



Virtual Research Environment goes live:

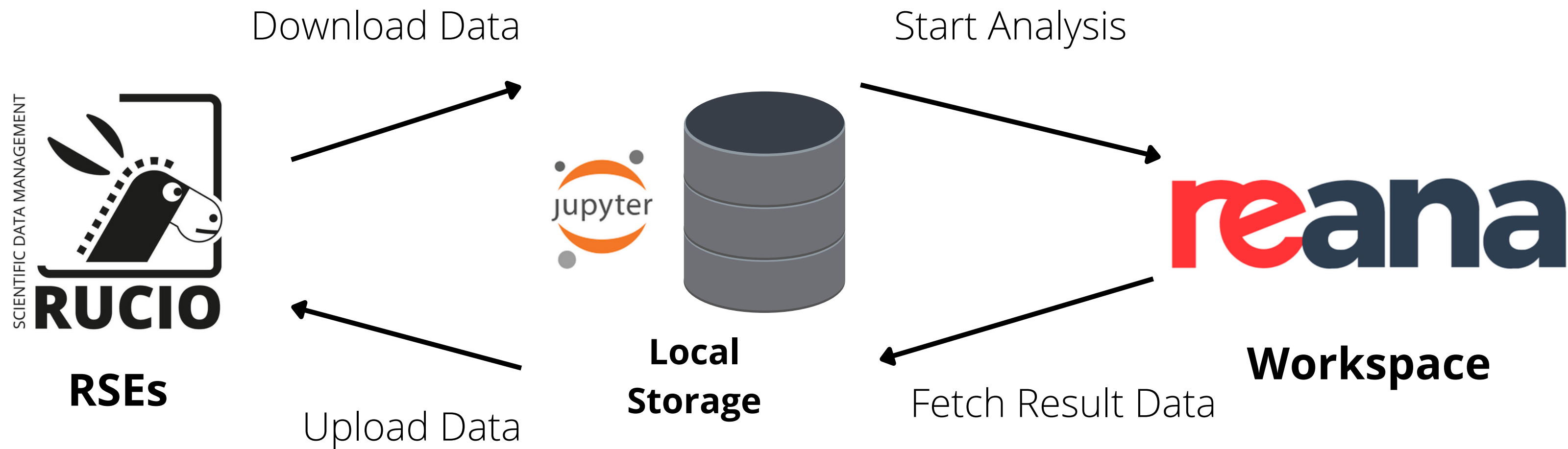
Big data shared across scientific analyses

Agisilaos Kounelis

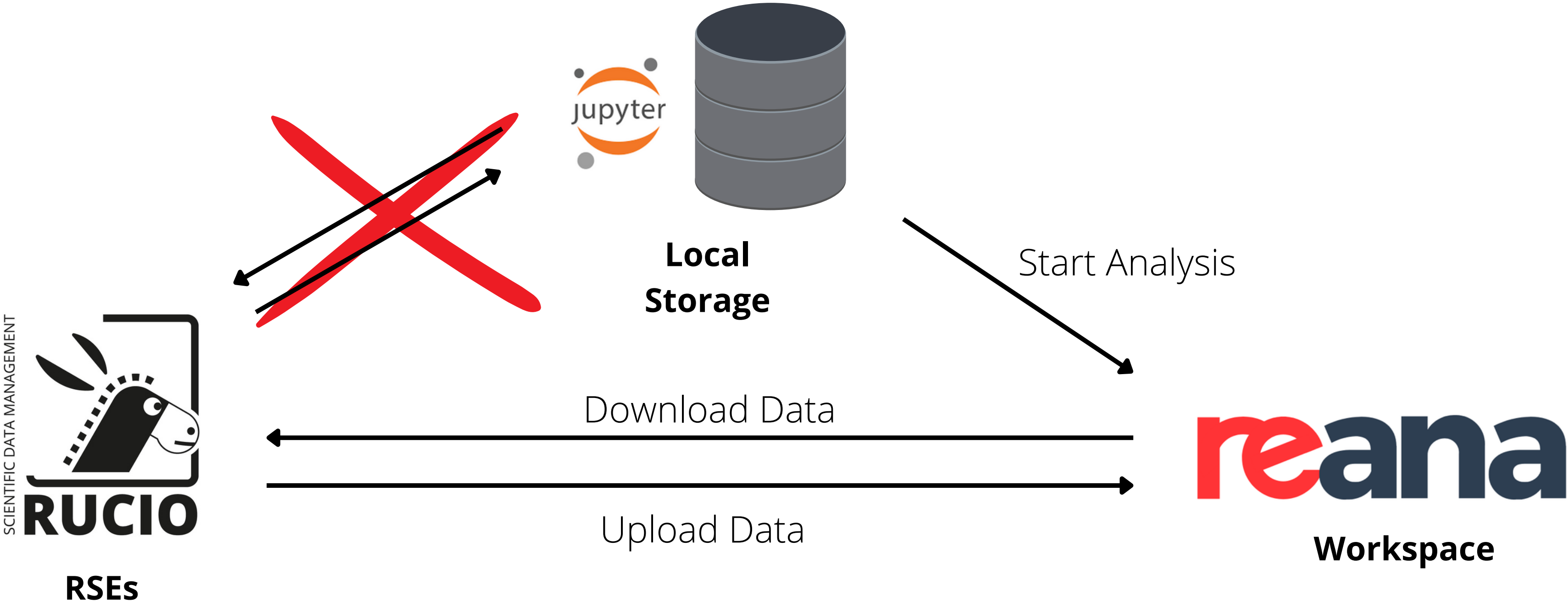
Supervisors: Elena Gazzarrini, Alba Vendrell Moya, Xavier Espinal Curull

Contributor: Tibor Šimko

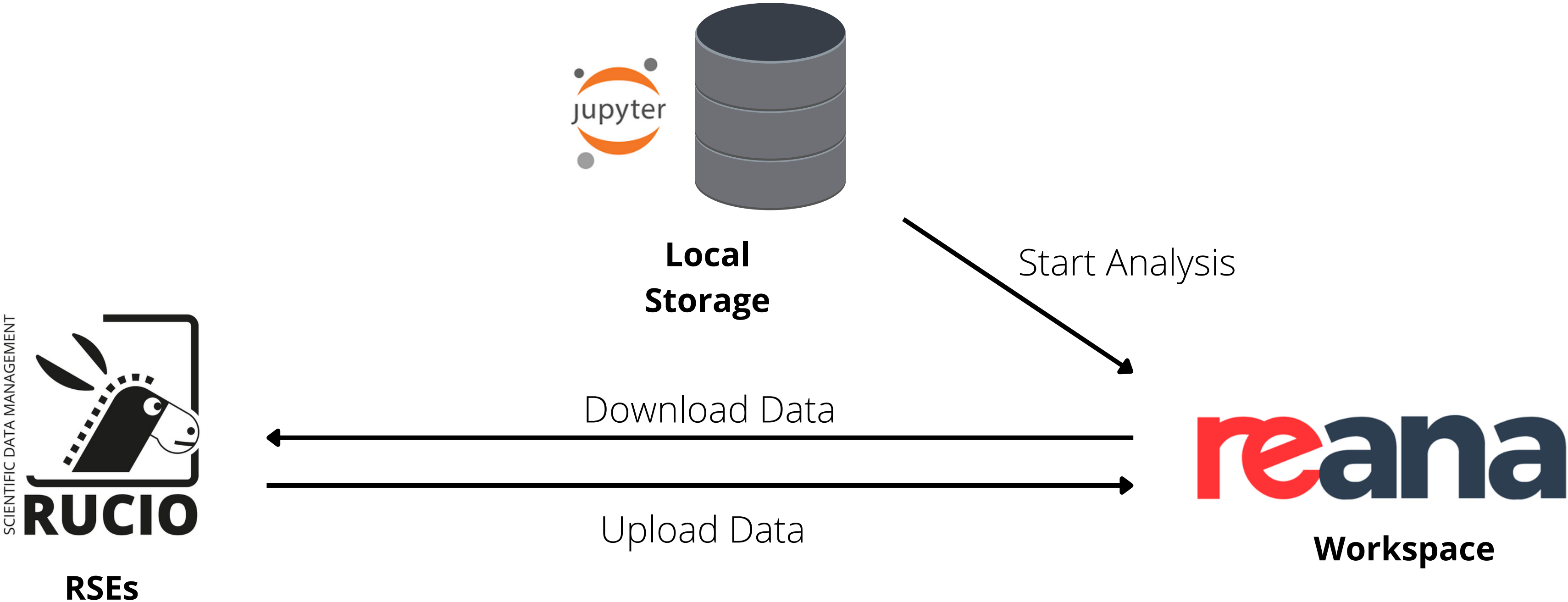
Existing Solution



Implemented Solution

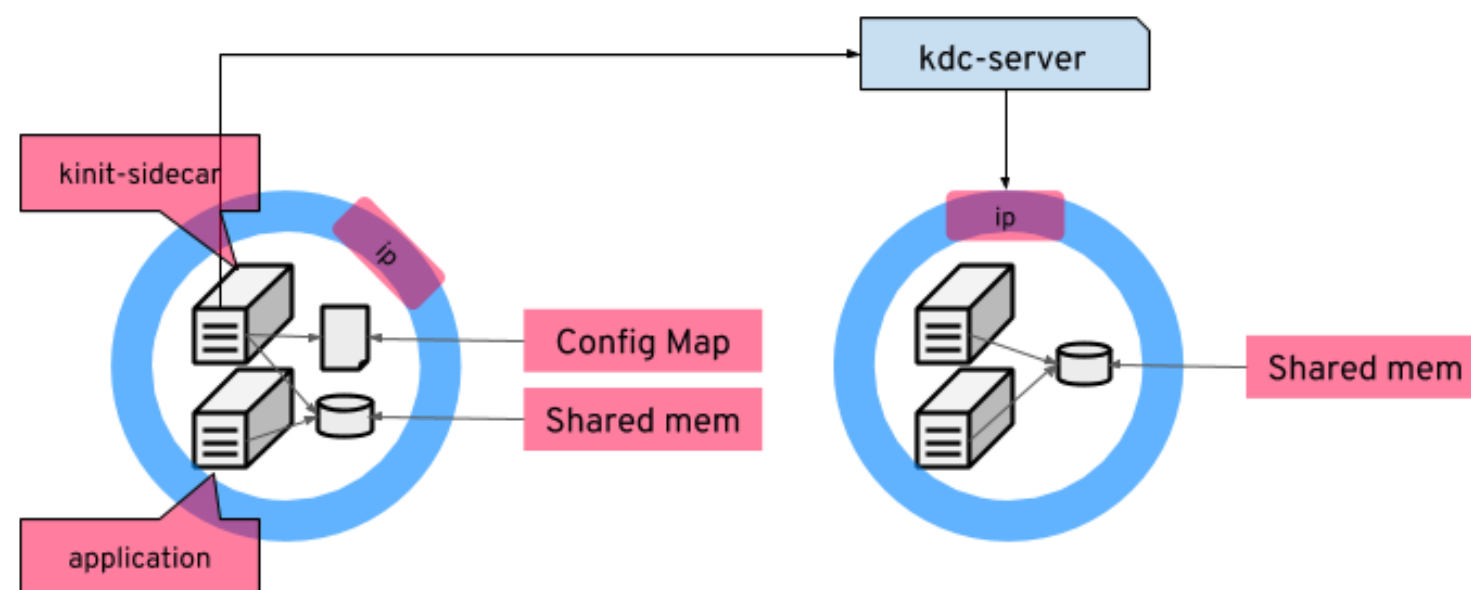


Implemented Solution



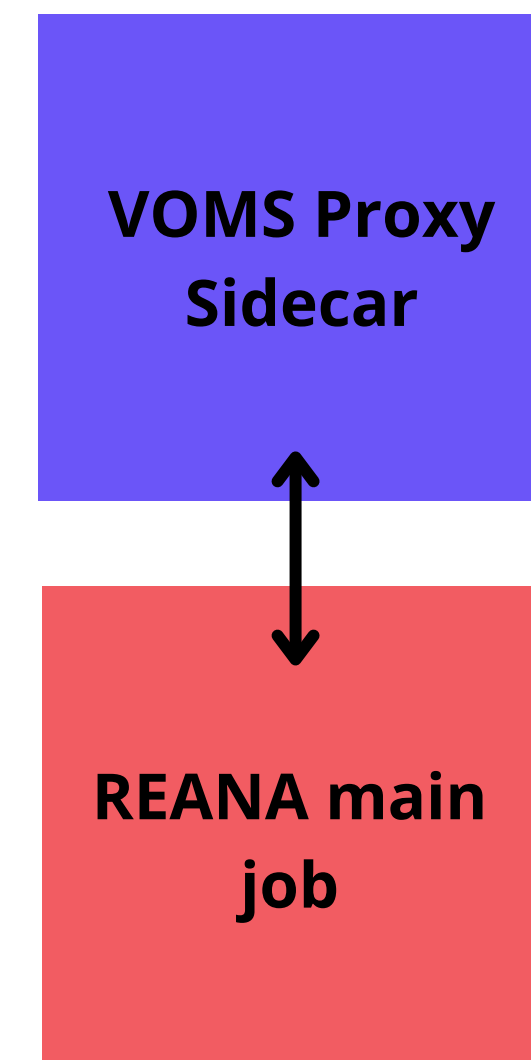
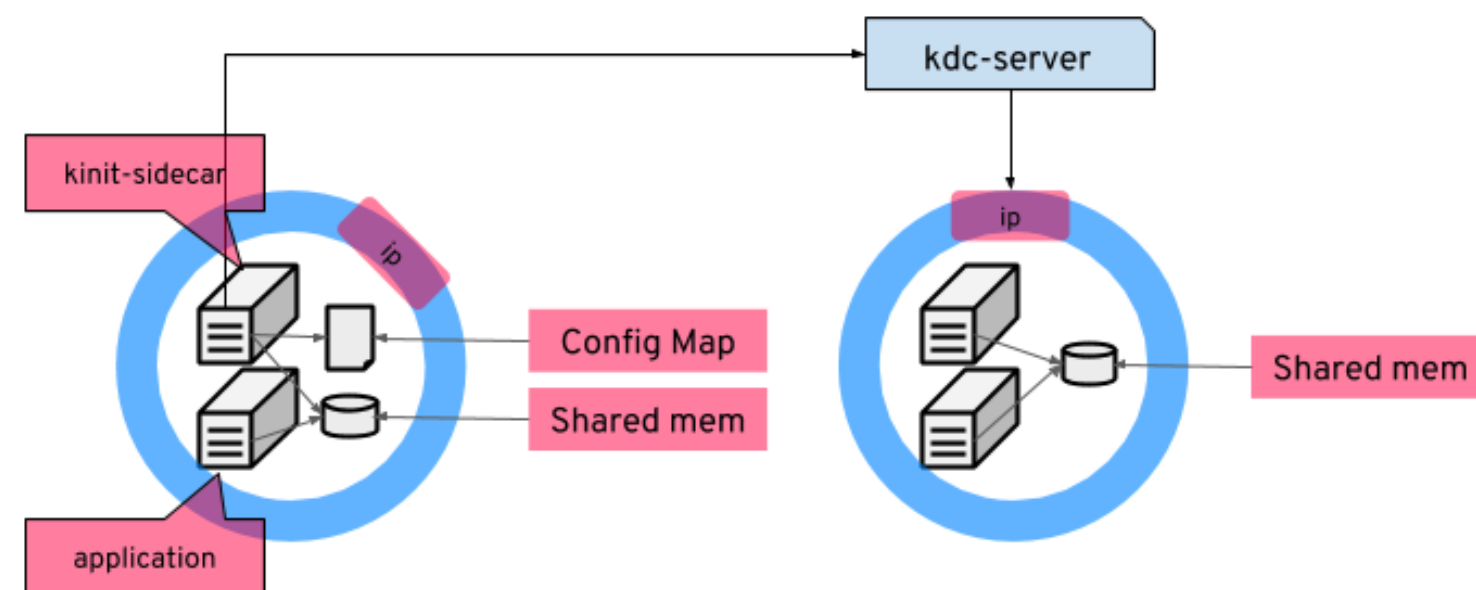
SIDECAR container for authentication

To maintain a valid **authentication token** (Kerberos, Rucio..) within an application's container namespace, so that the application can access services that require authentication.



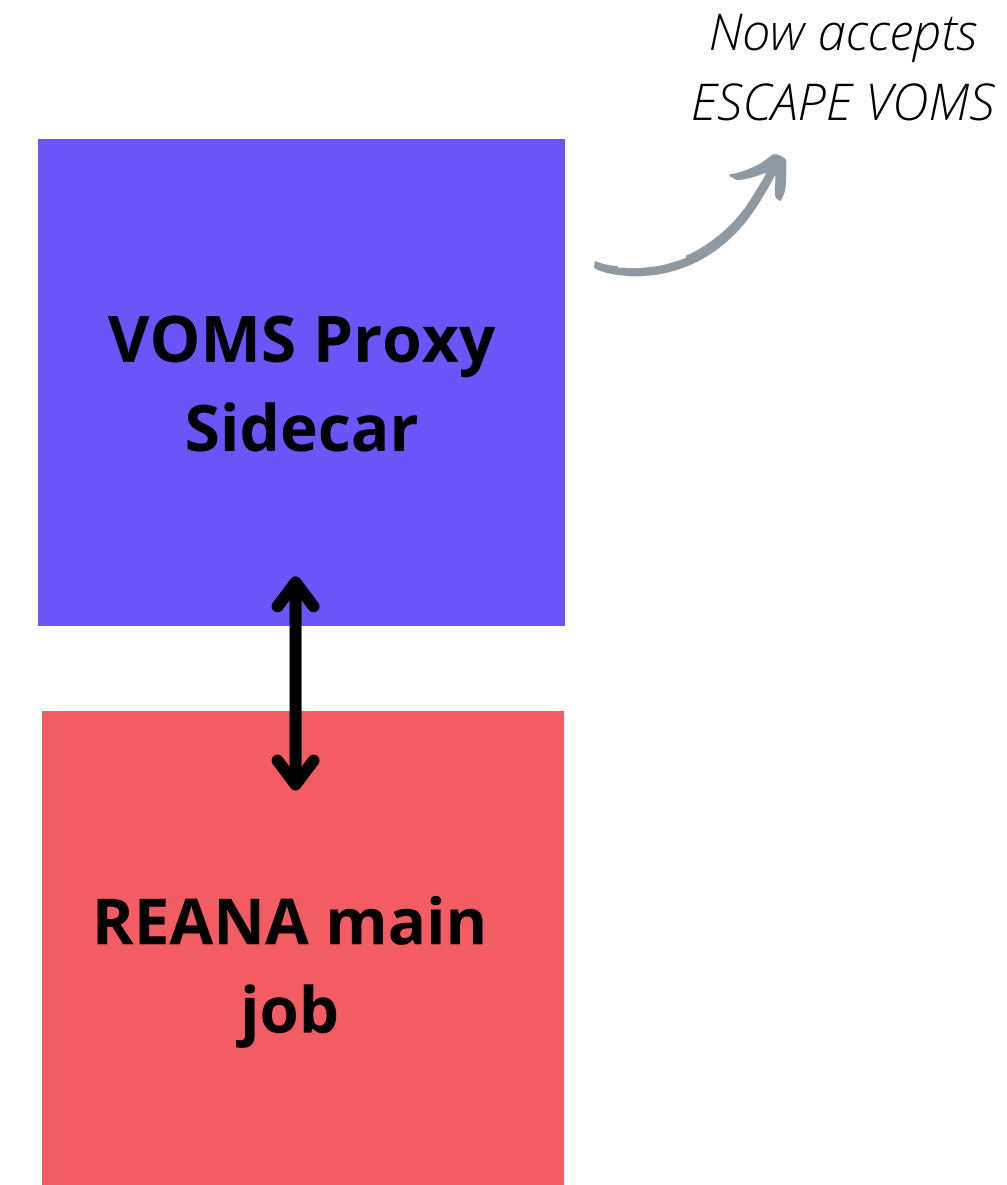
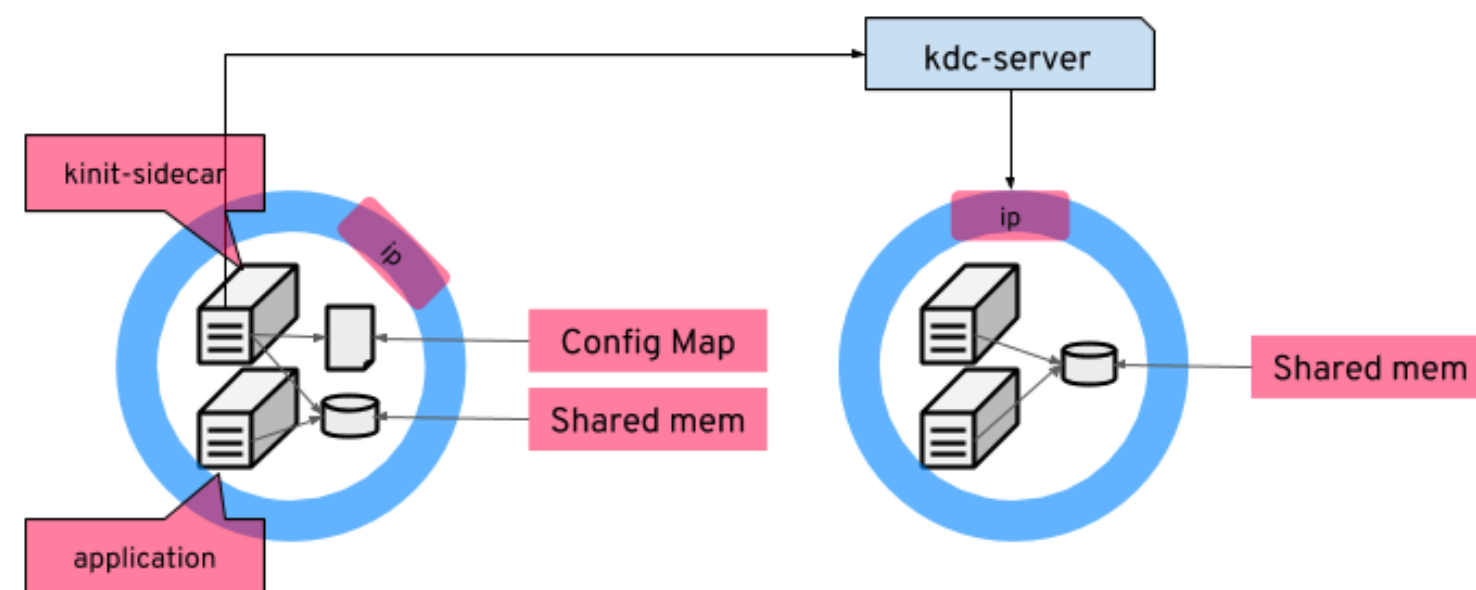
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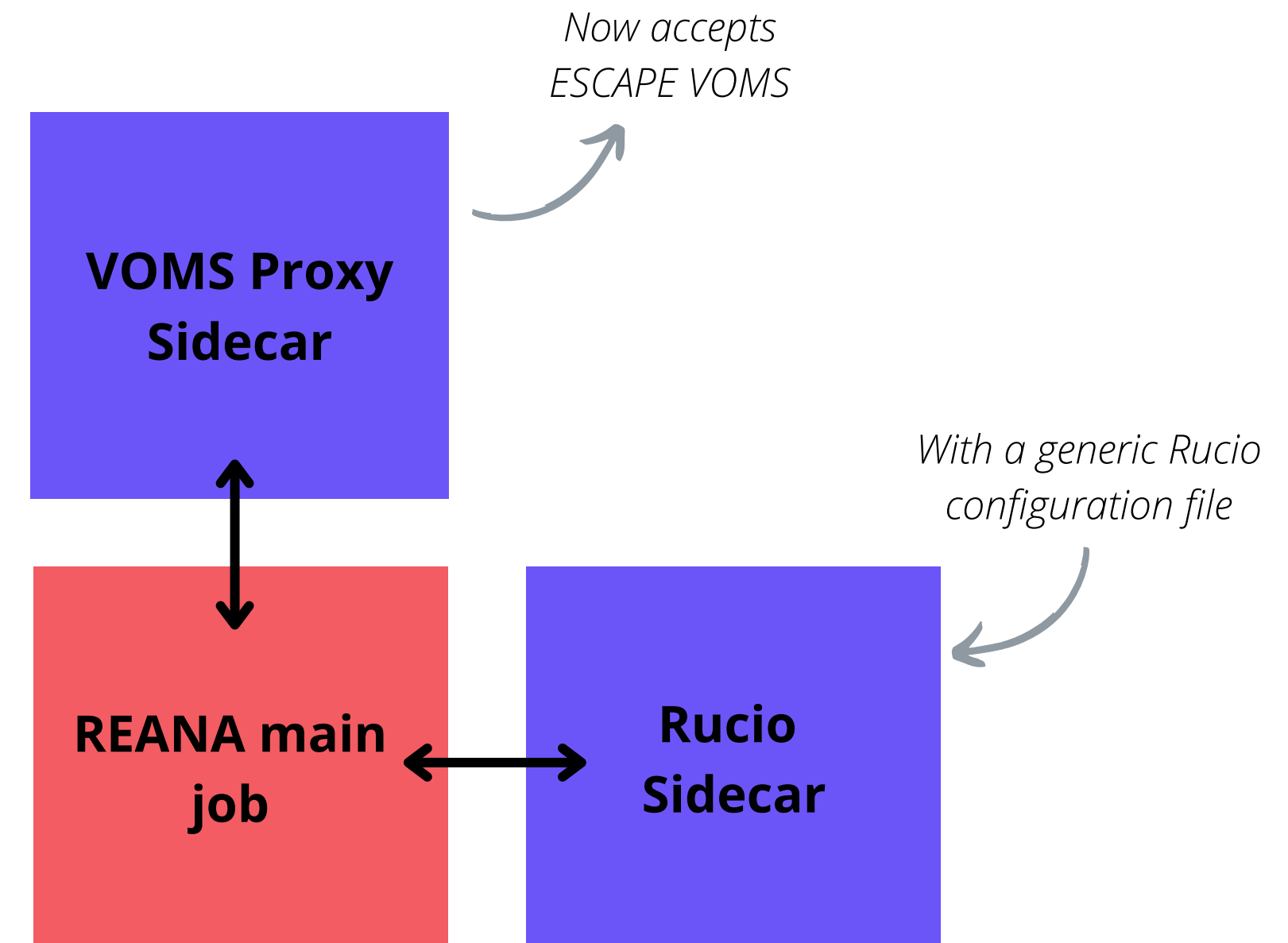
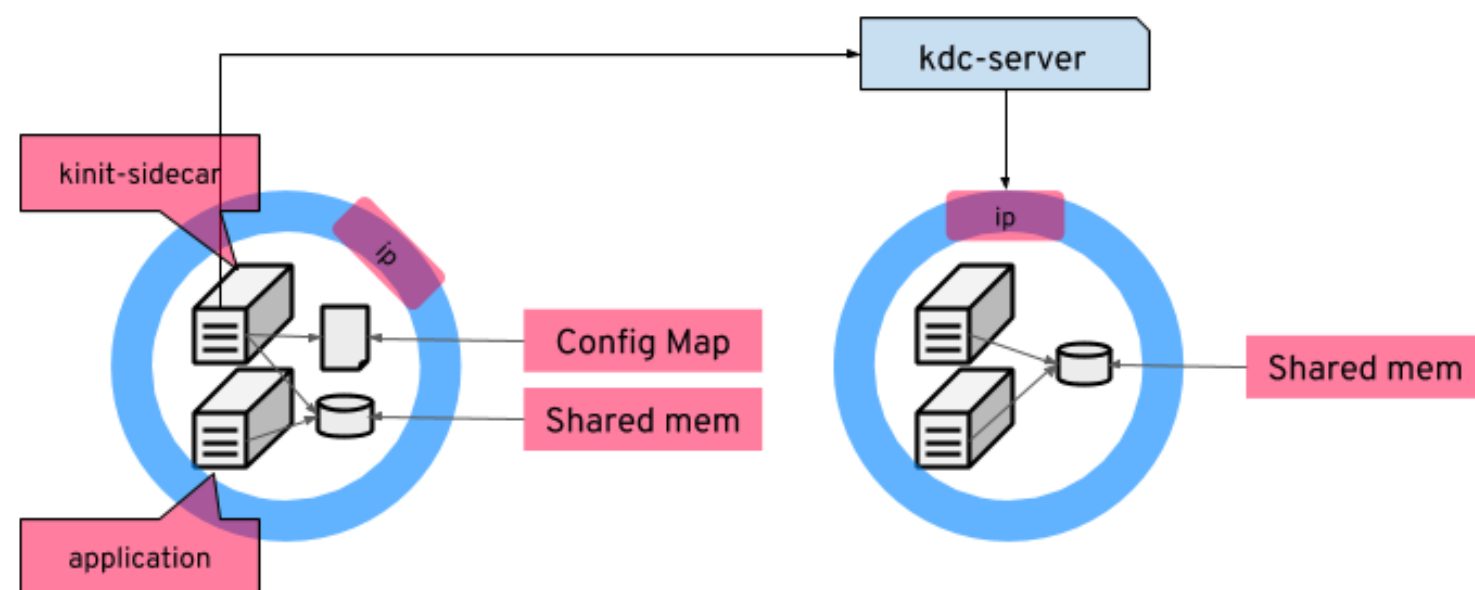
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How to use it

1. Add secrets through terminal command line

```
$ reana-client secrets-add  
--file userkey.pem --file usercert.pem  
--env VOMSPROXY_PASS=xxx  
--env VONAME=escape  
--env RUCIO_USERNAME=xxx
```

*Sorry, you still need your
X509 certificate..
But no need to execute
the 'voms-proxy-init'
command!*

How to use it

2. Set voms_proxy & rucio to TRUE in .yaml file

```
steps:  
  - name: fetchdata  
    voms_proxy: true  
    rucio: true
```

How to use it

3. Docker environment and execute Rucio commands

steps:

- name: fetchdata

 - voms_proxy**: true

 - rucio**: true

- environment: 'reanahub/reana-env-rucioclient:latest'

- commands:

 - **rucio get** DID_name && **rucio upload** DID_name

DEMO time!

```
workflow:
  type: serial
  specification:
    steps:
      - name: fetchdata
        voms_proxy: true
        rucio: true
        environment: 'projectescape/rucio-client'
        commands:
          - rucio get agis_test:fitdata.C agis_test:gendata.C
      - name: gendata
        environment: 'reanahub/reana-env-root6:latest'
        kubernetes_memory_limit: '256Mi'
        commands:
          - mkdir -p results && root -b -q 'agis_test/gendata.C(${events},"${data}")'
      - name: fitdata
        environment: 'reanahub/reana-env-root6:latest'
        kubernetes_memory_limit: '256Mi'
        commands:
          - root -b -q 'agis_test/fitdata.C("${data}","${plot}")'
      - name: uploaddata
        voms_proxy: true
        rucio: true
        environment: 'projectescape/rucio-client'
        kubernetes_memory_limit: '256Mi'
        commands:
          - rucio upload --scope agis_test results/plot.png --rse EULAKE-1
```



reana

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