

Earnáil phoiblí faoi threoir sonraí a chumasú

*Ó spéis go gníomh trí úsáid a bhaint as
Big Data Test Infrastructure (BDTI)*

EC-BDTI-PILOTS@ec.europa.eu



AS CNECT

Ard-Stiúrthóireacht na Líonraí
Cumarsáide, an Ábhair Dhigitigh agus na
Teicneolaíochta

AS DIGIT

Ard-Stiúrthóireacht
na Faisnéisíochta



Sonraí earnála poiblí agus ról Data analytics

Tá sonraí i ngach áit agus tá sé ag méadú ar luas nach bhfacthas a leithéid riamh roimhe seo.

- **Big Data: 3V - Méid, Éagsúlacht, Luas**



Tá sonraí ina bpríomhghné maidir le **seirbhísí, táirgí agus ceapadh beartais éifeachtach**.

Tá uaimhian ann **margadh aonair Eorpach** le haghaidh sonraí a chruthú agus tuilleadh sonraí a chur ar fáil trí bhonneagair agus teicneolaíochtaí cumhachtacha iontaofa, i gcomhréir le luachanna agus rialacháin an Aontais, chun tacú le saoránaigh, leis an earnáil phoiblí agus le cuideachtaí.



Céard é an Big Data Test Infrastructure (BDTI)?



BDTI: Ní le haghaidh big data **amháin**, ach le haghaidh gach **faisnéise ón earnáil phoiblí**



Sé mhí seirbhíse saor* in aisce le haghaidh riaracháin phoiblí an Aontais



Cruach anailísíochta sonraí atá réidh le húsáid agus tacaíocht lena aghaidh



Cloudardán atá bunaithe ar uirlisí **open-source**



Cabhrú leis an earnáil phoiblí **léargas a fháil** óna cuid sonraí agus dlús a chur leis an aistriú chuig **cinnteoireacht shonraíbhunaithe**

* Ní mór costas an treoirthionscadail a bheith oiriúnach laistigh de theorainneacha maoiniúcháin bhuiséad píolótach BDTI

Cuspóirí Big Data Test Infrastructure

Cuspóirí

- Inrochtaineacht, idir-inoibritheacht, cáilíocht agus inúsáidteacht faisnéise ón earnáil phoiblí a mhéadú i gcomhréir le ceanglas na **Treorach** maidir le **Open Data**
- Borradh a chur faoin **athúsáid agus faoi chomhcheangal sonraí poiblí oscailte** ar fud an Aontais chun táirgí agus seirbhísí faisnéise a fhorbairt, lena n-áirítear feidhmchláir intleachta saorga
- Tacar Sonraí Ardluacha – an Treoir maidir le Open Data
- Tástáil choibhéise ar chomhar comhroinnte sonraí **Business-to-Government (B2G)** chun **leas an phobail**
- Ionad tacaíochta Data Space: iniúchadh a dhéanamh ar do chuid sonraí agus turgnaimh a dhéanamh leo*
- Cuireann BDTI **timpeallacht shábháilte tástála** ar fáil chun turgnaimh big data a reáchtáil le haghaidh custaiméirí data space



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

Faoin Big Data Test Infrastructure (BDTI)

Tá BDTI á mhaoiniú ag an **gClár don Eoraip Dhigiteach (DEP)** agus díríonn sé ar an **teicneolaíocht dhigiteach a thabhairt do ghnólachtaí, do shaoránaigh agus d'údaráis riaracháin phoiblí.**

Cuireann an DEP maoiniú straitéiseach ar fáil i **gcúig réimse ríthábhachtacha:**

Ríomhaireacht ardfheidhmíochta

Cibearshlándaíl

Intleacht shaorga

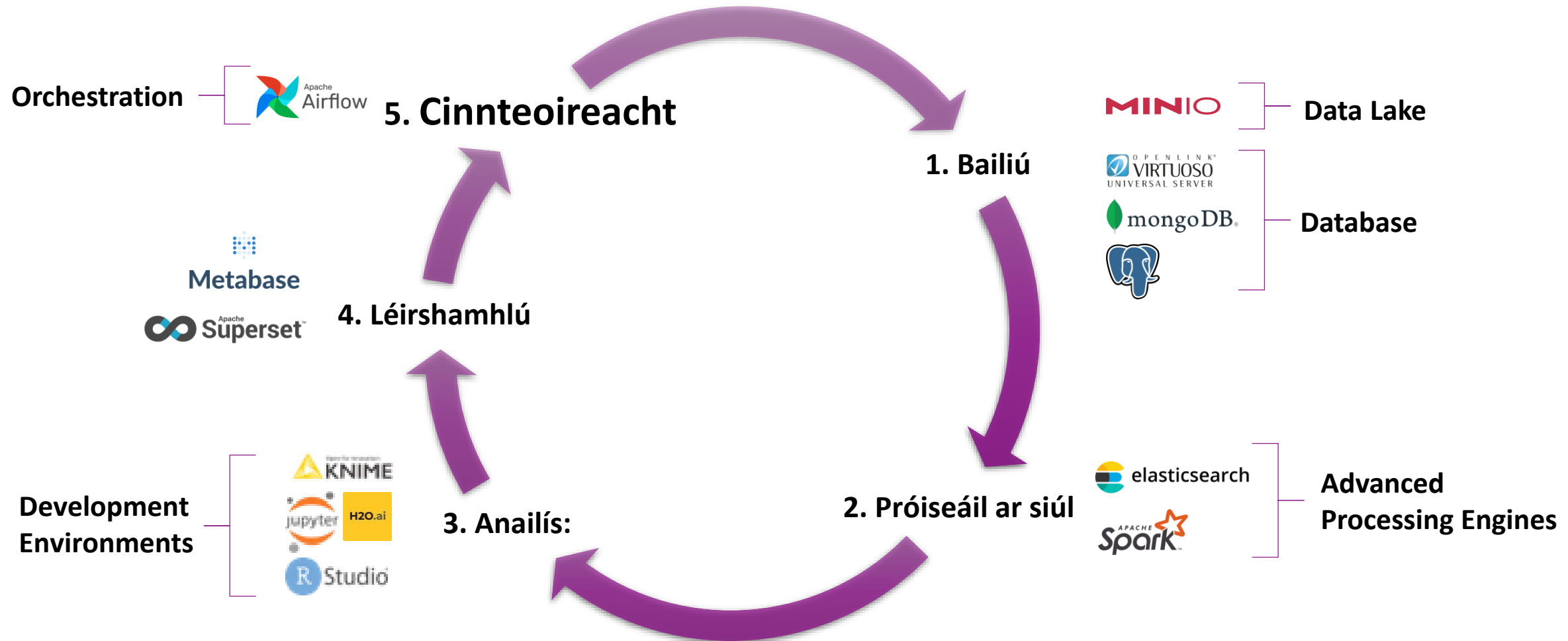
(Scamall, sonraí agus IS)

Ardscileanna digiteacha

Teicneolaíochtaí digiteacha a chur in úsáid agus a úsáid go forleathan



Uirlisí open-source chun tacú le do thuras sonraí



Tairseach BDTI



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

European Commission

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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 Introduction Video

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

Tairseach BDTI

100 % 
compháirteanna
open-source



Service Catalog

Home

My Account

Service Catalog

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Airflow - v2.3.0

Description

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

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

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

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

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

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

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

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

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

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

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

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

ElasticSearch - v7.17.3

Description

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

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

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

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

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

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

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

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

Cé dó BDTI?



Riaracháin Phoiblí Eorpacha

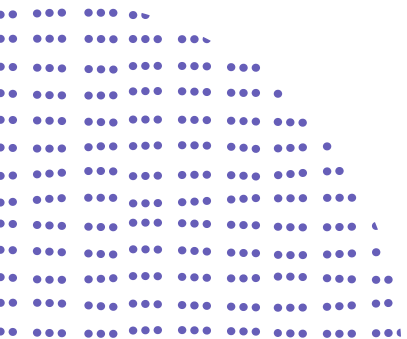
Is féidir le gach Riarachán Poiblí Eorpach ar an **leibhéal áitiúil, réigiúnach agus náisiúnta**

iarratas neamhspleách a dhéanamh ar threoirthionscadal BDTI



Comhpháirtíochtaí leis an saol acadúil agus leis an earnáil phríobháideach

Is féidir le lucht acadúil (máistreacht, mic léinn PhD) agus startups agus cuideachtaí (GovTech earnáil) iarratas a dhéanamh má tá siad **ag comhoibriú** le riarachán poiblí



Cad é an chúis le BDTI a úsáid?



