porder: Simple CLI for ordersv2 Cheat Sheet for porder v0.1.3

https://github.com/samapriya/porder and https://pypi.org/project/porder/

porder Installation

The porder tool is an unofficial command line interface built around the ordersv2 API from Planet. You can read about the API overview and capabilities here.

To make sure this works shapely needs to be installed, so first install shapely. Instructions are included in the Read Me

Installation is then: **pip install porder**

porder quota

To start using porder the first thing you need is to initiliaze the planet client which was installed during the installation on porder. You only need to do this once, type in
`planet init`
Email: captainplanet@gmail.com (hit enter or return)
Password: Password associated with your account that you created with planet

The porder quota tool fetches your current quotas including allocation name, total quota used and other info.To run this simply type the following and hit return
`porder quota`

Links

API Link here

Medium Article and Tutorial here

porder idlist

To place an order you need to first interact with your data API and get an idlist of items and assets you want to download. porder idlist allows you to create this using geometry, cloud and overlap filters.
type in
`porder idlist`

A setup would be (do not copy and paste the code but type it out in your command line)

porder idlist --input "full path to geometry.geojson file" --start "2018-01-01" --end "2018-02-01" --item "PSScene4Band" --asset "analytic" --number "20" --cmin 0 --cmax 0.8 --overlap 1 --outfile "path to idlist.csv"

- The **input** file refers to your geometry or aoi you can produce this using a service like geojson.io.
- The **start** and **end** date are in the format YYYY-MM-DD.
- **Items** refers to the constellation you want your data from (for example PSScene4Band is PlanetScope Scene 4 Band data and PSOrthoTile refers to PlanetScope Orthotile imagery).
- **Assets** refers to the type of item so (for example: analytic, or analytic_dn or analytic_xml). You can get the list of items and their assets here.
- The **number** filter limits the number of assets you ids you want to get (if you need all use a large number).
- The **cmin** and **cmax** control minimum and maximum cloud cover here it ranges from 0% to 0.8 or 80%.
- It is good to check for percentage **overlap** if you are using operations like clip later on. I like to set it to at least 1% so clip does not fail. The **outfile** is written as a csv and a text file and requires full path where you want to save this.

porder difflist and idsplit

porder difflist allows you to use existing files in your system to get only missing id(s) from an area of interest.

A simple setup would be

porder difflist --folder "F:\johndoe\ps4b_xml" --typ "metadata" --input "F:\johndoe\grid.geojson" --item "PSScene4Band" --asset "analytic_sr" --start "2018-06-01" --end "2018-08-01" --cmin 0 --cmax 0.9 --outfile "F:\johndoe\diff.txt"

porder idsplit allows you to split your idlist into equal parts for quick ordering.

A simple setup would be
porder idsplit --idlist "C:\johndone\orderlist.csv" --lines "100" --local "C:\johndoe\split"

This will split the idlist into multiple idlist files with 100 ids each.

porder order

The porder order tool allows you to bring your idlist and the place an order and bring together some tools. For this example I want to clip my scenes to a geometry and I want email notification when the order has been completed. A simple setup would be

porder order --name "testorder" --idlist "idlistfile.txt" --item "PSScene4Band" --asset "analytic" --boundary "clip_boundary.geojon" --op clip email

If you want your files zipped you can change --op to include --op clip zip email. An order link and created and copied to your clipboard

porder download multipart and multiproc

The last bit is designed to download your order once it has been completed. The three tools includes
porder download downloads all files sequentially.

porder multipart uses a multipart downloader to split each download into multiple parts and attempts to speed up the sequential download.

porder multiproc is the latest addition to the download tool, it employs multiprocessing and as such is efficient in simultaneously downloading multiple files. This tool also allows the user to save time for specifying extensions of the files you want to download for example ".tif" or ".xml"
Simple setups include

porder download --url "https://api.planet.com/compute/ops/orders/v2/b498ed28-f6c1-4f77-ae2b-f8a6ba325431" --local "C:\planet_demo\ps" --ext "Incase you want to download a specific file type"

porder multipart --url "https://api.planet.com/compute/ops/orders/v2/b498ed28-f6c1-4f77-ae2b-f8a6ba325431" --local "C:\planet_demo\ps" --ext "Incase you want to download a specific file type"

porder multiproc --url "https://api.planet.com/compute/ops/orders/v2/b498ed28-f6c1-4f77-ae2b-f8a6ba325431" --local "C:\planet_demo\ps" --ext "Incase you want to download a specific file type"