

# Nuke at school

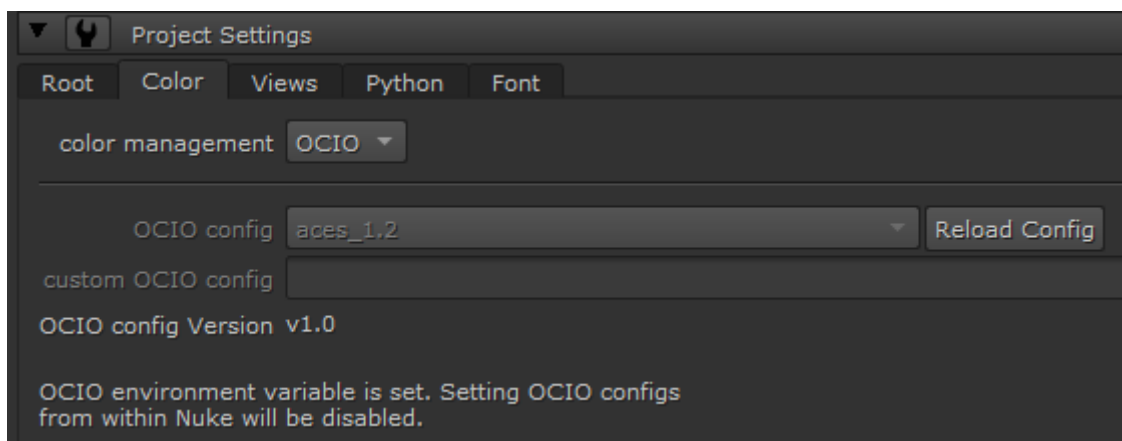
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# Nuke - What's different at school?

If you've used Nuke before you'll probably be familiar with the many ways it can be customized and the huge amount of gizmos and tools available online. Nuke at school comes with many of these customizations pre-configured for you.

## Color management

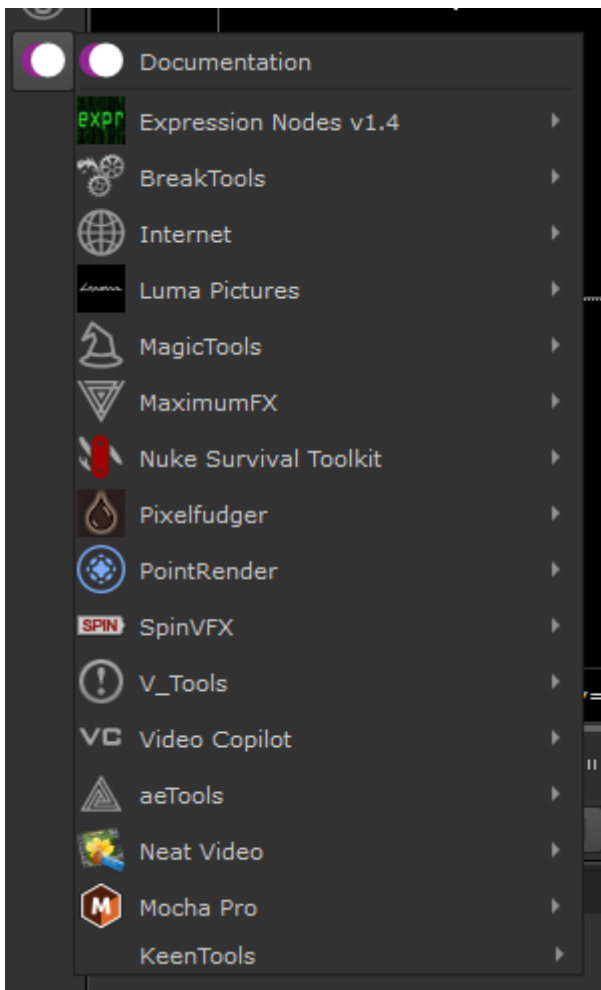
Color management is globally configured for all our applications at school. You'll see this when you open your Nuke project settings and go to the Color tab:



Don't change these settings! It's important they stay configured like this so Nuke plays nicely with the colors in our renders and the footage we get from our editors. Colorspace theory is taught in the second year.

## Gizmos and tools

All our gizmos/tools can be found in the side bar when you click on the NFA logo. They'll also show up in your tab search.



As you can see we have quite a large selection available. Check out [this page](#) for an overview of tools made by our students!

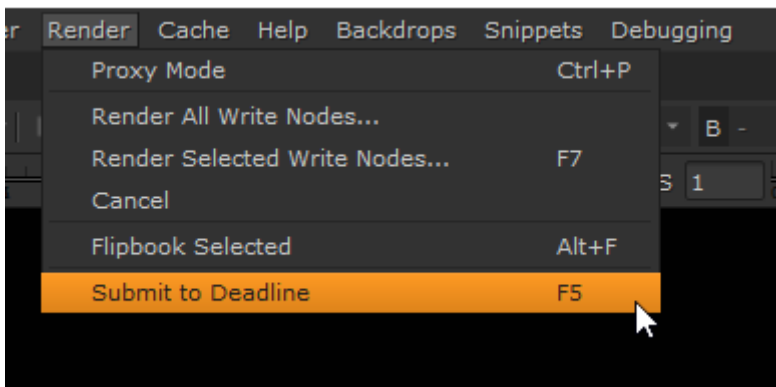
It's not possible for you to install new gizmos yourself because of how our Nuke is customized from one central location. Gizmo/tool installation is typically done by more TD inclined students, as it involves a bit of Git version control. Instructions for this can be found in the TD section of this documentation. You can technically install plugins and gizmos in your own `.nuke` user folder, but keep in mind that your render will likely fail on the farm when you do this.

