='', use\_fill=True, selected\_object\_type='ACTIVE', stroke\_sample=0.0, use\_uniform\_width=False, use\_clip\_camera=False)

Export Grease Pencil to SVG

- **filepath** (*string*, (*optional*, *never None*)) File Path, Path to file
- check\_existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- filter\_blender (boolean, (optional)) Filter .blend files
- filter backup (boolean, (optional)) Filter .blend files
- **filter image** (boolean, (optional)) Filter image files
- **filter movie** (boolean, (optional)) Filter movie files
- filter python (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- filter\_sound (boolean, (optional)) Filter sound files
- filter text (boolean, (optional)) Filter text files
- **filter\_archive** (boolean, (optional)) Filter archive files
- filter btx (boolean, (optional)) Filter btx files
- filter\_collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- filter\_obj (boolean, (optional)) Filter OBJ files
- filter\_volume (boolean, (optional)) Filter OpenVDB volume files
- **filter folder** (boolean, (optional)) Filter folders
- **filter\_blenlib** (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (emm in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - $\verb| o list_vertical Short List-Display files as short list. \\$
  - $\verb| OLIST_HORIZONTAL| Long List-Display files as a detailed list. \\$
  - THUMBNAIL Thumbnails Display files as thumbnails.
- sort\_method (enum in [], (optional)) File sorting mode
- use fill (boolean, (optional)) Fill, Export strokes with fill enabled

- **selected\_object\_type** (*emum in ['ACTIVE', 'SELECTED', 'VISIBLE'], (optional)*) Object, Which objects to include in the export
  - ACTIVE Active Include only the active object.
  - SELECTED Selected Include selected objects.
  - VISIBLE Visible Include all visible objects.
- stroke\_sample (float in [0, 100], (optional)) Sampling, Precision of stroke sampling. Low values mean a more precise result, and zero disables sampling
- use uniform width (boolean, (optional)) Uniform Width, Export strokes with uniform width
- use\_clip\_camera (boolean, (optional)) Clip Camera, Clip drawings to camera size when exporting in camera view

bpy.ops.wmgrease\_pencil\_import\_svg(\*, filepath=", directory=", files=None, check\_existing=False, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=Tru filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, relative\_path=True, display\_type='DEFAULT', sort\_method="', resolution=10, scale=10.0, use\_scene\_unit=False)

Import SVG into Grease Pencil

- filepath (string, (optional, never None)) File Path, Path to file
- directory (string, (optional, never None)) Directory, Directory of the file
- files (bpy prop collection of OperatorFileListElement, (optional)) Files
- check\_existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- filter blender (boolean, (optional)) Filter .blend files
- filter backup (boolean, (optional)) Filter .blend files
- filter image (boolean, (optional)) Filter image files
- filter\_movie (boolean, (optional)) Filter movie files
- **filter\_python** (boolean, (optional)) Filter Python files
- **filter\_font** (boolean, (optional)) Filter font files
- **filter\_sound** (boolean, (optional)) Filter sound files
- **filter text** (boolean, (optional)) Filter text files
- filter archive (boolean, (optional)) Filter archive files
- filter btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter\_obj** (boolean, (optional)) Filter OBJ files
- filter volume (boolean, (optional)) Filter OpenVDB volume files
- filter folder (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- **file mode** (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- relative\_path (boolean, (optional)) Relative Path, Select the file relative to the blend file
- display\_type (emm in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- sort\_method (enum in [], (optional)) File sorting mode
- resolution (int in [1, 100000], (optional)) Resolution, Resolution of the generated strokes

- scale (float in [1e-06, 1e+06], (optional)) Scale, Scale of the final strokes
- use scene unit (boolean, (optional)) Scene Unit, Apply current scene's unit (as defined by unit scale) to imported data

bpy.ops.wm.interface\_theme\_preset\_add(\*, name=", remove\_name=False, remove\_active=False)

Add a custom theme to the preset list

## **PARAMETERS:**

- name (string, (optional, never None)) Name, Name of the preset, used to make the path name
- remove name (boolean, (optional)) remove name
- remove\_active (boolean, (optional)) remove\_active

#### FILE:

startup/bl operators/presets.py:119

bpy.ops.wm.interface theme preset remove(\*, name="', remove name=False, remove active=True)

Remove a custom theme from the preset list

#### **PARAMETERS:**

- name (string, (optional, never None)) Name, Name of the preset, used to make the path name
- remove\_name (boolean, (optional)) remove\_name
- remove active (boolean, (optional)) remove active

#### FILE:

startup/bl operators/presets.py:119

bpy.ops.wm.interface\_theme\_preset\_save(\*, name="', remove\_name=False, remove\_active=True)

Save a custom theme in the preset list

#### **PARAMETERS:**

- name (string, (optional, never None)) Name, Name of the preset, used to make the path name
- remove\_name (boolean, (optional)) remove\_name
- remove\_active (boolean, (optional)) remove\_active

## FILE:

startup/bl\_operators/presets.py:685

bpy.ops.wm.keyconfig\_preset\_add(\*, name='', remove\_name=False, remove\_active=False)

Add a custom keymap configuration to the preset list

## **PARAMETERS:**

- name (string, (optional, never None)) Name, Name of the preset, used to make the path name
- remove\_name (boolean, (optional)) remove\_name
- remove\_active (boolean, (optional)) remove\_active

## FILE:

startup/bl\_operators/presets.py:119

bpy.ops.wm.keyconfig preset remove(\*, name=", remove name=False, remove active=True)

Remove a custom keymap configuration from the preset list

## **PARAMETERS:**

- name (string, (optional, never None)) Name, Name of the preset, used to make the path name
- remove\_name (boolean, (optional)) remove\_name
- remove active (boolean, (optional)) remove active

# FILE:

startup/bl operators/presets.py:119

bpy.ops.wm.lib\_reload(\*, library=", filepath=", directory=", filename=", hide\_props\_region=True, check\_existing=False, filter\_blender=True, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, relative\_path=True, display type='DEFAULT', sort method=")

Reload the given library

#### **PARAMETERS:**

- library (string, (optional, never None)) Library, Library to reload
- **filepath** (*string*, (*optional*, *never None*)) File Path, Path to file
- directory (string, (optional, never None)) Directory, Directory of the file
- filename (string, (optional, never None)) File Name, Name of the file
- hide props region (boolean, (optional)) Hide Operator Properties, Collapse the region displaying the operator settings
- check existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- filter\_blender (boolean, (optional)) Filter .blend files
- filter backup (boolean, (optional)) Filter .blend files
- **filter image** (boolean, (optional)) Filter image files
- filter movie (boolean, (optional)) Filter movie files
- **filter\_python** (boolean, (optional)) Filter Python files
- **filter\_font** (boolean, (optional)) Filter font files
- filter\_sound (boolean, (optional)) Filter sound files
- **filter text** (boolean, (optional)) Filter text files
- filter archive (boolean, (optional)) Filter archive files
- filter btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter\_alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter\_volume (boolean, (optional)) Filter OpenVDB volume files
- filter folder (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- relative path (boolean, (optional)) Relative Path, Select the file relative to the blend file
- **display\_type** (*emum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)*) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- sort method (enum in [], (optional)) File sorting mode

bpy.ops.wmlib\_relocate(\*, library=", filepath=", directory=", filename=", files=None, hide\_props\_region=True, check\_existing=False, filter\_blender=True, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, relative\_path=True, display type='DEFAULT', sort method=")

Relocate the given library to one or several others

## **PARAMETERS:**

• library (string, (optional, never None)) – Library, Library to relocate

- filepath (string, (optional, never None)) File Path, Path to file
- **directory** (*string*, (*optional*, *never* None)) Directory, Directory of the file
- filename (string, (optional, never None)) File Name, Name of the file
- files (bpy prop collection of OperatorFileListElement, (optional)) Files
- hide props region (boolean, (optional)) Hide Operator Properties, Collapse the region displaying the operator settings
- check\_existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- **filter blender** (boolean, (optional)) Filter .blend files
- **filter backup** (boolean, (optional)) Filter .blend files
- **filter\_image** (boolean, (optional)) Filter image files
- filter movie (boolean, (optional)) Filter movie files
- **filter\_python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- **filter sound** (boolean, (optional)) Filter sound files
- **filter text** (boolean, (optional)) Filter text files
- filter archive (boolean, (optional)) Filter archive files
- filter btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter\_obj** (boolean, (optional)) Filter OBJ files
- **filter volume** (boolean, (optional)) Filter OpenVDB volume files
- filter folder (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- relative\_path (boolean, (optional)) Relative Path, Select the file relative to the blend file
- display\_type (emm in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- **sort method** (*enum in* [], (*optional*)) File sorting mode

bpy.ops.wm.link(\*, filepath=", directory=", filename=", files=None, check\_existing=False, filter\_blender=True, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=True, filemode=1, relative\_path=True, display\_type='DEFAULT', sort\_method=", link=True, do\_reuse\_local\_id=False, clear\_asset\_data=False, autoselect=True, active\_collection=True, instance\_collections=True, instance\_object\_data=True)

Link from a Library .blend file

- **filepath** (*string*, (*optional*, *never* None)) File Path, Path to file
- **directory** (*string*, (*optional*, *never* None)) Directory, Directory of the file
- filename (string, (optional, never None)) File Name, Name of the file
- files (bpy prop collection of OperatorFileListElement, (optional)) Files
- check existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- **filter blender** (boolean, (optional)) Filter .blend files
- **filter backup** (boolean, (optional)) Filter .blend files
- M. T. / / / / M. T. / C.

