

A large, thin blue circle is centered on the page. Inside the circle, the text "OpenBioMaps" is written in a large, bold, sans-serif font. The word "Open" is in dark grey, "Bio" is in green with a red dot above the 'i', and "Maps" is in dark grey. Below "OpenBioMaps", the text "sustainable environment for biological data" is written in a smaller, dark grey, sans-serif font, centered within the circle.

# OpenBioMaps

sustainable environment  
for biological data

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09-29-2021

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# What is OpenBioMaps?

- An **idea**: build bridges between conservationists, researchers, and education
- A **service**: freely configurable database framework for arbitrary biological databases
- Open source free-to-use **software** for managing biodiversity research and conservation data

# Characteristics of sustainable (biodiversity) data management

- Flexible and interconnectable interfaces
- Decentralized workflow
- Open-sourced, community driven development

# OBM Consortium partners (2021)



Duna-Ipoly National Park, Hungary

Eötvös Loránd University, Hungary



Eszterházy Károly University, Hungary

Milvus Group, Romania



University of Debrecen, Hungary



WWF Hungary



Duna-Dráva National Park, Hungary



Fertő-Hanság National Park, Hungary



# Examples

# Nature conservation projects

Several monitoring programs, public and closed databases  
huge amounts of data

- Duna-Ipoly National Park, Hungary
- Bükk National Park, Hungary
- Kiskunság National Park, Hungary
- Balatonfelvidéki National Park, Hungary
- Duna-Dráva National Park, Hungary
- Órségi National Park, Hungary
- Fertő-Hanság National Park, Hungary
- Hortobágy National Park, Hungary
- Aggtelek National Park, Hungary
- Milvus Group Association, Romania

# Conservational / citizen science projects

Non-public research projects with public interface

- The Eurasian Kurgan Database
- BalkanHerps
- Corfu Dragonflies
- Butterfly monitoring

openbiomaps.org/projects/balkanherps/

Balkan Herps

Upload

User statistics

upload count: 2

modification count: 0

data count: 0

valuations: 0

most frequent species

Activity

most data

Mizsei Edvárd	17040
Márton Szabolcs	12651
Iosif Ruben	7244
Strachinis Ilias	3490
Elias Tzoras	1556
Buric Ivona	713
Peter Kaufmann	592
Daniel Jablonski	470
Tibor Sos	429
MIZSEI Edvárd	427

most uploads

Mizsei Edvárd	66
Tibor Sos	30
Márton Szabolcs	21
Strachinis Ilias	16
Elias Tzoras	15
Mizsei Edvard	12
Dimliris	8
Buric Ivona	6
Bo Stille	6
MIZSEI Edvárd	5

Project statistics

Members	Uploads	Data	Species
31	286	46025	125

Species statistics

rarest specieses:

Podarcis vaucheri	1
Chamaeleo chamaeleon	5
Crotaphytus pseudogeographica	5

most frequent specieses:

Lacerta viridis	3,974
Testudo graeca	3,475
Testudo hermanni	1,787

upload observation

file upload

data query

# Research projects

Mostly non-public projects of small research communities

- Transdiptera (Diptera database)
- Hungarian Flora Atlas
- Global Plover Database (Evolutionary biology)
- Sex-Ratio Evolution (Literature data)
- Bükk Mountain Fish Database
- Debrecen DNA Bank (Eurasian Steppe Region - DNA database)
- Protected Plants Database
- VIPER database (a LIFE Project)
- ...



# (Fully) Citizen science projects

- Dead animals database
- OpenHerpMaps
- ...

