VESPA-Cloud
Update #3

Virtual European Solar and Planetary Access
Europlanet-20204-RI

Website: http://europlanet-vespa.eu

Main Query Portal: http://vespa.obspm.fr

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VESPA-Cloud

Virtual European Solar and Planetary Access

A distributed Virtual Observatory for Solar System Sciences

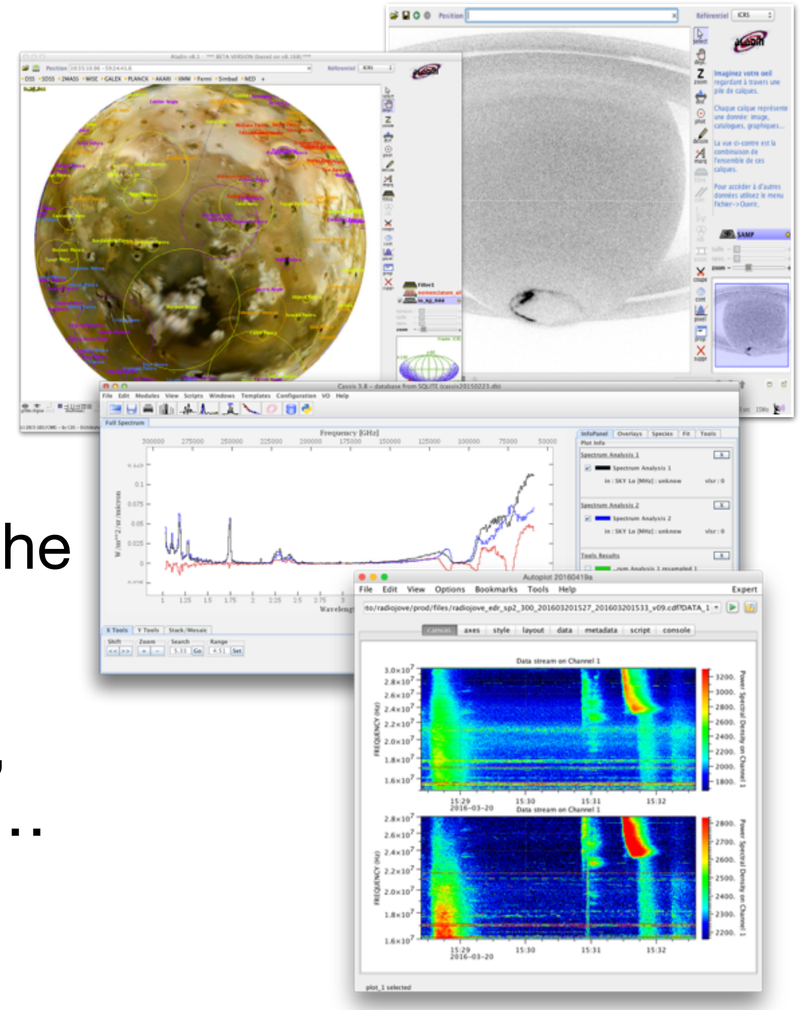
- **Sharing metadata for science data products** using relational databases and a standard metadata *(target, observer, location, spectral range, time range, physical parameter, product type…)*

- Distributed virtual research environment:

  - *Astronomy* interoperability framework (IVOA) and the tools developed by this community

  - Other interoperability standards from *heliophysics*, *planetary sciences* archives, and associated tools…

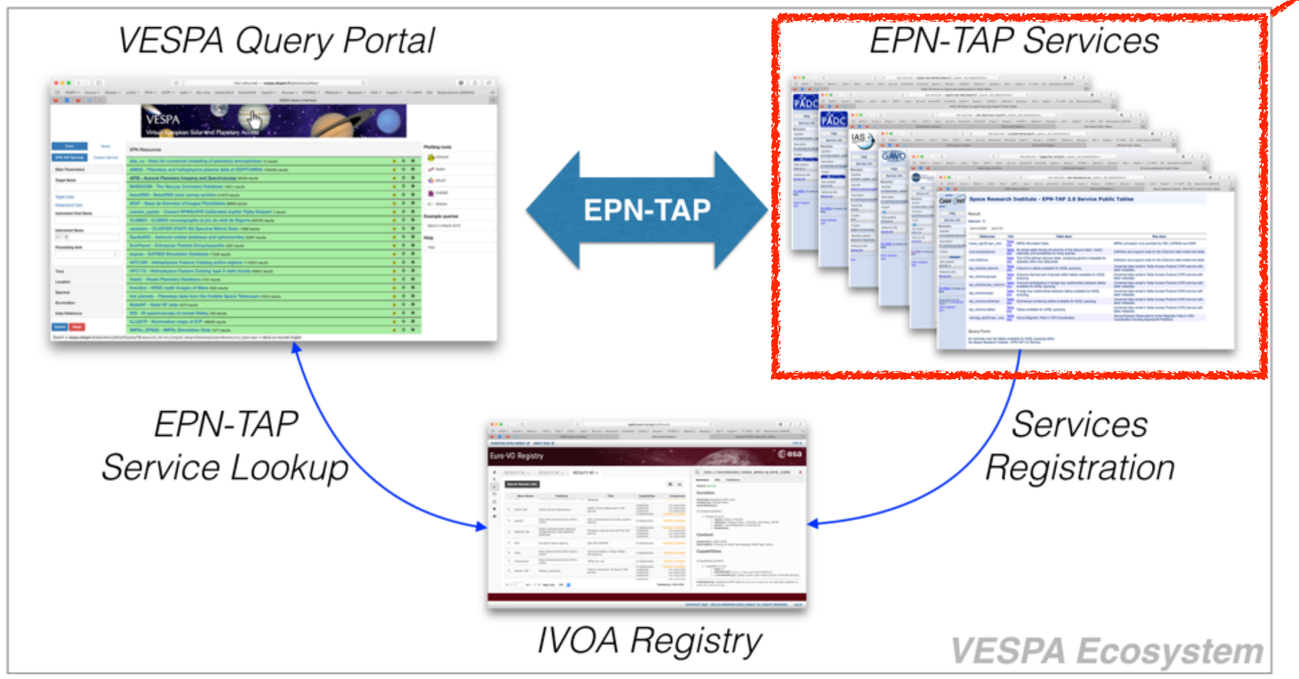
  - Community recommended data formats

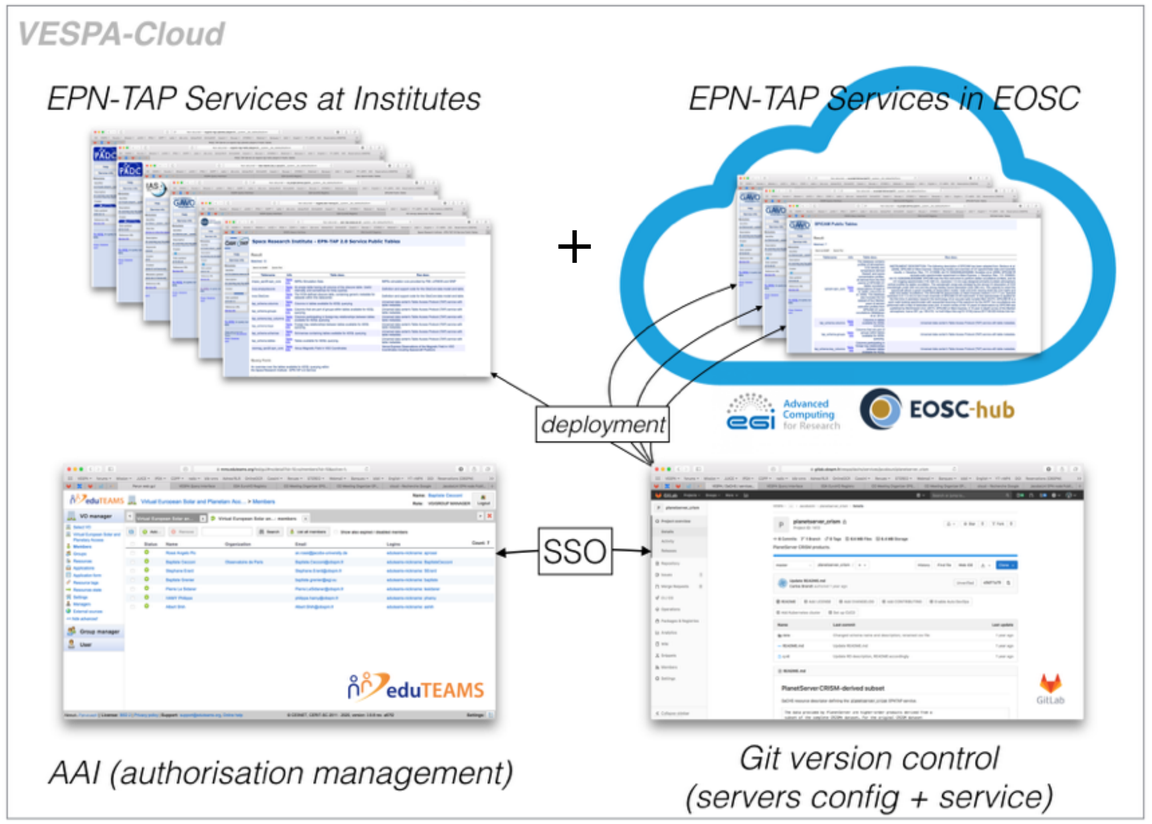


VESPA-Cloud

Virtual European Solar and Planetary Access

A distributed Virtual Observatory for Solar System Sciences





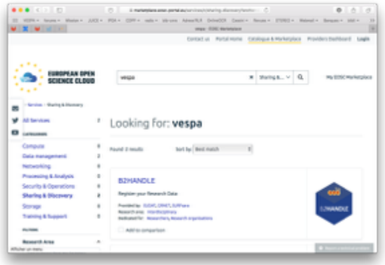
VESPA-Cloud

Virtual European Solar and Planetary Access

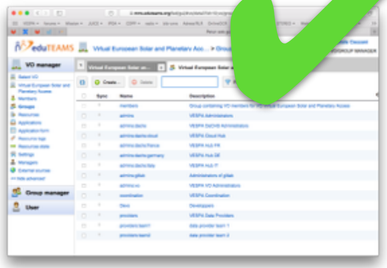
Service configuration and metadata management

- *Provider* orders a VESPA-Cloud service
- *VESPA-Cloud* registers *Provider* in VESPA-Cloud VO (eduTEAMS)
- *Provider* is authenticated through eduTEAMS to access GitLab server
- *Provider* manages his service configuration and metadata in GitLab
- *VESPA-Cloud* deploys the service configuration on server instances (DaCHS on EGI, Storage on B2SAFE…)

Marketplace

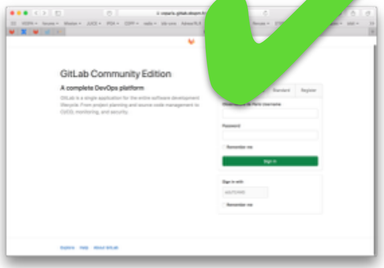


eduTEAMS



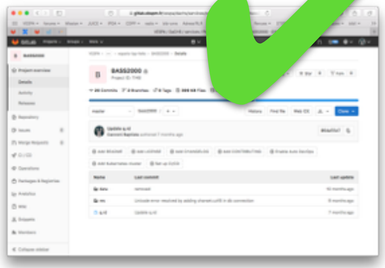
AAI

GitLab



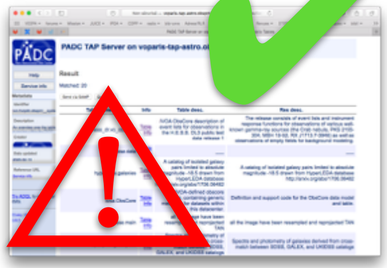
server config.

GitLab



service config.

