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How do I get a Kent Inquisit user account?

Anyone requiring an account to use Inquisit should email psychsupport@kent.ac.uk to request one including :

Fullname, email address, UoK username

i.e. **John Allen, J.A.Allen@kent.ac.uk, ja356**

What is the website for Inquisit?

- <http://www.millisecond.com/>
- Once you have your Inquisit account (see above) you can login on the Millisecond.com website
- In particular note the following menu options:
 - Download / Inquisit Lab - download the desktop client for installation for developing experiments and testing locally. NB you'll only need this if you are going to develop or modify a script yourself.
 - Download / Millisecond Test Library - see a long list of pre-written experiments, sorted by the academic paper they refer to.
 - Support / * - Help, FAQs etc
 - My Account / Web scripts - where to access your own scripts and where you can upload new ones
 - My Account / Web data files - access the results from your experiments and download them for further analysis.

How do I run an Inquisit IAT?

- There are 2 ways to run an Inquisit IAT experiment:
 - **The usual way** is through a web browser. You just need the URL for your particular study.
 - **Note** this extract from the documentation files (july 2014):
 - *“What are the machine requirements for Inquisit 4 Web?”*
 - *The client must be running Windows XP or later, or Mac OSX 10.5 or later. Sorry, no support for Linux. [JA: or Android/iOS - ie no phones]*
 - *The client must have a working Internet connection.*
 - *The client must be running a reasonably recent version of Chrome, Firefox, Internet Explorer, or Safari.”*
 - There is a desktop version of Inquisit (Inquisit Lab) that can be installed onto PCs/laptops (both Windows & Mac)
 - It can be downloaded from the ‘Download’ tab on the millisecond.com website.
 - Admin rights are required to install it
 - Once installed, when run, you will be prompted you to register the product. Follow the instructions to do this. A ‘computer key’ will be generated automatically. You will be prompted to authenticate by providing your millisecond username and password at which point a registration key will also be generated for you.

Will my participants need to install anything to take part in my study?

- Unfortunately the answer is ‘Yes’. Although it runs from within a browser (e.g. Firefox, Internet Explorer, Google Chrome), it does require that a browser plugin be installed. This is pretty simple and quick to do however it does require administrator privileges. If you’re running it on a Psychology lab computer then it should just work however if it’s run on your participant’s own computer it will need installing as the first step. See this link for details about what’s involved: <http://www.millisecond.com/web/participants.aspx> You may want to mention this to your participants in the initial brief and to include the link so they can check it out if they have concerns.

How do I get started creating an IAT experiment?

- The best place to start is to look through the extensive library of demo scripts available on the Inquisit website at <http://www.millisecond.com/download/library/>
- Search through to find the example closest to what you want, click on the link for it to take you through to the download page. Most script descriptions reference the primary author for any relevant academic papers which can aid searching.
- You can also run a web demo of the script first to see what it does. This requires the installation of the Inquisit Web Player. This requires administration rights. (Check with Tech Support to find out which computers already have this installed)
- Use **CTRL+Q** to abort a script when you've seen enough
- Download version 4 of your script and unzip it

How do I make changes to my IAT experiment?

- The *.iqx experiment files (or .exp for older versions) are only text files and so simple edits can be made using a text editor, such as notepad. In practice, this is probably only viable for making changes to text messages or to the words/pictures used by the IAT.
- To develop new scripts or make significant changes to existing scripts you will need the **Inquisit 4** desktop software installing on your PC/Mac. Contact Psychology technical support for help with this.

How do I upload my IAT to the website?

- Once you have written and tested your program using `Inquisit Lab` you can upload it to the Millisecond website to run in a browser.
 - login to your account online at `millisecond.com`
 - Select the 'Web Scripts' link from the 'My Account' drop-down menu
 - Either edit an existing script or select to Register New Script and browse and then upload it from your PC.

- Note that separately from the uploaded there are a number of settings that you configure on the Inquisit/Millisecond website itself. These include settings for generating Participant and Group IDs automatically; Instruction messages and also Thanks you messages for post experiment. It's mostly self-explanatory so have a go yourself and then test it to see what happens. Seek help if you have any concerns before you start collecting live data.

Where are my results files?

- If you have been running an Inquisit study (e.g. an IAT) and you want to look at or download your participant's results files:
 - login to your account online at millisecond.com
 - Select the 'Web data Files' link from the 'My Account' drop-down menu
 - If necessary, select the appropriate folder
 - In the 'File Name' column, select the link for whichever experiment you are interested in
 - Select either the summary or the raw data folder as desired
 - The raw data folder contains the full experiment data with individual response timings for each participant. (see below for more details)
 - The summary folder contains the summary data: PID, date etc and D scores. (see below for more details)
 - Select the file(s) you want to download by ticking the checkboxes in the left-hand column
 - Click the 'Download' link (with the green arrow next to it)
- Note that although these results files are all <filename>.iqdat files they are actually just normal text files and so, once downloaded can easily be opened in SPSS/Excel/Notepad [using file/open... and remembering to select 'all files *.*' on the file filter; then : 'delimited' ; next; select the 'Tab' checkbox; finish]

Can you explain the RAWDATA file's contents?

- The rawdata file contains a lot of columns of data.
- These are :
 - Date, time, group, subject, blockcode, blocknum, trialcode, trialnum, response, correct, latency, stimulusnumber1, stimulusitem1, expressions.da, expressions.db, expressions.d
- This is what they represent:
 - date/time/group/subject:

- built in variables that track date and time when script was run with the assigned subject- and group number
 - Note: group1/group2 counterbalance the order in which the pairings are run
- blockcode:
 - the name of the current trial
- blocknum:
 - the number of the current trial
- trialcode:
 - the name of the current trial
- trialnum:
 - the number of the current trial
- response:
 - the final trial response (scancodes of the keys pressed)
 - Note: script saves the final and -by design- correct response
- correct:
 - the accuracy of the initial response
 - 0 = initial response was incorrect and needed to be corrected
 - 1 = initial response is correct
- latency:
 - the latency (time in milliseconds) of the final (correct) response
- stimulusnumber:
 - the number of the current stimulus
- stimulusitem:
 - the currently presented item
- expressions.da:
 - d-score of the first blocks
- expressions.db:
 - d-score of the second blocks
- expressions.d:
 - overall d-score

Can Inquisit work with Prolific, Qualtrics & MTurk?

- Inquisit can be integrated with a number of 3rd party systems including Prolific and Qualtrics however (at the time of writing 2015/12) it cannot be used with MTurk as its use requires the installation of a browser plugin which invalidates MTurk's terms and conditions.

For more details see:

<http://www.millisecond.com/support/docs/v4/html/howto/interopsurveys.htm>

What settings are configurable on the website for an existing IAT experiment already uploaded?

- The *.iqx experiment files contain details of all the words/pictures and messages used DURING your IAT as well as the rules governing the order that the sections are run.
- Some settings about how an already uploaded IAT experiment are run are configurable on the website, including the following:
 - The opening page displayed at runtime
 - Can be created and specified by you, or automatically generated for you, according to configurable settings.
 - Configurable launch settings include:
 - Title
 - Instructions
 - Participant /Subject IDs: User entered vs automatically generated
 - Group IDs: i.e. subject groups your participant is assigned to
 - Finish page. Options include:
 - System generated
 - Custom page, specified by you
 - Redirected to another website (e.g. RPS to automatically assign RPS credits)

Testing can be time consuming, are there any keyboard shortcuts?

- The following keyboard shortcuts might be of use:
 - **CTRL Q** – quit/abort the whole experiment
 - **CTRL B** – skip the rest of the current BLOCK and carry on at the start of the next BLOCK
 - **CTRL D** – open the *debug* window which displays the current setting for all Inquisit attribute. The debug window must be closed before continuing with the current IAT.

Other tips?

- Take a look at the options under the `Tools` menu option to find out some of the other capabilities. e.g.
 - Scripts can quickly get to be long and hard to navigate. You can display line numbers for your script in the Inquisit editor by ticking the 'show line numbers' checkbox under the `Tools / Preferences` menu. This also helps you order the pages should you print out your script.
 - It's possible for your scripts to interface with the computer's serial and parallel ports
 - Inquisit uses 'keyboard scancodes' instead of key symbols. E.g. to detect pressing a 'q' you need to test for scancode 16. To find out what the scancode is for a key you want to use, use the 'keyboard scancodes' menu option under `Tools`.
 -

Where can I get more help?

As said above *'seek help if you have any concerns before you start collecting live data.'*

- Inquisit website:
 - <http://www.millisecond.com/>
 - {see the `Support/Documentation` link}
- Inquisit desktop software
 - See the `HELP` option on the Menu
- Psychology Technical Team.

A brief introduction to the Inquisit script file structure?

Inquisit scripts or programs are in fact actually nothing like a traditional computer program (ie not like an e-Prime or PsychoPy script nor like a Python or Javascript program.) Its structure is actually far more like an XML/HTML markup file. Although files have the `.iqx` (or in older versions `.exp`) file tag, they are simply text files and as such can be opened, viewed and edited in any text editor (e.g. Notepad, Notepad++)

An example is the **main experiment element** e.g.

```
<expt>  
/ blocks = [1=practice; 2=trialblock1; 3=trialblock2 ]  
</expt>
```

The <expt> element can appear anywhere in the file however for most sample programs downloaded from the millisecond.com tend to be at the end of the file.

Notes on the file structure:

1. All active parts of the script are enclosed between a match pair of tags (just as with XML) These all have an opening and a matching closing tag line and typically include one or more attribute (/parameter) tags.

e.g.

```
<element_type my_element_name>  
/ attribute_name = ( settings )  
</element_type>
```

2. Most <element> tags include a name.
 - a. e.g. <block practice_phase>
 - b. This need to be unique WITHIN an element type but it can be the same across different element types
 - c. E.g. <block practice> and <trial practice> is ok.

Commonly used <> elements

There are generally a number of ways to achieve any particular piece of functionality within Inquisit and its often not clear which is best until you try it and discover that it cannot quite do what you want. With that in mind, below are a few examples showing common elements

How to setup a list of words and reference them from a <trial> element

Put them in an <item my_items_name> list like this ..

```
<item attributeA>
/1 = "Marvelous"
/2 = "Superb"
/3 = "Pleasure"
/4 = "Beautiful"
</item>
```

Add more following the obvious pattern.

Note that the inserting any whitespace after the / is optional, so `'/1'` and `' / 1'` are equally valid.

Call them from a <text> list like this ...

```
<text attributeA>
/ items = attributeA
/ txcolor = (0, 255, 0)
</text>
```

Setting other option display setting as desired (above we change the colour to green)

Then access the <text> from a <trial> element

```
<trial attributeA>
/ validresponse = ("E", "I")
/ correctresponse = ("E")
/ stimulusframes = [1 = attributeA]
/ posttrialpause = 250
</trial>
```

How to setup a list of images and reference then from a <trial> element

```
<item targetA>  
/1 = "flower1.jpg"  
/2 = "flower2.jpg"  
/3 = "flower3.jpg"  
/4 = "flower4.jpg"  
</item>
```

Very similar to how words are setup.

But access them from a <picture> element instead of a <text> one ..

```
<picture targetA>  
/ items = targetA  
/ size = (20%, 20%)  
</picture>
```

Access the <picture> element with a <trial> -

```
<trial attributeA>  
/ validresponse = ("Q", "P")  
/ correctresponse = ("Q")  
/ stimulusframes = [1 = targetA]  
/ posttrialpause = 250  
</trial>
```

Access the <picture> element from a <block element> like this

```
<block attributepractice>  
/ bgstim = (attributeAleft, attributeBright)  
/ trials = [1=instructions; 2-19 = random(attributeA, attributeB)]  
/ errormessage = true(error, 200)  
/ responsemode = correct  
</block>
```

IMPORTANT: Note that Inquisit isn't capable of counting so you need to count how many trials you have and put the correct number on the /trials attribute setting that's in the <block> entity. See the green setting above. NB it starts at 2 because trial 1 above is used to present the instructions

How to pass a parameter (eg a subject ID) from Qualtrics into an Inquisit script

Note the Inquisit script will need to be uploaded and configured ready to run on the www.millisecond.com website before you can do this part. Once this is done, then in your Qualtrics survey:

1. First, find out the question that captures the Subject ID.
 1. Click on the question body so that the enhanced text editor options appear and click on the 'piped text tab
 2. Select Survey Question and then find the question that captures the Subject ID and click on the second of the options that appears (ie NOT the 'Question text' option'
 3. This should cause some text to be inserted into the question body that looks something like this:
 1. `{q://QID37/ChoiceTextEntryValue}`
 2. Copy this text into a separate file temporarily and then delete it from the question body.
2. Now select the Survey flow tab
 1. In End of Survey select Customize
 2. Select the 'Redirect to a URL' option and paste in the runtime link for your Inquisit program. It should look something like this:
 3. `research.millisecond.com/lc388/AgeIATkent.web/`
 4. Now append this code: `subject_ID=` and then also append the text you saved from 1.3 above to the end of it so that you have something like this:
 1. `research.millisecond.com/lc388/AgeIATkent.web/subject_ID={q://QID37/ChoiceTextEntryValue}`
 5. `subject_ID` will be the variable name that you will reference in your Inquisit study.
3. Now, when your Qualtrics study finishes, it will automatically jump to run your Inquisit study and will pass across your Subject ID.

How to access a parameter passed into an Inquisit experiment (e.g. subject ID)

1. Login to your Inquisit account at www.millisecond.com
2. Select the Web Scripts menu option
3. Find your script and click the `edit` button.
4. Advance through to the `Configure Launch Page` page and find the question Choose how subject ids should be generated: - change the setting to `URLQuery Parameter` and in the text box below enter the name of the variable you defined above e.g. `subject_ID`
5. After making any other changes to the configuration click the `Finish` button. Your Inquisit script is now ready to be run from your Qualtrics questionnaire.

How to jump to a url at the end of your Inquisit experiment (e.g. a debrief page)

1. As above, edit your script and progress through to the page titled 'Select a finish page'
2. Select the 'Redirect to a custom finish page' option
3. Type in the url that you wish to jump to
 1. e.g. <https://www.kent.ac.uk/psychology/social-attitudes-survey-1c388-2015-2016-debrief.html>
 2. it should look something like this:-



Redirect to a url on a different web server
Send participants to a page on a different web site.

https://eu.qualtrics.com/jfe/preview/SV_bkAM7KDi6h26YF7

4. If you want to redirect to a Kent branded debrief page then if you pass the desired text to Psychology technical support they can create the page for you.

How to pass on a parameter at the end to another program (e.g. passing a subject_ID to Qualtrics)

1. Any parameters passed INTO an Inquisit script on the url are automatically forwarded on at the end if you select to "Redirect to a url on a different web server" in your script configuration. See 'How to jump to a url at the end of your Inquisit experiment (e.g. a debrief page)' above
 1. E.g. if a Qualtrics survey calls your Inquisit script like this
 1. https://eu.qualtrics.com/jfe/preview/SV_bkAM7KDi6h26YF7?subject_ID=ABC
 2. Then Inquisit will pass on subject_ID=ABC on any forwarding url

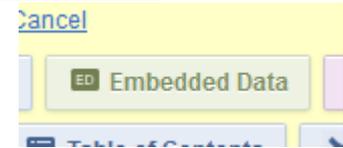
How to get Qualtrics to pick up a url parameter passed to it from another program (e.g. passing a subject_ID to Qualtrics from Inquisit)

1. To ensure that Qualtrics captures the passed url parameter and stores it in the results file, do the following:
 1. Edit the survey flow for the survey

2. Click to add a new element



3. .. of type embedded data :



4. Enter the variable name in EXACTLY as it will appear on the url (case sensitive)

1. E.G.



5. As long as the variable names match exactly then the value passed will also appear in the Qualtrics result file.