- Titter image (boolean, (optional)) Filter image files
- **filter movie** (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- **filter sound** (boolean, (optional)) Filter sound files
- filter text (boolean, (optional)) Filter text files
- filter\_archive (boolean, (optional)) Filter archive files
- filter btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter\_obj** (boolean, (optional)) Filter OBJ files
- filter volume (boolean, (optional)) Filter OpenVDB volume files
- filter\_folder (boolean, (optional)) Filter folders
- filter blenlib (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- relative\_path (boolean, (optional)) Relative Path, Select the file relative to the blend file
- display\_type (emm in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- **sort method** (*enum in* [], (*optional*)) File sorting mode
- link (boolean, (optional)) Link, Link the objects or data-blocks rather than appending
- do\_reuse\_local\_id (boolean, (optional)) Re-Use Local Data, Try to re-use previously matching appended data-blocks instead of appending a new copy
- clear\_asset\_data (boolean, (optional)) Clear Asset Data, Don't add asset meta-data or tags from the original data-block
- autoselect (boolean, (optional)) Select, Select new objects
- active\_collection (boolean, (optional)) Active Collection, Put new objects on the active collection
- instance\_collections (boolean, (optional)) Instance Collections, Create instances for collections, rather than adding them directly to the scene
- instance\_object\_data (boolean, (optional)) Instance Object Data, Create instances for object data which are not referenced by any objects

# bpy.ops.wm.memory\_statistics()

Print memory statistics to the console

bpy.ops.wm.obj\_export(\*, filepath=", check\_existing=True, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, display\_type='DEFAULT', sort\_method='', export\_animation=False, start\_frame=-2147483648, end\_frame=2147483647, forward\_axis='NEGATIVE\_Z', up\_axis='Y', global\_scale=1.0, apply\_modifiers=True, export\_eval\_mode='DAG\_EVAL\_VIEWPORT', export\_selected\_objects=False, export\_uv=True, export\_normals=True, export\_colors=False, export\_materials=True, export\_pbr\_extensions=False, path\_mode='AUTO', export\_triangulated\_mesh=False, export\_curves\_as\_nurbs=False, export\_object\_groups=False, export\_material\_groups=False, export\_vertex\_groups=False, export\_smooth\_groups=False, smooth\_group\_bitflags=False, filter\_glob='\*.obj;\*.mtl', collection='')

Save the scene to a Wavefront OBJ file

## **PARAMETERS:**

• **filepath** (*string*, (*optional*, *never* None)) – File Path, Path to file

- check existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- filter\_blender (boolean, (optional)) Filter .blend files
- filter\_backup (boolean, (optional)) Filter .blend files
- filter image (boolean, (optional)) Filter image files
- **filter\_movie** (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- filter sound (boolean, (optional)) Filter sound files
- **filter text** (boolean, (optional)) Filter text files
- filter archive (boolean, (optional)) Filter archive files
- filter\_btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter\_usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter\_volume (boolean, (optional)) Filter OpenVDB volume files
- filter folder (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (enum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST\_VERTICAL Short List Display files as short list.
  - $\verb| LIST_HORIZONTAL| Long List-Display files as a detailed list. \\$
- **sort\_method** (*enum in* [], (*optional*)) File sorting mode
- export\_animation (boolean, (optional)) Export Animation, Export multiple frames instead of the current frame only
- start\_frame (int in [-inf, inf], (optional)) Start Frame, The first frame to be exported
- end\_frame (int in [-inf, inf], (optional)) End Frame, The last frame to be exported
- $\bullet \quad \textbf{forward\_axis} \ (\textit{enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional)) \\$ 
  - Forward Axis
  - ∘ X X Positive X axis.
  - Y Y Positive Y axis.
  - $\circ$  Z Z Positive Z axis.
  - $\circ$  NEGATIVE\_X -X Negative X axis.
  - NEGATIVE\_Y -Y-Negative Y axis.
  - $\circ$  NEGATIVE\_Z -Z-Negative Z axis.
- up\_axis (enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional)) Up Axis
  - ∘ X X Positive X axis.
  - ∘ Y Y Positive Y axis.
  - $\circ$  Z Z Positive Z axis.
  - NEGATIVE X -X Negative X axis.
  - NEGATIVE Y -Y Negative Y axis.
  - $\circ$  NEGATIVE Z -Z Negative Z axis.
- **global\_scale** (*float in [0.0001, 10000], (optional)*) Scale, Value by which to enlarge or shrink the objects with respect to the world's origin

- apply\_modifiers (boolean, (optional)) Apply Modifiers, Apply modifiers to exported meshes
- export\_eval\_mode (enum in ['DAG\_EVAL\_RENDER', 'DAG\_EVAL\_VIEWPORT'], (optional)) —
   Object Properties, Determines properties like object visibility, modifiers etc., where they differ for Render and Viewport
  - DAG EVAL RENDER Render Export objects as they appear in render.
  - DAG EVAL VIEWPORT Viewport Export objects as they appear in the viewport.
- export\_selected\_objects (boolean, (optional)) Export Selected Objects, Export only selected objects instead of all supported objects
- export uv (boolean, (optional)) Export UVs
- export\_normals (boolean, (optional)) Export Normals, Export per-face normals if the face is flat-shaded, per-face-per-loop normals if smooth-shaded
- **export colors** (boolean, (optional)) Export Colors, Export per-vertex colors
- export\_materials (boolean, (optional)) Export Materials, Export MTL library. There must be a Principled-BSDF node for image textures to be exported to the MTL file
- **export\_pbr\_extensions** (boolean, (optional)) Export Materials with PBR Extensions, Export MTL library using PBR extensions (roughness, metallic, sheen, coat, anisotropy, transmission)
- path\_mode (enum in ['AUTO', 'ABSOLUTE', 'RELATIVE', 'MATCH', 'STRIP', 'COPY'], (optional)) Path Mode, Method used to reference paths
  - AUTO Auto Use relative paths with subdirectories only.
  - ABSOLUTE Absolute Always write absolute paths.
  - RELATIVE Relative Write relative paths where possible.
  - MATCH Match Match absolute/relative setting with input path.
  - STRIP Strip Write filename only.
  - COPY Copy Copy the file to the destination path.
- export\_triangulated\_mesh (boolean, (optional)) Export Triangulated Mesh, All ngons with four or more vertices will be triangulated.
   Meshes in the scene will not be affected. Behaves like Triangulate Modifier with ngon-method: "Beauty", quad-method: "Shortest Diagonal", min vertices: 4
- export\_curves\_as\_nurbs (boolean, (optional)) Export Curves as NURBS, Export curves in parametric form instead of exporting as mes
- export object groups (boolean, (optional)) Export Object Groups, Append mesh name to object name, separated by a ' '
- export\_material\_groups (boolean, (optional)) Export Material Groups, Generate an OBJ group for each part of a geometry using a different material
- export\_vertex\_groups (boolean, (optional)) Export Vertex Groups, Export the name of the vertex group of a face. It is approximated by choosing the vertex group with the most members among the vertices of a face
- export\_smooth\_groups (boolean, (optional)) Export Smooth Groups, Every smooth-shaded face is assigned group "1" and every flat-shaded face "off"
- smooth group bitflags (boolean, (optional)) Generate Bitflags for Smooth Groups
- **filter\_glob** (*string*, (optional, never None)) Extension Filter
- **collection** (*string*, (*optional*, *never None*)) Collection

bpy.ops.wm.obj\_import(\*, filepath=", directory=", files=None, check\_existing=False, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, display\_type='DEFAULT', sort\_method=", global\_scale=1.0, clamp\_size=0.0, forward\_axis='NEGATIVE\_Z', up\_axis='Y', use\_split\_objects=True, use\_split\_groups=False, import\_vertex\_groups=False, validate\_meshes=True, close\_spline\_loops=True, collection\_separator=", filter\_glob='\*.obj;\*.mtl')

Load a Wavefront OBJ scene

- **filepath** (*string*, (*optional*, *never None*)) File Path, Path to file
- directory (string, (optional, never None)) Directory, Directory of the file
- files (bpy prop collection of OperatorFileListElement, (optional)) Files
- check existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files

- filter blender (boolean, (optional)) Filter .blend files
- filter backup (boolean, (optional)) Filter .blend files
- filter\_image (boolean, (optional)) Filter image files
- **filter movie** (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- **filter sound** (boolean, (optional)) Filter sound files
- **filter text** (boolean, (optional)) Filter text files
- filter\_archive (boolean, (optional)) Filter archive files
- filter btx (boolean, (optional)) Filter btx files
- filter\_collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter\_volume (boolean, (optional)) Filter OpenVDB volume files
- **filter folder** (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- filemode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (emm in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - $\circ$  LIST\_HORIZONTAL Long List Display files as a detailed list.
  - $\circ$  THUMBNAIL Thumbnails Display files as thumbnails.
- sort\_method (enum in [], (optional)) File sorting mode
- **global\_scale** (*float in [0.0001, 10000], (optional)*) Scale, Value by which to enlarge or shrink the objects with respect to the world's origin
- clamp\_size (float in [0, 1000], (optional)) Clamp Bounding Box, Resize the objects to keep bounding box under this value. Value 0 disables clamping
- $\bullet \ \ \textbf{forward\_axis} \ (\textit{enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional)) \\$

Forward Axis

- ∘ X X − Positive X axis.
- ∘ Y Y Positive Y axis.
- $\circ$  Z Z Positive Z axis.
- NEGATIVE X -X Negative X axis.
- NEGATIVE Y -Y Negative Y axis.
- NEGATIVE Z -Z-Negative Z axis.
- up\_axis (enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional)) Up Axis
  - ∘ X X Positive X axis.
  - ∘ Y Y Positive Y axis.
  - $\circ$  Z Z Positive Z axis.
  - $\circ$  NEGATIVE\_X -X Negative X axis.
  - NEGATIVE Y -Y Negative Y axis.
  - $\circ$  NEGATIVE\_Z -Z-Negative Z axis.
- use split objects (boolean, (optional)) Split By Object, Import each OBJ 'o' as a separate object
- use\_split\_groups (boolean, (optional)) Split By Group, Import each OBJ 'g' as a separate object

- import vertex groups (boolean, (optional)) Vertex Groups, Import OBJ groups as vertex groups
- validate\_meshes (boolean, (optional)) Validate Meshes, Ensure the data is valid (when disabled, data may be imported which causes crashes displaying or editing)
- close\_spline\_loops (boolean, (optional)) Detect Cyclic Curves, Join curve endpoints if overlapping control points are detected (if disabled no curves will be cyclic)
- collection\_separator (string, (optional, never None)) Path Separator, Character used to separate objects name into hierarchical structur
- **filter glob** (*string*, (*optional*, *never None*)) Extension Filter

bpy.ops.wm.open\_mainfile(\*, filepath=", hide\_props\_region=True, check\_existing=False, filter\_blender=True, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, display\_type='DEFAULT', sort\_method='', load\_ui=True, use scripts=True, display\_file\_selector=True, state=0)

