Blender and MakeHuman

How to use MakeHuman and Blender to create characters that can be animated with Mocap data from Motive, FaceRig, PerceptionNeuron etc..

Install MakeHuman

- Download the makehuman release from
  http://www.makehumancommunity.org/content/downloads.html
- Unzip and move the folder to your applications directory

Install Blender

- Download and install from http://www.blender.org

Install the MHX2 addon in Makehuman

- Download MHX2 Plugin for Makehuman from
  http://www.makehumancommunity.org/content/plugins.html
- Move the 9_export_mhx2 directory to the MakeHuman plugins directory. On osX probably: /Applications/MakeHuman.app/Contents/Resources/plugins/ On Windows C:\Program Files\Makehuman\makehuman-1.1.1-win32\plugins (or wherever you've installed Makehuman)

Install the MHX2 plugin in Blender

- Download the MHX2 Plugin for Blender from
  http://www.makehumancommunity.org/content/plugins.html
- Move import_runtime_mhx2 to the Blender addons directory C:\Program Files\Blender Foundation\Blender\2.79\scripts\addons
- Enable the MHX2 importer in Blender. Open Blender, Select File > User Preferences. In the window that opens, select the Addons tab and then the MakeHuman category. Enable MakeHuman: Import-Runtime: MakeHuman eXchange 2 (.mhx2)
- In the File tab, enable Auto Run Python Scripts and Save User Settings.
- Save User Settings

Import a Makehuman character into Blender

- Open MakeHuman and design you character.
- Select the Pose/Animation tab and set Rig Presets to Default No Toes.
- For facial Animation you probably want your character to have teeth, toung, eyebrows and eyelashes. To do this enable the parts by selecting the Geometries tab…
- In the Files > Export tab, select MakeHuman Exchange (mhx2), select the export path, and press export.
- Open Blender Select File > Import > MakeHuman (.mhx2), and navigate to the mhx2 file

exported from MakeHuman.

- By default, the exported character is imported into Blender as it appears in MakeHuman. However, if Override Export Data is selected, the character will be rebuilt according to the options that appear.

Synchronizing Makehuman and Blender

This might be useful to make a makehuman character have similar proportions as a 3D scan..
https://www.blendernation.com/2016/07/10/add-sync-makehuman-mesh-pose/

Makewalk and other Blender Tools

Makewalk is used for retargeting of Bvh in Blender.
http://www.makehumancommunity.org/wiki/Documentation:Getting_and_installing_BlenderTools
http://www.makehumancommunity.org/wiki/Documentation:MakeWalk

not sure if this is needed any more

- Download blender plugins
  http://download.tuxfamily.org/makehuman/releases/1.1.1/blender_plugins_for_1.1.1.zip
- Add the directories makewalk, maketarget, mkeclothes and import_runtime_mhx2 directory to the blender addons folder. On osX probably: ~/Library/Application Support/Blender/2.79/scripts/addons
- In blender go go File/User Prefferences..
- Select Add-ons, then in Categories select MakeHuman
- Check MakeHumna: Import-Runtime: MakeHuman Exchange 2 (.mhv2)
- Check MakeHuman: MakeWalk
- Save User Settings

Now export an mhv2 from makehuman, import it into blender using the "Override Exported Data" and select Rig type: Game. Now open the MakeWalk Tab in the Tool Shelf and click Load and Retarget to load a .bvh file exported from motive. In MakeWalk: Edit Actions use GlobalEdit to make set the animation onto the ground,…