

Upgrades to Monitor My Watershed, 2022

January 20, 2022



Monitor My Watershed®

The logo consists of a stylized, teal-colored leaf or water drop shape to the left of the text "Monitor My Watershed®".

Overview of System Management of Monitor My Watershed

- Limnotech and Stroud Center collaborating to develop the trajectory of the tool
 - LimnoTech – managing the software engineering and maintenance
 - Anthony Aufdenkampe, PhD, Senior Environmental Scientist
 - Stroud Center
 - Promoting and facilitating the adoption of MonitorMW by community science groups
 - Managing the trajectory and overall function



GitHub = Where to-dos are documented,
among lots of other things

- **“Milestones”** are organized by priority and when met are posted as **“Releases”**
- This is all done in a logical, “must do A before B can occur” type pathway
 - This the challenge for the developers/engineers
 - Current upgrades are solidifying the foundation of the data portal
 - Building it for long term sustainability

GitHub

- <https://github.com/ODM2/ODM2DataSharingPortal/>
 - then access Milestones and Releases
 - <https://github.com/ODM2/ODM2DataSharingPortal/milestones>
 - <https://github.com/ODM2/ODM2DataSharingPortal/releases>

**ODM = Observations Data Model*

<http://www.odm2.org/>

Progress tracking on GitHub

The screenshot displays the GitHub repository page for `ODM2/ODM2DataSharingPortal`. The repository is public and has 76 issues, 1 pull request, and 15 tags. The repository structure includes `doc`, `src`, `.gitignore`, `LICENSE`, `README.md`, and `environment.yml`. The commit history shows a merge pull request #548 from `ODM2/develop` by `aufdenkampe` 13 days ago, with 1,478 commits. The repository description states: "A Python-Django web application enabling users to upload, share, and display data from their environmental monitoring sites via the app's ODM2 database. Data can either be automatically streamed from Internet of Things (IoT) devices, manually uploaded via CSV files, or manually entered into forms." The repository is tagged with `citizen-science`, `odm2`, and `envirodiy`. The `README.md` file is visible, showing the repository's purpose and the ODM2 Data Sharing Portal's architecture. The `Releases` section is highlighted with a red circle, showing the latest release `v0.12.1: Hot Fixes to Database C...` 13 days ago, with 15 releases in total.

github.com/ODM2/ODM2DataSharingPortal/

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ODM2 / ODM2DataSharingPortal Public

Watch 20 Fork 5 Star 19

<> Code Issues 76 Pull requests 1 Actions Projects Wiki Security Insights

main 7 branches 15 tags

Go to file Add file Code

about

A Python-Django web application enabling users to upload, share, and display data from their environmental monitoring sites via the app's ODM2 database. Data can either be automatically streamed from Internet of Things (IoT) devices, manually uploaded via CSV files, or manually entered into forms.

citizen-science odm2 envirodiy

Readme

BSD-3-Clause License

19 stars

20 watching

5 forks

Releases 15

v0.12.1: Hot Fixes to Database C... Latest

13 days ago

+ 14 releases

ODM2DataSharingPortal

This repository contains the code for a Python-Django web application enabling users to upload, share, and display data from their environmental monitoring sites. Data can either be automatically streamed from Internet of Things (IoT) devices, manually uploaded via CSV files, or manually entered into forms.

The ODM2 Data Sharing Portal is built on the [Observations Data Model Version 2 \(ODM2\)](#) information model and supporting software ecosystem, including an ODM2 database instance in PostgreSQL for data storage in the

Progress tracking on GitHub

github.com/ODM2/ODM2DataSharingPortal/issues

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Filters is:issue is:open Labels 25 Milestones 2 New issue

76 Open 331 Closed Author Label Projects Milestones Assignee Sort

- database error while installing the project
#554 opened 11 hours ago by TRSWNCA
- map legend - add ability to identify sites with data but station has been moved
#553 opened 5 days ago by dbressler75
- Enhance the new Time Series Visualization (TSV)
#551 opened 13 days ago by aufdenkampe 6 tasks Release 0.14 - Ke... 1
- Refactor Django models to more efficiently use ODM2

Progress tracking on GitHub

github.com/ODM2/ODM2DataSharingPortal/milestones

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Labels Milestones

2 Open 20 Closed Sort

Release 0.14 - Key features for community
No due date Last updated 13 days ago
0% complete 22 open 0 closed

Release 0.13 - Refactor code for performance & scalability
Due by February 28, 2022 Last updated 13 days ago
Deploy on AWS and optimize code for reliability, performance and sc...(more)