Open a Blender file

- **filepath** (*string*, (*optional*, *never* None)) File Path, Path to file
- hide\_props\_region (boolean, (optional)) Hide Operator Properties, Collapse the region displaying the operator settings
- check existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- **filter blender** (boolean, (optional)) Filter .blend files
- filter backup (boolean, (optional)) Filter .blend files
- **filter image** (boolean, (optional)) Filter image files
- filter\_movie (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter\_font** (boolean, (optional)) Filter font files
- **filter sound** (boolean, (optional)) Filter sound files
- filter text (boolean, (optional)) Filter text files
- filter\_archive (boolean, (optional)) Filter archive files
- filter\_btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- **filter\_alembic** (boolean, (optional)) Filter Alembic files
- filter\_usd (boolean, (optional)) Filter USD files
- **filter\_obj** (boolean, (optional)) Filter OBJ files
- filter\_volume (boolean, (optional)) Filter OpenVDB volume files
- **filter folder** (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- filemode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (enum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - $\begin{tabular}{ll} \bullet & \tt DEFAULT & \textbf{Default} \textbf{Automatically determine display type for files.} \end{tabular}$
  - LIST VERTICAL Short List Display files as short list.
  - $\circ \ \ \mbox{LIST\_HORIZONTAL}$  Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- sort\_method (enum in [], (optional)) File sorting mode
- load\_ui (boolean, (optional)) Load UI, Load user interface setup in the .blend file
- use\_scripts (boolean, (optional)) Trusted Source, Allow .blend file to execute scripts automatically, default available from system preferences
- **display\_file\_selector** (boolean, (optional)) Display File Selector
- state (int in [-inf, inf], (optional)) State

```
bpy.ops.wm.operator_cheat_sheet()
    List all the operators in a text-block, useful for scripting
    FILE:
        startup/bl_operators/wm.py:2246
bpy.ops.wm.operator defaults()
    Set the active operator to its default values
bpy.ops.wm.operator pie enum(*, data path=", prop string=")
    Undocumented, consider contributing.
    PARAMETERS:
      • data path (string, (optional, never None)) – Operator, Operator name (in Python as string)
      • prop string (string, (optional, never None)) – Property, Property name (as a string)
    FILE:
        startup/bl operators/wm.py:777
bpy.ops.wm.operator preset add(*, name=", remove name=False, remove active=False, operator=")
    Add or remove an Operator Preset
    PARAMETERS:
      • name (string, (optional, never None)) – Name, Name of the preset, used to make the path name
      • remove name (boolean, (optional)) – remove name
      • remove active (boolean, (optional)) – remove active
      • operator (string, (optional, never None)) – Operator
    FILE:
        startup/bl operators/presets.py:119
bpy.ops.wm.operator_presets_cleanup(*, operator=", properties=None)
    Remove outdated operator properties from presets that may cause problems
    PARAMETERS:
      • operator (string, (optional, never None)) – operator
      • properties (bpy prop collection of OperatorFileListElement, (optional)) - properties
    FILE:
        startup/bl operators/presets.py:882
bpy.ops.wm.owner_disable(*, owner_id=")
    Disable add-on for workspace
    PARAMETERS:
        owner id (string, (optional, never None)) – UI Tag
    FILE:
        startup/bl_operators/wm.py:2294
bpy.ops.wm.owner enable(*, owner id=")
    Enable add-on for workspace
    PARAMETERS:
        owner id (string, (optional, never None)) – UI Tag
    FILE:
        startup/bl operators/wm.py:2279
```

bpy.ops.wm.path open(\*, filepath=")

Open a path in a file browser

#### **PARAMETERS:**

filepath (string, (optional, never None)) - filepath

#### FILE:

startup/bl operators/wm.py:1167

bpy.ops.wmply\_export(\*, filepath=", check\_existing=True, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, display\_type='DEFAULT', sort\_method=", forward\_axis='Y', up\_axis='Z', global\_scale=1.0, apply\_modifiers=True, export\_selected\_objects=False, collection=", export\_uv=True, export\_normals=False, export\_colors='SRGB', export\_attributes=True, export\_triangulated\_mesh=False, ascii\_format=False, filter\_glob='\*.ply')

Save the scene to a PLY file

- **filepath** (*string*, (optional, never None)) File Path, Path to file
- check existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- **filter blender** (boolean, (optional)) Filter .blend files
- filter backup (boolean, (optional)) Filter .blend files
- filter image (boolean, (optional)) Filter image files
- filter movie (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter\_font** (boolean, (optional)) Filter font files
- filter\_sound (boolean, (optional)) Filter sound files
- filter\_text (boolean, (optional)) Filter text files
- filter\_archive (boolean, (optional)) Filter archive files
- filter\_btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter\_usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter volume (boolean, (optional)) Filter OpenVDB volume files
- **filter folder** (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- filemode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (enum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- sort\_method (enum in [], (optional)) File sorting mode
- forward\_axis (enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional)) Forward Axis
  - ∘ X X Positive X axis.
  - ∘ Y Y Positive Y axis.
  - $\circ$  Z Z Positive Z axis.

- NEGATIVE X -X Negative X axis.
- NEGATIVE Y -Y Negative Y axis.
- NEGATIVE Z -Z-Negative Z axis.
- up\_axis (enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional)) Up Axis
  - ∘ X X Positive X axis.
  - ∘ Y Y Positive Y axis.
  - $\circ$  Z Z Positive Z axis.
  - NEGATIVE X -X Negative X axis.
  - NEGATIVE Y -Y Negative Y axis.
  - NEGATIVE Z -Z-Negative Z axis.
- **global\_scale** (*float in [0.0001, 10000], (optional)*) Scale, Value by which to enlarge or shrink the objects with respect to the world's origin
- apply\_modifiers (boolean, (optional)) Apply Modifiers, Apply modifiers to exported meshes
- export\_selected\_objects (boolean, (optional)) Export Selected Objects, Export only selected objects instead of all supported objects
- collection (string, (optional, never None)) Source Collection, Export only objects from this collection (and its children)
- export uv (boolean, (optional)) Export UVs
- export\_normals (boolean, (optional)) Export Vertex Normals, Export specific vertex normals if available, export calculated normals otherwise
- export\_colors (enum in ['NONE', 'SRGB', 'LINEAR'], (optional)) –
   Export Vertex Colors, Export vertex color attributes
  - NONE None Do not import/export color attributes.
  - SRGB sRGB Vertex colors in the file are in sRGB color space.
  - LINEAR Linear Vertex colors in the file are in linear color space.
- export\_attributes (boolean, (optional)) Export Vertex Attributes, Export custom vertex attributes
- export\_triangulated\_mesh (boolean, (optional)) Export Triangulated Mesh, All ngons with four or more vertices will be triangulated.

  Meshes in the scene will not be affected. Behaves like Triangulate Modifier with ngon-method: "Beauty", quad-method: "Shortest Diagonal", min vertices: 4
- ascii format (boolean, (optional)) ASCII Format, Export file in ASCII format, export as binary otherwise
- filter\_glob (string, (optional, never None)) Extension Filter

bpy.ops.wm.ply\_import(\*, filepath=", directory=", files=None, check\_existing=False, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, display\_type='DEFAULT', sort\_method='', global\_scale=1.0, use\_scene\_unit=False, forward\_axis='Y', up\_axis='Z', merge\_verts=False, import\_colors='SRGB', import\_attributes=True, filter\_glob='\*.ply')

Import an PLY file as an object

- filepath (string, (optional, never None)) File Path, Path to file
- **directory** (*string*, (*optional*, *never* None)) Directory, Directory of the file
- files (bpy prop collection of OperatorFileListElement, (optional)) Files
- check existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- filter\_blender (boolean, (optional)) Filter .blend files
- filter\_backup (boolean, (optional)) Filter .blend files
- filter\_image (boolean, (optional)) Filter image files
- filter\_movie (boolean, (optional)) Filter movie files
- **filter\_python** (boolean, (optional)) Filter Python files

- **filter font** (boolean, (optional)) Filter font files
- filter sound (boolean, (optional)) Filter sound files
- filter text (boolean, (optional)) Filter text files
- filter archive (boolean, (optional)) Filter archive files
- filter btx (boolean, (optional)) Filter btx files
- filter\_collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter volume (boolean, (optional)) Filter OpenVDB volume files
- filter\_folder (boolean, (optional)) Filter folders
- filter\_blenlib (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (enum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- sort method (enum in [], (optional)) File sorting mode
- global\_scale (float in [1e-06, 1e+06], (optional)) Scale
- use scene unit (boolean, (optional)) Scene Unit, Apply current scene's unit (as defined by unit scale) to imported data
- forward\_axis (enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional)) –

## Forward Axis

- ∘ X X Positive X axis.
- ∘ Y Y Positive Y axis.
- $\circ$  Z Z Positive Z axis.
- NEGATIVE X -X Negative X axis.
- NEGATIVE Y -Y Negative Y axis.
- NEGATIVE Z -Z-Negative Z axis.
- up\_axis (enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional)) —

# Up Axis

- ∘ X X Positive X axis.
- ∘ Y Y Positive Y axis.
- $\circ$  Z Z Positive Z axis.
- $\circ$  NEGATIVE X -X Negative X axis.
- $\circ$  NEGATIVE\_Y -Y-Negative Y axis.
- $\circ$  NEGATIVE\_Z -Z-Negative Z axis.
- merge\_verts (boolean, (optional)) Merge Vertices, Merges vertices by distance
- import\_colors (enum in ['NONE', 'SRGB', 'LINEAR'], (optional)) —

Vertex Colors, Import vertex color attributes

- NONE None Do not import/export color attributes.
- SRGB sRGB Vertex colors in the file are in sRGB color space.
- LINEAR Linear Vertex colors in the file are in linear color space.
- import attributes (boolean, (optional)) Vertex Attributes, Import custom vertex attributes
- **filter glob** (*string*, (*optional*, *never None*)) Extension Filter

bpy.ops.wm.previews\_batch\_clear(\*, files=None, directory=", filter\_blender=True, filter\_folder=True, use\_scenes=True, use\_collections=True, use\_objects=True, use\_intern\_data=True, use\_trusted=False, use\_backups=True)

Clear selected .blend file's previews

## **PARAMETERS:**

- files (bpy prop collection of OperatorFileListElement, (optional)) files
- directory (string, (optional, never None)) directory
- **filter blender** (boolean, (optional)) filter blender
- filter folder (boolean, (optional)) filter folder
- use scenes (boolean, (optional)) Scenes, Clear scenes' previews
- use\_collections (boolean, (optional)) Collections, Clear collections' previews
- use objects (boolean, (optional)) Objects, Clear objects' previews
- use intern data (boolean, (optional)) Materials & Textures, Clear 'internal' previews (materials, textures, images, etc.)
- use trusted (boolean, (optional)) Trusted Blend Files, Enable Python evaluation for selected files
- use\_backups (boolean, (optional)) Save Backups, Keep a backup (.blend1) version of the files when saving with cleared previews

#### FILE:

startup/bl operators/file.py:204

bpy.ops.wm.previews\_batch\_generate(\*, files=None, directory=", filter\_blender=True, filter\_folder=True, use\_scenes=True, use\_scenes=True, use\_collections=True, use\_objects=True, use\_intern\_data=True, use\_trusted=False, use\_backups=True)

Generate selected .blend file's previews

#### **PARAMETERS:**

- files (bpy\_prop\_collection of OperatorFileListElement, (optional)) Collection of file paths with common directory root
- directory (string, (optional, never None)) Root path of all files listed in files collection
- filter blender (boolean, (optional)) Show Blender files in the File Browser
- filter folder (boolean, (optional)) Show folders in the File Browser
- use scenes (boolean, (optional)) Scenes, Generate scenes' previews
- use\_collections (boolean, (optional)) Collections, Generate collections' previews
- use objects (boolean, (optional)) Objects, Generate objects' previews
- use intern data (boolean, (optional)) Materials & Textures, Generate 'internal' previews (materials, textures, images, etc.)
- use trusted (boolean, (optional)) Trusted Blend Files, Enable Python evaluation for selected files
- use\_backups (boolean, (optional)) Save Backups, Keep a backup (.blend1) version of the files when saving with generated previews

# FILE:

startup/bl\_operators/file.py:95

bpy.ops.wm.previews clear(\*, id type={})

Clear data-block previews (only for some types like objects, materials, textures, etc.)

