

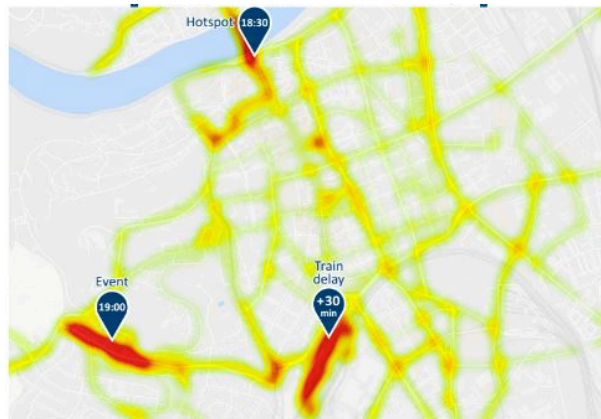


Data Market Austria

Allan Hanbury (TU Wien)

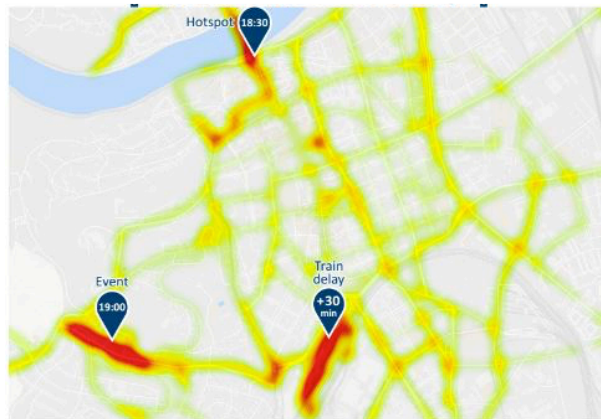
Mihai Lupu (Research Studios Austria FG)





Data for a Taxi Fleet

Example Use Case

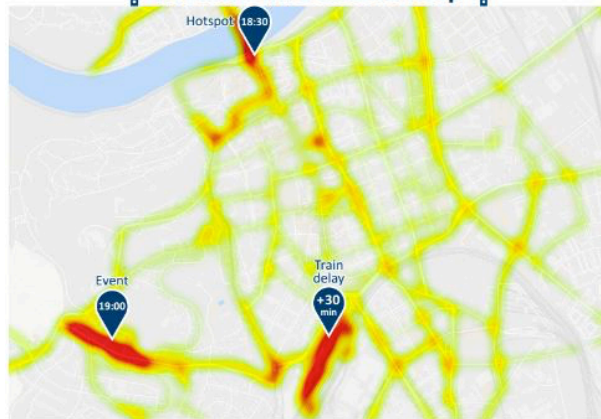


Data for a Taxi Fleet

Example Use Case

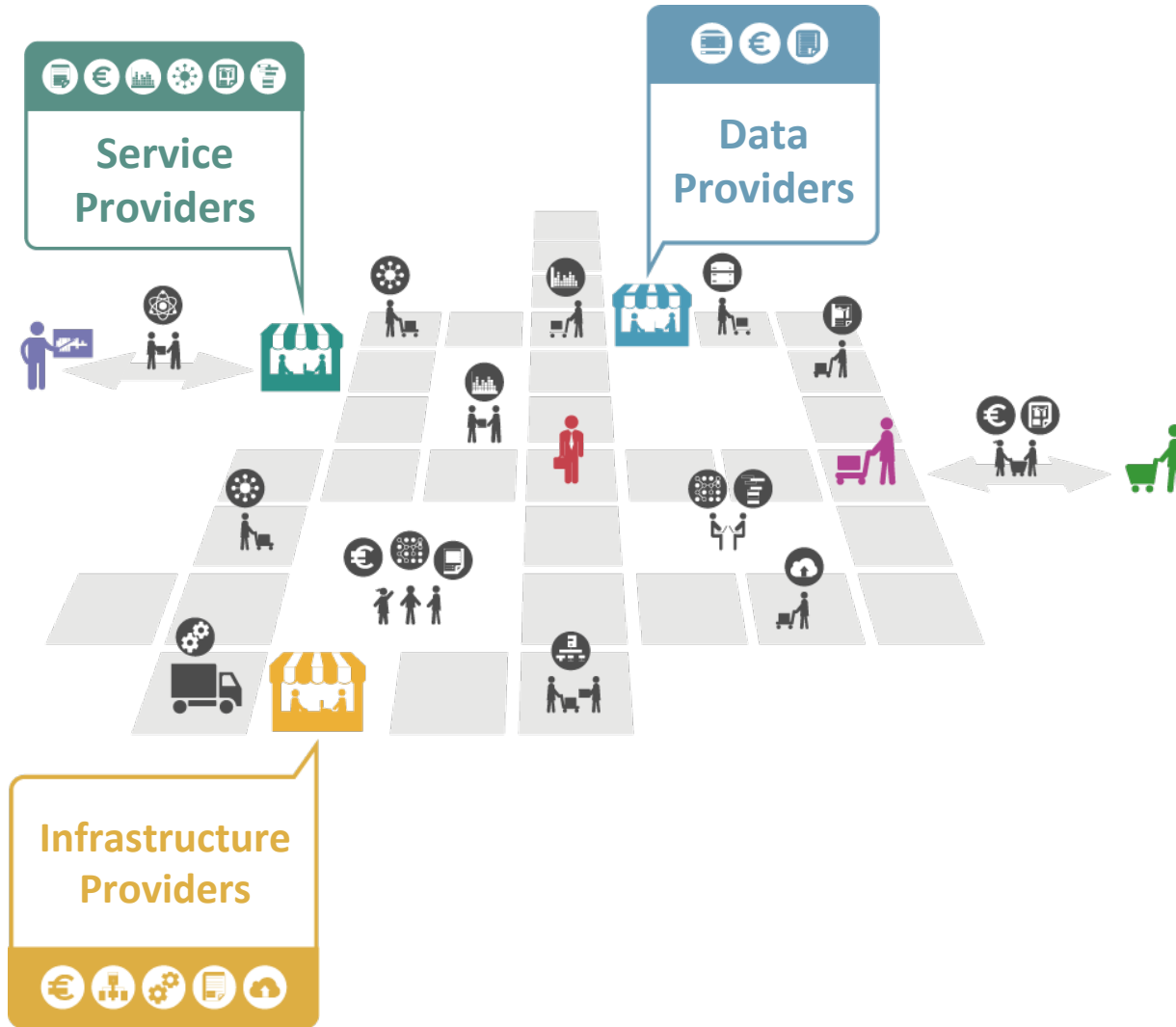


Result: Taxi Demand Map



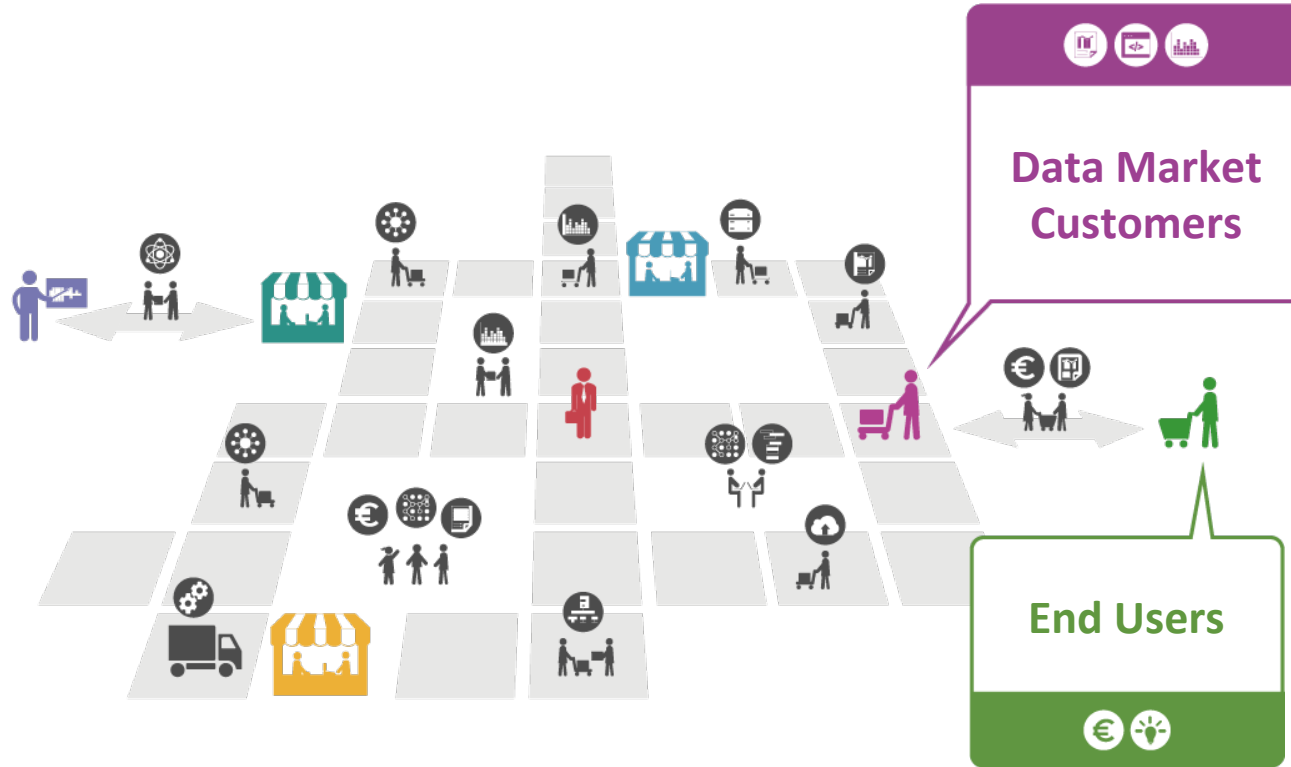


Offer

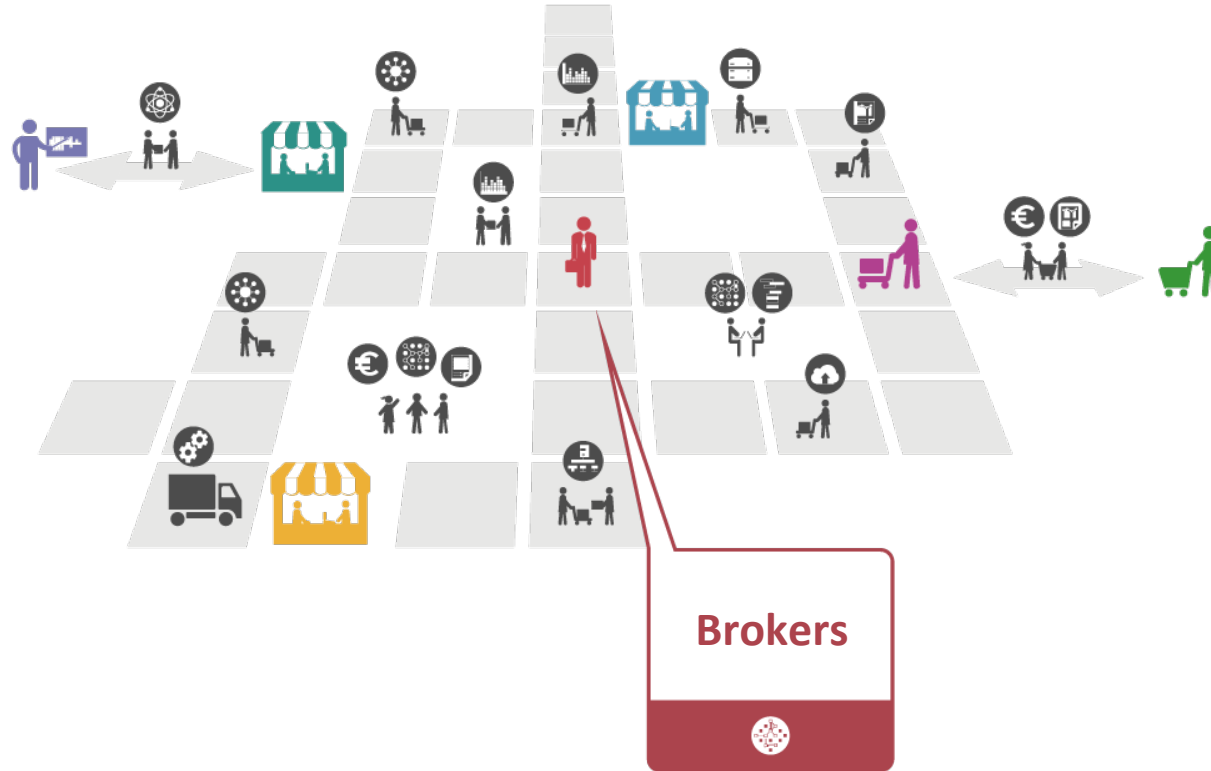


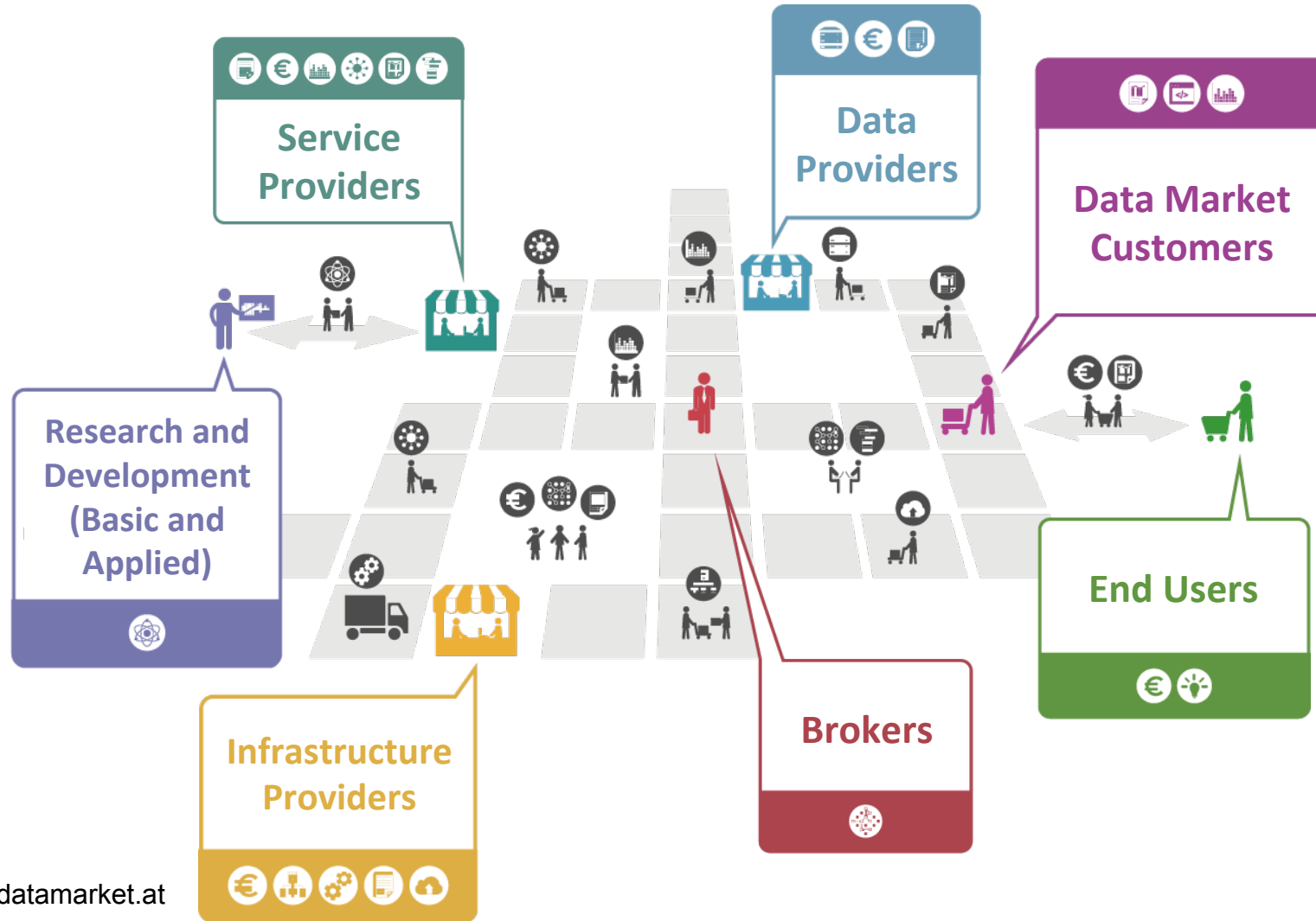


Demand



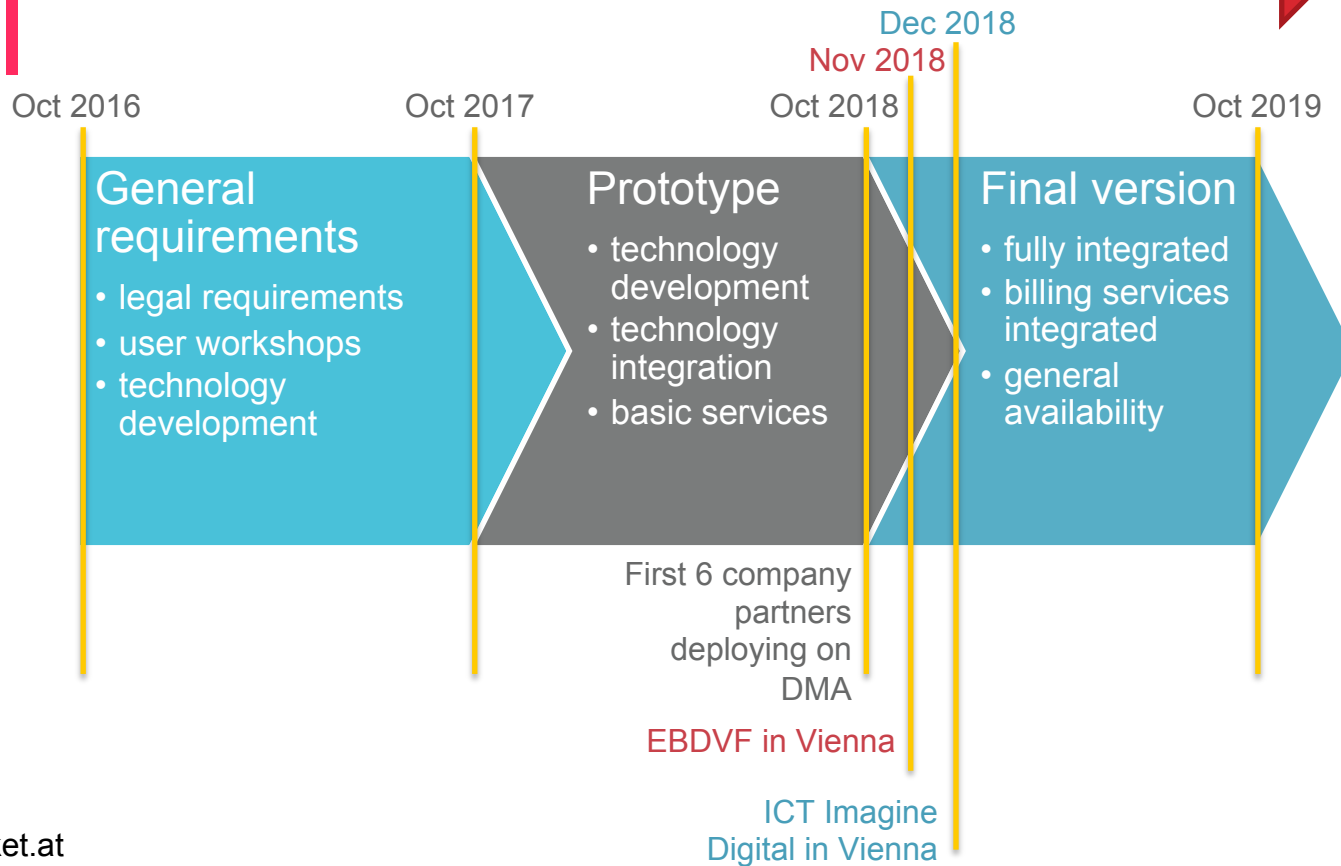
Brokerage

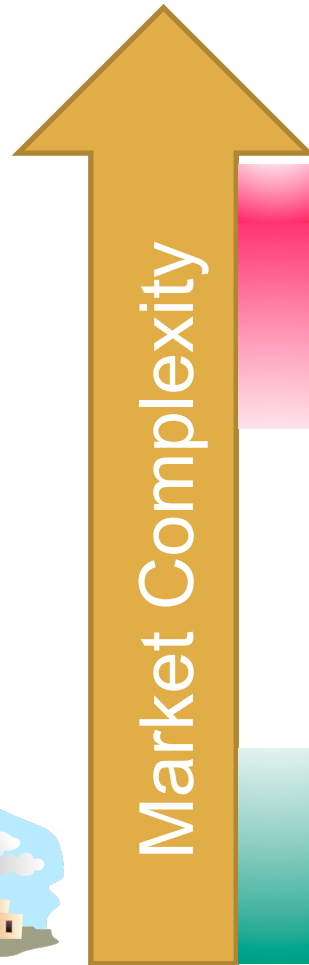
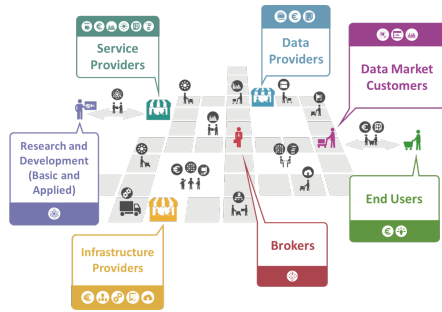




timeline

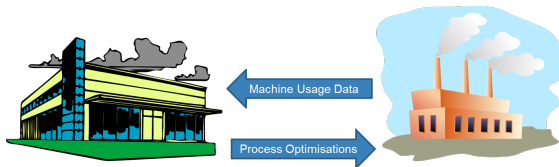
Business Model Development





