



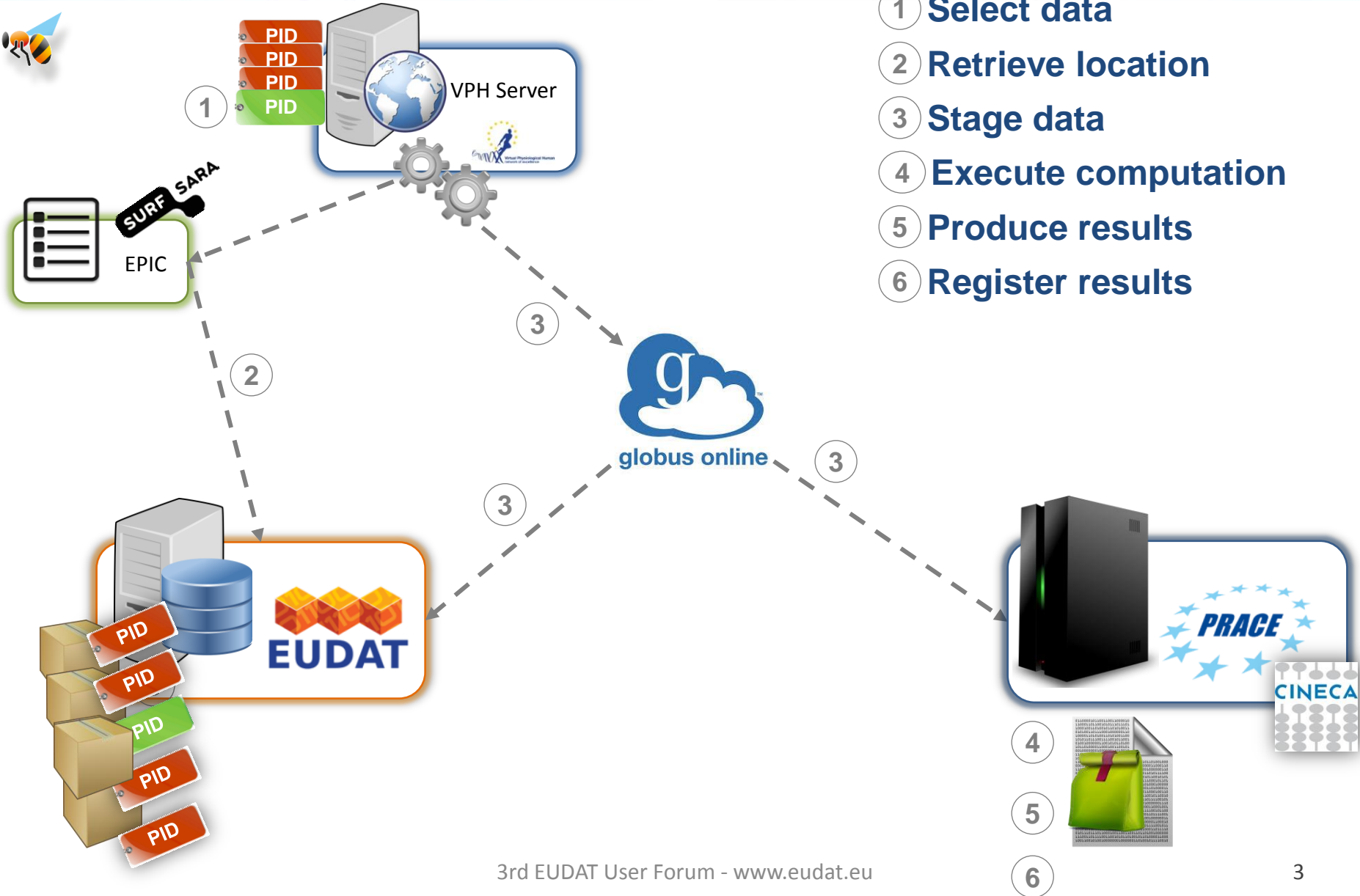
# B2STAGE

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# What is the B2STAGE?

- It is a service to permit users:
  - easily stage data between EUDAT resources and external data processing facilities, e.g. HPC machines
  - ingest computational results onto EUDAT resources
- Built upon B2SAFE functionalities
- Comprises three different packages:
  - **GridFTP Interface** for large volume of data
  - **HTTP Interface** compliant with the CDMI specification
  - **Data Staging Script** to integrate your existing system





# HTTP Interface

- Ingestion of data through the HTTP protocol
  - GET, PUT, DELETE objects
- Based on CDMI (Cloud Data Management Interface) specifications
  - access in a standardized, extensible way
  - compatible with other e-Infrastructures
- Programmable interface to access the B2SAFE (API)



# Current State and Development Plans

- **GridFTP Interface** (stable release available)
- **Data Staging Script** (stable release available)
  - Client SDK to integrate the service within existing community system
- **Http Interface** (under development)
  - Implementing CDMI compatibility, File access with PIDs, HTTPS support
  - Next Milestones:
    - HTTP(s) interface for B2SAFE End May
    - File registration with PID handling End May
    - Read-only CDMI interface End June



## Who can use B2STAGE & Why?

- **Researchers** can transfer large data collections from EUDAT storage resources to HPC facilities for processing, including PRACE and EGI
- **Community Data Managers** can replicate community data through a lightweight and programmable interface



# B2STAGE Future Plans

- Finalize the implementation of the HTTP Interface
- Evaluate alternative transfer technologies, e.g. FTS
- Think to a mechanism to optimize transfers on the basis of data location within the EUDAT infrastructure “stage the closest replica”
- Develop new features to improve user experience with the Data Staging Script (i.e. data path autocompletion, multi-pid parallel handling, etc.).
- Foster the collaboration with PRACE and EGI to develop cross-infrastructure usage.



**Thank you!**

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