
LifeWatch Scientific Community Meeting

Rome, 27-29 May 2019



Plant Data @LW-ITA

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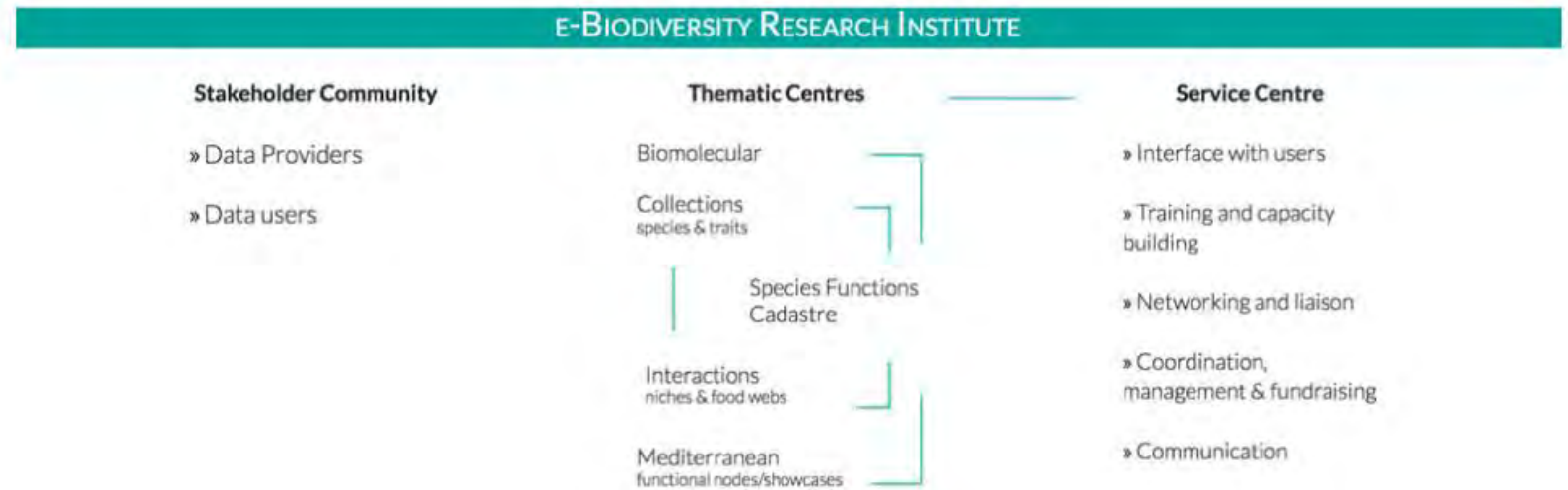
Alma Mater Studiorum - University of Bologna

Structure



The e-Biodiversity Research Institute of LifeWatch-ITA latter has branches distributed throughout Italy, focusing on the construction of a functional backbone, and seeks to reinforce integrated scientific research into biodiversity.

The e-Biodiversity Research Institute of LifeWatch-ITA is organised into four thematic centres: [Biomolecular](#), [Collections](#), [Interactions](#) and [Mediterranean](#), focusing on species, their genetic and phenotypic traits (including behavioural traits), their niches and their interactions.



LifeWatchPLUS



A proposal for enforcing the infrastructure of LifeWatch Italia was presented by a consortium made up by:

- CNR
- Istituto Nazionale di Fisica Nucleare
- Università del Salento
- Università di Bologna



MINISTERO DELL'ISTRUZIONE DELL'UNIVERSITÀ E DELLA RICERCA

VEGETATION dataserver @ UNIBO

Scopes: archive, discovery, distribution, analysis & modelling of plant biodiversity data (floristic data, herbarium data, community data; map data, citizen science data).

Requirements:

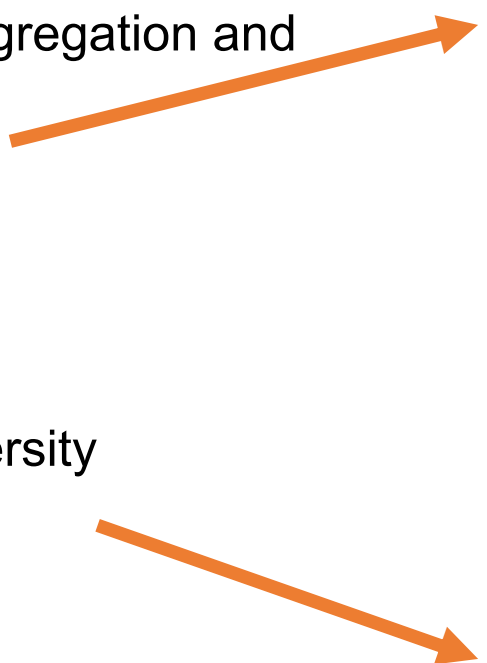
1) Data access and distribution:

- database and web services for data aggregation and exploitation
- multiple access support
- cloud services for data use
- big data analysis and modelling

2) Storage:

- storage space for big data on plant diversity
- data preservation
- effectiveness and scalability

hardware:



Frontend/access node
with large RAM pool
and high number of cores

Redundant storage space
Backup space

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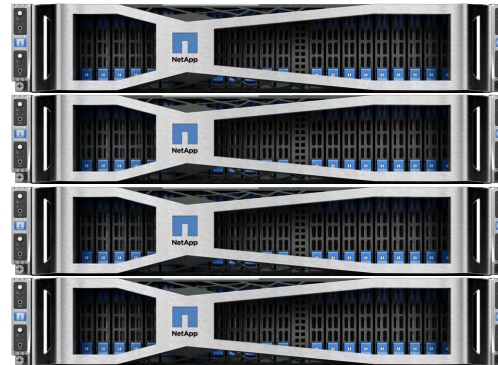
Configuration:

Network:
Switch Cisco
Nexus 100Gb



SW:
Hypervisor: VMware vSphere
Backup Sw: Veritas Netbackup

Calculus:
Netappcompute
96 core Xeon, HCI C
2048 GB memory
5Y support



Storage:

Netapp HCI Storage 22.4 TB
(8.8 TB ridondante)
5Y support

Backup Storage:
EMC Datadomain



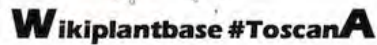
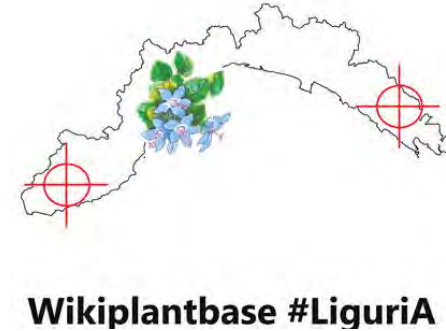
Partners of the project



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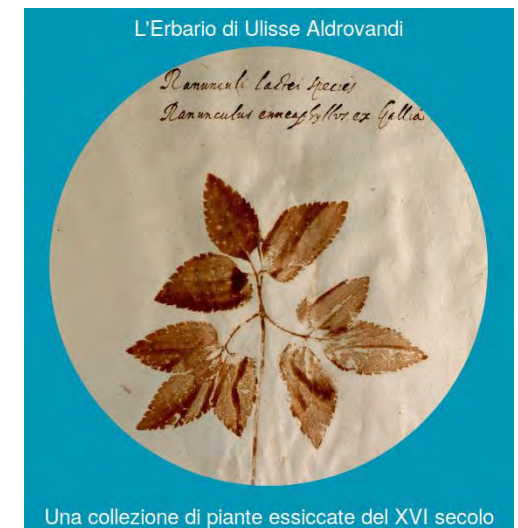
Partners' skills and collaborations



vegitaly



European Vegetation
Archive



Goals

- Improve data storage and accessibility;
- Integrate taxonomy cleaning services across systems;
- Provide virtual labs for data analyses and modelling;
- Provide integration of plant occurrence and community data with other resources;
- Improve data sharing and community projects among various organisations.