MongoNAS
HPC Academy 2019

August 15, 2019

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Overview

- The Old Way
- The Problem
- The Solution!
- Under The Hood
- Demo
- The Future
The Old Way

- SSH to Net App filer and use bash to produce user storage information
- Perl Script to make data human readable
- Data pulled from text files into web-app interfaces
The Problem

- Lots of parts leads to a lot of possible failure points
- Data is not in a single regularly updated location
- Data has minimal structure and lacks depth
- Difficult to query
- Text files are not easily transferred to the web
The Solution!

- MongoDB
  - Single Data Source
  - Access Control and Authorization
  - Easily accessible from multiple endpoints

- Python modules for inserting data into the database

- Web Interface
  - Quickly access and search the data
Under The Hood

Interface
- WebApp
- CGI (WSGI)
- Search (JS)

Frontend Code

Database
- MongoDB

Backend
- Client Side: mscan.py
- ocfnascona: mcdot.py
The Future

- More advanced search and sort
- Usability enhancements
  - Rich tables
  - Human-readable data
- Integration into other tools
  - quotamod
  - Lorenz
- Rollout to all filers
  - Animal workspaces
  - RZ
- Collaborate with SAG and the Hotline
Special Thanks to our project mentors

Mike Gilbert

Stephanie Choate