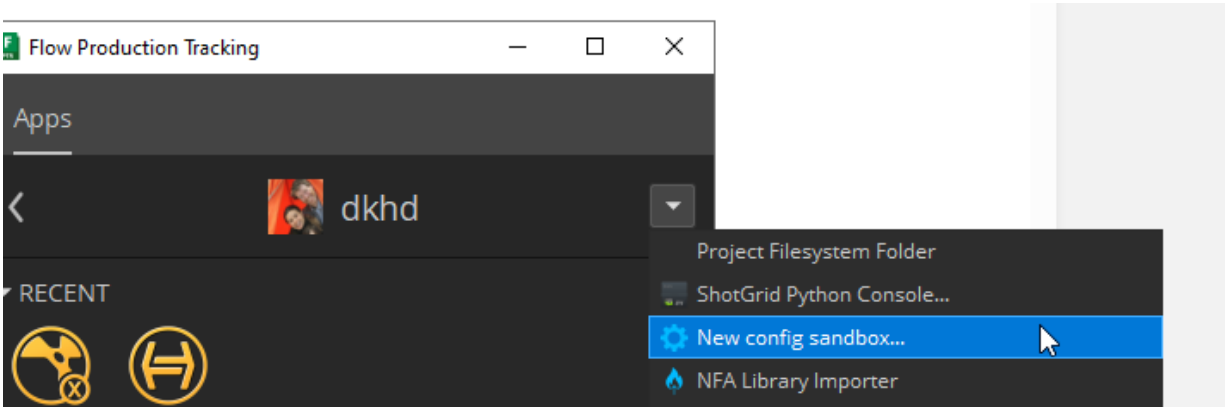
Pipeline - SG Dev - Making changes to our pipeline

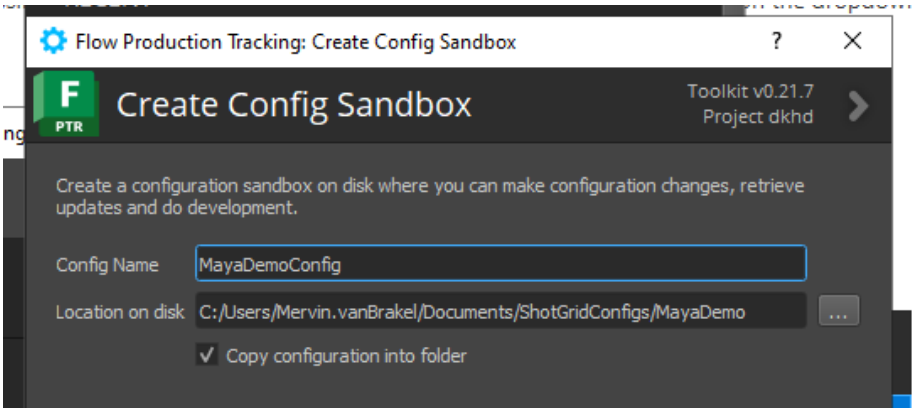
Now that you know what engines, apps and the configuration are you're ready to make some changes. I'm sure you've also read the ShotGrid toolkit documentation like I said earlier, right?? Anyways, lets go over all the steps of making a minor pipeline change so you know how it all works.

