

**Final Ecosystem Meeting
Amsterdam, 15th-16th of July**

Breakout session 2 Use cases & proof-of-concept infrastructure

**Sabato Mellone
University of Bologna**



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Agenda


- Overview on external use cases
- Proof-of-concept infrastructure
 - Registration and authentication
 - Procedures
 - Model/Data/Workflow/... upload
 - Search the catalogue/repository



Overview on external use cases

Call for external use cases

- Call open from October 2023
- Set of information required to upload the resource
- Three types (+1) of resources:
 - Dataset
 - Computational model
 - Platform to federate with
 - Other

EDITH wants you!		
		
We want to give due prominence to all the resources that are available today for building the Virtual Human Twin. No matter the level of maturity and complexity of what you can make available in our federated repository and catalogue, contact us and let's talk about it. We can decide together what level of integration to achieve.		
What I can contribute with:		
A dataset	A computational model	A platform to federate with
What I need to provide:		
Who you are and your affiliation	Who you are and your affiliation	Who you are and your affiliation
Contact details	Contact details	Contact details
Short description of the dataset	Short description of the model including its context of use	Short description of the platform
Whether there is personal data as defined in the GDPR	Whether there is a licence and/or terms of use attached	Description of its content
If there is personal data specify the data controller and where it is geographically located.	If there is a licence, which kind of licence.	Report the owner and manager of the platform
Specify the data format (e.g. CSV)	Specify the software used (e.g. docker, script with proprietary libraries, custom script, etc.) and/or the programming language (e.g. Python, C#, etc.)	Specify the reference community
If data is in a standard format specify which one (e.g. HL7 FHIR, OMOP CDM, etc.)	Specify the computational requirements (e.g. characteristics of the HPC cluster, workstation hardware, etc.	Specify the available interfacing options (e.g. API)
Link to webpages and/or references to published papers	Link to webpages and/or references to published papers	Link to webpages and/or references to published papers



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Overview of external use cases

- 34 contributions (last update: 24/06/2024)

Country

Germany (6)

UK (5)

France (4)

Italy (4)

USA (4)

Canada (2)

Netherlands (2)

Turkey (1)

Belgium (1)

Sweden (1)

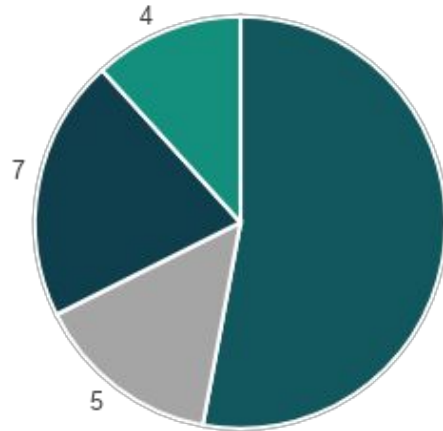
Greece (1)

Czech Republic (1)

Romania (1)

Unknown (1)

Types of external use cases



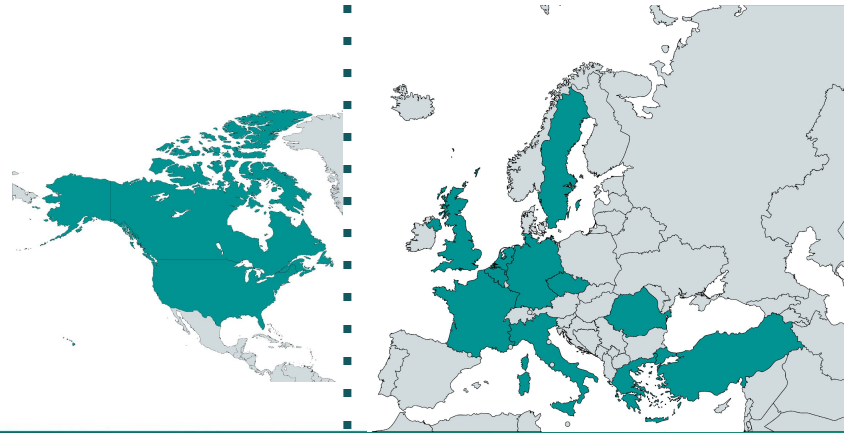
Providers from



Academia (21)

Company (12)

■ Computational Models ■ Datasets ■ Platforms ■ Other



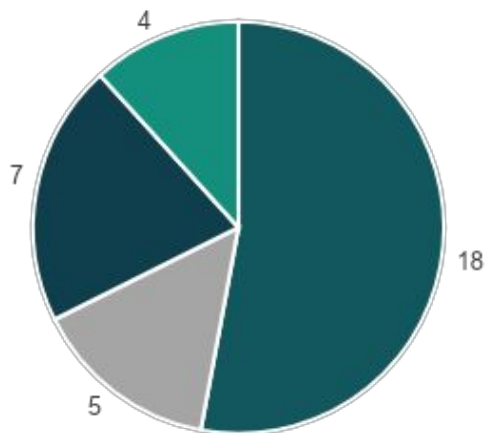
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Overview of external use cases

- 34 contributions (last update: 24/06/2024)

Types of external use cases



■ Computational Models ■ Datasets ■ Platforms ■ Other

Applications' field

- Pharmacokinetics
- (Patho)physiology
- Musculoskeletal
- Cardiovascular
- Genetics
- Immune system
- Oncology
- Drug development
- Biology
- Brain



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Which are the next steps?



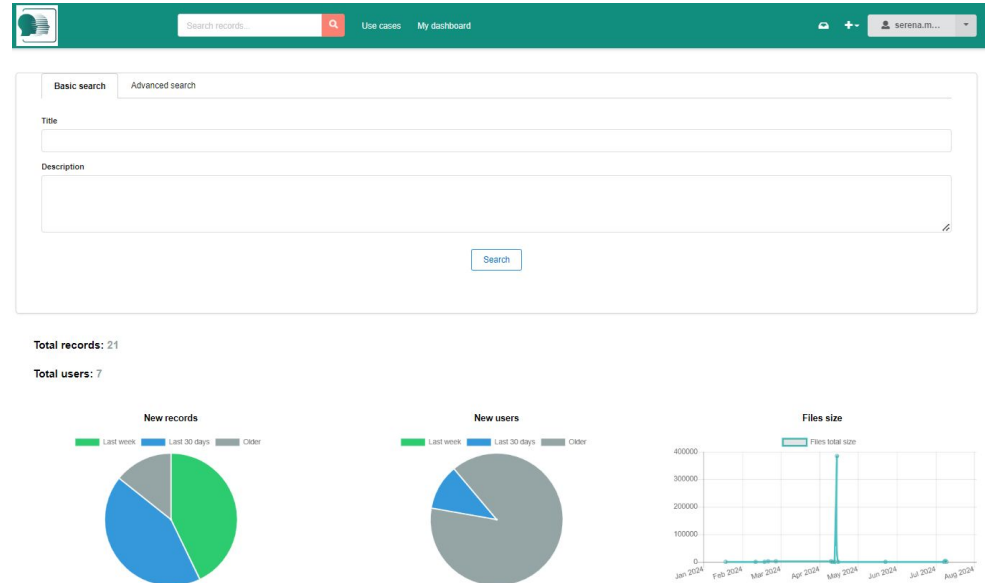
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Proof-of-concept infrastructure

Proof-of-concept infrastructure

- The Proof-of-Concept (PoC) platform is online.
- The platform is still in testing/debug phase.
- It will be possible to register and upload resources soon.

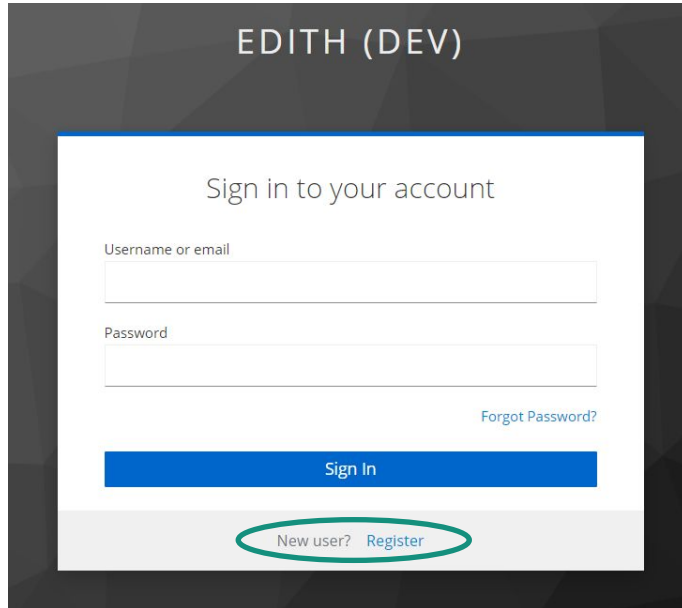


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Proof-of-concept infrastructure

Registration and authentication



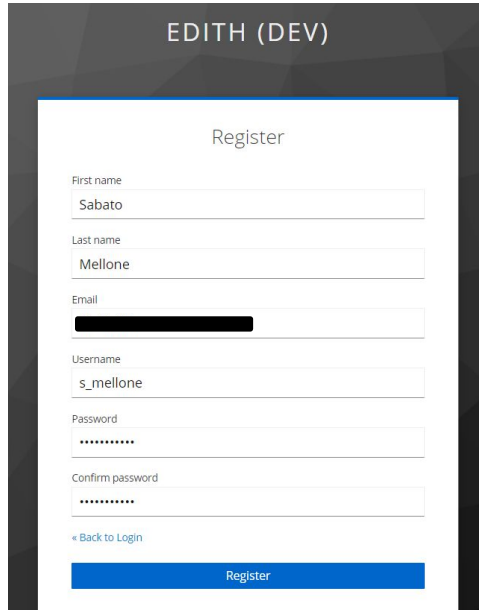
The screenshot shows a web interface for 'EDITH (DEV)'. At the top, it says 'EDITH (DEV)'. Below that is a white box with the heading 'Sign in to your account'. Inside this box, there are two input fields: 'Username or email' and 'Password'. Below the password field is a link that says 'Forgot Password?'. A blue 'Sign In' button is positioned below the input fields. At the bottom of the white box, there is a link that says 'New user? Register'. The 'Register' link is circled in green.

- [Keycloak](#): open-source identity and access management solution



Proof-of-concept infrastructure

Registration and authentication



The screenshot shows a web browser window with the title "EDITH (DEV)". Inside the browser, there is a registration form titled "Register". The form contains the following fields and elements:

- First name:** A text input field containing the value "Sabato".
- Last name:** A text input field containing the value "Mellone".
- Email:** A text input field containing a redacted email address (represented by black bars).
- Username:** A text input field containing the value "s_mellone".
- Password:** A text input field with masked characters (dots).
- Confirm password:** A text input field with masked characters (dots).
- Navigation:** A link labeled "« Back to Login" is located below the password fields.
- Submit:** A blue button labeled "Register" is at the bottom of the form.

- [Keycloak](#): open-source identity and access management solution
- Registration: insert the requested information
- A verification email will be sent to verify the email address

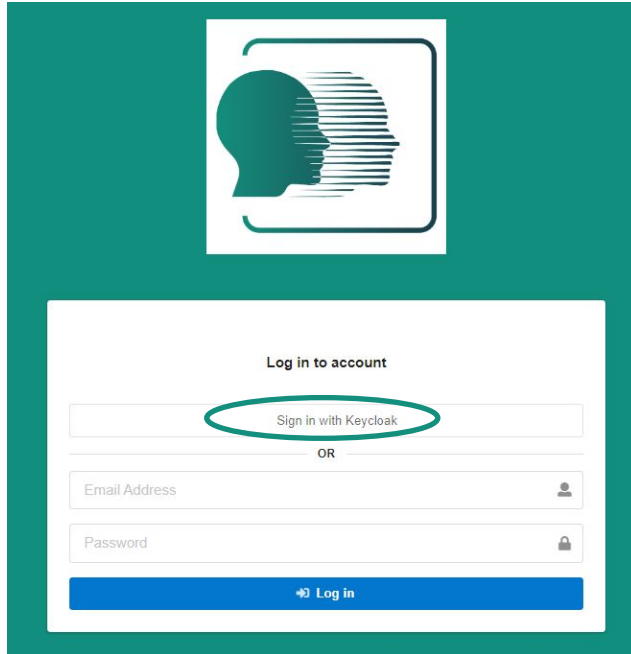


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Proof-of-concept infrastructure

Registration and authentication



The screenshot shows a login interface with a teal header. At the top center is a logo featuring a stylized head profile with horizontal lines. Below the logo, the text "Log in to account" is centered. Underneath, there is a button labeled "Sign in with Keycloak" which is circled in red. Below this button is the word "OR". Further down are two input fields: "Email Address" with a user icon on the right, and "Password" with a lock icon on the right. At the bottom is a blue button with a right-pointing arrow and the text "Log in".

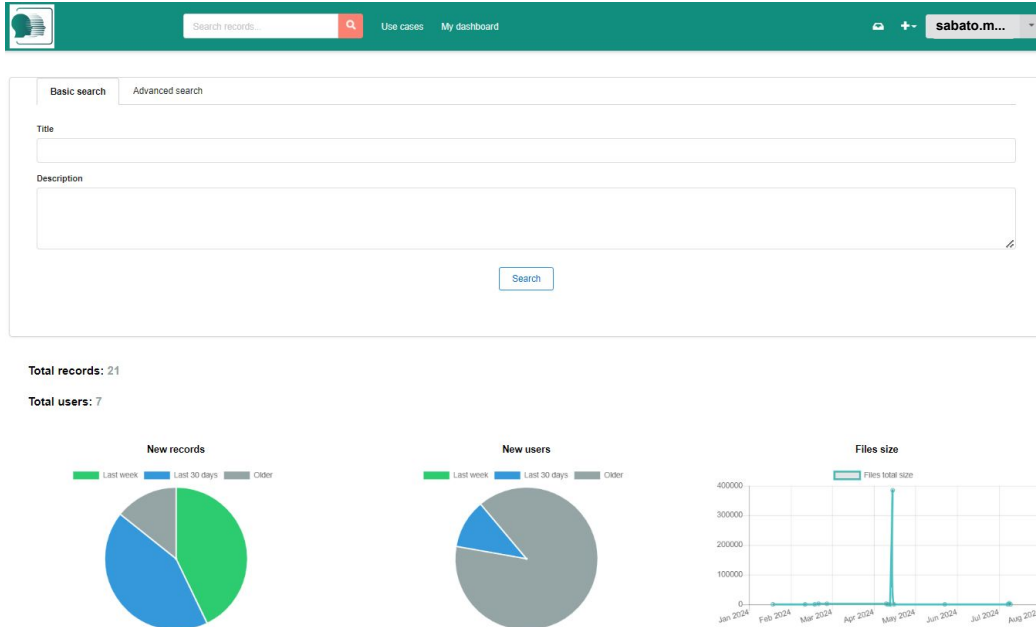
- [Keycloak](#): open-source identity and access management solution
- Registration: insert the requested information
- A verification email will be sent to verify the email address
- Go the [PoC platform website](#) and press **"Sign in with Keycloak"**



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Proof-of-concept infrastructure







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Model/Data/Workflow/etc. upload

 [Use cases](#) [My dashboard](#)   sabato.m...

Basic search

Advanced search

Title

Description

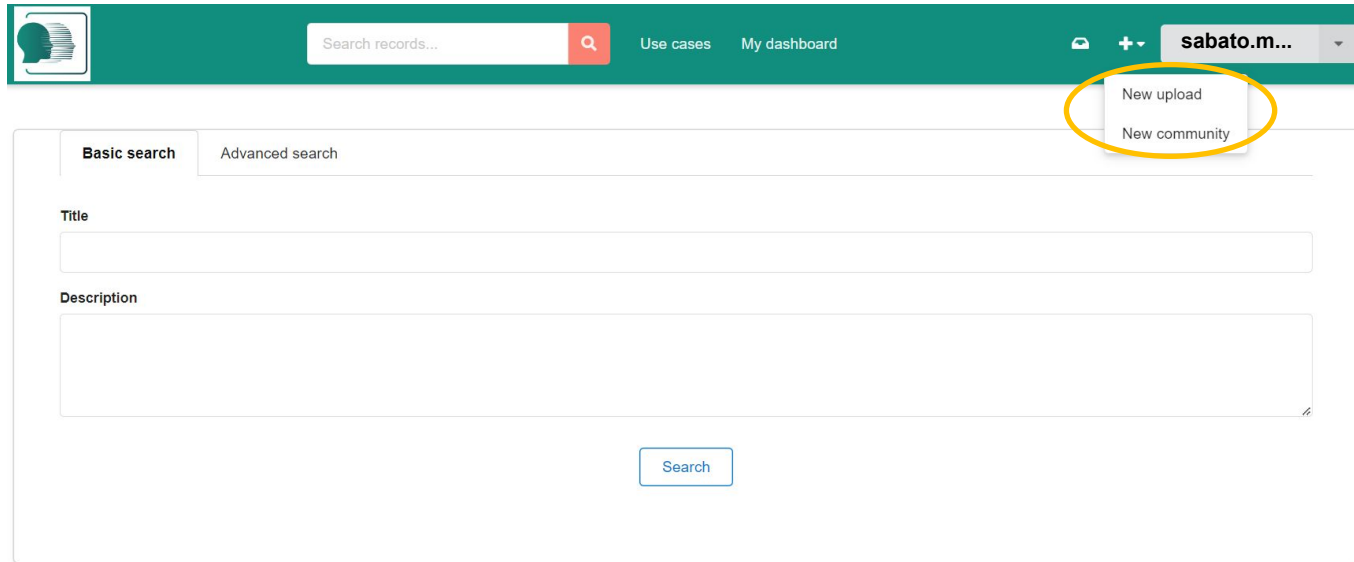


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Proof-of-concept infrastructure

Model/Data/Workflow/etc. upload



The screenshot displays the EDITH web interface. At the top, a teal header bar contains a logo on the left, a search bar with the text "Search records..." and a magnifying glass icon, and navigation links for "Use cases" and "My dashboard". On the right side of the header, there is a user profile icon and a dropdown menu currently showing "sabato.m...". A yellow circle highlights this dropdown menu, which contains two options: "New upload" and "New community". Below the header, the main content area features a search form with two tabs: "Basic search" (selected) and "Advanced search". The form includes a "Title" field, a "Description" field, and a "Search" button at the bottom.




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Proof-of-concept infrastructure

Model/Data/Workflow/etc. upload



[Use cases](#) [My dashboard](#)

sabato.m... 

Type

Core metadata

Extended metadata

Upload

Select resource type *

☐ Model

☒ CWL Workflow

☐ Other

Next



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- **Core metadata**

- Title
- Description
- Additional descriptions
- Creators (ORCID as identifier)
- License/Rights
- Subject
- Contributor(s)
- Identifier(s)
- Related identifiers
- Languages
- Use case

Type	Core metadata	Extended metadata	Upload
Title *			
Description *			
Additional descriptions			



Proof-of-concept infrastructure

Procedures – Workflow upload

- **Other info**
 - Programming language
 - Type of file
- **Upload the workflow**
 - Select the workflow

Type	Core metadata	Extended metadata	Upload
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Title *

Description *

Additional descriptions



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Procedures – Dataset upload

- **Upload the dataset**
 - Select the dataset

Type	Core metadata	Upload
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Title *

Description *

Additional descriptions



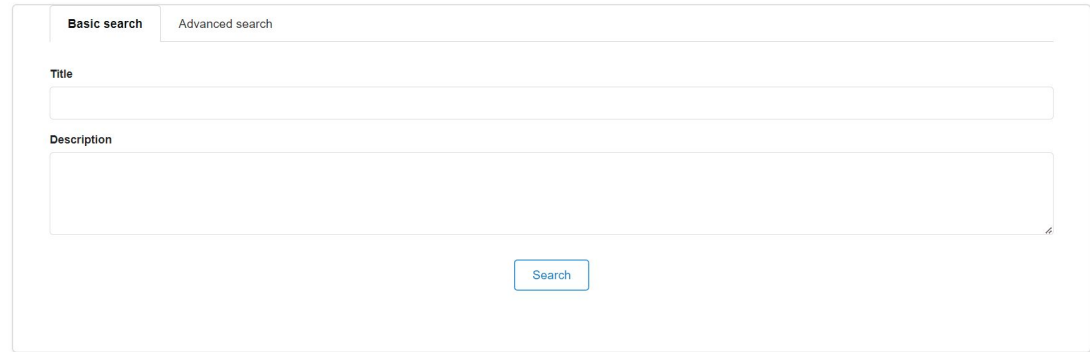
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Proof-of-concept infrastructure

Procedures – Search for a resource in the catalogue/repository

- Insert keyword(s)
- Select the resource
- Navigate into the resource
- Download it (different formats)



The screenshot shows a search interface with two tabs: 'Basic search' (selected) and 'Advanced search'. Below the tabs are two input fields: 'Title' and 'Description'. A 'Search' button is located at the bottom right of the search area.

Total records: 25

Total users: 8



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Proof-of-concept infrastructure

Procedures – Search for a resource in the catalogue/repository

- Insert keyword(s)
- Select the resource
- Navigate into the resource
- Download it (different formats)

The screenshot shows a search interface with two tabs: 'Basic search' and 'Advanced search'. The 'Advanced search' tab is active. Below the tabs are several input fields and dropdown menus:

- Title:** A text input field.
- Description:** A larger text input field.
- Creator:** A text input field with a placeholder 'name / orcid'.
- Contributor:** A text input field with a placeholder 'name / orcid'.
- Scale qualitative:** A dropdown menu with 'Scale qualitative' selected.
- Ontology:** A dropdown menu with 'Ontology' selected.
- Standard:** A dropdown menu with 'Standard' selected.



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Proof-of-concept infrastructure

Procedures – Search for a resource in the catalogue/repository

- Insert keyword(s)
- Select the resource
- Navigate into the resource
- Download it (different formats)

Age ⁺

Body

Body transformation ▼

Minimum credibility: 1

Body parts

- human body
 - bones - skeletal system
 - parts of human body
 - nervous system
 - endocrine glands
 - urinary system
 - respiratory system
 - the integument
 - joints - articular system
 - sense organs
 - genital systems
 - alimentary system
 - lymphoid system
 - cavities
 - regions of human body
 - muscles - muscular system
 - cardiovascular system

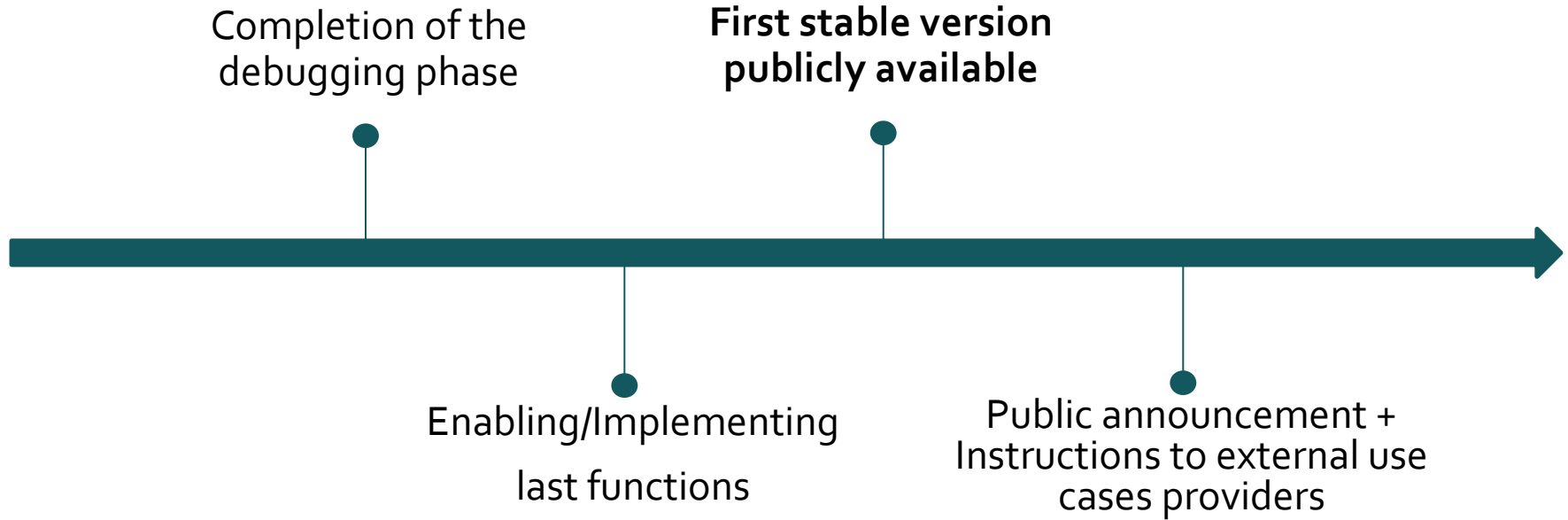
Need 3D interaction?



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Proof-of-concept infrastructure



STAY TUNED!



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Proof-of-concept infrastructure

- This is a proof-of-concept implementation; it is an online demonstrator
- It is not a commercial service, nor a preview of the VHT platform that will be implemented with the tender
- The main objective is to collect needs and further technical specifications, both for finalizing the roadmap and as an input for the implementation of the actual infrastructure



Questionnaire on expectations regarding access to the future VHT

User Role & Access Questionnaire

This questionnaire wants to collect feedback on user expectations regarding access to the future Virtual Human Twin (VHT) platform, particularly in the context of personal health data and computational models.

The end goal is to help to identify the features and access levels that are relevant to various roles and profiles.



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