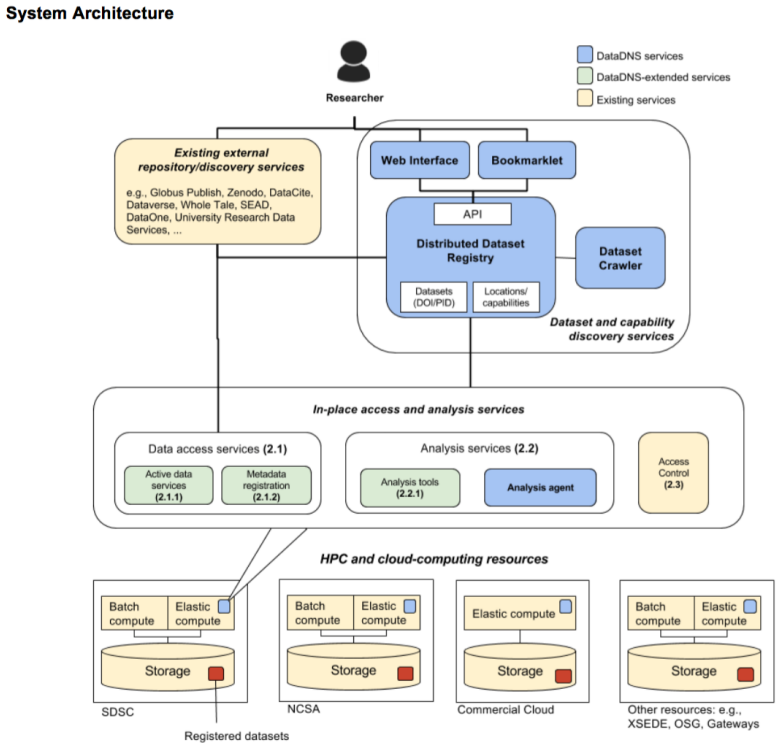
Workbench and DataDNS

DataDNS envisioned 4 primary components:

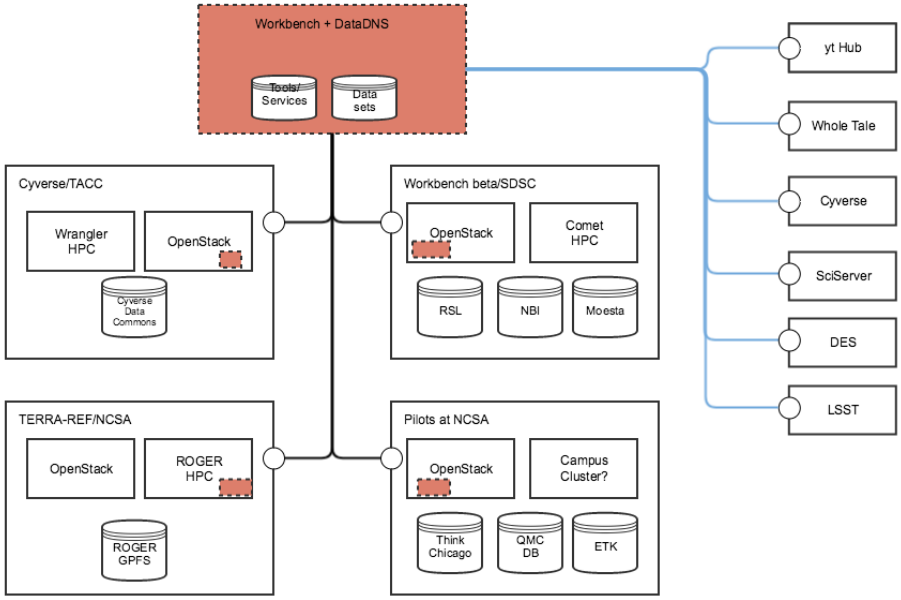
- Distributed dataset registry containing datasets, locations, and capabilities
- A lass of analysis agents that supported launching analysis environments near the data
- Dataset crawler used to populate the registry from various sources
- Data search engine built on the registry

The design was based on the assumption of heterogeneity – different agents running at each participating site.



Proposed DataDNS architecture

We are proposing to "merge" the ideas of the Workbench and DataDNS, eventually extending to integrate with external services. The motivation is that we already have Workbench installed at 3 different sites providing access to a variety of data and analysis environments. It should be straightforward to support the case of a user from one system – or a centralized DataDNS system – launching analysis at a remote location.



User story

A user of the public beta can discover a TERRA-REF analysis environment and execute it via the TERRA-REF Workbench instance. A URL is returned to the running analysis environment from workbench.terraref.org.

What needs to happen:

- TERRA-REF analysis environments can be discovered outside of TERRA-REF WB
- External service (e.g., beta WB) can launch via TERRA-REF WB API
- If no guest access is provided, user will need to apply for access