

# How to resize BVH animation files so that different sources can be used together

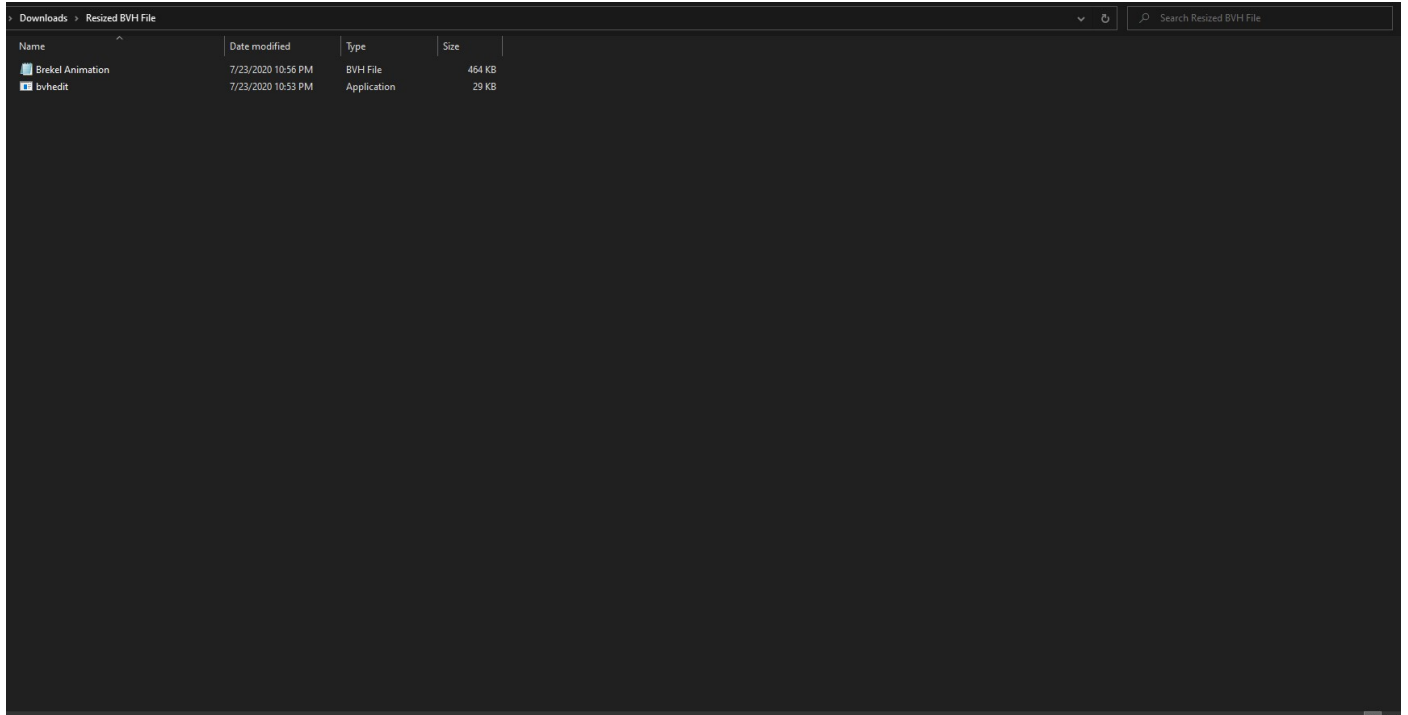
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