

Guide to the MTurk Command Line Tools

Christopher Lucas
Government Department
Harvard University

Alex Storer
IQSS
Harvard University

Dustin Tingley
Government Department
Harvard University

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The MTurk Command Line Tools are a set of CLIs that expand on the functions available through the Amazon Mechanical Turk website. This guide prepares the user to use three functions: `NotifyCSV`, `PayBonusCSV`, and `qualifycsv_text`. `NotifyCSV` allows the user to send an email to a batch of MTurk workers, `PayBonusCSV` pays a list of workers a bonus, and `qualifycsv_text` creates and assigns a new qualification to a list of MTurk Workers. The final section of this guide provides examples of different ways in which these utilities might be used in conjunction. If you have any questions, contact `clucas@fas.harvard.edu`.

Getting Started

1. You will need an Amazon Web Services (AWS) account and an Amazon Mechanical Turk Requester account in order to use the Command Line Tools.
2. If you do not have an AWS account, click [this link](#).
3. If you do not have an MTurk Requester account, click [this link](#).

Downloading the Command Line Tools

1. To download the additional functions, click [this link](#).
2. Click ZIP. This will download a zip file.

3. Uncompress the downloaded zip file into a convenient folder. The unzipped files will be in a directory named "alexstorer-Mturkingley-d1a53b9."

Installing the Command Line Tools

1. Open the file
`~\alexstorer-MTurkingley-d1a53b9\mturksamples\samples\mturk.properties` in a text editor.
2. Set your access key and your secret key to reflect your AWS identifiers. To set your access key, replace `AKIAJ55VK6ZI4ZUZM5AA` with your access key. To set your secret key, replace `CeuTfvPWjVeVSJBDcKCuqDp1t9s7CXh21CvmxkIf` with your secret key.
 - You can find your access key and secret key [here](#).
 - Set the keys according to the following example.
`access_key = Your AWS Access Key`
`secret_key = Your Secret Key`
3. Save and close the file.

Using the Command Line Tools in the Production Site

By default, the Command Line Tools are set to work in the the Developer Sandbox. The Developer Sandbox is a simulated environment that allows developers to test their Amazon Mechanical Turk solutions for free. However, it is simple to change between the two websites.

1. Open the file `~\aws-mturk-clt-1.3.0\bin\mturk.properties` in a text editor.
2. Comment out the Developer Sandbox `service_url` with a "#."
3. Uncomment the Production site `service_url` by removing the "#."

To return to the Sandbox, simply reverse the process above.

Getting to the command line

1. You will need to use the command line to edit and run the additional functions. If you know how to open a command line window, you may skip this section.

2. Unix users: To open a command line window, click on **Terminal** under **Applications**.
3. Windows users: Click "Start", type `cmd`, and press enter.

NotifyCSV

NotifyCSV is a utility that allows users to notify a number of workers in batch by email.

1. Before running the script, you must set up the csv input file such that the first line contains a comma-separated list consisting of the message subject, the message body, and the worker ID. Subsequent lines must contain only the next worker ID to receive the same message.
2. The CSV file should look like the following.
This is your message subject, 'This is your message body', WorkerID#1
,,WorkerID#2
,,WorkerID#3
...
where you replace the variables above with the appropriate values. To see an example CSV, click [this link](#).
3. You may use grammatical commas within your message body (within the quotes).
4. Messages can only be sent to a worker ID that you have interacted with in the past.
5. From the command line, navigate to the directory containing `build.xml`. To do so, type and enter the following (note that Windows users should replace `/` with `\`).
`cd [path to GitHub file]/alexstorer-MTurkingley-b9dd703/mturksamples`
6. Type and enter `ant` at the command line. The output should say "BUILD SUCCESSFUL" near the end. If not, install Apache Ant [here](#). For help installing Ant, see the appendix.
7. Type and enter the following.
`ant notifycsv -Dnotifycsv=/location/of/the/csv.`

PayBonusCSV

PayBonusCSV is a utility that allows users to pay bonuses to a number of workers in batch.

1. Before running the script, you must set up the csv input file such that each line contains a comma-separated list consisting of the assignment ID, the worker ID, the bonus amount and the reason for paying (in that order).

2. The CSV file should like like the following.

```
AssignmentID,WorkerID#1,PaymentBonus#1,Reason#1
AssignmentID,WorkerID#2,PaymentBonus#2,Reason#2
AssignmentID,WorkerID#3,PaymentBonus#3,Reason#3
...
```

where you replace the variables above with the appropriate values. To see an example CSV, click [this link](#).

3. Do not use commas except to separate the variables.
 4. From the command line, navigate to the directory containing build.xml. To do so, type and enter the following (note that Windows users should replace / with \).
- ```
cd [path to GitHub file]/alexstorer-MTurkingley-b9dd703/mturksamples
```
5. Type and enter `ant` at the command line. The output should say "BUILD SUCCESSFUL" near the end. If not, install Apache Ant here. For help installing Ant, see the appendix.
  6. Type and enter the following.
- ```
ant paybonuscsv -Dbonuscsv=/location/of/the/csv.
```

qualifycsv_text

qualifycsv_text is a utility allows users to create a qualification and assign it to workers in batch.

1. Before running the script, you must set up the csv input file such that each line contains a comma-separated list consisting of the assignment ID, the worker ID, the bonus amount and the reason for paying (in that order).
 2. The CSV file should like like the following.
- ```
WorkerID#1
WorkerID#2
WorkerID#3
...
```
- where you replace the variables above with the appropriate values. To see an example CSV, click [this link](#).
3. From the command line, navigate to the directory containing build.xml. To do so, type and enter the following (note that Windows users should replace / with \).
- ```
cd [path to GitHub file]/alexstorer-MTurkingley-b9dd703/mturksamples
```

4. Type and enter `ant` at the command line. The output should say “BUILD SUCCESSFUL” near the end. If not, install Apache Ant here. For help installing Ant, see the appendix.
5. Type and enter the following.

```
ant qualifycsv_text -Dqualifycsv=/location/of/the/csv -Dqualname=[qualification name].
```
6. Note that qualifications assigned to workers are visible to workers. Thus, choose the name of the qualification carefully such that it does not compromise the integrity of any research you may be conducting.
7. `qualifycsv_text` cannot be used to assign existing qualifications to new workers. It can only assign new qualifications that it creates.

Examples

Sending a survey to specific workers

The standard MTurk Requester interface does not allow requester to target specific workers for HITs. However, requesters can “call back” specific workers with the tools in this package. The following steps outline this procedure.

1. Identify the workers you want to call back for a follow-up survey.
2. Use `qualifycsv_text` to assign a new qualification to the workers you wish to call back.
3. Create a HIT in MTurk. Under “Additional Qualifications,” select the qualification created in Step 1. Under “Require qualification for preview,” select “Yes” for “Workers must have all of the required Qualifications in order to preview your HITs.” This will limit the visibility of the survey to those workers whose responses you want. Workers without the qualification assigned in Step 1 will not be able to accept the HIT.
4. Next, use `NotifyCSV` to send an email to the workers you want to call back. The following text is an example email one might wish to send.

Hello. Based on previous HITs you’ve completed, you’re eligible for a special survey. Your response is very important - we hope you’ll take the time to complete the HIT. Note that it pays particularly well (\$99,999,999,999.99). To take this HIT, please login to MTurk and, after logging in, click the link below.

www.LinkToAwesomeHIT.com

5. Note that in order to include a link to the HIT, you must find the HIT as a Mechanical Turk worker. As far as we know, HIT urls are not displayed to requesters. Thus, you must create a worker account if you do not have one, assign the qualification to yourself (otherwise you will not be able to see the HIT), find the HIT, click on it, and copy the url. Also note that you will not be able to assign the qualification to your own worker ID without first completing a HIT for your requester account. Finally, the url will only link to your HIT if the user is logged in before clicking it. Otherwise, the user will be rerouted to the Mechanical Turk Requester interface.
6. In our experience, response rates are typically between 30 and 50%.

A Installing Apache Ant

1. Go to this link.
2. Click Manual on the left sidebar.
3. Click Installing Apache Ant.
4. Click Getting Ant.
5. Follow the instructions to install Apache Ant.