CROSS Harmonization & HPC modelization of FOREST Datasets



CROSS-FOREST

The aim of Cross-Forest is to publish Forest Inventory Datasets and Forestry maps from Portugal and Spain in Linked Open Data (LOD) format, and to combine them to create and integrate models supporting forest management and forest protection.

Cross-Forest is developing a common platform for open forest data, and a cross-border data model (ontology) shared between Portugal and Spain, for the publication of forest inventories, maps and other forest databases in Linked Open Data format (LOD). Cross-Forest will provide a public endpoint exposing Forest Data, according to the produced model. The main goal is focused on keeping forest information always available and updated, to make exploitation easier for all stakeholders involved in forest management and research.

Two use cases are being developed:

CAMBRIC - to estimate the evolution of forests and wood quality, under different management scenarios

FRAME - to predict forest fires behavior and spreading through precise information on combustible materials, forestry maps and propagation models.

High Performance Computing (HPC) resources are employed due to the amount of data generated and managed, and to the complexity of the models.

Results so far show the usefulness and versatility provided by LOD technology, as It allows users to freely access and manage updated data to develop tools adapted to their needs and purposes. Publishing data as LOD allows Public Administrations to easily fulfil their requirements of transparence and publicity, optimize resources and keep a statistic control of the use of public data.

SZCZEGóŁY

POCHODZENIE SUROWCA DRZEWNEGO

Las

RODZAJ SUROWCA DRZEWNEGO

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RODZAJ DREWNA

Mediterranean forests in Spain and Portugal

WPŁYW NA śRODOWISKO I BIORóżNORODNOśĆ

Very high as it will help to protect forests from fires for its best management.

EFEKTY EKONOMICZNE

No data

POTENCJAł W ZAKRESIE KOMERCJALIZACJI

The results obtained so far demonstrate the usefulness and versatility provided by LOD technology, as it allows users to freely access and manage up-to-date data to develop tools adapted to their needs and purposes.

LOD technology allows for the modular and interconnected construction of an open, public and quality information infrastructure available to the sector. The

POTENCJAł DLA MOBILIZACJI DREWNA

Medium, this tool provides the best information for an appropiate managemnt to avoid forest fires and also for the best mangament, therfore, it will improve the mobilization potential when CrossForest is used for this purpose

POTENCJAł DLA ZRóWNOWAżONEGO ROZWOJU - WARTOśĆ

Bardzo pozytywny

ŁATWOśĆ WDROżENIA

"Consuming open data" is not easy, so it is necessary to create intermediate links and multidisciplinary teams to bring new technologies closer to users, in order to design adapted solutions.

ŁATWOśĆ WDROżENIA - OCENA

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KLUCZOWE WYMAGANIA

The technology is already developed, the requirements are similar to those necessary for the use of any other similar software.

RODZAJ WYDARZENIA, W KTóRYM WYSTąPIłA DANA BPI

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continuity of this type of publication allows public administrations to meet their transparency obligations, optimise resources and keep statistical control of the use made of the information.

HUB

Centrum Południowo-Zachodnie

EFEKTY W ZAKRESIE ZATRUDNIENIA

The project does not have a direct effect on employment, but it opens up opportunities for entrepreneurs and companies, as the information published allows any user with the appropriate profile to launch queries and develop adapted tools.

WPŁYW NA GOSPODARKę

High, as the information facilitates the management and forecasting of forestry work to be carried out.

KOSZT IMPLEMENTACJI (EURO - €)

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WYMAGANA WIEDZA SPECJALISTYCZNA

Medium, some knowledge of mapping and forestry tools is necessary.

WIęCEJ INFORMACJI

WYZWANIE

1. Poprawa odporności lasu i adaptacja do zmian klimatu

DOMENA

Inwentaryzacja, ocena, monitoring zasobów

Zarządzanie lasem, gospodarka leśna, usługi ekosystemowe, odporność

Zaburzenia ekosystemów leśnych, ryzyka, reagowanie na klęski i katastrofy

RODZAJ ROZWIąZANIA

Platformy z danymi, centra danych, otwarte dane

SŁOWA KLUCZOWE

forest models; High Performance Computing (HPC); Linked Open Data (LOD); ontology

ROZWIąZANIE CYFROWE

Tak

INNOWACJA

Tak

KRAJ POCHODZENIA

Portugalia

SKALA APLIKACJI

Ponadnarodowy

ROK ROZPOCZęCIA I ZAKOńCZENIA

2018 - 2021

DANE KONTAKTOWE

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ŹRóDŁA I MATERIAłY

STRONA INTERNETOWA

https://crossforest.eu/

STRONA INTERNETOWA PROJEKTU

https://crossforest.eu/

PROJEKT

ZASOBY

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LOGO DOBREJ PRAKTYKI

LOGO ORGANIZACJI

PROJEKT, W RAMACH KTóREGO STWORZONA ZOSTAłA NINIEJSZA FISZKA

Rosewood 4.0

DATA PUBLIKACJI

7 cze 2021

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY