

1. Access to all European research data
2. Access to world-class data services
3. Clear rules of use and service provision
4. FAIR data tools, training and standards
5. Sustainable after the grant

Current status:
Access to isolated
tabular data sources



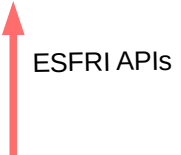

User database connector

- Managed by ESAP
- On-demand creation of dbs, table sets and tables
- Owned by the user



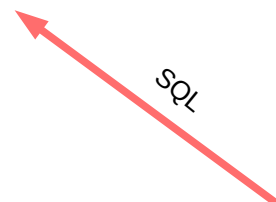
IVOA connector

- Use of column names as-is
- Complex queries



ESFRI connector

- Standardized, pre-formatted queries



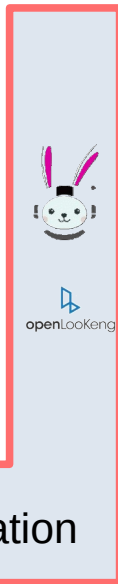
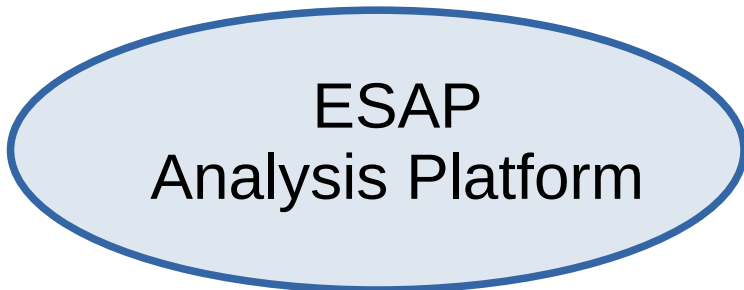
External database connector

- Only RDBMs (SQLAlchemy)
- Access with read-only role

Federation of heterogeneous data sources



SQL



Trino / openLookEng: SQL-to-everything federation

User database connector



- Managed by ESAP
- On-demand creation of dbs, table sets and tables
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External database connector

- Most RDBM
- Most NoSQL DB

IVOA connector

- Use of column names as-is
- Complex queries



ESFRI connector

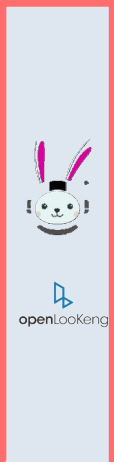
- Standardized, pre-formatted queries



Federation of heterogeneous data sources



Trino / openLookEng: SQL-to-everything federation



Data-lake connector



- Access to metadata
- Elastic Search?
- How to present the metadata as tables?

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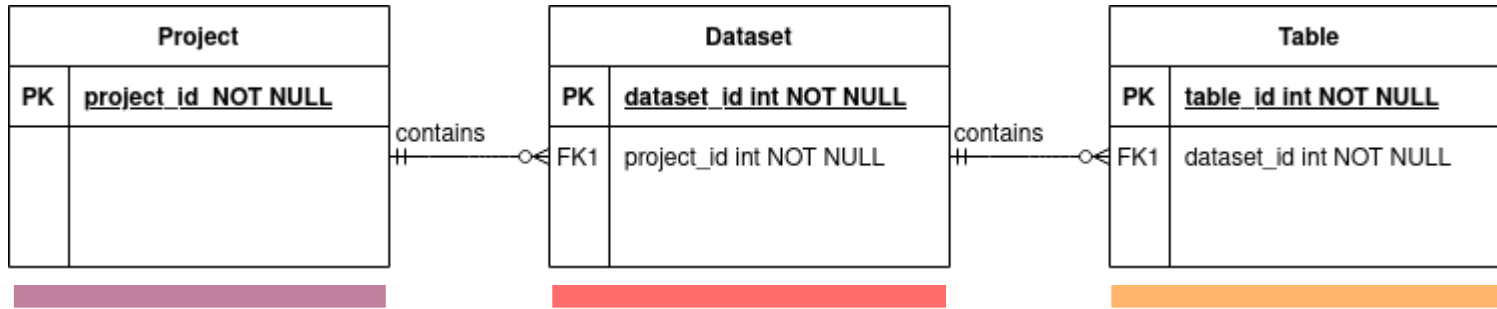
ESFRI connector

- Standardized, pre-formatted queries

External database connector

- Most RDBM
- Most NoSQL DB

Data-lake connector



```
SELECT did FROM `project_id.dataset_id.table_id` WHERE metadata='xyz'
```

ex: 'escape_datalake'

Rucio's
Scope

Rucio's Dataset or
Container