

Setup the REST-API Endpoint

1. Copy the contents of the REST-API Endpoint into the same directory as the DRK Connector directory.

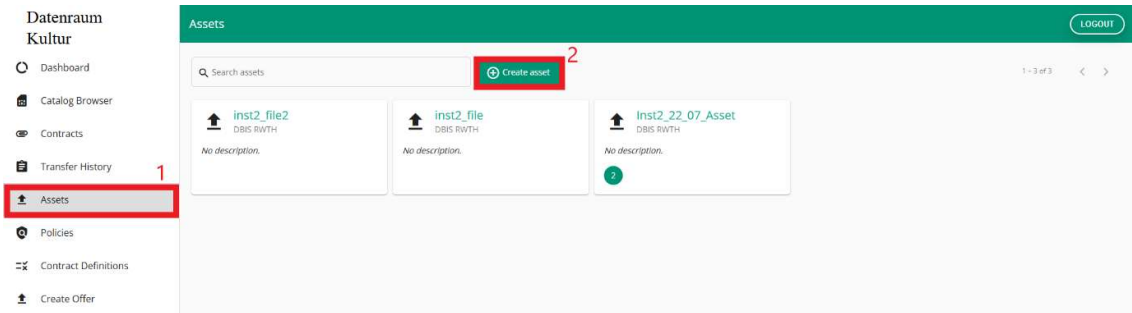


```
> drk-edc ← DRK Connector
  v min_rest_endpoint ← REST-API Endpoint
    > content_to_receive
    > content_to_share
    receiver_server.py
    sender_server.py
```

2. File system of the REST-API Endpoint
 - a. The directory **content_to_receive** contains the files that have been transferred to the Connector. The files are always in the format **content-YYYY-mm-dd--HH-MM-SS.tar**. Within the .tar file, the transferred file(s) can be found.
 - b. The directory **content_to_share** contains all files that are to be shared. Directories cannot be shared, but any type of single file can, including packages such as .tar. To share a file, an **Asset** has to be created, where the file to be shared is defined.
Example: <http://137.226.58.137:8000?file=manufacturer.xes>
 - c. **receiver_server.py** is the server responsible for receiving files.
 - d. **sender_server.py** is the server responsible for sending files.
3. To start the servers, run the following commands from the directory /min_rest_endpoint in your terminal:
 - a. **python3 receiver_server.py**
 - b. **python3 sender_server.py**
 - c. If you the scripts to run, even if the terminal is closed:
 - i. `setsid python3 sender_server.py > sender.log 2>&1 < /dev/null &`
 - ii. `setsid python3 receiver_server.py > receiver.log 2>&1 < /dev/null &`

As Dataprovider

1. Login to the Connector and create a new asset



2. Click on “Create asset” and fill out the fields “Name”, “Asset ID” and add a description. Then Scroll down

3. Click on “2 Datasource Information”

Create New Asset

The description uses [Markdown syntax](#)

Keywords

Language
English

Content Type

Endpoint Documentation

Publisher

Standard License

2 Datasource Information

Cancel Create

4. Choose “REST-API Endpoint” as Type and “GET” as Method. The URL is the IP address of your Connector with port 8000, followed by the file to be shared. For example: <http://137.226.58.137:8000?file=manufacturer.xes>
- With the Connector IP: 137.226.58.137
- Port: 8000
- File: manufacturer.xes