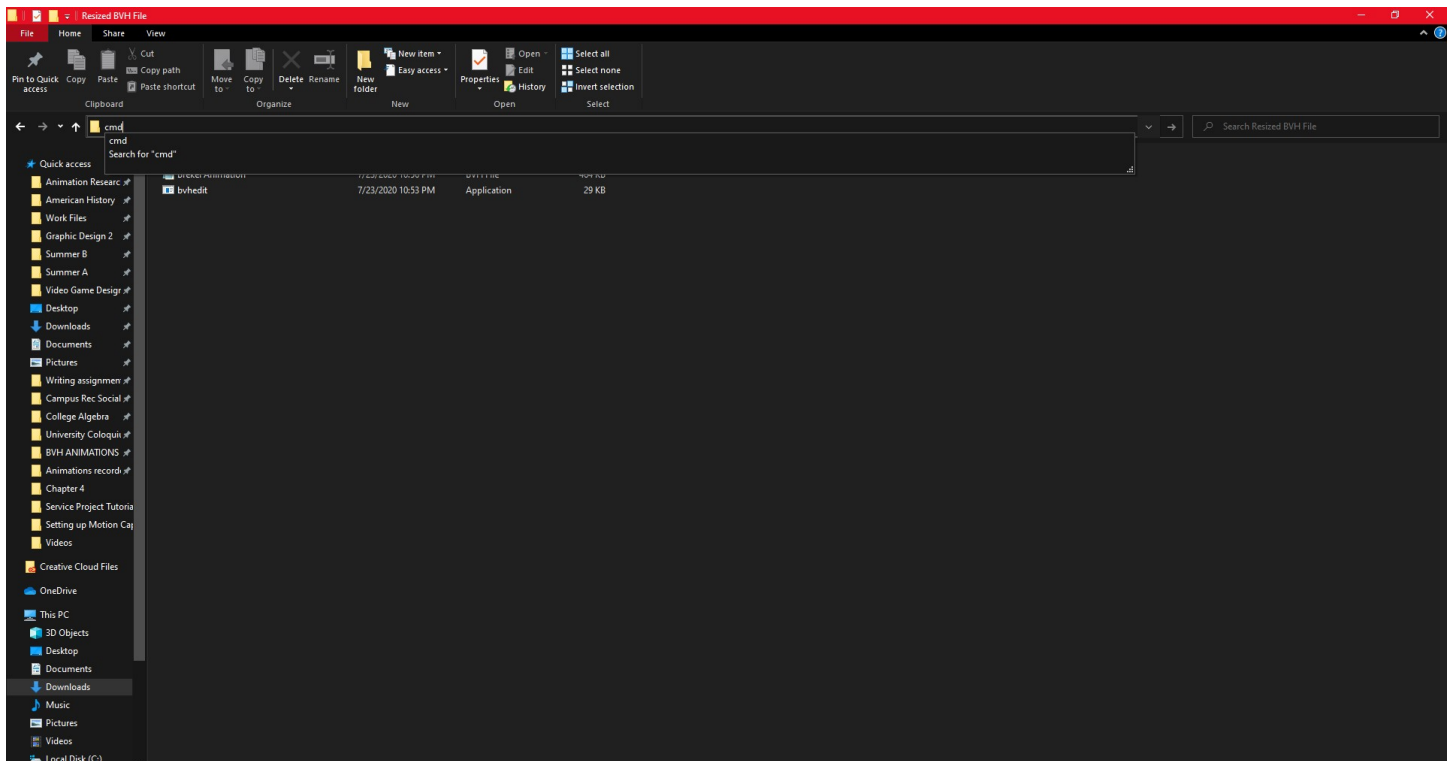
Make sure you have the bvhedit.exe file downloaded. Here is a link to download the file:

<https://drive.google.com/file/d/1ggJdrdEAvdKrlbktg-e9BMeGlobuGapK/view?usp=sharing>

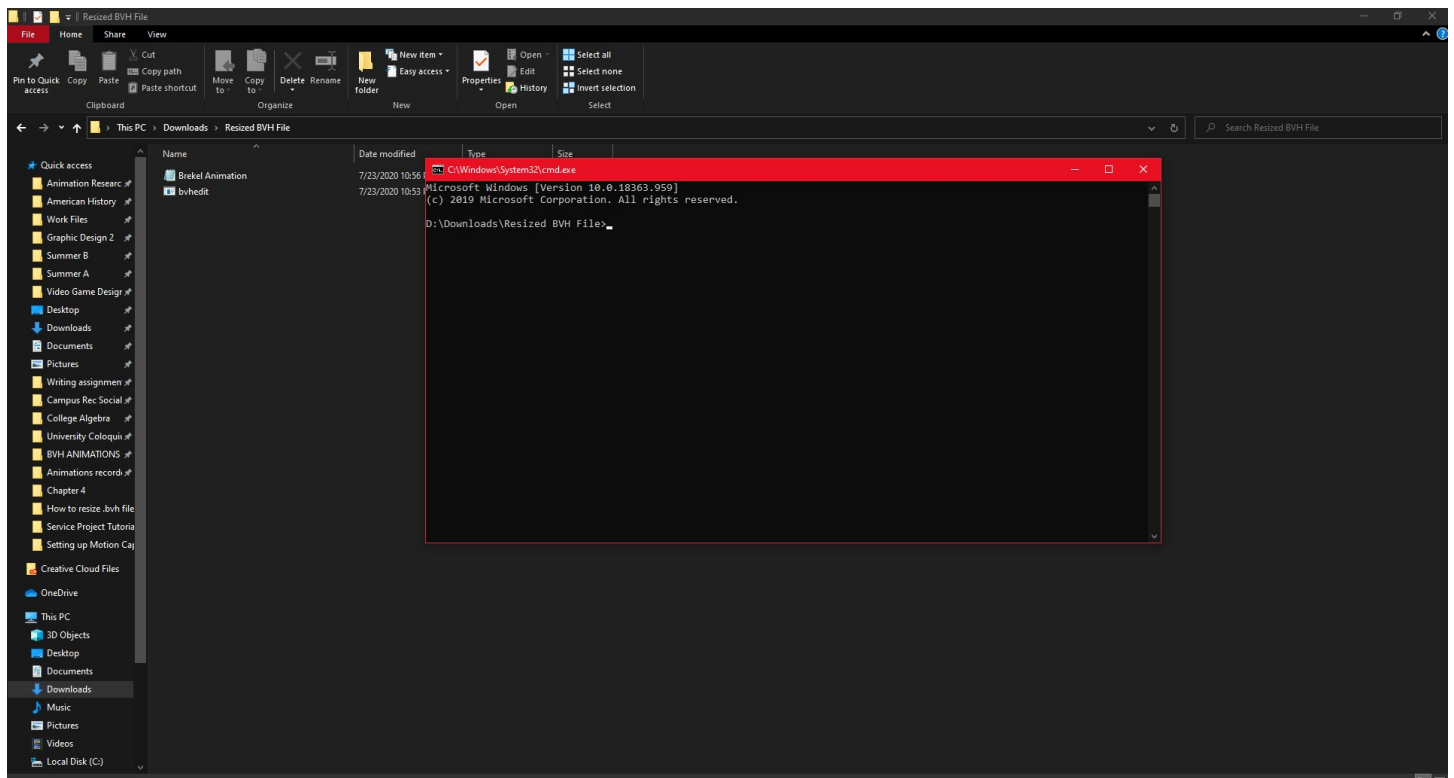
**Step 1:** Create a folder and put your .BVH file and the bvhedit tool in it.



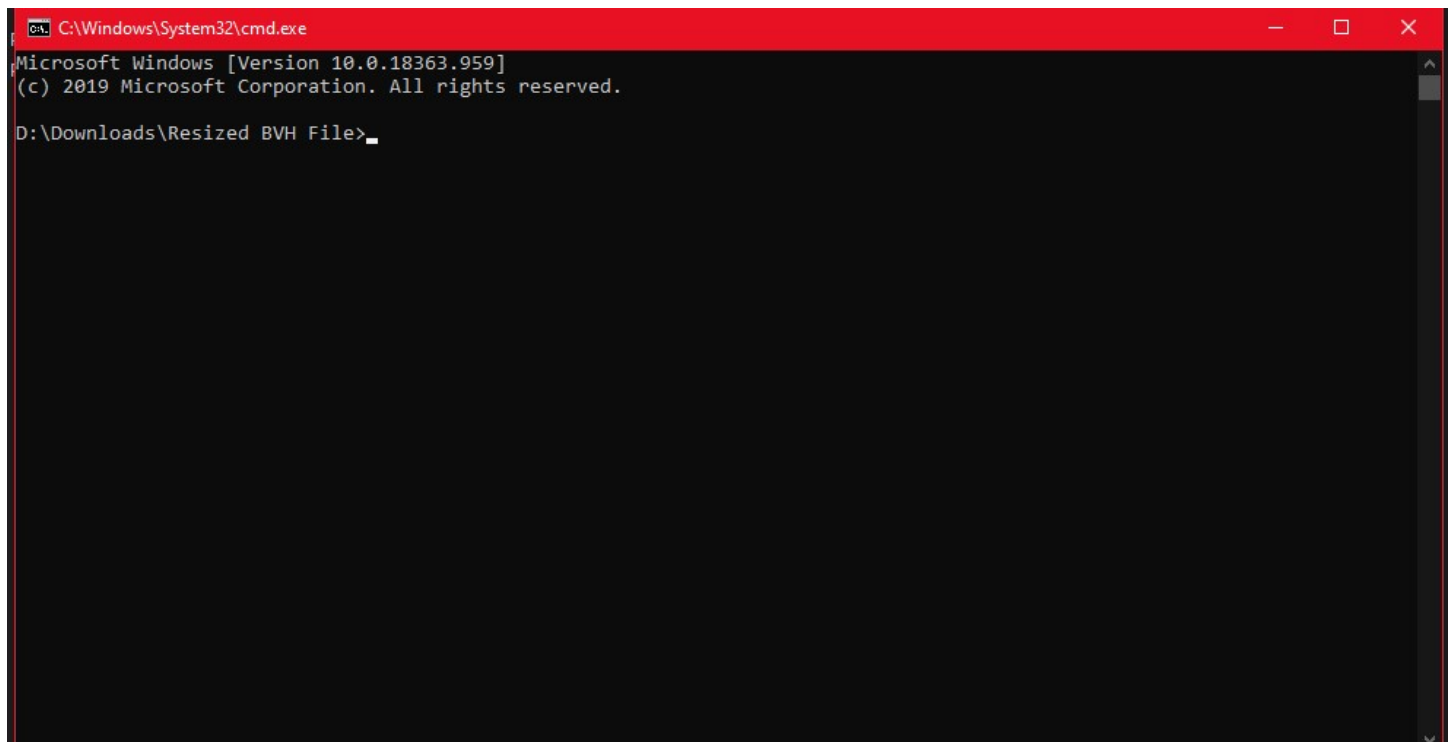
**Step 2:** Open the .bvhedit tool in the command prompt. You can easily do this by clicking the search bar in the file explorer and typing “cmd” and pressing enter.



This should open the command prompt.



**Step 3:** type 'bvhedit' in the command prompt and press enter.



This will open the bvhedit tool options.

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.18363.959]
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D:\Downloads\Resized BVH File>bvhedit
USAGE:
  bvhedit {input.bvh} {output.bvh} [-inh V] [-outh V] [-feet/meters]
where:
  -inh V    Desired output height of character (in given units)
  -outh V   Desired output height of character (in given units)
  -feet     Units in feet
  -meters   Units in meters
IN HEIGHT VALUES:
  -inh 17.9  CMU Motion Data (hips)
  -inh 70.8  Kinect Motion Data (hips)
  -inh 85.9  Noitom Motion Data (hips)
OUT HEIGHT VALUES:
  -outh 0.95 Average Human Male, Real world (hips, in meters)
  -outh 0.89 Average Human Female, Real world (hips, in meters)
EXAMPLE:
  bvhedit 05_01.bvh rescaled.bvh -inh 17.9 -outh 0.95
  Rescale the input 05_01.bvh to output rescaled.bvh where
  the input has 17.9 units from floor to hips, and output is
  real human male scale, 0.95 meters from floor to hips.

D:\Downloads\Resized BVH File>
```

Type bvhedit (name of your .bvh file) (name you want the rescaled file to be.bvh) -inh 70.8 (for Kinect animation, your inh and -outh values will change depending on your animation source and gender of your model)

A good example is: bvhedit Brekel.bvh rescaled animation.bvh -inh 70.8 -outh 0.89

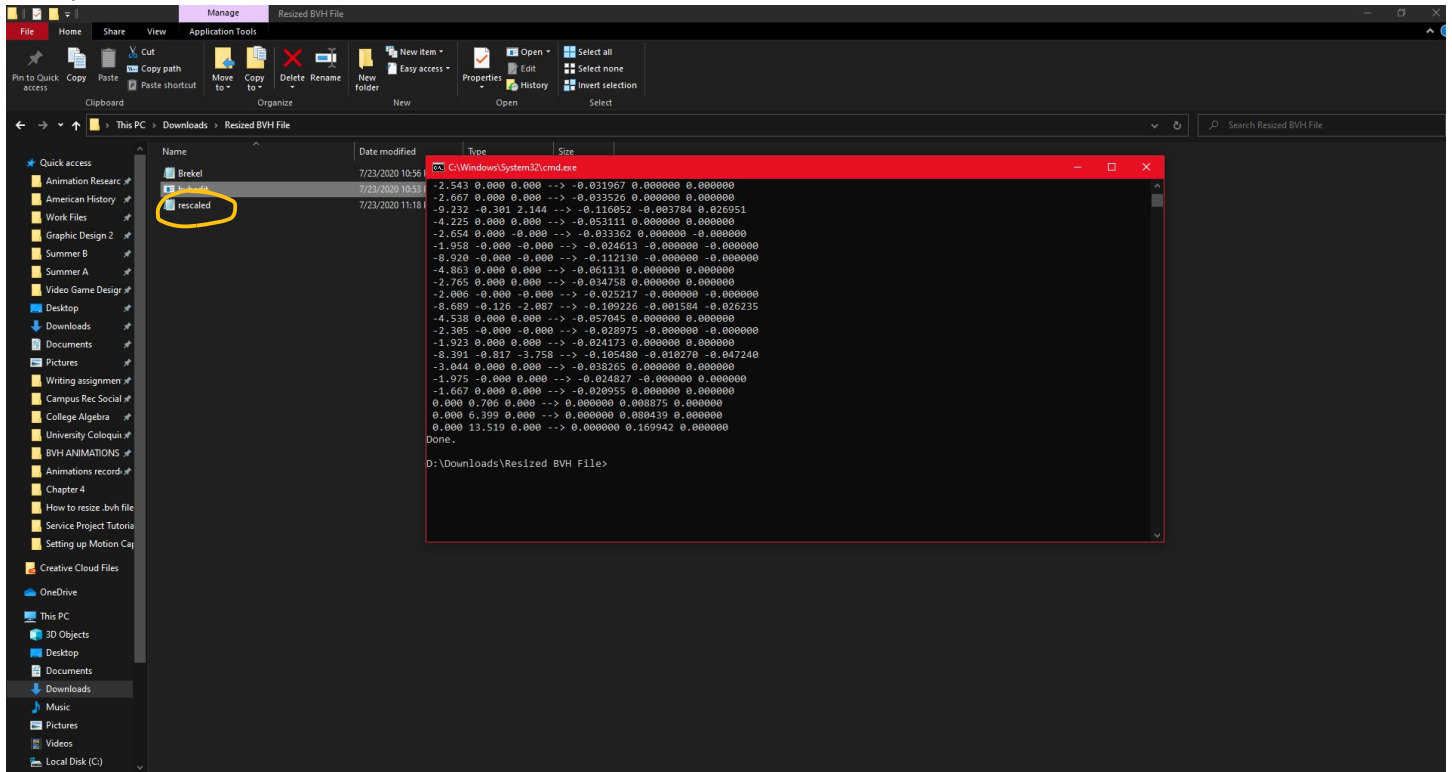
```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.18363.959]
(c) 2019 Microsoft Corporation. All rights reserved.

D:\Downloads\Resized BVH File>bvhedit
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  bvhedit {input.bvh} {output.bvh} [-inh V] [-outh V] [-feet/meters]
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EXAMPLE:
  bvhedit 05_01.bvh rescaled.bvh -inh 17.9 -outh 0.95
  Rescale the input 05_01.bvh to output rescaled.bvh where
  the input has 17.9 units from floor to hips, and output is
  real human male scale, 0.95 meters from floor to hips.

D:\Downloads\Resized BVH File>bvhedit Brekel Animation.bvh rescaledanimation.bvh -inh 70.8 -outh 0.89
Loading Brekel.
ERROR: Cannot find file.

D:\Downloads\Resized BVH File>bvhedit Brekel.bvh rescaled.bvh -inh 70.8 -outh 0.89
Loading Brekel.bvh.
```

Then press enter. You should see some numbers and see a new .bvh file in the folder.



Now your animation is correctly sized to work with other motion capture data.

**Step 4:** Follow the previous tutorial and import your rescaled animation into Motion Builder. Export it as an .FBX file and make sure to turn off Take\_001 when you export it. Then you can drag it into the time editor and use it with your motion capture rig! This screenshot shows the rescaled animation working with the CMU motion data that was previous in the time editor. This method can be used for all of the different motion capture sources.