Progress tracking on GitHub

github.com/ODM2/ODM2DataSharingPortal/milestones?state=closed

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Labels Milestones

2 Open ✓ 20 Closed Sort

v0.12.1 Hotfixes & Tweaks to AWS release <u>Closed 13 days ago</u> Last updated 9 days ago	100% complete 0 open 13 closed
v0.12-release: Live Production MonitorMW Web App on AWS <u>Closed on Dec 7, 2021</u> Last updated about 1 month ago 2021 Task 3: Release a complete MonitorMW web app to "production" o...(more)	100% complete 0 open 16 closed
v0.12-beta: Port Full MonitorMW Web App to Staging on AWS Closed on Nov 29, 2021 Last updated about 2 months ago 2021 Task 2: Develop and test a complete MonitorMW web app as "stag"...(more)	100% complete 0 open 19 closed

Recent Happenings

- Transition to Amazon Web Services (AWS)
 - Replaced old code - more stable and faster
 - ODM2 software stack updated
 - “Software stack” is all the software applications that work together and need regular updating
 - Making improvements according to feedback – please fill out the survey! NOW!
 - <https://www.envirodiy.org/monitor-my-watershed-hits-the-cloud/>
 - <https://docs.google.com/forms/d/e/1FAIpQLSfc9079O3tfjiyu7LqY5TuJXWQ1w8FsacI4XQUN99fCY4tCTg/viewform>

Recent Happenings

- Replacement of Time Series Analyst (TSA) with Time Series Visualization (TSV)
 - “Although this presently reduces the features available for interactive visualization of time series data, it opens the door to new features that we will develop over the next year. TSV will also be more performant and reliable than TSA.”
 - aufdenkampe released this Dec 07, 2021,
<https://github.com/ODM2/ODM2DataSharingPortal/releases/tag/v0.12.0>

Updates to be made by end of February 2022

- <https://github.com/ODM2/ODM2/DataSharingPortal/milestone/19>

Labels

Milestones

Release 0.13 - Refactor code for performance & scalability

Due by February 28, 2022 0% complete

Deploy on AWS and optimize code for reliability, performance and scalability for growing use base and bigger than RAM data tables. Also consider long-term maintainability.

27 Open ✓ 0 Closed

Upgrade Django from v2.2 to v3.2 LTS tech-debt

#507 opened on Oct 13, 2021 by aufdenkampe

Refactor Django models to more efficiently use ODM2

#550 opened 14 days ago by aufdenkampe

Update Deployment Guide and related docs for releases >0.12

#549 opened 14 days ago by aufdenkampe

Update Deployment Guide on `develop` for Python 3 release; including how to set up private `settings.json` files

#503 opened on Jul 27, 2021 by thuongtonphapluat1988

Customize WOFpy client pages? WoFpy-related

#516 opened on Nov 12, 2021 by emiliom

Confirm that WOFpy timestamps are correct bug WoFpy-related

#433 opened on Sep 10, 2019 by aufdenkampe

Unify app server: Gunicorn or uWSGI or other? tech-debt

#431 opened on Sep 5, 2019 by aufdenkampe

Cache Busting for JS/CS tech-debt

#529 opened on Nov 29, 2021 by ptomasula

Use Pandas for CSV upload and download functions tech-debt

Updates to be made after Feb 2022

- <https://github.com/ODM2/ODM2DataSharingPortal/milestone/20>

Labels Milestones

Release 0.14 - Key features for community

No due date 0% complete

22 Open 0 Closed

- Enhance the new Time Series Visualization (TSV)
#551 opened 14 days ago by aufdenkampe 6 tasks
- TSV y axis - add ability to adjust axis
#540 opened on Dec 17, 2021 by dbressler75
- adding custom y-axis range, similar to x-axis date selection feature request tsa-related
#457 opened on Jan 23, 2020 by dbressler75
- Allow non-raw-data to be posted/shared backburner feature request
#263 opened on Jun 5, 2018 by SRGDamia1
- GUI for csv uploads feature request
#384 opened on Apr 25, 2019 by SRGDamia1
- Lighter Weight Data Post Request backburner feature request
#11 opened on Feb 2, 2017 by horsburgh
- Consider CoAP over UDP instead to reduce power/data use on cellular networks backburner enhancement
#95 opened on Oct 3, 2017 by SRGDamia1
- Create MQTT endpoint for receiving data enhancement
#334 opened on Nov 6, 2018 by aufdenkampe

Final thoughts

- Please pass on the survey to others,
<https://www.envirodiy.org/monitor-my-watershed-hits-the-cloud/>
- Feel free to be in touch re Monitor My Watershed
- Access EnviroDIY.org and GitHub to track progress on Monitor My Watershed