

CEEbots coming - how to run a bot and how bots can help all CEE communities

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CEEbots

Lviv, Ukraine

► 13 October 2018

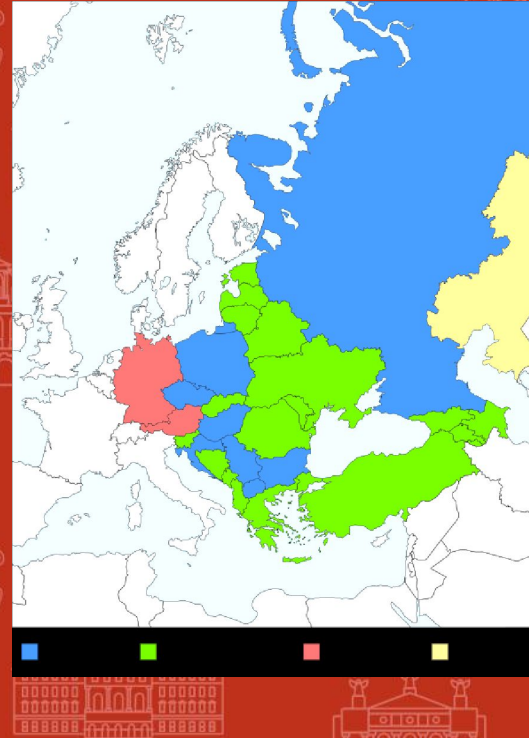
► 16:00 - 17:20

► Venue: Sheptytsky Centre

Facilitator:

CEEbots

1. The idea
2. CEE bots - statistics
3. Plan
4. Problems, reality, solution, goals
5. Measurement
6. Workshop part – how to create a pywikibot and what to do with it



CEEbots – the idea

- ▶ **TO STIMULATE GROWTH FOR ALL WIKIMEDIA PROJECTS OF THIS REGION AND AID IN COOPERATION AND UNDERSTANDING OF INDIVIDUAL PROJECTS WHICH ARE PART OF THE CEE REGION.**
- ▶ **A BROAD PROJECT TO "LINK-UP" THE CEE WIKIS IN MUTUAL COOPERATION.**
- ▶ **Place – Cape town, Wikimania 2018**
- ▶ **Participants: Andrei Cipu, User:Base, User:Masti and User:Vodnokon4e (All credits go to User:Masti as initiator).**

CEEbots - statistics

WIKIMEDIA BOT REQUESTS

<https://www.wikidata.org/wiki/Q4582561>

► Xtools.wmflabs.org

<https://xtools.wmflabs.org/>

► Stalktoy

<https://tools.wmflabs.org/meta/stalktoy>

► Others

CEEBots - Statistics

Leading 3 countries

Russia	214 (finished only) 18 ongoing	https://ru.wikipedia.org/wiki/Википедия:Запросы_к_ботоводам/Архив https://ru.wikipedia.org/wiki/Википедия:Запросы_к_ботоводам
Poland	162 (finished only)	https://pl.wikipedia.org/wiki/Wikipedia:Zadania_dla_botów/Archiwum/wykonane/2018
Ukraine	37 (ongoing) 19 archived	https://uk.wikipedia.org/wiki/Вікіпедія:Завдання_для_роботів https://uk.wikipedia.org/wiki/Вікіпедія:Завдання_для_роботів/Архів_7

CEEBots - Statistics

In alphabetical order

Albania		no page
Armenia	0	https://hy.wikipedia.org/wiki/Հոփաւորհա:Բոտի կարգաւիճակի փոփոխութեան օրէնք
Azerbaijan	0	https://az.wikipedia.org/wiki/Vikipediya:Botlar/Istəklər
Belarus	1	https://be.wikipedia.org/wiki/Вікіпедыя:Заданні_для_ботаў https://be-tarask.wikipedia.org/wiki/Вікіпэдыя:Рабатызацыя
BiH		no page
Bulgaria	3	https://bg.wikipedia.org/wiki/Уикипедия:Бот/Задачи
Croatia		no page
Czech	18	https://cs.wikipedia.org/wiki/Wikipedie:Bot/Žadosti_o_provedení_práce
Esperanto	-	https://eo.wikipedia.org/wiki/Vikipedio:Roboto/Laboroj

CEEBots - Statistics

In alphabetical order

Estonia		no page
Georgia		no page
Greece	3	https://el.wikipedia.org/wiki/Βικιπαίδεια:Δουλειές_για_bots
Hungary	19	https://hu.wikipedia.org/wiki/Wikipédia:Botgazdák_üzenőfal
Latvia	4	https://lv.wikipedia.org/wiki/Vikipēdija:Botu_pieprasījumi
Lithuania		no page
Macedonia	0	https://mk.wikipedia.org/wiki/Википедија:Барање_на_бот_услуги/заглавие
Romania	4	https://ro.wikipedia.org/wiki/Wikipedia:Sarcini_pentru_roboti
Serbia	4	https://sr.wikipedia.org/wiki/Википедија:Ботови/Задаци

CEEBots - Statistics

In alphabetical order

Slovakia	0	https://sk.wikipedia.org/wiki/Wikipédia:Úlohy_pre_botov
Slovenia		no page
Turkey	0	https://tr.wikipedia.org/wiki/Vikipedi:Botlar/Istekler
Kazakhstan		no page
Bashkortostan	1	https://ba.wikipedia.org/wiki/Википедия:Бот_хужаларына_һоразар

- * Some of the smaller wikis were active in the past, but no bot requests in the last year.
- * As of end of 2018 - a big gap between the leading 3 wikis and the others.
- * No activity at all for some of the wikis – it is not sure do they have own bots or at least they are not active.