DATA MARKET
AUSTRIA

<http://datamarket.at>




www.datamarket.at



INDUSTRIAL
DATA SPACE

<http://industrialdataspace.org>

Data Management

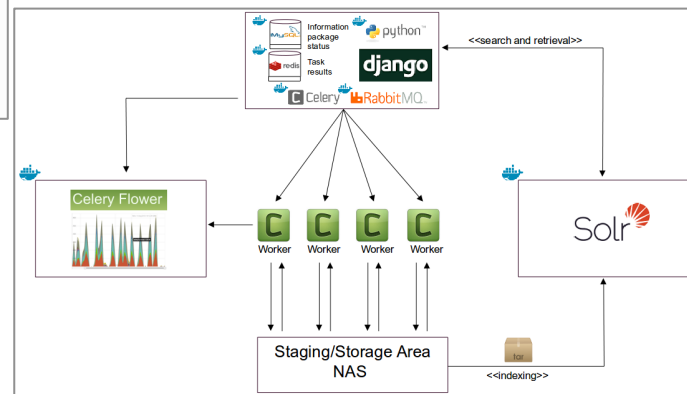

Administration ▾ Submission ▾ Management ▾ Access ▾ Logged in as: dma. [logout]

Conduit

Conduit is a data management application based on Python/Celery.

Features of *Conduit* include:

- Data set ingest pipeline**
 - Flexible creation of data set ingestion pipelines based on a modular set of tasks.
 - Monitoring the data set package creation process down to the execution of individual tasks.
 - Versioning of dataset packages.
- Digital preservation**
 - Scalable format migration to ensure access and usability of data sets on the long-term.
 - Capturing data set provenance to keep track of data set derivation paths and manipulation operations.
- Managed metadata**
 - Validation of core metadata compliance according to defined requirements.
 - Enrichment and quality assessment of provided metadata.



Data Management interfaces

swagger			
Hello, dma		Django Logout	Authorize
Conduit REST API			
checkout_working_copy	Show/Hide	List Operations	Expand Operations
create_dma_user	Show/Hide	List Operations	Expand Operations
directoryjson	Show/Hide	List Operations	Expand Operations
get_dataset_entry_stream	Show/Hide	List Operations	Expand Operations
index_data_asset	Show/Hide	List Operations	Expand Operations
informationpackages	Show/Hide	List Operations	Expand Operations
internalid	Show/Hide	List Operations	Expand Operations
ipfcfrombackend	Show/Hide	List Operations	Expand Operations
submissions	Show/Hide	List Operations	Expand Operations
upload	Show/Hide	List Operations	Expand Operations

ResourceSync Harvesting Interface

```
<urlset xsi:schemaLocation="http://www.sitemaps.org/schemas/sitemap/0.9 http://www.sitemaps.org/schemas/sitemap/0.9/sitemap.xsd">
  <rs:ln rel="up" href="http://conduit.apps.dma-cloud.catalysts.cc:80/conduit/rs/capabilitylist.xml"/>
  <rs:ln rel="index" href="http://conduit.apps.dma-cloud.catalysts.cc:80/conduit/rs/changelist.xml"/>
  <rs:md capability="changelist" from="2017-01-01T00:00:00Z" until="2018-03-02T10:35:01Z"/>
  <url>
    <loc>
      http://conduit.apps.dma-cloud.catalysts.cc:80/conduit/rs/resources/dma:22e5f3e34f073b1ba9d712b145817acd9114f61f
    </loc>
    <rs:md change="updated" datetime="2018-02-02T11:40:34Z"/>
  </url>
</urlset>
```

checkout_working_copy
Show/Hide | List Operations | Expand Operations

POST /conduit/api/checkout_working_copy/{identifier}/
Checkout a working copy

Implementation Notes
 Checkout a working copy
 The stored data asset cannot be edited or changed directly. It is required to checkout a working copy first. It is possible to checkout the complete data asset or metadata only.
 To checkout the data asset including all datasets use the following command:

```
curl -v -X POST http://localhost:8000/conduit/api/checkoutworkingcopy/ait:1a51edc908b3c5b90ef7180b92d9d5bcf64b753e/
```

 And to checkout metadata only use:

```
curl -d '{"metadataonly": "true"}' -X POST http://localhost:8000/conduit/api/checkoutworkingcopy/ait:1a51edc908b3c5b90ef7180b92d9d5bcf64b753e/
```

Parameter	Value	Description	Parameter Type	Data Type
identifier	(required)		path	string

Response Messages

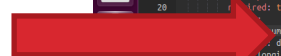
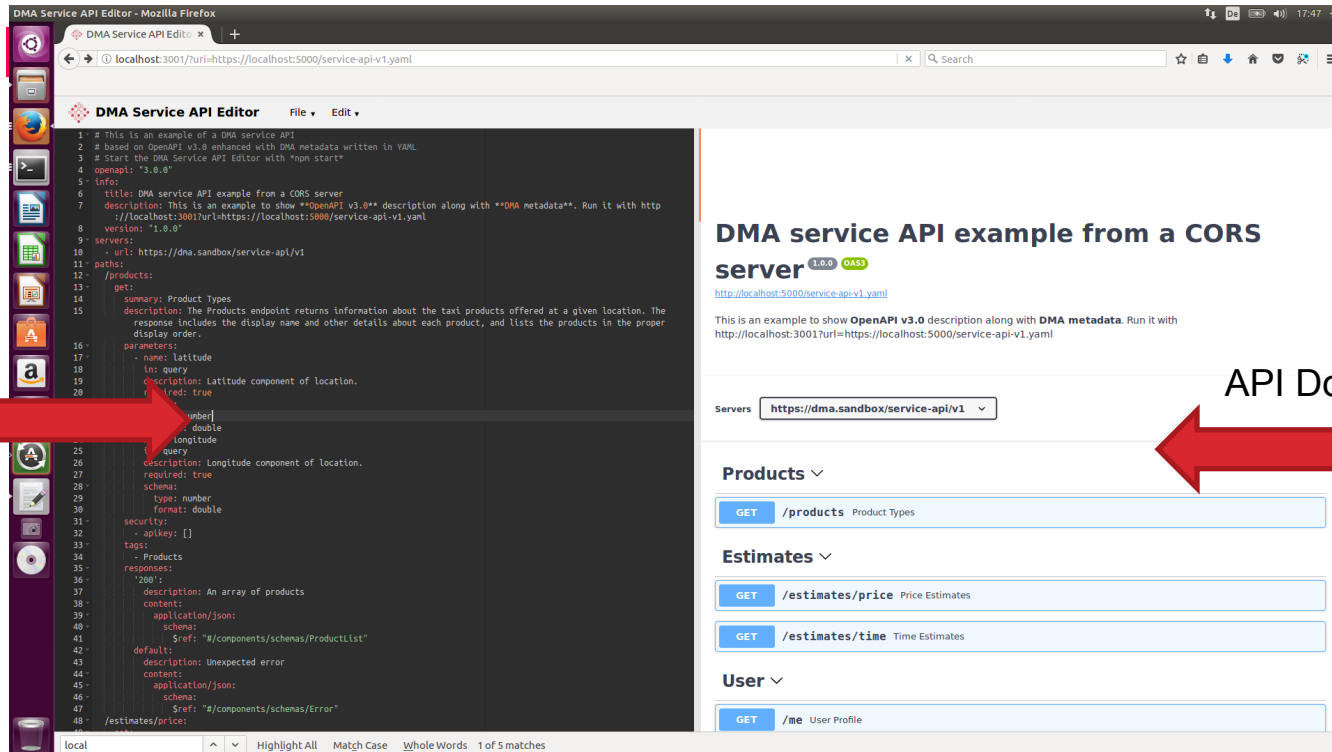
HTTP Status Code	Reason	Response Model	Headers
201			

Try it out!

