

DataPLANT services design – Considerations towards a common NFDI landscape

Data
PLANT

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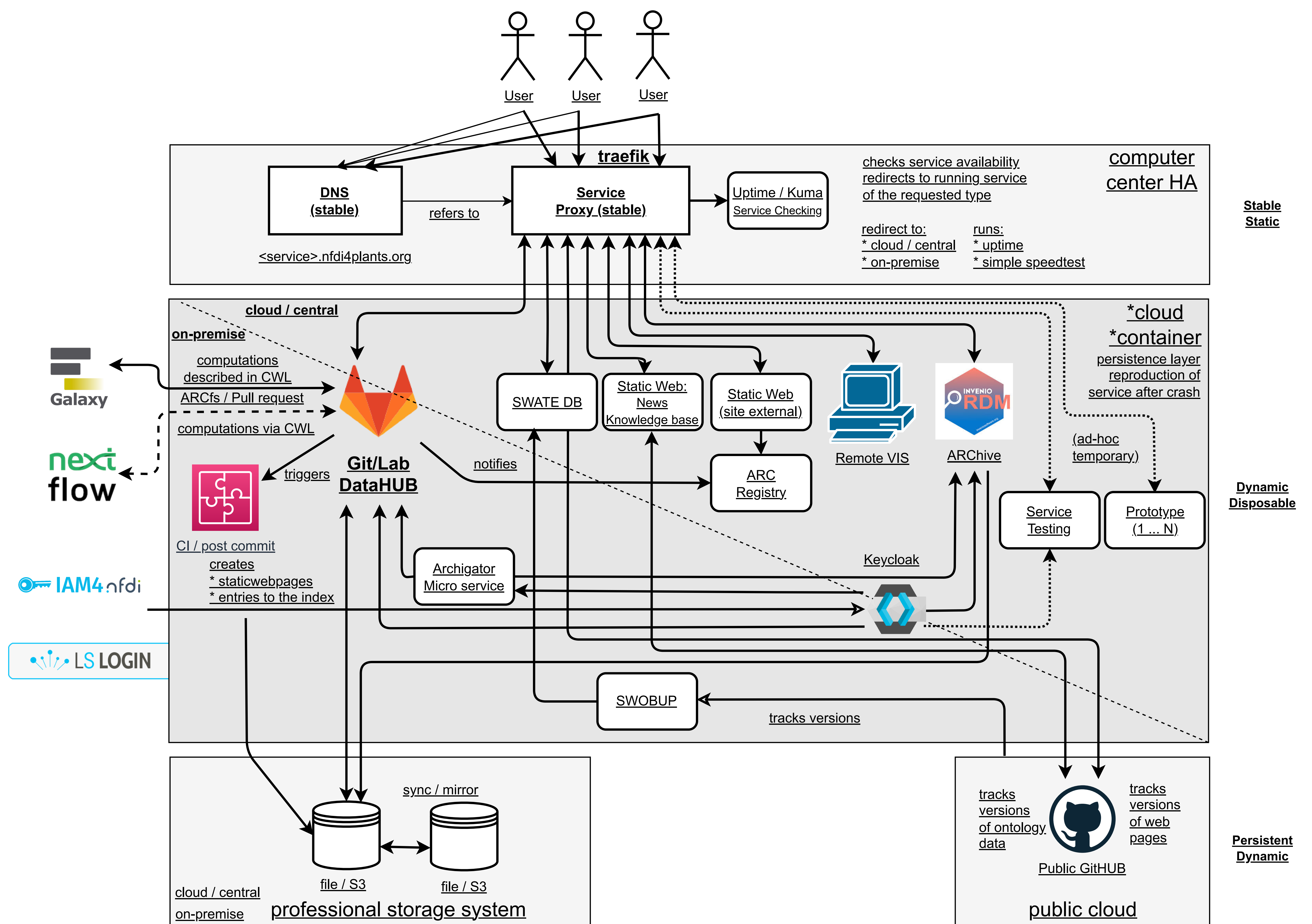
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STABLE LAYER

In the stable layer, the infrastructure proxy ensures targeted routing to all DataPLANT services. This can be configured automatically during operation. The configuration is automatically obtained from Gitlab, which means that this configuration is protected by versioning. The central entry proxy enables complete control over incoming and

SERVICE DESIGN

All DataPLANT services are designed in such a way that they can be completely rebuilt from the source data. This makes these services highly re-deployable and safe from data loss in the infrastructure. All software components are packaged as configurable docker containers which allow them to run on arbitrary cloud infrastructures like e.g. some EOSC node



STORAGE LAYERS

The basic infrastructure consists of the DataPLANT services, which centrally are controlled by Gitlab. These services are supported by the persistent layer. This stores the resulting data in S3 and storage file systems of the DataHUB, ARChive and other DataPLANT systems. Automatically generated websites, ontologies and templates are stored in the dynamic layer. Github serves as the basis for making the data open-source and publicly available to the scientific community.

SERVICES INTEGRATION

DataPLANT services are accessible to users of various AAI infrastructures. These include LS-AAI, NFDI-AAI and Galaxy. This integration allows users to continue to use their existing accounts while accounting and membership relations measures can be managed within DataPLANT's infrastructure using Keycloak to evaluate and enforce service usage policies based on users' affiliations, roles and other attributes.