



BBMRI-ERIC

Biobanking and
BioMolecular resources
Research Infrastructure

BBMRI Competence Center Kick-Off

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BBMRI CC Kick-Off Agenda

- Overview of tasks deliverables
- Status report of BiobankCloud
- Application to the BBMRI use cases and modifications needed to run on EGI platform
- Upcoming events

Partners & Roles

– Partners:

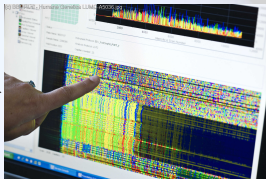
- **BBMRI-ERIC**
 - **BBMRI.nl**
 - **BBMRI.se**
 - **BBMRI.cz**
 - **KTH**
 - **EGI**
 - **SURFsara.nl**
 - **CESNET**
 - **EUDAT**
-
- **Confirmation of participating people.**
 - **Clarification of roles.**

BBMRI CC Use Case

- Biobanks are rapidly becoming also big data banks
 - clinical data,
 - phenotype data,
 - omics data: genomics, proteomics, transcriptomics, metabolomics, ...,
 - provenance & quality-related data.
- Value of the biobanks stems from providing both samples and data.

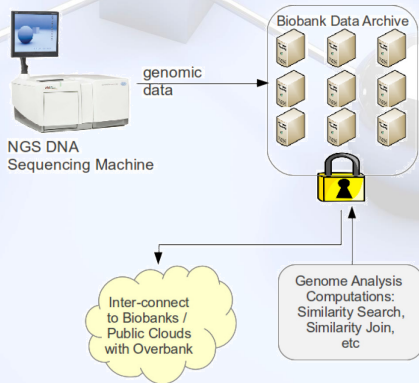
BBMRI CC Use Case

- Pilot use case for BB: genomics data processing in private clouds
 - data stored in the biobanks are inherently very privacy-sensitive and subject to many regulations if to be released,
 - private clouds in the biobanks: elegant solution to avoid need to release data outside of the biobanks.



BBMRI CC Use Case

- BiobankCloud project
 - biobank data processing on private clouds



- overview to be provided by Jim Dowling
<jdowling@kth.se>

Deliverables/Milestones

- **M6.2 Security and privacy requirements and secure storage architectural design are agreed**
 - *Date:* Feb 2016
 - Requirements are approved by the BBMRI Research Infrastructure community and the developers of the secure storage solution verified and accepted the design
- **D6.8 Analysis of requirements on biobank and study workflows (R)**
 - *Date:* Oct 2016
 - This document provides a summary and an analysis of the requirements captured by the BBMRI-ERIC Competence Centre for workflows from the biobank community.

Deliverables/Milestones

- **D6.11 Security toolset release for BBMRI-ERIC (OTHER)**
 - *Date:* Nov 2016
 - The final version of the toolset and security libraries released by the BBMRI-ERIC Competence Centre. This includes implementation and testing of the AAI in the project.
- **D6.16 Evaluated cloud environment and demonstrator of analysis workflow for biobank studies (DEMONSTRATOR)**
 - *Date:* Aug 2017
 - A demonstrator of a biobank research workspace running in the EGI cloud, together with an evaluation of its suitability in a typical NGS use case.

BiobankCloud on EGI Federated Clouds

- **Already known to be addressed:**
 - **Hadoop deployment on EGI,**
 - **integration with real-world federated identity management, incl. issues cross-fed issues**
 - **eduGAIN will be just the first step that doesn't solve all the issues by far,**
 - **likely to work with GÉANT AARC as one of pilot use cases,**
 - **figure out how to interface BBC authorization model with attribute authorities and external authorization systems (such as Perun, REMS),**

BiobankCloud on EGI Federated Clouds

- Already known to be addressed:
 - enhance traceability of data/processing \Rightarrow identifiers, provenance graphs
 - collaboration with EUDAT/RDA
- Pilot deployment of the whole private cloud scenario in some biobank.

Tasks

- **EGI-ENGAGE proposal**
 - Task 1 – Technology exchange, training, outreach and support
 - Task 2 – Secure data storage infrastructure
 - Task 3 – BBMRI-ERIC data sharing protocols for EGI
 - Task 4 – Workflow support for BBMRI on EGI infrastructure
- **BBMRI-ERIC proposal**
 - Task 1 – Technology exchange, training, outreach and support
 - Task 2 – AAI integration
 - Task 3 – Data identification, storage, provenance
 - Task 4 – Integration & pilot deployment

Upcoming Events

- **Oct 11–13, 2015, Bari (IT): EGI Community Forum 2015**
 - short presentation by Petr about BBMRI CC
- **Nov 25, 2015, Vienna (AT): BiobankCloud Workshop**
 - infrastructure partners are welcome to learn about the BiobankCloud internals

Thank you for your attention!
Q?/A!

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`<petr.holub@bbmri-eric.eu>`