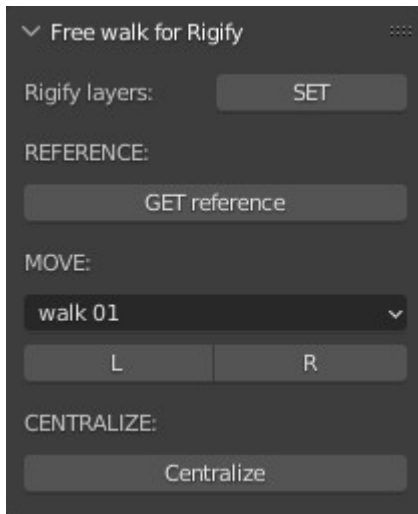


Free Walk for Rigify Documentation

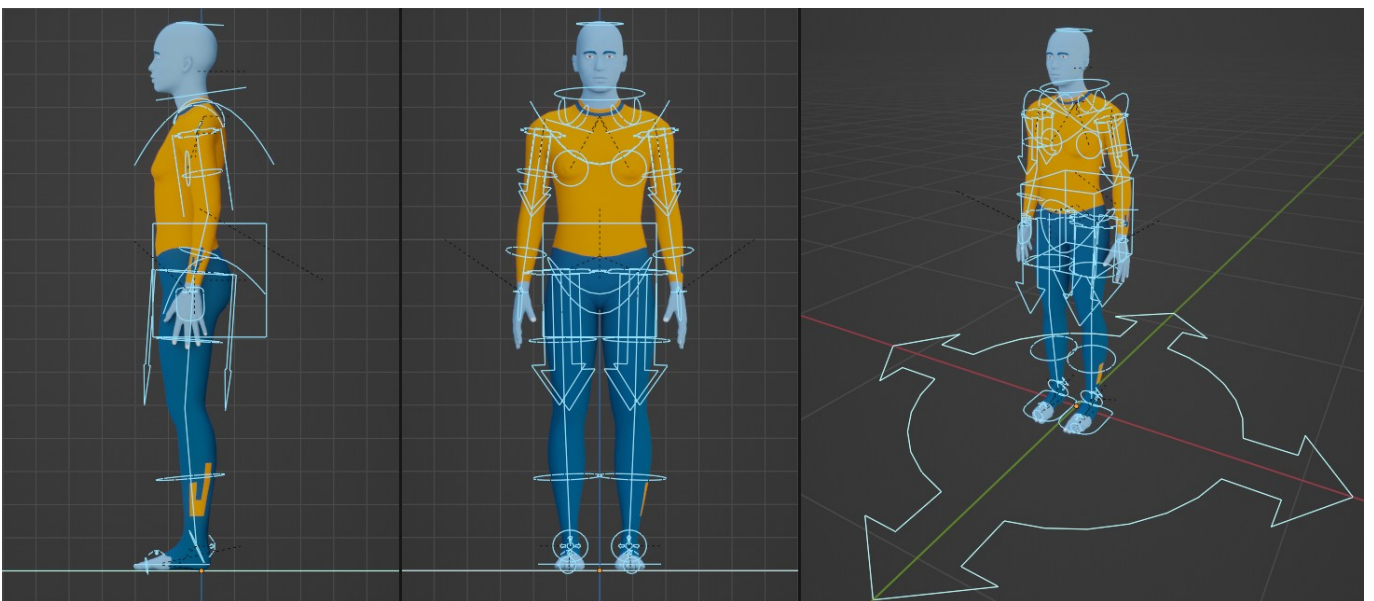
The addon panel is available in *3D view > Sidebar > Item*:



[**SET**]: This button turns ON only the *Rigify* layers that will be used.

REFERENCE:

First of all, for the addon to work, you need to position the character for calibration. This is essential because each character has specific measurements. Create an *Action* to save this reference pose, so you can recover it later (use *Fake User* button to protect it). In *object mode*, clear location and rotation, and insert *LocationRotationScale* keyframes. Change to *pose mode*, select the *root*, clear location and rotation, and insert *LocationRotationScale* keyframes too. Activate the *Rigify* layers using the [**SET**] button, then position the character like the model below, select all the bones and insert *LocationRotationScale* keyframes in all:



It is very important that when you change the current frame the character remains still. Then, if everything is right, capture the reference pose.