CEEbots - Plan

- ▶ Wikimedia Central and Eastern Europe/Bot Requests - created

https://meta.wikimedia.org/wiki/Wikimedia_Central_and_Eastern_Europe/Bot_Requests

On this page you can make a request to bots, computer programmes which take your routine and give you time to write articles instead, related to any Central and Eastern Europe language or multilingual wiki.

You may write in any CEE language. We will figure it out.

- ▶ Informing users about possibilities – village pumps, forums, discussions, meetings
- ▶ Creating/receiving requests
- ▶ Communication – clarifying, questions from bot operators
- ▶ Work
- ▶ Measurement, feedback, corrections in the flow

Wikimedia Central and Eastern Europe/Bot Requests

[https://meta.wikimedia.org/wiki/Wikimedia Central and Eastern Europe/Bot Requests](https://meta.wikimedia.org/wiki/Wikimedia_Central_and_Eastern_Europe/Bot_Requests)

Wikimedia Central and Eastern Europe/Bot Requests

[< Wikimedia Central and Eastern Europe](#)



This page is currently a draft. More information pertaining to this may be available on the [talk page](#).

Translation admins: Normally, drafts should *not* be marked for translation.

On this page you can make a request to [bots](#), computer programmes which take your routine and give you time to write articles instead, related to Central and Eastern Europe language or multilingual wiki.

You may write in any CEE language. We will figure it out.

What a request can be like?

Alternatives: • [User scripts](#) • [SQL queries](#) | [Want to help?](#)

Active botmasters: [Base](#), [Masti](#), [Vodnokon4e](#)

Request title: e.g. Rename category on Polish Wikipedia

[New request](#)

Wikimedia Central and Eastern Europe/Bot Requests

https://meta.wikimedia.org/wiki/Wikimedia_Central_and_Eastern_Europe/Bot_Requests

► What a request can be like?

Good requests:

Replace all A to B in pages in Category:Cats

Change X to Y in articles I've created

Remove template G voted to be deleted

Website foo.bar is now on domain foobar.com, change the links

Replace the word A to B but only when A does not follow the word C

Patrol all the pages created by user A never edited by anyone but A and admins

Delete all talk namespace redirects with no links to them

List most editing contributors

Wikimedia Central and Eastern Europe/Bot Requests

https://meta.wikimedia.org/wiki/Wikimedia_Central_and_Eastern_Europe/Bot_Requests

► What a request can be like?

Good requests:

Calculate average size of edits made by user X in June 2017

List smallest articles of category Y excluding disambiguations

List unfree files used in articles about people without date of death

Add a template/text on top or bottom of a page

Delete broken redirects to a page

Fixes disambiguation pages to a certain page

Wikimedia Central and Eastern Europe/Bot Requests

https://meta.wikimedia.org/wiki/Wikimedia_Central_and_Eastern_Europe/Bot_Requests

► What a request can be like?

Bad requests:

Replace the word A to B but only where A means X and not Z. (How would the bot know which meaning is used?)

I have seen X on several pages, change it to the correct value (Where? What is correct?)

A can be called X or Y in my language but I like Y more, replace all X to Y (Too insubstantial, requires consensus)

CEEbots - Problems, reality, solution, goals

► (Possible) problems

- Idea is not propagated enough in local wikis – not enough people interested - **communicate the idea again and better** – **to receive requests, actual work that can help local communities**
- No person for communication/ translation of the request - not enough people interested , no free person at the moment - **communicate the idea again; wait?** – **involve more people in the process**
- Problems in communication – not exactly what was needed - **correction** and **start the process again**

► Technical problems:

- Request is too unclear, not possible to perform – very often users are not aware what exactly bots can do – **better explanation, creating help pages, better documentation** – **to improve the flow, to receive better requests and to perform them without errors**
- Bot Issue? - not possible to perform? Too wide request? **???**
- Not enough resources? - No bot available? **???**

CEEbots measurement

► Quantity:

Number of requests – total, average per wiki, time chart, per bot

Number of bots

► Quality:

Feedback

Improvement of local wiki?

CEEbots

Workshop part

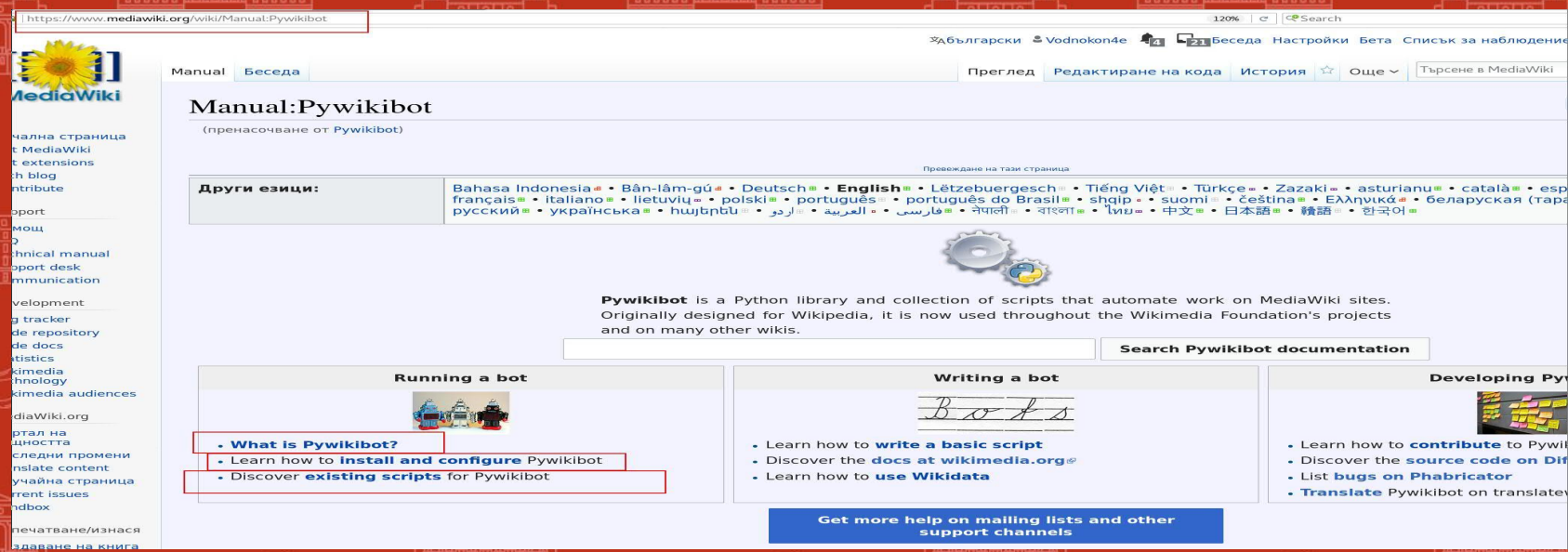
- ▶ How to create a pywikibot and what to do with it
- ▶ Other bots
- ▶ Discussion, practice

Pywikibot Overview

► What is Pywikibot?

Pywikibot is a Python library and collection of scripts that automate work on MediaWiki sites.

<https://www.mediawiki.org/wiki/Manual:Pywikibot>



The screenshot shows the MediaWiki website interface for the Pywikibot manual page. The page title is "Manual:Pywikibot" and it is noted as being redirected from "Pywikibot". The page content includes a list of other languages, a description of Pywikibot as a Python library for automating work on MediaWiki sites, and three main sections: "Running a bot", "Writing a bot", and "Developing Pywikibot".

Manual:Pywikibot
(пренасочване от Pywikibot)

Превеждане на тази страница

Други езици:

- Bahasa Indonesia
- Bân-lâm-gú
- Deutsch
- English
- Lëtzebuergesch
- Tiếng Việt
- Türkçe
- Zazaki
- asturianu
- català
- español
- français
- italiano
- lietuvių
- polski
- português
- português do Brasil
- shqip
- suomi
- čeština
- Ελληνικά
- беларуская (тарашкевіца)
- русский
- українська
- հայերեն
- اردو
- العربية
- فارسی
- नेपाली
- বাংলা
- ไทย
- 中文
- 日本語
- 한국어
- 한국어

Pywikibot is a Python library and collection of scripts that automate work on MediaWiki sites. Originally designed for Wikipedia, it is now used throughout the Wikimedia Foundation's projects and on many other wikis.

Running a bot

- What is Pywikibot?
- Learn how to **install and configure** Pywikibot
- Discover **existing scripts** for Pywikibot

Writing a bot

- Learn how to **write a basic script**
- Discover the **docs at wikimedia.org**
- Learn how to **use Wikidata**

Developing Pywikibot

- Learn how to **contribute** to Pywikibot
- Discover the **source code on GitHub**
- List **bugs on Phabricator**
- Translate** Pywikibot on translatewiki

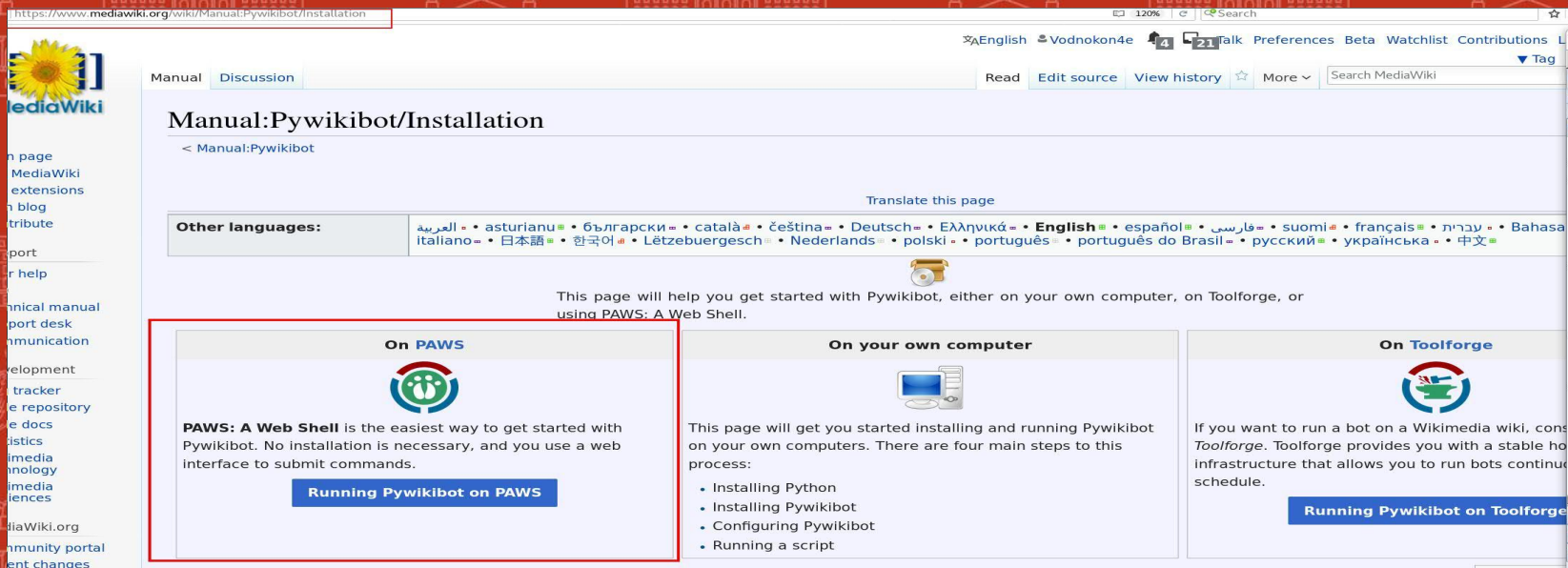
Get more help on mailing lists and other support channels

Pywikibot

how to create?

- Is it so hard? No, definitely it isn't – anyone can do it. Just follow the instructions.

<https://www.mediawiki.org/wiki/Manual:Pywikibot/Installation>



Manual:Pywikibot/Installation


< Manual:Pywikibot

Translate this page

Other languages: العربية • asturlanu • български • català • čeština • Deutsch • Ελληνικά • English • español • فارسی • suomi • français • עברית • Bahasa Italiano • 日本語 • 한국어 • Lëtzebuergesch • Nederlands • polski • português • português do Brasil • русский • українська • 中文

This page will help you get started with Pywikibot, either on your own computer, on Toolforge, or using PAWS: A Web Shell.


On PAWS



PAWS: A Web Shell is the easiest way to get started with Pywikibot. No installation is necessary, and you use a web interface to submit commands.

Running Pywikibot on PAWS


On your own computer



This page will get you started installing and running Pywikibot on your own computers. There are four main steps to this process:

- Installing Python
- Installing Pywikibot
- Configuring Pywikibot
- Running a script

On Toolforge

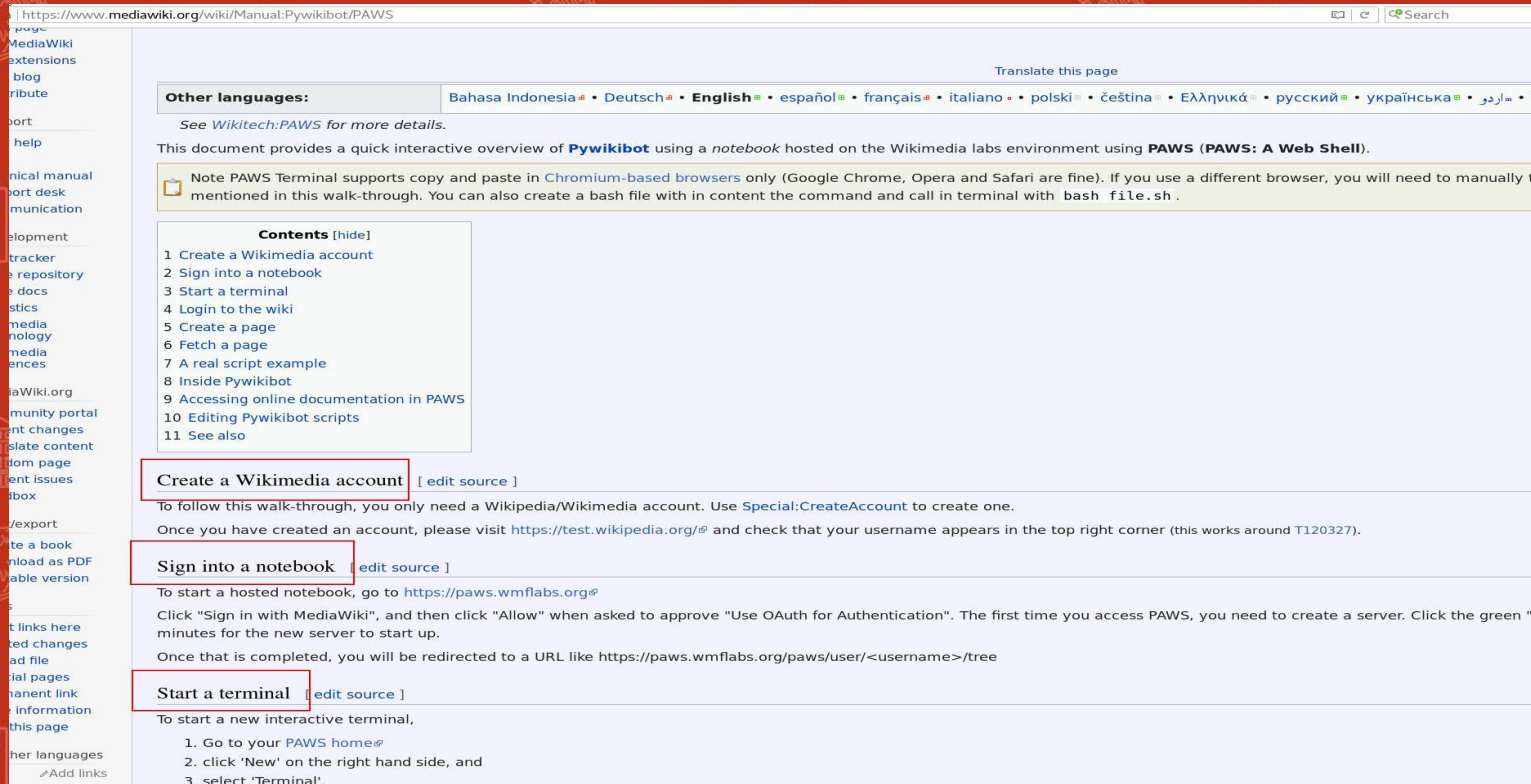


If you want to run a bot on a Wikimedia wiki, consider **Toolforge**. Toolforge provides you with a stable hosting infrastructure that allows you to run bots continuously on a schedule.

Running Pywikibot on Toolforge

Running Pywikibot on PAWS

► PAWS: A Web Shell is the easiest way to get started with Pywikibot. You have to perform 3 easy steps and to request a bot flag on wiki (in the meantime you can test it on test wiki).



The screenshot shows the MediaWiki page 'Manual:Pywikibot/PAWS'. The left sidebar contains a list of navigation links. The main content area has a 'Contents' table of contents and three highlighted sections:

- Create a Wikimedia account** [edit source]

To follow this walk-through, you only need a Wikipedia/Wikimedia account. Use [Special:CreateAccount](#) to create one.

Once you have created an account, please visit <https://test.wikipedia.org/#> and check that your username appears in the top right corner (this works around T120327).
- Sign into a notebook** [edit source]

To start a hosted notebook, go to <https://paws.wmflabs.org#>

Click "Sign in with MediaWiki", and then click "Allow" when asked to approve "Use OAuth for Authentication". The first time you access PAWS, you need to create a server. Click the green "minutes for the new server to start up.

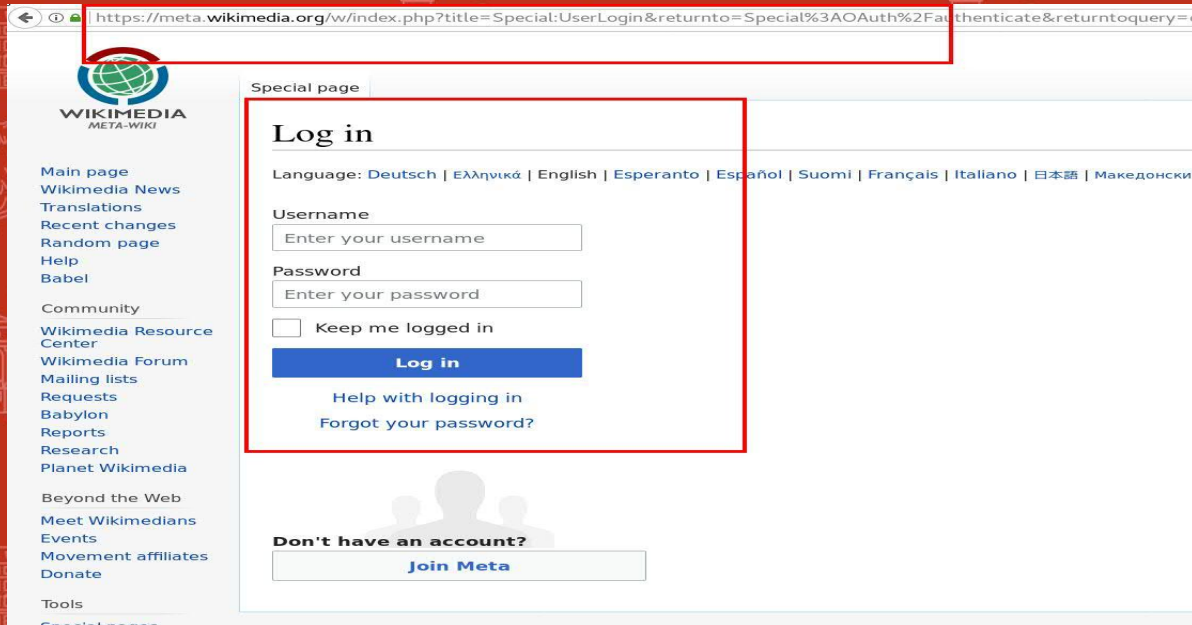
Once that is completed, you will be redirected to a URL like <https://paws.wmflabs.org/paws/user/<username>/tree>
- Start a terminal** [edit source]

To start a new interactive terminal,

 1. Go to your [PAWS home](#)
 2. click 'New' on the right hand side, and
 3. select 'Terminal'.

How it works – is it so hard? NO, it isn't.

Even before you got the bot flag, you can start work with your bot.
1. Log in to Meta with your bot account.



Special page

Log in

Language: [Deutsch](#) | [Ελληνικά](#) | [English](#) | [Esperanto](#) | [Español](#) | [Suomi](#) | [Français](#) | [Italiano](#) | [日本語](#) | [Македонски](#)

Username

Password

☐ Keep me logged in

Log in

[Help with logging in](#)

[Forgot your password?](#)

Don't have an account?

Join Meta

Wikimedia
META-WIKI

Main page
Wikimedia News
Translations
Recent changes
Random page
Help
Babel

Community
Wikimedia Resource Center
Wikimedia Forum
Mailing lists
Requests
Babylon
Reports
Research
Planet Wikimedia

Beyond the Web
Meet Wikimedians
Events
Movement affiliates
Donate

Tools
Special pages

How it works – is it so hard?

NO, it isn't.

Click "Sign in with MediaWiki", and then click "Allow" when asked to approve "Use OAuth for Authentication". The first time you access PAWS, you need to create a server.

Special page

OAuth

Allows usage of OAuth 1.0a for API authorization

[Privacy policy](#) [About Meta](#) [Disclaimers](#) [Developers](#) [Cookie statement](#) [Mobile view](#)

Hi Vodenbot,

In order to complete your request, **PAWS** needs permission to perform the following actions on your behalf on all projects of this site:

- **Perform high volume activity**
High-volume editing
- **Interact with pages**
Edit existing pages; Edit protected pages; Create, edit, and move pages; Patrol changes to pages
- **Interact with media**
Upload new files; Upload, replace, and move files
- **Perform administrative actions**
Rollback changes to pages
- **Interact with your watchlist**
View your watchlist
- **Miscellaneous activity**
Edit your watchlist

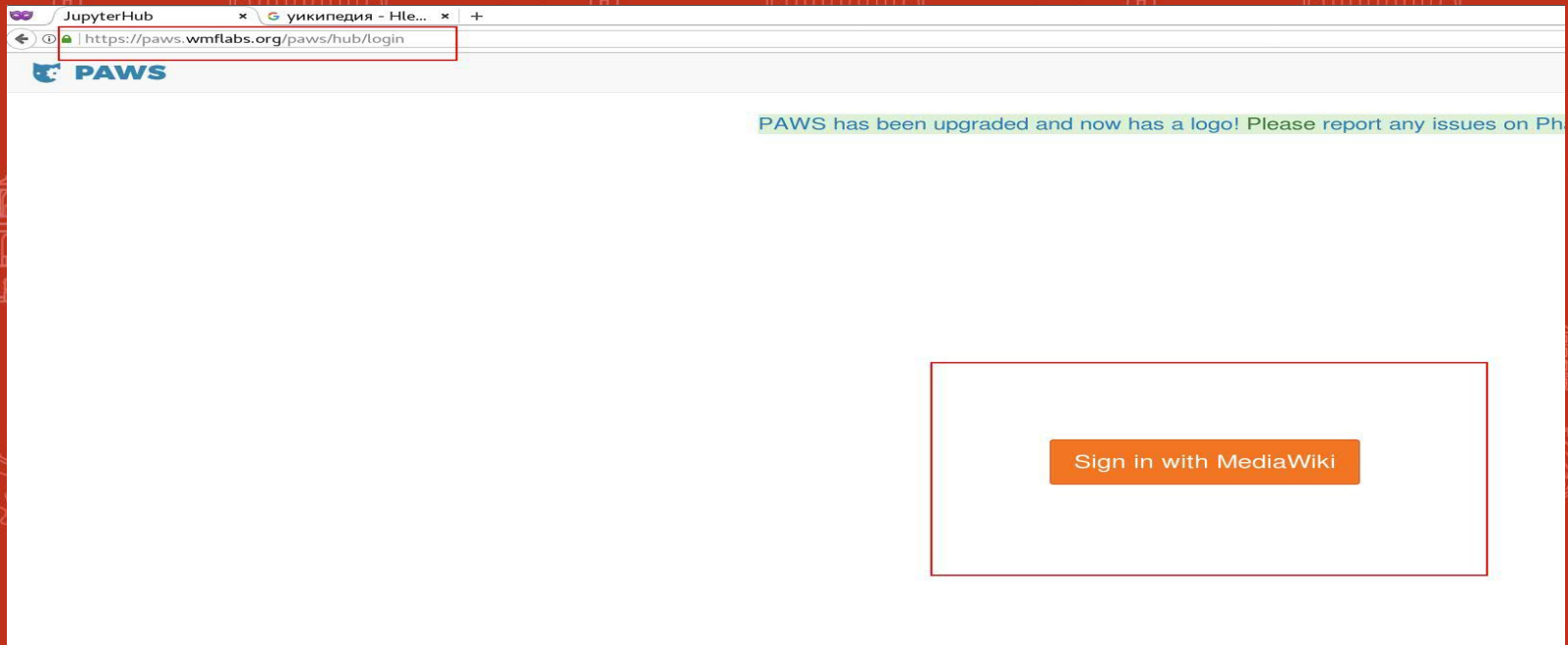
[Privacy policy](#)

Allow

Cancel

How it works – is it so hard? **NO, it isn't.**

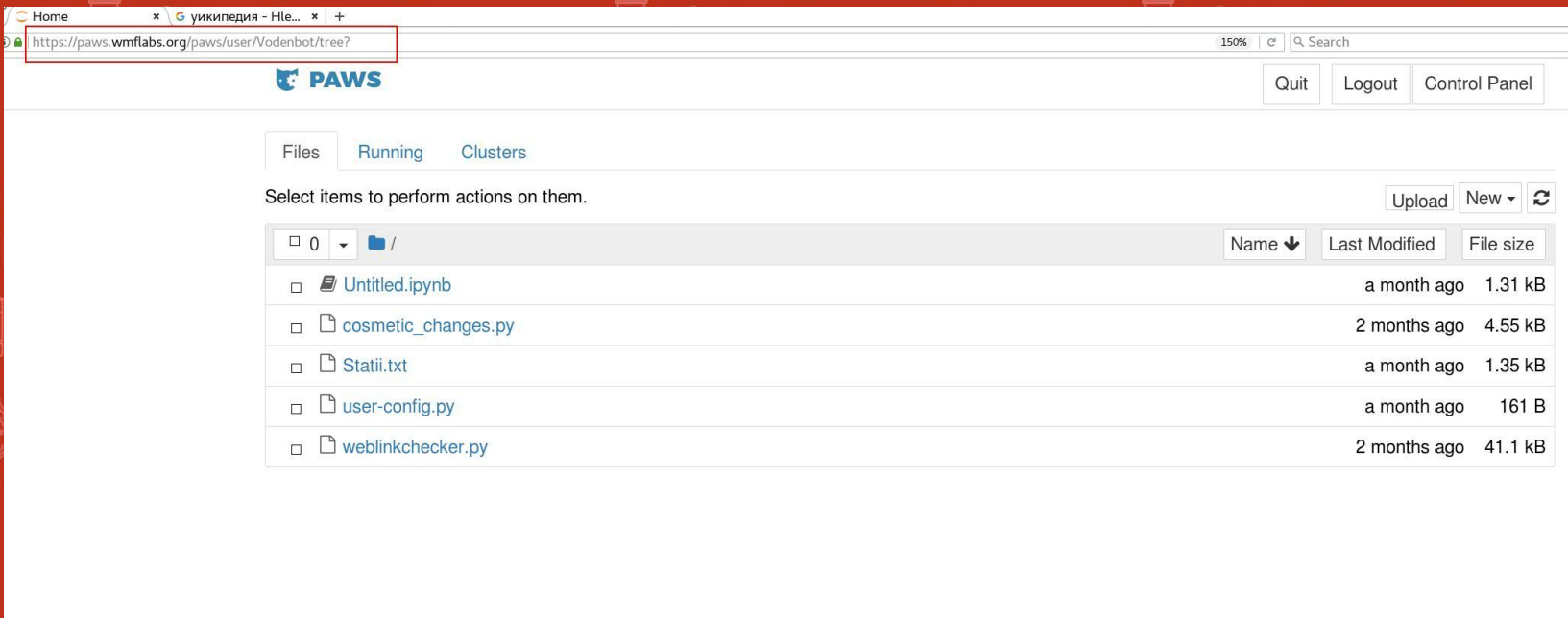
After that every time you will be redirected automatically.








How it works — is it so hard? NO, it isn't.

Start a terminal.

Go to your PAWS home, click 'New' on the right hand side, and select 'Terminal'.

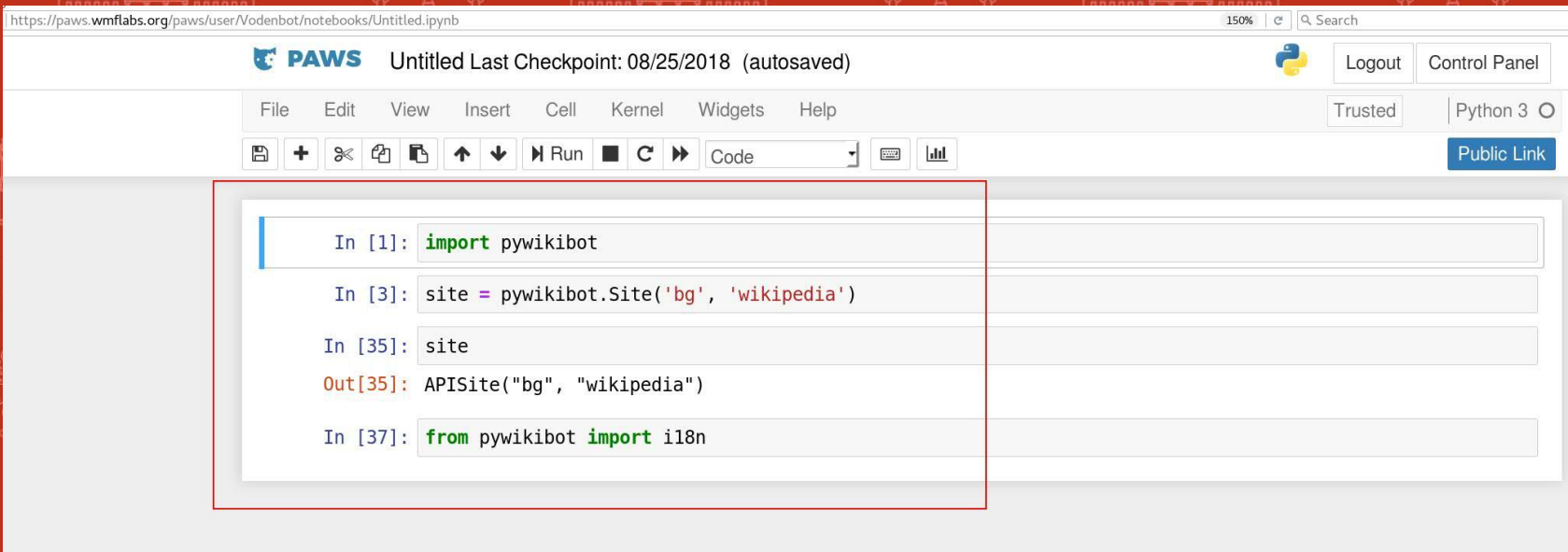


The screenshot shows a web browser window with the URL `https://paws.wmflabs.org/paws/user/Vodenbot/tree?`. The PAWS logo is in the top left, and navigation buttons 'Quit', 'Logout', and 'Control Panel' are in the top right. Below the logo are tabs for 'Files', 'Running', and 'Clusters'. A message says 'Select items to perform actions on them.' with 'Upload', 'New', and a refresh icon to the right. A file list table follows:

<input type="checkbox"/>	0		Name	Last Modified	File size
<input type="checkbox"/>			Untitled.ipynb	a month ago	1.31 kB
<input type="checkbox"/>			cosmetic_changes.py	2 months ago	4.55 kB
<input type="checkbox"/>			Statii.txt	a month ago	1.35 kB
<input type="checkbox"/>			user-config.py	a month ago	161 B
<input type="checkbox"/>			weblinkchecker.py	2 months ago	41.1 kB

How it works – is it so hard? NO, it isn't.

You don't have to write or install anything – script, packages. The only thing you need is your notebook (you even don't have to rename it as it is in your folder). It has only few lines that you need and you can change easily.



```
In [1]: import pywikibot

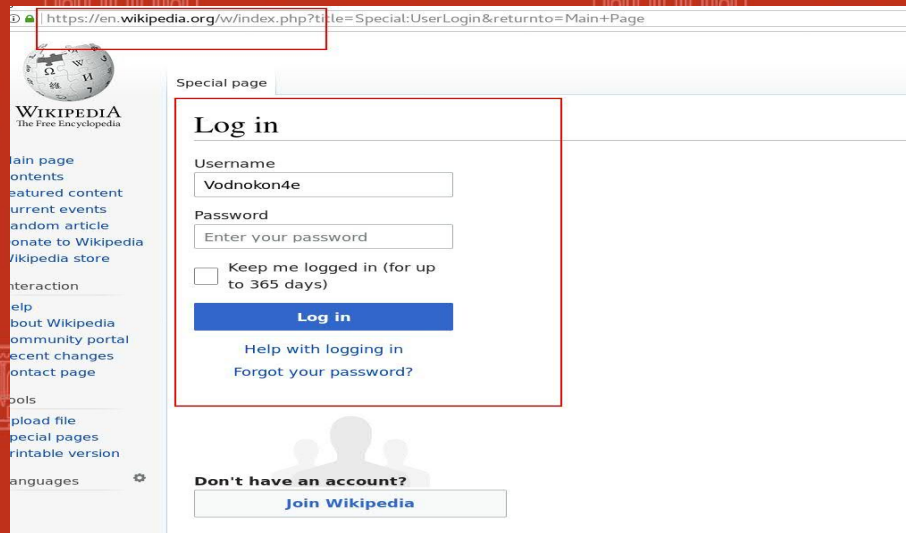
In [3]: site = pywikibot.Site('bg', 'wikipedia')

In [35]: site
Out[35]: APISite("bg", "wikipedia")

In [37]: from pywikibot import i18n
```

How it works – is it so hard? NO, it isn't.

