

Administration and Report Development Training

July 4 - 8, 2022

One Central Hotel
Cebu City, Philippines

DevTech Training

Short Course - Day 3

Docker Deployment Repository

What is Docker Deployment Repository?

- ⦿ It is a repository that is hosted in **GitHub.com**
- ⦿ It contains docker compose configuration files for :
 - ETRACS, EPayment, Mail Server, Download Server
 - Queueing Server and GDX Server
- ⦿ It contains bash scripting files to run each compose file
- ⦿ It contains a custom folder as a location for LGU specific configurations
- ⦿ Branching is used for every LGU repository

Docker Deployment Structure

⦿ **_custom**

- LGU specific configurations

⦿ **_res**

- Patches and shared files

⦿ **Bin**

- Bash scripting files to run compose files

⦿ **appserver**

- Locations of all application servers like ETRACS and EPayment

Docker Deployment Structure

⦿ email

- Primary mail server

⦿ system

- Location of common or system app and web servers

⦿ .gitignore

- List of files and folders that ignored by Git for tracking

⦿ custom-template.tar.gz

- The original custom template in compress format

The Basic Compose Files

⦿ **system-> notification**

- Notification server and uses Socket.IO API
- Scripting files used are:
 - restart-notification.sh
 - stop-notification.sh

⦿ **system-> download**

- Download server where client modules and static files are hosted
- Scripting files used are:
 - restart-download.sh
 - stop-download.sh

⦿ **appserver-> etracs**

- ETRACS application server
- Scripting files used are:
 - restart-etracs.sh
 - stop-etracs.sh

Configure MySQL Root Access Privilege

Configure MySQL Root Access Privilege

```
## Go to User's Home Directory
```

```
cd
```

```
## Ensure that MySQL container is running
```

```
## before going inside the container
```

```
docker exec -it mysql bash
```

```
## Login to MySQL
```

```
mysql -u root -p1234
```

```
## enable root to be accessible outside the container
```

```
grant all privileges on *.* to root@'%' identified by '1234';
```

```
## flush changes
```

```
flush privileges;
```

```
## Exit from Mysql
```

```
\q
```

```
## Exit from container
```

```
exit
```

Result

```
linuxmint@linuxmint-pc:~$ cd
linuxmint@linuxmint-pc:~$ docker exec -it mysql bash
root@1ef2c57cc8fc:/#
root@1ef2c57cc8fc:/# mysql -u root -p1234
mysql: [Warning] Using a password on the command line interface can be insecure.
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 567
Server version: 5.7.31 MySQL Community Server (GPL)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> grant all privileges on *.* to root@'%' identified by '1234';
Query OK, 0 rows affected, 1 warning (0.12 sec)

mysql> flush privileges;
Query OK, 0 rows affected (0.16 sec)

mysql> \q
Bye
root@1ef2c57cc8fc:/# exit
exit
linuxmint@linuxmint-pc:~$ |
```

Configuring Training Deployment Repository

Configuring Deployment Repository

```
## Go to training deployment folder  
cd ~/training-deployments
```

```
## Unzip the custom template  
tar -xvf custom-template.tar.gz
```

```
## 1. Using your File Manager, navigate to "training-deployments" folder
```

```
## 2. Open the file "_custom/env.conf" in Text Editor
```

```
## 3. Proceed to the next page
```

Configuring Deployment Repository

- 1) Change all **localhost** value to the actual IP address of your machine
- 2) Save and close the editor

```
lgu_name=TRAINING

channel=00000
fileupload_channel=${channel}

app_server_ip=localhost

dbserver_host=localhost:13306
dbserver_user=root
dbserver_pass=1234

db_etractions=zzz_etractions255
db_image=zzz_image
db_notification=zzz_notification
db_epayment=eor
db_queue=queue
```

Starting and Stopping Compose Files

Start Notification Server

```
## Go to training deployment folder
```

```
cd ~/training-deployments/bin
```

```
## Start Notification server
```

```
sh restart-notification.sh
```

```
## This command is in blocking mode
```

```
## You may press CTRL + C, to exit
```

```
## from it's log process
```

