

# Manual for Cyberball 5

Cyberball 5's development was made possible by NSF grant award #1339160

## Overview

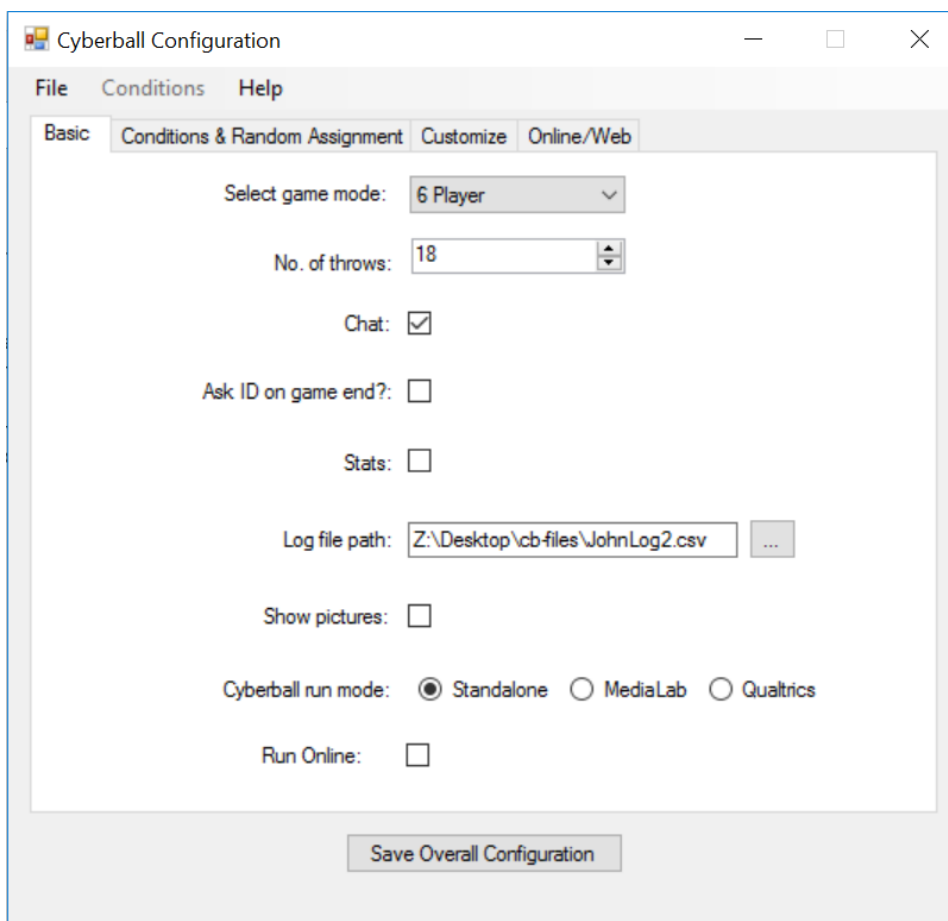
Cyberball 5 is broken down into 3 components: 1) “Configure CB 5” for configuring both desktop and online games/experiments, 2) “Play CB 5” the animated desktop game, and 3) “Play Online CB 5” the animated internet version of the game which runs in a browser. As an experimenter, you will configure your experiments through the “Configure CB 5” application while your participants will play the game through the “Play CB 5” application or the “Play Online CB 5” game/website. The focus of this manual will be the configuration application.

**IMPORTANT CONCEPT:** The same Cyberball configuration file (.cbe) can be used in the desktop and the web-based version of the game to give participants the same experience in the lab or online.

## Configure CB 5 Application

### The Basic Screen

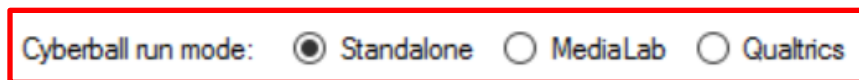
To configure your first experiment, launch the “Configure Cyberball 5” application via the shortcut on the start menu. The configuration application will open to the “Basic” screen as seen below:



**IMPORTANT CONCEPT:** On the “Basic” screen you are configuring experiment wide settings. Other screens provide condition-based configuration options.

On the basic screen, you can specify key options such as to allow chat or whether to show pictures by simply toggling the appropriate checkboxes. On this screen you will also specify the location and name of the log file for the Cyberball game to write to for the desktop version of the game. For the online version of the game, the log file is written and maintained for you on the web server. You'll see how to download it when we cover the Online/Web tab or screen.

**IMPORTANT CONCEPT:** On the basic screen you'll see the option for "Cyberball run mode" this option allows you to have the desktop version of Cyberball work with either MediaLab or Qualtrics or to have the game run alone. This option only applies to the desktop version of the game. This option is highlighted here:



Run Online:

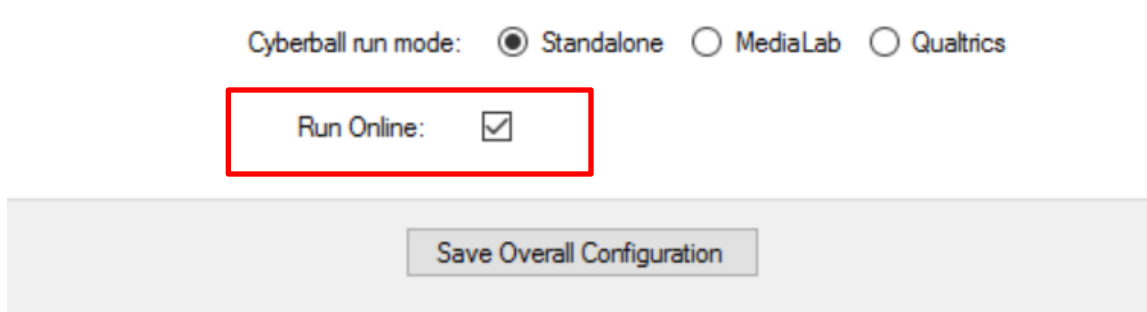
Save Overall Configuration

This option toggles whether the game (and conditions, random assignment, etc.) will be controlled by MediaLab or Qualtrics or if the game will be run independently. Most times MediaLab or Qualtrics will be checked, but if you want to run through the game on your own (for testing or whatever reason) select "Standalone." In "Standalone" mode the Cyberball game will prompt you for a condition number and participant ID each time it is run.

When ready, you can save the overall configuration file by clicking the "Save Overall Configuration" button. By default this will save the Cyberball .cbe file into a folder on the desktop called "cb-files."

**IMPORTANT CONCEPT:** The Cyberball desktop game needs the "cb-files" folder on the desktop to work correctly. It will look in this folder for a .cbe (configuration) file. **Only one configuration file** can be in the "cb-files" folder at one time or the Cyberball desktop game will not run correctly.

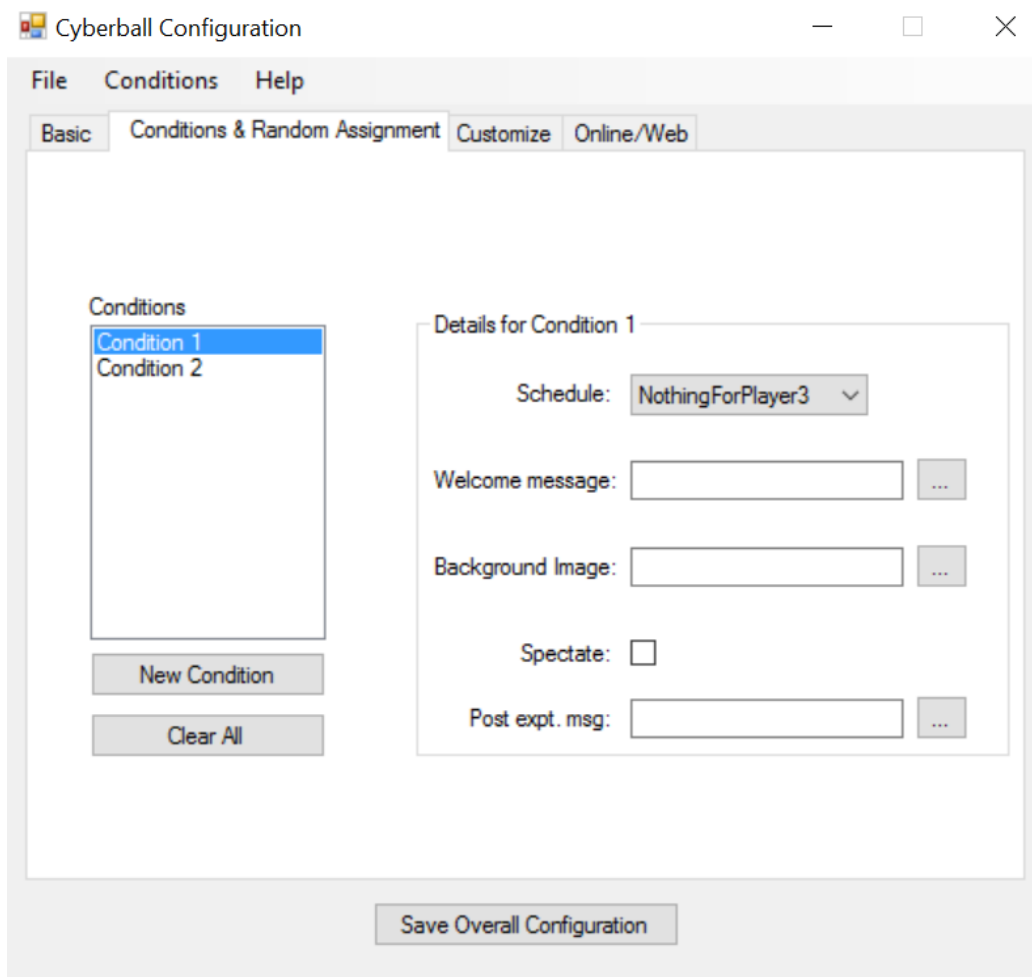
The final option on the “Basic” screen is the “Run Online” checkbox that when checked will unlock the “Online/Web” tab and open up the possibility of running the Cyberball game from a web server. This option is checked here:



For a detailed discussion of how to run Cyberball online please see the **Online/Web – Running Cyberball Online** section below.

