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Abstract:	This will be the first release of the Platform, which will be available for use by members of the HBP Consortium. The platform will allow researchers to access anonymised clinical data (imaging data, blood chemistry data etc.) provided by the organisations (hospitals, pharmaceutical companies) where Local Hospital Servers have been installed, and to analyse the data using early versions of the Medical Intelligence Tools developed in WP8.3.		
Keywords:	Medical Informatics Platform		

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1. The Aim of this Document

This document provides the information needed to access the Medical Informatics Platform v1 - preliminary release for internal Consortium use (Deliverable D8.6.3, Milestone 167).

2. How to Access the HBP Medical Informatics Platform (MIP)

2.1 Immediate Access:

To access the MIP v1 please go to: <http://hbps1.chuv.ch/webgraph>

You will need to log in with the HBP authentication credentials. If you have not registered yet, please contact us at hbp_medicalinformatics@chuv.ch.

Note: when registering, please use your institutional e-mail address for easier identification.

2.2 Access via HBP Collaboratory:

All HBP Platforms will be accessible via the HBP Collaboratory (formerly Unified Portal).

Collaboratory: <https://collab.humanbrainproject.eu/#/collab/>

MIP on the Collaboratory: <https://collab.humanbrainproject.eu/#/collab/50/nav/242>

Access to the Collaboratory requires a login account. To request an account, please go to: <https://services.humanbrainproject.eu/oidc/account/request>

3. Platform User Instructions

Please find Medical Informatics Platform (MIP) v1 Instructions (screenshots of Tools & Features Available):

- On the platform's help page: <http://hbps1.chuv.ch/webgraph/#/help>
- In our online User Knowledge Base (KB), accessible at <http://193.204.145.212:8080/liferay/welcome>. The KB also gives more details about the MIP project. Please note that both the features and the content of the KB are being continuously enriched and improved.

For the moment, users are asked to authenticate separately for the KB, but in the future we are looking to have a seamless sign on.

Note: some versions of Internet Explorer may not render the current version of the MIP web interface very well. If you have problems seeing the platform, please try another browser.

4. Help and User Feedback

For user help, please contact our team at hbp_medicalinformatics@chuv.ch.

To provide user feedback, please also contact hbp_medicalinformatics@chuv.ch.

If you have any thoughts regarding the current functionality, and the ones to be implemented in the coming phases, please get in touch.



5. Annexes

- Annex A: Tools & Features Available in this Platform Release
- Annex B: Logical Diagram as Implemented in Current v1 Version

The latter shows the logical architecture of the MIP platform, describing the product's components, and the workflow of the user queries through the software components.



Annex A: Tools & Features Available in this Platform Release

Tool / Feature	Responsible	Milestone / Remarks	Keywords	User Groups	Available at	Description/ Screenshot
1. <u>Web interface</u> v1 for users to define queries and aggregate functions, and for visualising the results.	WP8.4 Ferath Kherif (CHUV)				http://hbps1.chuv.ch/webgraph	
						<ul style="list-style-type: none"> • <i>Exploration of ontologies and brain data variables (brain features, measurements, clustering).</i>
						<ul style="list-style-type: none"> • <i>Creation and submission of queries.</i>
						<ul style="list-style-type: none"> • <i>Library of functions to be applied in queries by users.</i>
						<ul style="list-style-type: none"> • <i>Representation of results: plots of multiple types (as chosen by user).</i>
						<ul style="list-style-type: none"> • <i>User views (aka dashboards) for organising information and visualisation results. User may create, modify, duplicate and delete own views. May hide shared views.</i>
						<ul style="list-style-type: none"> • <i>Managing elements within views (e.g. plots, text etc): can create, modify, resize or remove elements within views.</i>
						<ul style="list-style-type: none"> • <i>Filters (criteria): allowing users to create and save filters for reuse, to modify filters, combine multiple filters, apply filters to plots, delete filters.</i>
2. <u>Federation</u> layer v1 for forwarding queries from the web to the data sources, for merging the results of the sources, and for sending the results to the web portal.	WP8.4 Ferath Kherif (CHUV)					
						<ul style="list-style-type: none"> • <i>Federation software connected to the web portal.</i>
						<ul style="list-style-type: none"> • <i>Federation software connected to three local data instances (currently all CHUV data, but different datasets used [for a closer to reality setup]).</i>
3. <u>Web service</u> integrating Web & Federation, in v1 directly exposing a set of combined aggregates, already pre-calculated at each data source. For next versions, the system will calculate these aggregates in real time.	WP8.4 Ferath Kherif (CHUV)					



4.	<u>Local Data Store Mirror (LDSM) v1</u> : database storing datasets of CHUV medical data, and running the queries in-situ.	WP8.1 Anastasia Ailamaki (EPFL)	MS155 Prototype of data federation and anonymisation tools				
<ul style="list-style-type: none"> • <i>Mapped CHUV data to ontology variables (at LDSM).</i> 							
<ul style="list-style-type: none"> • <i>Anonymisation of data available for MIP v1.</i> 							
5.	<u>Integration</u> of MIP platform components (listed in 1,2,3, and 4 above) – web, federation of data sources, data sources (LDSM) – so that they work as a product.	WP8.4 Ferath Kherif (CHUV)	MS167 Medical Informatics Platform internal release				
6.	<u>User Knowledge Base</u> : online platform dedicated to the end user, with guidelines on how to use the MIP platform, interactive e-learning tools, and information about the MIP project (currently separate registration required).	WP8.5 Giovanni Frisoni (HUG)	WP8.5 M171 Medical Informatics Platform starts user support and training; Guidebook for the use of the Medical Informatics Platform - initial release			http://193.204.145.212:8080/lieferay/welcome	



Annex B: MIP Logical Diagram as Implemented in Current v1 Version

- * Web portal : Web application , URL <http://hbps1.chuv.ch/webgraph/>
- * ws-1 : Webservice publishes the merged aggregate data
- * MIP Service Layer : MIP service produced at federation engine
- * Federation : federation engine
- * Virtual federated DB : provides access to aggregated data
- * Local data stores:
LDSM1 : CHUV clinical anonymized dataset 1
LDSM2 : CHUV research anonymized dataset 2
LDSM3 : CHUV research anonymized dataset 3