Step 1: Create a sandbox configuration

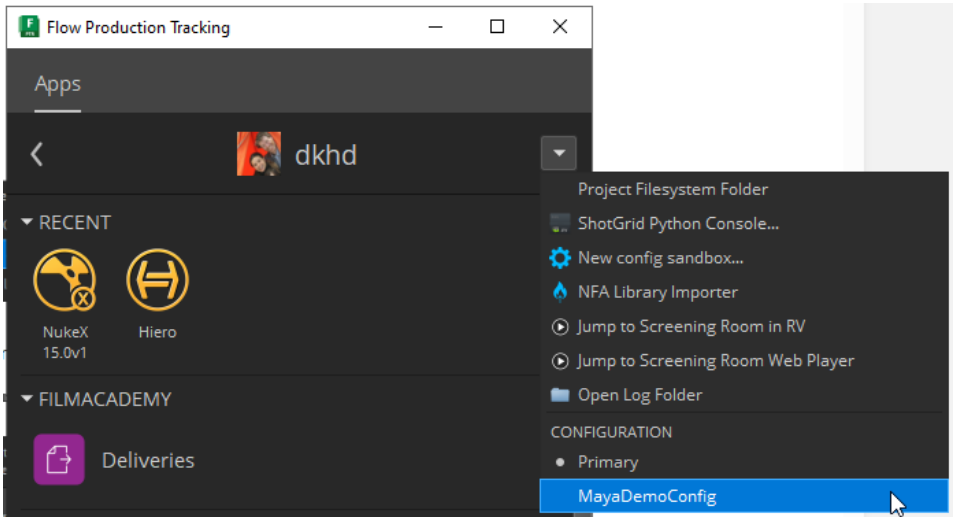
In order to test stuff you'll need a local copy of the ShotGrid configuration and tell ShotGrid to use that. This way you can try out a bunch of stuff without messing up the pipeline for everybody. Go to a ShotGrid project and click on the dropdown arrow and press *New config sandbox*...



Give it a descriptive name and copy it to a handy location on disk. Make sure the copy checkmark is checked:



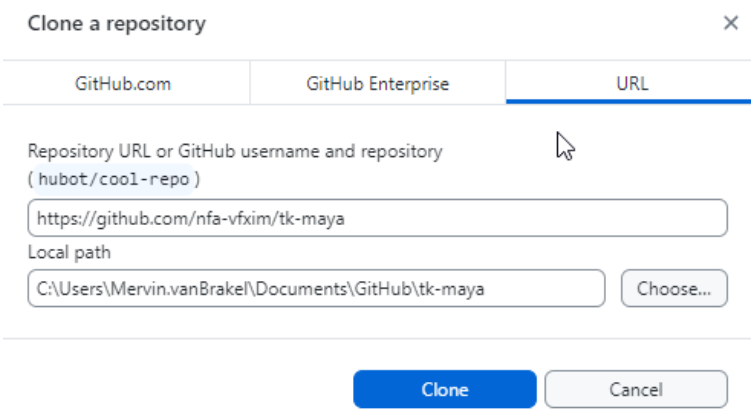
Now you have to exit the project and enter it again so the new configuration shows up:



Select it. You're now working with a local config!

Step 2: Clone an engine or app

The workflow for working on either engines and apps is essentially the same. First you need to clone the repository. I'm cloning the tk-maya engine here as I'll be making a minor change to the publisher. You can use Git from the command line of course, but I like GitHub desktop because I'm not a huge nerd.

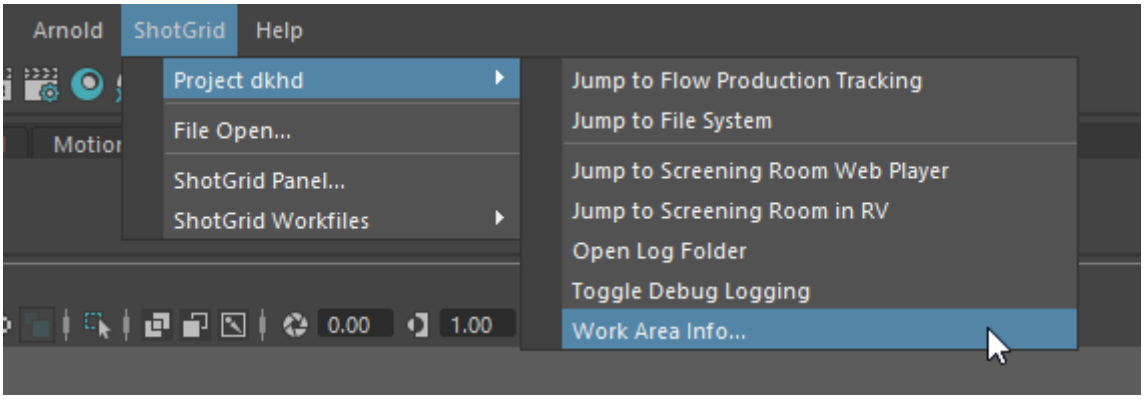


Step 3: Change your config to use the cloned engine or app

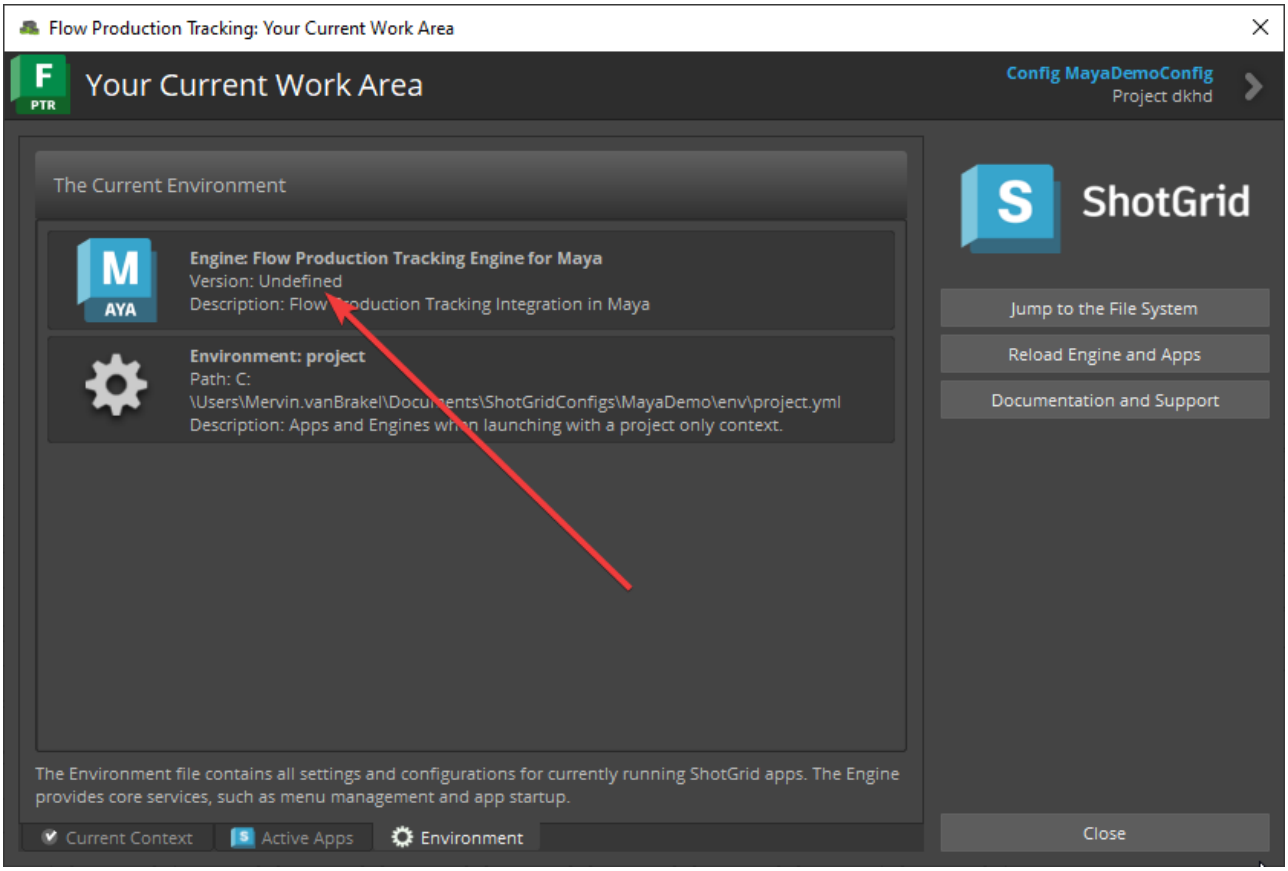
Browse over to where you have your config cloned and browse to the *env -> includes* folder. Here you'll find two files: app_locations.yml and engine_locations.yaml. Open the right file depending on what you're working on. I'm working on an engine, so I'll open engine_location.yaml. Find the engine or app you want to locally develop and change the type to `dev` and set the path to where you cloned the repository:

```
71  # Maya
72  engines.tk-maya.location:
73    type: dev
74    path: C:\Users\Mervin.vanBrakel\Documents\GitHub\tk-maya
75
76  # Nuke
77  engines.tk-nuke.location:
78    type: github_release
79    organization: nfa-vfxim
80    repository: tk-nuke
81    version: 0.14.5.2
```

