

Source Download: https://sourceforge.net/projects/jax-y/?source=typ_redirect

Demo:

I) Download:

```
1 ) download jax-y-demo.zip from the link above
2 ) unzip jax-y-demo.zip
```

II) Install demo Database:

```
1 ) chmod +x demo/db-script/db-planes.sh
2 ) ./demo/db-script/db-planes.sh
```

III) Run The executable Jar which deploy an endpoint at the URL : http://localhost:8080/rest/resources/

```
1 ) java -jar jax-y-swarm.jar
```

IV) Run the GUI Client:

```
1 ) java -jar GUI/jaxy-ui.jar
```

V) Tests (Public serivce):

```
1 ) Invoke the serviceDiscovery :
    http://localhost:8080/rest/resources/infoServices
2 ) Invoke the service planes :
    http://localhost:8080/rest/resources/planes ( XML / JSON )
3 ) Filter on total_pssengers > 300 : total_passengers=_>_300
4 ) Sort Only model : model
5 ) Sort Only model + distance_km : model - distance_km
```

VI) Add new Secured Service (customSignOn authentication):

```
1 ) Stop the server
 2 ) Uncomment vip planes service
 3 ) Uncomment customSignOn authentication in the serviceConf.yaml file
 4 ) restart the server
 5 ) Invoke the serviceDiscovery :
     http://localhost:8080/rest/resources/infoServices
 7 ) Invoke the service vip planes :
     http://localhost:8080/rest/resources/vip planes
     ( XML / JSON / XML-ENCRYPTED / JSON-ENCRYPTED )
 8 ) Test authentication by changing login / password / timeStamp
     Test timeOut // test SQL type inference capacity
 9 ) Decrypt data locally
10 ) Filter on total pssengers > 300
               total passengers= > 300
               total_passengers=_>_300&model='Airbus A340-500'
               total passengers= > 300&model= not 'Airbus A340-500'
                                      : model
12 ) Sort Only model + distance km : model - distance km
13 ) Change Tags using "AS" in SQL Queries
```

VII) Test SSO authentication with KeyCloack (should works with HTTPS):

```
1 ) Start KeyCloack SERVER ( 127.0.0.1:8180 )
2 ) Stop the jaxy server
3 ) Comment customSignOn authentication in the serviceConf.yaml file
4 ) Uncomment SSO authentication in the serviceConf.yaml file
5 ) restart the server
6 ) Go to the SSO panel
7 ) Invoke the serviceDiscovery :
    http://localhost:8080/rest/resources/infoServices
8 ) Invoke the service vip_planes :
    http://localhost:8080/rest/resources/vip_planes
    (XML / JSON / XML-ENCRYPTED / JSON-ENCRYPTED )
9 ) Test authentication by changing login / password / clientID / secretID
```

```
10 ) Filter on total_pssengers > 300 : total_passengers=_>_300

11 ) Sort Only model : model

12 ) Sort Only model + distance_km : model - distance_km

13 ) Check logs in KeyCloack server for the user admin
```

VIII) Generate Shell-script for automation

```
1 ) Generate script
2 ) test Script
```

Upcoming Features:

```
* Global Configuration Supports ( Thread pool size, nb of threads by service, data queue size ... authentication server, HTTPS ... )

* Swagger-Angular-Client intergration

* GUI Client Https supports

* Runtime Algo Choice for Encryption ( AES - DES ... )

* Randomize IV ( Initialization Vector ) for AES ...

* Add support of NoSQL databases ??

* Tests Tests & Tests
```