# Requirements

* Git
* Docker

# Downloading DT4H Mapping Configurations

DT4H mapping configurations are maintained in the project’s GitHub repository. Below, we

* Create and navigate into a working directory to run the tools: <workspaceDir>
* git clone <https://github.com/DataTools4Heart/common-data-model.git>
* git clone <https://github.com/DataTools4Heart/data-ingestion-suite.git>

# onFHIR Deployment

* Run inside the working directory,
  + sh ./common-data-model/docker/run.sh
* If there is no execution access, give execution access:
  + chmod +x ./common-data-model/docker/run.sh

# MIMIC Dataset

* The current mappings are designed for MIMIC-IV version 3.1. If you are using a different version of MIMIC, the mappings may not work correctly.
* To configure the toFHIR tool, specify the path to the MIMIC dataset by updating the configuration in line 21 of the **docker/deployment/docker-compose-tofhir.yml** file under **data-ingestion-suite**. Update only the section before the **colon** (“**:**”). This path must include a folder named “hosp”, which should contain the required CSV files. For example:

C:/development/data/mimic-iv-3.1

└── hosp/

├── admissions.csv

├── emar.csv

├── patients.csv

└── ...

# toFHIR Deployment

* Download the password file for SRDC’s private Docker repository from (Please contact if there is no access to the file): <https://srdcltd.sharepoint.com/:t:/s/DataTools4Heart/ERRInhWGLy5Cvfwn9JFaNOEBUmc1jjjP-bjCz3lAvYu9DQ?e=AsvrVi>
* Copy the file into <workspaceDir> directory.
* Run the following scripts in the <workspaceDir>:
  + sh ./data-ingestion-suite/docker/deployment/pull.sh
  + sh ./data-ingestion-suite/docker/deployment/run.sh
* If there is no execution access, give execution access:
  + chmod +x ./data-ingestion-suite/docker/deployment/pull.sh
  + chmod +x ./data-ingestion-suite/docker/deployment/run.sh

# Running Behind Nginx Configuration

* Please proceed with one of the following options:
  + The current deployment has been tested and worked successfully with Nginx and it is recommended to use it. If Nginx is not being used, you can easily start a Nginx Docker container directly using the Docker Compose file we have defined and toFHIR will be available to use:
    - sh ./data-ingestion-suite/docker/proxy/run.sh
  + If your host machine is already running nginx, you can insert the following proxy configuration:

location /dt4h/tofhir/api {

proxy\_pass http://127.0.0.1:6085/tofhir;

proxy\_set\_header Host $host;

proxy\_set\_header X-Real-IP $remote\_addr;

}

location /dt4h/tofhir {

proxy\_pass http://127.0.0.1:6082/;

proxy\_set\_header Host $host;

proxy\_set\_header X-Real-IP $remote\_addr;

}

location /dt4h/tofhir/kibana/ {

proxy\_pass http://127.0.0.1:5601/;

proxy\_set\_header Host $host;

proxy\_set\_header X-Real-IP $remote\_addr;

}

# Execution of Mappings of MIMIC Dataset

# Navigate to http://<hostname>/dt4h/tofhir

* Click on “hosp” and click on Open
* Click on Executions
* Click on green arrow next to the “mimic-hosp-csv-to-fhir-server” entry
* Click on the right-double-arrow icon to select all the mappings for execution
* Click Run button
* You can check the status of the execution by first checking the list of executions by clicking on the Refresh icon. Then, you can go into the details of the execution and see status of individual mapping tasks included on the “mimic-hosp-csv-to-fhir-server” job.
* Depending on the size of the dataset, execution may take some time. You can also monitor live logs and errors in detail from http://<hostname>/dt4h/tofhir/kibana . After accessing, click the three-line button on top-left and select Discover under Analytics.

For more information about toFHIR, you can visit [toFHIR.io](https://onfhir.io/tofhir/).

# Automated Docker Container Update

If you are installing for the first time, you can skip this step. This section outlines the procedure to follow when new updates are made to our Docker images. This process involves pulling the latest images from the repository, stopping all running containers to avoid conflicts, and then restarting them with the updated images.

* Stop all containers:
  + sh ./data-ingestion-suite/docker/deployment/stop.sh
  + sh ./common-data-model/docker/stop.sh
  + sh ./data-ingestion-suite/docker/proxy/stop.sh (**Optional**)
* Pull the latest changes and images:
  + cd common-data-model
  + git pull
  + cd ..
  + sh ./common-data-model/docker/pull.sh
  + cd data-ingestion-suite
  + git pull
  + cd ..
  + sh ./data-ingestion-suite/docker/deployment/pull.sh
* Run all containers:
  + sh ./common-data-model/docker/run.sh
  + sh ./data-ingestion-suite/docker/deployment/run.sh
  + sh ./data-ingestion-suite/docker/proxy/run.sh (**Optional**)