

902403 - Expedition DB Modern

Week 51

1. Kevin Gomes
 - a. Debugged some processing that has been broken since 2022!!
 - b. Added packard to ship nav loads

Week 46

1. Kevin Gomes
 - a. More plumbing for new Packard flows.

Week 42

1. Kevin Gomes
 - a. Looking into Dagster/Prometheus as ways to introduce orchestration, monitoring and alerting into the EXPD data pipelines I am re-working.

Week 39

1. Kevin Gomes
 - a. Working on Dagster implementation of the CTD config file monitor to get some experience with Dagster and Prometheus

Week 33

1. Mike McCann
 - a. Issuing PO for ActiveState renewal

Week 31

1. Brian Schlining
 - a. Meeting with DMO to discuss future directions.

Week 27

1. Karen Salamy
 - a. No meeting this week.

Week 25

1. Mike McCann
 - a. Project meeting

2. Karen Salamy
 - a. I am planning to return to work on this project after the M1 and SINKER deployments in mid-July.

Week 24

1. Karen Salamy
 - a. I attended team meetings.
2. Brian Schlining
 - a. Working on 2026 project proposal

Week 23

1. Mike McCann
 - a. Project meeting

Week 22

1. Brian Schlining
 - a. The project now has the following pieces in place. I'm moving on to other projects for the moment:
 - i. A new [database schema](#)
 - ii. [Tools for migrating the existing database to the new schema](#).
 - iii. A documented [REST API](#) ([source](#)). Along with a [python SDK](#) to simplify developer use (and an [example](#) to get started with).
 - iv. Authentication via [MBARI's Duo](#) (for human-in-the-loop apps) or using [API keys](#) (via an X-API-Key http header) for non-interactive applications.

Week 21

1. Brian Schlining
 - a. Continuing work on the database design and REST API. Many new endpoints added to the api. Swagger docs are at <http://gehenna.shore.mbari.org:9999/q/docs/>
 - b. Added authentication and role-based access control (RBAC)
 - i. Added OpenID Connect (OIDC) authorization (via Duo). Test login page at <http://gehenna.shore.mbari.org:9999/oidc.html>
 - ii. Added X-API-Key authentication. Test apikey page at <http://gehenna.shore.mbari.org:9999/xapikey.html>

Week 20

1. Mike McCann
 - a. Wrote dive_hours.py script to give IS information for sizing onboard storage for ROV video data
 - b. I am working on getting tests to pass in expd-django's expd-next branch

2. Karen Salamy
 - a. Attended the weekly team meeting on database updates and progress by Brian. I owe him some quick research on most popular SQL calls by users for the pre and post cruises in the past.
3. Brian Schlining
 - a. Lots of development on the database design and [REST API](#). Working through authorization and authentication; it needs to support both duo (human-in-the-loop authentication) as well as apiKey (i.e. machine-to-machine) authentication.

Week 19

1. Kevin Gomes
 - a. Meeting about API progress and migration of loading
2. Mike McCann
 - a. Wondering if I should continue to work on getting tests to pass on the expd-next branch
3. Brian Schlining
 - a. Continuing work on new expedition database design, [migration tools](#), and [API](#). Swagger docs for testing at <http://gehenna.shore.mbari.org:9999/q/docs/>

Week 18

1. Mike McCann
 - a. Got infinite scroll working for Postcruise Expedition list view
 - b. Merged all dependabot updates except for postgres 16 -> 17
 - c. Fixed problem with edited ROV nav ingest into rovtctdbin data
 - d. Continuing keeping main and expd-next branches in sync while following EXPD_NEXT

Week 17

1. Mike McCann
 - a. Wrote days_at_sea management function for Matt to get total days at sea for all our ships
 - b. Able now to incorporate schema changes from expd_next_foggy on the expd-next branch
 - c. Able to merge web app improvements on the main branch into expd-next
 - d. Working on display and usability issues for better Postcruise functionality

Week 16

1. Mike McCann
 - a. About done configuring local and CI containers & settings for EXPD_NEXT development
2. Brian Schlining
 - a. Working on [REST API](#) for new database schema

Week 15

1. Mike McCann
 - a. Building continuous integration Docker stack and Django config for EXPD_NEXT
 - b. Had IS add the everyone read-only account to access EXPD_NEXT on foggy
 - c. Wrote [detailed comment](#) about trying to sort out all of the different databases we have
2. Brian Schlining
 - a.

