Character Splitter User Manual

This script splits a full character morph in 2 parts (Head & Body), using both :
- a DFormer preset that you apply to your character before running the script
- a reference vertex (eg. #3127 for G8F), located on the cutting edge loop. This vertex height position is used to align the morphed figure to the base (unmorphed) figure.

Morphs for head components (eyelashes, eyes, tear, mouth & eyebrow) are also created.

Optionally a controller morph that drives the 2 split morphs can be created. This controller allows to apply the full character (head + body), with an optional scaling factor.

Two methods are available for the split process :
- a 'WYSIWYG' method that 'simply' separates head & body morphs
- a 'normalized' method that creates 'scaled' head & body morphs, with 'standard' height

The choice of the method, controlled by the 'Normalize Figure' checkbox option available in the 'Settings' Tab, depends both on your morph characteristics & the way you intend to use the split morphs.

Extensive detailed explanation of what the 2 methods perform and achieve is available in the 2 'Under the hood' documents.

As a bonus, although it is not optimized for this task, this script also allows to <u>save current shape as a morph</u>.
To do so, uncheck 'Split Shape Using a DFormer' in the GUI ('Settings' Tab). This disables the 'Body' & 'CTRL' Tabs.
This can be handy to merge head & body of a character that has been 'poorly' split (ie. its body morph includes deltas for the head), before cleanly splitting it. You can also use this feature to 'normalize' existing morphs.

As an optimization, a threshold of 0.001 is used to discard insignificant displacements when freezing properties.

The <u>progress report</u>, displayed when the splitting process is running, is mainly used to centralize events and popup windows. As the full process takes only a few seconds, we don't use the progress bar (we have to 'manually' advance it, which unnecessarily clutters the code).
If you don't see any activity, neither in the progress report, nore in the viewport, for a few seconds, then something went wrong. You'll have to inspect the the <u>'Log Report'</u> (found in the 'Log' Tab) for possible clues as to where it failed and why. You can also have a look at the log file available from the menu (Help > Troobleshooting > View Log File...).

Even if everything went fine, always check the 'Log Report' (only look for lines that are prepended by a '☠').

Finaly note that if your character has <u>corrective morphs</u> before splitting, you'll have to recreate them manually for your split character.

