



Mobility
Data Space

Data Sharing Community

Connector-as-a-Service

Quick starting guide

July 2023

01 Connector-as-a-Service

A "Connector-as-a-Service" (CaaS) is a cloud-based service that enables integration and data exchange between different systems and applications in a very easy way. In this case: The MDS facilitates smooth data communication and exchange in between the MDS members.

Together with our partner [sovity](#) we provide a platform that acts as a mediator between your system and those of other MDS members. Thus, the CaaS helps you to reduce the complexity of integrating and exchanging data, as no own operating environment and no detailed IT-knowledge is needed.

On the following slides, we will guide you through the installation of the CaaS and how to exchange data. We promise: The CaaS is a fast and easy start for providing and consuming data!

Fast & easy deployment via the MDS

Uncomplicated deployment via the MDS. The setup can be implemented without IT knowledge. And if you have any questions, the MDS as well as soviety is at your side.

N:N connections with a browser-based interface

Data can be exchanged with all other MDS members using a single interface. File download and upload is also possible without REST API interface.

Easy setup and secure management of your data

No separate operating environment is required, as the user interface can be accessed via secure web access (2-factor authentication). Data offerings can be tested, and content reviewed.

No obligations, but more service

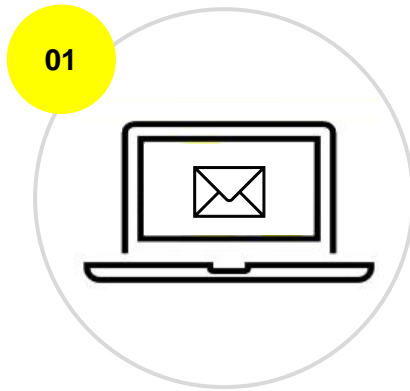
The CaaS is available to you without a contract commitment. Even better, you enjoy all the benefits of "as-a-service":

- IT support
- no additional costs
- no own updates
- fast prototyping with sample offers and E2E solutions
- upgrade to premium CaaS versions
- ...

02

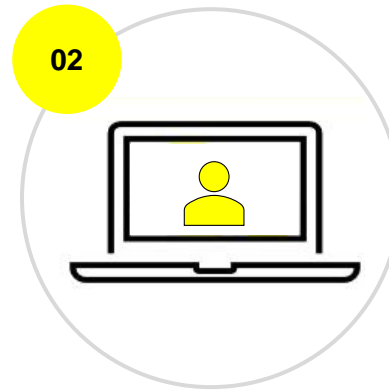
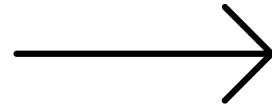
How to get started

02 How to get started



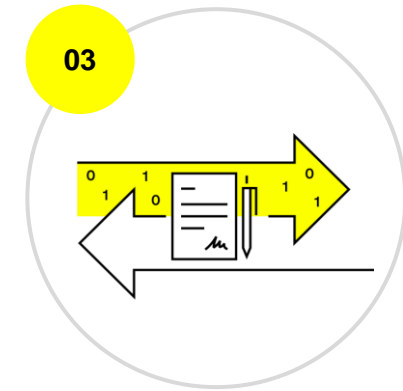
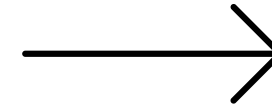
Request your CaaS!

Please send your CaaS-order to community@mobility-dataspace.eu.



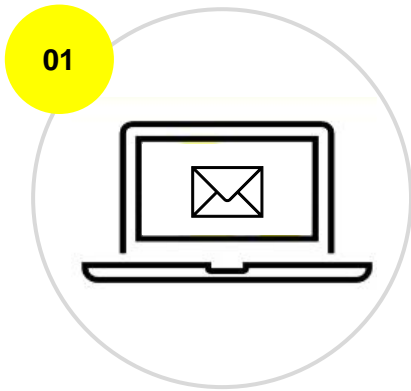
Register and set up your profile!

Register via the link in the confirmation mail and set up the 2FA.



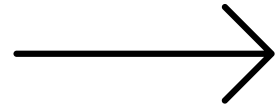
Offer and consume data!

Rapid Prototyping with Example offers and E2E-solutions – then: data exchange!



Request your CaaS!

Please send your
CaaS-order to
[community@mobility-
dataspace.eu](mailto:community@mobility-dataspace.eu).

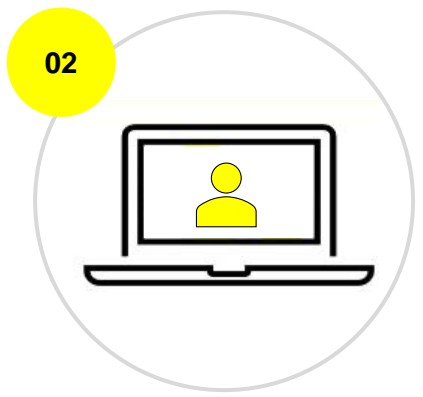


If you are interested in the CaaS, please send an e-mail with the following information to **community@mobility-dataspace.eu**

1. Full name of a designated person who manages the connector
2. E-Mail address & phone number of the designated person
3. Company name & URL
4. Department / role
5. Environment (Test / Prod)

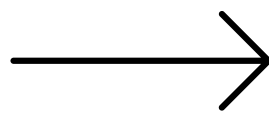
The Community Team will then order the CaaS at our partner sovity. Once the Connector is set up, you will receive an e-mail with the link to the portal where you can register / log in.

Once the connector is installed/ready, you will receive a confirmation mail to access the CaaS portal. Then, follow the steps below:



Register and set up your profile!

Register via the link in the confirmation mail and set up the 2FA.

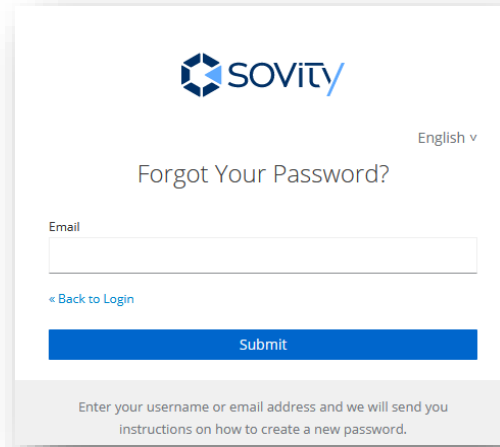


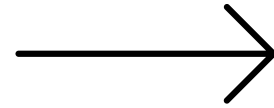
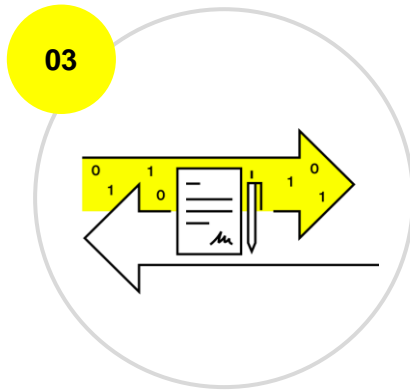
1. Click on „Forgot Your Password?“

2. Enter the e-mail address you sent the MDS upon ordering the CaaS

3. You will receive an e-mail with the reset link

4. Set-up your account with a 2-factor-authentication





On the following slides you will figure out how to set up your data offers and how to exchange data.

Offer and consume data!

Rapid Prototyping with
Example offers and
E2E-solutions – then:
data exchange!

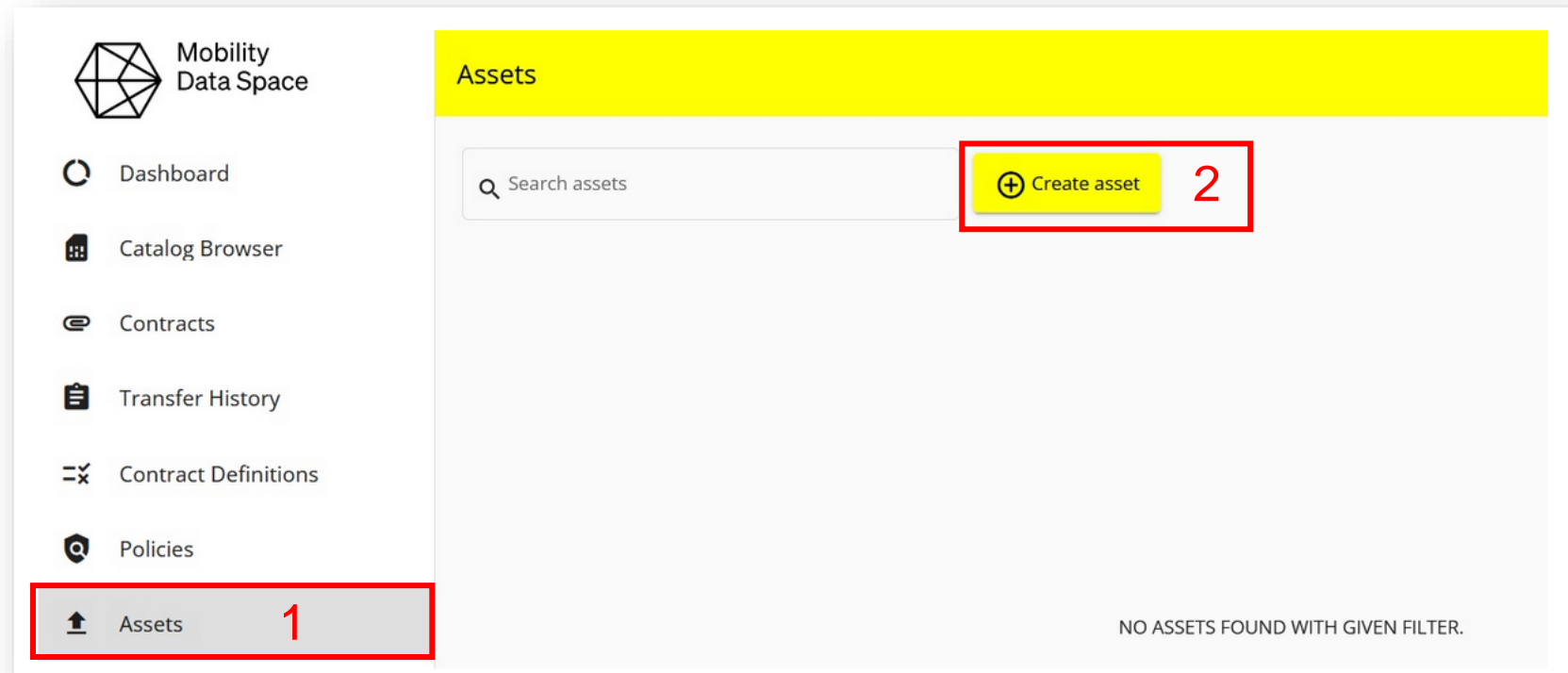
03

How to offer data

03 How to offer data

To offer data you need to define the data asset first:

Open the **Assets** tab (1) and click on **Create asset** (2)



03 How to offer data | General Information

When you have created the asset, you must describe your metadata at **1 'General information'**.

- (1) Name:** Name of your data
- (2) Version:** Version of your data offering
- (3) Description:** A more detailed description of your data offering
- (4) Keywords:** Describe the data offering with keywords and make it searchable in the MDS Broker. (Press 'Enter' after each keyword)
- (5) Content Type:** Content type of your data offering (e.g. 'text/plain')
- (6) Language:** Language of your dataset

