

A Simplified Protocol to Screen Out VPS and International Respondents Using Qualtrics

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* Note: This protocol is a work in progress and we appreciate any feedback. As with any protocol, you should test it yourself before fielding.

If this protocol is useful in your research, we ask that you cite it to help others who might also find it useful. It can be cited as:

Winter, Nicholas J. G., Burleigh, Tyler, Kennedy, Ryan and Clifford, Scott, A Simplified Protocol to Screen Out VPS and International Respondents Using Qualtrics (February 1, 2019). Available at SSRN: <https://ssrn.com/abstract=3327274>

This protocol takes you through the steps of setting up a filter on Qualtrics that will block most people in a non-US location¹ or using a Virtual Private Server (VPS) to cover their location. It will take you through all the steps, with illustrations as needed.

Before you begin, if you do not want people to be able to answer your survey more than once, you should always enable the Prevent Ballot Stuffing option in Survey Options.

Survey Options

Survey Title: This text will appear in the browser as the window or tab title.

Meta Description: Search engines and social media services use this description.

Survey Protection

- Open Access.** Allow anyone to take this survey.
- By Invitation Only.** Prevent people from taking the survey using an anonymous survey link.
- Password Protection.** This password must be entered to take this survey:
- Prevent Ballot Box Stuffing.** Keep people from taking this survey more than once.
- HTTP Referrer Verification.** The user must come from this URL to take the survey:
- Prevent Indexing.** A tag will be added to the survey to prevent search engines from indexing it.
- Secure Participants' Files.** Files uploaded as responses can only be viewed by users with permission to view responses.
- Survey Expiration.** The survey will only be available for a specified date range.

This option places a cookie on the user's browser to prevent them from answering the survey more than once from the same browser. It does not completely prevent duplicate responses, since users can take steps to erase or avoid detection through cookies. But it is a useful supplement to MTurk's built in checks to avoid duplication.

¹ This can also be used to select only participants from other countries by simply changing the IP_countryCode parameter.

Once this is done, you can follow the following steps to detect international and VPS respondents. The main concept is to lookup the IP address using a security service and use that information to make decisions on how to handle the potential respondent.

1. Create an account on IP Hub (<https://iphub.info/pricing>). A free plan that allows for 1,000 requests per day should suffice for most research purposes, although larger plans are available. We recommend IP Hub based on our own experiences, and because it provides a relatively liberal free service that functions quickly. You will be given an API key that consists of about 50 random letters and numbers, looking something like this:² MxI5ODpZT2kmVnlsR5iMcjBrRWpjxVZOKXIRKU1sNmdZb30EMA==
2. Next, you will want to be sure to add a warning to the beginning of the survey to tell people who are in the U.S. to turn off their VPNs or any ad blocking software they are using. This should be placed in its own block and should come before any other parts of the survey. This will prevent you from receiving complaints from some Turkers. From our piloting, it also appears that this is an effective way to initially screen out people who you do not want to take the survey (we noticed a significant drop in the number of international IPs testing our system once we added the warning).

Warning!

This survey uses a protocol to check that you are responding from inside the U.S. and not using a Virtual Private Server (VPS), Virtual Private Network (VPN), or proxy to hide your country. In order to take this survey, please turn off your VPS/VPN/proxy if you are using one and also any ad blocking applications. Failure to do this might prevent you from completing the HIT.

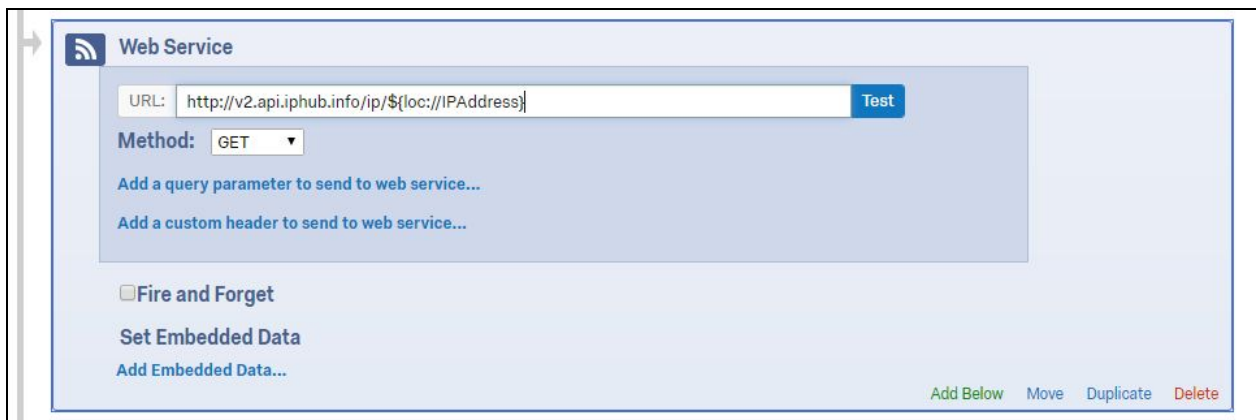
For more information on why we are requesting this, see this post from TurkPrime (<https://goo.gl/WD6QD4>)