## Render farm

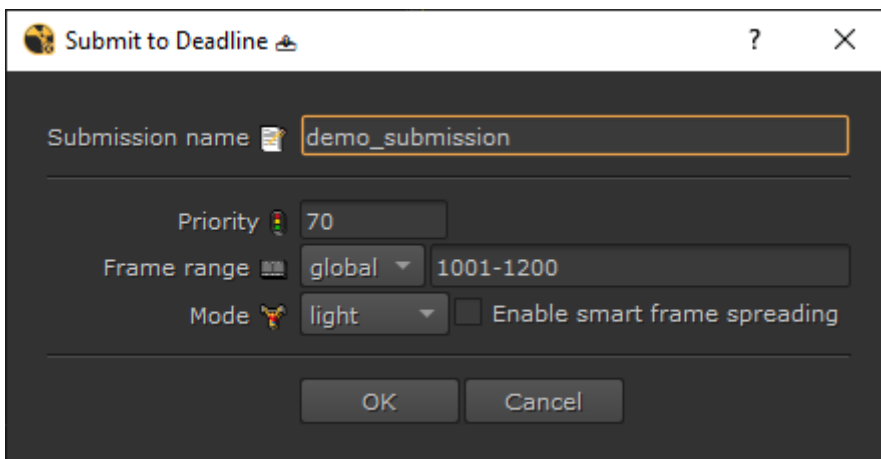
At school we have a render farm at our disposal which you can use to render your comps. Check out [this page](#) on how to submit your renders.

# Nuke - Rendering on the farm

Submitting your comp to our render farm is quite easy. First you need to make sure that all the files used in your comp (and your Nuke file itself of course) are stored on our Storage server. After that just select the write node you want to render and click the "Submit to Deadline" button that's under the Render menu bar item (you can also press F5):



You will be greeted with the following menu:



A couple things to note:

- The priority option determines how many machines will be able to run your render. You should leave this at 70 unless you've agreed on a different number with your class' render managers.
- The options *light*, *medium*, *heavy*, and *extreme* determine how much a single PC on the farm should render at once. If you have a fast comp, one PC will be able to render 4 frames simultaneously without a problem. If you have a slow comp and use the *extreme* option, one PC will render 1 frame at a time. So, a *light* render is theoretically 4 times

faster than an *extreme* render. However, you will cause PCs to hang and crash when you submit an especially slow comp using the *light* option, so try to judge which option suits your comp best.

- The smart frame spreading checkbox causes your frames on the farm to be rendered in a different order. First the first frame will be rendered, then the last frame, then the middle frame, after which the blanks will be filled in evenly. This is useful if you're submitting a comp that takes a long time to render and you want to quickly see if it's rendering successfully all the way through.

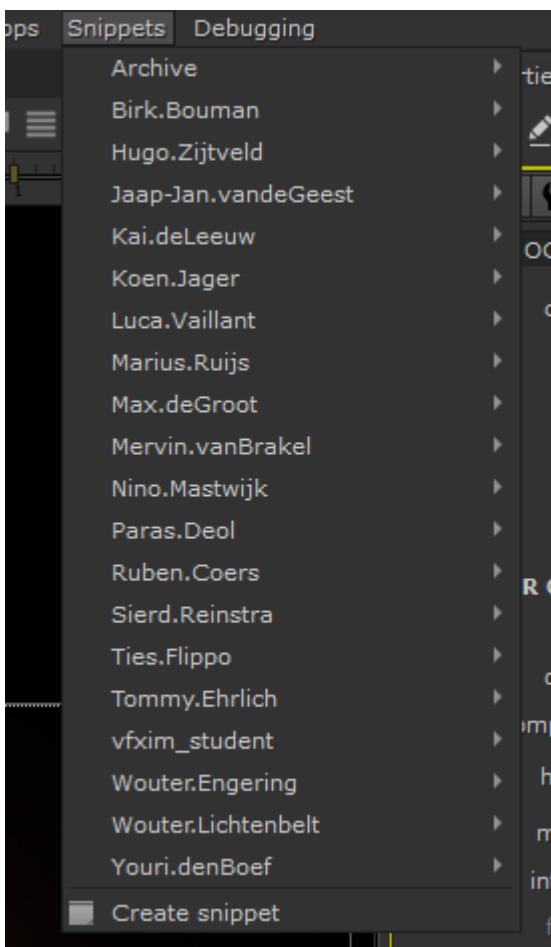
*Deadline submission tools developed by Gilles Vink.*

# Nuke - Custom tools

Over the years our students have made a lot of nice additions to our Nuke. Here's a showcase of some of these tools.

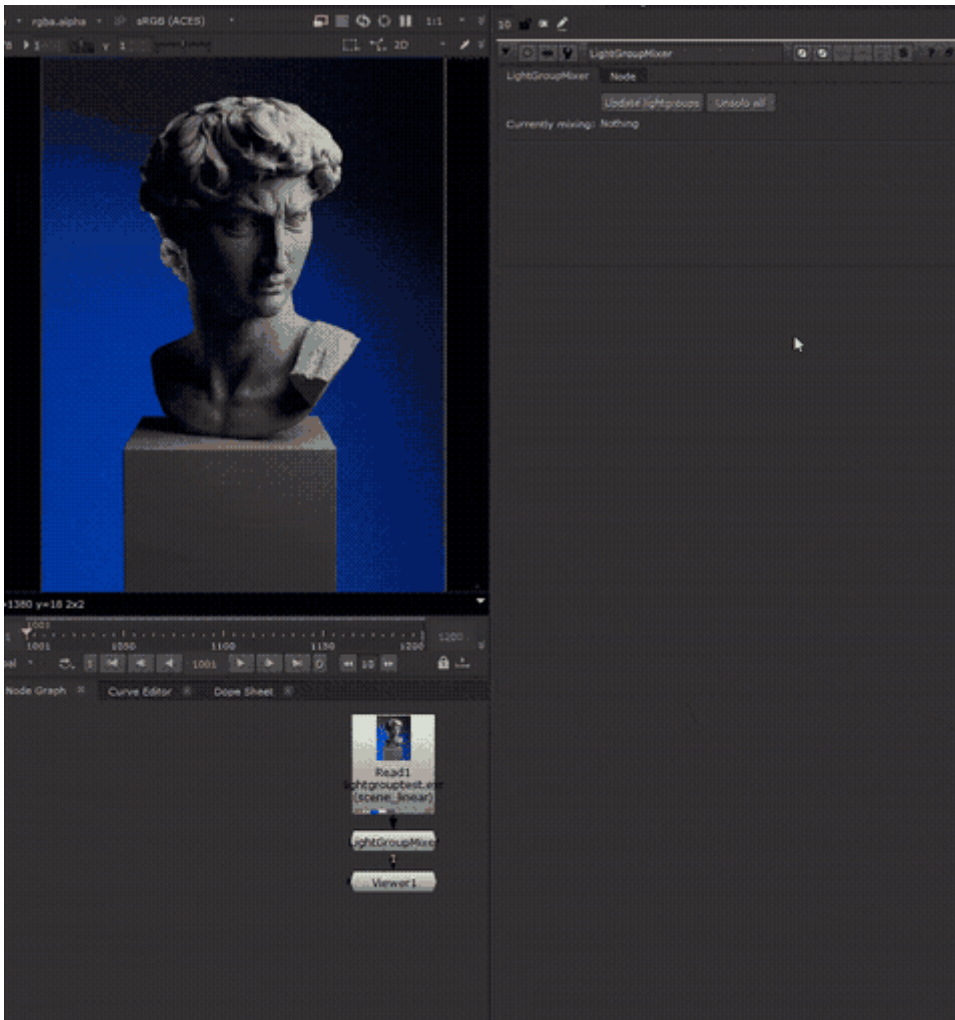
## Snippets - By Gilles Vink

The snippets tool, which can be found in the top menu bar, makes it easy to store a part of your node graph so other Nuke users can load it into their comp. Just select the nodes you want to save, press "Create snippet" and give it a name. It will show up for other users under your own name.



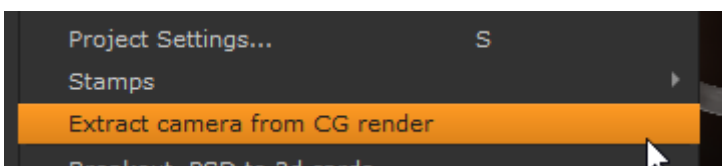
## LightGroupMixer - By Mervin van Brakel

The LightGroupMixer gizmo goes through the layers of your CG render and collects light groups for you to grade. This only works if your light group layer names have the prefix `LG_`, which is done automatically in our ShotGrid pipeline.



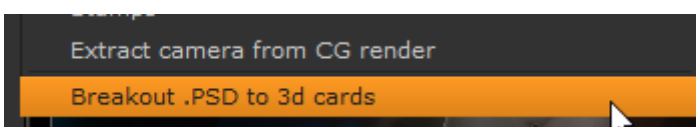
## Extract Camera from CG render - By Max de Groot

Found in the Edit menu, this script uses the metadata stored in CG .EXRs to extract an animated camera. You can run it when you have a read node selected.



## Breakout .PSD to 3d cards - By Mervin van Brakel

This tool was made specifically for concept artists who want to use Nuke to bring some 3d perspective to their 2d Photoshop layers. You can run it from the Edit menu when you have a read node selected which points to a Photoshop file. It will take your Photoshop layers and lay them out into the Nuke 3d scene.



## Additional custom tools

Tools under the BreakTools, MagicTools and MaximumFX tabs were also all made by students!

