

My Shelf Setup XML

My shelf tools setup, in progress. Save to houdinixx.x/toolbar/daam.shelf

```
<?xml version="1.0" encoding="UTF-8"?>
<shelfDocument>
  <!-- This file contains definitions of shelves, toolbars, and tools.
  It should not be hand-edited when it is being used by the application.
  Note, that two definitions of the same element are not allowed in
  a single file. -->

  <toolshelf name="daam" label="daam">
    <memberTool name="SopToTops"/>
    <memberTool name="rop_to_top"/>
    <memberTool name="TOPS_rangeselect"/>
    <memberTool name="versionup"/>
    <memberTool name="nodeVersionDown"/>
    <memberTool name="sop_makeFile"/>
    <memberTool name="showfile"/>
    <memberTool name="exportToNew"/>
    <memberTool name="sopTimeClamp"/>
    <memberTool name="Flipbook"/>
    <memberTool name="ChangeMulti"/>
  </toolshelf>

  <tool name="SopToTops" label="SOPtoTOP" icon="hicon:/SVGIcons.index?COP2_subnet.svg">
    <script scriptType="python"><![CDATA[import hou
nodes = hou.selectedNodes()
topnet = hou.node("/obj/topnet1")
if not topnet:
    topnet = hou.node("/obj").createNode("topnet")
    topnet.setName("topnet1")
for x in nodes:
    name = x.name()+"_"+str(x.parent())
    fstart = x.parm("f1").eval()
    fend = x.parm("f2").eval()
    if x.type().name() == "rop_geometry":
```

```

    ver = x.parm("vp_version")
    path = x.path()
elif x.type().name() == "rop_alembic":
    ver = x.parm("vp_version")
    path = x.path()
elif x.type().name() == "filecache::2.0":
    path = x.path() + "/render"
    ver = x.parm("vp_version")
else:
    ver = x.parm("version")
    path = x.path()

```

```

topcache = topnet.createNode("ropfetch")

```

```

try:

```

```

    if x.parm("cachesim").eval() is 1:
        topcache.parm("batchall").set(1)
        topcache.setColor(hou.Color(.5,0,0))
    else:
        topcache.parm("framesperbatch").set(15)
        topcache.setColor(hou.Color(0,.5,0))

```

```

except:

```

```

    if x.parm("initsim").eval() is 1:
        topcache.parm("batchall").set(1)
        topcache.setColor(hou.Color(.5,0,0))
    else:
        topcache.parm("framesperbatch").set(15)
        topcache.setColor(hou.Color(0,.5,0))

```

```

p = hou.IntParmTemplate("version", "Version", 1, min=1, max=40)

```

```

g = topcache.parmTemplateGroup()

```

```

g.insertAfter("pdg_servicename", p)

```

```

topcache.setParmTemplateGroup(g)

```

```

topcache.parm("version").set(ver)

```

```

topcache.parm("roppath").set(path)

```

```

topcache.setName(name)]]></script>

```

```

</tool>

```

```

<tool name="TOPS_rangeselect" label="TOPS RangeSelect"

```

```

icon="hicon:/SVGIcons.index?BUTTONS_set_framerange.svg">

```

```

    <script scriptType="python"><![CDATA[node = hou.selectedNodes()[0]

```

```

    popup = hou.ui.selectNode(title="Select Node to grab range",node_type_filter=hou.nodeTypeFilter.Sop)

```

```
popup = hou.node(popup)
start = popup.parm("f1")
end = popup.parm("f2")
start.deleteAllKeyframes();
end.deleteAllKeyframes();
```

```
if node.type().name() == "rangeextend":
    node.parm("newrangex").set(start)
    node.parm("newrangey").set(end)
if node.type().name() == "rangegenerate":
    node.parm("rangex").set(start)
    node.parm("rangey").set(end)]]></script>
</tool>
```

```
<tool name="versionup" label="Node Version UP" icon="hicon:/SVGIcons.index?BUTTONS_up.svg">
    <script scriptType="python"><![CDATA[import hou
nodes = hou.selectedNodes()
for x in nodes:
    try:
        ver = x.parm("vp_version").eval() + 1
    except:
        ver = x.parm("version").eval() + 1
    x.parm("version").set(ver)]]></script>
</tool>
```

```
<tool name="rop_to_top" label="ROPtO TOP" icon="hicon:/SVGIcons.index?CHOP_reorder.svg">
    <script scriptType="python"><![CDATA[import hou
nodes = hou.selectedNodes()
topnet = hou.node("/obj/topnet1")
frb = round((hou.playbar.frameRange()[1] - hou.playbar.frameRange()[0]) / 2)

if not topnet:
    topnet = hou.node("/obj").createNode("topnet")
    topnet.setName("topnet1")
if not hou.node("/obj/topnet1/rangegenerate_start"):
    rg = topnet.createNode("rangegenerate")
    rg.setName("rangegenerate_start")
for x in nodes:
    ver = x.parm("vp_version")
```

```

path = x.path()
name = x.name()
if x.parm("extra"):
    name = name + x.parm("extra").eval()
else: pass
topcache = topnet.createNode("ropfetch")
topcache.setColor(hou.Color(0,0,0))
topcache.setUserData("nodeshape", "circle")
p = hou.IntParmTemplate("version", "Version", 1)
g = topcache.parmTemplateGroup()
g.append(p)
topcache.setParmTemplateGroup(g)
topcache.parm("version").set(ver)
topcache.parm("roppath").set(path)
topcache.parm("framesperbatch").set(frb)
topcache.setName(name)]]></script>
</tool>

