

# Biosecurity Game Administration Instructions

Authors: Joel Dunstan, Justin Chong

# **Biosecurity Game: Administration**

## **Instructions**

### **Table of Contents**

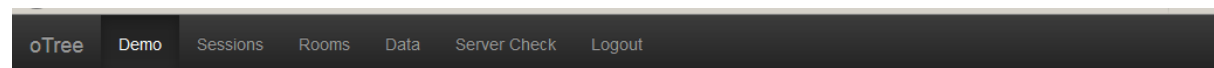
Demo.....	3
Full Screen Mode.....	4
New.....	5
Sessions.....	5
Archiving Sessions.....	5
Deleting Sessions.....	5
Creating sessions.....	6
Configure Sessions.....	7
Links.....	9
Edit.....	10
Monitor.....	11
Results.....	12
Payments.....	13
Rooms.....	13
Data.....	14
Server Check.....	15
Kiosk Mode.....	16
Server Set Up.....	16
1) Install Python 3.5.2, Postgres 9.6, Redis.....	16
2) Install oTree and psycopg2.....	17
3) Configuring Postgres.....	18
4) Preliminary Checks.....	19
5) Run The Server.....	20
6) Server Maintenance.....	21

## Demo

The “Demo” section of the site can be used for testing the games and for demonstration. It is not recommended for actual studies. To create a demo session, click on one of games in the list. “Lottery\_Test” is the lottery game on its own, “Biosecurity Test” is the biosecurity game on its own. It is these Demos that can be primarily used for testing out the games without saving any results. The Biosecurity Test does not do the group logic as the group matching functions lie within the Lottery Game.

So when you doing the Biosecurity Test, the number of player per group will default to the number of participants in the session. In this case, the Biosecurity Test will have 2 players, it will also do the demo without any features enabled as all of these have been turned off by default, such a feature is the Chat Box which allow users to chat.

The Biosecurity Game will run the Lottery Game, the Biosecurity Game and the end Results page. While it will get to the end and show the results for the game, it will not save these results like the Test Sessions.



### Demo

Welcome to the Biosecurity Game Admin Page. If you are looking to simply test out the games not play them, follow the instructions for 'Testing the Games'. If for some unfortunate reason you do not have the instructions available I'd advise you to check the 'Documentation' on otree.org and look at SESSION\_CONFIGS and the Python Tutorials and comments as the session configs that do the tests will have been commented out for the study to ensure the tests aren't accidentally run during the study. You can add entries to this list in `settings.py`.

Lottery_Test	Participants: 2
Biosecurity Test	Participants: 2
Biosecurity Game	Participants: 4

After clicking on a game link, you should see the following screen:

oTree
Demo
Sessions
Rooms
Data
Server Check
Logout

## Biosecurity Test: session xv1d2zdc (demo)

Description
Links
Monitor
Results
Payments
New

Below are temporary links for testing and demonstration. To launch a real study, either create persistent links by setting up a [room](#), or create a session through the [sessions](#) page.

You can either open full-screen mode, the session-wide link, or the single-use links.

### Full screen mode

[Play in full screen mode.](#)

### Session-wide link

Open the below link in **2** browser tabs.

<http://biosecurity.are.uwa.edu.au/join/3qtepc581r/>

### Single-use links

Open each link in its own browser tab.

P1	<a href="http://biosecurity.are.uwa.edu.au/initializeParticipant/341viar5/">http://biosecurity.are.uwa.edu.au/initializeParticipant/341viar5/</a>
P2	<a href="http://biosecurity.are.uwa.edu.au/initializeParticipant/jo5srdc0/">http://biosecurity.are.uwa.edu.au/initializeParticipant/jo5srdc0/</a>

## Full Screen Mode

Clicking “Play in fullscreen mode” allows you to view the game in fullscreen mode where you can view all windows of the game session in the same browser tab. This will only appear in the Demo page.


oTree
Demo
Sessions
Rooms
Data
Server Check
Logout

## Biosecurity Test: session u0955xzdc (demo)

Description
Links
Monitor
Results
Payments
New

ID in session	Code	Label	Page	App	Round	Page name	Status	Time on page
P1	9usip0ts		1/150 pages	Biosecurity	1	Bioinstructions	Playing	<1 min ago
P2	0gb61wr1		1/150 pages	Biosecurity	1	Bioinstructions	Playing	<1 min ago


[Advance toward user\(s\)](#)



### Biosecurity Instructions

#### Introduction

Please read through these instructions carefully. If you have any questions please raise your hand and one of the administrators will come to you. You are about to take part in an experiment about collective decision-making related to risky choices. This experiment gives you an opportunity to earn money. How much you earn



### Biosecurity Instructions

#### Introduction

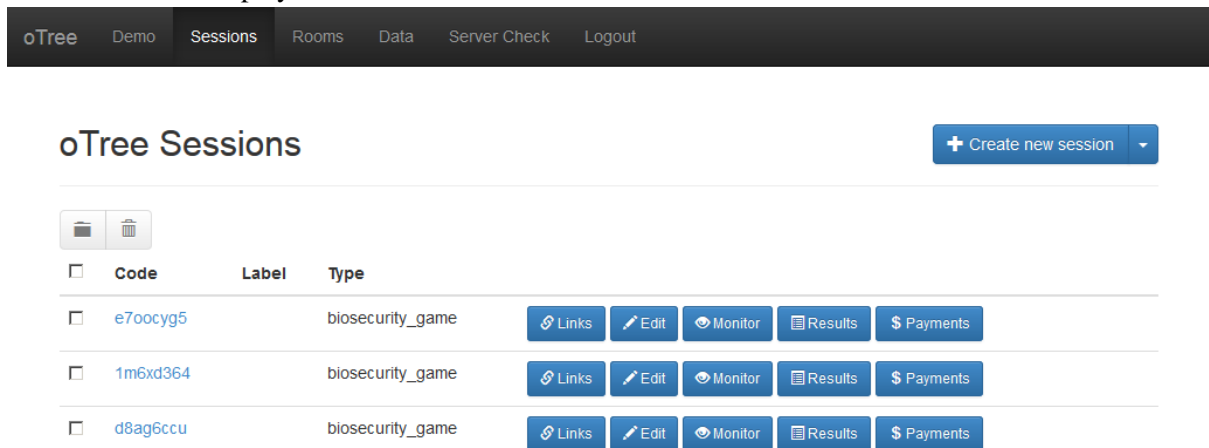
Please read through these instructions carefully. If you have any questions please raise your hand and one of the administrators will come to you. You are about to take part in an experiment about collective decision-making related to risky choices. This experiment gives you an opportunity to earn money. How much you earn

## New

The New link exists only in the Demo; it will recreate the session if you want to try the demo again.

## Sessions

The sessions tab displays a list of all the active sessions.



<input type="checkbox"/>	Code	Label	Type	
<input type="checkbox"/>	e7oocyg5	biosecurity_game		<a href="#">Links</a> <a href="#">Edit</a> <a href="#">Monitor</a> <a href="#">Results</a> <a href="#">Payments</a>
<input type="checkbox"/>	1m6xd364	biosecurity_game		<a href="#">Links</a> <a href="#">Edit</a> <a href="#">Monitor</a> <a href="#">Results</a> <a href="#">Payments</a>
<input type="checkbox"/>	d8ag6ccu	biosecurity_game		<a href="#">Links</a> <a href="#">Edit</a> <a href="#">Monitor</a> <a href="#">Results</a> <a href="#">Payments</a>

## Archiving Sessions

To archive sessions, click on the checkboxes to select the desired sessions that you want to archive (a session is selected when it shows a tick inside the check box). Once you have selected the sessions you wish to archive, click the folder button next to the trash bin, it will highlight that it's the archive button. Once it's archived it will come up with a link called "Show Archived Sessions" below all the list of all active sessions, clicking on this link will show all the archived sessions, allowing you access to those sessions again.

## Deleting Sessions

To delete sessions, click on the checkboxes to select the desired sessions that you want to delete (a session is selected when it shows a tick inside the check box). Once you have selected the sessions click the trash bin button to delete the sessions, it will come up with a warning saying that the action is irreversible allowing you to cancel the request, if you did the delete button by accident. Click Delete to delete the selected sessions.

## Creating sessions

To create a new session, click this button  
It should take you this screen

+ Create new session

oTree Demo Sessions Rooms Data Server Check Logout

### Create a new session

Session config:

Lottery\_Test

Number of participants:

Must be a multiple of 1

Create

[Configure session](#)

App sequence

**Lottery (3 rounds)** The Lottery Game. It begins with the lottery instructions page which contains information regarding how the game is played and how payoffs are made. Those instructions are hardcoded in the html template file under template/Lottery/LotteryInstructions.html The next page is a short quiz which tests participants understanding of the game and will not allow a player to progress, unless all of the questions are answered correctly. This is done to ensure that the instructions have been understood. Five questions are inputed

There are two forms on this page, one is the Session\_config drop down menu, this allows you to choose between different session configurations, we have the Lottery Test, the Biosecurity Test and the Biosecurity Game. The Biosecurity Game will be the one you use to create new sessions for the experiments.

The Number of participants is exactly as it sounds, the number of players inside the session, please enter an integer here. When you have configured the session as per the variables below, click the “Create” button to create the session. If you aren’t concerned with configuring the session, skip the configure session, straight to Links

## **Configure Sessions**

The link, “Configure Sessions” will bring up another form list, this will allow you to set custom settings for the session. I will explain the settings below:

### **dynamic finances**

The dynamic finances feature that reads from a csv file the revenue, upkeep and max protection for each round. This will allow an administrator to have custom and dynamic costs and revenue per round.

### **max protection**

This is the max protection for each round and will directly affect the slider on the Round pages. The max protection is one of those elements of the session that will affect the balance of the game and its difficulty, take great care with the value in here.

### **player communication**

This is a checkbox for the enabling of the Chat Box, when the player\_communication checkbox is ticked it will run the Chat Box on rounds 1, 6 and 11.

### **players per group**

This is the amount of players per group, the amount of groups is Number of participants / players\_per\_group. The group logic installed will accept of Number of participants that isn't a multiple of players\_per\_group. In the case where Number of participants isn't a multiple of players\_per\_group, it will pluck one player from every group starting from the first, until the last group is full or until there are no other groups to pluck from other than the last.

### **revenue**

This is the revenue that each player gets per round in the event an incursion doesn't occur. The revenue is one of those elements that can directly affect the game's difficulty, choose a number wisely and with reason.

### **set leader**

This is the One Player Feature checkbox, when this is enabled, it will ensure that one player is chosen to be the leader, the leader will choose their amount of protection first before everyone else. After the leader, has chosen their amount of protection, everyone else in the round will get to see what the leader put in as their protection before choosing their own amount of protection.

### **starting funds**

This is the funds each player starts with, while this does directly affect the balance of the start of the game, it will not have as much affect as the revenue, upkeep or max protection.

### upkeep

This is the cost of produce per round, this is one of those elements that will directly affect the balance of the game, please have a reason for changing this value.

### use browser bots

When this is enabled, it will run browser bots every time the game is opened, the bots will use the test.py in each app to run through the games. This is a way of testing the game inside the browser.

### participation fee

This is the amount you can set in real world currency (\$AUD in this case) which denotes how much a user will be paid for simply playing the game.

### real world currency per point

This value is the exchange rate for points to real world currency.

An image of the Configure Sessions form is below

## Create a new session

### Session config:

Biosecurity Game ▼

### Number of participants:

4

Must be a multiple of 1

Create

### Configure session

Custom

dynamic_finances	<input type="checkbox"/>
max_protection	<input type="text" value="15.0"/>
player_communication	<input checked="" type="checkbox"/>
players_per_group	<input type="text" value="4"/>
revenue	<input type="text" value="25.0"/>
set_leader	<input type="checkbox"/>
starting_funds	<input type="text" value="25.0"/>
upkeep	<input type="text" value="5.0"/>
use_browser_bots	<input type="checkbox"/>
General	
participation_fee	<input type="text" value="0.0"/>
real_world_currency_per_point	<input type="text" value="1.0"/>



## Links

After clicking create it will load up a page full of links.

[oTree](#) [Demo](#) [Sessions](#) [Rooms](#) [Data](#) [Server Check](#) [Logout](#)

### Biosecurity Game: session w549g557

[Description](#) [Links](#) [Edit](#) [Monitor](#) [Results](#) [Payments](#)

Links will play automatically with browser bots. To disable, go to settings.py and set `'use_browser_bots': False` in the session config.

You can either use the session-wide link, persistent links, or single-use links.

**Session-wide link**

If it is impractical to distribute distinct URLs to each participant, you can give the following start URL to all 10 participants.

<http://biosecurity.are.uwa.edu.au/join/rupmu0r0tm/>

Note: unlike the other link modes, this does not prevent the same person from playing twice.

**Persistent links**

If you want to give your participants permanent links that don't change, you should create your session in a [room](#).

**Single-use links**

Below are single-use links, which you can distribute to your participants. Each link has a unique code for the participant.

P1	<a href="http://biosecurity.are.uwa.edu.au/InitializeParticipant/pbqowq58/">http://biosecurity.are.uwa.edu.au/InitializeParticipant/pbqowq58/</a>
P2	<a href="http://biosecurity.are.uwa.edu.au/InitializeParticipant/xav2e18m/">http://biosecurity.are.uwa.edu.au/InitializeParticipant/xav2e18m/</a>
P3	<a href="http://biosecurity.are.uwa.edu.au/InitializeParticipant/pvtf7802/">http://biosecurity.are.uwa.edu.au/InitializeParticipant/pvtf7802/</a>
P4	<a href="http://biosecurity.are.uwa.edu.au/InitializeParticipant/hvw27qir/">http://biosecurity.are.uwa.edu.au/InitializeParticipant/hvw27qir/</a>
P5	<a href="http://biosecurity.are.uwa.edu.au/InitializeParticipant/ix08rjmc/">http://biosecurity.are.uwa.edu.au/InitializeParticipant/ix08rjmc/</a>
P6	<a href="http://biosecurity.are.uwa.edu.au/InitializeParticipant/f5c7k4c5/">http://biosecurity.are.uwa.edu.au/InitializeParticipant/f5c7k4c5/</a>
P7	<a href="http://biosecurity.are.uwa.edu.au/InitializeParticipant/rpt90b87/">http://biosecurity.are.uwa.edu.au/InitializeParticipant/rpt90b87/</a>
P8	<a href="http://biosecurity.are.uwa.edu.au/InitializeParticipant/no40gc1c/">http://biosecurity.are.uwa.edu.au/InitializeParticipant/no40gc1c/</a>
P9	<a href="http://biosecurity.are.uwa.edu.au/InitializeParticipant/j82giufc/">http://biosecurity.are.uwa.edu.au/InitializeParticipant/j82giufc/</a>
P10	<a href="http://biosecurity.are.uwa.edu.au/InitializeParticipant/007sabag/">http://biosecurity.are.uwa.edu.au/InitializeParticipant/007sabag/</a>

“Session-wide link” allows you to give the same link to multiple participants. This will allow users to open multiple windows and is not recommended. To prevent this you can append `?participant_label=<NAME>_<SURNAME>` to the link. For example: [http://biosecurity.are.uwa.edu.au/join/vdyqpgut8k/?participant\\_label=bill\\_gates](http://biosecurity.are.uwa.edu.au/join/vdyqpgut8k/?participant_label=bill_gates). This will create a unique link that can only be used by one participant and set the name of the participant label to be the participant’s name. The participant label will also show up on the Payments page as discussed later which will make it easier to know how much to pay everybody. **This is the recommended way to distribute links to players.**

Persistent links aren’t used since we are not using Rooms.

“Single-Use Links” are unique links for each individual participant, ?participant\_label= can also be appended to the link to set the participant labels. This will ensure that a participant can only access the game through one link, once, all the time.

## Edit

**oTree** Demo Sessions Rooms Data Server Check Logout

**Biosecurity Game: session** **h5yy4u1d**

[Description](#) [Links](#) [Edit](#) [Monitor](#) [Results](#) [Payments](#)

**Label:**  
  
For internal record-keeping

**Experimenter name:**  
  
For internal record-keeping

**Comment:**

**Participation fee:**  
 \$

**Real world currency per point:**

[Next](#)

Allows you to edit the following parameters

- Label – It is recommended that you put in the date and time of the experiment, or the date and time the session was made, to make sessions easily distinguishable.
- Experimenter name – Purely optional
- Comment – Purely optional, if there’s something special to mention about the session, here is the best place to put it.
- Participation Fee – as per [Configure Sessions](#)
- Real world currency per point – as per [Configure Sessions](#)

## Monitor

Displays the status of all the players in the session and allows you to advance slowest users. Advance slowest users **DOES NOT** differentiate between groups; it will move everybody forward in the session if they are behind, even if they are in a different group. It will also display the participant labels if you set them as per [Links](#).

oTree Demo Sessions Rooms Data Server Check Logout

### Biosecurity Game: session e7oocyg5

Description

Links

Edit

Monitor

Results

Payments

ID in session	Code	Label	Page	App	Round	Page name	Status	Time on page
P1	o6t3w60t		0/173 pages				Not started	
P2	ykrkotnq		0/173 pages				Not started	
P3	pdyyjp1j		0/173 pages				Not started	
P4	q0tfv9ch		0/173 pages				Not started	
P5	iodlp904		0/173 pages				Not started	
P6	zv1jqpi5		0/173 pages				Not started	
P7	7t8x5i7p		0/173 pages				Not started	
P8	71u1hyiw		0/173 pages				Not started	
P9	fwq8x9h9		0/173 pages				Not started	
P10	drwb8y5c		0/173 pages				Not started	

Advance slowest user(s)

## Results

Displays a table of results for the game that updates dynamically.

All player actions, form entries and incursion results will be displayed in this table.

Boolean values will show as 1 for true and 0 for false.

oTree

Demo

Sessions

Rooms

Data

Server Check

Logout

Biosecurity Game: session e7oocyg5

Description

Links

Edit

Monitor

Results

Payments

ID in session	Id in group	Role	Lottery question 1	Lottery question 2	Lottery question 3	Lottery question 4	Lottery question 5	Submitted answer 1
P1	1							
P2	2							
P3	1							
P4	2							
P5	1							
P6	2							
P7	1							
P8	2							
P9	1							
P10	2							

The results on this page can't be saved to local storage, these results are simply for viewing. If you want to save the data to local storage, check [Data](#).

## Payments

The payments page will show useful information on the amount of money that is owed to each player. If you set the participant labels as we recommended you should be seeing the participants full name in the participant label, making it extremely easy to work out who should be paid what. It'll also show the Total payments and the average payment per user.

oTree

Demo

Sessions

Rooms

Data

Server Check

Logout

Participants

Participant code	Participant label	Participation fee	Variable pay	Total pay	Note
o6t3w60t		\$25.00	\$0.00	\$25.00	
ykrkotnq		\$25.00	\$0.00	\$25.00	
pdyyjpj1j		\$25.00	\$0.00	\$25.00	
q0tfv9ch		\$25.00	\$0.00	\$25.00	
iodlp904		\$25.00	\$0.00	\$25.00	
zv1jqpi5		\$25.00	\$0.00	\$25.00	
7t8x5i7p		\$25.00	\$0.00	\$25.00	
71ulhyiw		\$25.00	\$0.00	\$25.00	
fwq8x9h9		\$25.00	\$0.00	\$25.00	
drwb8y5c		\$25.00	\$0.00	\$25.00	

Summary

Total payments	\$250.00
Mean payment	\$25.00

Notes/Signature

## Rooms

Rooms are not currently being implemented in the server as there was no need for such implementation. If you want to find out more about Rooms, have a look at this link.

<http://otree.readthedocs.io/en/latest/rooms.html>

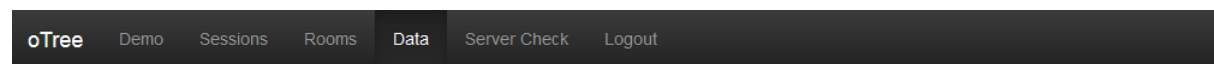
# Data

Allows you to download the data collected from experiments as a CSV or Excel spreadsheet.

To Download all the data from all apps, click on one of the links below “All apps”.

To Download documentation of each app, click on the Excel or CSV link for the respective app.

The Documentation can be downloaded from here to as a CSV file, this will show all the variables in models.py for each app, and it will show the comment we used with doc= inside models.py. This comment is also the app description. The data for a session is only available from the website when the session can still be found within the Sessions List. To keep the Sessions list clean, you can use [Archive Sessions](#)



## Data Export

### Citation requirement

If you publish research conducted using oTree, you are required by the oTree license to cite [this paper](#).

Citation:

Chen, D.L., Schonger, M., Wickens, C., 2016. oTree - An open-source platform for laboratory, online and field experiments. Journal of Behavioral and Experimental Finance, vol 9: 88-97

### All apps

[Excel](#) | [CSV](#)

Data for all apps in one file. There is one row per participant; different apps and rounds are stacked horizontally. This format is useful if you want to analyze participants' behavior across apps.

### Per-app

These files contain a row for each player in the given app. If there are multiple rounds, there will be multiple rows for the same participant. This format is useful if you are mainly interested in one app, or if you want to correlate data between rounds of the same app.

App	Data	Documentation
Biosecurity	<a href="#">Excel</a>   <a href="#">CSV</a>	<a href="#">CSV</a>
Lottery	<a href="#">Excel</a>   <a href="#">CSV</a>	<a href="#">CSV</a>
Results	<a href="#">Excel</a>   <a href="#">CSV</a>	<a href="#">CSV</a>

### Time spent on each page

[Download](#)

# Server Check

## Server Readiness Checks

For details on how to fix any issues highlighted below, see [here](#).

You have a recent version of oTree (1.0.0).

You are using a proper database (Postgres, MySQL, etc).

**DEBUG mode is on** You should only use DEBUG mode during development and testing of your app. Before launching a study, you should switch DEBUG mode off. To turn off DEBUG mode, set the environment variable `OTREE_PRODUCTION` to `1`.

You are using a server other than `runserver`.

**Sentry not configured** Sentry can send you the details of each server error by email. This is necessary because once you have turned off `DEBUG` mode, you will no longer see Django's yellow error pages; you or your users will just see generic "500 server error" pages. oTree offers a free Sentry service; you can find the sign-up link in the oTree documentation.

Password protection is on. Your app's `AUTH_LEVEL` is `STUDY`.

Your database appears to be synced.

Indicates that the server has updated to the latest version of oTree

You have a recent version of oTree (1.0.0).

Indicates that server is setup with a database. The database currently being used is Postgres

You are using a proper database (Postgres, MySQL, etc).

Indicates whether DEBUG mode is on. DEBUG will be set to off when the product is fully launched

**DEBUG mode is on** You should only use DEBUG mode during development and testing of your app. Before launching a study, you should switch DEBUG mode off. To turn off DEBUG mode, set the environment variable `OTREE_PRODUCTION` to `1`.

Indicates that the server is being run with `otree runprodserver --port=80` which is recommended for when the product enters production.

You are using a server other than `runserver`.

Indicates that sentry is not being used. Sentry is a free service provided by oTree that sends server error messages via email. To sign up to sentry, click on this link:

<http://otree.readthedocs.io/en/latest/server/heroku.html#sentry>

**Sentry not configured** Sentry can send you the details of each server error by email. This is necessary because once you have turned off `DEBUG` mode, you will no longer see Django's yellow error pages; you or your users will just see generic "500 server error" pages. oTree offers a free Sentry service; you can find the sign-up link in the oTree documentation.

Indicates that the server is password protected

Password protection is on. Your app's `AUTH_LEVEL` is `STUDY`.

Indicates database is synced

Your database appears to be synced.

## Kiosk Mode

When working inside the labs all the time, it would be useful to set up a kiosk mode on a browser with prevents users from accessing the address bar, going back on the pages or accessing the console and elements of the web page via F12. We did not get a chance to install it, if you want to give it a go. Here's the link.

<http://otree.readthedocs.io/en/latest/admin.html>

## Server Set Up

First thing you'll need to start your own server is a machine to work with, own server is running with Dual Cores, 4GB ECC RAM, 60GB Storage with room for expandability. The operating system can be anything, oTree server can be run on any Operating system that can handle Python and Django.

The instructions I provide will closely follow what is set in the oTree documentation mainly focusing on Windows Server Installation, the link for that is here:

<http://otree.readthedocs.io/en/latest/server/intro.html>

### 1) Install Python 3.5.2, Postgres 9.6, Redis

The links for their sites are below:

<https://www.python.org/downloads/>

<https://www.postgresql.org/download/>

**Take note of your root Postgres password**

**The link for Redis, is for windows:**

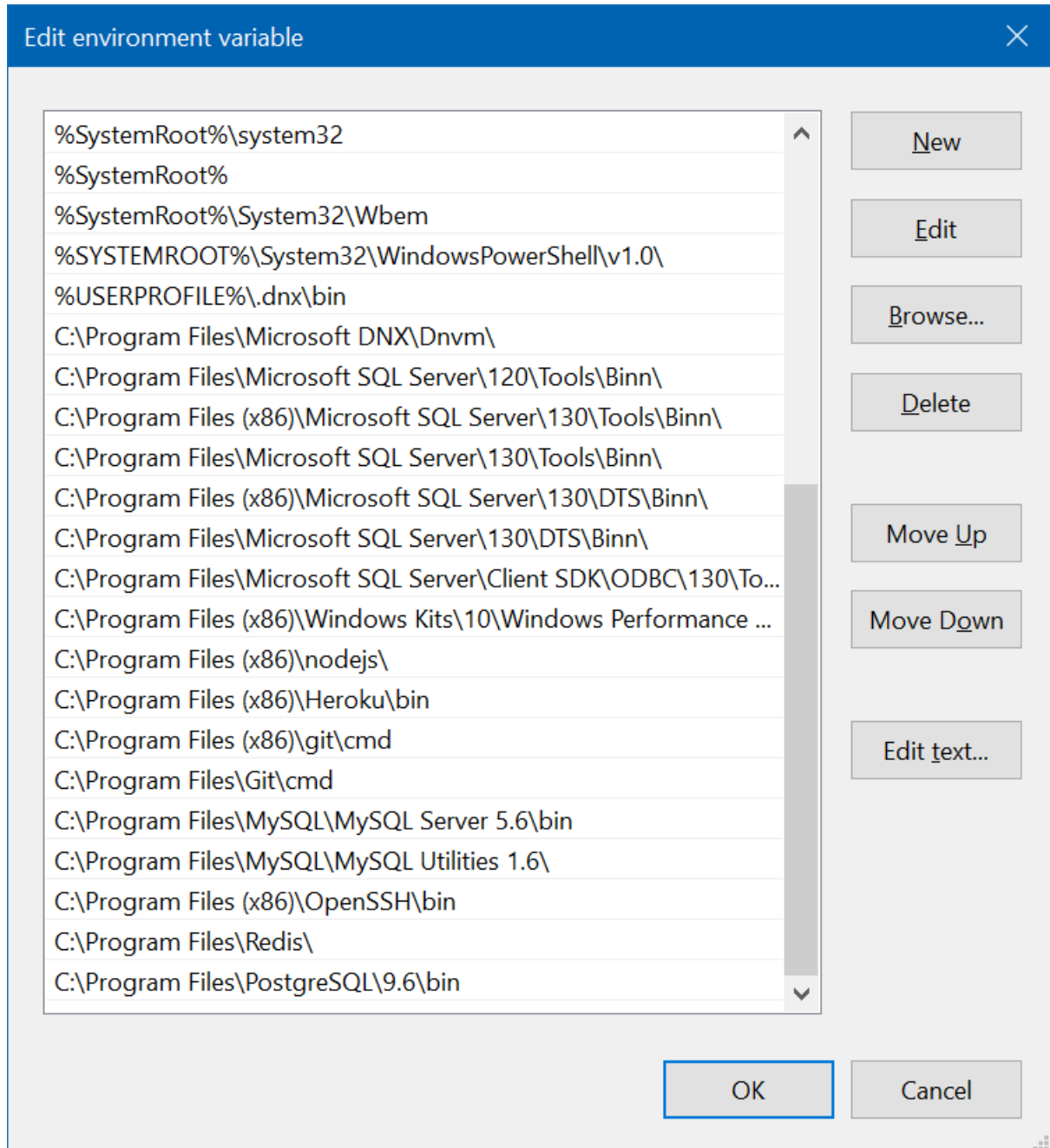
<https://github.com/MSOpenTech/redis/releases>

When installing Python, choose the option **ADD TO PATH**.



## 2) Install oTree and psycopg2

First access your environment variables and make sure that Python and Postgres are added to the PATH. Postgres is most likely not in there, to do this on windows search for environment variables and open the **System Environment Variables**. Look for PATH and then make sure Postgres is added to the PATH variable.



Once the variable has been set up, open your command line (it is best to do this as administrator):

```
pip3 install -U otree-core  
pip3 install psycopg2
```

If psycopg2 doesn't work try this link: <http://www.stickpeople.com/projects/python/win-psycopg/>

Now while you have the command prompt open you should test Redis using the command:  
**redis-cli ping**

It should return **PONG**

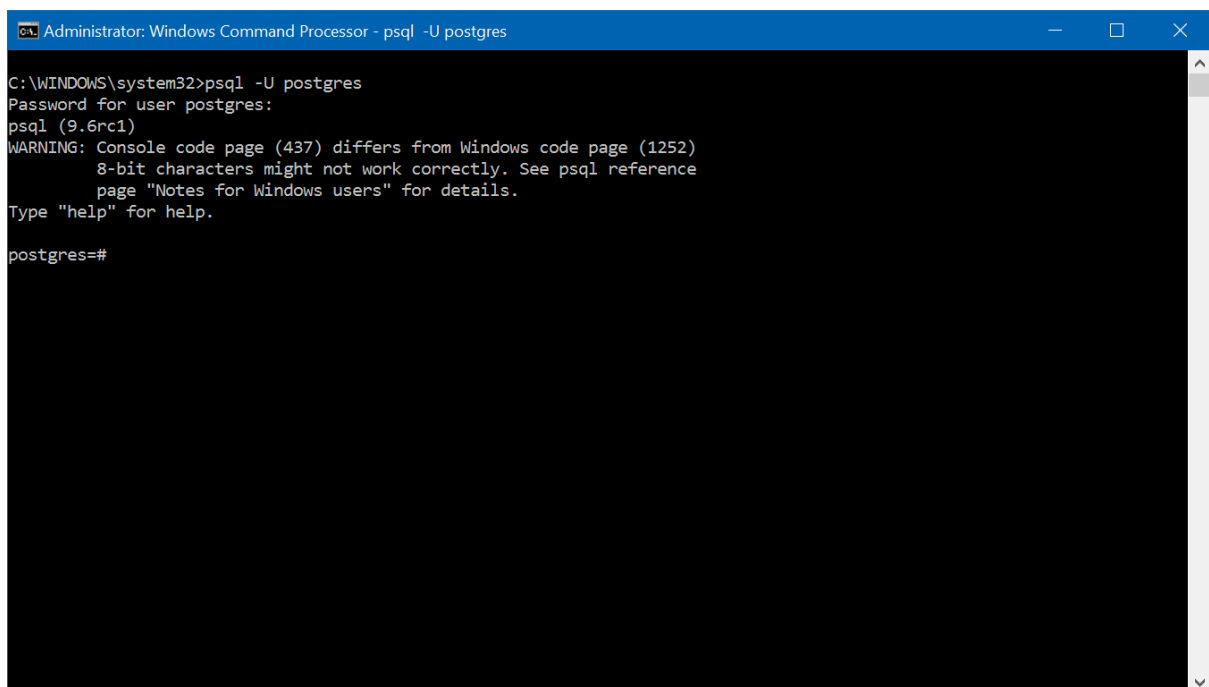
### **3) Configuring Postgres**

In your command line do the command:

```
psql -U postgres
```

Type in the password you used during the setup of Postgres.

It should come up with the Postgres bash.



```
Administrator: Windows Command Processor - psql -U postgres  
C:\WINDOWS\system32>psql -U postgres  
Password for user postgres:  
psql (9.6rc1)  
WARNING: Console code page (437) differs from Windows code page (1252)  
8-bit characters might not work correctly. See psql reference  
page "Notes for Windows users" for details.  
Type "help" for help.  
postgres=#
```

Use these commands:

```
CREATE DATABASE django_db;  
CREATE USER otree_user WITH PASSWORD '<your password here>';
```

**GRANT ALL PRIVILEGES ON DATABASE django\_db TO otree\_user;**

Do these commands but change the password to something you'll remember.

Now another thing to do here is to make otree\_user the owner of the django\_db database and grant otree\_user permissions to create a Database. You'll need to do this if you intend of running tests using bots within the command line.

**ALTER DATABASE django\_db OWNER to otree\_user;**  
**ALTER ROLE otree\_user WITH CREATEDB;**

Now exit postgres with:

**\q**

Now go back to your System Environment Variables, if you can't remember how to do that, refer to [2\) Install oTree and psycopg2](#). You'll need to create a new System Environment Variable called DATABASE\_URL, you must give it the value:

**postgres://otree\_user:<your password here>@localhost/django\_db**

This ensures that when oTree looks for a database to use, it searches for django\_db a postgres database. **Upon testing it will create another database test\_django\_gb.**

#### **4) Preliminary Checks**

If you have done the above settings, you should be able to navigate to some directory inside your command line and use:

**otree startproject otree\_test**

**(It'll prompt for the sample games, type 'y' and hit enter)**

**cd otree\_test**

**otree resetdb**

**(It'll prompt for the reset, type 'y' and hit enter)**

```
Administrator: Windows Command Processor

C:\otree>otree startproject otree_test
Include sample games? (y or n): y
Created project folder.

C:\otree>cd otree_test

C:\otree\otree_test>otree resetdb
This will delete and recreate your database.
Proceed? (y or n): y
[INFO]2016-10-21 04:32:37,426] otree > Database engine: PostgreSQL
[INFO]2016-10-21 04:32:37,426] otree > Retrieving Existing Tables...
[INFO]2016-10-21 04:32:39,536] otree > Dropping Tables...
[INFO]2016-10-21 04:32:39,693] otree > Creating Database 'default'...
Operations to perform:
  Synchronize unmigrated apps: prisoner, real_effort, principal_agent, battle_of_the_sexes, public_goods_simple, volunte
er_dilemma, bargaining, common_value_auction, stackelberg, ultimatum, trust, payment_info, auth, contenttypes, djhuey, s
taticfiles, trust_simple, survey, cournot, matching_pennies, otree, quiz, floppyforms, admin, channels, dictator, messag
es, lemon_market, guess_two_thirds, timeout, vickrey_auction, rest_framework, sessions, public_goods, bertrand, idmap, t
raveler_dilemma
  Apply all migrations: (none)
Synchronizing apps without migrations:
  Creating tables...
    Creating table auth_permission
    Creating table auth_group
    Creating table auth_user
    Creating table otree_pagecompletion
    Creating table otree_pagetimeout
    Creating table otree_completedgroupwaitpage
    Creating table otree_completedsubsessionwaitpage
```

If it gets through these tests, then oTree is ready on your system.

## 5) Run The Server

Now let's say you've followed my instructions to the letter and have made your own code, and have a website URL that you can use that's pointed towards your server's I.P Address via DNS (If you didn't understand that you may need to get someone to help you). If you meet those requirements, then try:

**otree runprodserver --port=80**

This will run the server for production, it will automatically run otree collectstatic for you, and since it runs on port 80 (which is HTTP) it will automatically route to your server when you type in the domain in a web browser.

Now close that for a moment, we need to make sure your oTree server is truly ready for its production stage.

You need to make System Environment Variables:

**OTREE\_AUTH\_LEVEL** with value **STUDY** or **DEMO**

(**STUDY**, restricts admin page to login only, **DEMO** allows any user who comes across the page to access the demos on the [Demo](#) page)

**OTREE\_PRODUCTION** with value **1**

**OTREE\_ADMIN\_PASSWORD** with value <another memorable password>

Now, restart the command line and navigate to your oTree Server directory  
And run:

**otree runprodserver --port=80**

add **--botworker** if your server has [browser bots](#) enabled.

**Make sure port 80 is allowed through your firewall and port forwarded in your router if necessary.**

Congratulations, you have yourself an oTree server running on Windows!

## **6) Server Maintenance**

Some advice for Maintenance, try to configure a .bat file for automatic maintenance of the server and run it weekly or fortnightly with Task Scheduler so you don't have to keep an eye on it. Try not to upgrade oTree on the server too much, updates could break your code!