Create New Asset

DATASOURCE

Type
REST-API Endpoint

METHOD

Method *
GET

Enable Method Parameterization

URL

URL *
http://137.226.58.137:8000?file=manufacturer.xes

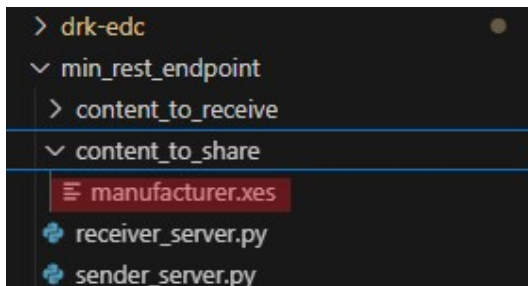
Enable Path Parameterization

QUERY PARAMS

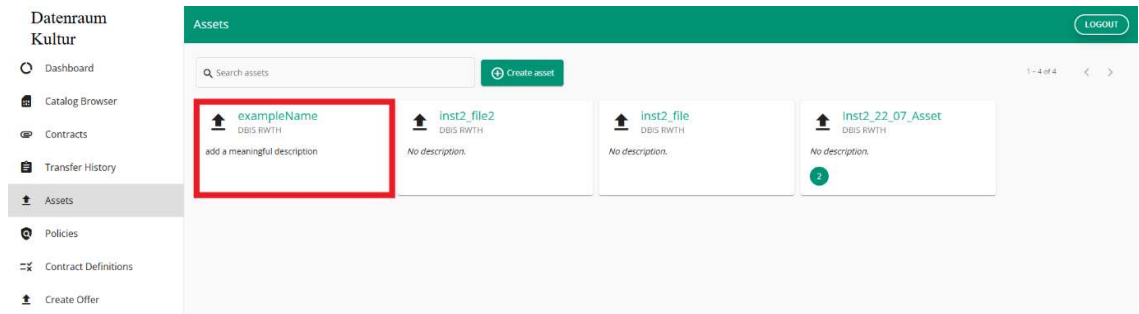
Add Query Param Enable Query Param Parameterization

Cancel **Create**

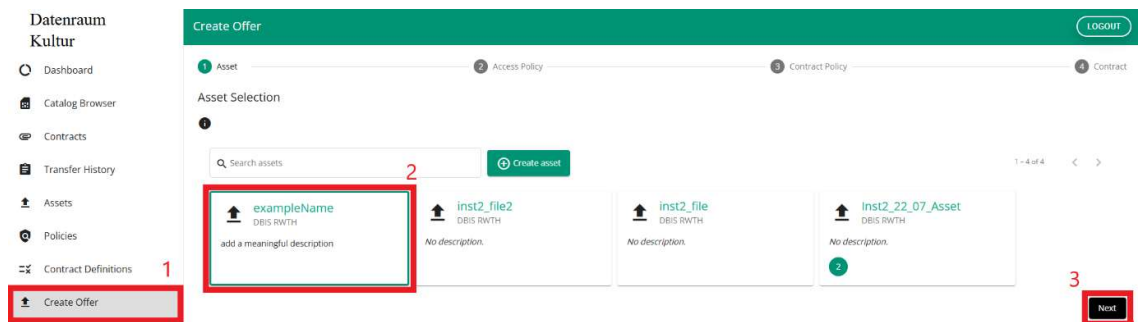
Caution: The file to be shared must be located in the folder content_to_share.



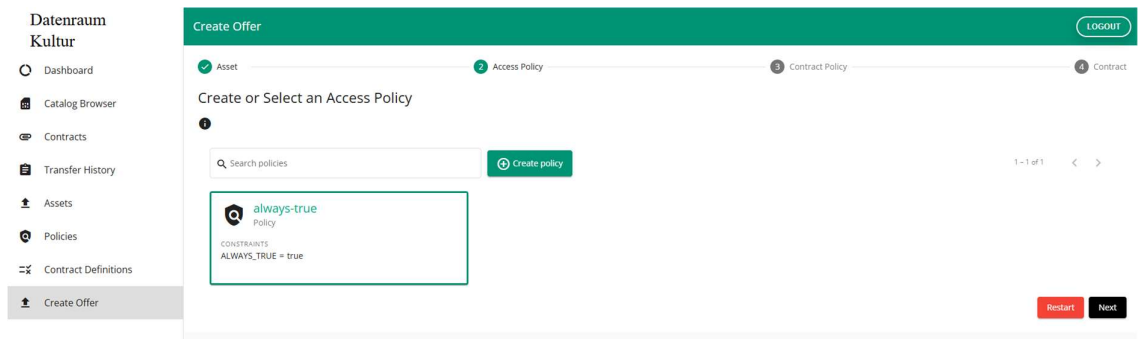
5. Click on “Create”. Now the Asset should be visible in the “Asset” section



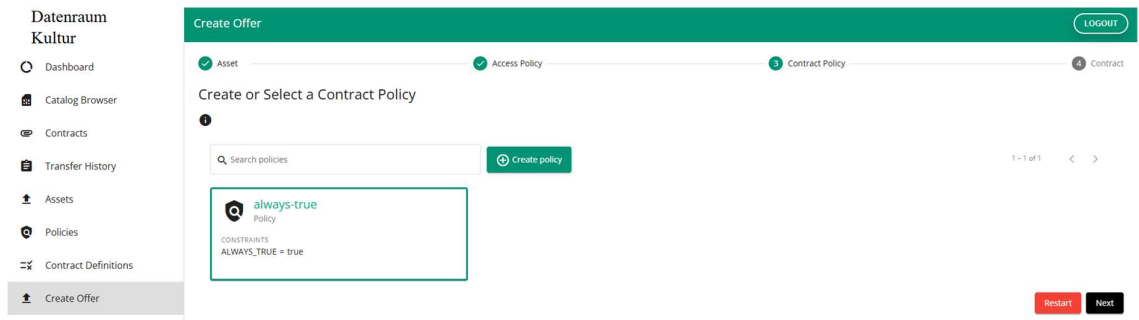
6. To publish the Asset, click on “Create Offer”. Then select the Asset and click on “Next”



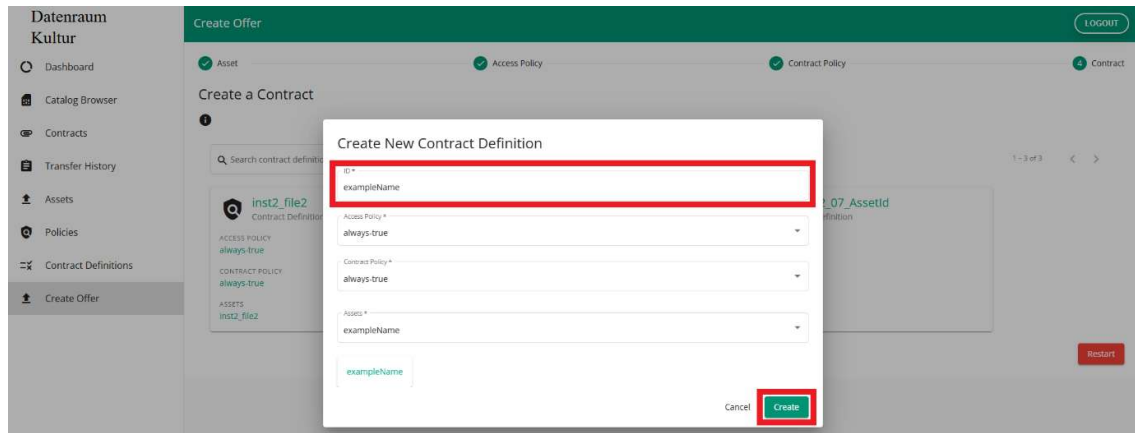
7. Select “always-true” or define your own policy, and then click “Next”.



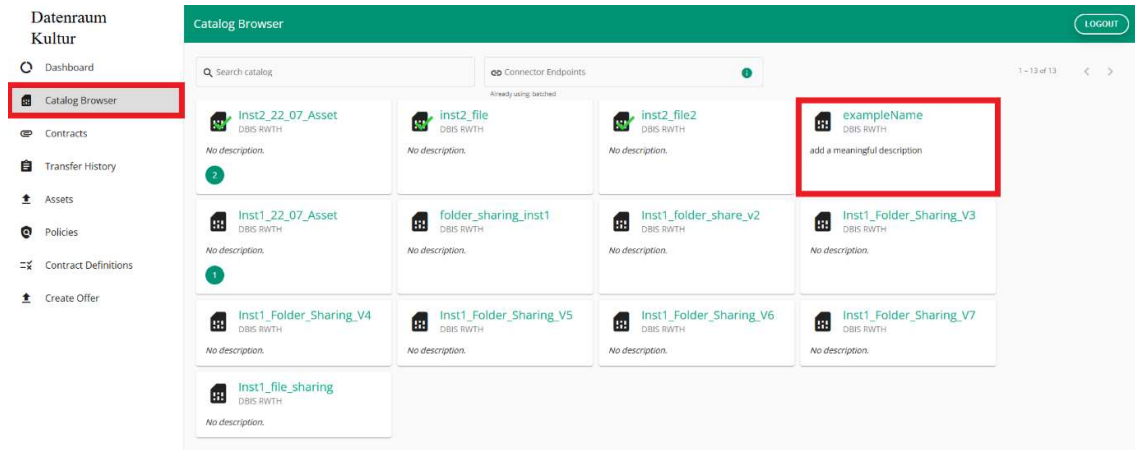
8. Repeat the same step for the Contract Policy.



9. Define the Contract ID (for example, the same as the Asset name) and then click “Create”.

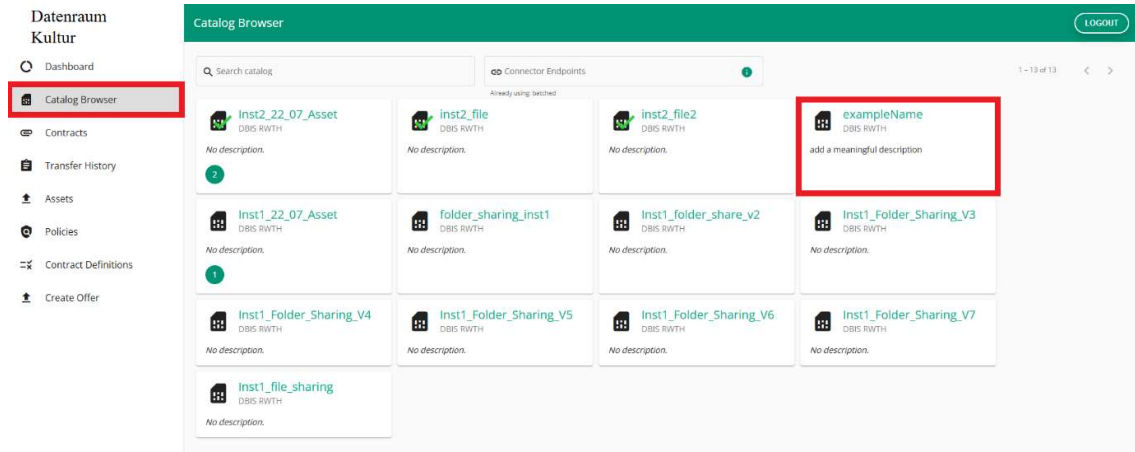


10. The Asset should now be accessible via the “Catalog Browser”

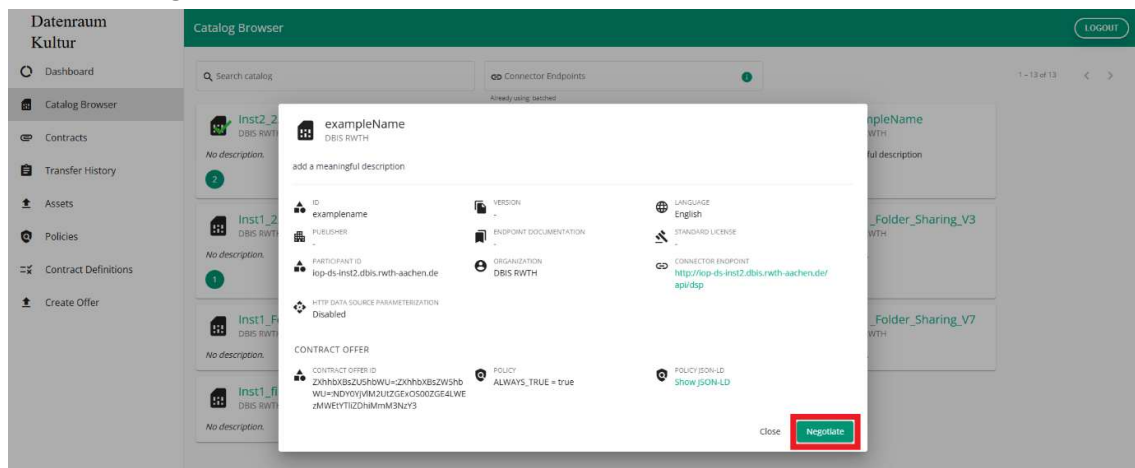


As Dataconsumer

1. Select an Asset via the “Catalog Browser”. (Click on the Asset name)

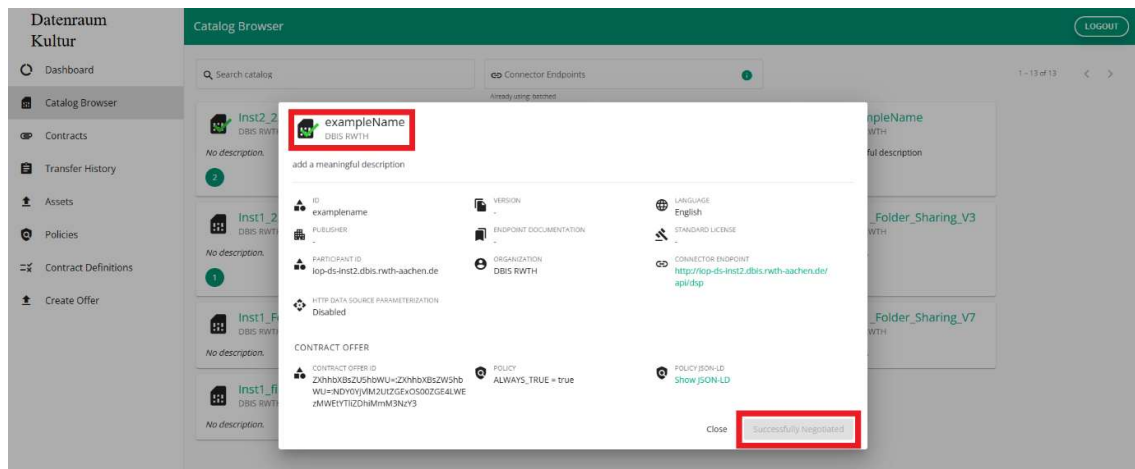


2. Click on “Negotiate”

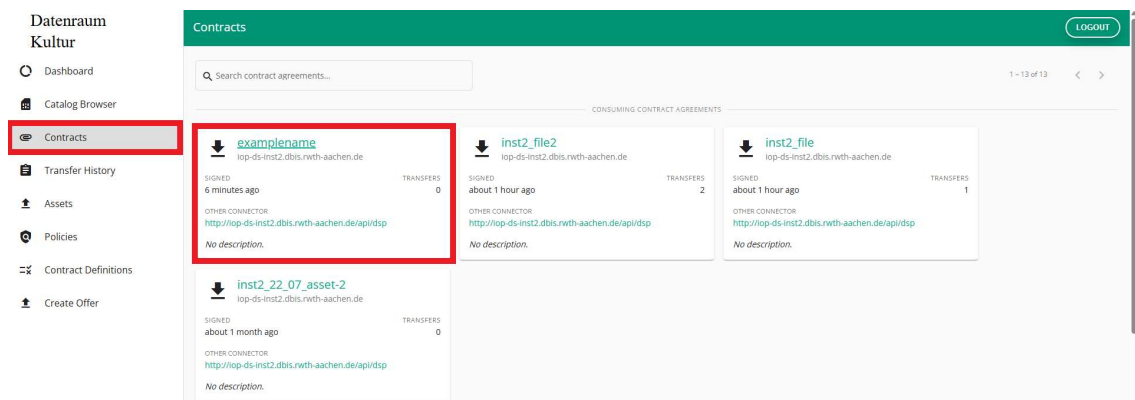


3. After a few seconds, if the negotiation was successful, a green check mark should appear next to the asset's name and the message “Successfully

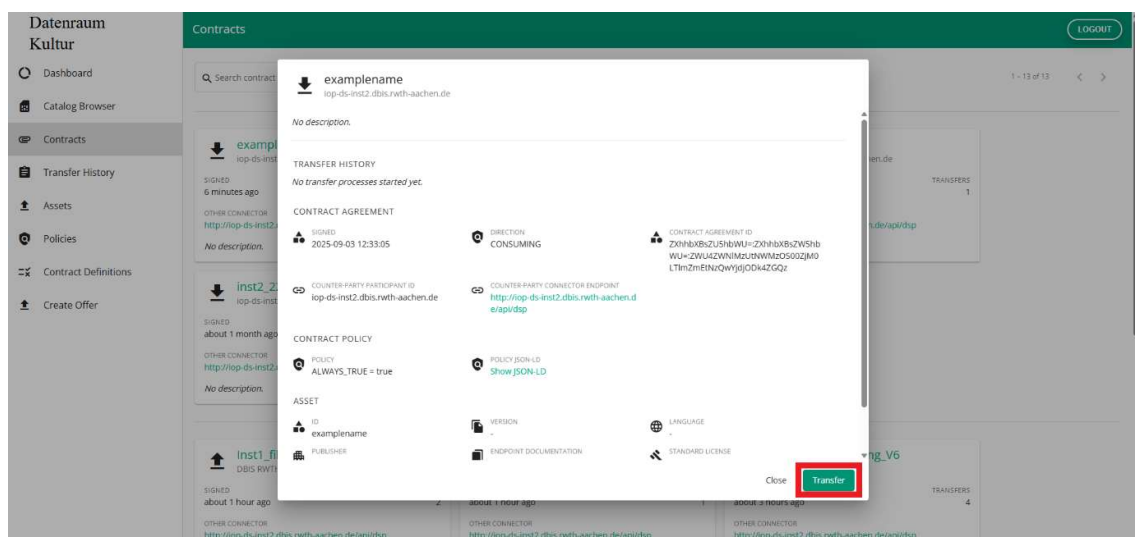
negotiated” should be shown in the lower right corner



4. Click on “Close” and locate the Asset in the “Contracts” section



5. Click on the Assets name and then on “Transfer”



6. A new window pops up. Select “REST-API Endpoint” as Type and “PUT” as Method. For the URL, add the IP of the receiving Connector with the port 9000 and a trailing /receive. In this example, the Connector IP is 137.226.58.137. So

for example: [http:// 137.226.58.137:9000/receive](http://137.226.58.137:9000/receive). Then Click “Initiate Transfer”

Initiate Transfer

DATASINK

Type

REST-API Endpoint

Method *

PUT

URL *

<http://137.226.58.137:9000/receive>

AUTHENTICATION

Add Authentication

ADDITIONAL HEADERS

Add Additional Header

HTTP DATASOURCE PARAMETERIZATION

When the data offer on the provider side is of the type **HttpData** and certain data source fields are set, certain parts of the request to the data source can be customized from the consumer side and will be passed to the other connector when initiating the transfer. This allows an asset to contain more than just one kind of data, allowing additional filtering or even sharing of entire APIs with multiple data sets via a single asset and a single contract.

Show Http Datasource Parameterization Fields

Cancel

Initiate Transfer

7. Once the data has been successfully transferred, the “Transfer History” will be displayed.

The screenshot displays the DRK-EDC interface for a transfer named 'examplename' with ID 'iop-ds-inst2.dbis.rwth-aachen.de'. The 'TRANSFER HISTORY' section, highlighted with a red box, shows a completed transfer 'LESS THAN A MINUTE AGO' with ID '30e31cf4-00e6-400b-8a0c-031808da024c'. Below this, the 'CONTRACT AGREEMENT' section provides details: 'SIGNED' at '2025-09-03 12:33:05', 'DIRECTION' as 'CONSUMING', and a long 'CONTRACT AGREEMENT ID'. It also lists the 'COUNTER-PARTY PARTICIPANT ID' and the 'COUNTER-PARTY CONNECTOR ENDPOINT'. The 'CONTRACT POLICY' section shows 'POLICY: ALWAYS_TRUE = true' and a link to 'Show JSON-LD'. The 'ASSET' section at the bottom lists 'ID: examplename', 'VERSION', and 'LANGUAGE'. A 'Close' button and a green 'Transfer' button are at the bottom right.

8. The transferred file can now be accessed in the “content_to_receive” folder. The file is always named in the format content-YYYY-mm-dd--HH-MM-SS.tar. Within the .tar file, the transferred file(s) can be found.

```
> drk-edc
  > min_rest_endpoint
    > content_to_receive
      ≡ content-2025-09-03--10-51-42.tar
    > content_to_share
  > receiver_server.py
  > sender_server.py
```

A red arrow points to the file 'content-2025-09-03--10-51-42.tar' in the terminal output.