Oc2go

A simple geocache downloader for opencaching.de

Purpose

I use this little perl script to download caches from opencaching.de to a local zip file, in order to import them on my GPSr device. Main reasons to use this script are:

- It downloads a set of caches which do not match any search criteria I can add for a "saved search" at opencaching.de. The only criterion which is common for all caches is: "It's interesting for me"...
- Since my favourite geocaching software Locus Map does not yet provide full support for geocaching listings from opencaching.de, this script adds some extra data to the caches in order to make this data visible in Locus Map (like some cache attributes specific to opencaching.de, recommendations, geokretys).
- The script processes your personal cache note for extra waypoint information. A line like "Parking: N 51° 12.345 E 008° 23.456" will result in an extra waypoint at this coordinates. This is useful for saving the final location of mystery- or multi-caches, for saving extra waypoint information given in the listing only etc.
  This functionality was originally introduced by geocaching4locus.

This script is written mainly for my own usage. Feel free to use it. It's optimized to import caches to Locus Map, but other geocaching software / GPSrs should work also.

Installation

Prerequisites

A running perl distribution. The script is tested with perl 5.18 on Linux and ActivePerl 5.16.3 on Windows.

The following perl modules should be installed:

- Crypt::SSLeay
- Net::OAuth::Simple
- XML::Twig
- JSON
- Archive::Zip

You should try to install missing modules from your distribution first (on Windows, use "Perl Packet Manager"). If your distribution does not contain a pre built package for the module, use "`cpan -i module_name`" to install it from CPAN.

Installation

Download the zip file and extract it to any suitable place on your system.

Run "`oc2go.pl -i`". This will set up some directories (`$HOME/.oc2go/`) and create the basic configuration file. The script will prompt for an authorization at opencaching.de. Copy the shown URL into your browser and authenticate using your opencaching.de user. You will get a code, enter this code at the command prompt. You are authenticated to opencaching.de now, you have to run this authentication only once.

```
File   Edit   View   Bookmarks   Settings   Help

prompt> ./oc2go.pl -i

                 d8888b.
                    `88
.d8888b. .d8888b. .aaadP' .d8888b. .d8888b.
88'  `88 88'  `"" 88'      88'  `88 88'  `88
88.  .88 88.  ... 88.      88.  .88 88.  .88
`88888P' `88888P' Y88888P  `8888P88 `88888P'
oooooooooooooooooooooooooooo~~~~.88~oooooooooo
                           d8888P

This is oc2go version 0.04

Setting up directories and config file for oc2go.pl...
Configuration directory /home/elmar/.oc2go already exists - ok.
Working directory /home/elmar/.oc2go/wrk already exists - ok.
Authorization config file /home/elmar/.oc2go/oc2go_auth.cfg already exists - ok.
You have to register at opencaching.de to use this script.

URL: http://www.opencaching.de/okapi/services/oauth/authorize?oauth_token=qaxyLxkXALBAbC2Vacc8&callback=oob

Please go to the above URL and authorize using your opencaching.de credentials.
It will give you a numeric code.

Please type it here:‾‾‾‾‾‾‾‾

You have now authorized this app.
Your access token and secret are:

access_token=
access_token_

You should note these down but they have also been saved in /home/elmar/.oc2go/oc2go_auth.cfg

prompt> 
```
```
                        oc2go : bash
```

Make sure your system is using the correct time zone and time settings, otherwise you might get a "HTTP 400" error while authenticating.

Usage

Basic Usage

Add your favorite geocaches to a bookmark file. The bookmark file is a simple text file, containing one cache-code per line. All text after the cache-code at the beginning of a line will be ignored. You can use the sample bookmark file as a start.

Once you filled you personal bookmark list, run
"`oc2go.pl -f your_bookmark_file.txt`".

The script will try to download the caches from you list and add them to a zip file named "`oc2go_caches.zip`".

Now copy this zip file to your GPSr and import it into your geocaching software.

Using personal coordinates

On the web interface of opencaching.de, you can add extra coordinates to your cache, e.g. to store the final location of a solved mystery cache. By default, oc2go.pl uses this extra coordinates as coordinates for the downloaded cache, so the cache will be displayed on your GPSr at the corrected coordinates instead of the listing coordinates.

Using personal cache note for extra coordinates

Sometimes it's useful to create extra waypoints for a geocache, e.g. for a parking location you selected yourself from a map, or for waypoint information which is given in the listing text only. If you add a line like "Parking location: N 51° 12.345 E 008° 23.456" to your personal cache note, oc2go.pl will try to parse the coordinates given and create an extra waypoint for them.

Please make sure to use exactly the format `"N/S DD MM.MMM E/W DDD MM.MMM"` for your extra waypoints, otherwise parsing the coordinates may fail.
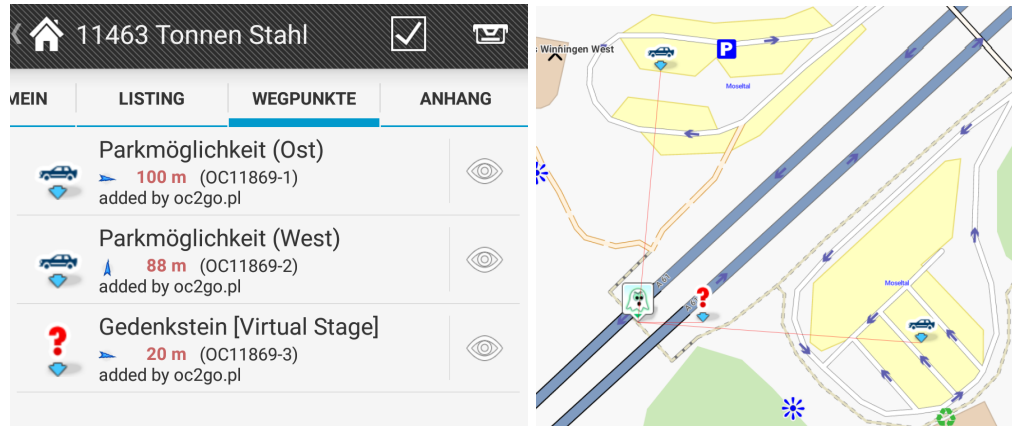
Example for this (the coordinates are just a sample, no need to use them for the shown cache):

```
Parkmöglichkeit (Ost): N 50° 18.987 E 007° 29.920
Parkmöglichkeit (West): N 50° 19.040 E 007° 29.840
Gedenkstein [Virtual Stage]: N 50° 18.991 E 007° 29.853
```

This will create some extra waypoints, which are shown here in Locus Map and on the map:

Other geocaching software and GPSrs should also be able to import and handle these waypoints.

While creating the extra waypoints, oc2go.pl whill try to guess the type of waypoint (final, parking area, virtual stage etc.). You can force a specific waypoint by adding the waypoint type to the name.

Known waypoint types so far:
- [Final Location]
- [Parking Area]
- [Virtual Stage]
- [Physical Stage]
- [Trailhead]

Tipp for "Locus Maps" users

To get the best result when importing geocaches in Locus Map, activate the setting "Settings ⇒ Geocaching ⇒ Move to final waypoint" in Locus Maps. For a solved mystery cache, do **not** enter the coordinates as personal coordinates, but add a extra waypoint information to the personal cache note like described above. Use "Final" as the waypoint name. Locus Maps will recognize this waypoint during import, move the cache to the coordinates of this waypoint and mark it as "solved" (the little red star on the icon).