# **PARAMETERS:**

id\_type (enum set in {'ALL', 'GEOMETRY', 'SHADING', 'SCENE', 'COLLECTION', 'OBJECT', 'MATERIAL', 'LIGHT', 'WORLD',
'TEXTURE', 'IMAGE'}, (optional)) -

Data-Block Type, Which data-block previews to clear

- ALL All Types.
- GEOMETRY All Geometry Types Clear previews for scenes, collections and objects.
- SHADING All Shading Types Clear previews for materials, lights, worlds, textures and images.
- SCENE Scenes.
- COLLECTION Collections.
- OBJECT Objects.

- MATERIAL Materials.
- LIGHT Lights.
- WORLD Worlds.
- TEXTURE Textures.
- IMAGE Images.

## bpy.ops.wm.previews\_ensure()

Ensure data-block previews are available and up-to-date (to be saved in .blend file, only for some types like materials, textures, etc.)

bpy.ops.wm.properties\_add(\*, data\_path=")

Add your own property to the data-block

#### **PARAMETERS:**

data path (string, (optional, never None)) – Property Edit, Property data path edit

FILE:

startup/bl operators/wm.py:2128

bpy.ops.wm.properties context change(\*, context=")

Jump to a different tab inside the properties editor

## **PARAMETERS:**

context (string, (optional, never None)) – Context

FILE:

startup/bl operators/wm.py:2171

Change a custom property's type, or adjust how it is displayed in the interface

#### **PARAMETERS:**

- data path (string, (optional, never None)) Property Edit, Property data path edit
- property name (string, (optional, never None)) Property Name, Property name edit
- property\_type (emim in ['FLOAT', 'FLOAT\_ARRAY', 'INT', 'INT\_ARRAY', 'BOOL', 'BOOL\_ARRAY', 'STRING', 'DATA\_BLOCK', 'PYTHON'], (optional)) –

Type

- FLOAT Float A single floating-point value.
- FLOAT ARRAY Float Array An array of floating-point values.
- INT Integer A single integer.
- INT\_ARRAY Integer Array An array of integers.
- BOOL Boolean A true or false value.
- BOOL ARRAY Boolean Array An array of true or false values.
- STRING String A string value.
- DATA BLOCK Data-Block A data-block value.
- PYTHON Python Edit a Python value directly, for unsupported property types.
- is overridable library (boolean, (optional)) Library Overridable, Allow the property to be overridden when the data-block is linked
- **description** (*string, (optional, never None)*) Description
- use\_soft\_limits (boolean, (optional)) Soft Limits, Limits the Property Value slider to a range, values outside the range must be inputted

numerically

- array length (int in [1, 32], (optional)) Array Length
- **default int** (int array of 32 items in [-inf, inf], (optional)) Default Value
- min int (int in [-inf, inf], (optional)) Min
- max\_int (int in [-inf, inf], (optional)) Max
- soft min int (int in [-inf, inf], (optional)) Soft Min
- **soft\_max\_int** (*int in [-inf, inf], (optional)*) Soft Max
- step int (int in [1, inf], (optional)) Step
- **default bool** (boolean array of 32 items, (optional)) Default Value
- **default float** (*float array of 32 items in [-inf, inf], (optional*)) Default Value
- min float (float in [-inf, inf], (optional)) Min
- max float (float in [-inf, inf], (optional)) Max
- soft\_min\_float (float in [-inf, inf], (optional)) Soft Min
- soft\_max\_float (float in [-inf, inf], (optional)) Soft Max
- precision (int in [0, 8], (optional)) Precision
- step float (float in [0.001, inf], (optional)) Step
- **subtype** (*enum in* [7, (*optional*)) Subtype
- default string (string, (optional, never None)) Default Value
- id\_type (emm in ['ACTION', 'ARMATURE', 'BRUSH', 'CACHEFILE', 'CAMERA', 'COLLECTION', 'CURVE', 'CURVES', 'FONT', 'GREASEPENCIL\_,' 'GREASEPENCIL\_V3', 'IMAGE', 'KEY', 'LATTICE', 'LIBRARY', 'LIGHT', 'LIGHT\_PROBE', 'LINESTYLE', 'MASI 'MATERIAL', 'MESH', 'META', 'MOVIECLIP', 'NODETREE', 'OBJECT', 'PAINTCURVE', 'PALETTE', 'PARTICLE', 'POINTCLOUD 'SCENE', 'SCREEN', 'SOUND', 'SPEAKER', 'TEXT', 'TEXTURE', 'VOLUME', 'WINDOWMANAGER', 'WORKSPACE', 'WORLD'], (optional)) ID Type
- eval\_string (string, (optional, never None)) Value, Python value for unsupported custom property types

#### FILE:

startup/bl\_operators/wm.py:1861

bpy.ops.wm.properties edit value(\*, data path=", property name=", eval string=")

Edit the value of a custom property

## **PARAMETERS:**

- data\_path (string, (optional, never None)) Property Edit, Property data\_path edit
- property\_name (string, (optional, never None)) Property Name, Property name edit
- eval string (string, (optional, never None)) Value, Value for custom property types that can only be edited as a Python expression

## FILE:

startup/bl operators/wm.py:2085

bpy.ops.wm.properties remove(\*, data path=", property name=")

Internal use (edit a property data path)

## **PARAMETERS:**

- data\_path (string, (optional, never None)) Property Edit, Property data\_path edit
- property\_name (string, (optional, never None)) Property Name, Property name edit

## FILE:

startup/bl operators/wm.py:2185

bpy.ops.wm.quit blender()

Ouit Blender

bpy.ops.wm.radial\_control(\*, data\_path\_primary=", data\_path\_secondary=", use\_secondary=", rotation\_path=", color\_path=", fill\_color\_override\_test\_path=", zoom\_path=", image\_id=", secondary\_tex=False,

#### release confirm=False)

Set some size property (e.g. brush size) with mouse wheel

#### **PARAMETERS:**

- data path primary (string, (optional, never None)) Primary Data Path, Primary path of property to be set by the radial control
- data path secondary (string, (optional, never None)) Secondary Data Path, Secondary path of property to be set by the radial control
- use\_secondary (string, (optional, never None)) Use Secondary, Path of property to select between the primary and secondary data patl
- rotation\_path (string, (optional, never None)) Rotation Path, Path of property used to rotate the texture display
- color\_path (string, (optional, never None)) Color Path, Path of property used to set the color of the control
- fill color path (string, (optional, never None)) Fill Color Path, Path of property used to set the fill color of the control
- fill color override path (string, (optional, never None)) Fill Color Override Path
- fill\_color\_override\_test\_path (string, (optional, never None)) Fill Color Override Test
- zoom path (string, (optional, never None)) Zoom Path, Path of property used to set the zoom level for the control
- image id (string, (optional, never None)) Image ID, Path of ID that is used to generate an image for the control
- secondary\_tex (boolean, (optional)) Secondary Texture, Tweak brush secondary/mask texture
- release\_confirm (boolean, (optional)) Confirm On Release, Finish operation on key release

bpy.ops.wmread factory settings(\*, use factory startup app template only=False, app template='Template', use empty=False)

Load factory default startup file and preferences. To make changes permanent, use "Save Startup File" and "Save Preferences"

#### **PARAMETERS:**

- use\_factory\_startup\_app\_template\_only (boolean, (optional)) Factory Startup App-Template Only
- use\_empty (boolean, (optional)) Empty, After loading, remove everything except scenes, windows, and workspaces. This makes it possil to load the startup file with its scene configuration and window layout intact, but no objects, materials, animations, ...

bpy.ops.wmread\_factory\_userpref(\*, use\_factory\_startup\_app\_template\_only=False)

Load factory default preferences. To make changes to preferences permanent, use "Save Preferences"

## **PARAMETERS:**

use factory startup app template only (boolean, (optional)) - Factory Startup App-Template Only

bpy.ops.wm.read history()

Reloads history and bookmarks

bpy.ops.wm.read\_homefile(\*, filepath="', load\_ui=True, use\_splash=False, use\_factory\_startup=False, use\_factory\_startup\_app\_template\_only=False, app\_template="Template", use\_empty=False)

Open the default file

## **PARAMETERS:**

- **filepath** (*string*, (*optional*, *never None*)) File Path, Path to an alternative start-up file
- $\bullet \ \ \textbf{load\_ui} \ (\textit{boolean, (optional)}) Load \ UI, \ Load \ user \ interface \ setup \ from \ the \ .blend \ file$
- $\bullet \quad use\_splash \ (boolean, \ (optional)) Splash \\$
- use\_factory\_startup (boolean, (optional)) Factory Startup, Load the default ('factory startup') blend file. This is independent of the norm start-up file that the user can save
- use\_factory\_startup\_app\_template\_only (boolean, (optional)) Factory Startup App-Template Only
- use\_empty (boolean, (optional)) Empty, After loading, remove everything except scenes, windows, and workspaces. This makes it possil to load the startup file with its scene configuration and window layout intact, but no objects, materials, animations, ...