Screenshot of the OpenHerpMaps website. The browser address bar shows "openbiomaps.org/projects/dead\_animals/". The main map displays Hungary with several yellow circular markers indicating dead animal locations. A sidebar on the right shows a metadata panel for a selected image:

FileName: IMG\_2806.JPG  
FileDateTime: 1440107468  
FileSize: 774470  
FileType: 2  
MimeType: image/jpeg  
SectionsFound: AIW\_TAG, IFDO, EXIF, MAKERNOTE  
COMPUTED  
ImageDescription:  
Make: Canon  
Model: Canon PowerShot A3500 IS  
Orientation: 1  
XResolution: 180/1  
YResolution: 180/1  
ResolutionUnit: 2  
DateTime: 2015:03:31 10:29:20  
YCbCrPositioning: 2  
ExposureTime: 1/500  
FNumber: 69/10  
ISO Speed Ratings: 400  
UndefinedTag: 0x8830: 4  
ExifVersion: 0230  
DateTimeOriginal: 2015:03:31 10:29:20  
DateTimeDigitized: 2015:03:31 10:29:20  
ComponentsConfiguration:  
CompressedBitsPerPixel: 1/1

Screenshot of the OpenHerpMaps website. The browser address bar shows "https://openherpmaps.ro/map/". The main map displays a grid overlay over a map of Europe, with a high density of black squares in the Balkan region. The website header includes the logo "OPENHERPMAPS" and the text "powered by Mihus Group". The browser's address bar and search bar are visible at the top.

# Citizen science / educational projects

Public Nestbox Breeding Data

Upload Map

QUERY TABLE  
public\_nestbox\_data

TEXT FILTERS  
project  
DE Botkert  
DE Evol Zool  
Jósvafő  
MME Debrecen

More options:  
 placing date  
 nestbox field identifier  
 nestbox type  
 country  
 city

SPATIAL QUERY

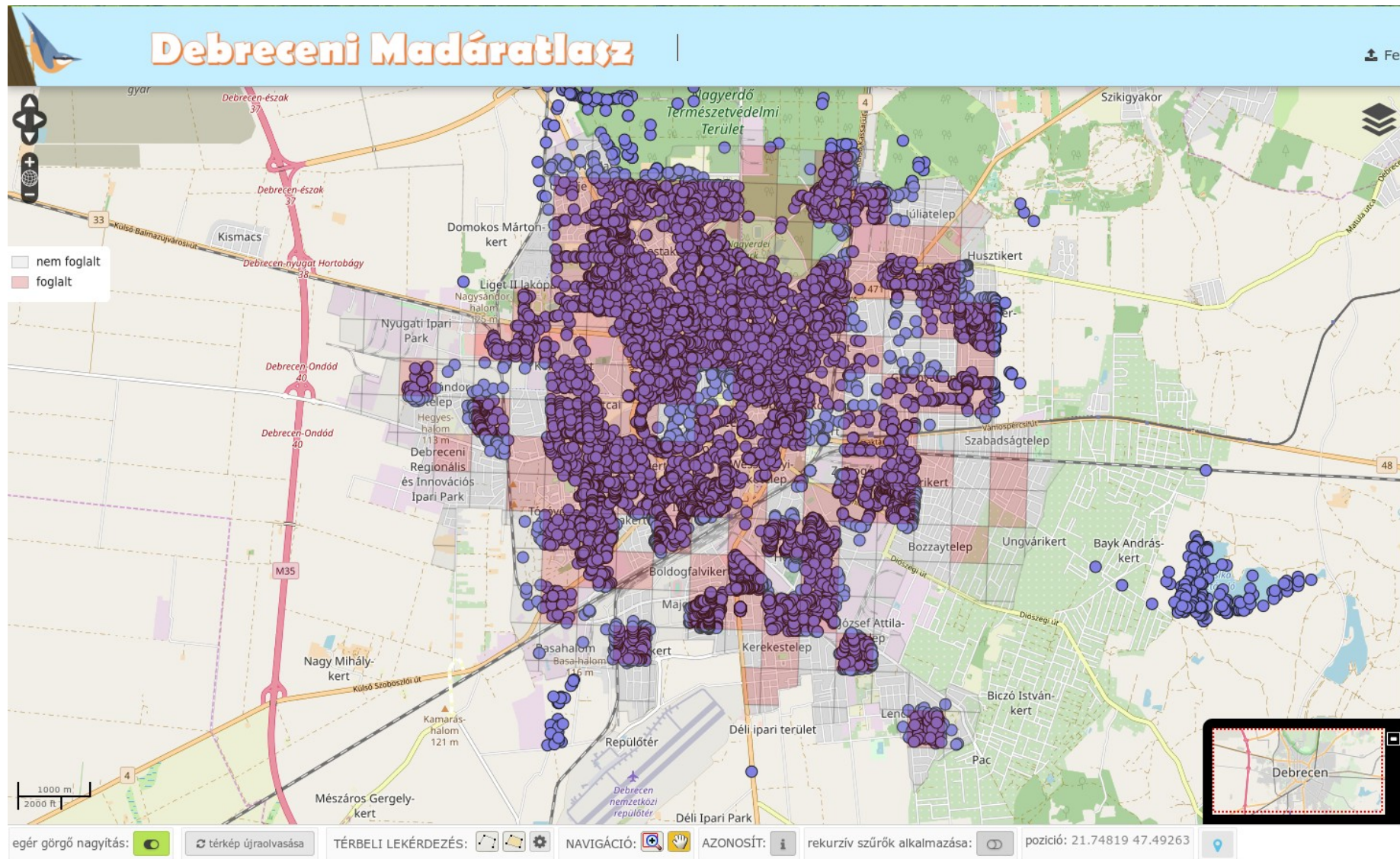
Búlcus utca - kutyafule - 2019.05.10:12:16:59  
csepel mellett - kutyafule - 2019.05.10:12:16:59  
Fűszerkert - 2016.09.20:23:08:42  
Geofiton kert - 2016.09.20:23:08:42  
Gyümölcsös - 2016.09.20:23:08:42  
krumpli - 2019.02.06:14:35:02  
Lajosmizse-cegléd - kutyafule - 2019.05.10:12:16:59  
margit sziget feletti tömb - kutyafule - 2019.05.10:12:16:59  
nagy pesti tömb - kutyafule - 2019.05.10:12:16:59  
nyugati melletti tömb - kutyafule - 2019.05.10:12:16:59  
sinek a nyugatinál - kutyafule - 2019.05.10:12:16:59