² This is not a real key, please do not try to use.

3. Next, go to the Survey Flow of your Qualtrics survey. After the block that contains the warning, you should add a Web Service.



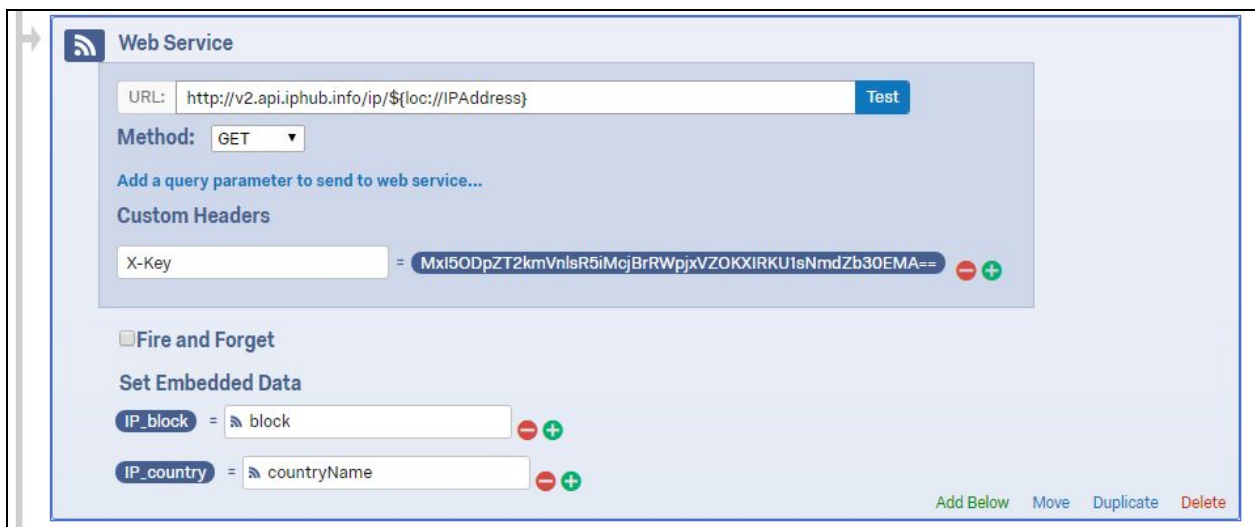
4. This is where we will make the call to IP Hub. In the "URL:" line, place in the following address: `http://v2.api.iphub.info/ip/${loc://IPAddress}`. The first part of this address calls the IP Hub API, the last part takes the IP address captured by Qualtrics and adds it to the API call. Make sure the "Method:" is set to "GET".



5. Click on “Add a custom header to send to web service...” On the left-hand side, for “Header to Web Service...” type in X-Key. On the right-hand side, where it says “Set a Value Now”, type in your API key.



6. Next, click on “Add Embedded Data...” and add entries for IP_block and IP_country that correspond with the returned IP Hub fields block and countryName.³



³ IP Hub also allows you to capture some other fields, including countryCode, ASN, and ISP. These may be useful for some analysts.

7. Click Save Flow. If you would like to screen out international or VPS actors, you can do this using the next few steps. Begin by setting up warnings explaining why they are not allowed to take the survey. These can be added as descriptive text questions in their own Block (or text entry questions if using the appeals procedure described at the end). This is both courteous and will prevent you from getting nasty emails. Below are the ones we used.

