From discovery to execution: the execution framework of the EOSC platform

Bundles and Workflow support in the EOSC Platform

Roksana Wilk (ACC Cyfronet AGH)
Intro about the importance of the interoperability from the user standpoint

Researcher needs to have a consistent environment to be effective and efficient

- Computing
- Data
- Storage
- Analytic tool
Intro about the importance of the interoperability from the user standpoint

The researcher has knowledge of the research topic, but **does not** have the tools needed to carry out the project effectively and doesn’t have expert knowledge about possible options.

EOSC provides various types of research resources, such as data, software, publications, datasets.

But what should a researcher select?

And which tools are compatible with each other?
Intro about the importance of the interoperability from the user standpoint

Our experts not only help researchers to find the needed solutions.

But we are creating Offer Bundles which are combining two or more complimentary offers what makes actions faster.

Researchers can focus on their work with technical support tailored to their needs with the complementary resources which are BOOSTING the efficiency of each.
Bundles - “tight” integrations to support your use case

Automate the writing and publication of DMPs

ARGOS + Zenodo

Ease the writing and publishing of DMPs by automations introduced by ARGOS. Document your dataset or software only once, i.e. in the repository when depositing/archiving and in ARGOS, when creating the DMP. Instead of creating a DMP in ARGOS and a dataset in Zenodo, you can search Zenodo, find the dataset or software you want to re-use or update their DMP about (new data created and shared during the project) and automatically prefill the sections of the DMP where this information is expected, e.g. license, doi, etc.

Deposit your DMPs and make them FAIR automatically once it’s completed. The DMPs are sent to Zenodo and a DOI is attached to the DMP. The DMP carries links with publications, data and software.

Additionally it offers:
- Amount of RAM 1 - 4 GB
- Number of cores 1 - 4
- Persistent storage
**Bundles - and wait for its arrival**

### EGI Notebook

<table>
<thead>
<tr>
<th>DETAILS</th>
<th>ORDER HISTORY</th>
<th>CONTACT WITH RESOURCE PROVIDER</th>
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<tr>
<td>Resource name</td>
<td>EGI Notebook</td>
<td></td>
</tr>
<tr>
<td>Resource offer</td>
<td>EGI Notebook + B2DROP</td>
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**PARAMETERS**

<table>
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<tr>
<th>Parameter</th>
<th>Value</th>
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<tbody>
<tr>
<td>Amount of RAM</td>
<td>1 GB</td>
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<tr>
<td>Number of cores</td>
<td>2</td>
</tr>
<tr>
<td>Persistent storage</td>
<td>10 GB</td>
</tr>
</tbody>
</table>

This resource was ordered with resources below (Bundle):

- **B2DROP**
Bundles - “tight” integrations to support you use case

EGI Notebook + B2DROP

This offer bundle consist of EGI Notebook for researchers and B2DROP for researchers

Read technical parameters

Select a bundle
Bundles - a "small" integrations to support you use case

Automate the writing and publication of DMPs

ARGOS + Zenodo

Ease the writing and publishing of DMPs by automations introduced by ARGOS.

Document your dataset or software only once, i.e. in the repository when depositing/archiving and in ARGOS, when creating the DMP. Instead, from the ARGOS environment, you can search Zenodo, find the dataset or software you want to re-use or update their DMP about (new data created and shared during the project) and automatically prefill the sections of the DMP where this information is expected, e.g. license, doi, etc.

Deposit your DMPs and make them FAIR automatically once it's completed. The DMPs are sent to Zenodo and a DOI is attached to the DMP. The DMP carries links with publications, data and software.

TECHNICAL PARAMETERS
Amount of RAM 1 - 4 GB
Number of cores 1 - 4
Persistent storage

PACKAGE INCLUDES

Zenodo
The Basic B2DROP Service Has A Per User Quota Limit Of 20GB. Researchers Which Have A Need For Higher Quota’s, Higher Storage Capacity, Specific Requirements And/OR (Nextcloud) Applications Enabled Can Request This Via The B2DROP Premium Service.
Bundles - get them together with one click

EGI Notebook + B2DROP
This offer bundle consist of EGI Notebook for researchers and B2DROP for researchers

Select a bundle

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**Parameters**
- AMOUNT OF BAND
  - 1 GB
  - 5 GB
  - 10 GB

- NUMBER OF CORES
  - 1
  - 2
  - 4

- PERSISTENT STORAGE
  - 1 GB
  - 10 GB
  - 50 GB

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**Bundle configuration**
Your resource will be configured with following resources:

- **For Researchers - Premium**

  **REQUEST QUOTA CAPACITY**
  - 100 GB
  - 200 GB
  - 500 GB
  - 1000 GB
  - 3000 GB

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eosfuture.eu @EOSCFuture EOSC future
Bigger picture! Composability

- Data
- Move (Transfer service)
- Analyse
- Better, faster computing HTC
- Store
- Publish
Less complicated (general) composability

- Data
- Move (Transfer service)
- Interoperability
- Analyse
- Interoperability
- Publish

Interoperability
Different possibilities of connections, refer to researchers research activities from

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**PROCESSING**

a) Capabilities needed: transfer, compute (possibly external) **processing tool**, storage (possibly external)

b) What matters for this goal:
   For storage:
   i) Size of the dataset
   ii) Time of retention

---

**PUBLISHING YOUR DATASET**

b) Capabilities needed: publishing service

c) What matters for this goal:
   ii) Size of the dataset
   iii) DOI
   iv) free/not free
   v) Domain
   vi) Security (anonymise personal data/licence)

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**ANONYMISATION**

**MOVE/STORAGE YOUR (BIG) DATA**

(place where I can keep my data to use it during my processing)

Capabilities needed: transfer, storage

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**USE EFFICIENT COMPUTING RESOURCES**

Capabilities needed: computing, storage (possibly external)

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**DISCOVER/RE-USE DATA**

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**MAKE YOUR REPOSITORY FINDABLE IN OPEN SCIENCE**

Capabilities needed: data sources

What matters for this goal:
   iii) Connecting of metadata?

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**DATA MANAGEMENT**

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**PRODUCE DATA (physical instruments)**

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Less complicated (general) composability

Service with own computational capabilities + transfer of data

Service
1. Transfer capabilities
2. Process
3. Compute

Services to publish data
- Size of accepted dataset
- Existence of DOI
- Free / Not free
- Domain
- Security
- Time span
Basic bricks in MP projects (types)

- Data
- Move (Transfer service)
- Analyse
- Publish
- Store
- Add new type (publications, software, anonymisation ...)
- Compute (for extensive analysis)
Thank you for your attention!