The rest of this user manual presents the different tabs of the user interface to the left, and the corresponding 'Parameter Settings' to the right. It concludes with the 6 steps workflow for a successful split.
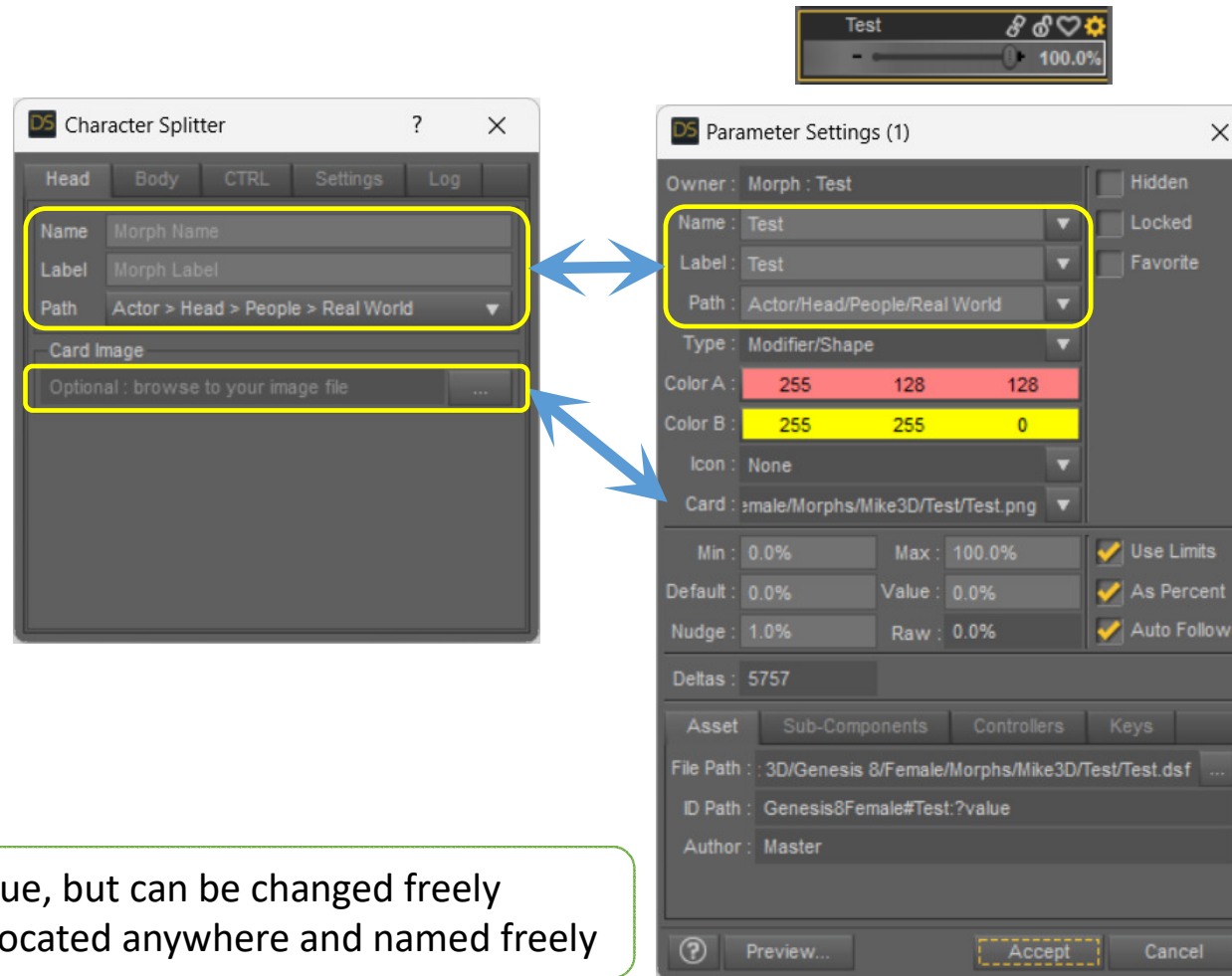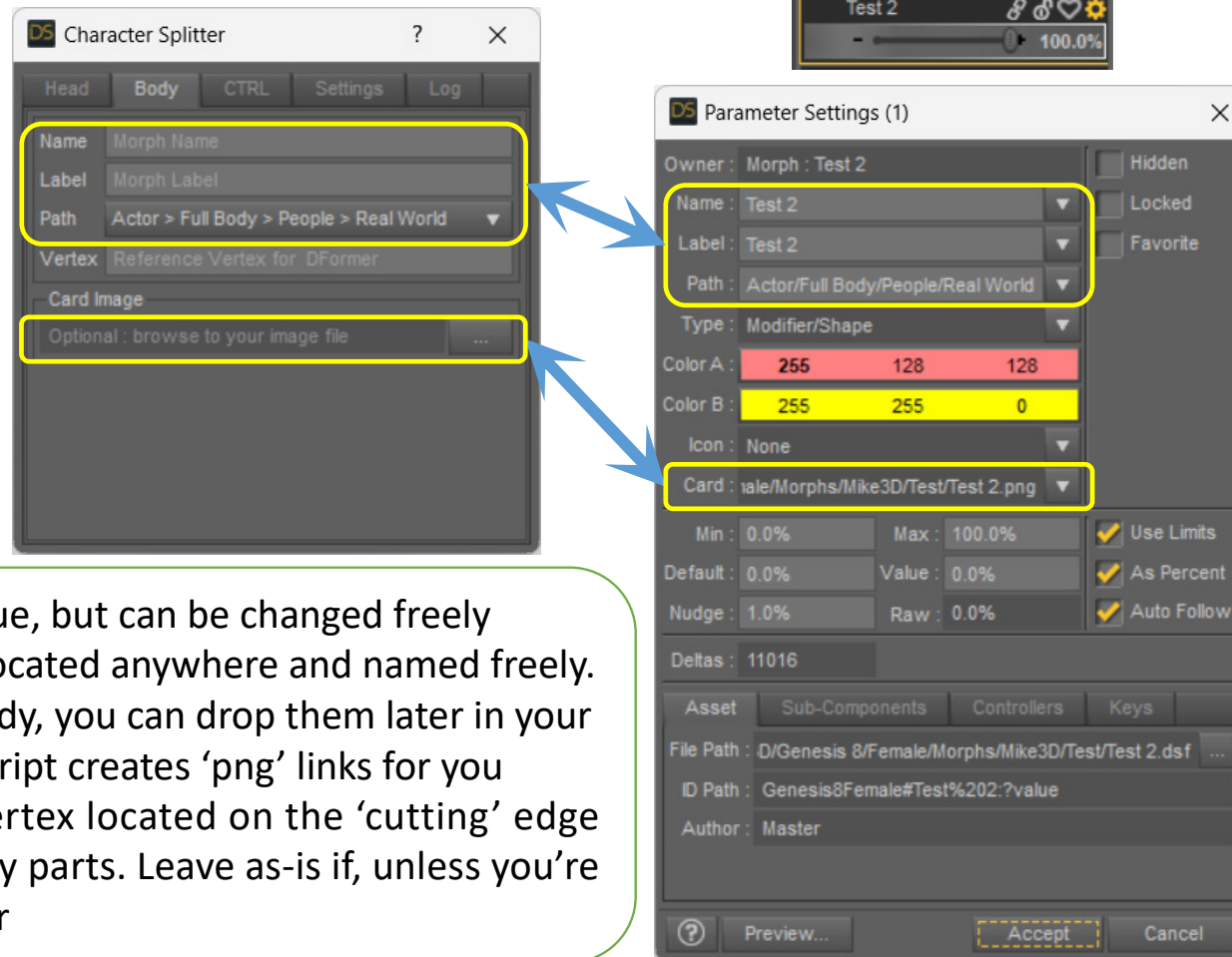
❖ <u>Label</u> inherits Name value, but can be changed freely
❖ <u>Card Image</u> file can be located anywhere and named freely

