
ViewNudger Documentation

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Unfortunately in maya you are unable to nudge a camera or by sub pixel amounts. ViewNudger solves that by letting you.

Features

- Any pixel amount nudging.
- Great for fixing stubborn tracks in Maya.
- No extra libraries needed.

Planned Features

- Give me ideas!

Requirements

- Autodesk Maya 2015 (<http://www.autodesk.com/products/maya/overview>)

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4.1 Installation

4.1.1 Get ViewNudger for Maya

Using the MEL setup script

- Download the package from the github repo <http://github.com/chrisdevito/ViewNudger.git> and click Download Zip.
- After extraction, drag and drop the setup.mel (found in the ViewNudger directory) into any open maya window.
- This will install it into your maya/scripts directory.

Using Pip

```
$ pip install ViewNudger
```

Git

```
$ git clone https://github.com/chrisdevito/ViewNudger
$ cd ViewNudger
$ python setup.py install
```

Manual

- Download the package from the github repo <http://github.com/chrisdevito/ViewNudger.git> and click Download Zip.
- Copy the ViewNudger folder into your maya/scripts path.

4.1.2 How to Run

Drop this code as a button or run from the maya python script editor.

```
from ViewNudger import ui

if __name__ == '__main__':
    global win

    try:
        win.close()
    except:
        pass

    win = ui.UI()
    win.create()
```

4.2 API

`ViewNudger.api.force_update(view)`

Selects the center of the viewport to force it to refresh properly in VP1. THIS IS AWFUL.

Parameters `view` (*OpenMaya.M3dView*) – View to convert point.

Raises None

Returns None

Return type `NoneType`

`ViewNudger.api.getCamera(view)`

Gets the camera from the current view.

Parameters `view` (*OpenMaya.M3dView*) – View to get camera from.

Raises None

Returns Camera function set.

Return type `OpenMaya.MFnCamera`

`ViewNudger.api.getRenderer(view)`

Gets the current renderer in viewport.

Parameters `view` (*OpenMaya.M3dView*) – View to convert point.

Raises None

Returns Name of current renderer.

Return type `str`

`ViewNudger.api.getSelection()`

Gets the current selection.

Raises `RuntimeError` – If nothing selected.

Returns First index of object selected

Return type `str`

`ViewNudger.api.nudge(transformName=None, pixelAmount=[1.0, 1.0], moveObject=False, rotate-
View=False, view=None)`

Moves object/camera by pixel amount in x and y.

Parameters

- **transformName** (*str*) – Name of a transform to nudge from.
- **pixelAmount** (*list of 2 floats*) – Pixel amount to nudge in x and y.
- **moveObject** (*bool*) – Move the object instead of view.
- **rotateView** (*bool*) – Rotate the camera back at point after nudge.
- **view** (*OpenMaya.M3dView*) – View to calculate nudge one.

Raises None

Returns None

Return type NoneType

`ViewNudger.api.parseArgs (transformName, view=None)`

Checks input values.

Parameters

- **transformName** (*str*) – Name of a transform to nudge from.
- **view** (*OpenMaya.M3dView or Str*) – Optional desired M3dView.

Raises

- **RuntimeError** – If transformName isn't a transform or doesn't exist.
- **RuntimeError** – If view set is not a view.

Returns view

Return type OpenMaya.M3dView

`ViewNudger.api.screenToWorld (fnCamera=None, point2D=None, cameraPoint=None, setDistance=1.0, view=None)`

Converts a screen point to world.

Parameters

- **fnCamera** (*OpenMaya.MFnCamera*) – Camera function set.
- **point2D** (*list of 2 floats*) – x and y values to convert to 3d value.
- **cameraPoint** (*OpenMaya.MPoint*) – Position to test.
- **setDistance** (*float*) – Distance to set returned point from camera.
- **view** (*OpenMaya.M3dView*) – View to convert point.

Raises None

Returns 2d Point converted to 3d point.

Return type OpenMaya.MPoint

`ViewNudger.api.worldToScreen (fnCamera=None, cameraPoint=None, transformPoint=None, view=None)`

Converts a world point into a screen point.

Parameters

- **fnCamera** (*OpenMaya.MFnCamera*) – Camera function set.
- **cameraPoint** (*OpenMaya.MPoint*) – Position to test.
- **transformPoint** (*OpenMaya.MPoint*) – Position to test.
- **view** (*OpenMaya.M3dView*) – View to convert point.

Raises None

Returns x and y position of 3d point.

Return type list of 2 floats

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