IBM DataPower Gateway

Lab - Running IBM DataPower Gateway on containers.

Perquisites

- Linux system with minimum 1 cores.
- Docker installed.

Step 1 - Logon to the provided system

Step 2 - Change directory to **datapower/local**

Run the command:

cd datapower/local

```
[admin@bastion-gym-lan ~]$ cd datapower/local
[admin@bastion-gym-lan local]$ ▮
```

Step 3 - Verify docker is installed and is running.

Run the following commands:

sudo docker version
sudo systemctl status docker

Press Ctl C to come out of the status page.

```
[admin@bastion-gym-lan local]$ sudo docker version
Client: Docker Engine - Community
 Version:           24.0.5
 API version:       1.43
 Go version:        go1.20.6
 Git commit:        ced0996
 Built:             Fri Jul 21 20:36:32 2023
 OS/Arch:           linux/amd64
 Context:           default

Server: Docker Engine - Community
 Engine:
  Version:          24.0.5
  API version:      1.43 (minimum version 1.12)
  Go version:       go1.20.6
  Git commit:       a61e2b4
  Built:            Fri Jul 21 20:35:32 2023
  OS/Arch:          linux/amd64
  Experimental:     false
 containerd:
  Version:          1.6.22
  GitCommit:        8165feabfdfe38c65b599c4993d227328c231fca
 runc:
  Version:          1.1.8
  GitCommit:        v1.1.8-0-g82f18fe
 docker-init:
  Version:          0.19.0
  GitCommit:        de40ad0
```

```
[admin@bastion-gym-lan local]$ sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; disabled; vendor preset: disabled)
   Active: active (running) since Mon 2023-08-07 18:24:47 EDT; 2h 44min ago
     Docs: https://docs.docker.com
 Main PID: 91528 (dockerd)
    Tasks: 9
   Memory: 36.2M
   CGroup: /system.slice/docker.service
           └─91528 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

Aug 07 18:24:46 bastion-gym-lan systemd[1]: Starting Docker Application Container Engine...
Aug 07 18:24:46 bastion-gym-lan dockerd[91528]: time="2023-08-07T18:24:46.601484424-04:00" level=info msg="Starting up"
Aug 07 18:24:46 bastion-gym-lan dockerd[91528]: time="2023-08-07T18:24:46.637148107-04:00" level=info msg="Loading containers: start."
Aug 07 18:24:47 bastion-gym-lan dockerd[91528]: time="2023-08-07T18:24:47.496406859-04:00" level=info msg="Firewalld: interface docker0 alr>
Aug 07 18:24:47 bastion-gym-lan dockerd[91528]: time="2023-08-07T18:24:47.644446788-04:00" level=info msg="Loading containers: done."
Aug 07 18:24:47 bastion-gym-lan dockerd[91528]: time="2023-08-07T18:24:47.662282071-04:00" level=info msg="Docker daemon" commit=a61e2b4 gr>
Aug 07 18:24:47 bastion-gym-lan dockerd[91528]: time="2023-08-07T18:24:47.662484534-04:00" level=info msg="Daemon has completed initializat>
Aug 07 18:24:47 bastion-gym-lan dockerd[91528]: time="2023-08-07T18:24:47.689181222-04:00" level=info msg="API listen on /run/docker.sock"
Aug 07 18:24:47 bastion-gym-lan systemd[1]: Started Docker Application Container Engine.
lines 1-19/19 (END)
```

Step 4 – Review the sample script to run DataPower on containers.

Run the following command:

cat startDataPowerBasic.sh

```
[admin@bastion-gym-lan local]$ cat ./startDataPowerBasic.sh
#!/bin/bash

echo
echo "Starting local DataPower instance"
echo


# Start the IBM DataPower container using external volumes
docker  run -it --name=demo-datapower --memory=4g  -e DATAPOWER_ACCEPT_LICENSE=true -e DATAPOWER_INTERACTIVE=true -e DATAPOWER_WORKER_THREADS=1 -p
 9090:9090 cp.icr.io/cpopen/datapower/datapower-limited:10.5.0.5
```

Step 5 – Review the sample script to run DataPower on container using an existing configuration.

Run the following commands:

cat startDataPower.sh

```
[admin@bastion-gym-lan local]$ cat ./startDataPower.sh
#!/bin/bash

echo
echo "Starting local DataPower instance using the configuration stored in the local directory"
echo

# Switch to the IBM DataPower config directory
cd ../dp-demo

# Start the IBM DataPower container using external volumes
docker  run -it --name=demo-datapower --memory=4g  -v $PWD/drouter/config:/opt/ibm/datapower/drouter/config -v $PWD/drouter/local:/opt/ibm/datapow
er/drouter/local -v $PWD/drouter/secure/usrcerts:/opt/ibm/datapower/root/secure/usrcerts -e DATAPOWER_ACCEPT_LICENSE=true -e DATAPOWER_INTERACTIVE
=true -e DATAPOWER_WORKER_THREADS=1 -p 9090:9090 -p 6443:6443 cp.icr.io/cpopen/datapower/datapower-limited:10.5.0.5
```

Step 6 – Run the DataPower instance using sample DataPower configuration.

Run the following command:

sudo ./startDataPower.sh

Sample output is listed below for reference.
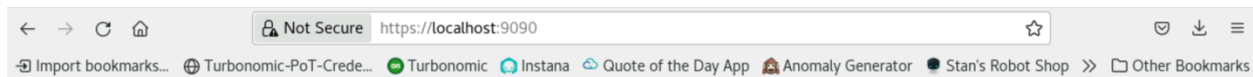
Step 7 – Access DataPower Console.

From the browser of the system you are logged-on, access the following link:

https://localhost:9090/

Click "**Advanced"** and "**Accept Risks"** to continue with the self-signed certificates.

Use the credentials (username: **admin** ; password: **admin**) to login to the DataPower admin console.

After logging on to the system, you can explore the artifacts in the application domain IDP.

IBM DataPower Gateway
IDG.10.5.0.5

IDG console at 0c5625bbb950

Username:

Password:

Domain:

default ▾

Graphical Interface:

◉ WebGUI (original)
◯ New UI (technology preview)

Log in

DataPower Gateway

admin @ b86e46d5d055 8/7/2023, 10:06:24 PM (EDT)

Domain: default ▾   Save Configuration   Logout   IBM

▣ Control Panel

▢ New UI (technology preview)

Search   🔍 ⊞

⊞ 📁 Status
⊞ 📁 Services
⊞ 📁 Network
⊞ 📁 Administration
⊞ 📁 Objects

Firmware: IDG.10.5.0.5
Build: 351132
Delivery type: Long-term support
IBM DataPower Gateway
Copyright IBM Corporation 1999-2023
View License Agreement

Control Panel

B2B

B2B Partner Profile   **B2B Gateway Service**   **B2B Transaction Viewer**

Services

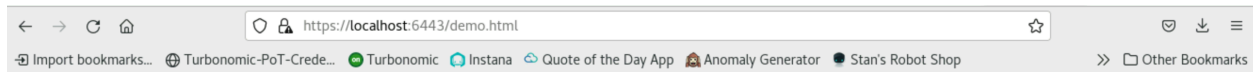**Web Service Proxy**   **Multi-Protocol Gateway**   **XML Firewall**   **Web Application Firewall**

Monitoring and Troubleshooting

Step 8 – Test the sample configuration.

From the browser access the following links:

https://localhost:6443/

The following output validates that the static page is correctly returned from the sample the sample DataPower configuration.