```

```

<tool name="sop_makeFile" label="SOP makeFile From ROP"
icon="hicon:/SVGIcons.index?BUTTONS_upload.svg">
    <script scriptType="python"><![CDATA[import hou, re
nodes = hou.selectedNodes()
parent = nodes[0].parent()
nodeList = []
for x in nodes:
    name = x.name()+"_load"

    version = x.parm("vp_version").eval()
    path= x.parm("sopoutput").eval()
    path = str(path)
    newpath1 = re.sub("_v\d+", "_v{0}", path).format("`padzero(3,ch('version'))`)")
    newpath1 = re.sub("\.d+", ".$F4", newpath1)

    file = parent.createNode("file")
    try:
        file.setName(name)
    except:
        continue
    file.setColor(hou.Color(0,0,1))

```

```
file.parm("file").set(newpath1)
p = hou.IntParmTemplate("version", "Version", 1)
g = file.parmTemplateGroup()
g.append(p)
file.setParmTemplateGroup(g)
file.parm("version").set(version)
nodeList.append(file)
```

```
parent.layoutChildren(items=nodeList)]]></script>
</tool>
```

```
<tool name="showfile" label="TOPS Show File in Nautilus"
icon="hicon:/SVGIcons.index?BUTTONS_addassetdirectory.svg">
  <script scriptType="python"><![CDATA[import hou, re
nodes = hou.selectedNodes()
```

```
for x in nodes:
    rpath = x.parm("roppath").eval()

    try:
        tnode = rpath.rpartition("/")[0]
        dirpath = hou.node(tnode).parm("file").eval()
    except:
        tnode = rpath
        dirpath = hou.node(tnode).parm("vp_path").eval()
        print(dirpath)
    dirpath = dirpath.rpartition("/")[0]
    hou.ui.showInFileBrowser(str(dirpath))]]></script>
</tool>
```

```
<tool name="exportToNew" label="SOP send to new" icon="hicon:/SVGIcons.index?BUTTONS_cut.svg">
  <script scriptType="python"><![CDATA[node = hou.selectedNodes()
net = hou.node("/obj")
for x in node:
    name = x.name()
    makeout = net.createNode("geo")
    makeout.setInput(0,x)
    makeout.setName(name+"_INOUT")
    makeout.moveToGoodPosition()
    makeout.setColor(hou.Color(.5, .25, .6))
```

```
merge = makeout.createNode("object_merge")
merge.parm("objpath1").set(x.path())]]></script>
</tool>
```

```
<tool name="sopTimeClamp" label="SOP time clamp" icon="hicon:/SVGIcons.index?SOP_timeblend.svg">
  <script scriptType="python"><![CDATA[node = hou.selectedNodes()
for x in node:
  outnode = x.outputs()[0]
  name = x.name() + "_TIMESHIFT_clamp"
  start = x.parm("f1")
  end = x.parm("f2")
  net = x.parent()
  timeshift = net.createNode("timeshift")
  timeshift.parm("rangeclamp").set(3)
  timeshift.parm("frange1").deleteAllKeyframes()
  timeshift.parm("frange2").deleteAllKeyframes()
  timeshift.parm("frange1").set(start)
  timeshift.parm("frange2").set(end)
  timeshift.setName(name)
  timeshift.setInput(0, x)
  outnode.setInput(0, timeshift)
  timeshift.moveToGoodPosition()]]></script>
</tool>
```

```
<tool name="nodeVersionDown" label="Node Version DOWN"
icon="hicon:/SVGIcons.index?BUTTONS_down.svg">
  <script scriptType="python"><![CDATA[import hou
nodes = hou.selectedNodes()
for x in nodes:
  ver = x.parm("version").eval() -1
  x.parm("version").set(ver)]]></script>
</tool>
```

```
<tool name="Flipbook" label="Flipbook" icon="hicon:/SVGIcons.index?BUTTONS_capture.svg">
  <script scriptType="python"><![CDATA[import hou
import re

def flipbook_from_node():
  try:
    # Ask user to pick a ROP node to steal the path from
```

```

stealfile = hou.ui.selectNode(
    title="Select OpenGL Export Node to steal path from",
    multiple_select=False,
    node_type_filter=hou.nodeTypeFilter.Rop
)
if not stealfile:
    return

# Get the output path and convert to $F4 format
filepath = hou.node(stealfile).parm("vp_path").eval()
renderpath = re.sub(r'\.\d+\.', '.$F4.', filepath)

# Confirm the output path
confirm = hou.ui.displayMessage(
    f"Use this path?\n\n{renderpath}",
    buttons=('Yes', 'No'),
    default_choice=0
)
if confirm != 0:
    return

# Resolution preset options
resolution_presets = [
    "1920x1080", # Default
    "1280x720",
    "2048x858",
    "3840x2160",
    "Custom"
]

# Ask user to select resolution preset
choice = hou.ui.selectFromList(
    resolution_presets,
    message="Select Flipbook Resolution",
    title="Resolution Presets",
    exclusive=True,
    default_choices=[0]
)

if not choice:

```

```
return
```

```
selection = resolution_presets[choice[0]]
```

```
if selection == "Custom":
```

```
    # Ask for custom resolution
```

```
    resx_str = hou.ui.readInput("Enter custom resolution X:", buttons=("OK",), close_choice=0)[1]
```

```
    resy_str = hou.ui.readInput("Enter custom resolution Y:", buttons=("OK",), close_choice=0)[1]
```

```
    resx = int(resx_str)
```

```
    resy = int(resy_str)
```

```
else:
```

```
    resx, resy = map(int, selection.split("x"))
```

```
# Get current frame range
```

```
frames = hou.playbar.frameRange()
```

```
# Setup the flipbook
```

```
cur_desktop = hou.ui.curDesktop()
```

```
scene = cur_desktop.paneTabOfType(hou.paneTabType.SceneViewer)
```

```
if not scene:
```

```
    hou.ui.displayMessage("No Scene Viewer found.")
```

```
    return
```

```
scene.flipbookSettings().stash()
```

```
flipbook_options = scene.flipbookSettings()
```

```
flipbook_options.output(renderpath)
```

```
flipbook_options.frameRange((frames[0], frames[1]))
```

```
flipbook_options.useResolution(True)
```

```
flipbook_options.resolution((resx, resy))
```

```
# Run the flipbook
```

```
scene.flipbook(scene.curViewport(), flipbook_options)
```

```
except Exception as e:
```

```
    hou.ui.displayMessage(f"Error: {str(e)}")
```

```
# Run it
```

```
flipbook_from_node()]]></script>
```

```
</tool>
```



```

<tool name="ChangeMulti" label="ChangeMultiParm"
icon="hicon:/SVGIcons.index?BUTTONS_pdg_task_table.svg">
  <script scriptType="python"><![CDATA[import hou

# Prompt for parameter name
parm_name = hou.ui.readInput("Parameter to change (e.g. 'uniformscale')", buttons=("OK", "Cancel"))[1]
if not parm_name:
    raise hou.Error("Parameter name not specified.")

# Prompt for value (literal or expression)
value_input = hou.ui.readInput(f"Value to set for '{parm_name}'\n(Prefix expressions with expr:)",
buttons=("OK", "Cancel"))[1]
if not value_input:
    raise hou.Error("Value not specified.")

# Get selected nodes
selected_nodes = hou.selectedNodes()
if not selected_nodes:
    raise hou.Error("No nodes selected.")

# Check for expression prefix
is_expr = value_input.strip().startswith("expr:")
expr_str = value_input.strip()[5:].strip() if is_expr else value_input.strip()

# Apply to all selected nodes
for node in selected_nodes:
    parm = node.parm(parm_name)
    if not parm:
        print(f"Node '{node.name()}' does not have a parameter named '{parm_name}'")
        continue

    try:
        if is_expr:
            parm.setExpression(expr_str, language=houd.exprLanguage.Hscript)
        else:
            # Try float conversion first
            try:
                val = float(expr_str)
            except ValueError:

```

```
        val = expr_str
        parm.set(val)
    except Exception as e:
        print(f"Failed to set value on '{node.name()}': {e}")
]]></script>
</tool>

<shelfSetEdit name="shelf_set_1" fileLocation="/mnt/jobs/software/houdini/hfs20.5.370-
py310/houdini/toolbar/ShelfDefinitions.shelf">
    <addMemberToolshelf name="NOISE" inPosition="14"/>
    <addMemberToolshelf name="daam" inPosition="15"/>
</shelfSetEdit>
</shelfDocument>
```

Revision #3

Created 13 May 2025 22:52:37 by Anthony

Updated 30 May 2025 15:52:36 by Anthony