Now reload your ShotGrid config by exiting the ShotGrid project in the launcher and entering it again. Now you are using the code that's on your local machine! You can verify you've done this correctly by going to the *Work Area Info* window:

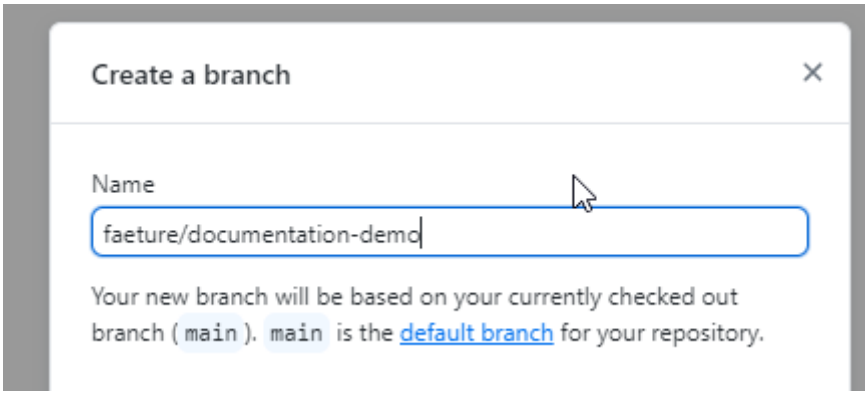


To verify you are using local code you can now look at either the app or environment tab (depends on what you're working on). If the version is undefined you know you're working locally!



Step 4: Make a new Git branch

It's best practice to work on a separate Git branch for the engine or app you're working on. So go ahead and make one, then switch to that.