mouse wheel zoom: reset map SPATIAL QUERY: NAVIGATION: IDENTIFY: apply recursive filters: position: 21.65284 47.55760

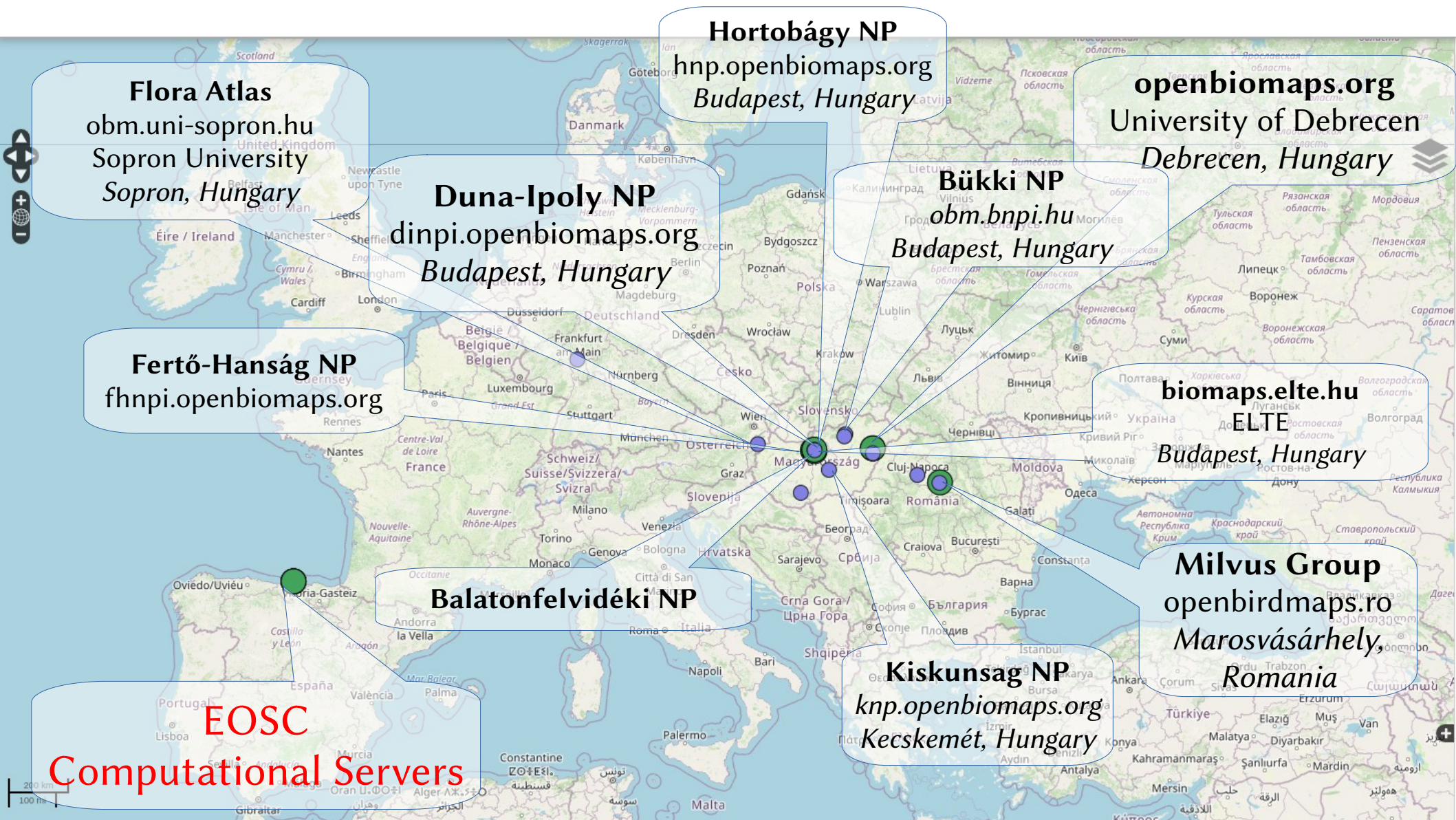
Public Nestbox Database: A database for independent projects