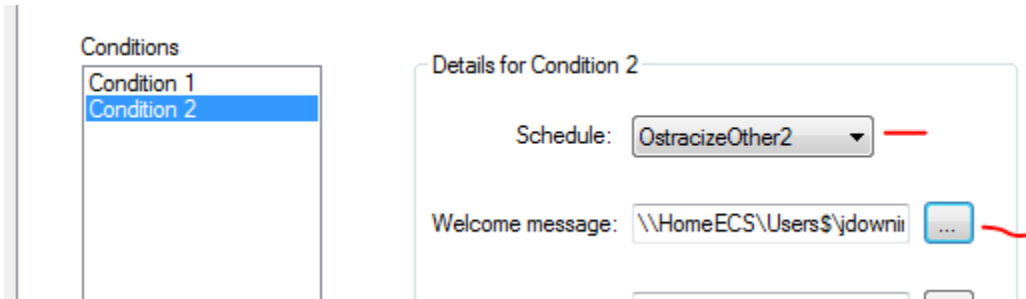
### Conditions & Random Assignment

To configure conditions, navigate to the “Conditions & Random Assignment” screen shown here:



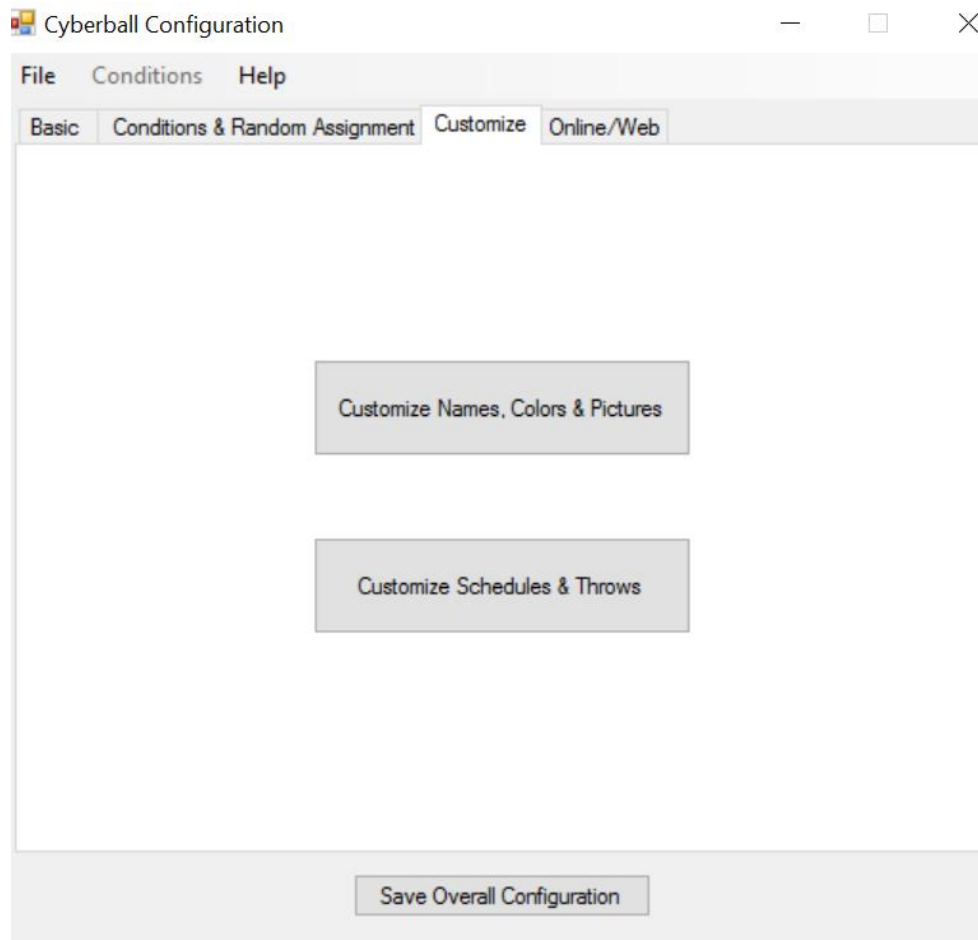
On this screen you'll create and configure the conditions of your experiment. You can manipulate the welcome message, the background image, the post experiment message, and whether the participant will spectate. Also, here you assign the Schedule (custom or pre-programmed) that the participant will receive in the particular condition.

Here we've set the Schedule to "OstracizeOther2" and provided a custom message for Condition 2:



### Further Customizations of the Cyberball Game

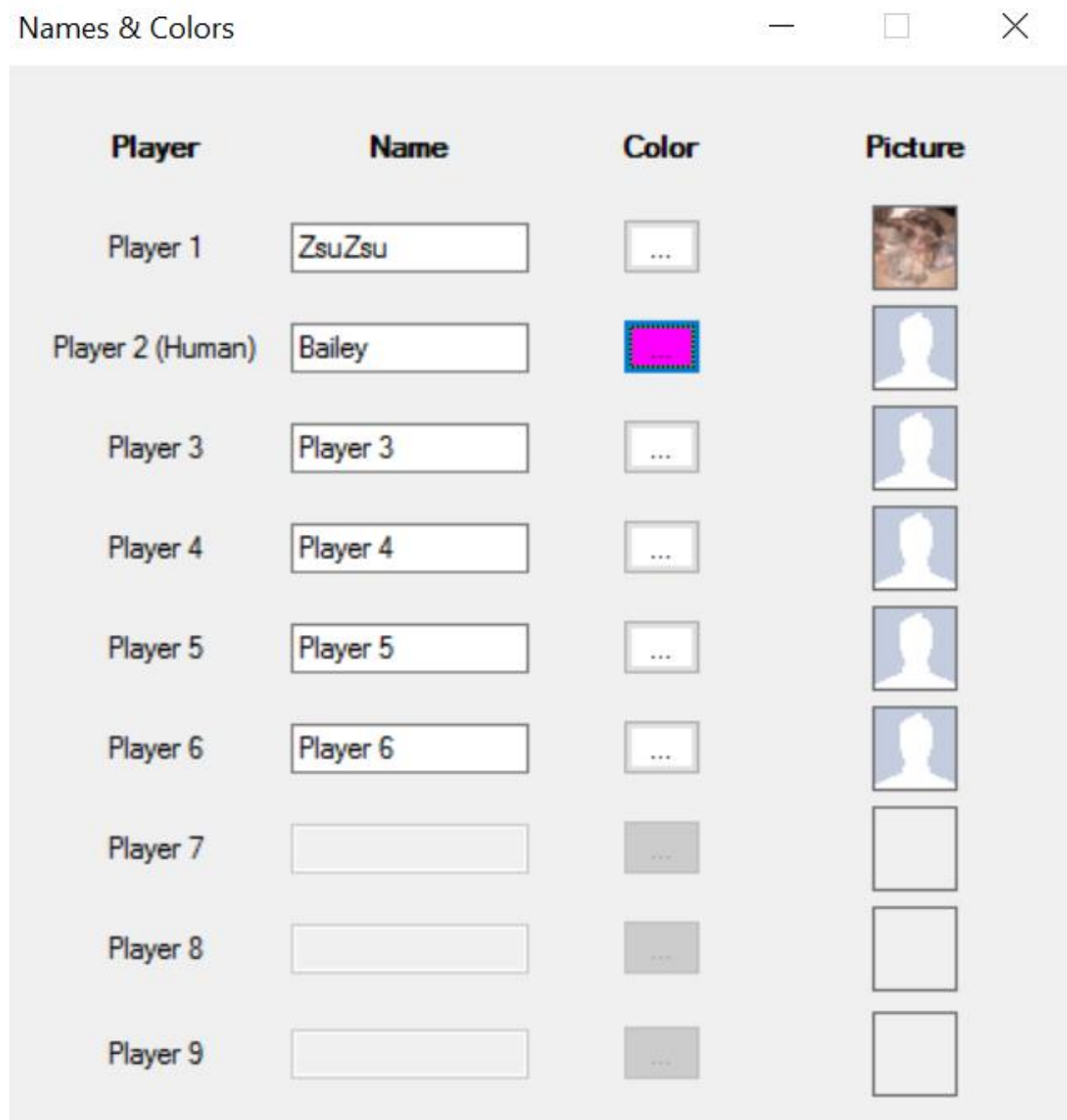
To customize the game further (create your own schedule, add custom messages, delay specific throws, change names, colors, and pictures) navigate to the "Customize" screen seen below:



IMPORTANT CONCEPT: Customizations of names, colors, and pictures are experiment wide. Customizations of schedules and throws are typically specific to a condition.

**Customize Names, Colors & Pictures**

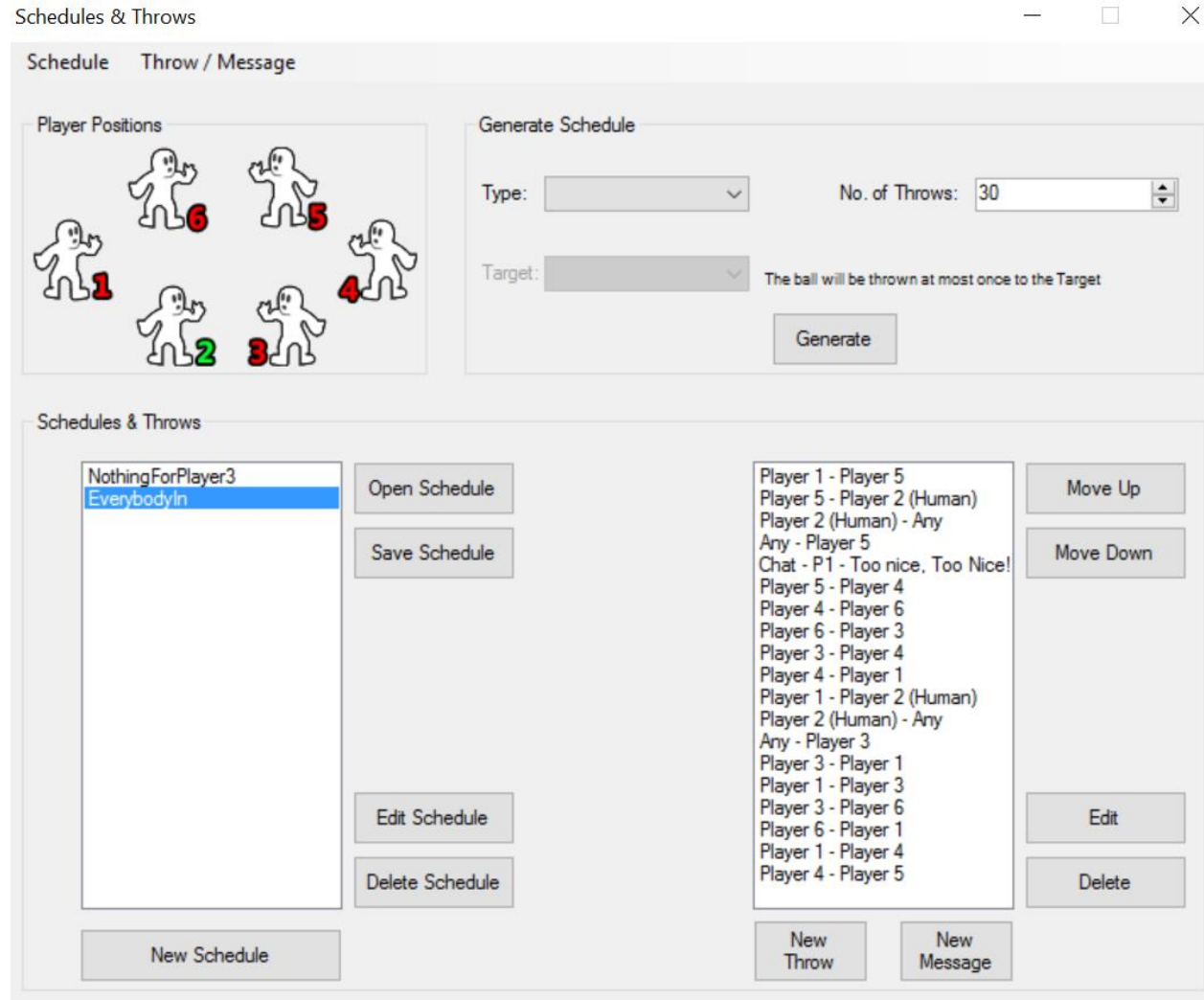
To customize names, colors, and pictures navigate to the “Names & Colors” screen as seen here:



On this form you can change the names of players (remember that Player 2 is the human player), select a color for their Cyber-person, and select a picture to be displayed for the player.

## Customizing Schedules, Throws, and Messages

To easily create a custom schedule made up of custom throws and messages, navigate to the “Schedules & Throws” screen seen here:

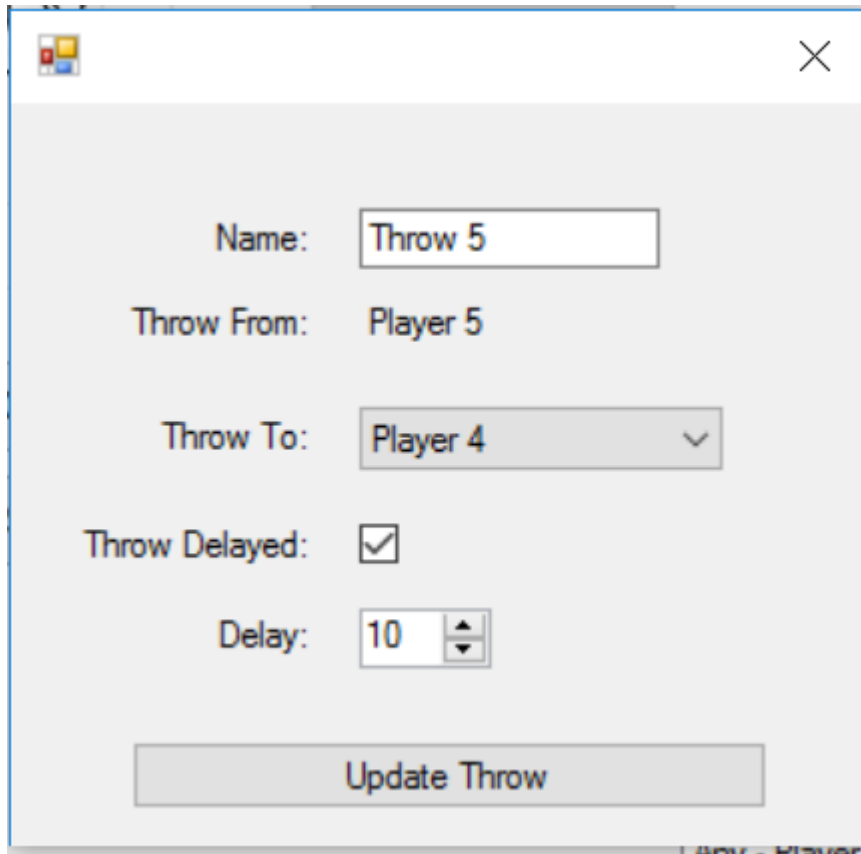


On this screen you can do any number of the following:

1. Generate a schedule of a specified number of throws based on common ostracism or inclusion schedules.
2. Create a blank schedule in which you customize all throws and their order.
3. Create or modify a custom throw to add to a schedule.
4. Create or modify a custom message to have any of the players say during the game at the moment and for the length (in seconds) you specify.
5. Save the Schedule you create to a separate file for sharing with other experimenters.
6. Open an existing Schedule.

**IMPORTANT CONCEPT:** The number of players available for throws etc. on the custom Schedules screen is determined by your choice of number of players on the “Basic” screen.