Note that **you are not allowed to overwrite a morph** (could happen if Name is already in use by another morph) **or use an existing Label**. In both cases, your input gets discarded and replaced by a placeholder notification.

'Body' Tab

Character Splitter

| Head | Body | CTRL | Settings | Log |

Name: Morph Name
Label: Morph Label
Path: Actor > Full Body > People > Real World ▼

Vertex: Reference Vertex for DFormer

Card Image
Optional : browse to your image file ...

Test 2
— ● 100.0%

Parameter Settings (1)

Owner : Morph : Test 2   ☐ Hidden
Name : Test 2   ▼   ☐ Locked
Label : Test 2   ▼   ☐ Favorite
Path : Actor/Full Body/People/Real World ▼
Type : Modifier/Shape   ▼
Color A : 255   128   128
Color B : 255   255   0
Icon : None   ▼
Card : ...ale/Morphs/Mike3D/Test/Test 2.png ▼

Min : 0.0%   Max : 100.0%   ✔ Use Limits
Default : 0.0%   Value : 0.0%   ✔ As Percent
Nudge : 1.0%   Raw : 0.0%   ✔ Auto Follow

Deltas : 11016

| Asset | Sub-Components | Controllers | Keys |

File Path : D/Genesis 8/Female/Morphs/Mike3D/Test/Test 2.dsf ...
ID Path : Genesis8Female#Test%202:?value
Author : Master

? Preview...   Accept   Cancel

❖ <u>Label</u> inherits Name value, but can be changed freely
❖ <u>Card Image</u> file can be located anywhere and named freely. If your cards are not ready, you can drop them later in your product folder, as the script creates 'png' links for you
❖ <u>Vertex</u> is a reference vertex located on the 'cutting' edge loop that separates body parts. Leave as-is if, unless you're using your own DFormer

