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.

PODROBNOSTI

PôVOD DREVA

Les

DRUH DREVA

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UVAžOVANý DRUH DREVA

Mediterranean forests in Spain and Portugal

VPLYV NA žIVOTNé PROSTREDIE A BIODIVERZITU

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

DOPAD NA PRíJMY

No data

POTENCIáL VYUžITIA

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

MOBILZAčNý POTENCIáL

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

POTENCIáL UDRžATEľNOSTI - HODNOTA

Veľmi pozitívne

UľAHčENIE IMPLMENTáCIE

"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.

UľAHčENIE IMPLMENTáCIE - HODNOTENIE

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KľúčOVé PREPOKLADY

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

TYP PODUJATIA, NA KTOROM BOL TENTO BPI PREZENTOVANý

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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.

ROZBOčOVAč

Juhozápadné centrum

DOPAD NA ZAMESTNANOSť

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.

EKONOMICKý VPLYV

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

NáKLADY NA IMPLEMENTáCIU (EURO - €)

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POTREBA šPECIFICKýCH ZNALOSTí

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

VIAC INFORMáCIí

RIEšENá VýZVA

1. Zlepšenie odolnosti lesov a adaptácie na zmenu klímy

DOMAIN

Inventarizácia, posudzovanie, monitoring/monitorovanie

Lesné hospodárstvo/hospodárska úprava lesa, pestovanie lesa, ekosystémové služby, odolonosť

Disturbancie/kalamity, riziká, odpoveď na katastrofu

TYP RIEšENIA

Dátové platformy, dátové rozbočovače, verejne prístupné dáta

KľúčOVé SLOVá

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

DIGITALNE RIEšENIE

áno

INOVáCIE

Áno

KRAJINA PôVODU

Portugalsko

ROZSAH APLIKáCIE

Cezhraničný/multilaterálny

ZAčIATOK A KONIEC ROKA

2018 - 2021

KONTAKTNé úDAJE

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REFERENCES AND RESOURCES

HLAVNá WEBSTRáNKA

https://crossforest.eu/

PROJEKTOVá WEBSTRáNKA

https://crossforest.eu/

REFERENCIA PROJEKTU

ZDROJE

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Cross-Forest is co-financed by the European Union’s Innovation and Networks Executive Agency (INEA), through the Connecting Europe Facility (CEF) 2014-2020. Action 2017-EU-IA-0140 (Agreement No INEA/CEF/ICT/A2017/1566738)

LOGO NAJLPEŠEJ PRAXE

LOGO HLAVNEJ ORGANIZáCIE

PROJEKT, V RáMCI KTORéHO BOL TENTO INFORMAčNý PREHľAD VYTVORENý

Rosewood 4.0

DáTUM ODOSLANIA

7 jún 2021

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY