Upgrades to Monitor My Watershed, 2022

January 20, 2022
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/](https://github.com/ODM2/ODM2DataSharingPortal/)
  - then access Milestones and Releases
  - [https://github.com/ODM2/ODM2DataSharingPortal/milestones](https://github.com/ODM2/ODM2DataSharingPortal/milestones)
  - [https://github.com/ODM2/ODM2DataSharingPortal/releases](https://github.com/ODM2/ODM2DataSharingPortal/releases)

*ODM = Observations Data Model

Progress tracking on GitHub
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Progress tracking on GitHub

- **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
  - 0% complete, 27 open, 0 closed

- **Deploy on AWS and optimize code for reliability, performance and sc... (more)**
Progress tracking on GitHub

- v0.12.1 Hotfixes & Tweaks to AWS release
  - Closed 13 days ago
  - Last updated 9 days ago
  - 100% complete, 0 open, 13 closed

- v0.12-release: Live Production MonitorMW Web App on AWS
  - Closed on Dec 7, 2021
  - Last updated about 1 month ago
  - 2021 Task 3: Release a complete MonitorMW web app to "production" o...
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/1FAIpQLSfc9079O3tfjiyu7LqY5TuJXWQ1w8Fsacl4XQUN99fCY4tCTg/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 that 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/ODM2DataSharingPortal/milestone/19](https://github.com/ODM2/ODM2DataSharingPortal/milestone/19)
Updates to be made after Feb 2022

- [https://github.com/ODM2/ODM2DataSharingPortal/milestone/20](https://github.com/ODM2/ODM2DataSharingPortal/milestone/20)

**Release 0.14 - Key features for community**

- Enhance the new Time Series Visualization (TSV)
  - #551 opened 14 days ago by auferkenkamp
  - 0 tasks
- TSV y-axis: add ability to adjust axis
  - #540 opened on Dec 17, 2021 by diez服务器75
- Adding custom y-axis range, similar to x-axis date selection
  - #457 opened on Jan 23, 2020 by diez服务器75
- Allow non-raw data to be posted/shared
  - #265 opened on Jun 5, 2018 by SRSdata
- GUI for csv uploads
  - #384 opened on Apr 25, 2019 by SRSdata
- Lighter Weight Data Post Request
  - #11 opened on Feb 2, 2017 by horsburgh
- Consider CoAP over UDP instead to reduce power/data use on cellular networks
  - #15 opened on Oct 3, 2017 by SRSdata
- Create MQTT endpoint for receiving data
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