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Ministero dell'Università e della Ricerca
Italiadomani PIANO NAZIONALE DI RIPRESA E RESILIENZA
Consiglio Nazionale delle Ricerche

H2IOSC
Humanities and cultural Heritage Italian Open Science Cloud

Trans-National and National Access to the H2IOSC RIs Cluster Services

LIST OF SERVICES

January 2025

www.h2iosc.cnr.it

E-RIHS.it for H2IOSC

ATON: WebXR services for Heritage Science

ATON is an open-source framework to present and interact with 3D models and scenes on the web, primarily targeting Heritage Science communities. Its adaptive presentation layer allows interactive, liquid 3D visualization - ranging from mobile devices, museum kiosks, workstations, up to immersive XR devices - without any installation required for final users. The adoption of robust open-source ecosystems and international standards, alongside a REST API, maximize interoperability and integration with other platforms and H2IOSC services. The E-RIHS.it service offers public access to research institutes, laboratories, museums, experts and researchers, willing to rapidly integrate interactive 3D tools into their workflows. User-friendly interfaces, modular components and multi-user capabilities allow wide customizations for different use cases. Furthermore, a plug&play architecture provides an accelerator for development and deployment of cross-device and interoperable Web3D/WebXR applications or pilots.
CATEGORIES: 3D Presentation; Immersive Visualization; PWA; Data representation and Visualization; Data curation and Preservation; Data collection

Slide show

Demo Videos

- → Built-in tools
- → Multiresolution 3D models
- → Navigation tools
- → Immersive VR (WebXR) and Multiresolution
- → Mixed Reality presentation (WebXR)
- → Plug&Play Apps

Max number of Users/User teams for the call: 3
Specific data policy on reuse: The User/User team is required to share the data produced during the TNA/NA activities under an open license.
Providers: CNR ISPC | Operating Units: Naples and Rome
Contact person: Bruno Fanini
Email: bruno.fanini@cnr.it

Kapto: capture services

The E-RIHS Kapto service offers a set of functionalities to track and record interactive sessions performed in remote infrastructural nodes/equipment, public exhibits or web-applications – targeting analytics.
Remote applications are able to formalize a list of attributes to track during an interactive session, for instance spatial attributes (like virtual/physical 3D locations, 2D eye movements, focal points, HMD location in physical space, GPS coordinates, etc.); interaction states related to the application logic or equipment (like BCI headsets' EEG voltages, wearable device signals, sensors data, etc.) or other attributes.
The Kapto service can be used standalone, or as a part of a wider pipeline involving a suite of web-based services dedicated to analytics workflows (e.g. pilot 7.7 "Interlumo"), allowing examination/filtering of incoming raw data, processing using for instance Machine Learning models and Visual/Immersive Analytics inspection tools.

CATEGORIES: Analytics and descriptive statistics; Data analysis

Slide show

Max number of Users/User teams for the call: 1
Specific data policy on reuse: captured records (sessions) will be stored on the hub for a period of 6 months. The User/Team can access and save a copy of the data at any time via session ID provided by Kapto service.
Providers: CNR ISPC | Operating Units: Rome
Contact person: Bruno Fanini
Email: bruno.fanini@cnr.it

CLARIN-IT for H2IOSC

EpiLexO Editor

EpiLexO is an interface for creating lexica for epigraphic languages conformant to Semantic Web principles linked to their testimonies (encoded in TEI-EpiDoc) and related bibliographies. EpiLexO is a web-based platform designed for the creation, editing, and linking of lexical resources for ancient languages. It is based on a Service-Oriented Architecture exposing RESTful APIs. The platform facilitates historical linguists in encoding multilingual lexica, linking lexical data to inscriptions, bibliographies, and other external Linked Open Data resources. Its user-friendly interface supports collaborative editing and is particularly aimed at scholars in historical linguistics and digital humanities, providing essential tools for managing and interlinking lexical information and inscriptions.
CATEGORIES: Data representation & Visualization

Slide show

Max number of Users/User teams for the call: 2 (teams of max 5 collaborators each)
Specific data policy on reuse: The User/User team is responsible for the data redistribution policy. The User/User team is encouraged to share the data produced during the TNA/NA activities under an open license and, possibly, the deposit of said data on the repository ILC4CLARIN
Providers: CNR ILC | Operating Unit Pisa
Contact person: Michele Mallia, Valeria Quochi
Email: michele.mallia@cnr.it, valeria.quochi@ilc.cnr.it

eScriptorium: a web platform for Handwritten Text Recognition (HTR)

eScriptorium is a web platform which integrates Handwritten Text Recognition (HTR) through kraken HTR engine and cooperative proofreading of automated transcriptions. Through the HTR United Project not only new performant HTR models are provided, but the entire process of image acquisition / recognition / HTR model refinement / proofreading / deposit of digital resources is open and replicable, in compliance to the principle of Open Science.
CATEGORIES: Data processing; HTR & Proof Reading

Slide show

Max number of Users/User teams for the call: 12
Specific data policy on reuse: The User/User team is responsible for the data redistribution policy. The User/User team is encouraged to share the data produced during the TNA/NA activities under an open license and, possibly, the deposit of said data on the repository ILC4CLARIN
Providers: CNR ILC | Operating Unit Pisa
Contact person: Federico Boschetti, Michele Mallia
Email: federico.boschetti@ilc.cnr.it, michele.mallia@cnr.it

SKOSMOS Vocabulary Service

Skosmos is an open-source web application designed to offer a standardised way of publishing and browsing vocabularies, taxonomies, ontologies, and thesauri as linked data, encoded using the popular SKOS (Simple Knowledge Organization System) vocabulary. Skosmos offers an intuitive, user-friendly interface for searching, exploring, and retrieving concepts through hierarchical or alphabetical navigation. The platform supports internationalization and customization, making it ideal for academic, library, and research projects. The service includes data conversion into SKOS from formats such as CSV/TSV or JSON, and vocabulary hosting. Advanced features such as autocomplete, semantic relationship visualization, and output in various formats enhance usability may also be available, in addition to integration with GraphDB, ensuring high performance even with large RDF datasets.
CATEGORIES: Data representation and visualization; Knowledge representation and visualization

Slide show

Max number of Users/User teams for the call: unlimited users
Specific data policy on reuse: The User/User team is responsible for the data redistribution policy. The User/User team is required to share the data produced during the TNA/NA activities under the open license Creative Commons CC BY-SA in the repository ILC4CLARIN
Providers: CNR ILC | Operating Unit Pisa
Contact person: Michele Mallia
Email: michele.mallia@cnr.it

H2IOSC Project - Humanities and cultural Heritage Italian Open Science Cloud funded by the European Union - NextGenerationEU - NRRP M4C2 - Project code IR0000029 - CUP B63C22000730005
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info.h2iosc@h2iosc.cnr.it

DARIAH-IT for H2IOSC

RAISE - Restore dAta Integration SuitE

RAISE is suite of tools and services for GLAM resources FAIRification, built as a modular and scalable workflow focused on data collection, mapping, modelling and visualization, enabling the creation of custom LODs integrating data on cultural heritage objects created and managed by Libraries, Archives and other Memory institutions with other information gathered by researchers. The suite is the result of the work started within the RAISE project and supported by different national and international research projects, including the Social Sciences and Humanities Open Cloud (SSHOC). RAISE comes with specialized modules to manage Back End (BE) and Front End (FE) FAIRification processes: the Data Management Tool Suite (RAISE-BE), the Semantic Data Ingestion Tool Suite and the Data Visualisation Tool Suite (RAISE-FE). The RAISE modular architecture, based on micro-services, can be adapted to the scientific needs of the users and integrated in various contexts and with different systems, promoting interoperability and long-term sustainability.
CATEGORIES: Data processing; Data curation and preservation; Data representation & visualization; Query and data extraction

Slide show

Max number of Users/User teams for the call: 3
Specific data policy on reuse: The User/User team is responsible for the data redistribution policy. The User/User team is recommended to use open licenses and depositing data in the DARIAH-IT repository to make it more accessible and reusable.
For any other specification, please see the DMP - RAISE - Restore dAta Integration SuitE
Providers: CNR OVI | Operating Unit Florence
Contact person: Federica Spinelli
E-mail: federica.spinelli@cnr.it

TIGRO - Tesoro Italiano delle Origini, gestore ricerche

TIGRO is a software for the lexicographic and linguistic analysis of textual corpora. Leveraging on the experience gained with GATTO, a reference tool in the field of lexicography of variants in antique Italian texts developed by OVI, TIGRO introduces also a set of procedures for FAIR principles implementation, providing a flexible, scalable and reusable solution for textual data analysis. Features include: construction of custom corpora out of collections texts in standard formats (XML-TEI, plain TXT, DOCX files); searching by forms and/or headwords (also using wildcards and advanced search options, such as filtering texts by user selection and/or metadata); downloading of the textual contexts identified through searches in different formats (e.g. PDF, DOC, DOCX, RTF, XML-TEI) with the possibility of customizing the context breadth, and of including bibliographic information; searching for co-occurrences; an API set that allows interoperability of the tool with other software. As for RAISE, the TIGRO modular architecture, based on micro-services, can be adapted to the scientific needs of the users and integrated in various contexts and with different systems, promoting interoperability and long-term sustainability.
CATEGORIES: Query and Data Extraction; Data representation & Visualization

Slide show

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For any other specification, please see the DMP - Tigro - Tesoro Italiano delle Origini, gestore ricerche
Providers: CNR OVI | Operating Unit Florence
Contact person: Federica Spinelli
E-mail: federica.spinelli@cnr.it

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E-Mail
info.h2iosc@h2iosc.cnr.it

MFE – MetaFAIR Ecosystem

MFE is a Platform for the integrated management of digitised manuscripts. Designed for researchers, scholars, and institutions such as libraries, archives and museums, it enables them to catalogue, preserve and enhance documents in a unified environment.
Some of its key features include:

- Cataloguing: Supports national and international cataloguing standards, enabling an accurate description of cultural assets.
- Digitisation: Manages digitisation processes, ensuring the acquisition and archiving of images and documents in digital format.
- Digital Preservation: Ensures the long-term preservation of digital content, implementing strategies for the preservation of data integrity and accessibility.
- Access and Use: Provides tools for consultation and research of digital collections, facilitating public or restricted access to materials.
- Integration: Integrates with other information systems and platforms, facilitating interoperability and data exchange between different cultural institutions.

MFE is in the development phase. A dedicated version will be selected from the current development phase for the TNA call. The federation authentication service developed by Nanotec and integrated in the project's API manager is used.
CATEGORIES: Data processing; data collection; query and data extraction.

Slide show

Max number of Users/User teams for the call: 2
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Providers: CNR OVI | Operating Unit Florence
Contact person: Federica Spinelli
E-mail: federica.spinelli@cnr.it

Helpdesk Contact

For any questions, please contact the Access Coordination and Management Unit of H2IOSC at **tna.h2iosc@h2iosc.cnr.it**