Note that **you are not allowed to overwrite a morph** (could happen if Name is already in use by another morph) **or use an existing Label**. In both cases, your input gets discarded and replaced by a placeholder notification.
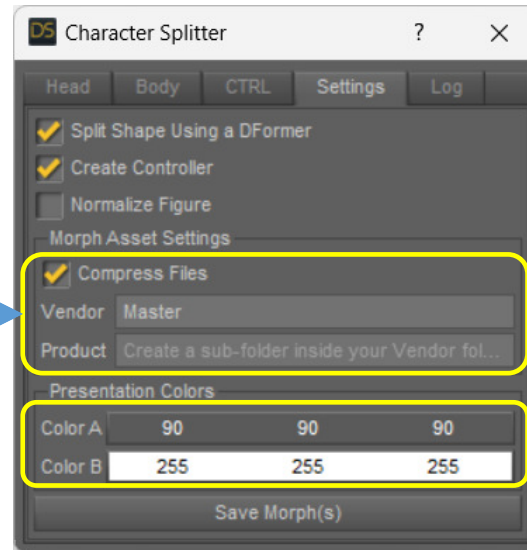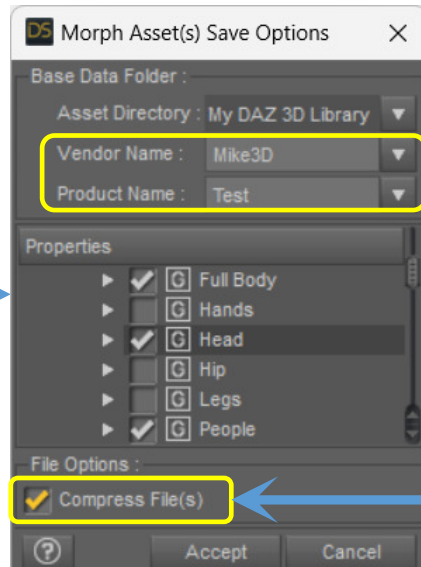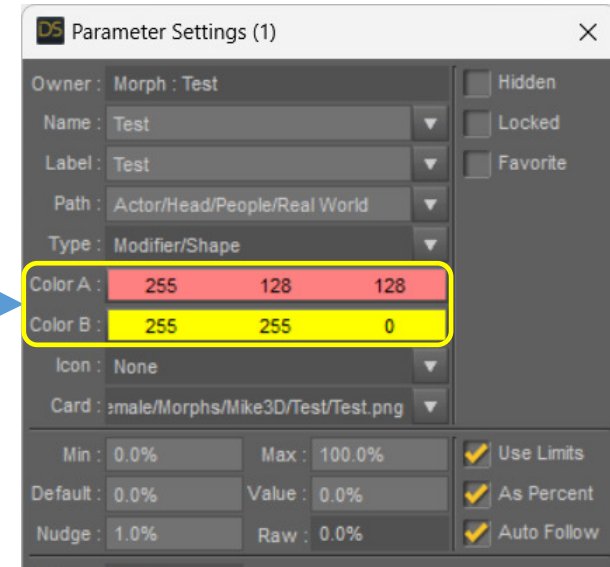
'CTRL' Tab
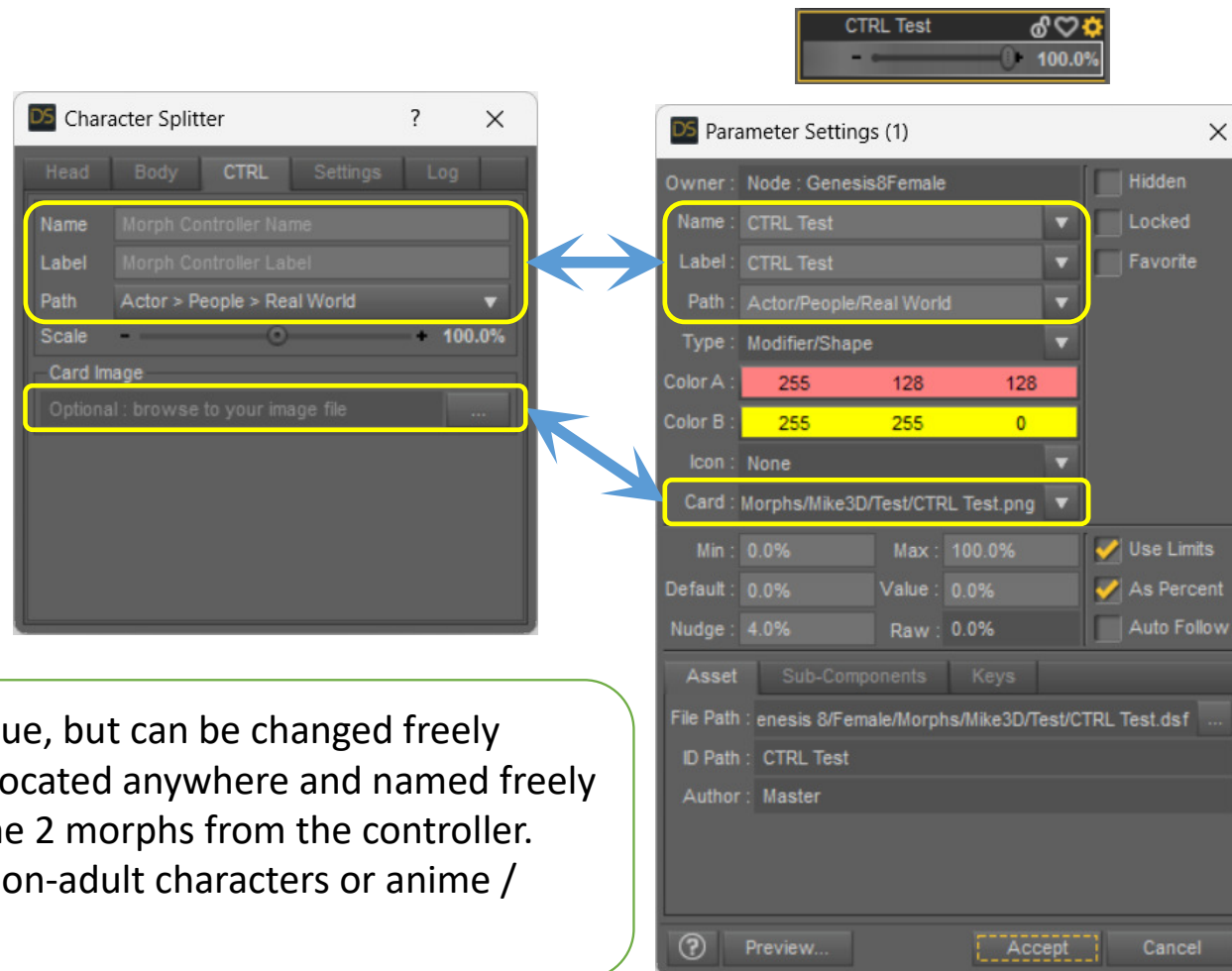
❖ <u>Label</u> inherits Name value, but can be changed freely
❖ <u>Card Image</u> file can be located anywhere and named freely
❖ <u>Scale</u> allows to resize the 2 morphs from the controller.
  This applies mainly to non-adult characters or anime / fantasy creatures