# Educational projects

Bird Atlas of Debrecen: data collected by students



# OpenBioMaps server network



# OpenBioMaps célok

- Keretrendszer/eszközök létrehozása széles körű felhasználásra
- Felhasználói tábor kialakítása különböző célszektorokban
- Aktív kapcsolatok építésnek támogatása kutatás és természetvédelem között

# EOSC

[Contact Us](#) [Portal Home](#) [Catalogue & Marketplace](#) [Providers Dashboard](#) [Login](#)

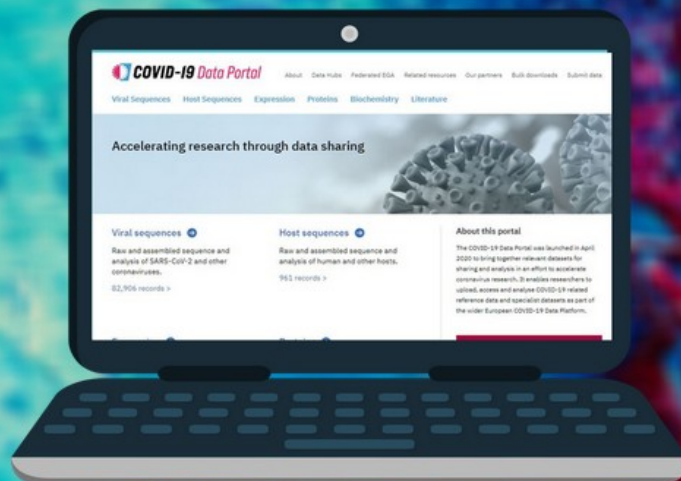


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## ACCESS EOSC SERVICES & RESOURCES



NETWORKING



COMPUTE



STORAGE



SHARING & DISCOVERY

# OpenBioMaps web felület

- Profile
- Invites
- Project administration ▼
- Messages **3**
- Founding new project

 **Profile p**

 You have 3 new m

 **User data**

Given name\*: ? Mikló

Family name\*: ? Bán

Password\*: \*\*\*\*\*

E-mail address\*: banm@

Workplace: Unive

Address: .....

References: .....