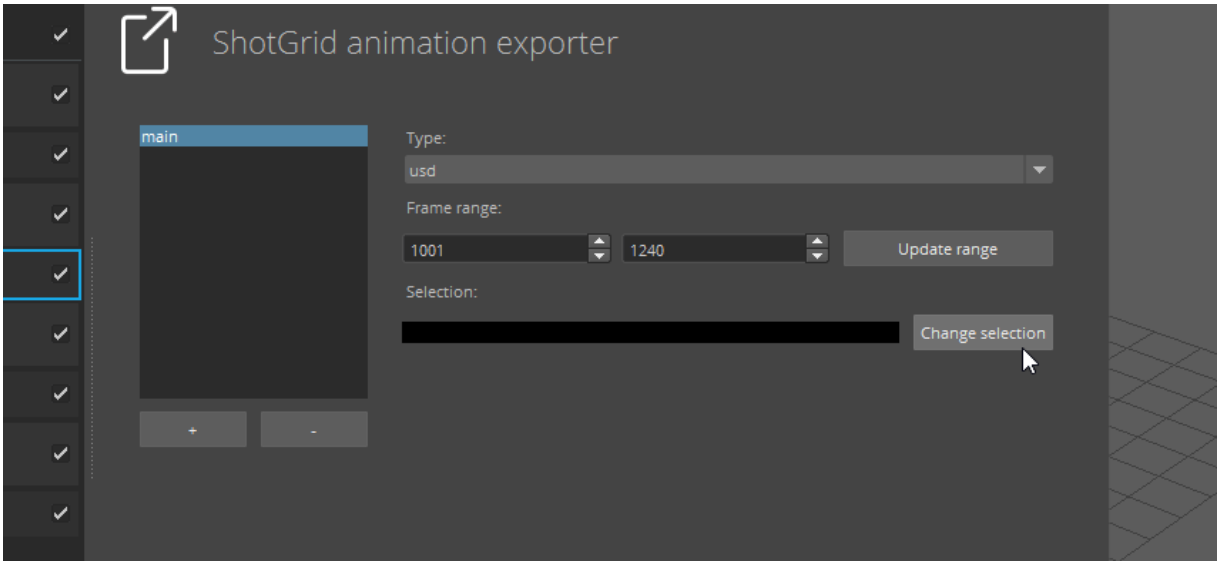
Step 5: Make changes to the code

Now you can make changes to the engine or app code and try them out. Let's say I want to be a bit more aggressive about telling users to select a root item in their Maya publish. I'd fine the line of code that sets the error message and then change that.

```
def change_maya_selection(self):
    """Prompts the user to select a new root item for the publish."""
    selection = maya_interfacing.get_current_selection()

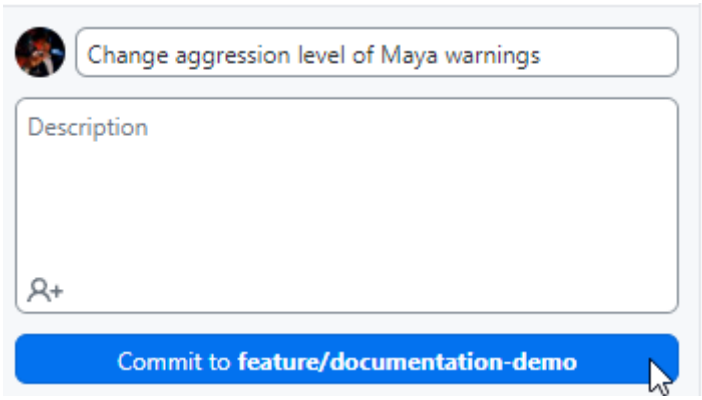
    if len(selection) != 1:
        if len(selection) > 1:
            error_message = "You've selected multiple roots, which might result in weird
        else:
            error_message = "You need to select a root item for exporting."
```

After changing the code you should save your file and then press the *Reload Engine and Apps* button that's in the *Work Area Info* window. Now the new code is used in Maya:

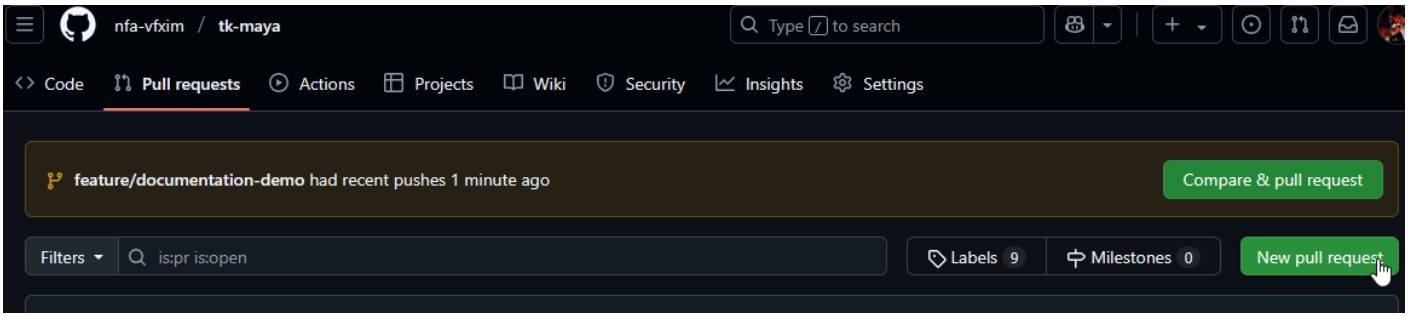


Step 6: Commit, pull request and merge

Once your code changes are done you can commit and push them to the repository.