DMA

Service API Editor

API Editing

DMA Service API Editor - Mozilla Firefox

DMA Service API Editor

```

1 # This is an example of a DMA service API
2 # based on OpenAPI v3.0 enhanced with DMA metadata written in YAML
3 # Start the DMA Service API Editor with 'npm start'
4 openapi: "3.0.0"
5 info:
6   title: DMA service API example from a CORS server
7   description: This is an example to show **OpenAPI v3.0** description along with **DMA metadata**. Run it with http
8     ://localhost:3001?url=https://localhost:5000/service-api-v1.yaml
9   version: "1.0.0"
10  servers:
11    - url: https://dma.sandbox/service-api/v1
12  paths:
13    /products:
14      get:
15        summary: Product Types
16        description: The Products endpoint returns information about the taxi products offered at a given location. The
17          response includes the display name and other details about each product, and lists the products in the proper
18          display order.
19        parameters:
20          - name: latitude
21            in: query
22            description: Latitude component of location.
23            required: true
24          - name: longitude
25            in: query
26            description: Longitude component of location.
27            required: true
28          schema:
29            type: number
30            format: double
31        security:
32          - apiKey: []
33        tags:
34          - Products
35        responses:
36          '200':
37            description: An array of products
38            content:
39              application/json:
40                schema:
41                  $ref: "#/components/schemas/ProductList"
42            default:
43              description: Unexpected error
44              content:
45                application/json:
46                  schema:
47                    $ref: "#/components/schemas/Error"
48  /estimates/price:
  
```

DMA service API example from a CORS server

This is an example to show **OpenAPI v3.0** description along with **DMA metadata**. Run it with <http://localhost:3001?url=https://localhost:5000/service-api-v1.yaml>

Servers:

Products

GET /products Product Types

Estimates

GET /estimates/price Price Estimates

GET /estimates/time Time Estimates

User

GET /me User Profile

API Documentation



“DMA Data Model License” generieren

Vertrag anlegen

Vertrag konfigurieren

Auf dieser Seite kann eine Data Market Austria Lizenz zusammengestellt werden. Für einige der Klauseln stehen mehrere Alternativen zur Auswahl. Durch Klicken des Symbols ➡ wird die jeweils nächste Alternative angezeigt. Gibt es keine weitere Alternative mehr, wird wieder die erste Klausel angezeigt. Manche Klauseln sind optional und können daher durch Klicken des Symbols ⬅ deaktiviert bzw. durch Klicken auf ➡ wieder aktiviert werden.

Einige Klauseln beinhalten Parameter. Ein Beispiel ist die Gewährleistungsdauer, für die eine bestimmte Anzahl an Monaten festgelegt werden kann.

Beachten Sie, dass es logische Abhängigkeiten zwischen Klauseln gibt. So kann zum Beispiel das Deaktivieren einer Klausel zur Folge haben, dass weitere Klauseln deaktiviert werden. Oder eine Klausel kann nicht aktiviert werden, weil sie nicht mit einer anderen aktivierten Klausel kompatibel ist. Beachten Sie diesbezüglich die entsprechenden Hinweismeldungen.

Abschließend kann das Vertragstextdokument durch Klicken auf "Vertragstext erzeugen" generiert werden. Das Vertragsdokument erhält einen Identifikator (SHA-256 Hash), über den der Vertrag referenziert und angezeigt werden kann.

Data Market Austria Lizenz

Präambel

s01-00000

Diese LIZENZ ist ein rechtsgültiger Vertrag zwischen dem DATA MARKET PROVIDER und dem DATA MARKET CUSTOMER in ihrer Eigenschaft als

Final Report on Legal, Social and Cultural Aspects

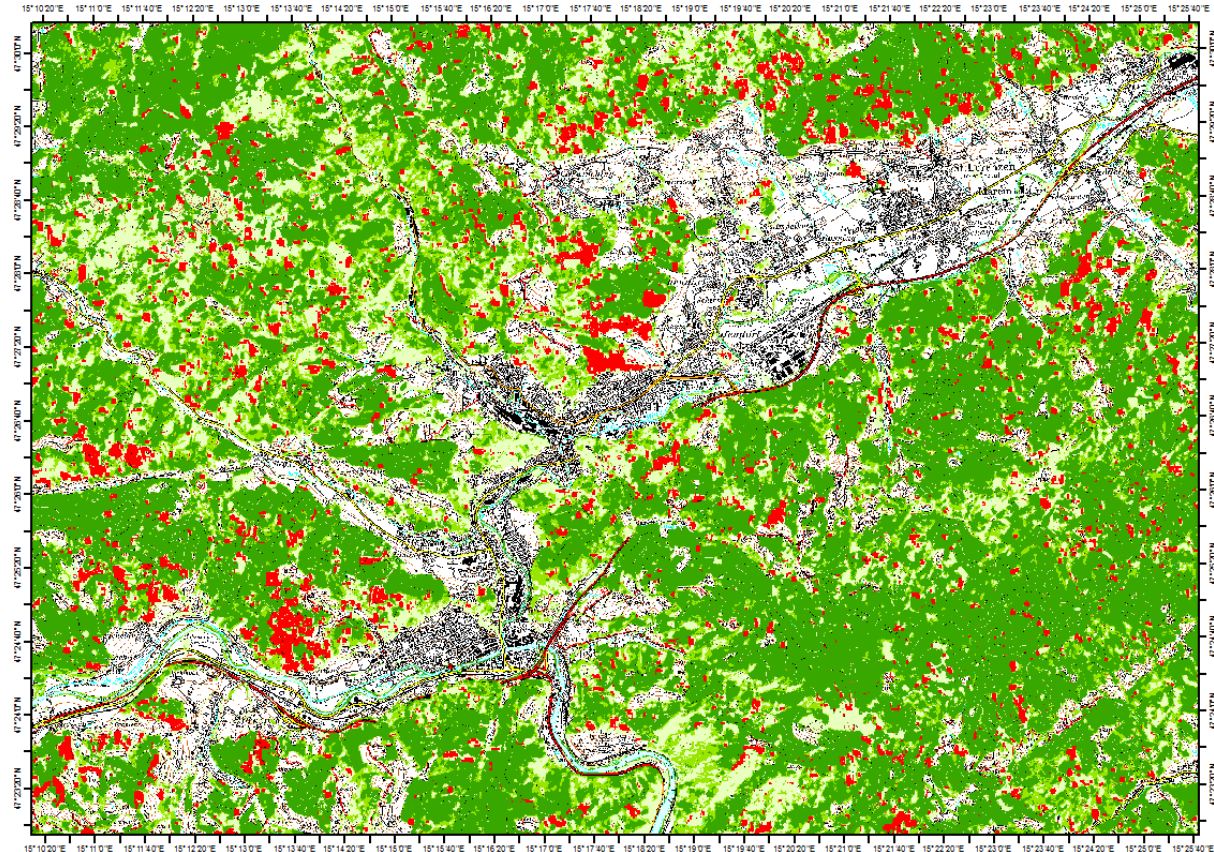
Deliverable number

D3.4

2	Modelle für (self executing) Smart Contracts.....	11
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7	Leitlinien für DMP betreffend Datenschutz	92

Forest (Change) Monitoring

- Draft Result of Forest (Change) Monitoring
- Forest Type Map (Coniferous, Broadleaf, Mixed Forest)
- Change areas in **RED**
- Input for service → „Updated Rockfall Propagation“





Willkommen!

zu Data Market Austria

Dies ist der Einstiegspunkt zum zentralen Knoten des DMA-Projektes.

Hier finden Sie verschiedene Informationen zu diesem Prototyp:

- **Management Konsole**
- **Visualisierung von Metriken**
- **Entwicklungskomponenten:**
 - **Prometheus (metrics accumulator)**
 - **Zipkin (verteiltes Tracking)**
 - **Elasticsearch Informationen**



DATA MARKET
AUSTRIA

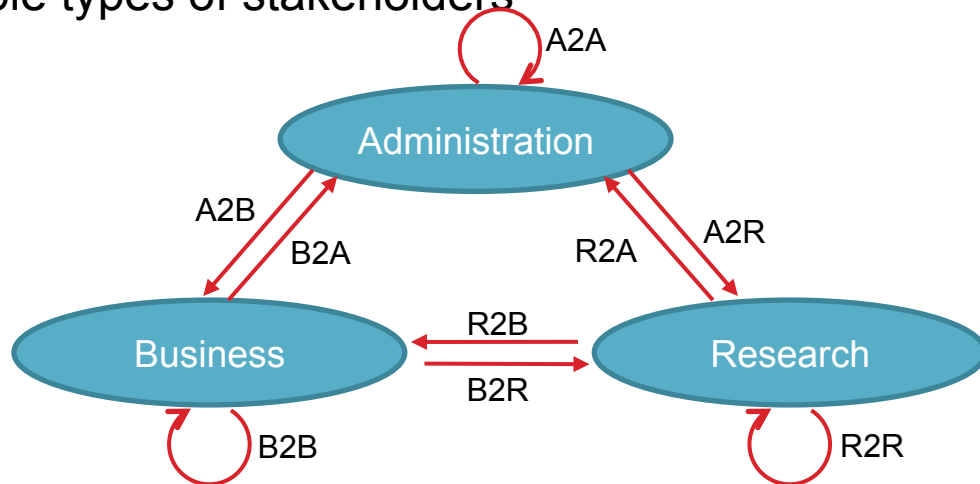
Österreichs erstes digitales Ökosystem für
Daten, Business und Innovation

Dmaservices

Organisation ↕	Status	Name ↕	Beschreibung ↕	Berechtigungen	Erstellt am
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Outlook

- DMA could support data/service exchange between multiple types of stakeholders



- DMA is built in a modular form – the modules can be reused for other platforms
- The legal framework around data exchange is very well investigated

Visit us at the EBDVF 2018



"Data Driven Artificial Intelligence for the Future"



Thank

Any questions?

@DataMarketAT

mihai.lupu@researchstudio.at

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DMA Coordinator

Studio Director | Research Studio **Data Science**
Research Studios Austria Forschungsgesellschaft mbH

www.researchstudio.at

