FIRST

ECLIPSE TRACTUS-X COMMUNITY DAYS

7. / 8. DECEMBER 2023
STUTTGART
Stream 1 „MXD and EDC“

Workshop

First and second day

Stephan Bauer, Catena-X
Johannes Diemer, ARENA2036
What are the major goals?

Try & Error -> gain knowledge
Try to complete the two challenges and gain new knowledge. Approach the topic in a playful way. Let’s share ideas and expertise!

Provide feedback, ask the coaches

Help each other
We are people of different knowledge and experience, but we all are interested in tractus-x and the community and the related products.

We share the same interests.

Have fun / network
We are a big community / network. Maybe you know a lot of the people from video calls … face to face is much better ;)

Collaborate & create partnerships!
Challenge 1 “Your own MXD”

Try to setup your own local MXD and learn how the communication/transfer between two EDCs works. The Challenge is along the provided “E2E adopter journey tutorial”

Goals
- Testing the E2E Adopter Journey Tutorial
- Providing feedback
- Working with the local MXD deployment
- Understanding the architecture
- Play around with assets, policies ...
- Communication between two (already registered EDCs)

This challenge is needed for 1a and 2 – don’t skip it ;)

Tractus X
Good to know

The MXD provides the following services:

• Three already registered EDCs:
  • Alice
  • Bob
  • Trudy (disabled)
• KeyCloak (preconfigured)
• Managed Identity Wallet (MIW)
• The needed databases

Hints (most are described in the tutorial)

• The provided VMs are prepared with the required tools as described in “Prerequisites”
• Be careful with the used EDC version
• Use the Policy playground
• Clone the tutorial-resource repository
• “terraform init/apply” is your friend
• “terraform destroy” and “kind delete clusters” resets
Challenge 1a “Extend MXD”

Activate the third EDC “trudy” and deploy it on the same cluster (created in challenge 1)

Goals
• Add a third EDC (Trudy)
• Providing feedback
• Working with the local MXD deployment
• Understanding the architecture
• Play around with assets, policies ...
• Communication between three (already registered EDCs)

Hints
• Find the config file enabling “trudy”
• Be careful with the used EDC version
• Use the Policy playground
• “terraform init/apply” is your friend
Challenge 2 “Use dDTR”

Extend the already created setup/cluster and a dDTR to bob and deploy a given backendservice.

Goals

• Extend the cluster (add dDTR and backend service)
• Get to know the configuration parameters
• Use dDTR and try to get some data from bob

Hints

• The new services are prepared in the “dtr” folder next to “mxd” folder
• There is only one dDTR connected with bob
• Backend service just serves some data from local file
• “terraform init/apply” is your friend
Challenge 3 “Your own EDC”

Try to configure and deploy your own EDC, register the EDC at the provided white label environment and communicate/transfer data with other developer (teams)

Goals
• Local EDC deployment with provided helm chart (in memory)
• Get to know the configuration parameters
• Communicate with other EDCs from this challenge
• Register your EDC and get to know the process
• Optional:
  • Try to get data from remote deployed EDC
Good to know

The tractusx-edc (in memory) provides everything which is needed to setup your own EDC

There is a white label environment available, which provides:

- Portal (with fake companies and logins)
  BPNs, IDs and secrets will be provided
- MIW (Url will be provided) -> Important for EDC configuration
- Keycloak (URL will be provided)
- Test data

Hints

- Create an empty cluster with kind
- Use the in memory helm chart
- This challenge (the cluster) is independent
- value.yaml needs to be edited
Your Environment for the Tutorial

Systems:
- 7 VMs each with
  - Ubuntu 22.04
  - 4 CPUs
  - 64 GB Memory
  - 128 GB storage

Hostnames: tractus-X0n.arena2036.de \((n=1,\ldots,7)\)
IP-addresses: 141.70.214.18\(n\)

Usernames on each system: tx0\(i\) \((i=1,\ldots,8)\)
Passwords: \(<\text{username}>-2023\text{-mxd}\)

Your personal data for the working groups
- Your hostnames: tractus-X0n.arena2036.de
- Your username on each system: tx0\(i\)
- Ports to be used instead of 80 and 443 (to be changed in kind.config.yaml (hostport))

For the in memory EDC
(for config file variabales.yaml in tractusx-edc/charts/tractusx-connector-memory)
- BPM
- URL for MIW: https://managed-identity-wallet.whitelabel.cofinity-x.com/
- URL for Keycloak: https://centralidp.whitelabel.cofinity-x.com/auth/realms/CX-Central/protocol/openid-connect/token
- Client-ID
- Secret
Let’s work together

tractus-x.com