Week 14

1. Mike McCann
 - a. Thinking about how best to do test driven development on expd-django's expd-next branch
2. Brian Schlining
 - a. Continuing work on the new database design and REST API.

Week 13

1. Mike McCann
 - a. Ran a django inspectdb against EXPD_NEXT on foggy and saw lots of ForeignKeys, Yay!
 - b. Started long-running expd-next branch in expd-django to track the new database changes
2. Brian Schlining
 - a. Ran the [first migration](#) of EXPD to EXPD_NEXT, a candidate for the new database design.
 - b. Started work on a [REST API](#) for the new database. Currently testing performance related to consolidating the yearly data tables into single tables.

Week 12

1. Brian Schlining
 - a. Continuing [work on the new EXPD database](#). Ran a test load to [combine the yearly ROV CTD tables into a single table](#) (about 81 million rows). There's now a [standard way to migrate data tables](#) so things should move faster now.

Week 11

1. Kevin Gomes
 - a. Experimenting with TimescaleDB for long term combined storage of timeseries data
2. Mike McCann
 - a. Regular bi-weekly project meeting
 - b. Trying to make the sharable postcruise results link more user friendly

3. Brian Schlining
 - a. Continuing to work on cleaning up and updating the database schema.
 - b. Testing database has been set up at EXPD_NEXT on foggy.shore.mbari.org

Week 10

1. Brian Schlining
 - a. Working through the [database schema](#) and [data importers](#) for the new DB design.

Week 9

1. Kevin Gomes
 - a. Meeting
 - b. Looking into time series database and workflow tools
 - c. More documentation of current workflow
2. Mike McCann
 - a. Working on replicating the legacy postcruise.asp – adding the data links
 - b. Planning to abandon the ExpeditionData table and dynamically generate links from REST calls
 - c. Got GitHub Actions to trigger jobs on Pull Requests to upstream – thanks Carlos & Kevin!
 - d. Seem to be on target with a near complete expd web app replacement in a few weeks
3. Karen Salamy
 - a. Checked in various UX code updates including fixing some bugs with the precruise and updating the Home Page for the new EXPD to be similar to the existing one on Canyon Head.
4. Brian Schlining
 - a. Set up scripts ([clean_start.sh](#), [sqlserver_run_ddl.sc](#)) to scrub and rebuild a testing database for development of the new database schema. Working on [migrating](#) the existing production database to the new schema. There are a lot of data integrity issues that need to be addressed with the production database as part of this migration.

Week 8

1. Mike McCann
 - a. Got linter job to run in GitHub Actions for expd-django – this will help maintain code quality
 - b. Figuring out how to use pre-commit to apply to all files, including html template files
 - c. Working on replicating the legacy postcruise.asp functionality

Week 7

1. Kevin Gomes
 - a. Working on documenting current scripts, batch files and stored procedures to scope replacement
2. Mike McCann
 - a. Got tests to run in a fresh empty EXPD database in GitHub Actions
 - b. Team meeting to discuss contributing, workflows, and design
 - c. Continuing to iterate on Precruise & Postcruise functionality and tests

Week 6

1. Mike McCann
 - a. Merged [expd-django-5.0 branch](#) to main and pulled to production
 - b. Kicked off team meetings that will continue bi-weekly through March
 - c. Trying to get tests to run on a fresh Azure SQL Edge database in GitHub Actions
2. Karen Salamy
 - a. Attended the first 2025 kickoff for EXPDM with Mike M. Mike reviewed the new Django app structure he has built.

Week 5

1. Mike McCann
 - a. Testing the [expd-django-5.0 branch](#) in production on <https://expd.shore.mbari.org>
 - b. Learning to use the [Kolo app](#) to generate integration test code - it's pretty cool!
 - c. Testing GitHub Actions for expd-django - wondering what databases are needed for the tests

Week 4

1. Mike McCann
 - a. Tried to organize [EXPD Modernization project page](#) to be helpful for project team members
 - b. Working on cookiecutter-django and Django 5.0 updates: [Issue 59](#)

Week 3

1. Mike McCann
 - a. Built the [Django documentation polls app](#) to better understand the essentials of Django
 - b. Got expd-django's precruise to load data into the database using the legacy form
 - c. Writing more tests for precruise creation and expedition update views

Week 2

1. Mike McCann

- a. Trying to get the Precruise Step 2 "Check these entries..." page to work in expd-django