Tairbhe sé mhí saor in aisce, lena n-áirítear tacaíocht chomhairleach agus theicniúil



Turgnaimh a dhéanamh le hanailísíocht sonraí trí leas a bhaint as **bonneagar ardfheidhmíochta** a bhaineann leas as cumhacht an **elastic cloud**



Treoir a fháil chun bogadh ó phróiseas píolóta go próiseas **atá réidh don táirgeadh**



Triail do smaoineamh → Bain tairbhe → Cruthaigh eolas

Cé a d'úsáid é cheana féin?



Theastaigh réiteach ó Generalitat Valenciana chun póirseáil trí ailt chliniciúla eolaíochtúla ollmhóra ó fhoinsí éagsúla amhail PubMed.gov agus foilseacháin a bhaineann le COVID-19. Ba é an dúshlán a bhí acu léargas agus eolas luachmhar a bhaint as an méid ollmhór sonraí seo.



Thug Chomhghuaillíocht Eorpach Fola agus AS SANTE faoi iarracht chomhoibríoch chun ardán cuimsitheach rochtana oscailte a bhunú san Eoraip. Ba é ab fheidhm leis an tionscnamh sin sonraí ríthábhachtacha a bhailiú le haghaidh staidéar dírithe ar theiripe plasma téarnaimh COVID-19. Ba é an dúshlán a bhí ann na coinníollacha is éifeachtaí don chóireáil seo a aithint, agus úsáid á baint as anailís sonraí chun cinntí eolasacha a dhéanamh agus iarrachtaí taighde a shruithlínú.



Thug an bardas aghaidh ar an tasc casta a bhaineann le tacair sonraí éagsúla a chomhghaolú laistigh den chathair. Ba é an cuspóir a bhí acu tuiscint a fháil ar phatrúin ghluaiseachta daoine ar fud ceantair éagsúla le himeacht ama. Bhí an dúshlán sin maidir le hanailís sonraí riachtanach chun léargas a fháil ar threochtaí soghluaisteachta agus chun seirbhísí a athdhearadh chun gníomhaíochtaí agus imeachtaí cultúrtha a chur chun cinn go héifeachtach.



Arduirlisí amharcléirithe sonraí agus mianadóireachta téacsanna chun cuidiú le **hasbhaint an eolais** atá sna doiciméid, tacú le cliniceoirí agus bainisteoirí ina gcleachtais chliniciúla agus ina gcuid oibre ó lá go lá.



Timpeallacht fhíorúil atá réidh le húsáid ina ndéantar **sonraí a bhailítear trí shuíomh gréasáin saincheaptha** a ionghabháil agus a anaithnidíú, agus anailís le déanamh orthu ansin le harduirlisí amharcléirithe sonraí agus anailíseacha. Ar dtús, níor próiseáladh ach sonraí deonacháin, ansin méadaíodh an raon feidhme chun **plasma fola ó cheann go ceann a ghabháil, ó thabhartas go triail othair/chliniciúil.**



Anailís thuarthach, thuairisciúil agus amshraithe ar thacair sonraí iomadúla a bailíodh **roimh phaindéim COVID-19, lena linn agus ina diaidh**, amhail: braiteoirí Wi-Fi poiblí, sonraí páirceála agus geo-thagartha gluaiseachtaí daoine (i.e. turasóirí).



Conas iarratas a dhéanamh: próiseas tapa agus simplí



Téigh i dtaithí ar an tseirbhís BTDI ar ár [suíomh gréasáin](#)



» Sainigh do chás úsáide anailísíochta sonraí trí úsáid a bhaint as ár [Canva BTDI](#) agus ansin líon isteach an fhoirm iarratais ar theimpléad (féach an [suíomh gréasáin](#))



» Cuir isteach d'iarratas píolótach (teimpléad) trí ríomhphost

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» Buail linn chun mionléiriú a dhéanamh ar do chás úsáide



» Ceadáítear an Tionscadal Píolótach más fíor na nithe seo a leanas ina leith:

Tugann sé luach, is féidir é a dhéanamh i 6 mhí, tá acmhainní go leor aige ar fáil (scileanna, foireann, sonraí)



» Socrófar do thimpeallacht tástála



» Féadfaidh tú tús a chur le píolótú agus luach a chruthú!

Go raibh maith agaibh as bhur gcuid airde!



An bhfuil tú ag obair le haghaidh riarachán poiblí a bhfuil bonneagar de dhíth air le haghaidh anailísíocht sonraí? Téigh i dteagmháil linn



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[Suíomh gréasáin BDTI](#)



[Leathanach Joinup BDTI](#)



[Nuachtlitir BDTI](#)



Links and resources

- <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>