One thing an experimenter may want to do is add a delay to a particular throw. To do this, select the throw to modify from the list of throws displayed for the schedule in the listbox on the right side of the “Schedules & Throws” form. This action brings up the customize throw screen seen here:



The screenshot shows a dialog box for customizing a throw. It has a title bar with a close button. The fields are:

- Name: Throw 5
- Throw From: Player 5
- Throw To: Player 4
- Throw Delayed:
- Delay: 10

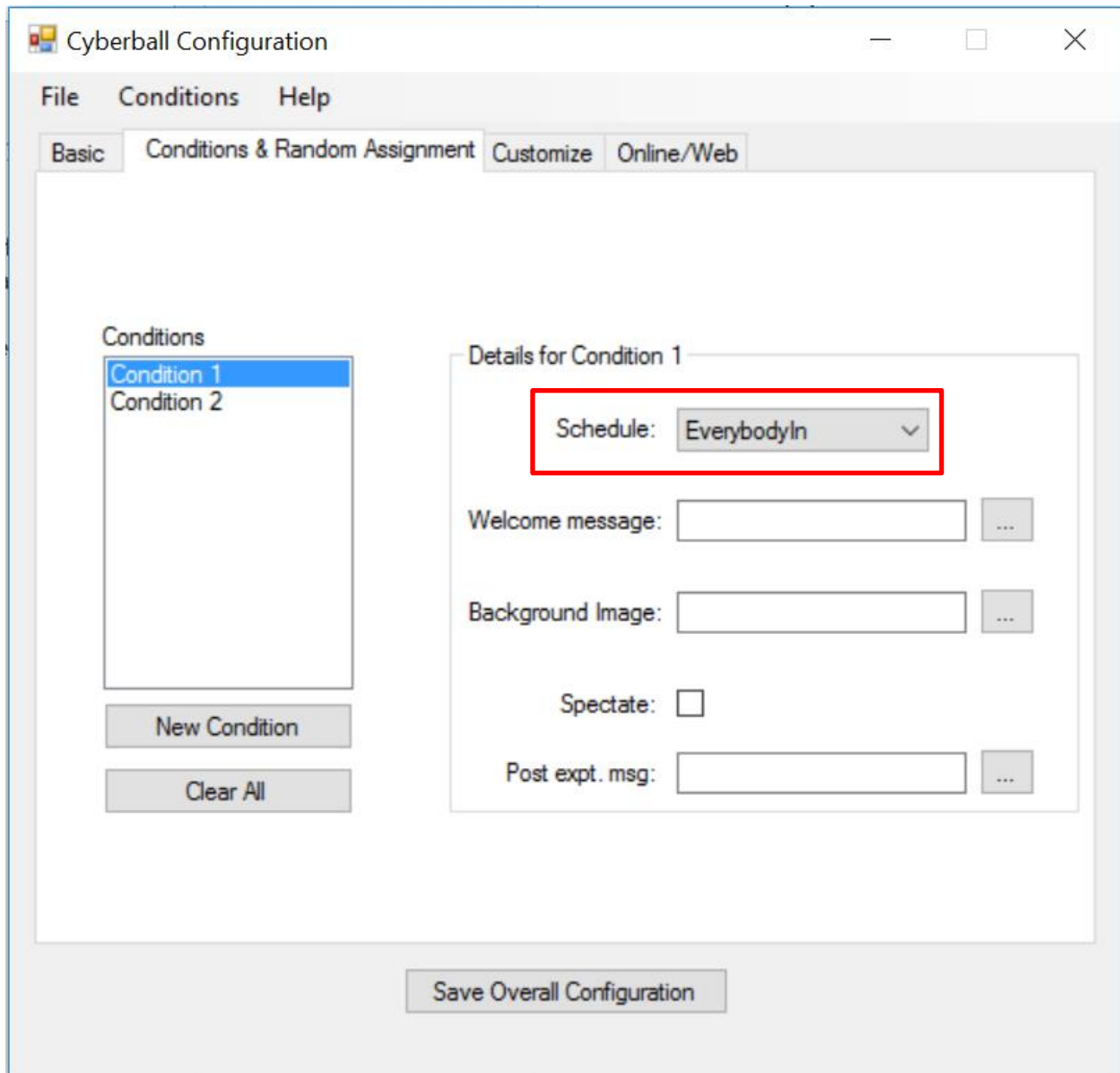
At the bottom is an "Update Throw" button.

To delay a throw, select the “Throw Delayed” checkbox and then chose the number of seconds for the delay and enter this into the “Delay” textbox. From this form you can also name the throw, and where it makes sense, change the Player the throw is meant for. Hit “Update Throw” to save your changes.

### **Assigning a Custom Schedule to a Condition**

Once you have created a custom Schedule (named “EverybodyIn” in this example), it will be available to assign to a condition on the “Conditions & Random Assignment” screen. In the below illustration we have assigned the “EverybodyIn” to be the schedule used for Condition 1:

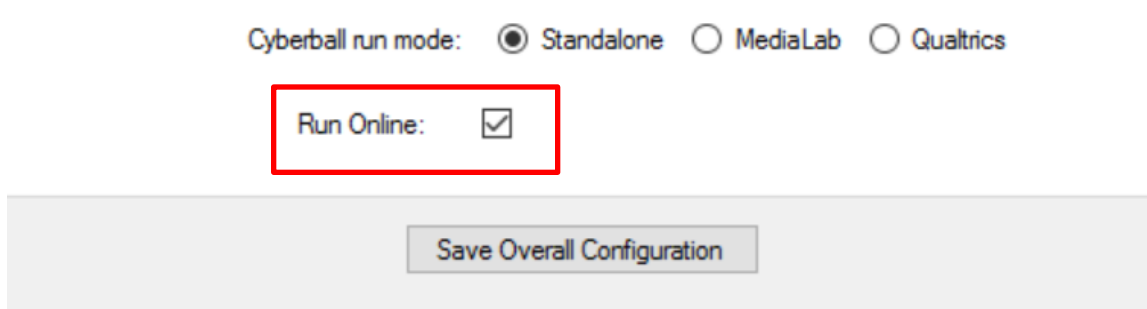




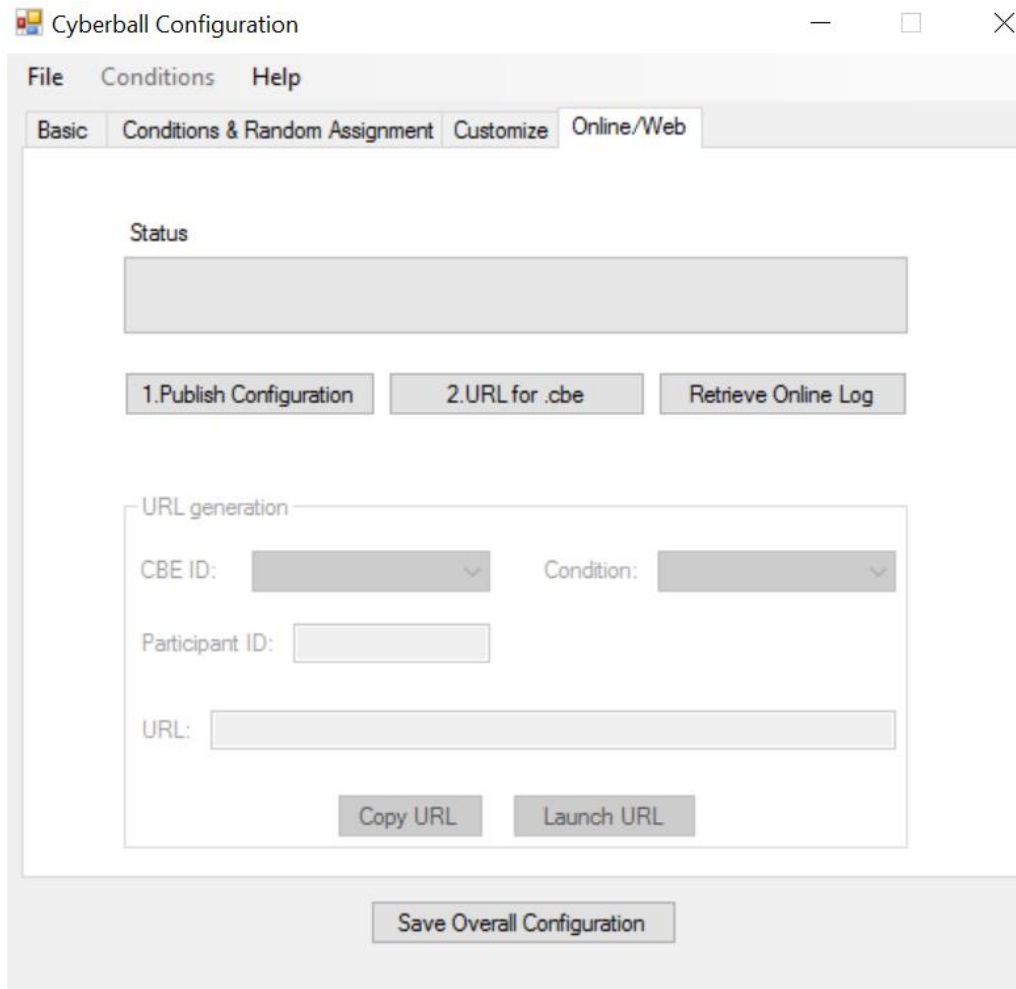
Simply hit the “Save Overall Configuration” button to save your experimental configuration file. Place the resulting .cbe file in the “cb-files” directory (it will be saved there by default). Now, the desktop game version of Cyberball is configured for the experiment.

### Online/Web – Running Cyberball Online

Once you have a configuration of Cyberball that you like (stored in a .cbe file) you are ready to publish this configuration file online and run an experiment on the web. To start, go back to the “Basic” screen or tab and check the “Run Online” box as seen here.



With Run Online option checked, the “Online/Web” tab, seen here, becomes enabled. The “Run Online” on the “Basic” screen must be checked to work fully with the online version of Cyberball through the Cyberball configuration application.



There are three key buttons on this form that you'll want to approach in order. They are:

1. "Publish Configuration" – This button allows you to publish your experiment file (.cbe) to the Cyberball webservers. Once it is published you can run an experiment online based on that configuration. But you must first publish your .cbe before continuing.

**IMPORTANT CONCEPT:** The Cyberball configuration files (.cbe) are universal. You can use the same configuration file on the internet that you, or another experimenter, has used with the desktop version of Cyberball.

2. "URL for .cbe" – This button will generate the correct url (web address) for your experiment, the condition you select, and the participantID you provide.
3. "Retrieve Online Log" – After you have run some participants you will want to download the log file that pertains to your experiment.

After publishing the configuration file, select the "URL for .cbe" button and the "URL generation" portion of the form will become enabled.

**IMPORTANT CONCEPT:** Cyberball's online version runs on shared servers. This means you do not need to have your own server (as in Cyberball 4) to run an online experiment. However, to keep track of your experiment amongst the many running concurrently on the Cyberball servers, you will need to keep track of the "CBE ID."

### The CBE ID

The "CBE ID" uniquely identifies your experiment—globally. The "CBE ID" is necessary for URL generation and any other task associated with the online experiment, such as retrieving the log file. The number/key Cyberball creates for the "CBE ID" is called a GUID and is guaranteed to be unique. Thus, you do not need to worry about another experimenter running your experiment with your "CBE ID" — unless you want them to in which case you can provide them the "CBE ID" or GUID. You will need this number to run the appropriate experiment and also to download the corresponding log file.

Because GUIDs are hard to remember and keep track of, Cyberball includes a feature where the GUIDs (CBE IDs) that you generate for your experiments are saved to a file located at "Desktop/cb-files/mycbes.csv." This file provides a cheat sheet connecting the "CBE IDs" to the particular .cbe experiment files that have been uploaded to the server. The file has three columns: "CBE ID", "# of Conditions", and "Location of .cbe File." Here's an example:

CBE ID	# of Conditions	Location of .cbe File
3c640137-4975-418e-b4ae-764317966c23	3	Z:\Desktop\cb-files\Cyberball5281_Test.cbe
0d2d2afd-a151-49b1-95b4-5baa46165704	2	Z:\Desktop\cb-files\Cyberball5281_Test_again2.cbe
8c5fa50f-e037-4374-bfaf-2368d8885985	4	Z:\Desktop\cb-files\Cyberball5281_Test_withIntID.cbe

Here we've highlighted the "CBE ID", which is "3c640137-4975-418e-b4ae-764317966c23" in this example. Notice that this "CBE ID" is included in the URL for the experiment. This tells the Cyberball webserver which experiment to run when the participant accesses the URL. This "CBE ID" is highlighted below.

- 1.Publish Configuration
- 2.URL for .cbe
- Retrieve Online Log

URL generation

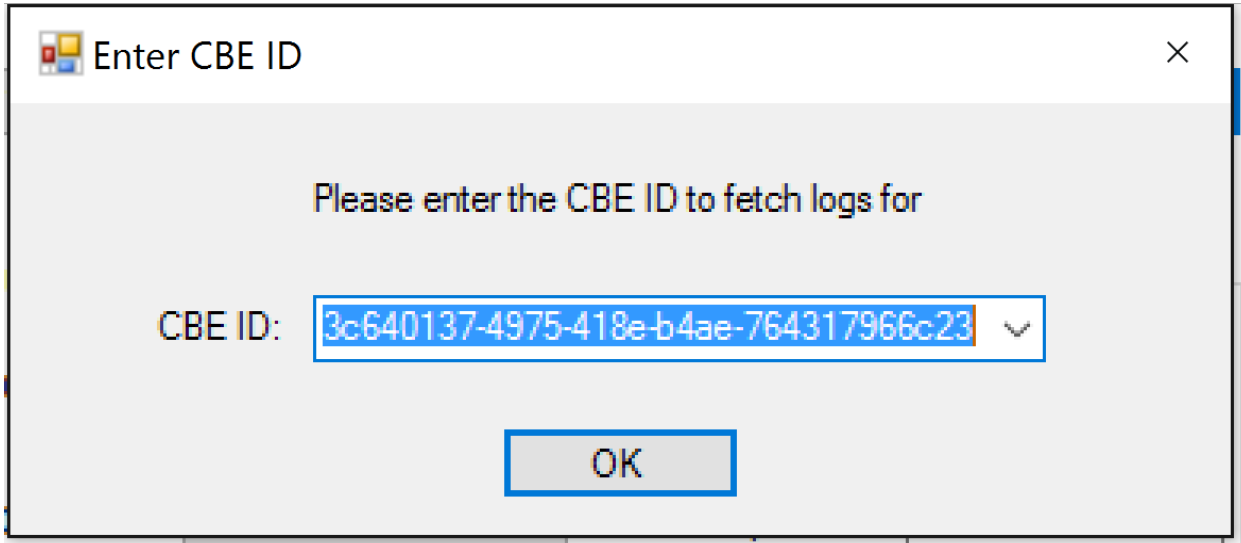
CBE ID:

Condition:  Participant ID:

URL:

### Retrieving the Log File

When you click the “Retrieve Online Log” file button, the form that pops up will ask which log, identified by the unique “CBE ID.” Just enter the “CBE ID” manually as seen here or select the “CBE ID” from the drop down box. This drop down box is populated by the “mycbes.csv” contained in the “cb-files” directory.



Enter CBE ID

Please enter the CBE ID to fetch logs for

CBE ID: 3c640137-4975-418e-b4ae-764317966c23

OK

When the “OK” button is clicked, the log file for “CBE ID” “3c640137-4975-418e-b4ae-764317966c23” will be automatically saved on your desktop.