[**GET reference**]: This button captures the reference pose to memory.

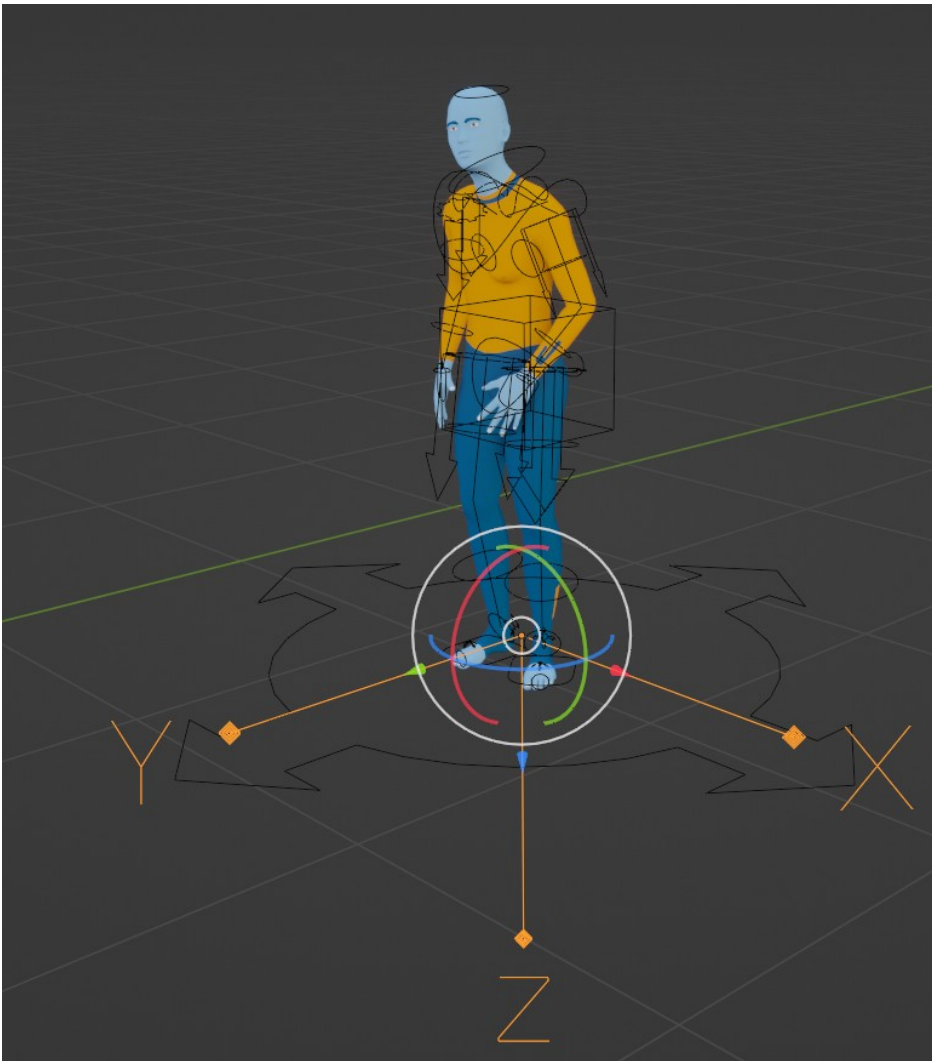
MOVE:

First, create a new Action to separate from the reference pose. In the current version of the addon there are two types of walk available: *walk_01* and *walk_02*. After selecting the type, choose which leg will be moved: *Left* or *Right*.

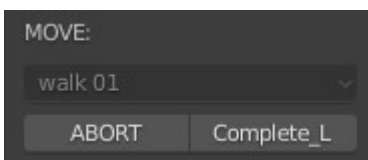
[**L**]: This button moves the left leg forward.

[**R**]: This button moves the right leg forward.

After clicking the [**L**] or [**R**] button, the addon adds an empty to the scene. If you wish, rotate it to direct the movement. The displacement will happen on the y-axis of the empty.