The best part is that you still can use your personal (not bot) account) for Wikipedia and both accounts can work together without problems and multiply your work, even without staying on your PC. You only need to log in to Wikipedia with your personal account. You can run even several terminals (several bots) and your own account simultaneously.



The screenshot shows the Wikipedia login page. The browser's address bar is highlighted with a red box and contains the URL: `https://en.wikipedia.org/w/index.php?title=Special:UserLogin&returnto=Main+Page`. The page features the Wikipedia logo and a sidebar with various links. The main content area is titled "Special page" and contains a "Log in" section. This section has input fields for "Username" (containing "Vodnokon4e") and "Password" (with a placeholder "Enter your password"). Below these is a checkbox for "Keep me logged in (for up to 365 days)". A blue "Log in" button is positioned below the checkbox. Underneath the button are links for "Help with logging in" and "Forgot your password?". At the bottom of the login section, there is a "Don't have an account?" link and a "Join Wikipedia" button. The entire login section is outlined with a red box.

How it works – is it so hard? NO, it isn't. Nut how it looks?

Start a terminal.

Go to your PAWS home, click 'New' on the right hand side, and select 'Terminal'.

Here is the terminal.

<https://paws.wmflabs.org/paws/user/Vodenbot/terminals/1>

150% 🔍 Search



Logout

Control Panel

```
Welcome to PAWS!  
Please behave responsibly  
Getting Started: https://www.mediawiki.org/wiki/Manual:Pywikibot/PAWS  
Questions? Need help? Find us on #wikimedia-cloud on IRC on freenode!  
File bugs at https://phabricator.wikimedia.org/maniphest/task/create/?projects=PAWS  
@PAWS:~$
```

How it works – is it so hard? NO, it isn't. Nut how it looks?

Start a terminal.

Go to your PAWS home, click 'New' on the right hand side, and select 'Terminal'.

Here is the terminal.

<https://paws.wmflabs.org/paws/user/Vodenbot/terminals/1>

150% 🔍 Search



Logout

Control Panel

```
Welcome to PAWS!  
Please behave responsibly  
Getting Started: https://www.mediawiki.org/wiki/Manual:Pywikibot/PAWS  
Questions? Need help? Find us on #wikimedia-cloud on IRC on freenode!  
File bugs at https://phabricator.wikimedia.org/maniphest/task/create/?projects=PAWS  
@PAWS:~$
```


How it looks

– some practical work

Lets check some common error on a wiki and run a bot that will fix it.

1. Find the error you want to fix - find the problem

Error: No empty space between comma and following square brackets , and [[

2. Choose a script to fix it and create a command (define what you want to do, where) in terminal. In that case it will be the easiest script – `replace.py`

```
Welcome to PAWS!  
Please behave responsibly  
Getting Started: https://www.mediawiki.org/wiki/Manual:Pywikibot/PAWS  
Questions? Need help? Find us on #wikimedia-cloud on IRC on freenode!  
File bugs at https://phabricator.wikimedia.org/maniphest/task/create/?projects=PAWS  
@PAWS:~$ pwb.py replace.py -ns:0 -start:! ",[" ", [" -search:",["
```

How it looks

– some practical work

Run the command and describe your work in the summary (you can do that in two ways).

```
File bugs at https://phabricator.wikimedia.org/maniphest/task/create/.projects-PAWS
```

```
@PAWS:~$ pwb.py replace.py -ns:0 -start:! ",[" ", [" -search:",["
```

```
The summary message for the command line replacements will be something like: Bot: Automated text replacement (-,[ +, [)
```

```
Press Enter to use this automatic message, or enter a description of the  
changes your bot will make: █
```


How it looks

– some practical work

This is a pywikibot at work. And it is working fast....

```
No changes were necessary in [[1416]]
No changes were necessary in [[1417]]
No changes were necessary in [[1418]]
No changes were necessary in [[1419]]
No changes were necessary in [[141 (число)]]
No changes were necessary in [[141 г. пр.н.е.]]
No changes were necessary in [[142]]
No changes were necessary in [[1420]]
No changes were necessary in [[1421]]
No changes were necessary in [[1422]]
No changes were necessary in [[1423]]
No changes were necessary in [[1424]]
No changes were necessary in [[1425]]
No changes were necessary in [[1426]]
No changes were necessary in [[1427]]
No changes were necessary in [[1428]]
No changes were necessary in [[1429]]
No changes were necessary in [[142 (число)]]
No changes were necessary in [[142 г. пр.н.е.]]
No changes were necessary in [[143]]
No changes were necessary in [[1430]]
No changes were necessary in [[1431]]
No changes were necessary in [[1432]]
```

How it looks

– some practical work

When you find a problem: check it and decide what you are going to do. If there are no errors in script or false positive – you can run the bot in automatic mode and go for a coffee or a beer. It will do your work.

```
>>> Адриан Иванов <<<
@@ -15 +15 @@
- | инструмент          = [[пиано]], [[акордеон]], [[синтезатор]]
+ | инструмент          = [[пиано]], [[акордеон]], [[синтезатор]]

Do you want to accept these changes? ([y]es, [N]o, [e]dit original, edit
[l]atest, open in [b]rowser, [m]ore context, [a]ll, [q]uit):
```

Bot will show in terminal the wrong case, display the solution in green colour and ask for next step.

You simply can choose **a** for **[a]ll** - the bot will continue in fully automated mode. If you are still not sure – you can click **y** for **y[es]** for this case and check next in semi-automated mode. It's good to verify at least several cases, before continue in fully automated mode.

CEEbots

Why are we doing this?

- Because we can
- Because it's fun
- Because we want to screw some other's wiki, not only ours.

CEEbots

► Questions?

► IDEAS?