Start Notification Server

```
linuxmint@linuxmint-pc:~$ cd ~/training-deployments/bin
linuxmint@linuxmint-pc:~/training-deployments/bin$ sh restart-notification.sh
Removing network notification_default
WARNING: Network notification_default not found.
Creating network "notification_default" with the default driver
Creating rameses-notification-server ... done
Attaching to rameses-notification-server
rameses-notification-server    | Notification Server 0.0.4 running on http://0.0.0.0:8080
|
```


Shutdown Notification Server

```
## Go to training deployment folder  
cd ~/training-deployments/bin
```

```
## Stop Notification server  
sh stop-notification.sh
```

Shutdown Notification Server

```
linuxmint@linuxmint-pc:~$ cd ~/training-deployments/bin
linuxmint@linuxmint-pc:~/training-deployments/bin$ sh stop-notification.sh
Stopping rameses-notification-server ... done
Removing rameses-notification-server ... done
Removing network notification_default
linuxmint@linuxmint-pc:~/training-deployments/bin$ |
```

Start Download Server

```
## Go to training deployment folder  
cd ~/training-deployments/bin
```

```
## Start Download server  
sh restart-download.sh
```

```
## This command is in blocking mode  
## You may press CTRL + C, to exit  
## from it's log process
```

Start Download Server

```
linuxmint@linuxmint-pc:~$ cd ~/training-deployments/bin
linuxmint@linuxmint-pc:~/training-deployments/bin$
linuxmint@linuxmint-pc:~/training-deployments/bin$ sh restart-download.sh
Removing network download_default
WARNING: Network download_default not found.
Creating network "download_default" with the default driver
Creating download-node-server ... done
Creating download-nginx-server ... done
Attaching to download-nginx-server, download-node-server
download-nginx-server | app_server_ip -> 172.22.26.249
download-nginx-server |
download-nginx-server | user  nginx;
download-nginx-server | worker_processes  1;
download-nginx-server |
download-nginx-server | error_log  /var/log/nginx/error.log warn;
download-nginx-server | pid       /var/run/nginx.pid;
download-nginx-server |
download-nginx-server |
download-nginx-server | events {
download-nginx-server |     worker_connections  1024;
download-nginx-server | }
download-nginx-server |
download-nginx-server | http {
download-nginx-server |     include          /etc/nginx/mime.types;
download-nginx-server |     default_type     application/octet-stream;
```

Stop Download Server

```
## Go to training deployment folder
```

```
cd ~/training-deployments/bin
```

```
## Stop Download server
```

```
sh stop-download.sh
```

Stop Download Server

```
linuxmint@linuxmint-pc:~$ cd ~/training-deployments/bin
linuxmint@linuxmint-pc:~/training-deployments/bin$
linuxmint@linuxmint-pc:~/training-deployments/bin$
linuxmint@linuxmint-pc:~/training-deployments/bin$ sh stop-download.sh
Stopping download-nginx-server ... done
Stopping download-node-server ... done
Removing download-nginx-server ... done
Removing download-node-server ... done
Removing network download_default
linuxmint@linuxmint-pc:~/training-deployments/bin$ |
```

Start ETRACS Server

```
## Go to training deployment folder  
cd ~/training-deployments/bin
```

```
## Start ETRACS server  
sh restart-etracs.sh
```

```
## This command is in blocking mode  
## You may press CTRL + C, to exit  
## from it's log process
```

Start ETRACS Server

```
linuxmint@linuxmint-pc:~$ cd ~/training-deployments/bin
linuxmint@linuxmint-pc:~/training-deployments/bin$
linuxmint@linuxmint-pc:~/training-deployments/bin$
linuxmint@linuxmint-pc:~/training-deployments/bin$ sh restart-etracs.sh
Removing network etracs_default
WARNING: Network etracs_default not found.
Creating network "etracs_default" with the default driver
Creating etracs-server ... done
Attaching to etracs-server
etracs-server |
etracs-server | =====
etracs-server |
etracs-server |      Osiris3 Server (ETRACS)
etracs-server |
etracs-server |      JAVA      : /opt/jdk/bin/java
etracs-server |      JAVA_HOME : /opt/jdk
etracs-server |      JAVA_OPTS : -Xms512m -Xmx4096m -Dosiris.run.dir=/apps/server/bin -Dosiris.base.dir=/apps/server -Duser.language=en
etracs-server |
etracs-server | =====
etracs-server |
etracs-server | ** No available env.conf file
etracs-server |
etracs-server | *****
etracs-server | START OSIRIS 3 TRANSACTION SERVER @ port:8070Tue Jul 05 20:59:34 PST 2022
etracs-server | *****
etracs-server | *****
etracs-server | START WEBSOCKET SERVER @ port:8060 Tue Jul 05 20:59:34 PST 2022
etracs-server | *****
etracs-server | *****
etracs-server | START WEBSOCKET SERVER @ port:8061 Tue Jul 05 20:59:34 PST 2022
etracs-server | *****
etracs-server | *****
```


Stop ETRACS Server

```
## Go to training deployment folder  
cd ~/training-deployments/bin
```

```
## Stop ETRACS server  
sh stop-etrams.sh
```

```
## This command is in blocking mode  
## You may press CTRL + C, to exit  
## from it's log process
```

Stop ETRACS Server

```
linuxmint@linuxmint-pc:~$ cd ~/training-deployments/bin
linuxmint@linuxmint-pc:~/training-deployments/bin$
linuxmint@linuxmint-pc:~/training-deployments/bin$ sh stop-etrams.sh
Stopping etrams-server ... done
Removing etrams-server ... done
Removing network etrams_default
linuxmint@linuxmint-pc:~/training-deployments/bin$ |
```

Starting All Containers

```
## Go to training deployment folder
```

```
cd ~/training-deployments/bin
```

```
## Start all containers
```

```
sh start.sh
```

Starting All Containers

```
linuxmint@linuxmint-pc:~$ cd ~/training-deployments/bin
linuxmint@linuxmint-pc:~/training-deployments/bin$
linuxmint@linuxmint-pc:~/training-deployments/bin$
linuxmint@linuxmint-pc:~/training-deployments/bin$ sh start.sh
Creating network "download_default" with the default driver
Creating download-nginx-server ... done
Creating download-node-server ... done
Creating network "queue_default" with the default driver
Creating queue-proxy ... done
Creating queue-server ... done
Creating network "etracs_default" with the default driver
Creating etracs-server ... done
linuxmint@linuxmint-pc:~/training-deployments/bin$ |
```

Stopping All Containers

```
## Go to training deployment folder  
cd ~/training-deployments/bin  
  
## Stop all containers  
sh stop.sh
```

Stopping All Containers

```
linuxmint@linuxmint-pc:~$ cd ~/training-deployments/bin
linuxmint@linuxmint-pc:~/training-deployments/bin$
linuxmint@linuxmint-pc:~/training-deployments/bin$ sh stop.sh
Removing network epayment_default
WARNING: Network epayment_default not found.
Stopping etracs-server ... done
Removing etracs-server ... done
Removing network etracs_default
Removing network etracs-web_default
WARNING: Network etracs-web_default not found.
Stopping queue-server ... done
Stopping queue-proxy ... done
Removing queue-server ... done
Removing queue-proxy ... done
Removing network queue_default
Removing network notification_default
WARNING: Network notification_default not found.
Stopping download-node-server ... done
Stopping download-nginx-server ... done
Removing download-node-server ... done
Removing download-nginx-server ... done
Removing network download_default
Removing network mail-primary_default
WARNING: Network mail-primary_default not found.
Removing network mail-bpls_default
WARNING: Network mail-bpls_default not found.
linuxmint@linuxmint-pc:~/training-deployments/bin$ |
```

Update your “devtech-training” repository to get additional docs for reference in setting up iReport-3.0.0 and Training Platform.

Additional Docs For Setup

- Go to "devtech-training/docs" folder
- Setup **iReport-3.0.0** by following the steps in **iReport-Setup.pdf** document
- Setup **Training-Platform** by following the steps in **Training-Platform-Setup.pdf** document

Up Next...

Report Development Training - Part 1