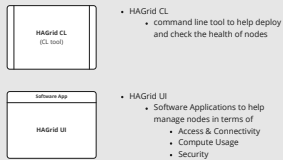


## Deployment & Orchestration

Tools to help deploy, monitor, and orchestrate nodes



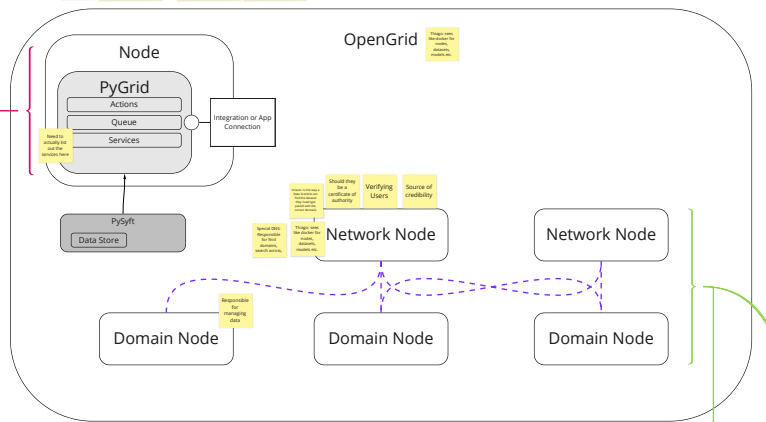
### Possible Integrations



## Notes

- OpenGrid is a network structure that mimics the internet while still using the internet -- so in essence it is a *highway* governed by more specific rules layered over the internet
  - PyGrid is the backend architecture that helps support running OpenGrid  
(No longer the Management or Governance UI)
  - Syft is the library being run off of
- In order to get it running a lot of apps and services have been thought up (in this diagram) that mimic apps and services already in place for the internet.
  - This provides a lot of opportunity to integrate with and open up for API creation with others instead of building from scratch
- The idea here is that we separate out what we are currently trying to get "PyGrid" to accomplish, into respective product experience spaces. These spaces will take the form of different products, web apps, APIs, and integrations. Both built by us and jointly built with others we believe to be good collaborators.
- My aim is that this approach will lead to...
  - Clearer distinction between what is *icing on the cake* versus what is absolutely *essential* for proving product viability
  - Quicker idea to implementation as we can target a single section's MVP versus trying to weave every auxiliary feature into one MVP
  - More reliable updating as we will no longer be asking the user to directly download all application features under the name PyGrid to their node. Instead we will be asking them to download the core features with options to connect to web apps, integrations, and custom APIs that can cover the other features
  - More team support as we can partner with others to build APIs and Web apps that better fit their orgs with or for us instead of building all being in house
  - Industry specific Apps, if we can partner with others we can create governance apps with them that more specific to their workflows and industry more so than we can with a general governance solution
    - This will require clear foundational rulesets between networks and domains that cannot be changed
    - This will require clear documentation around services and actions a developer can build from
    - But this could lead to solutions that tackle problems like integrating with PACS systems and other barriers that are very specific to that workflow.
- Last but not least given the above diagram, I would say the main things that would need to be focused on for a proof of network concept are...
  - PyGrid robustness
  - Deployment & Orchestration Products
  - Clear documentation behind what services and actions in PyGrid are available to build an app or integration from

**Notice:** Governance was not mentioned, this is a shift from earlier thinking. The closer we can get to sandboxing the better and the above is why we cannot just give a partner a reliable sandbox.



## Research

Spaces to house scientific and analytical inquiry into data



- Data Scientists
  - Pulls Syft in
  - Can connect to Node Client for research
  - Can send requests to Nodes
  - Can Pull permitted information from Nodes
  - Can use Syft and supported integrations for research workflow
- Data Owner
  - Can Annotate Dataset
  - Can Upload Dataset to Node
  - Can Manage Datasets (Add, Remove, Edit)

### Possible Integrations



## Governance

Spaces to facilitate conversations around data use and permissions

- Network Manager
  - Triage Members
  - Manage Members
  - Verify Members
  - Monitor Member Activity
  - Vote on Study applications
  - Track Study Blockages
- Domain Manager
  - Upload & Manage Data
  - Adjust Dataset metadata
  - View Data Details
  - Monitor Activity on Data Subjects
  - Specify Policies & Triage Projects
  - Manage Team Permissions & Access



### Possible Integrations



## Discovery

Products to facilitate conversations around finding and vetting nodes and datasets.



- Register nodes to OpenGrid
- Search for nodes across OpenGrid
- Search for Datasets across OpenGrid
- Search for network registry pages



- A way for Networks to create profile or landing pages that a user lands on during search
- Ideas on things a user could do when landing is register for the network and potentially read about a promoted project that the network is recruiting for
- Potentially a CMS to help a network control how they present themselves

## Analytics

A space to see research, dataset, or node impact/performance



- Can see summary and performance across a network.
  - Dataset categories across domains
  - Search Performance  
(if connected to Grid Registry)
  - Study Application summary info
  - Dataset Usage
- Information pulled depends on...
  - Connection to Grid Registry
  - Connection to a Network
  - Integrations
  - Info on the Node itself

### Possible Integrations