## bpy.ops.wm.read userpref()

Load last saved preferences

bpy.ops.wmrecover\_auto\_save(\*, filepath="', hide\_props\_region=True, check\_existing=False, filter\_blender=True, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False,

filter\_volume=False, filter\_folder=False, filter\_blenlib=False, filemode=8, display\_type='LIST\_VERTICAL', sort\_method='', use scripts=True)

Open an automatically saved file to recover it

#### **PARAMETERS:**

- **filepath** (*string*, (*optional*, *never None*)) File Path, Path to file
- hide\_props\_region (boolean, (optional)) Hide Operator Properties, Collapse the region displaying the operator settings
- check existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- filter\_blender (boolean, (optional)) Filter .blend files
- filter\_backup (boolean, (optional)) Filter .blend files
- filter image (boolean, (optional)) Filter image files
- filter\_movie (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- **filter\_sound** (boolean, (optional)) Filter sound files
- filter\_text (boolean, (optional)) Filter text files
- **filter archive** (boolean, (optional)) Filter archive files
- filter\_btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter volume (boolean, (optional)) Filter OpenVDB volume files
- filter\_folder (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- filemode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (enum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - $\verb| OLIST_VERTICAL| Short List-Display files as short list. \\$
  - $\circ \ \ \mbox{LIST\_HORIZONTAL} \ \mbox{Long List} \mbox{Display files as a detailed list.}$
  - THUMBNAIL Thumbnails Display files as thumbnails.
- **sort\_method** (*enum in* [], (*optional*)) File sorting mode
- use\_scripts (boolean, (optional)) Trusted Source, Allow .blend file to execute scripts automatically, default available from system preferences

# bpy.ops.wmrecover\_last\_session(\*, use\_scripts=True)

Open the last closed file ("quit.blend")

#### **PARAMETERS:**

**use\_scripts** (boolean, (optional)) – Trusted Source, Allow .blend file to execute scripts automatically, default available from system preferences

# bpy.ops.wm.redraw\_timer(\*, type='DRAW', iterations=10, time\_limit=0.0)

Simple redraw timer to test the speed of updating the interface

- type (emum in ['DRAW', 'DRAW\_SWAP', 'DRAW\_WIN', 'DRAW\_WIN\_SWAP', 'ANIM\_STEP', 'ANIM\_PLAY', 'UNDO'], (optional)) Type
  - DRAW Draw Region Draw region.
  - o DDAM CMAD Draw Region & Swan \_ Draw region and swan

- DIAM SWAF DIAW REGION & SWAP DIAW REGION AND SWAP.
- DRAW WIN Draw Window Draw window.
- DRAW WIN SWAP Draw Window & Swap Draw window and swap.
- ANIM STEP Animation Step Animation steps.
- ANIM PLAY Animation Play Animation playback.
- UNDO Undo/Redo Undo and redo.
- iterations (int in [1, inf], (optional)) Iterations, Number of times to redraw
- time limit (float in [0, inf], (optional)) Time Limit, Seconds to run the test for (override iterations)

bpy.ops.wm.revert mainfile(\*, use scripts=True)

Reload the saved file

#### **PARAMETERS:**

**use\_scripts** (boolean, (optional)) – Trusted Source, Allow .blend file to execute scripts automatically, default available from system preferences

bpy.ops.wm.save\_as\_mainfile(\*, filepath=", hide\_props\_region=True, check\_existing=True, filter\_blender=True, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, display\_type='DEFAULT', sort\_method='', compress=False, relative\_remap=True, copy=False)

Save the current file in the desired location

- **filepath** (*string*, (*optional*, *never None*)) File Path, Path to file
- hide props region (boolean, (optional)) Hide Operator Properties, Collapse the region displaying the operator settings
- check existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- **filter blender** (boolean, (optional)) Filter .blend files
- filter backup (boolean, (optional)) Filter .blend files
- filter\_image (boolean, (optional)) Filter image files
- filter\_movie (boolean, (optional)) Filter movie files
- **filter\_python** (boolean, (optional)) Filter Python files
- **filter\_font** (boolean, (optional)) Filter font files
- filter\_sound (boolean, (optional)) Filter sound files
- **filter text** (boolean, (optional)) Filter text files
- filter archive (boolean, (optional)) Filter archive files
- **filter\_btx** (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter\_alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter\_obj** (boolean, (optional)) Filter OBJ files
- filter volume (boolean, (optional)) Filter OpenVDB volume files
- filter folder (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (emm in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.

- **sort method** (*enum in* [], (*optional*)) File sorting mode
- compress (boolean, (optional)) Compress, Write compressed .blend file
- relative remap (boolean, (optional)) Remap Relative, Remap relative paths when saving to a different directory
- copy (boolean, (optional)) Save Copy, Save a copy of the actual working state but does not make saved file active

## bpy.ops.wm.save\_homefile()

Make the current file the default startup file

bpy.ops.wm.save\_mainfile(\*, filepath="', hide\_props\_region=True, check\_existing=True, filter\_blender=True, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, display\_type='DEFAULT', sort\_method="', compress=False, relative remap=False, exit=False, incremental=False)

Save the current Blender file

- filepath (string, (optional, never None)) File Path, Path to file
- hide props region (boolean, (optional)) Hide Operator Properties, Collapse the region displaying the operator settings
- check existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- **filter blender** (boolean, (optional)) Filter .blend files
- **filter backup** (boolean, (optional)) Filter .blend files
- filter\_image (boolean, (optional)) Filter image files
- filter movie (boolean, (optional)) Filter movie files
- **filter\_python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- filter\_sound (boolean, (optional)) Filter sound files
- filter\_text (boolean, (optional)) Filter text files
- filter\_archive (boolean, (optional)) Filter archive files
- filter\_btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter volume (boolean, (optional)) Filter OpenVDB volume files
- filter\_folder (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (emum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- **sort method** (*enum in* [], (*optional*)) File sorting mode
- compress (boolean, (optional)) Compress, Write compressed .blend file
- relative remap (boolean, (optional)) Remap Relative, Remap relative paths when saving to a different directory
- exit (boolean, (optional)) Exit, Exit Blender after saving
- incremental (boolean, (optional)) Incremental, Save the current Blender file with a numerically incremented name that does not overwrite any existing files

## bpy.ops.wm.save\_userpref()

Make the current preferences default

## bpy.ops.wm.search\_menu()

Pop-up a search over all menus in the current context

# bpy.ops.wm.search\_operator()

Pop-up a search over all available operators in current context

bpy.ops.wm.search\_single\_menu(\*, menu\_idname=", initial\_query=")

Pop-up a search for a menu in current context

#### PARAMETERS:

- menu idname (string, (optional, never None)) Menu Name, Menu to search in
- initial query (string, (optional, never None)) Initial Query, Query to insert into the search box

bpy.ops.wm.set\_stereo\_3d(\*, display\_mode='ANAGLYPH', anaglyph\_type='RED\_CYAN', interlace\_type='ROW\_INTERLEAVED', use\_interlace\_swap=False, use\_sidebyside\_crosseyed=False)

Toggle 3D stereo support for current window (or change the display mode)

#### **PARAMETERS:**

- display\_mode (enum in Stereo3D Display Items, (optional)) Display Mode
- anaglyph\_type (enum in Stereo3D Anaglyph Type Items, (optional)) Anaglyph Type
- interlace type (enum in Stereo3D Interlace Type Items, (optional)) Interlace Type
- use interlace swap (boolean, (optional)) Swap Left/Right, Swap left and right stereo channels
- use sidebyside crosseyed (boolean, (optional)) Cross-Eyed, Right eye should see left image and vice versa

## bpy.ops.wm.splash()

Open the splash screen with release info

## bpy.ops.wm.splash about()

Open a window with information about Blender

bpy.ops.wm.stl\_export(\*, filepath=", check\_existing=True, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filemode=8, display\_type='DEFAULT', sort\_method='', ascii\_format=False, use\_batch=False, export\_selected\_objects=False, collection='', global\_scale=1.0, use\_scene\_unit=False, forward\_axis='Y', up axis='Z', apply modifiers=True, filter\_glob='\*.stl')

Save the scene to an STL file

- **filepath** (*string*, (optional, never None)) File Path, Path to file
- check\_existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- filter\_blender (boolean, (optional)) Filter .blend files
- filter\_backup (boolean, (optional)) Filter .blend files
- filter\_image (boolean, (optional)) Filter image files
- filter movie (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- filter\_sound (boolean, (optional)) Filter sound files
- filter text (boolean, (optional)) Filter text files
- **filter archive** (boolean, (optional)) Filter archive files

- **filter btx** (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter volume (boolean, (optional)) Filter OpenVDB volume files
- **filter folder** (boolean, (optional)) Filter folders
- **filter\_blenlib** (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (enum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- sort method (enum in [], (optional)) File sorting mode
- ascii\_format (boolean, (optional)) ASCII Format, Export file in ASCII format, export as binary otherwise
- use batch (boolean, (optional)) Batch Export, Export each object to a separate file
- export selected objects (boolean, (optional)) Export Selected Objects, Export only selected objects instead of all supported objects
- collection (string, (optional, never None)) Source Collection, Export only objects from this collection (and its children)
- global scale (float in [1e-06, 1e+06], (optional)) Scale
- use\_scene\_unit (boolean, (optional)) Scene Unit, Apply current scene's unit (as defined by unit scale) to exported data
- forward\_axis (enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional)) —
  Forward Axis
  - ∘ x X − Positive X axis.
  - ∘ Y Y Positive Y axis.
  - ∘ Z Z Positive Z axis.
  - $\circ$  NEGATIVE X -X Negative X axis.
  - NEGATIVE\_Y -Y-Negative Y axis.
  - $\circ$  NEGATIVE\_Z -Z-Negative Z axis.
- up\_axis (enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional)) Up Axis
  - $\circ$  X X Positive X axis.
  - ∘ Y Y Positive Y axis.
  - $\circ$  Z Z Positive Z axis.
  - NEGATIVE X -X Negative X axis.
  - NEGATIVE Y -Y Negative Y axis.
  - NEGATIVE Z -Z-Negative Z axis.
- apply modifiers (boolean, (optional)) Apply Modifiers, Apply modifiers to exported meshes
- **filter glob** (*string*, (*optional*, *never None*)) Extension Filter
- bpy.ops.wm.stl\_import(\*, filepath=", directory="', files=None, check\_existing=False, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=False, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filter\_obj=Yalse, filter\_blenlib=False, forward\_axis=Yalse, filter\_start=Yalse, filter\_start=Yal

