MTender Pilot

Public Portal Deployment Guide

Ver 1.0

Prepared under technical cooperation for EBRD UNCITRAL Public Procurement Initiative
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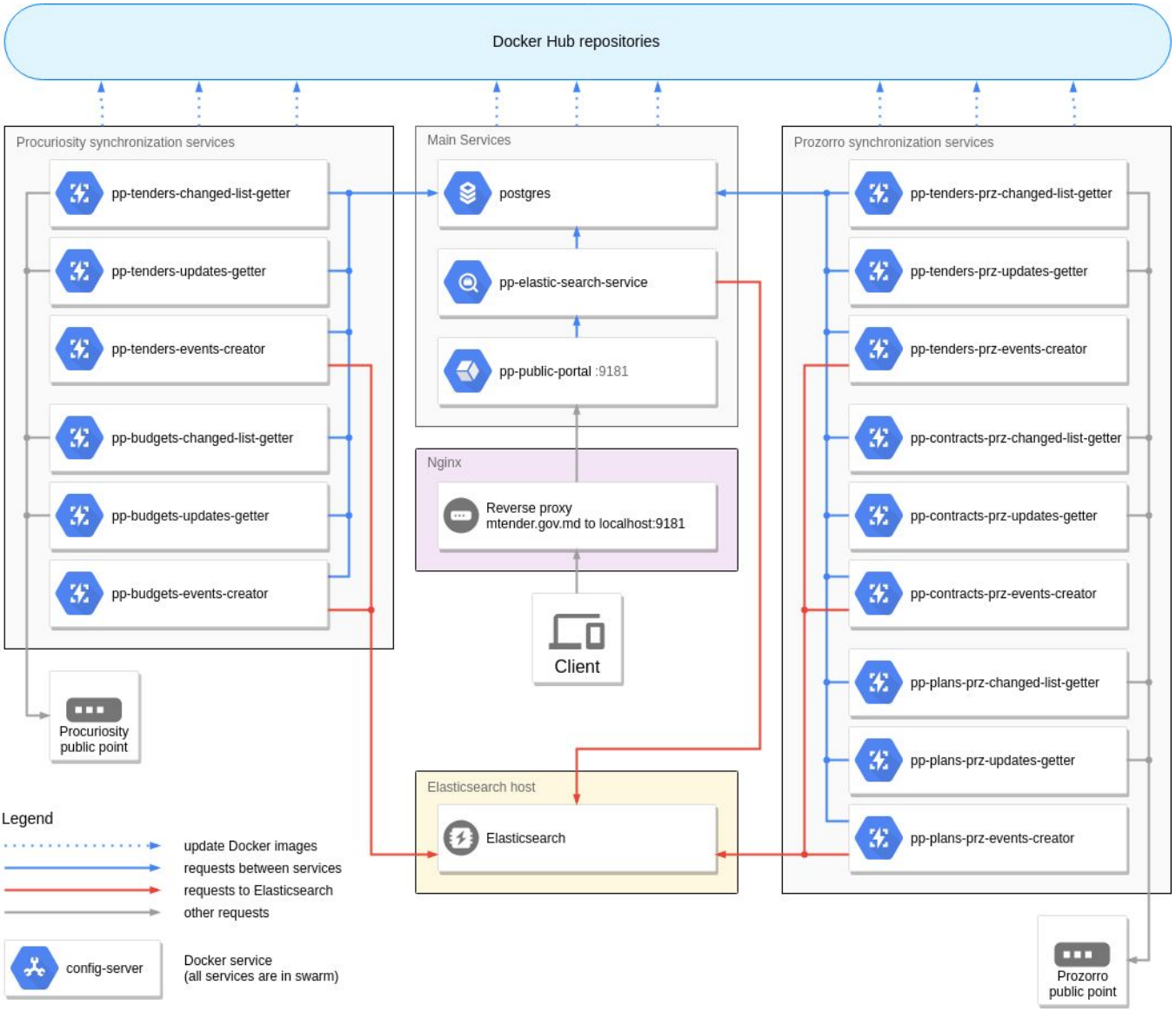
MTender components scheme



