BlueBRIDGE



Are you an educator providing scientific training?

Request a BlueBRIDGE Virtual Research Environment and make your job easier!



@BlueBridgeVREs

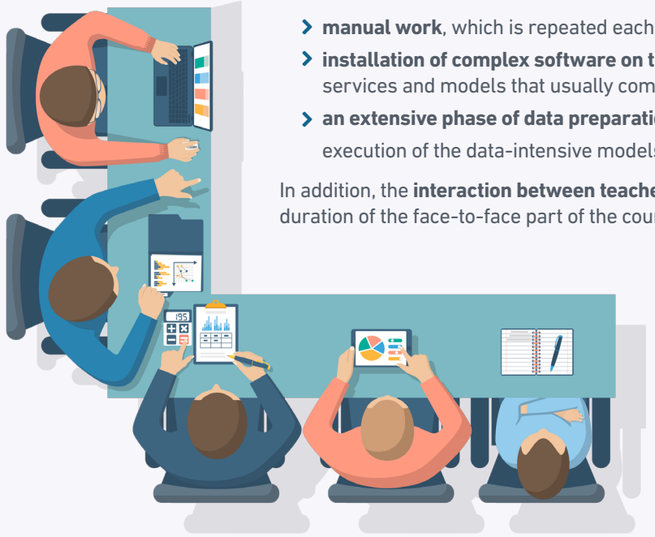
www.bluebridge-vres.eu



Here's why

Education in an interdisciplinary scenario is usually delivered through university courses, focussed training events and workshops provided by specialised scientific institutes.

As a result, there can often be a gap in making the necessary technological support available to scientists, trainees and students.



All the steps in preparing courses and workshops require:

- **manual work**, which is repeated each time a new course is held.
- **installation of complex software on the users' computers** to enable use of data processing services and models that usually come under heterogeneous programming languages.
- **an extensive phase of data preparation and powerful hardware installation** to allow the execution of the data-intensive models.

In addition, the **interaction between teachers and students is usually limited** to the duration of the face-to-face part of the course.

The BlueBRIDGE solution

BlueBRIDGE offers you Virtual Research Environments (VREs) to **set up and deliver training courses in a cost-effective way**. The BlueBRIDGE VREs are collaborative, web-based applications which enable collaboration and integrated access to potentially unlimited digital research resources, as well as cross-disciplinary and cross-community tools and services.

How it works

		Actors involved
	TRAINING COURSE DEFINITION AND PREPARATION	
	SET UP OF THE VRE FOR THE COURSE PREPARATION (TRAINING MATERIAL, SELECTION OF DATASETS AND DATA SERVICES, ETC.)	
	OPENING OF THE VRE TO THE COURSE PARTICIPANTS	
	COURSE DELIVERY	
	POST-COURSE ACTIVITIES (SURVEY, TRAINING MATERIAL DISTRIBUTION, ETC.)	

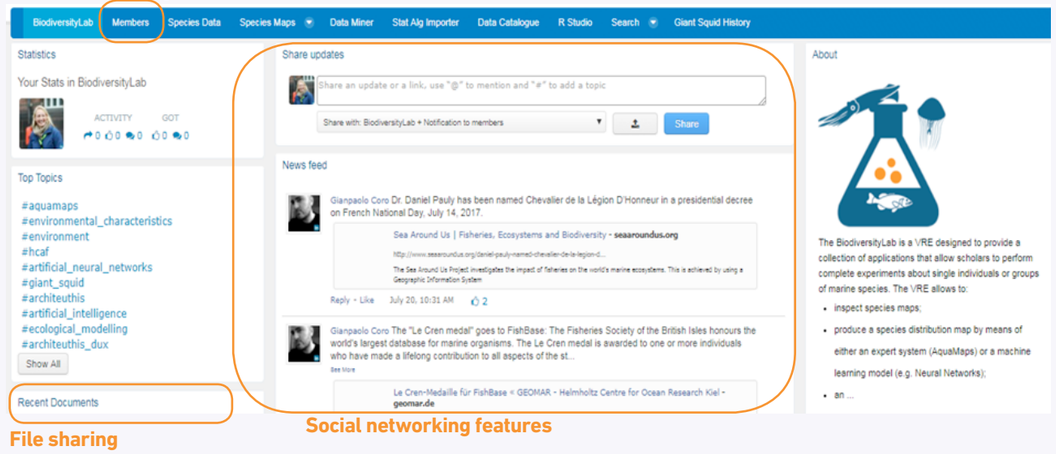
Main features

Standard features

Each VRE is **equipped** with a simple graphical user interface that offers access to:

- **Social networking features with an integrated mailing system**, that trainers and course participants can use to communicate and exchange opinions and results on their research.
- **Data storage and file sharing facilities** (e.g., presentations, documentation, URLs, etc).
- **Member management**: The VRE can be open, restricted or private (it's up to the instructor). If restricted or private, access to the VRE is limited to those possessing the credentials.
- **Computational resources** required to run model simulations.
- **Integrated surveys:** The VRE lets you create surveys that instructors can use to assess the course or to set up questionnaires that participants are required to complete.

Member management



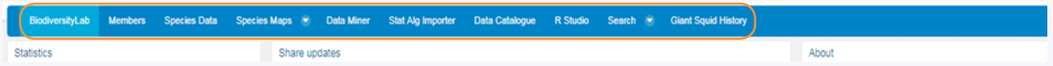
File sharing

Social networking features

Customized features

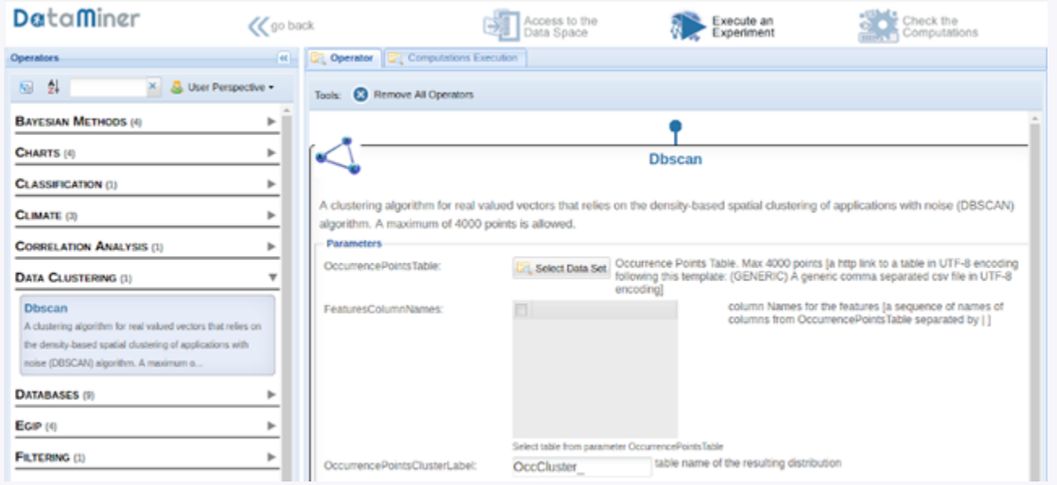
According to the needs of the trainer, each VRE can be **populated** with specific data and algorithms, with facilities for managing data, parameterizing models and providing standard and a variety of computational intensive models.

Application toolbar



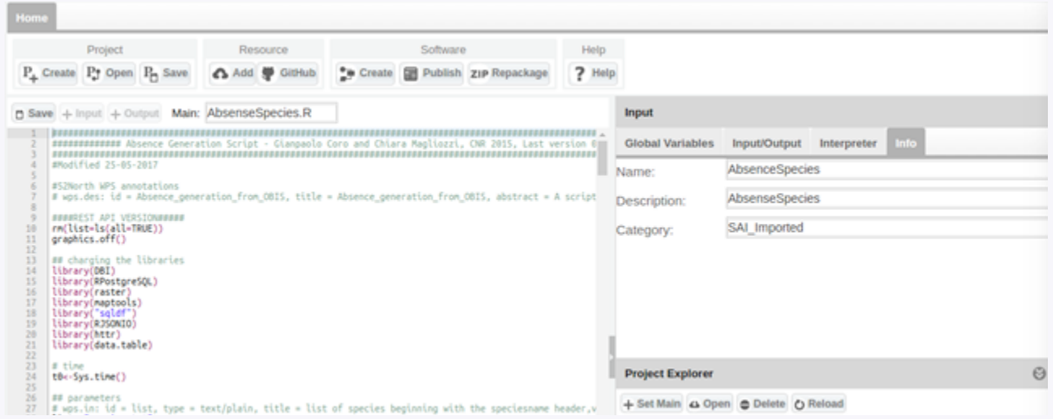
Here are some examples of the most-used features:

- **Data Analytics at Scale**: a facility enabling users to benefit from the offerings of the DataMiner service and interactively execute a large array of data analytics tasks on datasets. These algorithms range from those implemented to produce a species distribution map using either an expert system or a machine learning model to those used to analyse climatic change and its effect on species distribution, to those for estimating similarities among habitats, and approaches for stock assessment.

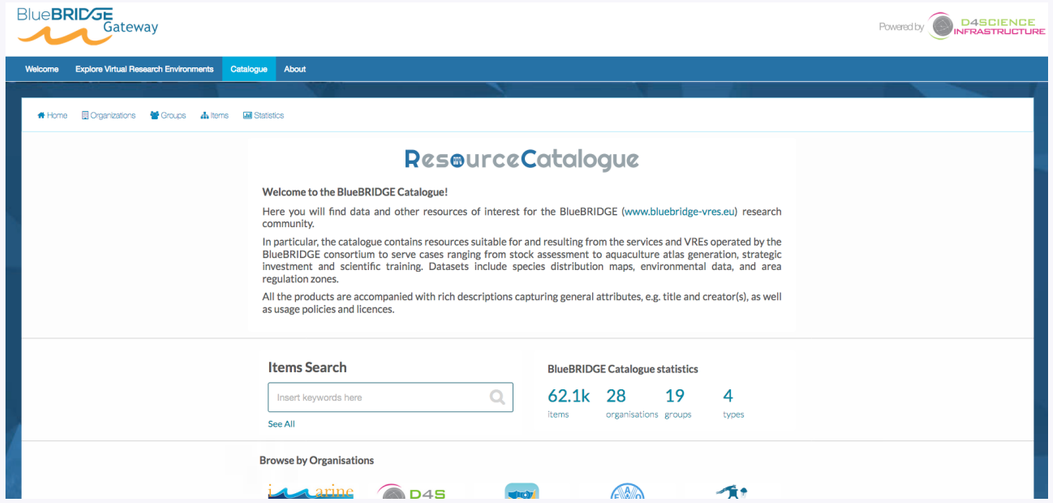


- **R Studio as-a-Service:** a facility enabling users to access a fully-fledged RStudio® working environment directly from the VRE. This environment is integrated with the rest of the VRE facilities enabling the usage of files from the workspace and the storage of new files in the workspace. Some R scripts executed on a local machine could take hours / days to complete, whereas if you exploit the VRE the time can be dramatically reduced to seconds / minutes.

- **Algorithm Importer**: a facility enabling users to transform R-based algorithms and methods into DataMiner algorithms, i.e. methods that can be executed by the data analytics platform. This transformation assists in annotating the code, thus making it possible for Data Miner to properly execute it.



- **Resource Catalogue**: a facility enabling users to access the BlueBRIDGE resources (incl. services, datasets, products).



- **Geospatial Data Viewer**: a facility enabling users to discover and visualize GIS layers, e.g. species distribution maps that have been generated and published. This facility relies on the GeoExplorer portlet, and allows effective exploitation of the maps generated and comparison and analysis of the diverse distributions through map overlay, transect production and value inspection.
- **BiOnym**: an environment to compare a set of scientific names against taxonomic reference lists including recognised ones like Catalogue of Life.
- **Species Data Discovery**: a facility enabling users to discover and manage species data products (occurrence data and taxonomic data) from a number of heterogeneous providers (including GBIF and speciesLink for occurrences data, as well as ASFIS, BrazilianFlora, CatalogueOfLife, IRMNG, IT IS, NCBI, WoRDSS, WoRMS for taxonomic data) in a seamless way. Once discovered, objects can be stored in the workspace for future uses.
- **Species Viewer**: a facility enabling users to discover and browse species products (namely species distribution maps). This facility supports discovery mechanisms ranging from a simple search based on species names to very specific search criterion, and also offers a comprehensive set of products visualisation approaches.

Additional facilities are already available or can be implemented by BlueBRIDGE.

Time duration

- **Access to the VRE can be unlimited in time, or have an expiry date**, depending on the agreement between course provider and instructors. The VRE can be **opened before** and **remain open after the course** has taken place. In this way, course participants can prepare themselves beforehand and, after the course, they can continue experimentation on their own datasets, as in the case of students working on degree theses.
- Course participants' can also **access other public VREs on the infrastructure**.

Our Portfolio

World-renowned leading research institutes as well as universities are using the BlueBRIDGE VREs to organise courses, workshop and hands-on meetings.

ICES CIEM International Council for the Exploration of the Sea / Conseil International pour l'Exploration de la Mer

IRD Institut de recherche pour le développement

SORBONNE UNIVERSITÉS

Do you have a training course in the pipeline?

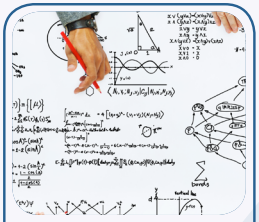
Try the BlueBRIDGE VREs!

The set up is very quick (usually one week).
What are you waiting for? Please contact us at info@bluebridge-vres.eu.

www.bluebridge-vres.eu

@BlueBridgeVREs

Who's behind BlueBRIDGE?



IT Research & Academic Institutions

National Research Council of Italy

FORTH Institute of Computer Science



Blue Growth related scientific institutions

Food and Agriculture Organization of the United Nations

ICES CIEM

IRD Institut de recherche pour le développement



Companies

ENGINEERING

GRID ARENDAL

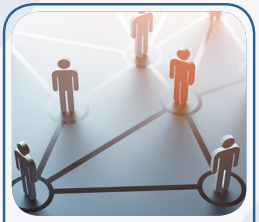
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