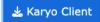
# KaryoSolver Client Installation Guide

The KaryoSolver Client, hereinafter KaryoClient, can be download from the 4eVAR website.

In the Karyo module, clicking on



After few seconds in your download folder you have KaryoClient.tar.gz.

Below are the installation guides for each operating system:

# **Installation on Windows (using WSL)**

To run KaryoClient on Windows, the recommended approach is to use the Windows Subsystem for Linux (WSL 2). If WSL is not yet installed, follow Microsoft's official guide: https://learn.microsoft.com/en-us/windows/wsl/install.

## Steps:

- 1. Open your WSL terminal (e.g., Ubuntu from Microsoft Store).
- 2. Update packages: sudo apt update && sudo apt upgrade
- 3. Install required tools: sudo apt install python3 python3-venv python3-pip
- 4. Extract KaryoClient.tar.gz it into a folder named 'KaryoClient'. You can use the following command from your terminal:

tar -xvzf KaryoClient.tar.gz -C KaryoClient

This will create the 'KaryoClient' directory containing the client files. Navigate into this folder before proceeding with the installation steps described above.

- 5. Create environment: python3 -m venv venv && source venv/bin/activate
- 6. Install dependencies: pip install -r requirements.txt
- 7. Close the environment: deactivate

To open the terminal in the correct folder, right-click inside the project folder in File Explorer and choose "Open in Terminal".

## **Installation on Ubuntu**

Steps:

- 1. Open the terminal (Ctrl+Alt+T). Navigate to the project folder: cd path/to/karyosolver
- 2. Update packages: sudo apt update && sudo apt upgrade
- 3. Install required tools: sudo apt install python3 python3-venv python3-pip
- 4. Extract KaryoClient.tar.gz into a folder named 'KaryoClient'. You can use the following command from your terminal:

tar -xvzf KaryoClient.tar.gz -C KaryoClient

This will create the 'KaryoClient' directory containing the client files. Navigate into this folder before proceeding with the installation steps described above.

- 5. Create environment: python3 -m venv venv && source venv/bin/activate
- 6. Install dependencies: pip install -r requirements.txt
- 7. Close the environment: deactivate

#### Installation on macOS

Steps:

- 1. Install Homebrew if not already available: https://brew.sh/. Then open the terminal (Applications  $\rightarrow$  Utilities  $\rightarrow$  Terminal).
- 2. Update Homebrew: brew update
- 3. Install Python and Git: brew install python3 python3-venv python3-pip
- 4. Extract KaryoClient.tar.gz into a folder named 'KaryoClient'. You can use the following command from your terminal:

tar -xvzf KaryoClient.tar.gz -C KaryoClient

This will create the 'KaryoClient' directory containing the client files. Navigate into this folder before proceeding with the installation steps described above.

- 5. Create environment: python3 -m venv venv && source venv/bin/activate
- 6. Install dependencies: pip install -r requirements.txt
- 7. Close the environment: deactivate

## **Reference Data**

After downloading the reference data, make sure to extract it into the folder named 'data' inside the project directory. The application will not run correctly unless the reference files are placed in this folder.

To extracting the downloaded reference file KaryoClientData.tar.gz navigate to the parent KaryClient folder and run:

tar -xvzf KaryoClientData.tar.gz

you will find the extracted files in: .../KarioClient/data/reference

## **Running the Application**

To start the application, open a terminal in the project folder (where the file start.sh is located).

Run: ./start.sh

# **Expected Output After Launch**

After running ./start.sh, you should see log messages in the terminal. Typically, the final lines will include a message similar to:

... Server running at http://127.0.0.1:8000/

In 4eVAR portal, into the Karyo module, click on the access the KaryoSolver frontend interface.