#### **PARAMETERS:**

- **filepath** (*string*, (*optional*, *never None*)) File Path, Path to file
- directory (string, (optional, never None)) Directory, Directory of the file
- files (bpy\_prop\_collection of OperatorFileListElement, (optional)) Files
- check\_existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- **filter\_blender** (boolean, (optional)) Filter .blend files
- filter\_backup (boolean, (optional)) Filter .blend files
- **filter image** (boolean, (optional)) Filter image files
- **filter movie** (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- filter\_sound (boolean, (optional)) Filter sound files
- filter text (boolean, (optional)) Filter text files
- filter\_archive (boolean, (optional)) Filter archive files
- **filter btx** (boolean, (optional)) Filter btx files
- filter\_collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter volume (boolean, (optional)) Filter OpenVDB volume files
- filter\_folder (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- file mode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (enum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - THUMBNAIL Thumbnails Display files as thumbnails.
- **sort method** (*enum in* [], (*optional*)) File sorting mode
- **global\_scale** (float in [1e-06, 1e+06], (optional)) Scale
- use\_scene\_unit (boolean, (optional)) Scene Unit, Apply current scene's unit (as defined by unit scale) to imported data
- use\_facet\_normal (boolean, (optional)) Facet Normals, Use (import) facet normals (note that this will still give flat shading)
- forward\_axis (enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional))—

# Forward Axis

- ∘ X X Positive X axis.
- ∘ Y Y Positive Y axis.
- $\circ$  Z Z Positive Z axis.
- $\circ$  NEGATIVE X -X Negative X axis.
- NEGATIVE Y -Y Negative Y axis.
- NEGATIVE Z -Z-Negative Z axis.
- up\_axis (enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional)) Up Axis
  - ∘ X X Positive X axis.
  - ∘ Y Y − Positive Y axis.
  - ∘ 7 Z Positive Z axis.
  - NEGATIVE X -X Negative X axis.

- NEGATIVE\_Y -Y Negative Y axis.
- NEGATIVE Z -Z-Negative Z axis.
- use\_mesh\_validate (boolean, (optional)) Validate Mesh, Ensure the data is valid (when disabled, data may be imported which causes crashes displaying or editing)
- **filter glob** (*string*, (optional, never None)) Extension Filter

bpy.ops.wm.sysinfo(\*, filepath='')

Generate system information, saved into a text file

#### **PARAMETERS:**

filepath (string, (optional, never None)) - filepath

FILE:

startup/bl\_operators/wm.py:2214

bpy.ops.wm.tool set by brush type(\*, brush type=", space type='EMPTY')

Look up the most appropriate tool for the given brush type and activate that

#### **PARAMETERS:**

- brush\_type (string, (optional, never None)) Brush Type, Brush type identifier for which the most appropriate tool will be looked up
- space\_type (enum in ['EMPTY', 'VIEW\_3D', 'IMAGE\_EDITOR', 'NODE\_EDITOR', 'SEQUENCE\_EDITOR', 'CLIP\_EDITOR', 'DOPESHEET\_EDITOR', 'GRAPH\_EDITOR', 'NLA\_EDITOR', 'TEXT\_EDITOR', 'CONSOLE', 'INFO', 'TOPBAR', 'STATUSBAR', 'OUTLINER', 'PROPERTIES', 'FILE\_BROWSER', 'SPREADSHEET', 'PREFERENCES'], (optional)) Type

## FILE:

startup/bl\_operators/wm.py:2428

bpy.ops.wm.tool set by id(\*, name=", cycle=False, as fallback=False, space type='EMPTY')

Set the tool by name (for key-maps)

## **PARAMETERS:**

- name (string, (optional, never None)) Identifier, Identifier of the tool
- cycle (boolean, (optional)) Cycle, Cycle through tools in this group
- as\_fallback (boolean, (optional)) Set Fallback, Set the fallback tool instead of the primary tool
- space\_type (enum in ['EMPTY', 'VIEW\_3D', 'IMAGE\_EDITOR', 'NODE\_EDITOR', 'SEQUENCE\_EDITOR', 'CLIP\_EDITOR', 'DOPESHEET\_EDITOR', 'GRAPH\_EDITOR', 'NLA\_EDITOR', 'TEXT\_EDITOR', 'CONSOLE', 'INFO', 'TOPBAR', 'STATUSBAR', 'OUTLINER', 'PROPERTIES', 'FILE BROWSER', 'SPREADSHEET', 'PREFERENCES'], (optional)) Type

## FILE:

startup/bl\_operators/wm.py:2337

bpy.ops.wm.tool set by index(\*, index=0, cycle=False, expand=True, as fallback=False, space type='EMPTY')

Set the tool by index (for key-maps)

## **PARAMETERS:**

- index (int in [-inf, inf], (optional)) Index in Toolbar
- cycle (boolean, (optional)) Cycle, Cycle through tools in this group
- expand (boolean, (optional)) expand, Include tool subgroups
- as fallback (boolean, (optional)) Set Fallback, Set the fallback tool instead of the primary
- space\_type (enum in ['EMPTY', 'VIEW\_3D', 'IMAGE\_EDITOR', 'NODE\_EDITOR', 'SEQUENCE\_EDITOR', 'CLIP\_EDITOR', 'DOPESHEET\_EDITOR', 'GRAPH\_EDITOR', 'NLA\_EDITOR', 'TEXT\_EDITOR', 'CONSOLE', 'INFO', 'TOPBAR', 'STATUSBAR', 'OUTLINER', 'PROPERTIES', 'FILE\_BROWSER', 'SPREADSHEET', 'PREFERENCES'], (optional)) Type

## FILE:

startup/bl operators/wm.py:2387

```
bpy.ops.wm.toolbar()
    Undocumented, consider contributing.
    FILE:
        startup/bl operators/wm.py:2495
bpy.ops.wm.toolbar fallback pie()
    Undocumented, consider contributing.
    FILE:
        startup/bl operators/wm.py:2519
bpy.ops.wm.toolbar prompt()
    Leader key like functionality for accessing tools
    FILE:
         startup/bl operators/wm.py:2619
bpy.ops.wm.url open(*, url=")
    Open a website in the web browser
    PARAMETERS:
         url (string, (optional, never None)) – URL, URL to open
    FILE:
        startup/bl operators/wm.py:1074
bpy.ops.wm.url open preset(*, type=")
    Open a preset website in the web browser
    PARAMETERS:
        type (enum in [], (optional)) – Site
    FILE:
        startup/bl operators/wm.py:1144
```

bpy.ops.wm.usd\_export(\*, filepath="', check\_existing=True, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=True, filter\_obj=False, filter\_volume=False, filter\_btx=False, filter\_blenlib=False, filter\_alembic=False, filter\_usd=True, filter\_obj=False, filter\_yolume=False, filter\_folder=True, filter\_blenlib=False, filter\_alembic=False, filter\_usd=True, filter\_obj=False, filter\_volume=False, filter\_sound=False, filter\_usd=True, filter\_obj=False, filter\_volume=False, filter\_obj=False, filter\_archive=False, filter\_archive=False, filter\_archive=False, filter\_archive=False, filter\_python=False, filter\_sound=False, filt

Export current scene in a USD archive

- **filepath** (*string*, (*optional*, *never* None)) File Path, Path to file
- check\_existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- **filter blender** (boolean, (optional)) Filter .blend files
- filter backun (boolean (ontional)) Filter blend files

- inci\_ouchup (ooolean, (opilonal)) i mei lokiki mes
- filter image (boolean, (optional)) Filter image files
- filter\_movie (boolean, (optional)) Filter movie files
- filter python (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- filter sound (boolean, (optional)) Filter sound files
- **filter text** (boolean, (optional)) Filter text files
- filter\_archive (boolean, (optional)) Filter archive files
- filter btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter\_alembic (boolean, (optional)) Filter Alembic files
- filter usd (boolean, (optional)) Filter USD files
- **filter obj** (boolean, (optional)) Filter OBJ files
- filter\_volume (boolean, (optional)) Filter OpenVDB volume files
- **filter\_folder** (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- **file mode** (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- display\_type (emm in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST VERTICAL Short List Display files as short list.
  - LIST HORIZONTAL Long List Display files as a detailed list.
  - $\circ$  THUMBNAIL Thumbnails Display files as thumbnails.
- sort\_method (enum in [], (optional)) File sorting mode
- **selected\_objects\_only** (*boolean, (optional)*) Selection Only, Only export selected objects. Unselected parents of selected objects are exported as empty transform
- visible\_objects\_only (boolean, (optional)) Visible Only, Only export visible objects. Invisible parents of exported objects are exported a empty transforms
- collection (string, (optional, never None)) Collection
- export\_animation (boolean, (optional)) Animation, Export all frames in the render frame range, rather than only the current frame
- export\_hair (boolean, (optional)) Hair, Export hair particle systems as USD curves
- export uvmaps (boolean, (optional)) UV Maps, Include all mesh UV maps in the export
- rename uvmaps (boolean, (optional)) Rename UV Maps, Rename active render UV map to "st" to match USD conventions
- export mesh colors (boolean, (optional)) Color Attributes, Include mesh color attributes in the export
- export normals (boolean, (optional)) Normals, Include normals of exported meshes in the export
- **export\_materials** (*boolean*, (*optional*)) Materials, Export viewport settings of materials as USD preview materials, and export material assignments as geometry subsets
- $\bullet \ \ \textbf{export\_subdivision} \ (\textit{enum in ['IGNORE', 'TESSELLATE', 'BEST\_MATCH']'}, \ (\textit{optional})) \\$

Subdivision, Choose how subdivision modifiers will be mapped to the USD subdivision scheme during export

- IGNORE Ignore Scheme = None. Export base mesh without subdivision.
- TESSELLATE Tessellate Scheme = None. Export subdivided mesh.
- BEST\_MATCH Best Match Scheme = Catmull-Clark, when possible. Reverts to exporting the subdivided mesh for the Simple subdivision type.
- export\_armatures (boolean, (optional)) Armatures, Export armatures and meshes with armature modifiers as USD skeletons and skinner
  meshes
- only deform bones (boolean, (optional)) Only Deform Bones, Only export deform bones and their parents
- export shapekeys (boolean, (optional)) Shape Keys, Export shape keys as USD blend shapes
- use instancing (boolean, (optional)) Instancing, Export instanced objects as references in USD rather than real objects
- evaluation mode (omm in ['RENDER' 'VIEWPORT'] (ontional) \_