VPS Warning:

Qualtrics View

VPS Warning Block Options

VPS

Our system has detected that you are using a Virtual Private Server (VPS) or proxy to mask your country location. As has been widely reported, this has caused a number of problems with MTurk data (<https://goo.gl/WD6QD4>).

Because of this, we cannot let you participate in this study. If you are located in the U.S., please turn off your VPS the next time you participate in a survey-based HIT, as we requested in the warning message at the beginning. If you are outside of the U.S., we apologize, but this study is directed only towards U.S. Participants.

Thank you for your interest in our study.

Import Questions From... + Create a New Question

Survey View

Our system has detected that you are using a Virtual Private Server (VPS) or proxy to mask your country location. As has been widely reported, this has caused a number of problems with MTurk data (<https://goo.gl/WD6QD4>).

Because of this, we cannot let you participate in this study. If you are located in the U.S., please turn off your VPS the next time you participate in a survey-based HIT, as we requested in the warning message at the beginning. If you are outside of the U.S., we apologize, but this study is directed only towards U.S. Participants.

Thank you for your interest in our study.

Out of US Warning:

Qualtrics View

▼ Out of US Warning Block Options ▼

<input checked="" type="checkbox"/>	Our system has detected that you are attempting to take this survey from a location outside of the U.S. Unfortunately, this study is directed only towards participants in the U.S. (this also excludes U.S. citizens living abroad) and we cannot accept responses from those in other countries (as per our IRB protocol).
	Thank you for your interest in our study.

Import Questions From... + Create a New Question ▼

Survey View

Our system has detected that you are attempting to take this survey from a location outside of the U.S. Unfortunately, this study is directed only towards participants in the U.S. and we cannot accept responses from those in other countries (as per our IRB protocol).

Thank you for your interest in our study.


Still Missing Warning

This message is added defensively. We find a small number of cases (about 1.6% in our pilot) the API lookup does not succeed and responses need to be checked after the survey is complete

Qualtrics View

Still Missing Warning Block Options

WID For some reason we were still unable to verify your country location. We ask you to please assist us in getting this protocol correct. Please enter your MTurk worker ID below and contact the requester for this HIT to report the problem.

 Once you click Next, you will be taken to the survey (and certifying that you are taking this survey from the U.S. and not using a VPS). We will be checking locations manually for those who reach this point and you will be contacted if this check identifies you as violating these requirements.

Survey View

For some reason we were still unable to verify your country location. We ask you to please assist us in getting this protocol correct. Please enter your MTurk worker ID below and contact the requester for this HIT to report the problem.

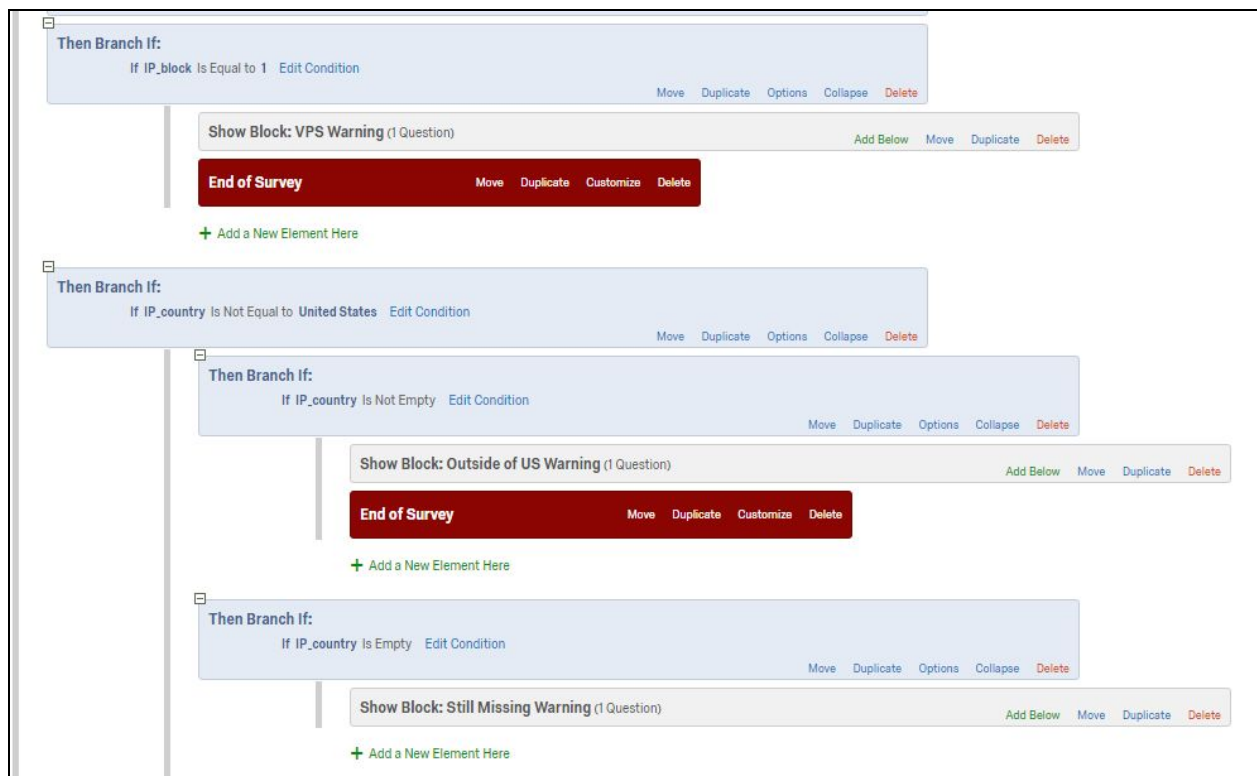
Once you click Next, you will be taken to the survey (and certifying that you are taking this survey from the U.S. and not using a VPS). We will be checking locations manually for those who reach this point and you will be contacted if this check identifies you as violating these requirements.

- Now go back to the Survey Flow. After the web service call we added earlier, add two Branches that respond to Embedded Data.

For the first one, set it to activate “If IP_block is Equal to 1”. This catches respondents who are identified as behind a VPS, VPN, or server farm. Move your VPS warning text underneath this branch and then add an End of Survey option below it.

For the second Branch, set it to activate “If IP_country is Not Equal to United States”. Then create two sub-Branches: one for “If IP_country is Not Empty” and the second for “If IP_country is Empty”. (IP_country will be Empty if the IP trace failed for some reason.) Under the first sub-branch, drag your out of US warning and add an End of Survey option below it. Under the second sub-Branch, drag your location missing warning.

Now if anyone tries to access your survey from outside the US or from a server farm, they will be shown a warning and taken to the end of your survey. This part of your survey flow will look like the illustration below.⁴



⁴ You may wish to create a Custom End of Survey Message in Qualtrics for these two End of Survey blocks, especially if your standard end of survey message includes the study debriefing and/or mTurk code. To do so, click “Customize” on the Block, then check “Override Survey Options,” and select “Custom end of survey message...” You can then choose a message from your Qualtrics Library or create a new one.

9. Save the new Survey Flow. Now nobody (or at least very few people) outside of the US or using a detected server farm should be able to take your survey.
10. One final note: With any IP lookup service, there is always a risk of false positives -- people who get screened out when they should not have been. So far, we have only encountered two cases of this. But, because it can happen, and because those who report false positives are helping us evaluate the utility of the screening procedure, we also included an appeal process for Turkers.

We added to the information screens shown above the line, "If you have received this message in error, please contact the requester and enter your MTurk worker ID in the box below" and added a text box for entry (see illustration below). In our case, the information provided to us about false positives from these respondents was worth paying them what they would have received for the survey, but this is left to the discretion of the researcher. With Amazon continuing to update their service and remove fraudulent participants, it is possible that one day the number of false positives will supersede the utility of this protocol, but we have, so far, continued to find it useful.

VPS Exclusion Message with Appeal Process

Our system has detected that you are using a Virtual Private Server (VPS) or proxy to mask your country location. As has been widely reported, this has caused a number of problems with MTurk data (<https://goo.gl/WD6QD4>).

Because of this, we cannot let you participate in this study. If you are located in the U.S., please turn off your VPS the next time you participate in a survey-based HIT, as we requested in the warning message at the beginning. If you are outside of the U.S., we apologize, but this study is directed only towards U.S. Participants.

Thank you for your interest in our study.

If you have received this message in error, please report it to the requester for this study and enter your MTurk Worker ID below.