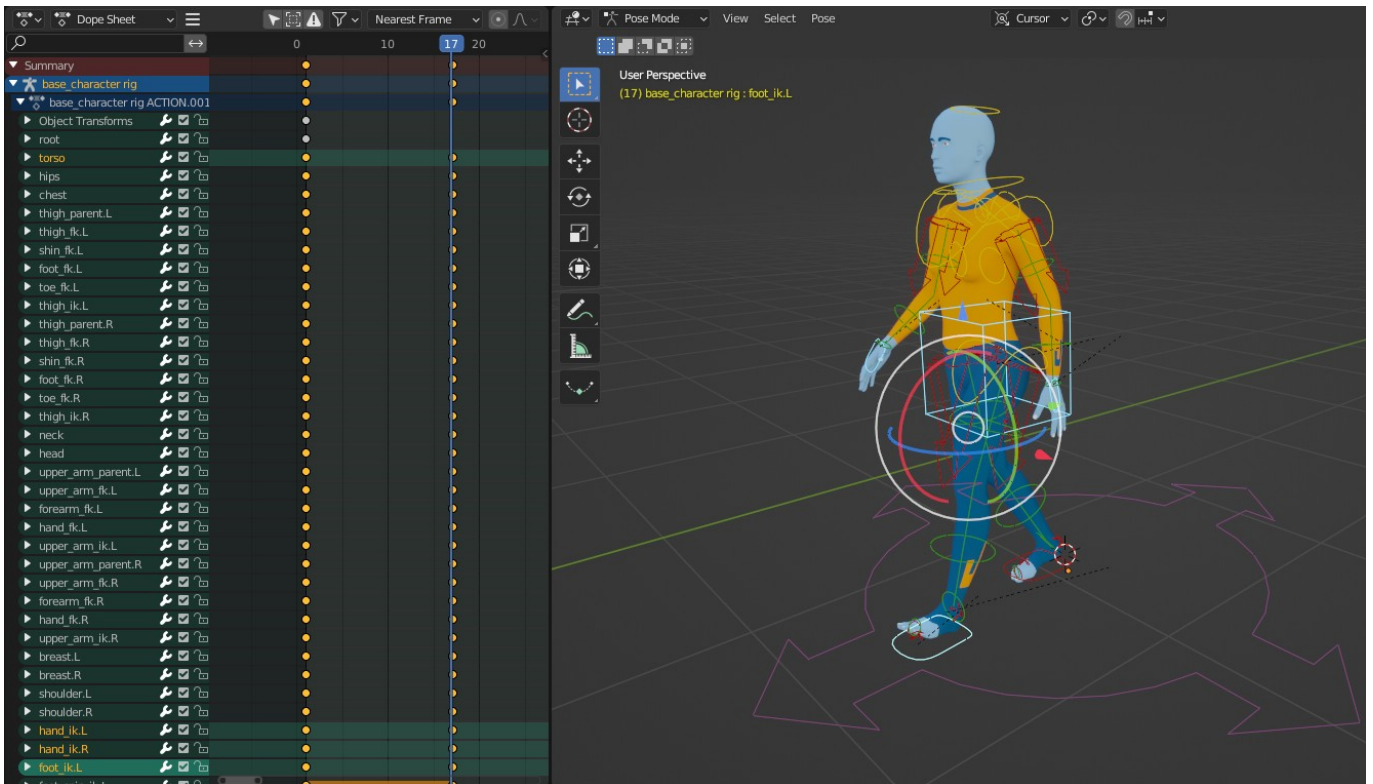
Also note, after clicking the [**L**] or [**R**] button, the panel change, there are new buttons:



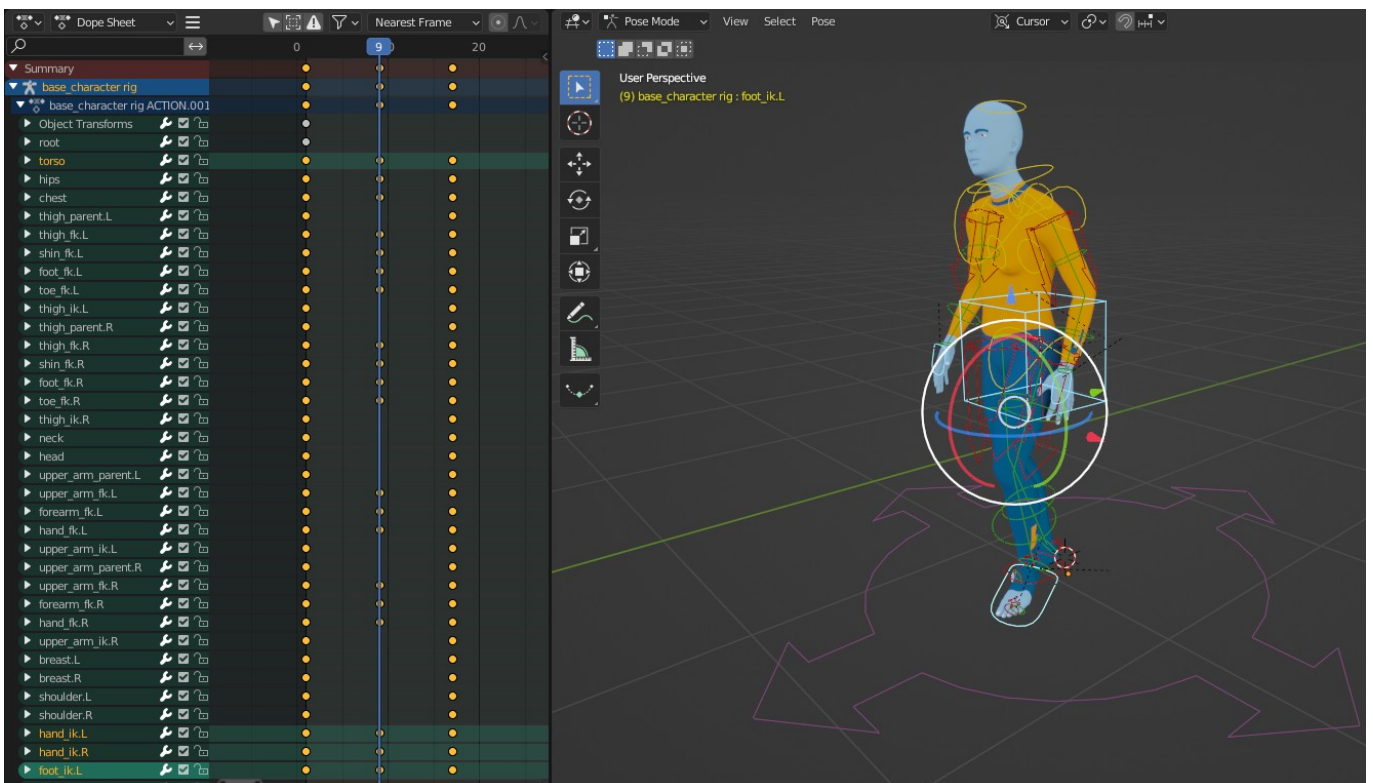
[**ABORT**]: This button aborts the current movement.

[**Complete_?**]: This button generates the movement, step by step, while inserting the keyframes.

