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Advanced: Using Bash to Efficiently Pay MTurk Bonuses in Bulk

Objective:

This document supplements “Paying MTurk Worker Bonuses via Amazon Web Services (AWS) API” by detailing how to run all of the needed Terminal commands at once via running a single bash file. This avoids problems that may arise when trying to copy and paste multiple bonus payment lines at once.

**Note: If you use “Qualtrics\_MTurk\_Bonus\_Processing\_Template.Rmd” you can avoid the Excel steps and the script will prepare a bash file for you.**

This is somewhat of a tutorial on creating and running bash scripts as well.

**Warning:** For Terminal commands in general, but specifically bash scripts, it is very easy to permanent damage (such as pay out an unintentionally high bonus amount). Proceed with care.

Step 1: Open Terminal

Step 2: If not already made, create a bin (standard folder name for .exe files) folder (this only needs to be done once on a computer)

1. Type “cd ~” to ensure that your directory is /Users/user\_name
2. Type “mkdir bin” to create the directory /Users/user\_name/bin

Step 3: Create a file for the bash script (see Qualtrics\_MTurk\_bonus\_processing\_Template.Rmd)

1. Move this file (or create it in) the bin directory.
2. If you are not using the suggested R file to create the bash script:
   1. Make sure the top line of the file is “#!/bin/bash” to denote it as a bash file
   2. Paste in all of your send-bonus command lines
   3. As a nice check, you can add a line at the very bottom of the file “echo completion\_message” so that you know the file finished and/or even a “echo Final Account Balance Should be XXXX.XX”
      1. Avoid using dollar signs or exclamation marks
   4. Note that there is no extension to the file name
   5. Make sure to save the file from whatever text editor you are using

Step 5: Make sure your text file is in the directory Users/your\_user\_name/bin

Step 6: Export your bin directory to the PATH by typing “export PATH=$PATH:/Users/your\_user\_name/bin”

1. Note the absence of spaces in this command (important)

Step 7: Type “chmod u+x file\_name” which gives you as the user (u) the ability to execute (x) the file

Step 8: To execute the file, simply type file\_name (no extension) and it will run the bash file, i.e. every line that you put in the file.

Step 9 (optional): As an extra step to prevent the script from being run again (which would pay out the bonuses again), type “chmod u-x file\_name”

NOTE: Bash files do not stop if some line hits an error. If something has gone wrong use control + c to terminate the script, although anything that it has already done may be permanent.