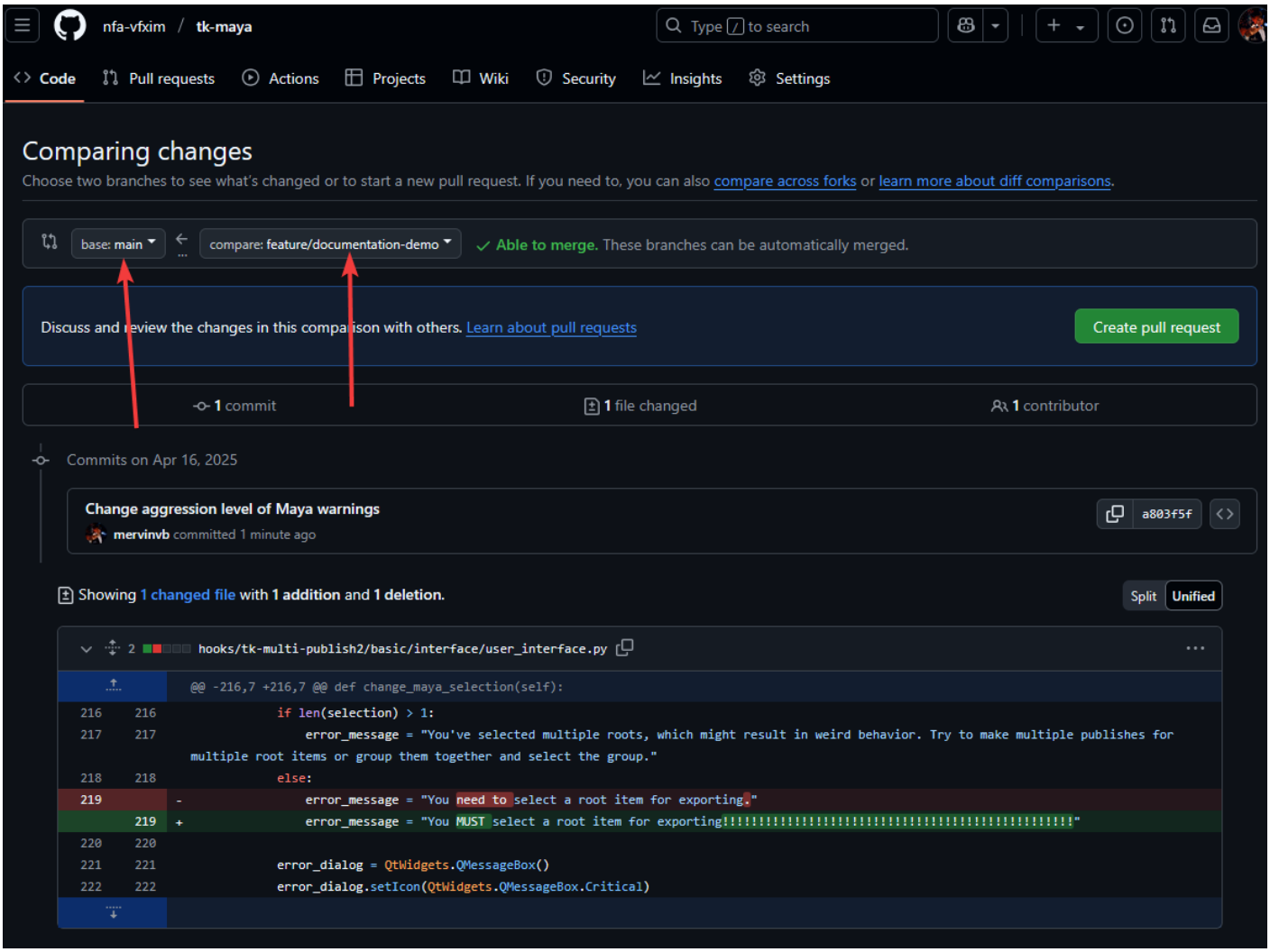


Now that your changes are pushed you can make a pull request to get your code to the main branch of the engine/app. Browse to the repository on GitHub and press the *New pull request* button.



