

Javni sektor koji se oslanja na podatke.

*Od mode do upotrebe:
infrastruktura za ispitivanje velike količine
podataka (Big Data Test Infrastructure –
BDTI)*

EC-BDTI-PILOTS@ec.europa.eu



GU CNECT

Glavna uprava za komunikacijske mreže, sadržaje i tehnologiju

GU DIGIT

Glavna uprava za informatiku



Informacije javnog sektora i uloga analitike podataka — (Data analytics)

Podaci su **posvuda** i rastu dosad nezabilježenom brzinom

- **Big Data** (velika količina podataka): 3V - **Volume**, **Variety**, **Velocity**
(količina, raznovrsnost i brzina)



Podaci su ključni za **usluge**, **proizvode** i **kvalitetno oblikovanje politika**.

Cilj je **jedinstveno europsko tržište podataka** i više raspoloživih podataka uz pomoć snažne i pouzdane infrastrukture i tehnologije, **u skladu s vrijednostima i propisima EU-a**, kao pomoć građanima, javnom sektoru i poduzećima.

Što je Big Data Test Infrastructure (BDTI)?



BDTI: ne **samo** za velike količine podataka (big data), nego i za sve **informacije javnog sektora**



Šest mjeseci besplatno*
za javne uprave EU-a



Gotovi alati za analitiku podataka
i potporu



Platforma u oblaku (cloud), koja se
temelji na
alatima otvorenog koda (**open
source**)



Cilj je pomoći javnom sektoru **da iskoristi svoje podatke** i ubrza prelazak
na **odlučivanje koje se oslanja na podatke**

* Trošak pilot-projekta mora biti u granicama financiranja iz pilot-proračuna za BDTI

Big Data Test Infrastructure – ciljevi

Ciljevi

- povećanje lake dostupnosti, interoperabilnosti, kvalitete i iskoristivosti informacija javnog sektora u skladu s odredbama **Direktive o otvorenim podacima (Open Data)**
- poticanje **ponovne uporabe i kombiniranja otvorenih javnih podataka** iz cijele Unije radi razvoja informacijskih proizvoda i usluga, što uključuje i aplikacije umjetne inteligencije
- visokovrijedni skupovi podataka – Direktiva o otvorenim podacima (Open Data)
- testiranje suradnje u području razmjene podataka između poduzeća i državnih tijela (**Business-to-Government**) (B2G) **za opće dobro**
- centar za podršku podatkovnim prostorima (Data Space): upoznajte svoje podatke i eksperimentirajte s njima*
- BDTI pruža sigurno **okruženje za testiranje tehnologije velike količine podataka (big data)** za korisnike podatkovnog prostora (data space)

* <https://joinup.ec.europa.eu/collection/semic-support-centre/data-spaces>



Upoznajte Big Data Test Infrastructure (BDTI)

BDTI se financira iz **programa Digitalna Europa (DEP)**.

Naglasak je na **približavanju digitalne tehnologije** poduzećima, građanima i javnoj upravi.

Program Digitalna Europa osigurava strateško financiranje u pet ključnih područja:

Računalstvo visokih performansi

Kibersigurnost

Umjetna inteligencija

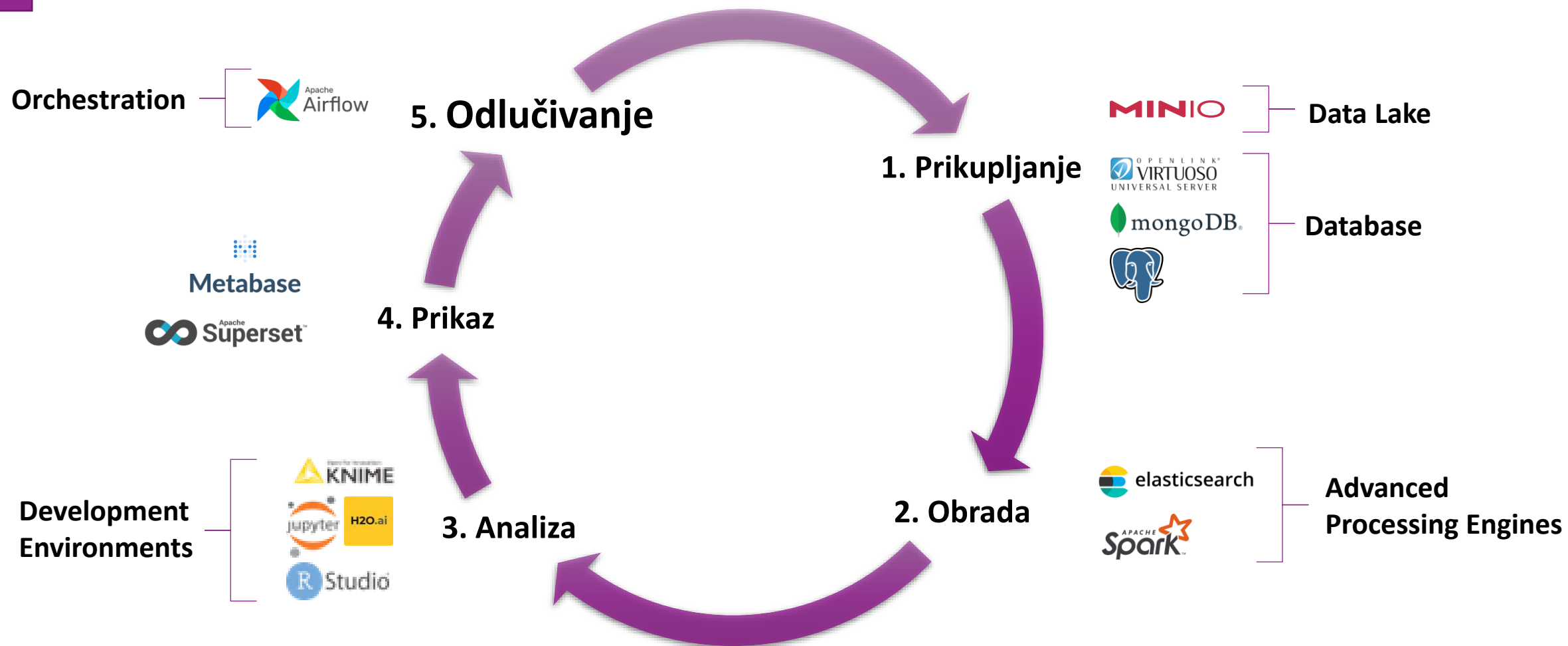
(oblak, podaci i umjetna inteligencija)

Napredne digitalne vještine

Uvođenje i široka upotreba digitalnih tehnologija



Open source – alati otvorenog koda za potporu vašem radu s podacima



Portal BDTI



portal.p1.bdti.dataplatform.tech.ec.europa.eu

European Commission

- Home
- My Account
- Service Catalog
- My Services
- My Data

Logout

v0.9.4

Welcome

BDTI is a Platform-as-a-Service (PaaS), hosted in the cloud, that offers the necessary managed infrastructure and software frameworks for statistical analysis to data engineers, data scientist, and data analysts for a variety of use cases. The platform enables users to select from different components a deployment suited as a solution for their use case. Standard deployments are readily available, but BDTI allows combining components for a custom solution.

Documentation

[Learn more](#)

BIG DATA TEST INFRASTRUCTURE (BDTI)

Watch on YouTube

<https://youtu.be/fdzNCB1CVUM>

Optimisation of Public Lighting - Dún Laoghaire County

Main page | Additional information

The goal of this dashboard is to support you to achieve savings and CO2 emission reduction by turning lighting off when and where the least necessary. By default, lighting is always on between sunset and sunrise.

Daily full-lighting expenses versus projected expenses

Date	Full-lighting (Euro)	Projected (Euro)	Savings (%)
Tuesday, April 18	22.4k	17.7k	17.7%
Wednesday, April 19	22.4k	17.5k	17.5%
Thursday, April 20	22.4k	16.9k	16.9%
Friday, April 21	22.4k	16.3k	16.3%
Saturday, April 22	22.4k	19.9k	19.9%
Sunday, April 23	22.4k	15.7k	15.7%
Monday, April 24	22.4k	17.3k	17.3%

Projected savings next week

27.3k Euro

Projected emission reduction next week

3.36 tCO2

Scenario comparison of projected cumulative savings over 1 year *

Scenario comparison of projected savings and emission reduction after 1 year *

Traffic level name	Cumulative emission savings (tCO2)	Cumulative savings (Euro)
5 Very high traffic	179k	3,342k
4 High traffic	84.4k	2,024k
3 Medium traffic	726.91	5,809k
2 Low traffic	466.0	3,789k
1 Very low traffic	221.5	1,795k
0 None	0	0



Service Catalog

Home

My Account

Service Catalog

My Services

My Data

Airflow - v2.3.0

Description

Airflow is a platform created by the community to programmatically author, schedule and monitor workflows.

Launch

Apache Superset - v1.0

Description

Apache Superset is a modern data exploration and visualization platform. It is fast, lightweight, intuitive, and loaded with options that make it easy for users of all skill sets to explore and visualize their data, from simple line charts to highly detailed geospatial charts.

Launch

Apache Superset v2.1

Description

Apache Superset is a modern data exploration and visualization platform. It is fast, lightweight, intuitive, and loaded with options that make it easy for users of all skill sets to explore and visualize their data, from simple line charts to highly detailed geospatial charts.

Launch

ElasticSearch - v7.17.3

Description

Elasticsearch is the distributed, RESTful search and analytics engine at the heart of the Elastic Stack.

Launch

H2O-3 - v36.1.1

Description

H2O is an in-memory platform for distributed, scalable machine learning. H2O uses familiar interfaces like R, Python, Scala, Java, JSON and the Flow notebook/web interface, and works seamlessly with big data technologies like Hadoop and Spark.

Launch

Jupyterlab - lab-3.2.8 - datascience-notebook

Description

The Jupyter Notebook is a web application for creating and sharing documents that contain code, visualizations, and text. It can be used for data science, statistical modeling, machine learning, and much more.

Launch

Jupyterlab - lab-3.4.2 - all-spark-notebook

Description

The Jupyter Notebook is a web application for creating and sharing documents that contain code, visualizations, and text. It can be used for data science, statistical modeling, machine learning, and much more. Used for spark.

Launch

Jupyterlab - lab-4.0.4 - all-spark-notebook

Description

The Jupyter Notebook is a web application for creating and sharing documents that contain code, visualizations, and text. It can be used for data science, statistical modeling, machine learning, and much more. Used for spark.

Launch

Jupyterlab - lab-4.0.4 - datascience-notebook

Description

The Jupyter Notebook is a web application for creating and sharing documents that contain code, visualizations, and text. It can be used for data science, statistical modeling, machine learning, and much more.

Launch

Kibana - v7.17.3

Description

Kibana is your window into the Elastic Stack. Specifically, it is a browser-based analytics and search dashboard for Elasticsearch.

Launch

Knime - v4.5.3

Description

KNIME Analytics Platform is the open source software for creating data science. Intuitive, open, and continuously integrating new developments, KNIME makes understanding data and designing data science workflows and reusable components accessible to everyone.

Launch

Knime - v5.1.0

Description

KNIME Analytics Platform is the open source software for creating data science. Intuitive, open, and continuously integrating new developments, KNIME makes understanding data and designing data science workflows and reusable components accessible to everyone.

Launch

Metabase - v0.43.3

Description

Metabase sets up in five minutes, connecting to your database, and bringing its data to life in beautiful visualizations. An intuitive interface makes data exploration feel like second nature—opening data up for everyone, not just analysts and developers.

Launch

MinIO - RELEASE.2022-06-20T23-13-45Z

Description

MinIO offers high-performance, S3 compatible object storage. Native to Kubernetes, MinIO is the only object storage suite available on every public cloud, every Kubernetes distribution, the private cloud and the edge. MinIO is software-defined and is 100% open source under GNU AGPL v3.

Launch

MongoDB - v4.4.13

Description

MongoDB® is a relational open source NoSQL database. Easy to use, it stores data in JSON-like documents. Automated scalability and high-performance. Ideal for developing cloud native applications.

Launch

PgAdmin4 - v6.8

Description

PgAdmin is the most popular and feature rich Open Source administration and development platform for PostgreSQL, the most advanced Open Source database in the world.

Launch

Postgresql - v14.2.0

Description

PostgreSQL is a powerful, open source object-relational database system with over 30 years of active development that has earned it a strong reputation for reliability, feature robustness, and performance.

Launch

RStudio - v4.1.2

Description

An integrated development environment for R and Python, with a console, syntax-highlighting editor that supports direct code execution, and tools for plotting, history, debugging and workspace management.

Launch

Spark - v3.2.1

Description

Apache Spark is an open-source unified analytics engine for large-scale data processing. Spark provides an interface for programming clusters with implicit data parallelism and fault tolerance.

Launch

Virtuoso - v7.2.7

Description

OpenLink Virtuoso is a next-generation Universal Server that facilitates the development and deployment of a new generation of Enterprise-wide, Internet, Intranet, and Extranet-based solutions, transcending prevalent enterprise challenge areas such as Disparate Databases and Data Sources, Web Service Composition, and Business Process Management.

Launch

Komu je namijenjen BDTI?



Tijelima javne uprave u EU-u

Svako tijelo javne uprave u EU-u na **lokalnoj, regionalnoj i nacionalnoj razini** može samostalno podnijeti zahtjev za pilot-projekt BDTI-ja



Partnerstvima s akademskom zajednicom i privatnim sektorom

Akadska zajednica (diplomski studiji, studenti na doktoratu) te *start-up* i ostala poduzeća (sektor GovTech) mogu se prijaviti ako **suraduju** s javnom upravom

Zašto BDTI?



Šest mjeseci korištenja **bez naknade**, što uključuje **savjetodavnu i tehničku** potporu



Mogućnost eksperimentiranja s analitikom podataka uz korištenje **infrastrukture visokih performansi** koja se služi snagom elastičnog oblaka (**elastic cloud**)



Smjernice za prelazak iz statusa pilot-projekta u proces koji je **spreman za rad**



Testirajte svoju ideju → Iskoristite postojeće podatke → Stvorite novo znanje

Tko ga već koristi?



Uprava Valencije (Generalitat Valenciana) trebala je pomoć pri analizi brojnih znanstvenih kliničkih članaka iz različitih izvora kao što su PubMed.gov i publikacije povezane s bolešću COVID-19. Zadatak je bio iz te goleme količine podataka izvući kvalitetne zaključke i spoznaje.



Savez neprofitnih ustanova za transfuzijsku medicinu European Blood Alliance (EBA) i GU SANTE zajedno su se upustili u uspostavu sveobuhvatne europske platforme otvorenog pristupa. Cilj njihove inicijative bilo je prikupljanje ključnih podataka za ciljanu studiju o terapiji bolesti COVID-19 konvalescentnom plazmom. Zadatak je bio utvrditi najučinkovitije uvjete za takvo liječenje, uz korištenje analize podataka da bi se donijele utemeljene odluke i pojednostavnio istraživački rad.



Općina je imala složenu zadaću povezivanja različitih skupova podataka iz cijeloga grada s ciljem razumijevanja obrazaca kretanja ljudi u raznim područjima i tijekom vremena. Ta je analiza podataka omogućila stjecanje uvida u trendove mobilnosti i preoblikovanje usluga kako bi se bolje poticale kulturne aktivnosti i događanja.



Napredni **alati za vizualizaciju podataka i rudarenje teksta** pomažu pri **izvlačenju znanja** sadržanog u tim dokumentima i potpora su liječnicima i upraviteljima u kliničkoj praksi i svakodnevnom radu.



Virtualno okruženje spremno za korištenje u koje se **podaci prikupljeni s pomoću prilagođenih internetskih stranica** unose i anonimiziraju, a zatim analiziraju naprednom vizualizacijom podataka i analitičkim alatima. U početku su obrađeni samo podaci o darivanju, a zatim je opseg proširen na cijeli postupak s **krvnom plazmom, od darivanja do pacijenta/kliničkog ispitivanja**.



Prediktivna, deskriptivna i vremenska analiza višestrukih skupova podataka prikupljenih **prije, tijekom i nakon pandemije bolesti COVID-19**, npr.: javni bežični senzori, podaci o parkiranju i georeferencirani podaci o kretanju ljudi (turista).



Postupak prijave: brzo i jednostavno



Upoznajte se s
uslugom BDTI-ja
na našim
[internetskim
stranicama](#)



» Definirajte svoje
potrebe za
analitikom
podataka s
pomoću našeg
alata [BDTI
Canva](#), a zatim
ispunite
standardizirani
obrazac zahtjeva
(vidjeti
[internetske
stranice](#))



» Predajte svoj
zahtjev (obrazac)
e-poštom
EC-BDTI-PILOTS@ec.europa.eu



» Na sastanku
ćemo razraditi
vaše konkretne
potrebe



» Pilot-projekt se
odobrava:
ako donosi
vrijednost, može
se realizirati za
šest mjeseci i ako
ima
dovoljno resursa
(vještine, tim,
podaci)



» Uspostava vašeg
testnog
okruženja



» Počnite s pilot-
projektom i
stvaranjem
vrijednosti!

Hvala na pozornosti!



Radite za javnu upravu kojoj je potrebna infrastruktura za analitiku podataka? Javite nam se:



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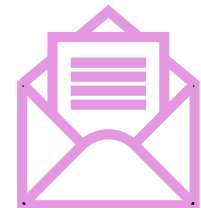
[Internetske
stranice
BDTI-ja](#)



[BDTI na platformi
Joinup](#)



[Bilten BDTI-ja](#)



Poveznice i resursi

- <https://big-data-test-infrastructure.ec.europa.eu/>
- <https://code.europa.eu/bdti/bdti-demonstrator>
- https://commission.europa.eu/publications/interoperable-europe-act-proposal_en
- https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy_en
<https://digital-strategy.ec.europa.eu/en/policies/legislation-open-data>
- <https://digital-strategy.ec.europa.eu/en/policies/data-governance-act>
- <https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence>
- <https://digital-strategy.ec.europa.eu/en/activities/digital-programme>
- <https://dssc.eu/wp-content/uploads/2023/03/DSSC-Data-Spaces-Glossary-v1.0.pdf>
- <https://digital-strategy.ec.europa.eu/en/library/staff-working-document-data-spaces>
- https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1113
- <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32019L1024>
- <https://joinup.ec.europa.eu/collection/egovernment/solution/big-data-test-infrastructure-bdti>