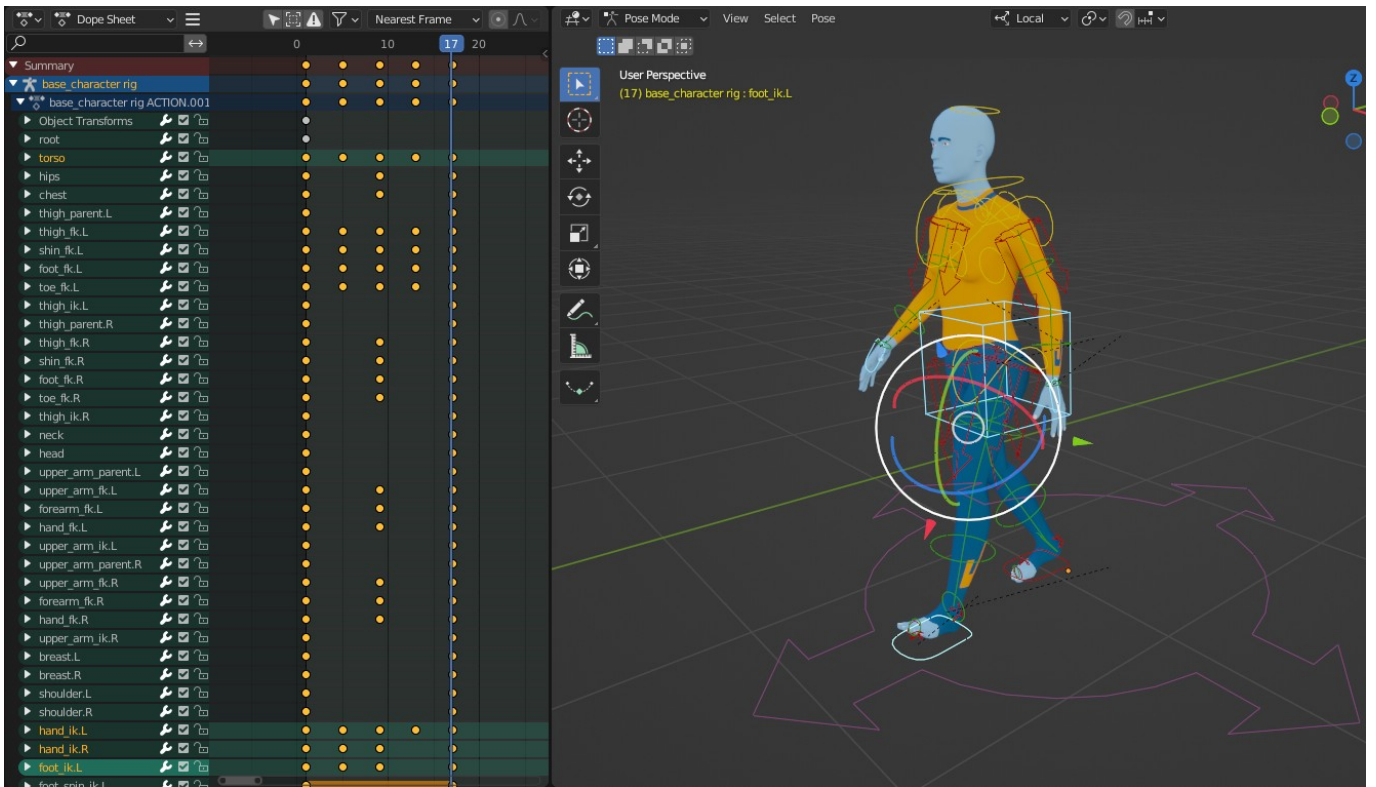
When you click on the [Complete_?] button for the first time, it places the character in the final position of the movement (look at the keyframes):



In every step you can move the bones to adjust the pose (don't forget to replace the keyframes). When you click on the [Complete_?] button for the second time, it places the character in the middle of the movement (look at the keyframes):



Straighten the bones if you wish. When you click on the [Complete_?] button for the third time, the movement will be finished (look at the keyframes):



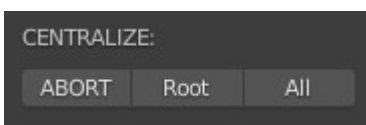
At the end of the process, the panel returns to showing the [L] and [R] buttons.

CENTRALIZE:

After walking through the scene, it is possible to re-center the *root*. But first, it is important to go to the last frame of the walk, select the *root* and insert *LocationRotationScale* keyframes. Change to *object mode* and insert *LocationRotationScale* keyframes. Then advance one frame.

[**Centralize**]: This button starts the centering process.

After clicking the [Centralize] button, the addon adds an empty to the scene. The program uses this empty to re-center, so position and rotate it as you wish. You will notice that the panel has changed too. There are two alternatives: center the *root* and keep the object in the same place; or center the object and the *root*.



[**ABORT**]: This button aborts the centering process.

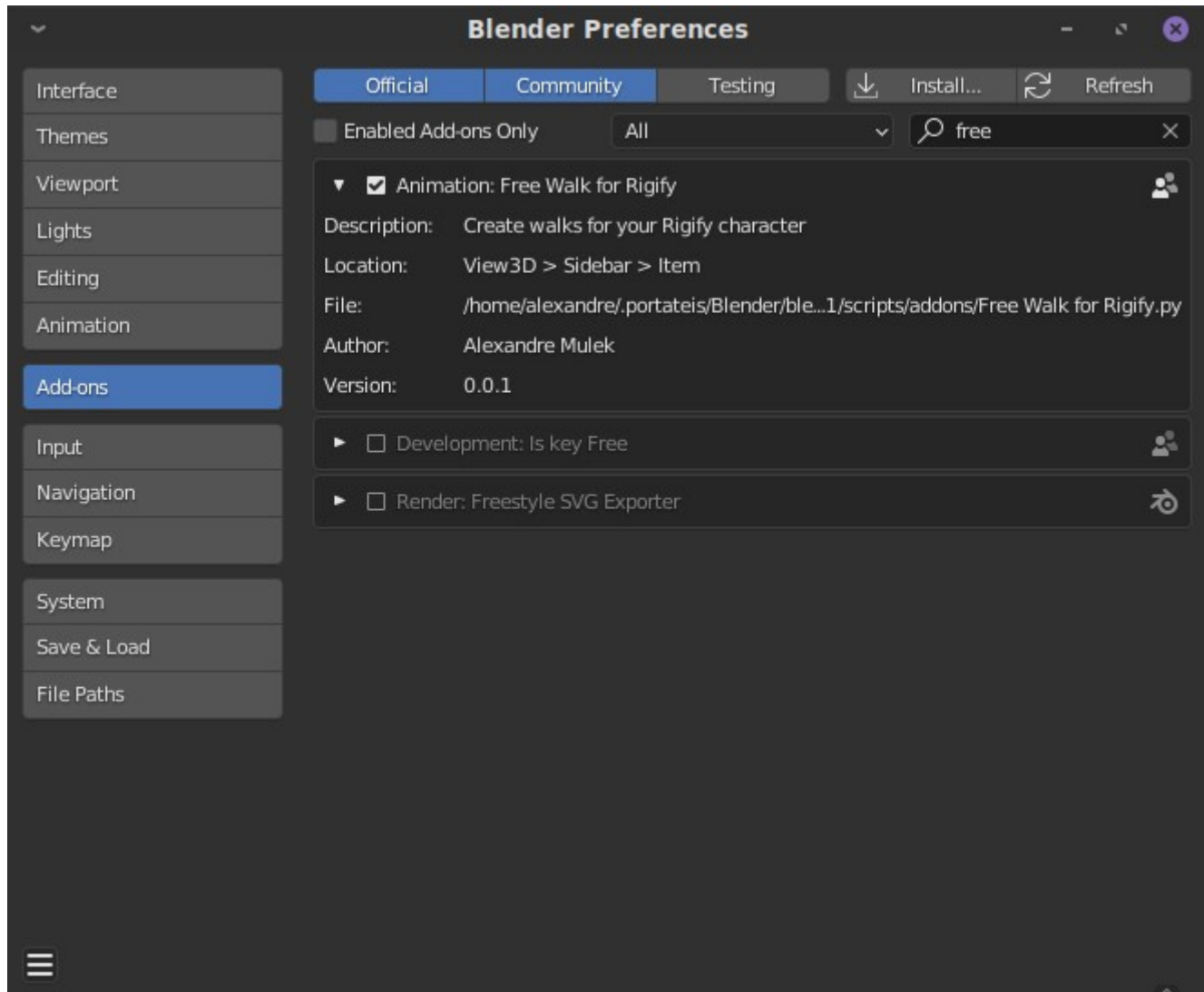
[**Root**]: This button only centers the *root*.

[**All**]: This button centers the object and the *root*.

The addon adds the keyframes and the panel returns to showing the [Centralize] button.

how to install

Copy the `.py` file into the blender installation folder, for example, `blender > 3.1 > scripts > addons`, or start the Blender, open the *Preferences > Add-ons* and click on the *Install...* button to select the `.py` file. Now the addon will be listed and you can enable it by pressing the checkbox:



limitations

The addon only works with modern versions of *Rigify* rigs (0.6.5 or later). It is necessary to maintain the original names of the bones and layers (or change the variables and commands in the script):

```
#animated bones
fwr_bone_root = "root"
fwr_bone_torso = "torso"
fwr_bone_hips = "hips"
fwr_bone_chest = "chest"
fwr_bone_thigh_parent_L = "thigh_parent.L"
fwr_bone_thigh_ik_L = "thigh_ik.L"
fwr_bone_thigh_parent_R = "thigh_parent.R"
fwr_bone_thigh_ik_R = "thigh_ik.R"
fwr_bone_neck = "neck"
fwr_bone_head = "head"
fwr_bone_upper_arm_parent_L = "upper_arm_parent.L"
fwr_bone_upper_arm_ik_L = "upper_arm_ik.L"
fwr_bone_upper_arm_parent_R = "upper_arm_parent.R"
fwr_bone_upper_arm_ik_R = "upper_arm_ik.R"
fwr_bone_breast_L = "breast.L"
fwr_bone_breast_R = "breast.R"
fwr_bone_shoulder_L = "shoulder.L"
fwr_bone_shoulder_R = "shoulder.R"
fwr_bone_hand_ik_L = "hand_ik.L"
fwr_bone_hand_ik_R = "hand_ik.R"
fwr_bone_foot_ik_L = "foot_ik.L"
fwr_bone_foot_spin_ik_L = "foot_spin_ik.L"
fwr_bone_foot_heel_ik_L = "foot_heel_ik.L"
fwr_bone_toe_ik_L = "toe_ik.L"
fwr_bone_foot_ik_R = "foot_ik.R"
fwr_bone_foot_spin_ik_R = "foot_spin_ik.R"
fwr_bone_foot_heel_ik_R = "foot_heel_ik.R"
fwr_bone_toe_ik_R = "toe_ik.R"

fwr_bone_upper_arm_fk_L = 'upper_arm_fk.L'
fwr_bone_forearm_fk_L = 'forearm_fk.L'
fwr_bone_hand_fk_L = 'hand_fk.L'
fwr_bone_upper_arm_fk_R = 'upper_arm_fk.R'
fwr_bone_forearm_fk_R = 'forearm_fk.R'
fwr_bone_hand_fk_R = 'hand_fk.R'
fwr_bone_thigh_fk_L = 'thigh_fk.L'
fwr_bone_shin_fk_L = 'shin_fk.L'
fwr_bone_foot_fk_L = 'foot_fk.L'
fwr_bone_toe_fk_L = 'toe_fk.L'
fwr_bone_thigh_fk_R = 'thigh_fk.R'
fwr_bone_shin_fk_R = 'shin_fk.R'
fwr_bone_foot_fk_R = 'foot_fk.R'
fwr_bone_toe_fk_R = 'toe_fk.R'

#--COLLECTIONS: set rigify collections in new versions of Blender
collections_new = [
    'Torso',
    'Arm.L (IK)',
    'Arm.L (FK)',
    'Arm.R (IK)',
    'Arm.R (FK)',
    'Leg.L (IK)',
    'Leg.L (FK)',
    'Leg.R (IK)',
    'Leg.R (FK)',
    'Root'
]

collections_old = [
    'Layer 4',
    'Layer 8',
    'Layer 9',
    'Layer 11',
    'Layer 12',
    'Layer 14',
    'Layer 15',
    'Layer 17',
    'Layer 18',
    'Layer 29'
]

collections_all = collections_new + collections_old

for c in collections_all:
    try:
        bpy.context.object.data.collections[c].is_visible = True
    except:
        pass

#--LAYERS: set rigify layers in old versions of Blender
layers_old = [3, 7, 8, 10, 11, 13, 14, 16, 17, 28]

for l in layers_old:
    try:
        bpy.context.object.data.layers[l] = True
    except:
        pass
```

Rig Layers

- Face
- Face (Primary) Face (Secon...
- Torso
- Torso (Tweak)
- Fingers
- Fingers (Detail)
- Arm.L (IK) Arm.R (IK)
- Arm.L (FK) Arm.R (FK)
- Arm.L (Tweak) Arm.R (Tweak)
- Leg.L (IK) Leg.R (IK)
- Leg.L (FK) Leg.R (FK)
- Leg.L (Tweak) Leg.R (Tweak)
- Root

Bone Collections

- Face
- Face (Primary)
- Face (Secondary)
- Torso
- Torso (Tweak)
- Fingers
- Fingers (Detail)
- Arm.L (IK)
- Arm.L (FK)
- Arm.L (Tweak)
- Arm.R (IK)
- Arm.R (FK)
- Arm.R (Tweak)
- Leg.L (IK)
- Leg.L (FK)
- Leg.L (Tweak)
- Leg.R (IK)
- Leg.R (FK)
- Leg.R (Tweak)
- Root
- ORG
- MCH
- DEF

Skeleton

Pose Position Rest Position

Layers:

Protected Layers: