Psyact JATOS Onboarding Guide

Version 1.0 - May 2025

Psychiatry in Action Lab, Tel Aviv University



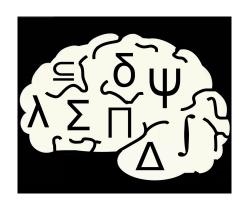


Table of Contents

- What is JATOS?
- JATOS Installation
- Local vs. Server JATOS
- Creating Your Study Locally
 - Running an Experiment
 - Pre-Export Checklist
 - Exporting Data
 - JATOS Key Features
 - Troubleshooting
 - Further Resources

What is JATOS?

JATOS (Just Another Tool for Online Studies) is a web application that helps researchers set up and run online studies. It allows you to manage experiments, collect participant data, and host your studies on your own infrastructure.

- o Create and manage online experiments
- o Collect data from participants worldwide
- o Host studies on your own infrastructure
- Work with various programming frameworks

JATOS Installation

Local Installation (For Coding Your Experiment)

- Download JATOS from the official website:
 https://www.jatos.org/Installation.html
- o Extract the ZIP file to a location on your computer
- Important: Do not place JATOS in cloud-sync folders like Dropbox or Google Drive

Starting JATOS:

- Windows: Double-click on `loader.bat`
- Mac/Linux:
 Open the JATOS folder in terminal
 run: ./loader.sh start

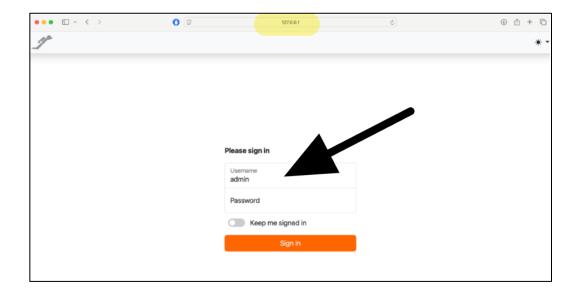


Access JATOS via your browser at http://localhost:9000

Default credentials (change immediately if used beyond local testing):

Username: admin

Password: admin



Local vs. Server JATOS

Local JATOS (Development & Testing)

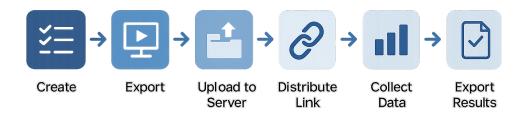
- Used for creating and testing studies locally.
- o Only accessible from your own machine.
- o Typical URL: http://localhost:9000

Server JATOS (Live Deployment)

- o Used for running studies with real participants.
- Accessible over the internet https://jatos.psyact.org
- You export your study from local and import it into the server.

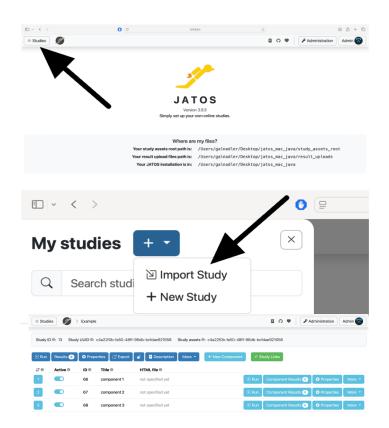
Workflow Summary:

- o Create & test on Local JATOS
- Export the study as a .jzip file
- Import it into Server JATOS
- o Distribute participation links
- $\circ \quad \text{Monitor and export results}$



Creating Your Study Locally

- o Log into JATOS
- Click 'New Study' in the sidebar
- o Enter the study title, description, and JSON input if needed
- Click 'Create'
- o Add components: define title, HTML file, and JSON input for each
- Drag components to reorder them



Unlocked study: allows editing and modifying components.



Locked study: read-only mode to protect from changes.



When your study is underway, make sure to LOCK the study on JATOS!

Minimum HTML Requirements:

(Try using an existing experiment as example - https://www.jatos.org/Example-Studies.html)

```
<html>
<head>
<script src='jatos.js'></script>
</head>
<body>
<script>

jatos.onLoad(function()) {

// Your code using JATOS
});

</script>
</body>
</html>
```

The **jatos.appendResultData()** command saves the data trial by trial. It is the recommended method to save your data.

Note for Experiments Using jsPsych

If your experiment uses jsPsych, **DO NOT upload the entire jsPsych library as a folder** within your study.

Instead, **you must load jsPsych at the beginning of your code** using the following URL: https://static.psyact.org/

Example: In your HTML <head>, add:

```
<script src="https://static.psyact.org/jspsych/jspsych.js"></script>
<link href="https://static.psyact.org/jspsych/jspsych.css" rel="stylesheet" />
```

This ensures compatibility with server policies and reduces redundancy.

Running an Experiment

Experiment Workflow:

1. Development:

- Create and test your study on local JATOS
- Adjust as needed

2. **Testing**:

- Run through the entire experiment multiple times
- o Test all conditions and paths through the experiment
- Complete the Pre-Export Checklist before proceeding

3. Pre-Export Checklist:

- Complete the Pre-Export Checklist to ensure your study is 100% ready
- IMPORTANT: Only export to server JATOS when the study is finished and tested

4. Transfer to Server:

- o On your local JATOS, click on your study in the left sidebar
- Click "Export" on the study toolbar



- Save the .jzip file to your computer
- o On your server JATOS, click "Import" and select the .jzip file

5. **Participant Recruitment**:

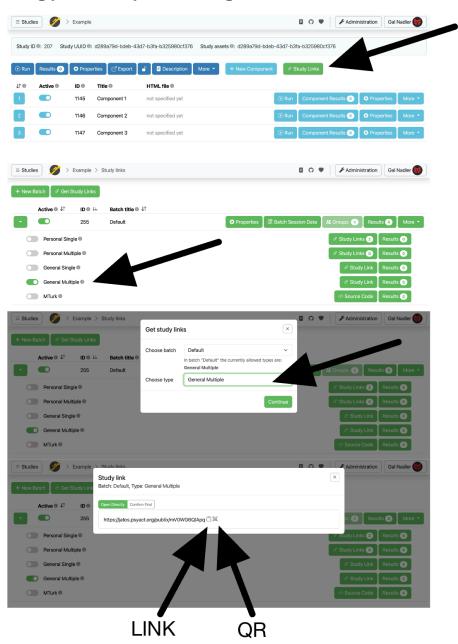
- o On server JATOS, go to your study
- Click "Study Links" to generate links for participants
- choose the appropriate worker type (Personal Single, MTurk, etc.)
- Distribute the generated links to participants

6. **During the Study**:

- Monitor progress in the Results section
- Check for any issues or errors

Worker Types and generate link:

- o Personal Single: one-time use by one person
- o Personal Multiple: same person, multiple runs
- o General Single: public link, single use
- General Multiple: public link, multiple uses Recommended for running your study online, e.g., on Profilic



Pre-Export Checklist

DO NOT upload your study to the server before making sure it runs smoothly with no errors ON YOUR LOCAL JATOS.

DO NOT upload your study if it is larger than 10 MB overall.

DO NOT upload your study if the final data file it generates has a size greater than 1 MB per participant.

Our server is a valuable shared resource that we've invested significant effort into setting up and maintaining. It also contains highly valuable data. Please use it responsibly and with consideration for other users.

<u>IMPORTANT!</u> If you expect your experiment to require significant memory or computational resources (e.g., heavy libraries, complex visual stimuli, or large data processing), **please contact us before uploading your study**.

This helps us ensure smooth performance for all users and maintain server stability.

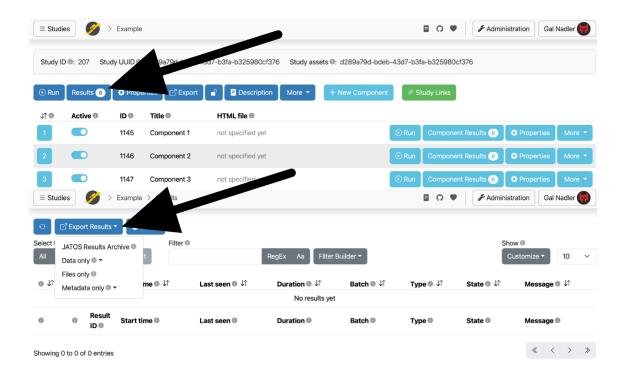
▼ Functionality Checklist:

[] Run through the entire study from start to finish multiple times
[] Test all possible paths through the experiment (if there are
conditions or branching)
[] Verify all instructions are clear and free of typos
[] Confirm all stimuli (images, videos, audio) load correctly and
completely
[] Check that all interactive elements (buttons, sliders, text inputs)
work as expected
[] Test any timers or timing-dependent features to ensure they
function correctly
[] Verify browser compatibility (test in Chrome, Firefox, Safari, etc.)
[] Test on different devices (desktop, tablet, mobile) if applicable

■ Data Collection:	
	[] Confirm all necessary data is being collected (nothing missing) [] Check that data is structured in the expected format [] Test downloading results to ensure they can be exported correctly [] Ensure results are being saved appropriately after each component/task
A Error Handling:	
	[] Test what happens if a participant refreshes the page or does something unexpected [] Check behavior if a participant closes the browser and returns later [] Ensure appropriate error messages appear if something goes wrong [] Verify proper end-of-study behavior and messaging
Resource & Security:	
	[] Ensure total study size is lower than 10MB [] Ensure final data size is lower than 1MB per participant [] Confirm participant data is anonymized appropriately [] Verify informed consent is properly implemented [] Ensure any sensitive data is handled according to ethical guidelines

Exporting Data

- 1. Access your results by clicking "Results" in your study's toolbar
- 2. Select the results you want to export by checking the corresponding boxes
- 3. Click "Export Results"
- 4. Choose the export format:
 - JATOS Results Archive (.jrzip): Contains everything (result data, files, and metadata)
 - Result Data: Only the experiment data (ZIP or Plain Text format)
 - Result Files: Only uploaded files during the experiment
 - Metadata: Information about participants (JSON or CSV format)



JATOS Key Features

Session Data Types:

JATOS offers three types of sessions to store and exchange data:

1. Study Session:

- o Passes data between components within a single study run
- o Accessible via jatos.studySessionData

2. Batch Session:

- o Shares data between different study runs in the same batch
- Accessible via jatos.batchSessionData

3. Group Session:

- Allows real-time data exchange between participants in a group study
- o Accessible via jatos.groupSessionData

Troubleshooting

OCommon Issues & Fixes:

- o Page Not Loading: check JATOS is running and URL is correct
- Missing Data: ensure jatos.submitResultData() is called
- \circ Export Problems: split large results, increase memory in config

Further Resources

- o Official Docs: https://www.jatos.org/
- o JATOS.js Reference: https://www.jatos.org/jatos.js-Reference.html
- o GitHub Issues: https://github.com/JATOS/JATOS/issues
- o Example Studies: https://www.jatos.org/Example-Studies.html
- o Google, chatGPT, Gemini, Claude etc... are your best friends!