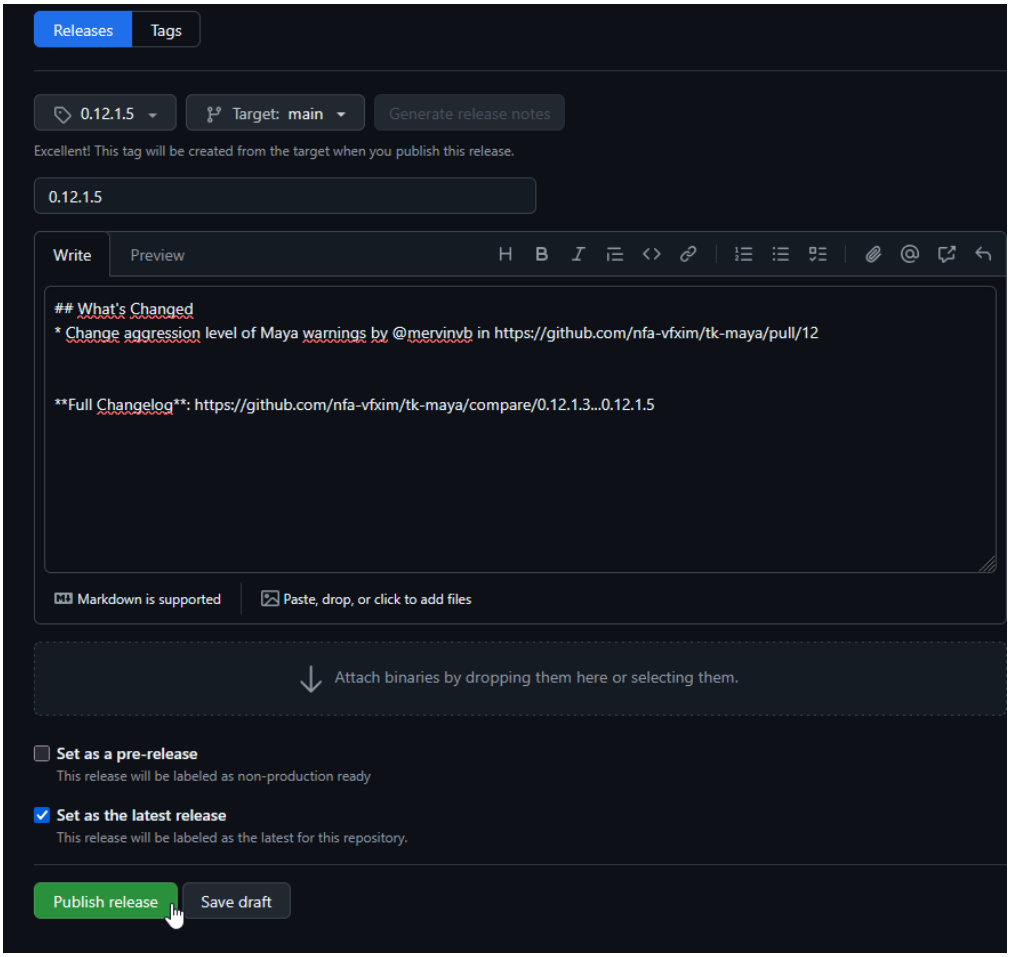
Select the right branches and press *Create pull request*.

> Select the branch on the nfa-vfxim organization, never the one from ShotGrid!!