Create New Asset

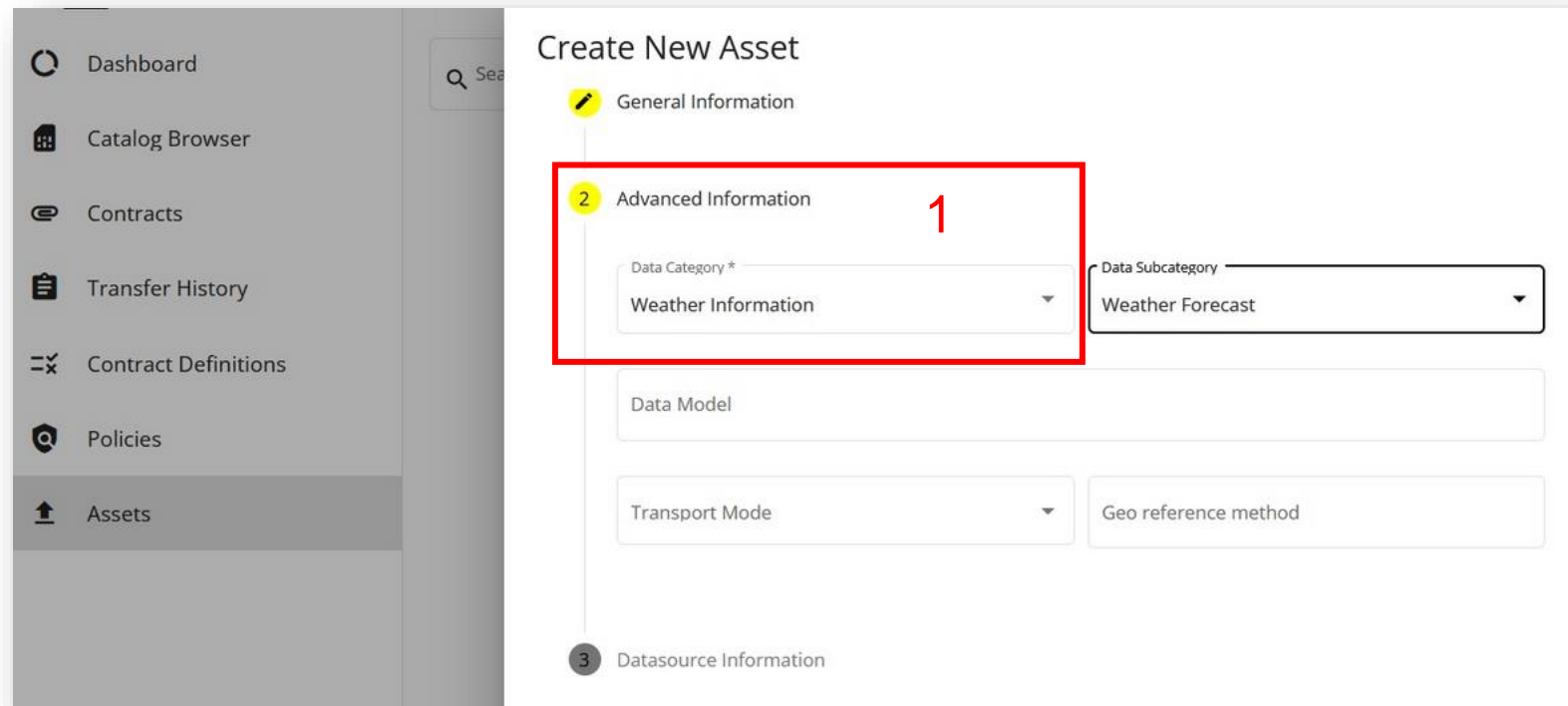
1 General Information

Name *	1	Version	2
Id *			
Description		3	
Keywords		4	
Content Type		5	
Language		6	

Cancel Create

03 How to offer data | Advanced Information

When you have described your metadata, you need to select underneath **2 'Advanced information'** at least one suitable **Data Category** (mandatory) **(1)**.



Create New Asset

General Information

2 Advanced Information 1

Data Category *
Weather Information

Data Subcategory
Weather Forecast

Data Model

Transport Mode

Geo reference method

3 Datasource Information

- *Data Subcategory (optional)*
- *Transport Mode (optional)*
- *Data Model (optional)*
- *Geo Reference Method (optional)*

03 How to offer data | Datasource Information

When you have selected the data categories, you must define the **3 Datasource Information: Choose Type. (1)**

You can **(2)** use a REST-API with different authentication types (none, basic auth or API key).

Dashboard

Catalog Browser

Contracts

Transfer History

Contract Definitions

Policies

Assets

Create New Asset

3 Datasource Information

DATASOURCE 1

Type

REST-API Endpoint

Method * 2

GET

URL *

https://api.open-meteo.com/v1/forecast?latitude=48.137&longitud

AUTHENTICATION

Add Authentication

ADDITIONAL HEADERS

Add Additional Header

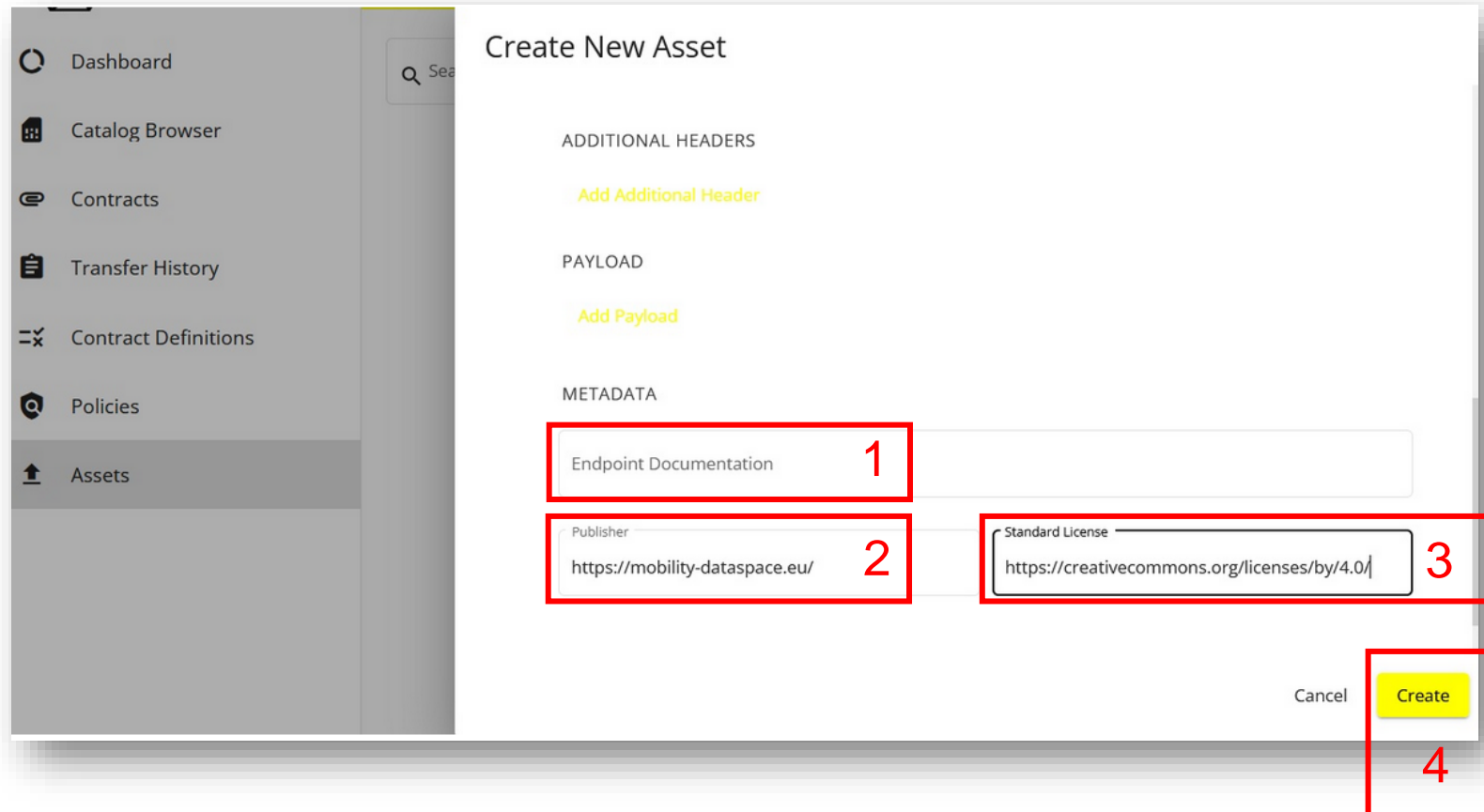
Cancel Create

03 How to offer data | Define Metadata

Once you have defined the datasource information, you must define the metadata for this data source.

You can set:

- **Endpoint documentation (1)** with description of your data (as URL)
- **Publisher** (as URL):
The publisher of the data offering (2)
- **License** (as URL):
Terms under which your data shall be processed ([reference](#)) (3)
- Then click on **Create** (4)

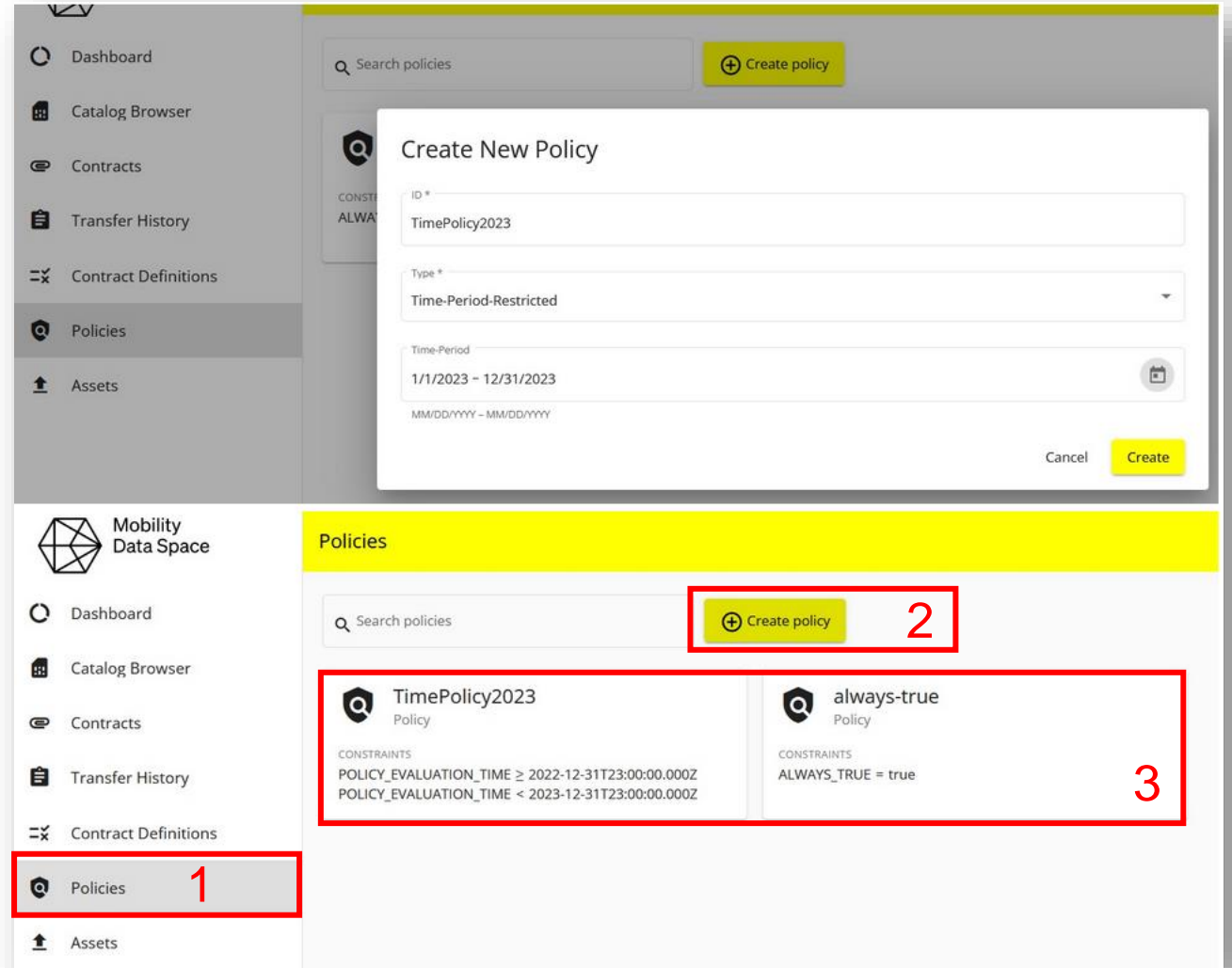


03 How to offer data | Create policy

As you have defined the metadata for your data source, you must go to **(1) Policies**.

Now you must **create** a new **usage policy pattern (2)** or select an already **existing one (3)** from the list below:

- Connector restricted usage
Your data offer can be consumed only through connectors you have whitelisted. Be aware that the Connector ID usually equals your Connectors base URL (e.g. MyConnector.com)
- Time period restricted
Your data offer can be consumed within the given time range only.
- Always free
Free access

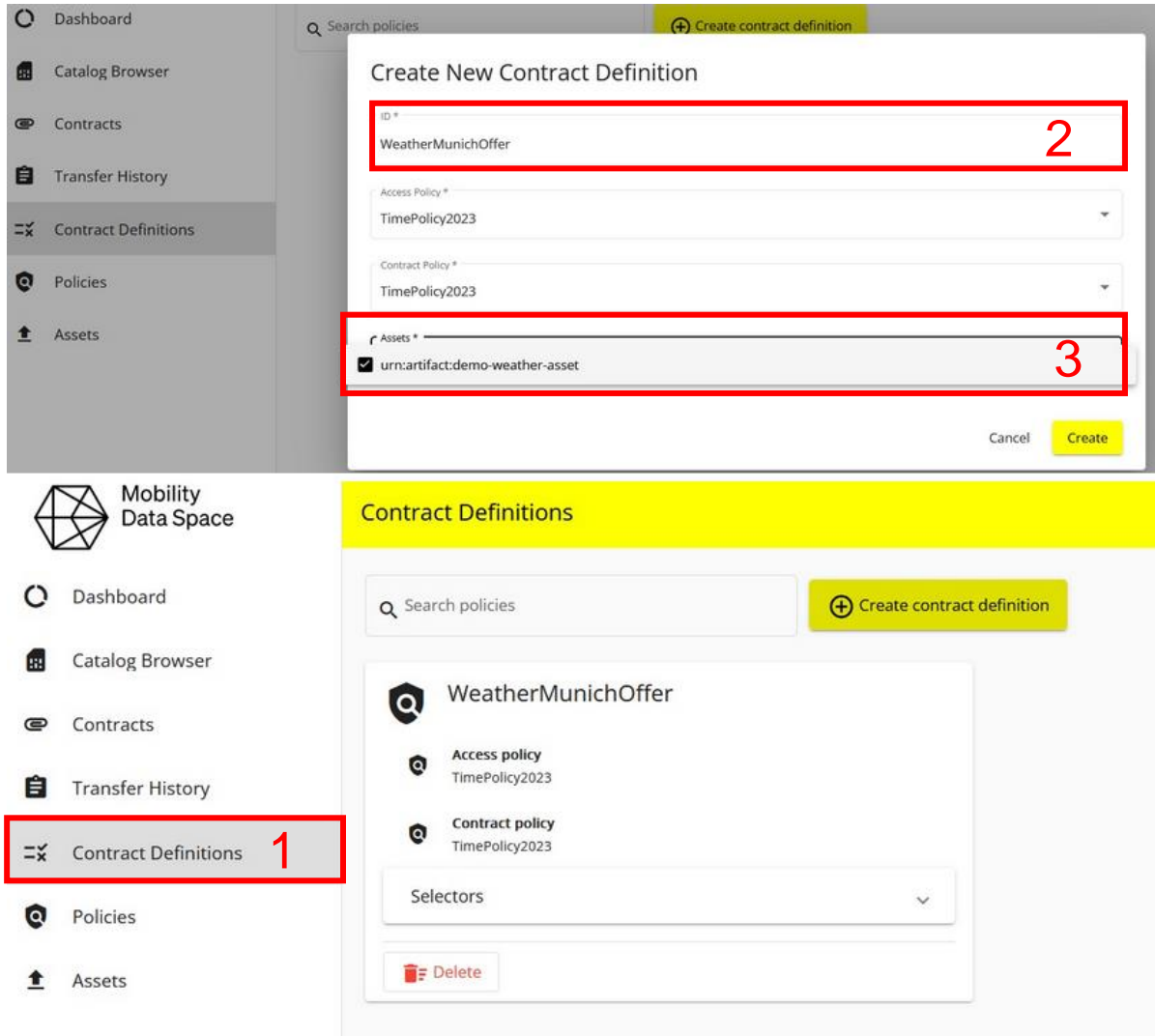


The screenshot displays the Mobility Data Space interface. On the left, a sidebar menu lists various sections: Dashboard, Catalog Browser, Contracts, Transfer History, Contract Definitions, Policies, and Assets. The 'Policies' section is highlighted with a red box and labeled with a red '1'. The main content area shows a 'Create New Policy' dialog box. This dialog has fields for 'ID *' (containing 'TimePolicy2023'), 'Type *' (a dropdown menu set to 'Time-Period-Restricted'), and 'Time-Period' (containing '1/1/2023 - 12/31/2023'). There are 'Cancel' and 'Create' buttons at the bottom right of the dialog. Below the dialog, the 'Policies' section is highlighted with a yellow header. It contains a search bar, a 'Create policy' button (highlighted with a red box and labeled with a red '2'), and a list of existing policies. Two policies are visible: 'TimePolicy2023' and 'always-true'. The 'TimePolicy2023' policy is highlighted with a red box and labeled with a red '3'. Its constraints are listed as 'POLICY_EVALUATION_TIME ≥ 2022-12-31T23:00:00.000Z' and 'POLICY_EVALUATION_TIME < 2023-12-31T23:00:00.000Z'. The 'always-true' policy has the constraint 'ALWAYS_TRUE = true'.

03 How to offer data | Create contract definitions

After defining the usage policy pattern, you are obliged to create a contract offer using the **Contract Definitions** tab (1).

Choose a unique **ID (2)** for your contract offer and select already defined policies and data **assets (3)**.



04

How to consume data

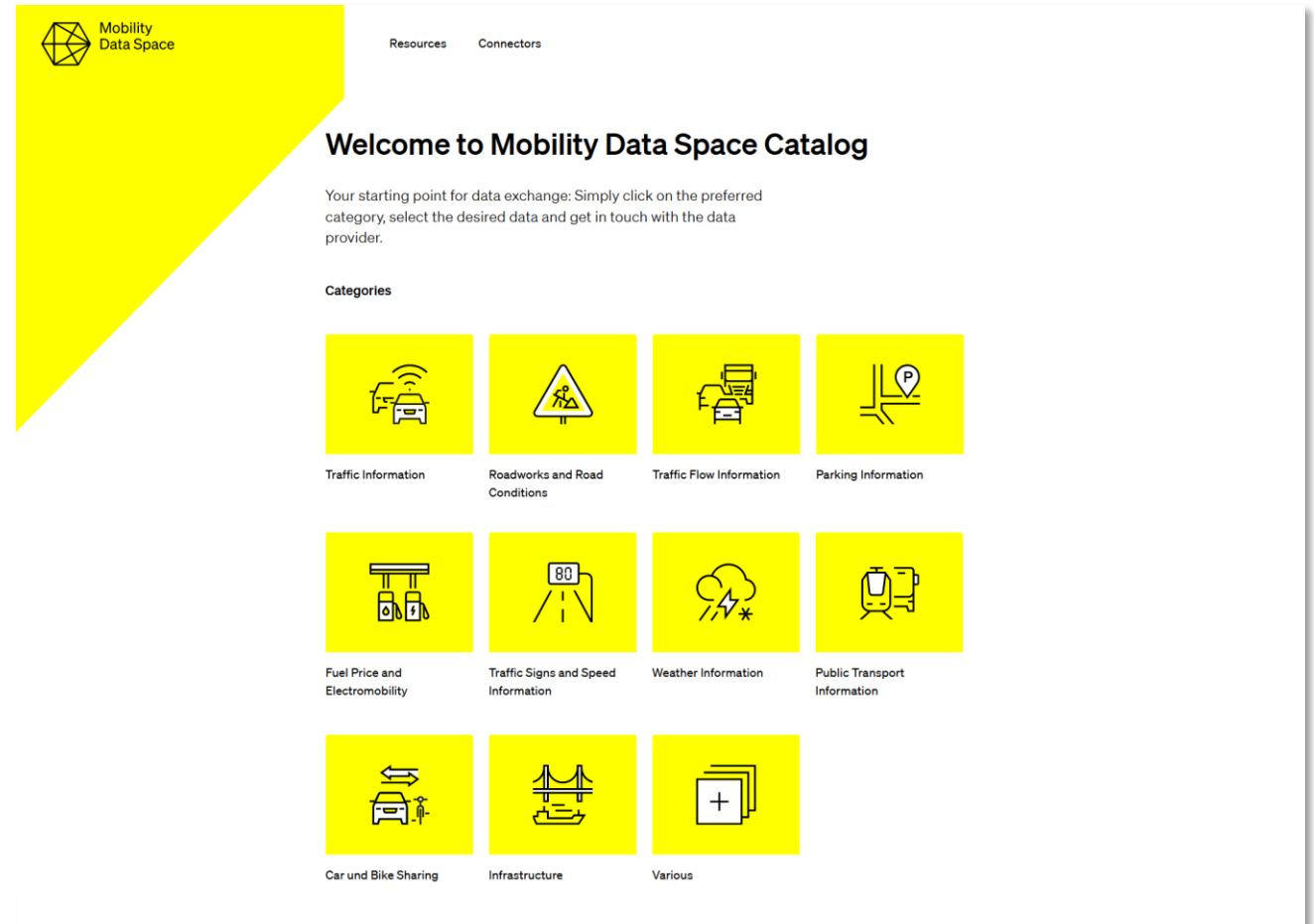
04 How to consume data

There are two MDS catalogs where you can browse all registered resources:

- [MDS Test Catalog](#) or
- [MDS Productive Catalog](#)

If you find a data resource to be consumed, please copy the base path of the Original ID (e.g. <https://connector.host.com>) + add: **/api/v1/ids/data** (default EDC catalog request path).

Be aware that data or CaaS providers could add path mappings for routing which must be added, too (e.g., <https://connector-mds-test-001.prod-sovity.azure.sovity.io/>).

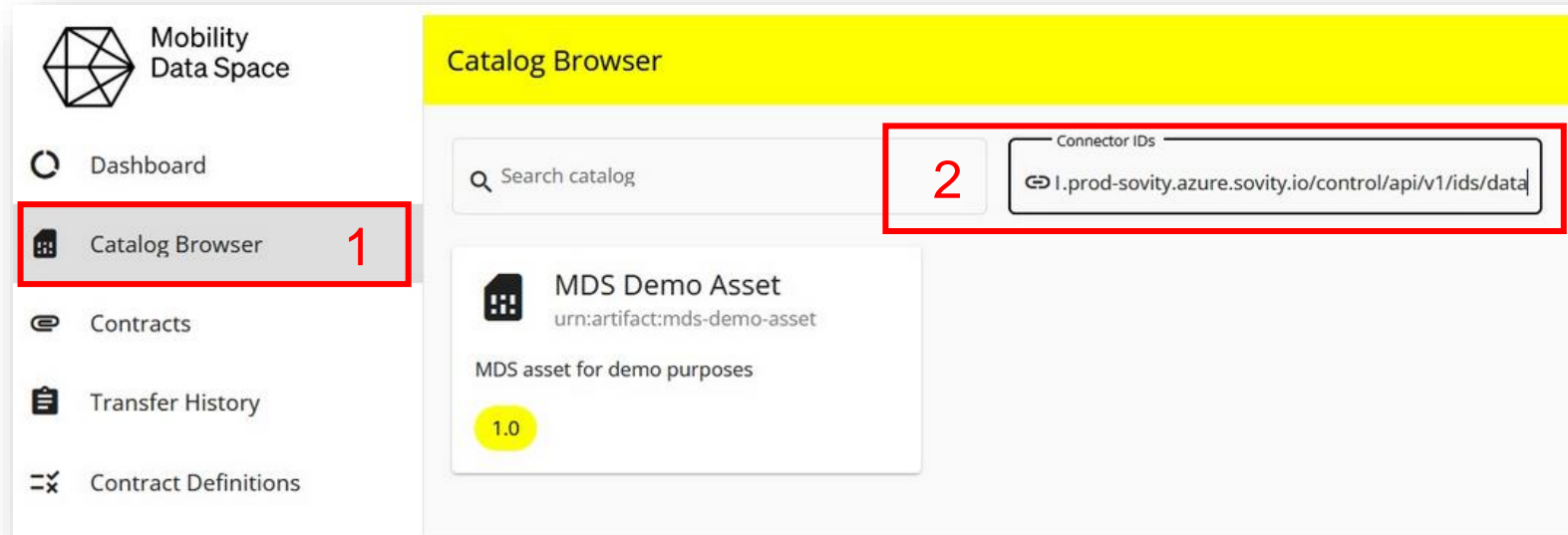


04 How to consume data I Negotiate asset

When you are in one of the catalogs, go to **Catalog Browser (1)** at the frontend of the MDS EDC version. Please enter in the field **Connector IDs (2)** the url of the Connector, from which data shall be requested.

Then press **Enter**. You will see all available offers of the requested connector.

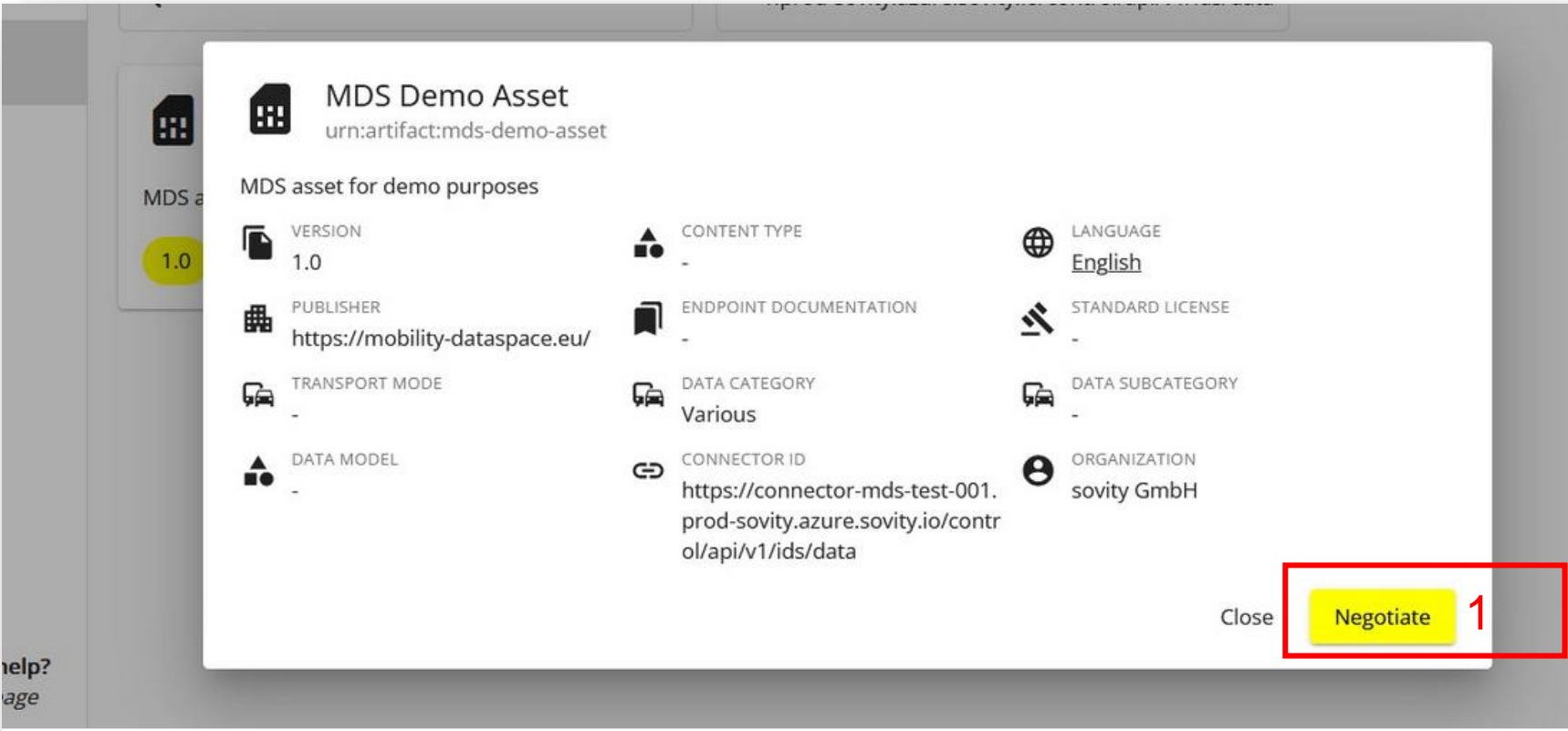
Be aware to use the access URL endpoint which ends on **/api/ids/data** (e.g. <https://connector-mds-test-001.prod-sovity.azure.sovity.io/control/api/v1/ids/data>).



04 How to consume data I Negotiate asset

When you have “chosen” a specific Connector, then select a desired resource.

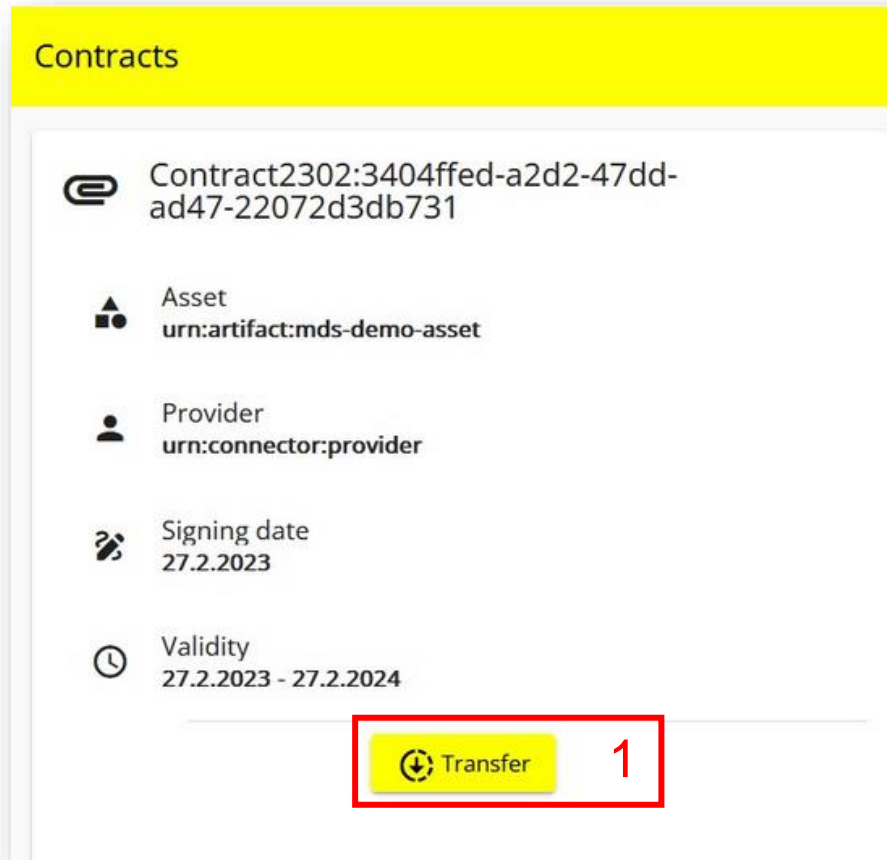
If you want to consume it, click the button **Negotiate (1)**.



04 How to consume data | Transfer asset

As you have expressed your interest in the dataset, go to **Contracts**.

Then press the button **Transfer (1)**.

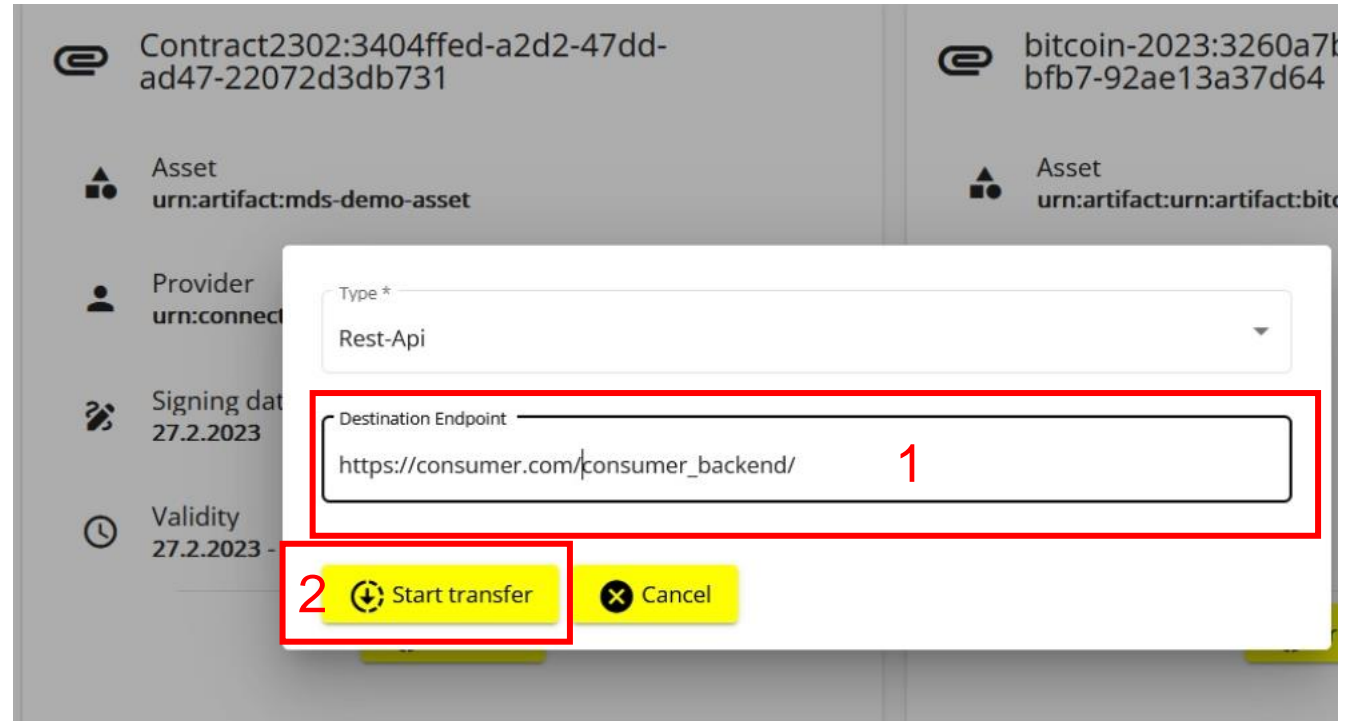


04 How to consume data | Transfer asset

As soon as the negotiations were successful, enter a **Destination Endpoint (1)** of your backend.

Then press **Start transfer (2)**.

For test purposes and only for public data you can use services like Webhook, who show all information from HTTP requests.



Contract2302:3404ffed-a2d2-47dd-ad47-22072d3db731

Asset
urn:artifact:mds-demo-asset

Provider
urn:connect

Signing date
27.2.2023

Validity
27.2.2023 -

Type *

Rest-API

Destination Endpoint

https://consumer.com/consumer_backend/ 1

2 Start transfer Cancel

Do you still have questions?

→ community@mobility-dataspace.eu

DRM Datenraum Mobilität GmbH
Karolinenplatz 4
D-80333 München