 **Settings**

**Email preferences**

Receive system messages:

Would you like to receive th

Would you like to receive th

Visible email address for pr

**Language settings**

Please select your language

**Str\_taxon\_settings**

Str\_select\_species\_name\_t

Drop profile

- Administrative access
- Create table
- Data access
- Database columns
- File manager
- Functions
- Groups
- Interrupted uploads
- Lang definitions
- Mapserver settings
- Members
- Modules
- Rshinyserver
- Server info
- Server logs
- Species names
- SQL query settings
- Str\_job\_management
- Upload forms
- Web map layers

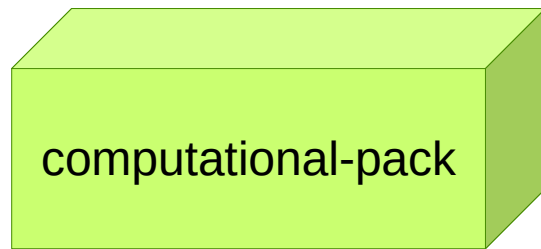


is required to modify it)

Please choose ... ▼

Please choose ... ▼

# OpenBioMaps computational-pack

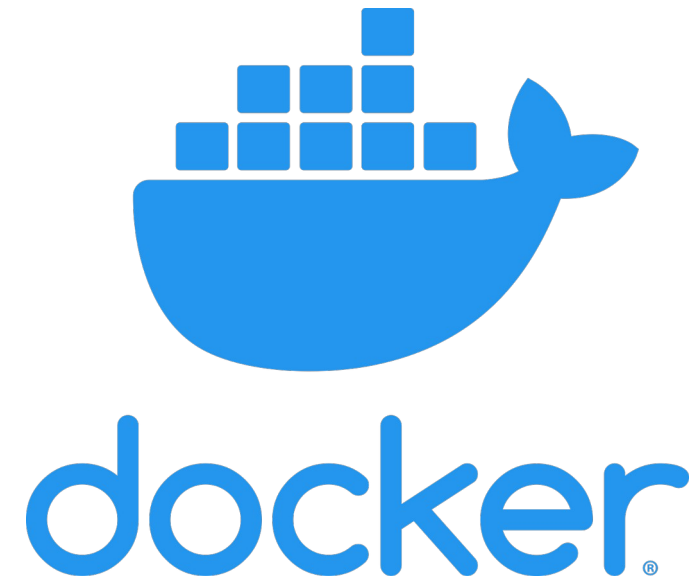


Resources

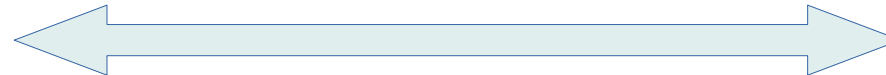