Note that **you are not allowed to overwrite a morph** (could happen if Name is already in use by another morph) **or use an existing Label**. In both cases, your input gets discarded and replaced by a placeholder notification.

'Settings' Tab

File > Save As > Support Asset > Morph Asset(s)...

Morph Asset(s) Save Options

Base Data Folder :
Asset Directory : My DAZ 3D Library ▼
Vendor Name : Mike3D ▼
Product Name : Test ▼

Properties
▶ ✓ G Full Body
▶ ☐ G Hands
▶ ✓ G Head
▶ ☐ G Hip
▶ ☐ G Legs
▶ ✓ G People

File Options :
✓ Compress File(s)

? | Accept | Cancel

Character Splitter ? ✕

Head | Body | CTRL | **Settings** | Log

✓ Split Shape Using a DFormer
✓ Create Controller
☐ Normalize Figure

Morph Asset Settings
✓ Compress Files
Vendor | Master
Product | Create a sub-folder inside your Vendor fol...

Presentation Colors
Color A | 90 | 90 | 90
Color B | 255 | 255 | 255

Save Morph(s)

Note : 'Vendor' is not to be confused with 'Author', which can only be changed from Edit > Preferences

Test 🔗 🔗 ♡ ⚙
− ● 100.0%

Parameter Settings (1) ✕

Owner : Morph : Test | ☐ Hidden
Name : Test ▼ | ☐ Locked
Label : Test ▼ | ☐ Favorite
Path : Actor/Head/People/Real World ▼
Type : Modifier/Shape ▼
Color A : 255 | 128 | 128
Color B : 255 | 255 | 0
Icon : None ▼
Card : emale/Morphs/Mike3D/Test/Test.png ▼