- cranadon mode (chain in president, relite one p, (opnomilj)-
  - Use Settings for, Determines visibility of objects, modifier settings, and other areas where there are different settings for viewport and renderin
  - RENDER Render Use Render settings for object visibility, modifier settings, etc.
  - VIEWPORT Viewport Use Viewport settings for object visibility, modifier settings, etc.
- **generate\_preview\_surface** (*boolean, (optional)*) USD Preview Surface Network, Generate an approximate USD Preview Surface shac representation of a Principled BSDF node network
- generate materialx network (boolean, (optional)) MaterialX Network, Generate a MaterialX network representation of the materials
- **convert\_orientation** (*boolean*, (*optional*)) Convert Orientation, Convert orientation axis to a different convention to match other applications
- export\_global\_forward\_selection (enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional)) Forward Axis
  - ∘ X X Positive X axis.
  - ∘ Y Y Positive Y axis.
  - $\circ$  Z Z Positive Z axis.
  - NEGATIVE X -X Negative X axis.
  - NEGATIVE Y -Y-Negative Y axis.
  - $\circ$  NEGATIVE Z -Z Negative Z axis.
- export\_global\_up\_selection (enum in ['X', 'Y', 'Z', 'NEGATIVE\_X', 'NEGATIVE\_Y', 'NEGATIVE\_Z'], (optional)) Up Axis
  - ∘ X X Positive X axis.
  - ∘ Y Y Positive Y axis.
  - $\circ$  Z Z Positive Z axis.
  - NEGATIVE X -X Negative X axis.
  - NEGATIVE Y -Y Negative Y axis.
  - $\circ$  NEGATIVE\_Z -Z-Negative Z axis.
- **export\_textures** (*boolean, (optional*)) Export Textures, If exporting materials, export textures referenced by material nodes to a 'textures directory in the same directory as the USD file
- export\_textures\_mode (enum in ['KEEP', 'PRESERVE', 'NEW'], (optional)) –

Export Textures, Texture export method

- KEEP Keep Use original location of textures.
- PRESERVE Preserve Preserve file paths of textures from already imported USD files. Export remaining textures to a 'textures' folder next to the USD file.
- NEW New Path Export textures to a 'textures' folder next to the USD file.
- overwrite\_textures (boolean, (optional)) Overwrite Textures, Overwrite existing files when exporting textures
- relative\_paths (boolean, (optional)) Relative Paths, Use relative paths to reference external files (i.e. textures, volumes) in USD, otherwis use absolute paths
- xform\_op\_mode (enum in ['TRS', 'TOS', 'MAT'], (optional)) –

Xform Ops, The type of transform operators to write

- TRS Translate, Rotate, Scale Export with translate, rotate, and scale Xform operators.
- TOS Translate, Orient, Scale Export with translate, orient quaternion, and scale Xform operators.
- MAT Matrix Export matrix operator.
- root\_prim\_path (string, (optional, never None)) Root Prim, If set, add a transform primitive with the given path to the stage as the parent of all exported data
- export custom properties (boolean, (optional)) Custom Properties, Export custom properties as USD attributes
- **custom\_properties\_namespace** (*string, (optional, never None)*) Namespace, If set, add the given namespace as a prefix to exported custom property names. This only applies to property names that do not already have a prefix (e.g., it would apply to name 'bar' but not 'foo:bar') and does not apply to blender object and data names which are always exported in the 'userProperties:blender' namespace

- author\_blender\_name (boolean, (optional)) Blender Names, Author USD custom attributes containing the original Blender object and object data names
- convert\_world\_material (boolean, (optional)) World Dome Light, Convert the world material to a USD dome light. Currently works for simple materials, consisting of an environment texture connected to a background shader, with an optional vector multiply of the texture color
- allow\_unicode (boolean, (optional)) Allow Unicode, Preserve UTF-8 encoded characters when writing USD prim and property names (requires software utilizing USD 24.03 or greater when opening the resulting files)
- export\_meshes (boolean, (optional)) Meshes, Export all meshes
- export\_lights (boolean, (optional)) Lights, Export all lights
- export cameras (boolean, (optional)) Cameras, Export all cameras
- export curves (boolean, (optional)) Curves, Export all curves
- export points (boolean, (optional)) Point Clouds, Export all point clouds
- export volumes (boolean, (optional)) Volumes, Export all volumes
- triangulate\_meshes (boolean, (optional)) Triangulate Meshes, Triangulate meshes during export
- quad method (enum in Modifier Triangulate Quad Method Items, (optional)) Quad Method, Method for splitting the quads into triangles
- ngon method (enum in Modifier Triangulate Ngon Method Items, (optional)) N-gon Method, Method for splitting the n-gons into triangles
- usdz\_downscale\_size (enum in ['KEEP', '256', '512', '1024', '2048', '4096', 'CUSTOM'], (optional)) USDZ Texture Downsampling, Choose a maximum size for all exported textures
  - KEEP Keep Keep all current texture sizes.
  - 256 256 Resize to a maximum of 256 pixels.
  - 512 512 Resize to a maximum of 512 pixels.
  - 1024 1024 Resize to a maximum of 1024 pixels.
  - o 2048 Resize to a maximum of 2048 pixels.
  - 4096 4096 Resize to a maximum of 4096 pixels.
  - CUSTOM Custom Specify a custom size.
- usdz\_downscale\_custom\_size (int in [64, 16384], (optional)) USDZ Custom Downscale Size, Custom size for downscaling exported textures
- merge\_parent\_xform (boolean, (optional)) Merge parent Xform, Merge USD primitives with their Xform parent if possible. USD does 1 allow nested UsdGeomGprims, intermediary Xform prims will be defined to keep the USD file valid when encountering object hierarchies.
- convert\_scene\_units (enum in ['METERS', 'KILOMETERS', 'CENTIMETERS', 'MILLIMETERS', 'INCHES', 'FEET', 'YARDS', 'CUSTOM'], (optional)) –

Units, Set the USD Stage meters per unit to the chosen measurement, or a custom value

- METERS Meters Scene meters per unit to 1.0.
- $\circ$  KILOMETERS Kilometers Scene meters per unit to 1000.0.
- $\circ$  CENTIMETERS Centimeters Scene meters per unit to 0.01.
- $\circ$  MILLIMETERS Millimeters Scene meters per unit to 0.001.
- $\circ$  INCHES Inches Scene meters per unit to 0.0254.
- $\circ \quad \text{FEET Feet-Scene meters per unit to 0.3048}. \\$
- $\circ\ \ \text{YARDS}\ Yards-Scene meters per unit to 0.9144.$
- $\circ \ \ \mbox{CUSTOM}$  Custom Specify a custom scene meters per unit value.
- meters\_per\_unit (float in [0.0001, 1000], (optional)) Meters Per Unit, Custom value for meters per unit in the USD Stage

bpy.ops.wm.usd\_import(\*, filepath=", check\_existing=False, filter\_blender=False, filter\_backup=False, filter\_image=False, filter\_movie=False, filter\_python=False, filter\_font=False, filter\_sound=False, filter\_text=False, filter\_archive=False, filter\_btx=False, filter\_collada=False, filter\_alembic=False, filter\_usd=True, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filter\_alembic=False, filter\_usd=True, filter\_obj=False, filter\_volume=False, filter\_folder=True, filter\_blenlib=False, filter\_alembic=False, relative\_path=True, display\_type='DEFAULT', sort\_method=", filter\_glob='\*.usd', scale=1.0, set\_frame\_range=True, import\_cameras=True, import\_curves=True, import\_lights=True, import\_materials=True, import\_meshes=True, import\_volumes=True, import\_shapes=True, import\_skeletons=True, import\_visible\_only=True, create\_collection=False, read\_mesh\_uvs=True, read\_mesh\_colors=True, read\_mesh\_attributes=True, prim\_path\_mask=", import\_guide=False, import\_proxy=False, import\_render=True, import\_all\_materials=False, import\_usd\_preview=True,

set\_material\_blend=True, light\_intensity\_scale=1.0, mtl\_purpose='MTL\_FULL', mtl\_name\_collision\_mode='MAKE\_UNIQUE', import\_textures\_mode='IMPORT\_PACK', import\_textures\_dir='//textures/', tex\_name\_collision\_mode='USE\_EXISTING', attr\_import\_mode='ALL', validate\_meshes=False, create\_world\_material=True, import\_defined\_only=True, merge\_parent\_xform=True, apply\_unit\_conversion\_scale=True)

Import USD stage into current scene

- filepath (string, (optional, never None)) File Path, Path to file
- check\_existing (boolean, (optional)) Check Existing, Check and warn on overwriting existing files
- filter\_blender (boolean, (optional)) Filter .blend files
- filter backup (boolean, (optional)) Filter .blend files
- **filter image** (boolean, (optional)) Filter image files
- **filter movie** (boolean, (optional)) Filter movie files
- **filter python** (boolean, (optional)) Filter Python files
- **filter font** (boolean, (optional)) Filter font files
- filter\_sound (boolean, (optional)) Filter sound files
- **filter text** (boolean, (optional)) Filter text files
- filter\_archive (boolean, (optional)) Filter archive files
- filter btx (boolean, (optional)) Filter btx files
- filter collada (boolean, (optional)) Filter COLLADA files
- filter alembic (boolean, (optional)) Filter Alembic files
- **filter usd** (boolean, (optional)) Filter USD files
- **filter\_obj** (boolean, (optional)) Filter OBJ files
- filter\_volume (boolean, (optional)) Filter OpenVDB volume files
- filter folder (boolean, (optional)) Filter folders
- **filter blenlib** (boolean, (optional)) Filter Blender IDs
- filemode (int in [1, 9], (optional)) File Browser Mode, The setting for the file browser mode to load a .blend file, a library or a special file
- relative path (boolean, (optional)) Relative Path, Select the file relative to the blend file
- display\_type (enum in ['DEFAULT', 'LIST\_VERTICAL', 'LIST\_HORIZONTAL', 'THUMBNAIL'], (optional)) Display Type
  - DEFAULT Default Automatically determine display type for files.
  - LIST\_VERTICAL Short List Display files as short list.
  - $\circ$  LIST\_HORIZONTAL Long List Display files as a detailed list.
- **sort method** (*enum in* [], (*optional*)) File sorting mode
- scale (float in [0.0001, 1000], (optional)) Scale, Value by which to enlarge or shrink the objects with respect to the world's origin
- set frame range (boolean, (optional)) Set Frame Range, Update the scene's start and end frame to match those of the USD archive
- import\_cameras (boolean, (optional)) Cameras
- import\_curves (boolean, (optional)) Curves
- $\bullet \quad import\_lights \ (boolean, \ (optional)) Lights \\$
- import materials (boolean, (optional)) Materials
- import meshes (boolean, (optional)) Meshes
- import volumes (boolean, (optional)) Volumes
- import\_shapes (boolean, (optional)) USD Shapes
- import skeletons (boolean, (optional)) Armatures
- import blendshapes (boolean, (optional)) Shape Keys
- import points (boolean, (optional)) Point Clouds
- import\_subdiv (boolean, (optional)) Import Subdivision Scheme, Create subdivision surface modifiers based on the USD SubdivisionScheme attribute

- support scene instancing (boolean, (optional)) Scene Instancing, Import USD scene graph instances as collection instances
- import\_visible\_only (boolean, (optional)) Visible Primitives Only, Do not import invisible USD primitives. Only applies to primitives with non-animated visibility attribute. Primitives with animated visibility will always be imported
- create collection (boolean, (optional)) Create Collection, Add all imported objects to a new collection
- read\_mesh\_uvs (boolean, (optional)) UV Coordinates, Read mesh UV coordinates
- read\_mesh\_colors (boolean, (optional)) Color Attributes, Read mesh color attributes
- read mesh attributes (boolean, (optional)) Mesh Attributes, Read USD Primvars as mesh attributes
- prim\_path\_mask (*string, (optional, never None*)) Path Mask, Import only the primitive at the given path and its descendants. Multiple paths may be specified in a list delimited by commas or semicolons
- import guide (boolean, (optional)) Guide, Import guide geometry
- import proxy (boolean, (optional)) Proxy, Import proxy geometry
- import render (boolean, (optional)) Render, Import final render geometry
- import\_all\_materials (boolean, (optional)) Import All Materials, Also import materials that are not used by any geometry. Note that whe this option is false, materials referenced by geometry will still be imported
- import\_usd\_preview(boolean, (optional)) Import USD Preview, Convert UsdPreviewSurface shaders to Principled BSDF shader networks
- set\_material\_blend (boolean, (optional)) Set Material Blend, If the Import USD Preview option is enabled, the material blend method w automatically be set based on the shader's opacity and opacity Threshold inputs
- light\_intensity\_scale (float in [0.0001, 10000], (optional)) Light Intensity Scale, Scale for the intensity of imported lights
- mtl purpose (enum in ['MTL ALL PURPOSE', 'MTL PREVIEW', 'MTL FULL'], (optional)) –

Material Purpose, Attempt to import materials with the given purpose. If no material with this purpose is bound to the primitive, fall back on loading any other bound material

- MTL ALL PURPOSE All Purpose Attempt to import 'allPurpose' materials...
- MTL PREVIEW Preview Attempt to import 'preview' materials. Load 'allPurpose' materials as a fallback.
- o MTL FULL Full Attempt to import 'full' materials. Load 'allPurpose' or 'preview' materials, in that order, as a fallback.
- $\bullet \quad \textbf{mtl\_name\_collision\_mode} \ (\textit{emum in ['MAKE\_UNIQUE', 'REFERENCE\_EXISTING'], (optional))} \\$

Material Name Collision, Behavior when the name of an imported material conflicts with an existing material

- MAKE UNIQUE Make Unique Import each USD material as a unique Blender material.
- REFERENCE\_EXISTING Reference Existing If a material with the same name already exists, reference that instead of importing.
- import\_textures\_mode (enum in ['IMPORT\_NONE', 'IMPORT\_PACK', 'IMPORT\_COPY'], (optional))—

Import Textures, Behavior when importing textures from a USDZ archive

- IMPORT NONE None Don't import textures.
- IMPORT PACK Packed Import textures as packed data.
- IMPORT COPY Copy files to textures directory.
- import textures dir (string, (optional, never None)) Textures Directory, Path to the directory where imported textures will be copied
- tex name collision mode (enum in ['USE EXISTING', 'OVERWRITE'], (optional)) –

File Name Collision, Behavior when the name of an imported texture file conflicts with an existing file

- USE\_EXISTING Use Existing If a file with the same name already exists, use that instead of copying.
- $\circ$  OVERWRITE Overwrite Overwrite existing files.
- attr\_import\_mode (enum in ['NONE', 'USER', 'ALL'], (optional)) -

Custom Properties, Behavior when importing USD attributes as Blender custom properties

- $\circ$  NONE None Do not import USD custom attributes.
- USER User Import USD attributes in the 'userProperties' namespace as Blender custom properties. The namespace will be stripped from the property names.
- ALL All Custom Import all USD custom attributes as Blender custom properties. Namespaces will be retained in the property names.
- validate\_meshes (boolean, (optional)) Validate Meshes, Ensure the data is valid (when disabled, data may be imported which causes crashes displaying or editing)

cruores appaying or caung,

- create\_world\_material (boolean, (optional)) World Dome Light, Convert the first discovered USD dome light to a world background shader
- import\_defined\_only (boolean, (optional)) Defined Primitives Only, Import only defined USD primitives. When disabled this allows importing USD primitives which are not defined, such as those with an override specifier
- merge\_parent\_xform (boolean, (optional)) Merge parent Xform, Allow USD primitives to merge with their Xform parent if they are the only child in the hierarchy
- apply\_unit\_conversion\_scale (boolean, (optional)) Apply Unit Conversion Scale, Scale the scene objects by the USD stage's meters pounit value. This scaling is applied in addition to the value specified in the Scale option

## bpy.ops.wm.window close()

Close the current window

## bpy.ops.wm.window fullscreen toggle()

Toggle the current window full-screen

## bpy.ops.wm.window new()

Create a new window

## bpy.ops.wm.window new main()

Create a new main window with its own workspace and scene selection

bpy.ops.wm.xr\_navigation\_fly(\*, mode='VIEWER\_FORWARD', lock\_location\_z=False, lock\_direction=False, speed\_frame\_based=True speed\_min=0.018, speed\_max=0.054, speed\_interpolation0=(0.0, 0.0), speed\_interpolation1=(1.0, 1.0))

Move/turn relative to the VR viewer or controller

- mode (enum in ['FORWARD', 'BACK', 'LEFT', 'RIGHT', 'UP', 'DOWN', 'TURNLEFT', 'TURNRIGHT', 'VIEWER\_FORWARD', 'VIEWER\_BACK', 'VIEWER\_LEFT', 'VIEWER\_RIGHT', 'CONTROLLER\_FORWARD'], (optional)) Mode, Fly mode
  - FORWARD Forward Move along navigation forward axis.
  - BACK Back Move along navigation back axis.
  - LEFT Left Move along navigation left axis.
  - RIGHT Right Move along navigation right axis.
  - UP Up Move along navigation up axis.
  - DOWN Down Move along navigation down axis.
  - TURNLEFT Turn Left Turn counter-clockwise around navigation up axis.
  - TURNRIGHT Turn Right Turn clockwise around navigation up axis.
  - $\verb| VIEWER_FORWARD| \ \ Viewer Forward-Move along viewer's forward axis. \\$
  - VIEWER BACK Viewer Back Move along viewer's back axis.
  - VIEWER LEFT Viewer Left Move along viewer's left axis.
  - VIEWER RIGHT Viewer Right Move along viewer's right axis.
  - CONTROLLER FORWARD Controller Forward Move along controller's forward axis.
- lock location z (boolean, (optional)) Lock Elevation, Prevent changes to viewer elevation
- lock direction (boolean, (optional)) Lock Direction, Limit movement to viewer's initial direction
- speed frame based (boolean, (optional)) Frame Based Speed, Apply fixed movement deltas every update
- speed min (float in [0, 1000], (optional)) Minimum Speed, Minimum move (turn) speed in meters (radians) per second or frame
- speed max (float in [0, 1000], (optional)) Maximum Speed, Maximum move (turn) speed in meters (radians) per second or frame
- **speed\_interpolation0** (mathutils.Vector of 2 items in [0, 1], (optional)) Speed Interpolation 0, First cubic spline control point between min/max speeds
- speed\_interpolation1 (mathutils.Vector of 2 items in [0, 1], (optional)) Speed Interpolation 1, Second cubic spline control poir between min/max speeds

bpy.ops.wm.xr\_navigation\_grab(\*, lock\_location=False, lock\_location\_z=False, lock\_rotation=False, lock\_rotation\_z=False, lock\_rotation\_z=

Navigate the VR scene by grabbing with controllers

#### **PARAMETERS:**

- lock location (boolean, (optional)) Lock Location, Prevent changes to viewer location
- lock location z (boolean, (optional)) Lock Elevation, Prevent changes to viewer elevation
- lock rotation (boolean, (optional)) Lock Rotation, Prevent changes to viewer rotation
- lock\_rotation\_z(boolean, (optional)) Lock Up Orientation, Prevent changes to viewer up orientation
- lock\_scale (boolean, (optional)) Lock Scale, Prevent changes to viewer scale

bpy.ops.wmxr navigation reset(\*, location=True, rotation=True, scale=True)

Reset VR navigation deltas relative to session base pose

## **PARAMETERS:**

- location (boolean, (optional)) Location, Reset location deltas
- rotation (boolean, (optional)) Rotation, Reset rotation deltas
- scale (boolean, (optional)) Scale, Reset scale deltas

bpy.ops.wmxr\_navigation\_teleport(\*, teleport\_axes=(True, True, True), interpolation=1.0, offset=0.0, selectable\_only=True, distance=1.70141e+38, from viewer=False, axis=(0.0, 0.0, -1.0), color=(0.35, 0.35, 1.0, 1.0))

Set VR viewer location to controller raycast hit location

#### **PARAMETERS:**

- teleport\_axes (boolean array of 3 items, (optional)) Teleport Axes, Enabled teleport axes in navigation space
- interpolation (float in [0, 1], (optional)) Interpolation, Interpolation factor between viewer and hit locations
- offset (float in [0, inf], (optional)) Offset, Offset along hit normal to subtract from final location
- selectable\_only (boolean, (optional)) Selectable Only, Only allow selectable objects to influence raycast result
- distance (float in [0, inf], (optional)) Maximum raycast distance
- from viewer (boolean, (optional)) From Viewer, Use viewer pose as raycast origin
- axis (mathutils. Vector of 3 items in [-1, 1], (optional)) Axis, Raycast axis in controller/viewer space
- color (float array of 4 items in [0, 1], (optional)) Color, Raycast color

bpy.ops.wmxr session toggle()

Open a view for use with virtual reality headsets, or close it if already opened

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