



INRAE

université
PARIS-SACLAY

Système d'Information GENOmique Multi-Espèce SIGENO-ME

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PEPI IBIS 2025

➤ Centre de Traitement de l'Information Génétique (CTIG)

- Service Unit of the Animal Genetics Department of INRAE

- Bioinformatics platform for the department researchers
- And for professional partners in animal breeding
- 20 computer engineers



- Missions

- **Manage the Zootechnics National Databases**, including SIGENO-ME
- **Contribute to genetics evaluation**
- Provide computer resources to researchers
- Develop and host Information Systems for external clients, in relation with animal breeding
- CATI SICGPAE

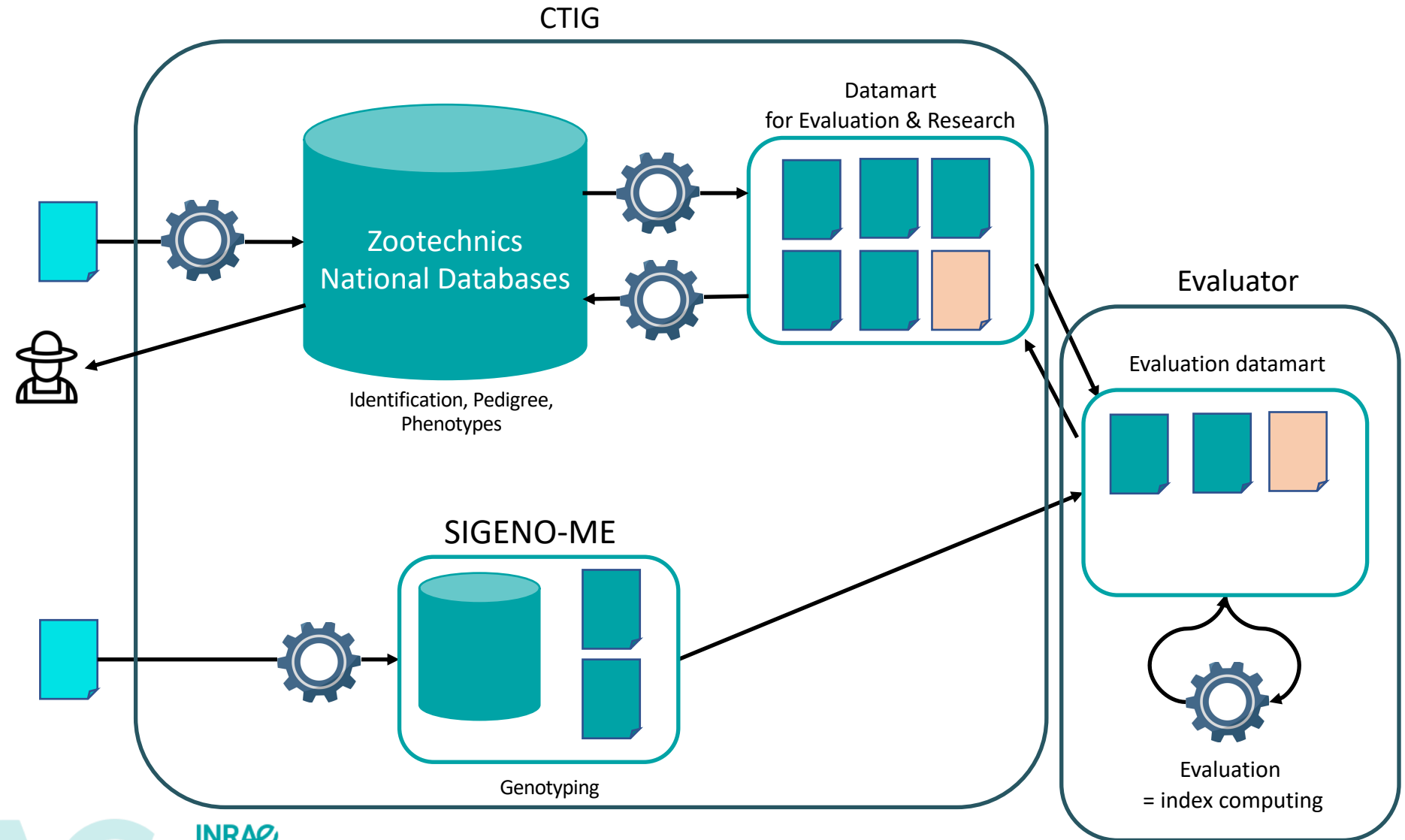


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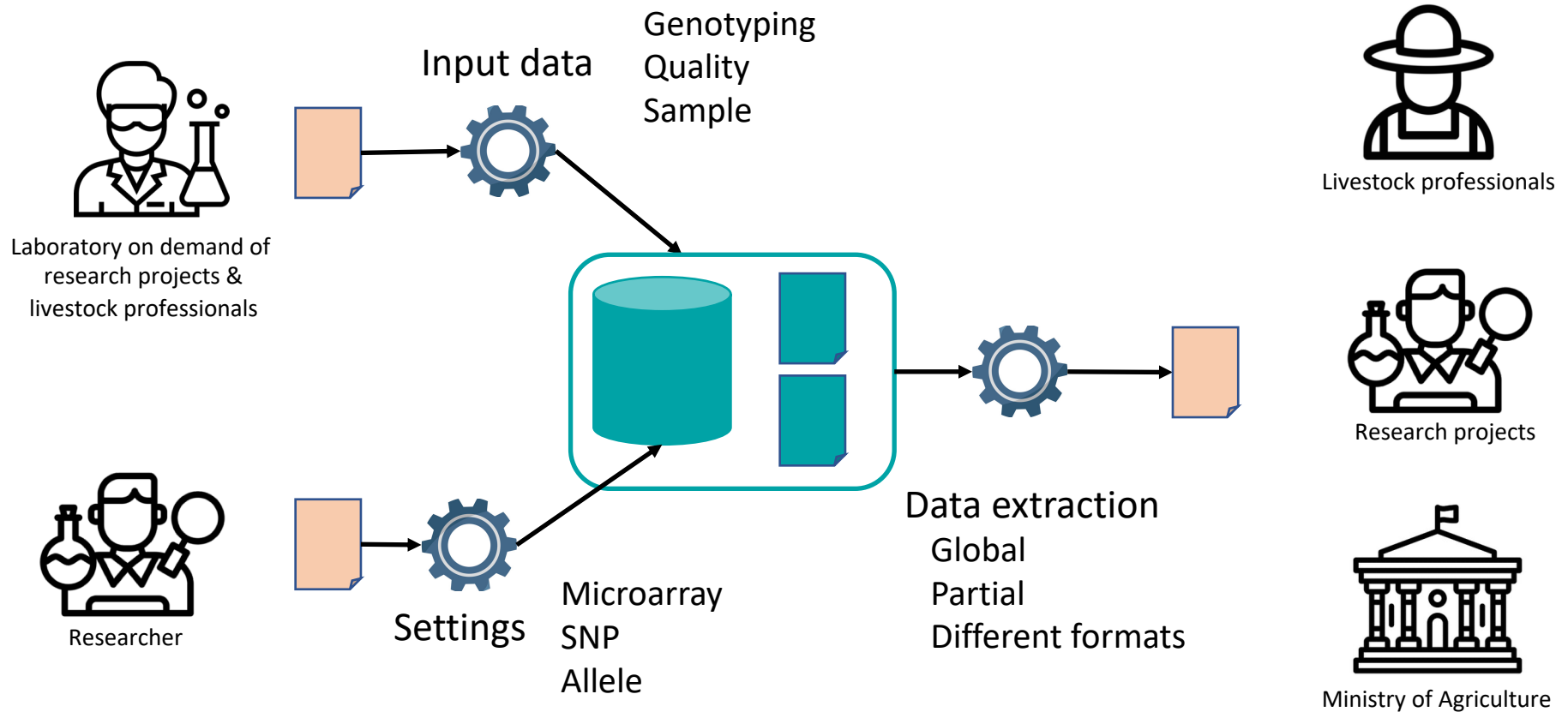
SIGENO_ME
PEPI IBIS october 2025

<https://ctig.inrae.fr>

➤ Genetics evaluation data flow



➤ SIGENO-ME functionalities & actors



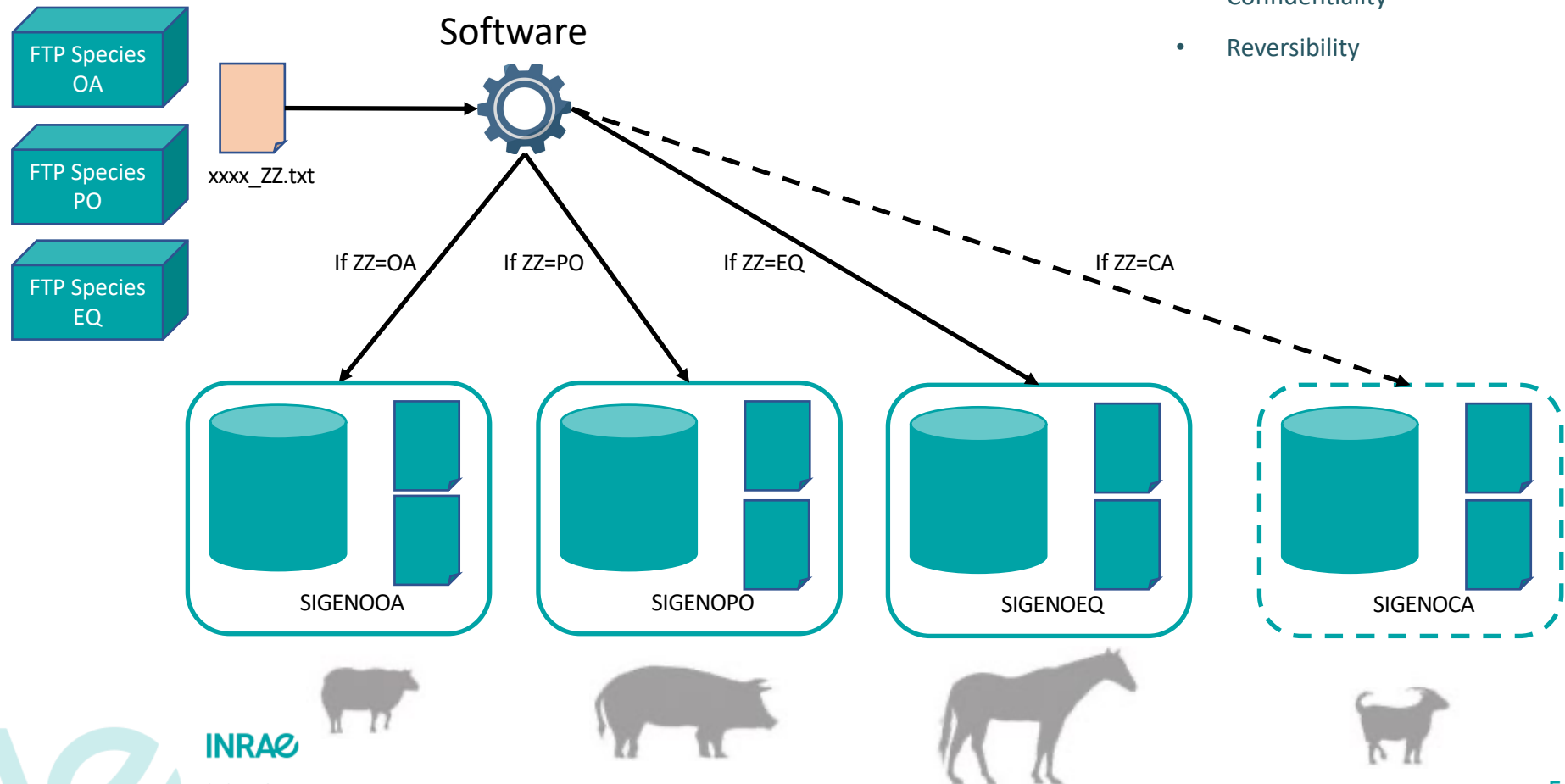
➤ SIGENO-ME multi-species architecture

Generic : file formats, database model, software

Specific : Database, file repository

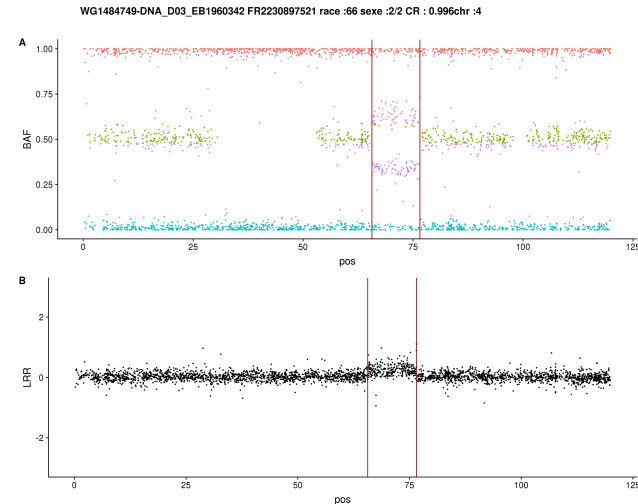
Advantages :

- Maintainability
- Scalability
- Confidentiality
- Reversibility



➤ Future works

- Store fluorescence data
 - Raw data
 - Chromosomal abnormality analysis
- Improve access right management
- Improve storage efficiency
 - Alleles coded in binary
 - Cut into several small files
- Interoperability
 - Spider, CRB@Anim



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