





## Linguistic Linked Open Data for Humanists

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## Introduction

### Who we are and what we do



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#### The CNR Institute of Computational Linguistics (ILC)

We are researchers and research technologists at the Italian National Research Council (CNR) and we work at the Institute of Computational Linguistics in Pisa





#### H2IOSC project

H2IOSC stands for Humanities and Cultural Heritage Italian Open Science Cloud

It is a PNRR project aiming to create a collaborative and inclusive cluster of the Italian nodes of four Research Infrastructures in the domain of Social Sciences and Humanities: CLARIN-IT, DARIAH-IT, E-RIHS.it, and OPERAS-IT

It will provide researchers, businesses and citizens with an open and multidisciplinary environment enabling access to advanced tools to conduct innovative and intensive data-driven research

https://www.h2iosc.cnr.it/

#### The Institute of Computational Linguistics in H2IOSC

The project comprises various work packages, involving multiple units from different research centers. The ILC is the leading member of CLARIN-IT and hosts the ILC4CLARIN center. Therefore, our role in H2IOSC is to improve and support the use of CLARIN tools and services



H2IOSC Project - Humanities and cultural Heritage Italian Open Science Cloud funded by the European Union – NextGenerationEU – NRRPM4C2 – Project code IR0000029 – CUP B63C22000730005.

#### **Overview of Reserch Infrastructures in H2IOSC**



the Italian Common Language Resources and Technology Infrastructure





Digital Research Infrastructure for the Arts and Humanities



#### H2IOSC Work packages

WP1 Project and Financial Management

WP2 Landscaping

WP3 Digital Resources Standardization, Consolidation and Alignment

**WP4** Ris Nodes and resources Interoperability

WP5 MarketPlace

WP6 Resources Accessibility, Servification, Virtualization, Remotization

WP7 Community Pilots

WP8 Training and Capacity Building

### H2IOSC Training

The units working on WP8 have created a joint strategy to organise training activities for the Italian user community. The goal is to provide them with interdisciplinary skills and knowledge specific to SSH, as well as to train them on the resources available from IR. The strategy involves:

- The adaptation of pre-existing training materials to the needs of the user base
- The creation of a training infrastructure composed of two platforms: a Virtual Training Environment (LMS) for delivery and the FAIR and Interoperable Training Materials Publication Platform for repository and versioning

#### Virtual Training Environment Platform

| ≡ Corso                              |  | Admin Admin   |
|--------------------------------------|--|---|
| Corsi > Introduzione alle risorse li | inguistiche: standard e archivi digitali > Introduzione al ciclo di vita e alla gestione delle risorse lingui  | stiche  |
| CLARENT                              | Introduzione al ciclo di vita e alla gestione delle risorse linguistiche<br>I dati linguistici sono essenziali per la comunicazione, la ricerca linguistica e lo sviluppo di strumenti di trattamento automatico del linguaggio.<br>Abstract: In questa unità, imparerete a conoscere il ruolo delle infrastrutture e degli archivi di dati di ricerca nella gestione, nella citazione, nella riusabilità e nella diffusione<br>delle risorse linguistiche e del linguaggio. |   |
|                                      | Autori: Iulianna van der Lek Darja Filer<br>Parole chiave: ciclo di vita dei dati risorse linguistiche gestione dati<br>Licenza: Creative Commons Attribution-ShareAlike 4.0 International License<br>URL alla risorsa: Doppio click per modificare  | Lingua principale: Italiano<br>Data di versione: 23/05/2024<br>Tipo di URL: URL                             |
|                                      | Gruppi target: student: ricercatori<br>Tipo di risorsa didattica: Modulo<br>Obiettivi di apprendimento: Spiegare che cos'è una risorsa linguistica e distinguerne tra i vari tip<br>risorse linguistiche.  | Livello: principiante<br>pi e identificare le fasi di alto livello del ciclo di vita e della gestione delle |
|                                      | Ordinamento: • 1   |   |

#### Results of our pre-course survey

1. Are you familiar with the FAIR principles?

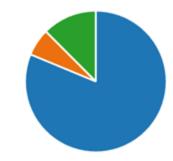




3. Have you already worked with language resources?

#### <u>Altri dettagli</u>

Yes 13
No 1
I am not sure what language res... 2



4. If yes, what type of language resources have you already worked with?

#### <u>Altri dettagli</u>

Textual resources (corpora) 12

- Lexical resources (lexica, Diction... 11
- Natural Language Processing to... 3



9. Which of the following semantic web standards are you familiar with? (Select all that apply)

Altri dettagli

- RDF (Resource Description Fram... 4
- OWL (Web Ontology Language) 2
- SPARQL (SPARQL Protocol and ... 1
- SKOS (Simple Knowledge Organ... 4
- None of the above 10



#### Introductions

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#### Your turn!

Introduce yourself in a few words



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#### Course outline

- **Day 1** Introduction to LOD: the fundamentals
- Day 2 SPARQL tutorial; Language resources, FAIR principles and LOD
- **Day 3** Semantic Web standards and Semantic artefacts: taxonomies, thesauri and ontologies
- **Day 4** Tour of the LLOD Cloud and Ontolex; Lexicographic queries using SPARQL
- **Day 5** Introducing triplestores and Protégé; LOD case study: the LiLa-Linking Latin project

# Let's begin!

We are happy to have you onboard