WP5 - ESAP

ESFRI Science Analysis Platform

WP3+WP5 Common Call

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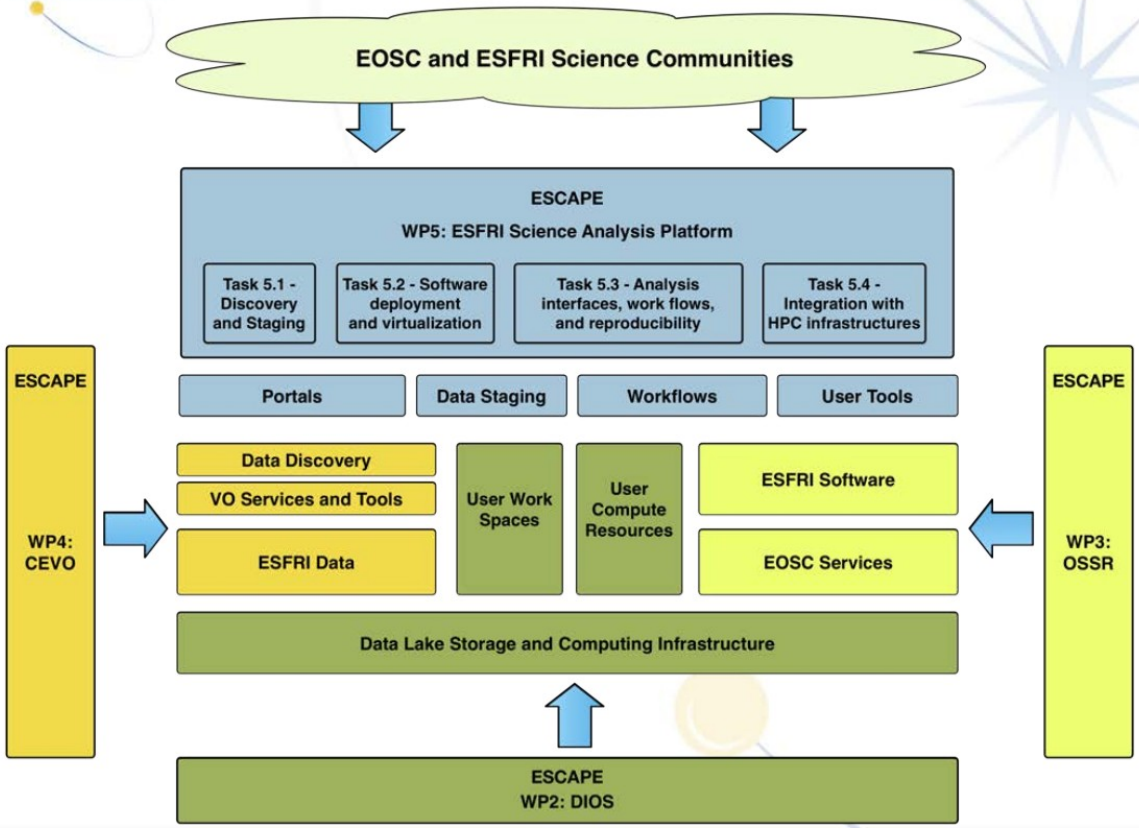
WP5: ESFRI Science Analysis Platform



WP5 Context

- Building a prototype Science Analysis Platform – allowing users to find, process, analyse and compare data from different farcilities and archives.
- Finding data through the Virtual Observatory
- Integrated with Data Lake – distributed computing and storage – processing data from the ESFRI's stored in the data lake
- Processing data with software from the repository

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WP5: Tasks

- T5.1 – Data aggregation and staging
- T5.2 – Software deployment and virtualisation
- T5.3 – Analysis interface, work flows and reproducibility
- T5.4 – Integration with HPC and HTC infrastructures

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WP5: Tasks

- T5.1 – Data aggregation and staging
- T5.2 – Software deployment and virtualisation
  - Integrate software and service repository (WP3), allow access to software components developed by ESFRIs
  - Provide access to software repository metadata
  - Support containerisation of additional tools
  - Demonstrate with variety of examples (CSIC, EGO, FAIR, JIVE, LOFAR)

- T5.3 – Analysis interface, work flows and reproducibility
- T5.4 – Integration with HPC and HTC infrastructures

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WP5: Tasks

- T5.1 – Data aggregation and staging
- T5.2 – Software deployment and virtualisation
- T5.3 – Analysis interface, work flows and reproducibility
  - Interactive analysis interface which Integrates data access & staging (T5.1)
  - Provides access to EOSC software repository (T5.2)
  - Simplify porting workflows to science platform environment
    - support common deployment language (e.g. CWL)
    - deploy across EOSC infrastructure
  - promote preservation & sharing of workflows
  - Start with small number of representative workflows

- T5.4 – Integration with HPC and HTC infrastructures

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WP5: Tasks

- T5.1 – Data aggregation and staging
- T5.2 – Software deployment and virtualisation
- T5.3 – Analysis interface, work flows and reproducibility
- T5.4 – Integration with HPC and HTC infrastructures
  - Deploy user-initiated workflows on HPC and HTC infrastructure – maintain interactivity and responsiveness
  - Obviously close links with WP2 – integrate Science Platform with Data Lake
  - Expand number of ESFRIs supported

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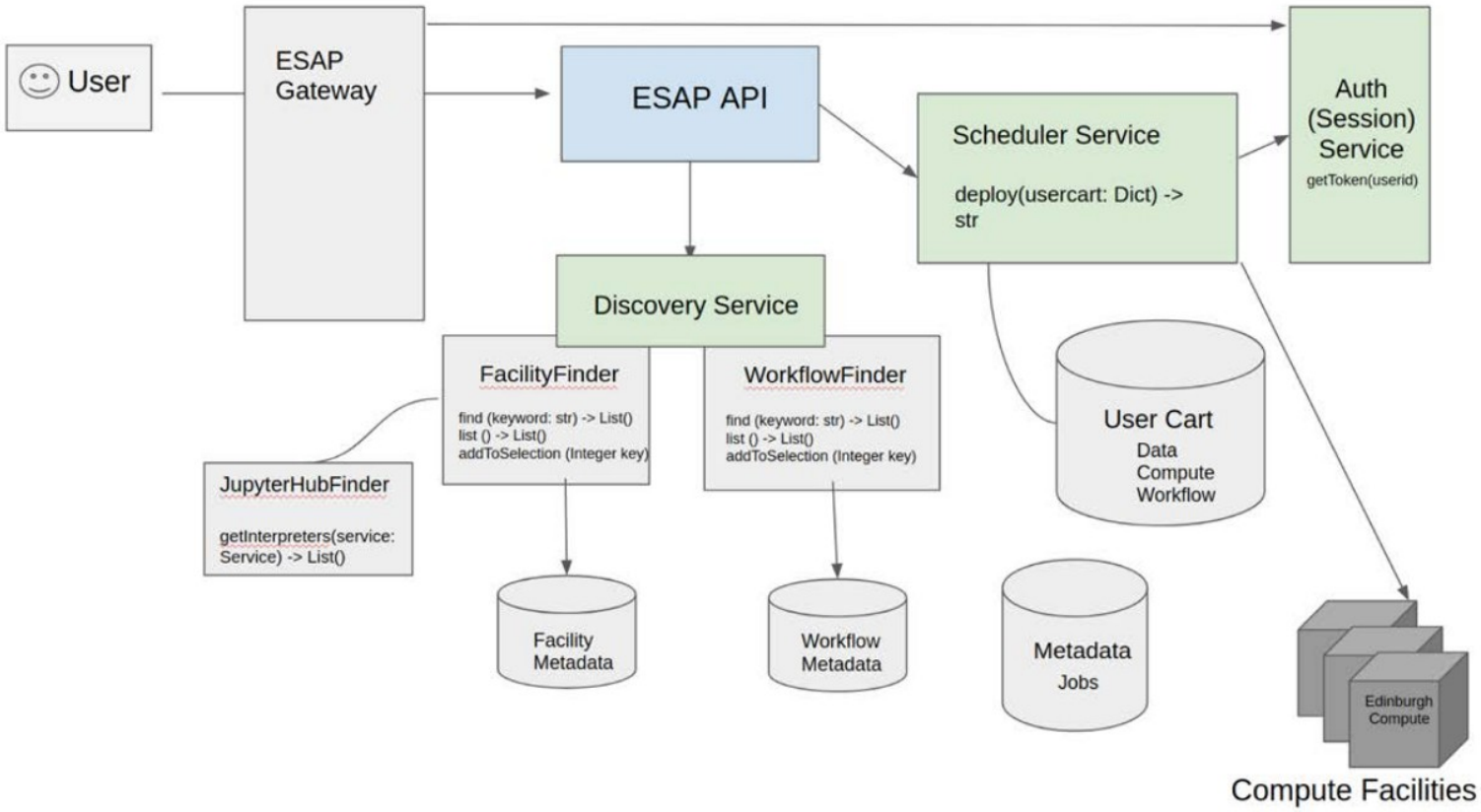
ESAP Architectural Design



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Discussion points

- How do we store metadata describing the notebook and what metadata specifically is needed, so that ESAP can display useful information to the users such as required libraries, description of notebook use case?
- Do we start with the Gitlab repository developed by WP3? Or do we start with our own repo as a test case, and then switch to the WP3 later?
- Where is the WP3 Gitlab located? Is the structure flexible? Can we iterate with them over what metadata is stored and how it is stored? Does Gitlab provide an API that we can read from?
- Do we harvest and display other software & workflows in the same page/way? Is the metadata stored for both cases similar? How does our API reader service distinguish between the two?

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Thank you !