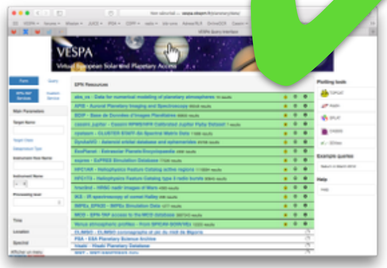
DaCHS



openstack deployment

(not failsafe, redeploy script needed)

VESPA



accessible and findable

- **VESPA VO Community AAI with eduTEAMS**
  - implemented and configured.
  - mapped to vo.europlanet-vespa.eu at EGI-CheckIn AAI for VM deployment authorization

- **VM resources at CESNET and CC-IN2P3**
  - access granted and tested (with manual deployment)
  - SLA in place

- **Storage resources**: not tested.
  Marketplace: not started

- Issue:
  - need for automation for reloading VM resource.

VESPA-Cloud Sustainability plans

- **VESPA-Cloud infrastructure:**
  - AAI (eduTEAMS)
  - Storage spaces (EUDAT, EGI)
  - DaCHS Services (EGI - IN2P3+CESNET)
  - Community + Marketplace
- **Ambitious initial programme of work**. Not all done, but promising prototype.
- **What happens now:**
  - **On VESPA side**, willing to continue prototyping of current architecture
  - ***Continuation of SLA***
  - ***Extensions:*** *let's first finish this one*