EUBrazilOpenBio: EU-Brazil Open Data and Cloud Computing e-Infrastructure for Biodiversity

Description

The main goal of EUBrazilOpenBio was to deploy an e-Infrastructure of open access resources (data, tools, services), to make significant strides towards supporting the needs and requirements of the biodiversity scientific community. This data e-Infrastructure resulted from the federation and integration of substantial individual existing data, cloud, and grid EU and Brazilian infrastructures and resources across the biodiversity & taxonomy domain namely Catalogue of Life, OpenModeller, D4Science-II and Venus-C. The breadth & depth of the resulting data infrastructure & the openness of its resources have enabled in a large variety of new cost-effective, cross-disciplinary virtual research environment applications thus opening the way to its widespread adoption and exploitation by the worldwide biodiversity scientific community. Accelerating the creation of a data e-Infrastructure of open access resources pursues interoperability with end-user technologies, & contributes to social, environmental agendas.

Europe through international cooperation can facilitate the exploitation of European excellence & results in data infrastructure & cloud computing to enhance European competitiveness & job opportunities.

Project goals were two Use Cases:

1. Integration between Regional & Global Taxonomies.
2. Data usability & use of ecological niche modelling.

The interoperation ran through all infrastructures: hardware & computing facilities, portals & platforms, scientific data knowledge infrastructures.

Principal Outputs: 2 user scenarios, a software platform with a specific Software Development Cooperation Environment, computational e-Infrastructure, at least 50 seed resources (dataset, services, platforms, computational & storage resources) offered to the biodiversity community, a consolidated community of biodiversity scientists, socio-economic impact report, an EUBrazil joint action plan on recommendations & future co-operation.

Barcelona Supercomputing Center - Centro Nacional de Supercomputación