Docker services

Order	*Service name*	*External port*	*Description*
1	postgres	-	PostgreSQL database
2	pp-tenders-changed-list-getter	-	Get changed Procuriosity tenders id list
3	pp-tenders-updates-getter	-	Get Procuriosity tender JSON data
4	pp-tenders-events-creator	-	Refresh Procuriosity tender into DB and index to Elasticsearch
2	pp-budgets-changed-list-getter	-	Get changed Procuriosity budgets id list
3	pp-budgets-updates-getter	-	Get Procuriosity budget JSON data
4	pp-budgets-events-creator	-	Refresh Procuriosity budget into DB and index to Elasticsearch
2	pp-tenders-prz-changed-list-getter	-	Get changed Prozorro tenders id list
3	pp-tenders-prz-updates-getter	-	Get Prozorro tender JSON data
4	pp-tenders-prz-events-creator	-	Refresh Prozorro tender into DB and index to Elasticsearch
2	pp-contracts-prz-changed-list-getter	-	Get changed Prozorro contracts id list
3	pp-contracts-prz-updates-getter	-	Get Prozorro contract JSON data
4	pp-contracts-prz-events-creator	-	Refresh Prozorro contract into DB and index to Elasticsearch
2	pp-plans-prz-changed-list-getter	-	Get changed Prozorro plans id list
3	pp-plans-prz-updates-getter	-	Get Prozorro plan JSON data
4	pp-plans-prz-events-creator	-	Refresh Prozorro plan into DB and index to Elasticsearch
5	pp-elastic-search-service	-	Elasticsearch JSON API
6	pp-public-portal	9181	MTender website

***** - deployment order for synchronization services groups does not matter

Deployment scripts

```
#create file example
touch deploy.config

#grant execution permission example
chmod +x deploy.config

#edit file example
nano deploy.config

#execute file example
./deploy.sh
```

The following steps describe the files you need to create and grant permissions to execute:

1. Create config file [deploy.config]

```
ADMIN_USER=******
ADMIN_PASSWORD=******
ADMIN_EMAIL=*****@mt*****.***.*d

PUBLIC_PORTAL_PORT=9181

DB_TYPE=pgsql
DB_PORT=5432
DB_PUB_PORT=5555
DB_USERNAME=postgres
DB_PASSWORD=******
DB_HOST=postgres
DB_TENDERS_NAME=pp_tenders
DB_BUDGETS_NAME=pp_budgets
DB_PLANS_NAME=pp_plans
DB_CONTRACTS_NAME=pp_contracts
DB_PP_NAME=pp_public_portal

TENDERS_URL=https://public.mtender.gov.md/tenders
BUDGETS_URL=https://public.mtender.gov.md/budgets
TENDERS_PRZ_URL=https://public.api.mepps.openprocurement.net/api/2.3/tenders
PLANS_PRZ_URL=https://public.api.mepps.openprocurement.net/api/2.3/plans
CONTRACTS_PRZ_URL=https://public.api.mepps.openprocurement.net/api/2.3/contracts

ELASTIC_INDEXING=true
ELASTIC_TENDERS_INDEX=pp_tenders
ELASTIC_TENDERS_TYPE=docs
ELASTIC_BUDGETS_INDEX=pp_budgets
ELASTIC_BUDGETS_TYPE=docs
ELASTIC_PLANS_INDEX=pp_plans
ELASTIC_PLANS_TYPE=docs
ELASTIC_CONTRACTS_INDEX=pp_contracts
ELASTIC_CONTRACTS_TYPE=docs
ELASTIC_CPV_INDEX=pp_cpv
ELASTIC_CPV_TYPE=docs
ELASTIC_PAGE_SIZE=25
ELASTIC_URL=http://10.41.10.3:9200

SYNCHRONIZATION_SERVICES="pp-tenders-prz-changed-list-getter
                          pp-tenders-prz-updates-getter
                          pp-tenders-prz-events-creator
                          pp-tenders-changed-list-getter
                          pp-tenders-updates-getter
                          pp-tenders-events-creator
                          pp-budgets-changed-list-getter
                          pp-budgets-updates-getter
                          pp-budgets-events-creator
                          pp-plans-prz-changed-list-getter
                          pp-plans-prz-updates-getter
                          pp-plans-prz-events-creator
                          pp-contracts-prz-changed-list-getter
                          pp-contracts-prz-updates-getter
                          pp-contracts-prz-events-creator"

SLEEP_DELAY_INTERVAL=120
SLEEP_ERROR_INTERVAL=300
NET_NAME=ocds-network
```

2. Create Docker network script [network.sh]

```
#### include config ####
. deploy.config

#### swarm init ####
docker swarm init

#### network init ####
docker network create \
--driver=overlay \
--attachable \
${NET_NAME}
```

3. Create PostgreSQL service and databases script [postgresql_service.sh]

```
#### include config ####
. deploy.config

#### postgres ####
SERVICE_NAME=postgres;
echo "Creating service: ${SERVICE_NAME}";
docker volume create pgdata
docker service create  \
--mode=replicated \
--label inner-ports=${DB_PORT} \
--limit-memory=200m \
--name ${SERVICE_NAME} \
--hostname=${SERVICE_NAME} \
--network=${NET_NAME} \
--mount type=bind,source=/etc/localtime,target=/etc/localtime,readonly \
--mount source=pgdata,destination=/var/lib/postgresql/data \
--env POSTGRES_PASSWORD=${DB_PASSWORD} \
--with-registry-auth \
--update-order="start-first" \
--publish published=${DB_PUB_PORT},target=${DB_PORT} \
postgres:10

#### wait service ####
sleep 10

#### create databases ####
docker exec $(docker ps -q -f name=${SERVICE_NAME}) createdb -h localhost -p ${DB_PORT} -U postgres
${DB_TENDERS_NAME}
docker exec $(docker ps -q -f name=${SERVICE_NAME}) createdb -h localhost -p ${DB_PORT} -U postgres
${DB_BUDGETS_NAME}
docker exec $(docker ps -q -f name=${SERVICE_NAME}) createdb -h localhost -p ${DB_PORT} -U postgres
${DB_PLANS_NAME}
docker exec $(docker ps -q -f name=${SERVICE_NAME}) createdb -h localhost -p ${DB_PORT} -U postgres
${DB_CONTRACTS_NAME}
docker exec $(docker ps -q -f name=${SERVICE_NAME}) createdb -h localhost -p ${DB_PORT} -U postgres
${DB_PP_NAME}
```

4. Create synchronization services script [sync_service.sh]

```
#### include config ####
. deploy.config

#### create synchronization services ####
for SERVICE_NAME in ${SYNCHRONIZATION_SERVICES}
do
    echo "Creating service: ${SERVICE_NAME}"
    docker service create \
        --limit-cpu=0.5 \
        --limit-memory=100m \
        --hostname=${SERVICE_NAME} \
        --name=${SERVICE_NAME} \
        --network=${NET_NAME} \
        --update-order="start-first" \
        --mount type=bind,source=/etc/localtime,target=/etc/localtime,readonly \
        --mount type=bind,source=/etc/hosts,destination=/etc/hosts \
        --env SERVICENAME=${SERVICE_NAME} \
        --env environments_DB_TYPE=${DB_TYPE} \
        --env environments_DB_PORT=${DB_PORT} \
        --env environments_DB_USERNAME=${DB_USERNAME} \
        --env environments_DB_PASSWORD=${DB_PASSWORD} \
        --env environments_DB_HOST=${DB_HOST} \
        --env environments_DB_BUDGETS_NAME=${DB_BUDGETS_NAME} \
        --env environments_DB_TENDERS_NAME=${DB_TENDERS_NAME} \
        --env environments_DB_PLANS_NAME=${DB_PLANS_NAME} \
        --env environments_DB_CONTRACTS_NAME=${DB_CONTRACTS_NAME} \
        --env environments_ELASTIC_INDEXING=${ELASTIC_INDEXING} \
        --env environments_ELASTIC_BUDGETS_INDEX=${ELASTIC_BUDGETS_INDEX} \
        --env environments_ELASTIC_BUDGETS_TYPE=${ELASTIC_BUDGETS_TYPE} \
        --env environments_ELASTIC_TENDERS_INDEX=${ELASTIC_TENDERS_INDEX} \
        --env environments_ELASTIC_TENDERS_TYPE=${ELASTIC_TENDERS_TYPE} \
        --env environments_ELASTIC_PLANS_INDEX=${ELASTIC_PLANS_INDEX} \
        --env environments_ELASTIC_PLANS_TYPE=${ELASTIC_PLANS_TYPE} \
        --env environments_ELASTIC_CONTRACTS_INDEX=${ELASTIC_CONTRACTS_INDEX} \
        --env environments_ELASTIC_CONTRACTS_TYPE=${ELASTIC_PLANS_TYPE} \
        --env environments_ELASTIC_CPV_INDEX=${ELASTIC_CPV_INDEX} \
        --env environments_ELASTIC_CPV_TYPE=${ELASTIC_CPV_TYPE} \
        --env environments_ELASTIC_URL=${ELASTIC_URL} \
        --env environments_TENDERS_URL=${TENDERS_URL} \
        --env environments_BUDGETS_URL=${BUDGETS_URL} \
        --env environments_TENDERS_PRZ_URL=${TENDERS_PRZ_URL} \
        --env environments_PLANS_PRZ_URL=${PLANS_PRZ_URL} \
        --env environments_CONTRACTS_PRZ_URL=${CONTRACTS_PRZ_URL} \
        --env environments_SLEEP_DELAY_INTERVAL=${SLEEP_DELAY_INTERVAL} \
            --env environments_SLEEP_ERROR_INTERVAL=${SLEEP_ERROR_INTERVAL} \
        eprocurementsystems/pp-sync-cdb-service
done
```

5. Set mapping in Elasticsearch and import CPV script [elasticsearch.sh]

```
#### include config ####
. deploy.config

#### elasticsearch mapping and CPV ####
services=($SYNCHRONIZATION_SERVICES)
echo "Prepare mapping";
docker exec -w /var/www/service $(docker ps -q -f name=${services[0]}) php yii mapping-elastic/all
echo "Import CPV";
docker exec -w /var/www/service $(docker ps -q -f name=${services[0]}) php yii cpv/import
```

6. Create Elasticsearch search service script [search_service.sh]

```
#### include config ####
. deploy.config

##==== elastic-search-service ======
SERVICE_NAME=pp-elastic-search-service;
echo "Creating service: ${SERVICE_NAME}";
docker service create \
--limit-cpu=0.5 \
--limit-memory=100m \
--hostname=${SERVICE_NAME} \
--name=${SERVICE_NAME} \
--network=${NET_NAME} \
--env SERVICENAME=${SERVICE_NAME} \
--env environments_DB_HOST=${DB_HOST} \
--env environments_DB_PORT=${DB_PORT} \
--env environments_DB_USERNAME=${DB_USERNAME} \
--env environments_DB_PASSWORD=${DB_PASSWORD} \
--env environments_DB_BUDGETS_NAME=${DB_BUDGETS_NAME} \
--env environments_DB_TENDERS_NAME=${DB_TENDERS_NAME} \
--env environments_DB_PLANS_NAME=${DB_PLANS_NAME} \
--env environments_ELASTIC_BUDGETS_INDEX=${ELASTIC_BUDGETS_INDEX} \
--env environments_ELASTIC_BUDGETS_TYPE=${ELASTIC_BUDGETS_TYPE} \
--env environments_ELASTIC_TENDERS_INDEX=${ELASTIC_TENDERS_INDEX} \
--env environments_ELASTIC_TENDERS_TYPE=${ELASTIC_TENDERS_TYPE} \
--env environments_ELASTIC_PLANS_INDEX=${ELASTIC_PLANS_INDEX} \
--env environments_ELASTIC_PLANS_TYPE=${ELASTIC_PLANS_TYPE} \
--env environments_ELASTIC_CONTRACTS_INDEX=${ELASTIC_CONTRACTS_INDEX} \
--env environments_ELASTIC_CONTRACTS_TYPE=${ELASTIC_PLANS_TYPE} \
--env environments_ELASTIC_CPV_INDEX=${ELASTIC_CPV_INDEX} \
--env environments_ELASTIC_CPV_TYPE=${ELASTIC_CPV_TYPE} \
--env environments_ELASTIC_URL=${ELASTIC_URL} \
--env environments_ELASTIC_PAGE_SIZE=${ELASTIC_PAGE_SIZE} \
--env environments_SLEEP_ERROR_INTERVAL=${SLEEP_ERROR_INTERVAL} \
--update-order="start-first" \
--mount type=bind,source=/etc/localtime,target=/etc/localtime,readonly \
--mount type=bind,source=/etc/hosts,destination=/etc/hosts \
eprocurementsystems/pp-elastic-search-service
```

7. Create website service script [portal_service.sh]

```
#### include config ####
. deploy.config

##==== public-portal ======
SERVICE_NAME=pp-public-portal;
echo "Creating service: ${SERVICE_NAME}";
docker volume create uploads
docker service create \
--limit-cpu=0.5 \
--limit-memory=100m \
--hostname=${SERVICE_NAME} \
--name=${SERVICE_NAME} \
--network=${NET_NAME} \
--env environments_ELASTIC_SERVICE_URL=http://pp-elastic-search-service \
--env environments_DB_TYPE=${DB_TYPE} \
--env environments_DB_PORT=${DB_PORT} \
--env environments_DB_USERNAME=${DB_USERNAME} \
--env environments_DB_PASSWORD=${DB_PASSWORD} \
--env environments_DB_HOST=${DB_HOST} \
--env environments_DB_NAME=${DB_PP_NAME} \
--env environments_ADMIN_USER=${ADMIN_USER} \
--env environments_ADMIN_PASSWORD=${ADMIN_PASSWORD} \
--env environments_ADMIN_EMAIL=${ADMIN_EMAIL} \
--update-order="start-first" \
--publish published=${PUBLIC_PORTAL_PORT},target=80 \
--mount type=bind,source=/etc/localtime,target=/etc/localtime,readonly \
--mount type=bind,source=/etc/hosts,destination=/etc/hosts \
--mount source=uploads,destination=/var/www/service/frontend/web/uploads \
eprocurementsystems/pp-portal
```

Service update scripts

1. Update pp-public-portal

```
docker pull eprocurementsystems/pp-portal:latest
docker service update --image eprocurementsystems/pp-portal:latest pp-public-portal
```

2. Update pp-elastic-search-service

```
docker pull eprocurementsystems/pp-elastic-search-service:latest
docker service update --image eprocurementsystems/pp-elastic-search-service:latest
pp-elastic-search-service
```

3. Update synchronization services

```
docker pull eprocurementsystems/pp-sync-cdb-service:latest

docker service update --image eprocurementsystems/pp-sync-cdb-service:latest pp-elastic-search-settings

docker service update --image eprocurementsystems/pp-sync-cdb-service:latest
pp-tenders-prz-changed-list-getter
docker service update --image eprocurementsystems/pp-sync-cdb-service:latest
pp-tenders-prz-updates-getter
docker service update --image eprocurementsystems/pp-sync-cdb-service:latest
pp-tenders-prz-events-creator

docker service update --image eprocurementsystems/pp-sync-cdb-service:latest
pp-tenders-changed-list-getter
docker service update --image eprocurementsystems/pp-sync-cdb-service:latest pp-tenders-updates-getter
docker service update --image eprocurementsystems/pp-sync-cdb-service:latest pp-tenders-events-creator

docker service update --image eprocurementsystems/pp-sync-cdb-service:latest
pp-budgets-changed-list-getter
docker service update --image eprocurementsystems/pp-sync-cdb-service:latest pp-budgets-updates-getter
docker service update --image eprocurementsystems/pp-sync-cdb-service:latest pp-budgets-events-creator

docker service update --image eprocurementsystems/pp-sync-cdb-service:latest
pp-plans-prz-changed-list-getter
docker service update --image eprocurementsystems/pp-sync-cdb-service:latest
pp-plans-prz-updates-getter
docker service update --image eprocurementsystems/pp-sync-cdb-service:latest
pp-plans-prz-events-creator

docker service update --image eprocurementsystems/pp-sync-cdb-service:latest
pp-contracts-prz-changed-list-getter
docker service update --image eprocurementsystems/pp-sync-cdb-service:latest
pp-contracts-prz-updates-getter
docker service update --image eprocurementsystems/pp-sync-cdb-service:latest
pp-contracts-prz-events-creator
```