

Enriching Pure data using Ricgraph – Research in context graph- and BackToPure

Presentation at Vrije Universiteit Amsterdam, January 23, 2025



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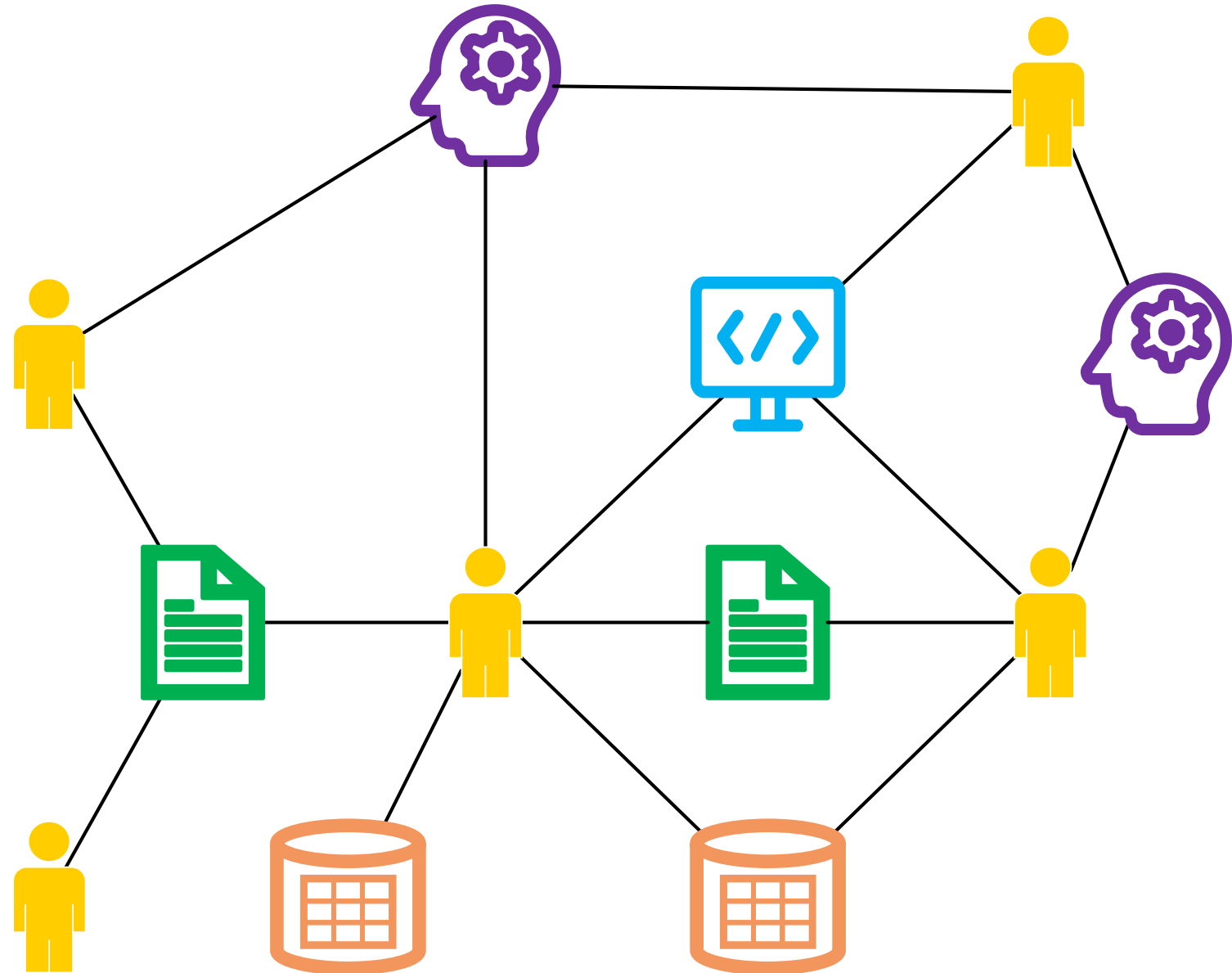


What is Ricgraph – Research in context graph?

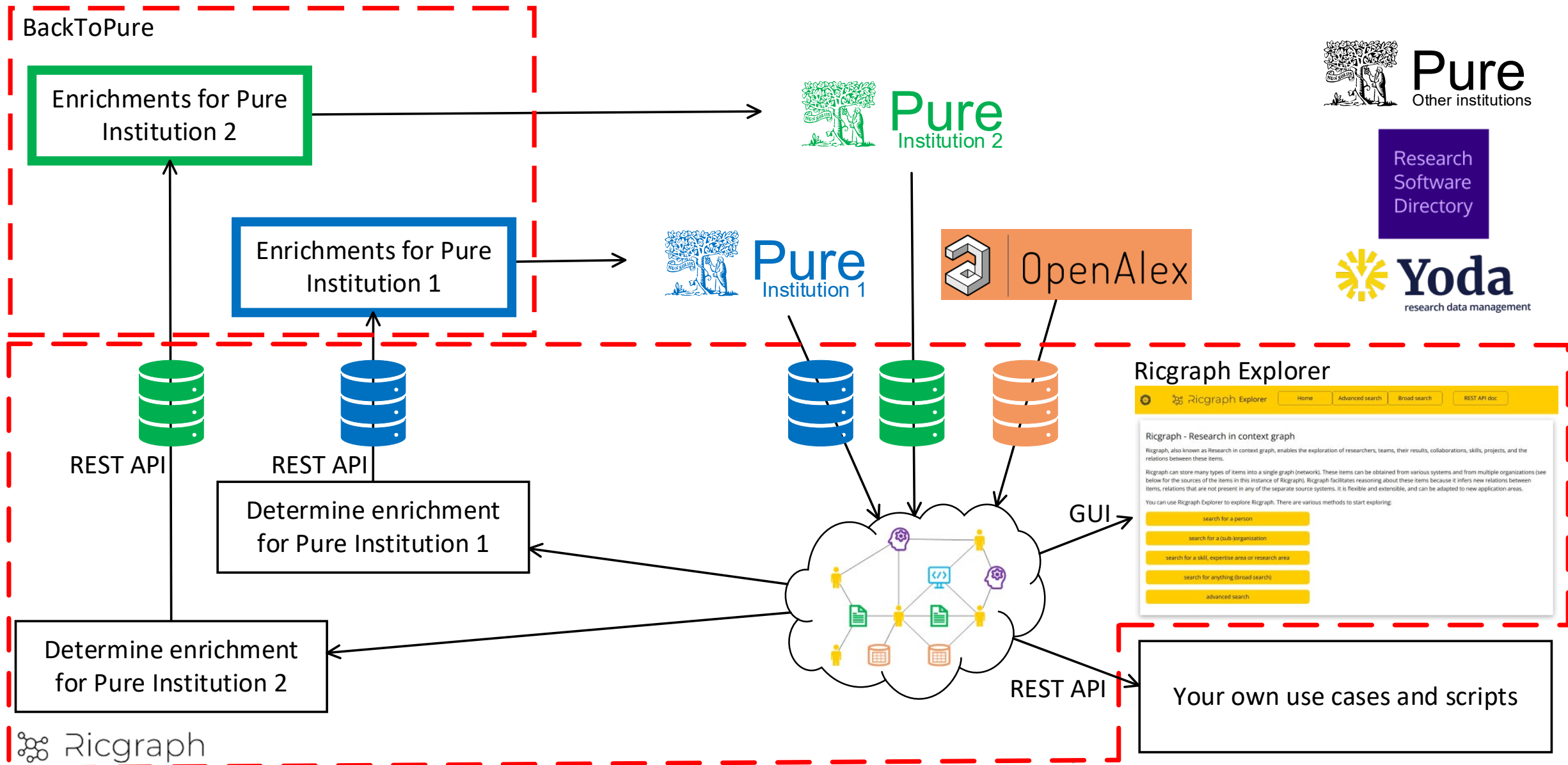
Ricgraph takes data about research activities (publications, datasets, software, ...) and researchers (persons, organizations, projects, skills), and links them together in a single, interconnected knowledge graph.

What is a graph database?

- We have relations between items
- Related items are neighbors
- We can “walk” from one item to another
- No duplicates



Overview Open Ricgraph demo server



[Research software directory](#): research software metadata repository; [Yoda](#): research data repository

An Example of how Ricgraph can work:



Journal article title: Enriching a RIS using Ricgraph
Author 1: Mary Johnson, ORCID1
Author 2: John Doe, ORCID2
DOI: 10.1000/journ.111



Author 1: Mary Johnson, ORCID1, ISNI1

Author 1 orgs: Institution1, Faculty1, Department1



Author 2: John Doe, ORCID2, ScopusID2

Author 2 orgs: Institution2, Faculty2, Department2



Pure
Institution 1



Journal article title: Enriching a RIS using Ricgraph
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Author 2: John Doe, ORCID2

Author 2 orgs: Institution2



Pure
Institution 2



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Author 1: Mary Johnson, ORCID1

Author 1 orgs: Institution1

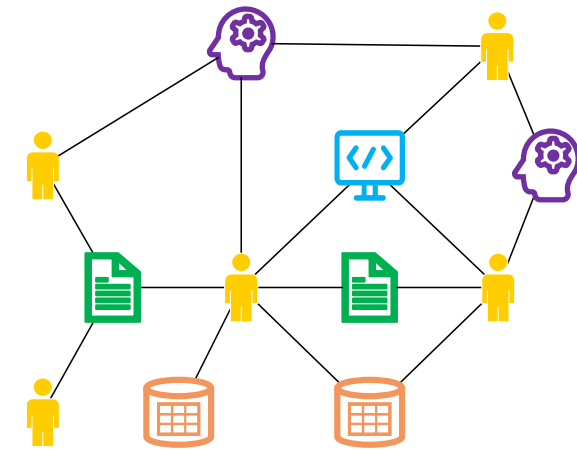


Author 2: John Doe, ORCID2, ScopusID2

Author 2 orgs: Institution2, Faculty2, Department2



Some interesting additional facts:



- Ricgraph can store **many types of items** in a single graph
- It harvests **multiple source systems** into a single graph
- Ricgraph **facilitates reasoning** because it infers new relations between items
- Ricgraph Explorer is the **exploration tool**
- Ricgraph has a **REST API**, to programmatically get items
- Ricgraph **can be tailored** for an application area

Go to Live Demo



Ricgraph Explorer

Home

Broad search

Advanced search

REST API doc

Ricgraph - Research in context graph

Ricgraph, also known as Research in context graph, enables the exploration of researchers, teams, their results, collaborations, skills, projects, and the relations between these items. Ricgraph can store many types of items into a graph. These items can be obtained from various systems and from multiple organizations. Ricgraph facilitates reasoning about these items because it infers new relations between items, relations that are not present in any of the separate source systems, and can be adapted to new application areas.

For the source systems harvested in this instance of Ricgraph, see below.

You can use Ricgraph Explorer to explore Ricgraph. There are various methods to start exploring:

search for a person

search for a (sub-)organization

search for a skill, expertise area or research area

search for anything (broad search)

advanced search

About Ricgraph



Utrecht University



Ricgraph

BackToPure



What is BacktoPure?

BackToPure is a local program that uses Ricgraph to import new data into Pure and enrich existing data.

Enriching Pure using January 2025 version of BackToPure

You can enrich your Pure by adding to a:

- *Internal person*: All IDs from a person in Ricgraph
- *External person*: Some IDs from a person in Ricgraph
- *Journal article*: A journal article in Ricgraph that has at least one *internal person* as collaborator
- *Data set*: A data set in Ricgraph that has at least one *internal person* as collaborator

Plans for extending BackToPure

- Add other research result types
- Add all IDs for *external persons* in Pure
- Option: add press-media items from Nexis Newsdesk (these also need to be added to Ricgraph)
- Merge external organizations based on ids
- Merge external persons based on ids

[Go to Live Demo](#)

Useful Links:

[Read me first!](#)

[BackToPure GitHub Page](#)

[RicGraph GitHub Page](#)



[Update Internal Persons with IDs](#)

[Update External Persons with IDs](#)

[Import Research Outputs](#)

[Import Datasets](#)

[Update External Organisations](#)

Automate Your Research Data Management

Welcome to the BackToPure Script Runner

Prerequisites

Ricgraph: you need to have acces to ricgraph

Pure: you need a apikey for the crud api of pure

config: you need fill in these in the config file

Introduction

The BackToPure Script Runner is a web-based interface designed to streamline and automate the management of research data within the PURE system. This

Practical steps

- Join the Ricgraph demo! (or get your own version)
- Harvest OpenAlex, Yoda-Datacite, Pure(s), Profile pages (own other sources)
- Get BackToPure from GitHub
- Fill in API credentials in your own BackToPure
- Start updating Pure! (you can try your staging/test version first ;)

We would like to start a pilot, would your institution like to participate?

- We look for a “coalition of the willing”:
 - A few institutions (3?) that allow us to harvest their Pure, and allow us to make the result open
 - Responsibility for possible privacy issues lies at your institution [UU has a draft privacy statement available]
 - We need a Read API key for each Pure
- We make available an *Open Ricgraph demo server*
- You can install BackToPure locally, so you can enrich your Pure using information from all sources in Ricgraph [you keep your Write API key for your Pure private]

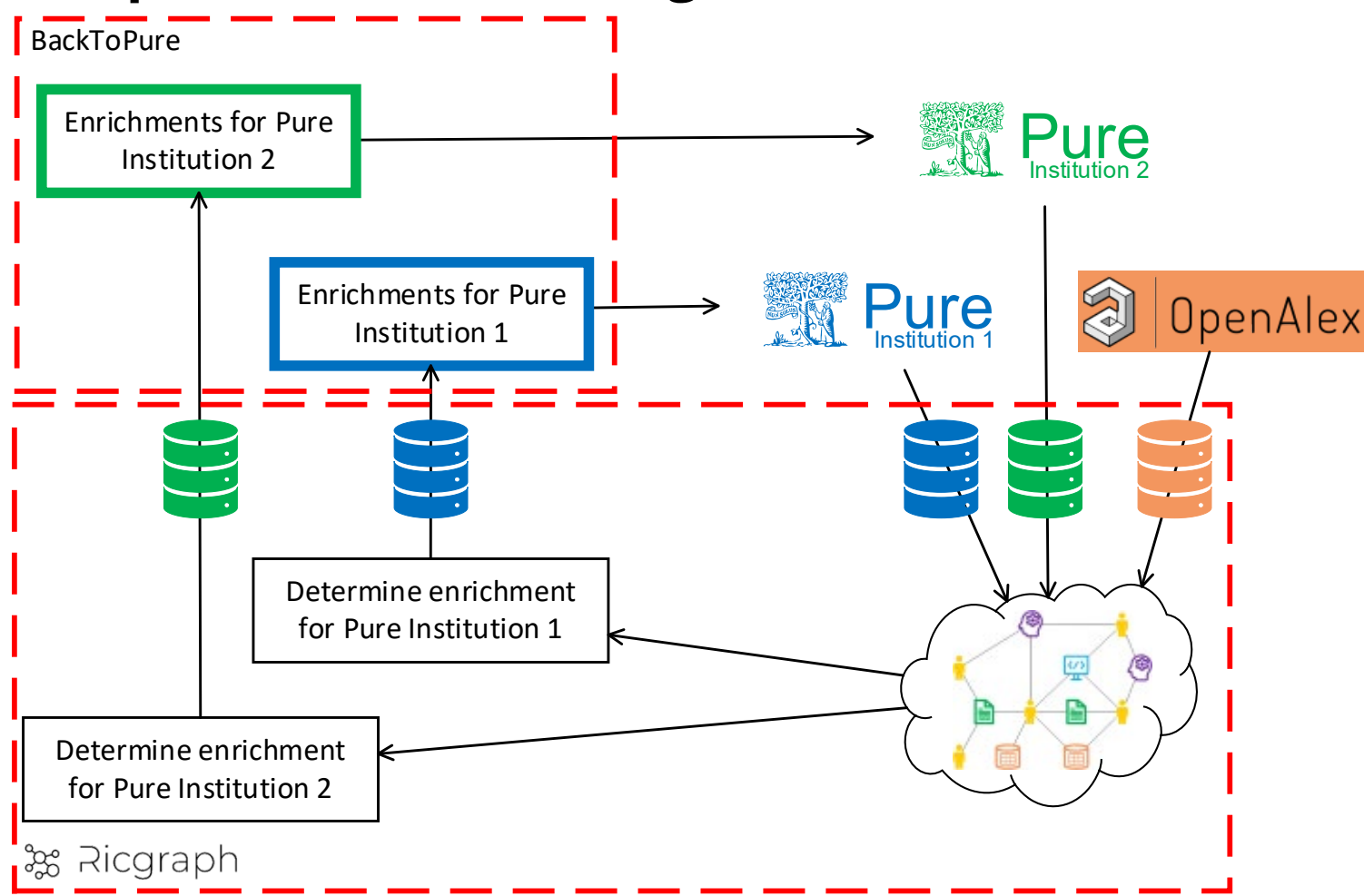


What is in it for your institution?

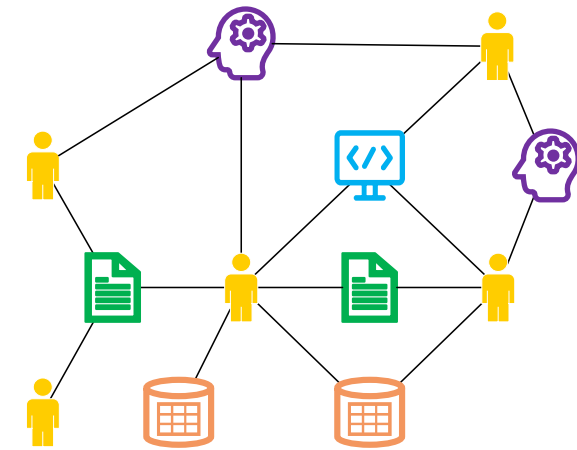
- After enriching, your Pure will have a more complete view about research at your institution
- The Open Ricgraph demo server allows to find *and explore* interesting use cases on common research information
- You can implement your own use cases and scripts using the REST API
- The more participants, the more we can learn from each other (and the more fun!)
- With your user experiences, we will improve Ricgraph and BackToPure



Components in enriching Pure



Links Ricgraph



- Website: www.ricgraph.eu
- Reference publication: Rik D.T. Janssen (2024). Ricgraph: A flexible and extensible graph to explore research in context from various systems. *SoftwareX*, 26(101736).
<https://doi.org/10.1016/j.softx.2024.101736>
- GitHub (software, documentation and videos):
<https://github.com/UtrechtUniversity/ricgraph>
- Zenodo: <https://doi.org/10.5281/zenodo.7524314>

More information, presentations, demos, install workshops:



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Ricgraph

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Link BackToPure

- GitHub: <https://github.com/UtrechtUniversity/BackToPure>

More information, presentations, demos, install workshops:

- David Grote Beverborg, d.h.j.grotebeverborg@uu.nl



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shaping tomorrow