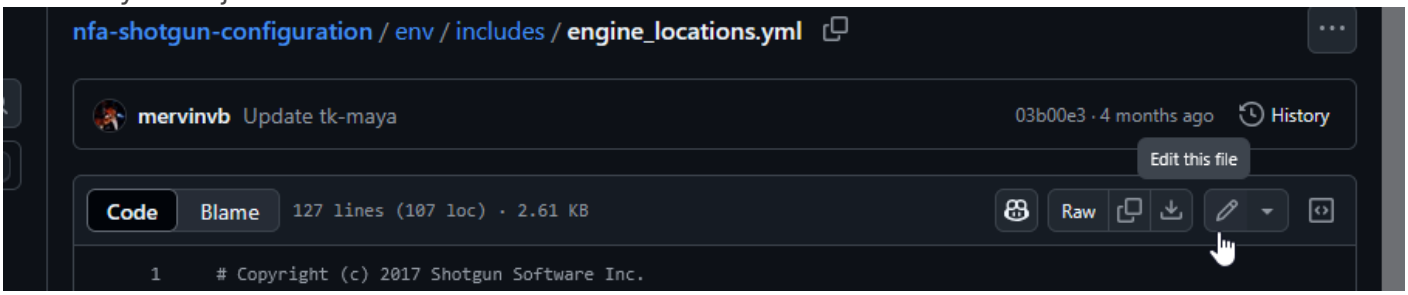

nfa-vfxim / tk-maya
Type / to search
Code
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
Comparing changes
Choose two branches to see what's changed or to start a new pull request. If you need to, you can also compare across forks or learn more about diff comparisons.
base: main
compare: feature/documentation-demo
Able to merge. These branches can be automatically merged.
Discuss and review the changes in this comparison with others. Learn about pull requests
Create pull request
1 commit
1 file changed
1 contributor
Commits on Apr 16, 2025
Change aggression level of Maya warnings
mervinvb committed 1 minute ago
a803f5f
Showing 1 changed file with 1 addition and 1 deletion.
Split
Unified
hooks/tk-multi-publish2/basic/interface/user_interface.py
@@ -216,7 +216,7 @@ def change_maya_selection(self):
if len(selection) > 1:
error_message = "You've selected multiple roots, which might result in weird behavior. Try to make multiple publishes for multiple root items or group them together and select the group."
else:
- error_message = "You need to select a root item for exporting."
+ error_message = "You MUST select a root item for exporting!!!

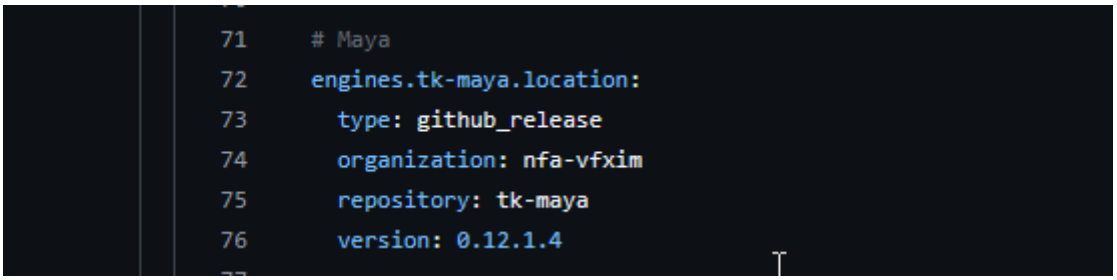


Increment the tag version a little bit. We don't really have any good conventions for this, just use your pipeline wisdom and come up with something good (incrementing the last digit will do just fine).



Now go over to the ShotGrid configuration repository and set the version of that engine or app to the one you've just created:





Commit your changes and voila! You've made a change to our ShotGrid pipeline! Your changes will now be fetched by all the computers when they open their ShotGrid launcher. I hope you haven't made any mistakes, as that causes all the VFX projects to grind to a halt while you scramble to fix your little typo that caused the configuration to not load properly :)

Revision #4
Created 16 April 2025 11:25:13 by Mervin van Brakel
Updated 16 April 2025 12:40:36 by Mervin van Brakel