9

SDK-RI Installation using Docker

The SDK-RI is fully dockerized and the container is built over a Jetty image and deploys the *SdkRefIMpl* war file into Jetty.

The SDK-RI image is built automatically as part of the CI/CD pipeline and pushed to the i3-MARKET Docker image supported by means of Nexus.

To build manually the SDK-RI Docker image, the following steps should be followed:

i) Image build:

```
docker    build    --build-arg    --no-cache    -t    registry.gitlab.com/i3-
market/code/sdk/i3m-sdk-reference-implementation/sdk-ri:version . --build-arg
BACKPLANE_URL=http://backplane:3000 --build-arg OIDC_URL=https://identity1.i3-
market.eu/xxx  --build-arg  VC_URL=https://identity1.i3-market.eu/xxxx/vc/api-
spec/ui --build-arg DATA_ACCESS_URL=http://xx.xxx.x.xxx:3100
```

ii) Image push:

```
docker      push      registry.gitlab.com/i3-market/code/sdk/i3m-sdk-reference-
implementation/i3market-sdk-ri:version
```

iii) Run container:

```
docker    run    --name    sdk-ri    -p    8181:8080    registry.gitlab.com/i3-
market/code/sdk/i3m-sdk-reference-implementation/i3market-sdk-ri:version
```

As a reminder and in line with the tagging approach reported in D4.8 [5], "*version*" is formatted as *MAJOR.MINOR.PATCH* and each part changes according to the following rules.

We increment:

- *Major* when breaking backward compatibility.
- *Minor* when adding a new feature that does not break compatibility.
- *Patch* when fixing a bug without breaking compatibility.

As part of the setup in step i) to configure SDK-RI instance, the following endpoints should be provided to link them to the SDK-RI instance: Backplane URL, OIDC URL, Verifiable Credentials (VC) URL, and finally data access URL.

9.1 Setup

Clone the repository and download the dependencies:

```
git@gitlab.com:i3-market/code/sdk/i3m-sdk-reference-implementation.git
```

9.2 Running the SDK-RI with Docker

You can use Docker to run the SDK-RI.To do so, follow the same setup instructions as above.

Then, just build and run using:

```
docker build --no-cache -t i3m/i3market-sdk-ri:latest .
docker push i3m/i3market-sdk-ri:latest
docker run --name sdk-ri -p 8181:8080 i3m/i3market-sdk-ri
```

SDK-RI container is built over a jetty image and deploys the SdkREfIMpl war file into jetty.

Finally just go to http:/$deploy_host/SdkRefImpl for accessing SDK-RI REST API.

9.3 Configuring and using SDK-RI

- The marketplace will have all the common services exposed in a SDK-RI/endpoint.
- Each marketplace end-user, who pursues making use of the SDK-RI, should configure the SDK-RI by means of:
  - pointing to the Backplane endpoint(s) hosted in a concrete i3-MARKET node (i.e., Backplane API node1, OpenID Connect Provider API node1, and Verifying Credential service API node1);
  - pointing to the wallet endpoint hosted locally.

- This configuration should be defined in the SDK-RI properties file placed at "src/resources/sdk_ri_config.properties".
- An example of setup could be the following:
  - backplane.url = xxxx
  - oidc.url = xxxx
  - verifiable_credentials.url = xxxxx