Min : 0.0% | Max : 100.0% | ✓ Use Limits
Default : 0.0% | Value : 0.0% | ✓ As Percent
Nudge : 1.0% | Raw : 0.0% | ✓ Auto Follow

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- ❖ <u>Split Shape</u> sets whether to use a DFormer to split figure in 2 parts (eg. head & body). If unchecked, a morph is created from full current figure shape, and 'Body' and 'CTRL' tabs become unavailable
- ❖ <u>Create Controller</u> sets whether to create a controller that drives both morphs and scale. When unchecked, 'CTRL' tab is disabled, as well as when 'Split' is unchecked
- ❖ <u>Normalize Figure</u> allows to rescale the morphs to match base figure proportions
- ❖ <u>ColorA & ColorB</u> : these settings apply to both morphs and to the controller
- ❖ <u>Scale</u> allows to resize the figure. This applies mainly to non-adult characters or fantasy creatures
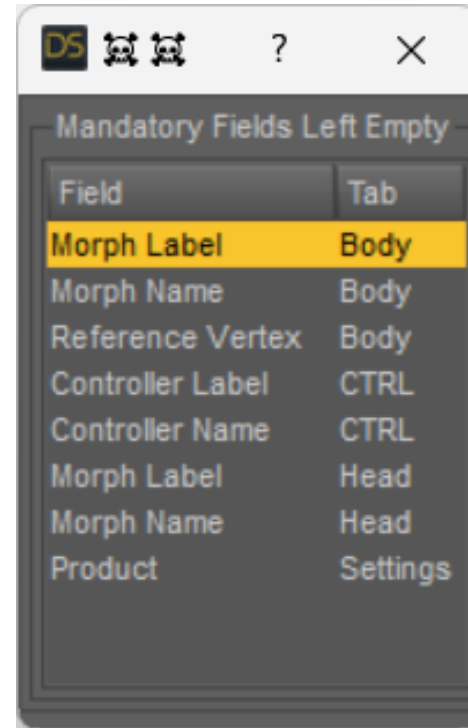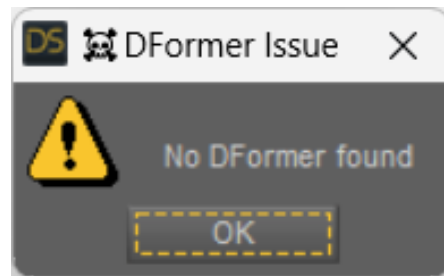- ❖ Hit <u>Save Morph(s)</u> button when you're ready to create your morphs

'Log' Tab
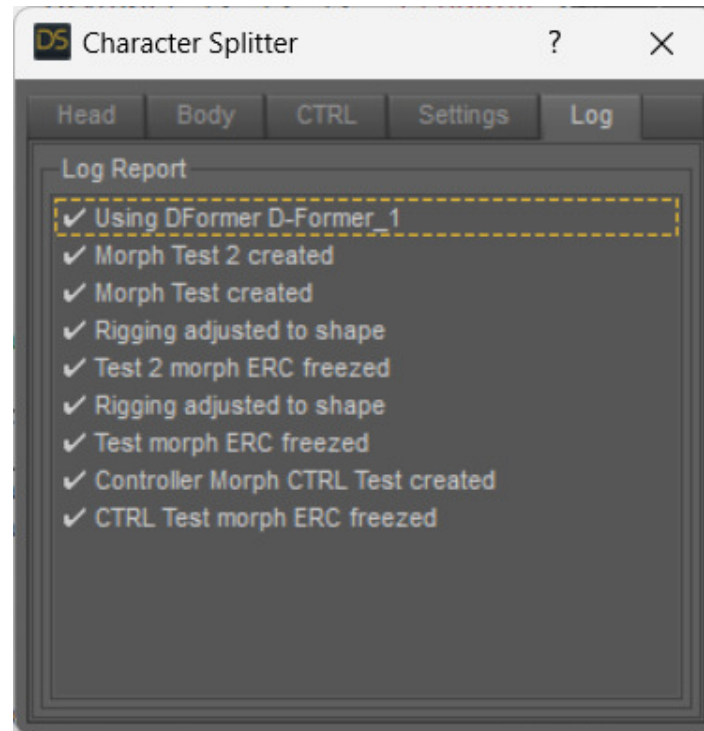
Always have a look at the <u>Log Report</u> when the script finishes, whether successfuly or not. Successful steps are prepended with a '✔' and failures/errors are prepended with a '☠'.
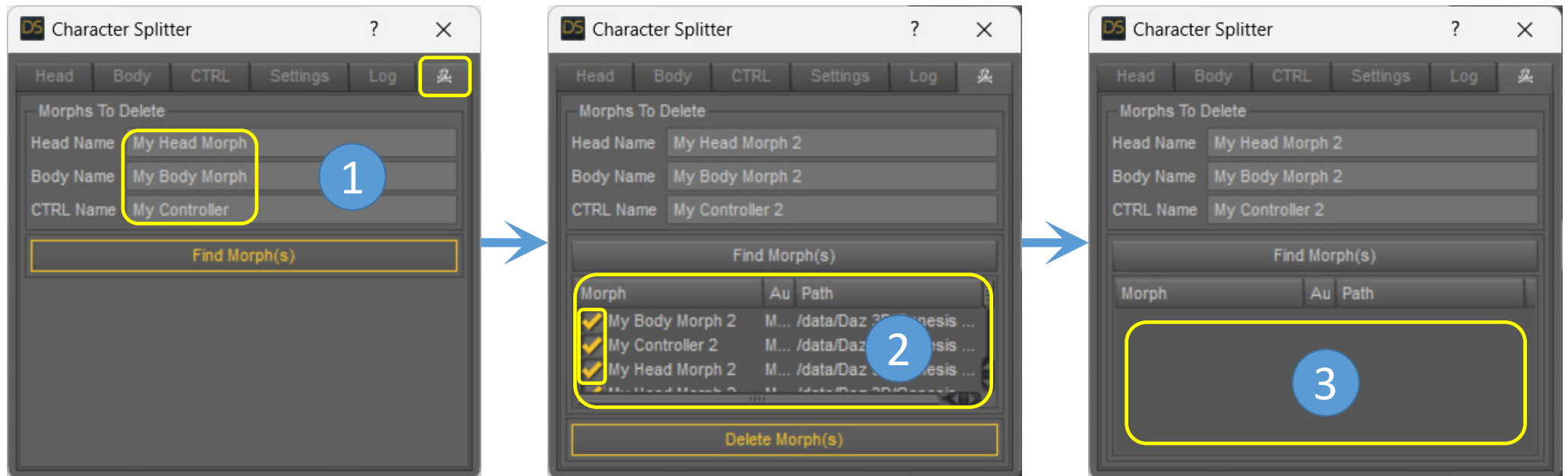
① Fill the name of the morphs you want to delete. Labels are just reminders, you can actually fill fields as you please. Once done, hit the 'Find Morph(s)' button. You can do it many times, for example if you made a typo.

② The list of matching morphs appears. You can verify its content and uncheck morphs you want to keep. Note that head components (eyelashes, eyes...) have the same name as the Head morph. 'Path' column may be empty for morphs that have not been saved to file. When satisfied with the selection, hit the 'Delete Morph(s)' button. This definitively deletes the files & cached data, as well as empty directories and card images, for a clean removal.

③ If everything went fine, you end up with an empty list (as pictured). Otherwise, you see the list of the morphs for which deletion failed. Successes & failures are logged in the 'Log' Tab. Note that there is no clue as to why it failed.

Setup Validation

DFormer Issue

⚠ No DFormer found

OK

Mandatory Fields Left Empty

Field	Tab
Morph Label	Body
Morph Name	Body
Reference Vertex	Body
Controller Label	CTRL
Controller Name	CTRL
Morph Label	Head
Morph Name	Head
Product	Settings

❖ When hitting the 'Save Morph(s)' button, a few checks are performed to ensure that all the mandatory fields have been set. If the '☠ ☠'popup appears, take note of the missing fields, close the popup, fill the missing fields and hit the 'Save Morph(s)' button again

❖ A warning popup (☠DFormer Issue) is also displayed at start in case a DFormer issue is detected. You can ignore this warning if you don't want to split your character. Otherwise you have to close the popup & the GUI, apply a valid DFormer, and launch the script again