Data

Scripts

Results



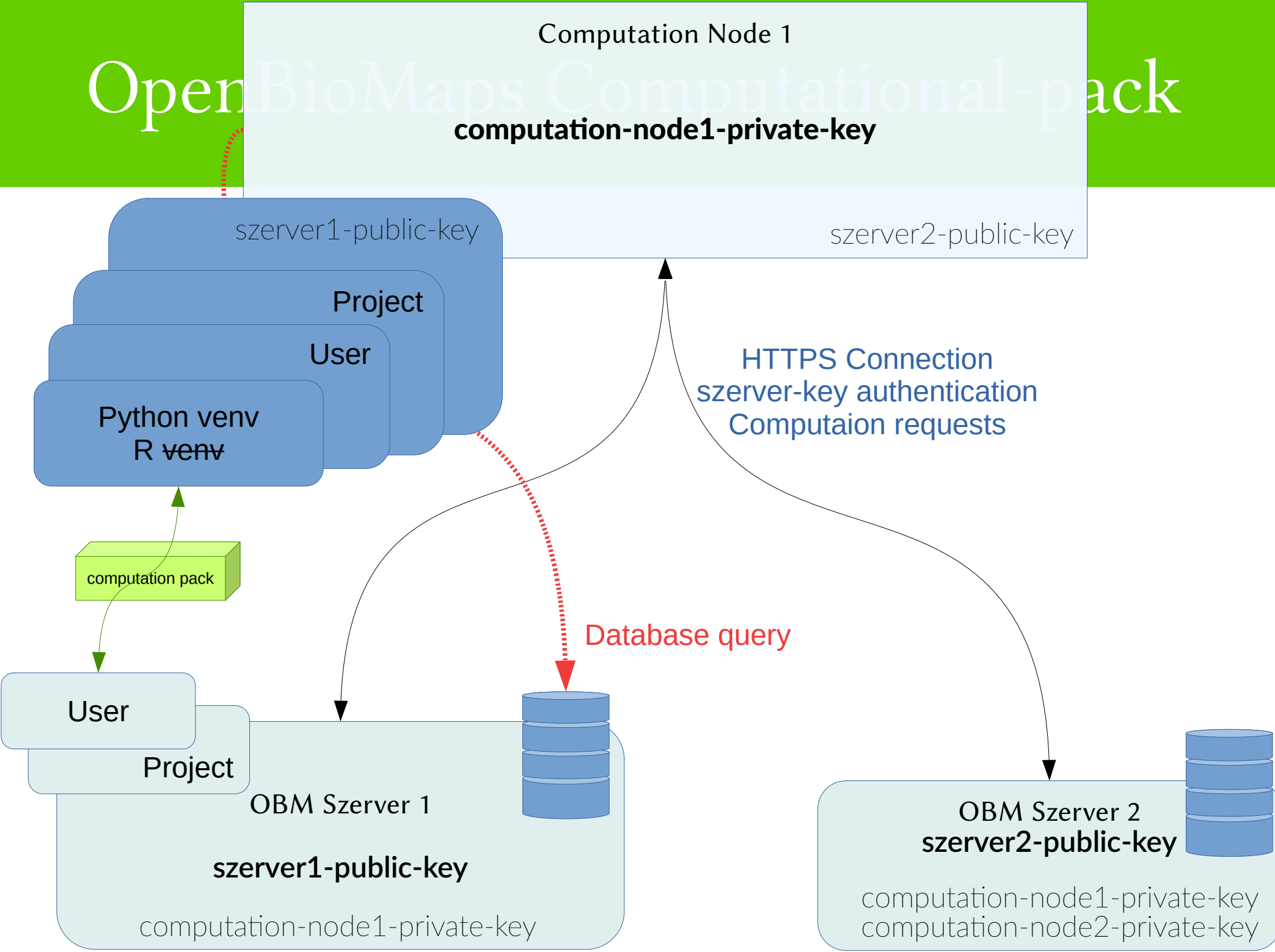
computational-pack exchange



github, gitlab => OpenBioMaps



# OpenBioMaps Computational-pack



# EOSC

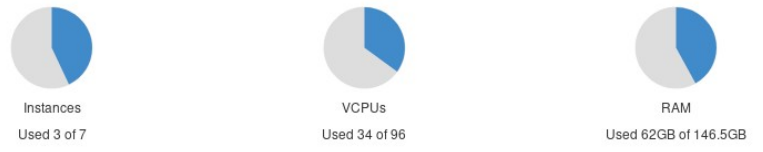
- Project
- API Access
- Compute
  - Overview
  - Instances
  - Images
  - Key Pairs
  - Server Groups
- Rating >
- Volumes >
- Network >
- Object Store >
- Identity >

Project / Compute / Overview

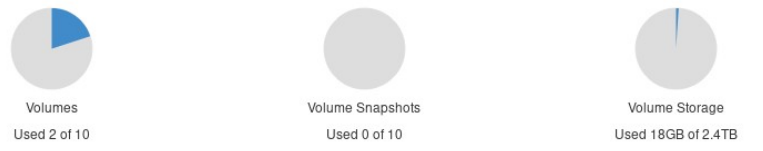
## Overview

### Limit Summary

#### Compute



#### Volume



#### Network



### Usage Summary

Select a period of time to query its usage:

The date should be in YYYY-MM-DD format.

2020-10-07 to 2020-10-08

Active Instances: 1

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# OpenBioMaps

sustainable environment  
for biological data

<https://openbiomaps.org>