Workflow
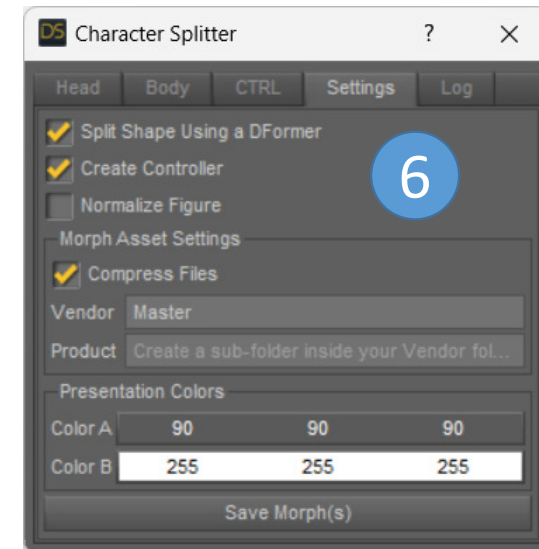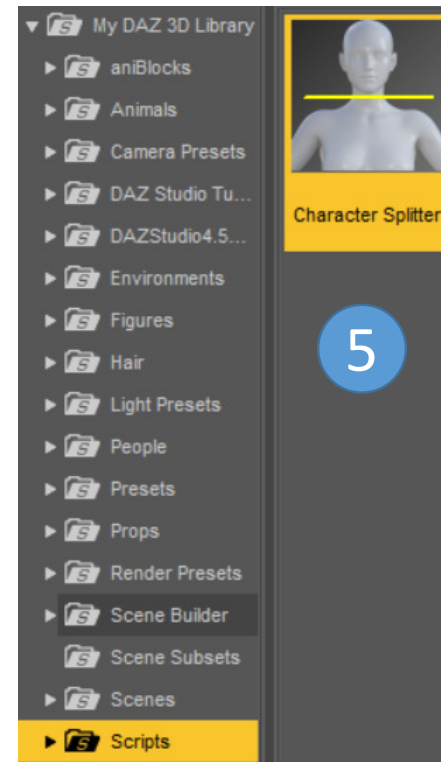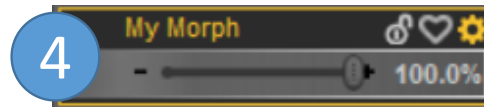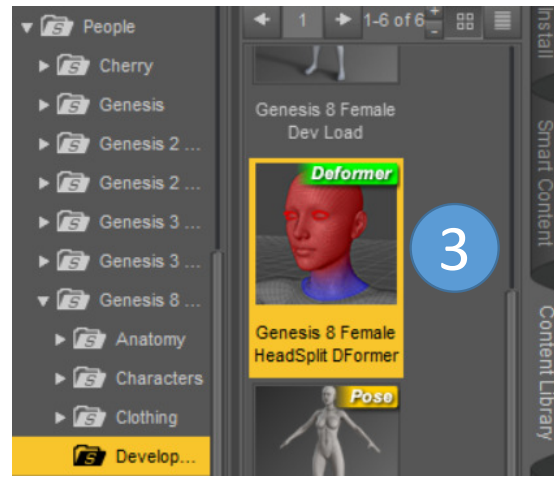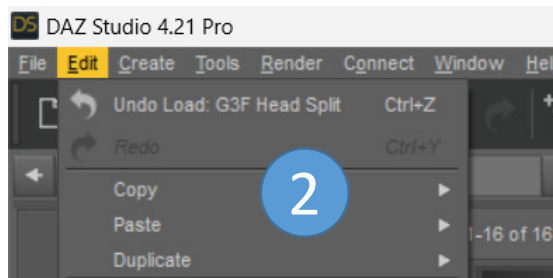
1. Load your base figure in the Scene. For G8/G9, delete the head parts (eyelashes, ...) that are not morphed
2. Zero the figure from the main menu : Edit > Figure > Zero > Zero Figure
3. Apply a DFormer preset. Note: for G8 & G9, press 'Esc' when prompted to apply the DFormer to other fitted figures
4. Apply your morph(s) to the base figure
5. Run the 'Character Splitter' script located in the 'Scripts' folder of 'My DAZ 3D Library'
6. Configure the 'Character Splitter' GUI and hit the 'Save Morph(s)' button when ready to create your morphs