SAMSUNG ELECTRONICS

Knox E-FOTA On-Premises

Guidance for Upgrade to DFM 1.0.1.7 from DFM 1.0.1.6

Version : 1.4

Last Update : Oct 2023

Document History

What	Ver.	When
I. Added: Guidance for upgrade to DFM 1.0.1.7 ← There are a couple of items that have changed: 1) changed Docker image files, 2) New Feature: Configurable device group polling	**Ver1.4**	**Oct 2023**
I. Added: Guidance for upgrade to DFM 1.0.1.6 ← There are a couple of items that have changed: 1) changed Docker image files, 2) alter table, 3) New Feature: Configurable Device Group polling	**Ver1.3**	**Apr 2023**
I. Added: Guidance for upgrade to DFM 1.0.1.5 ← There are a couple of items that have changed: 1) changed Podman image files	**Ver1.2**	**Jul 2022**
I. Added: Guidance for upgrade to DFM 1.0.1.4 ← There are a couple of items that have changed: 1) changed Podman image files, 2), New Feature: Configurable length of password digits	**Ver1.1**	**Mar 2022**
I. Added: Guidance for upgrade to DFM 1.0.1.3 ← There are a couple of items that have changed: 1) changed Podman image files	**Ver1.0**	**Jan 2022**

[ADDENDUM] : Upgrade from 1.0.1.6 to 1.0.1.7

1.1. Purpose of this document

The purpose of this document is to provide instructions to **upgrade a system with DFM 1.0.1.6 to 1.0.1.7**. If DFM has never been installed on the server, skip this process and follow the new installation process document.

1.2. Why patch DFM Podman images, etc.?

- Updated bug issues
- New feature: Configurable device polling interval and postpone waiting time

1.3. Why upgrade Podman?

The dfm network setting method has been changed since version 1.0.1.7. An upgrade is required because it is not supported in versions below Podman 4.0.
The setting now uses a bridge network rather than a method of generating with the previous pod. The least supported Podman version is version 4.0, but installing a more recent version (4.6) is recommended.

1.4. What changed in version 1.0.1.7 ?

	Category	Summary
1	Set-up device polling interval and postpone waiting time	- Using DFM cli
2	Docker image	- dfm-core image - dfm-console image

1. Changed two Docker image files when compared with the previous DFM 1.0.1.7 version:
   - dfm-core
   - dfm-console

1.5. Update the DFM Module

During the update, a short circuit may occur.

The DFM Module is logged in with **a dedicated service account** and operates with the privileges of the account. You should log in with the account you used to install before.

1.4.1. Install v1.0.1.7 DFM Module Package

The following command shows you how to install the v1.0.1.7 tar compress package:

```
1) delete exist dfm folder
  rm -rf /tmp/dfm

2) extract package
tar -zxvf  sec-dfm_1.0.1.7.tar.gz -C /tmp

example)
$ tar -zxvf sec-dfm_1.0.1.7.tar.gz
  /tmp/dfm/
  ....
  /tmp/dfm/usr/
  /tmp/dfm/usr/bin/
  /tmp/dfm/usr/bin/dfm
```

1.4.1. DFM CLI Update

【STEP 1】Copy the DFM CLI.

sudo cp /tmp/dfm/bin/dfm /usr/local/bin or sudo cp /tmp/dfm/bin/dfm /usr/bin

Example)
sudo cp /tmp/dfm/bin/dfm /usr/local/bin

【STEP 2】Check the DFM CLI privileges and version.

ls -al /usr/local/bin/dfm or ls -al /usr/bin/dfm
-rwxr-x**r-x**. 1 efotadm efotadm 2902624 Mar 2 07:42 dfm

dfm version
version: 1.0.7 Red Hat Enterprise Linux release 8.4 (Ootpa)

1.4.2. Check Podman version

【STEP 1】Check the Podman version.

podman -v

Example)
podman -v

podman version 3.2.3

1.4.3. Upgrade Podman

If you are in rootless mode, please upgrade to mandatory.

【STEP 1】Check the DFM service.

#rootless mode
podman ps -a

#root mode
sudo podman ps -a

Example)
podman ps -a

```
CONTAINER ID  IMAGE                                          COMMAND               CREATED      STATUS
c8f8232a8ca1  localhost/minio/minio:RELEASE.2020-06-01T17-28-03Z  server /data          9 hours ago  Up 9 hours ago (healthy)
e80b80bdba55  localhost/haproxytech/haproxy-debian:2.1.4      haproxy -f /usr/l...  8 hours ago  Up 8 hours ago (healthy)
120be188f49f  localhost/dfm-core:1.0.1.4                                            8 hours ago  Up 8 hours ago (healthy)
8a3e2f4452e8  localhost/dfm-console:1.0.1.4                                         8 hours ago  Up 8 hours ago (healthy)
1988a1049bc9  localhost/mysql/enterprise-server:8.0           mysqld                4 hours ago  Up 4 hours ago (healthy)
```

【STEP 2】Terminate the DFM service.

```
#rootless mode
podman rm -af

#root mode
sudo podman rm -af
```

【STEP 3】Remove the pod if it exists.

```
#rootless mode
podman pod rm dfm-pod
```

【STEP 4】Remove the current package.

```
sudo yum remove -y podman
```

【STEP 5】Install the new package.

```
# Latest version install
sudo yum install -y podman
# If the installed Podman version is between 4.0 to 4.4 in Red Hat Enterprise Linux 8.4
sudo yum install -y podman podman-plugins dnsmasq
```

【STEP 6】Check the Podman version.

```
podman -v

Example)
podman -v

podman version 4.6.1
```

1.4.4. After upgrading Podman

【**STEP 1**】Check the network.

```
#rootless mode
podman network ls

#root mode
sudo podman network ls

Example)
podman network ls

NETWORK ID    NAME        DRIVER
2f259bab93aa  podman      bridge
```

【**STEP 2**】(Optional) If dfm-network is not created, create the network.

```
#rootless mode
podman network create

#root mode
sudo podman network create

Example)
dfm network create
The dfm network was created with the name "dfm-network".
```

【**STEP 3**】(Optional) Following step 2, check the created network.

```
#rootless mode
podman network ls

#root mode
sudo podman network ls

Example)
podman network ls

NETWORK ID    NAME           DRIVER
70a2eb4fe1d2  dfm-network    bridge
2f259bab93aa  podman         bridge
```

【**STEP 4**】Start the database service.

```
#rootless mode
dfm start dfm-mysql

#root mode
sudo dfm start dfm-mysql
```

【**STEP 5**】Check the database service.

```
# If it is redhat 8.4 version, run health check
podman healthcheck run dfm-mysql

#rootless mode
podman ps -a

#root mode
sudo podman ps -a
```

Example)

CONTAINER ID	IMAGE	STATUS	NAMES
9baaf3c0338a	localhost/mysql/enterprise-server:8.0	Up 36 seconds ago (healthy)	dfm-mysql

【**STEP 6**】Start the minio service.

```
#rootless mode
dfm start dfm-minio

#root mode
sudo dfm start dfm-minio
```

【**STEP 7**】Check the minio service.

```
# If it is redhat 8.4 version, run health check
podman healthcheck run dfm-minio

#rootless mode
podman ps -a

#root mode
sudo podman ps -a
```

Example)

CONTAINER ID	IMAGE	STATUS	NAMES
9baaf3c0338a	localhost/mysql/enterprise-server:8.0	Up 36 seconds ago (**healthy**)	dfm-mysql
77d1f27b3038	localhost/minio/minio:RELEASE.28-03Z	Up 38 seconds ago (**healthy**)	dfm-minio

1.4.5. Configure Device Group polling

【**STEP 1**】Check the DFM CLI version.

```
dfm version
version:  1.0.7
```

【STEP 2】Set the device polling interval (Allowed values: integer type).

```
Example)
dfm config set polling_interval_register =84200
```

【STEP 3】Set the default waiting time (Allowed values: 1 to 7200).

```
Example)
dfm config set default_waiting_time =30
```

【STEP 4】Confirm the configurations.

```
dfm config get polling_interval_register
dfm config get default_waiting_time
```

1.4.6. DFM Core Update

The released **Core** image information is as follows:

【STEP01】Stop the running core server.

```
#root mode
sudo dfm terminate dfm-core
#rootless mode
dfm terminate dfm-core
```

【STEP02】Load the released podman image.

```
#root mode
sudo podman load -i /tmp/dfm/images/dfm-core_1.0.1.7.tar

#rootless mode
podman load -i /tmp/dfm/images/dfm-core_1.0.1.7.tar
```

【STEP03】Change repository and tag's configuration

```
dfm config set core_img_rep=localhost/dfm-core

dfm config set core_img_tag=1.0.1.7
```

【STEP04】Confirm the changed repository and tag's configuration

```
dfm config get core_img_rep
dfm config get core_img_tag
```

【STEP05】Start up Server

- DFM Core Server

```
#rootless mode
dfm start dfm-core

#root mode
sudo dfm start dfm-core
```

【Validation】
Make sure the DFM Core Server container is in a healthy state. It may take some time until its state is healthy.

```
# If it is redhat 8.4 version, run health check
podman healthcheck run dfm-core

#rootless mode
podman ps -a

#root mode
sudo podman ps -a
```

Example)

CONTAINER ID	IMAGE	STATUS	NAMES
9baaf3c0338a	localhost/mysql/enterprise-server:8.0	Up 36 seconds ago (healthy)	dfm-mysql
77d1f27b3038	localhost/minio/minio:RELEASE.28-03Z	Up 38 seconds ago (healthy)	dfm-minio
15dd23fb2355	localhost/dfm-core:1.0.1.7	Up 32 seconds ago (healthy)	dfm-core

1.4.7. DFM Admin Console Update

The released **Admin Console** image information is as follows:

【**STEP01**】Stop the running console server.

```
#root mode
sudo dfm terminate dfm-console
#rootless mode
dfm terminate dfm-console
```

【**STEP02**】Load the released podman image.

```
#root mode
sudo podman load -i /tmp/dfm/images/dfm-console_1.0.1.7.tar

#rootless mode
podman load -i /tmp/dfm/images/dfm-console_1.0.1.7.tar
```

【**STEP03**】Change repository and tag's configuration

```
dfm config set console_img_rep=localhost/dfm-console

dfm config set console_img_tag=1.0.1.7
```

【**STEP04**】Confirm the changed repository and tag's configuration

```
dfm config get console_img_rep
dfm config get console_img_tag
```

【**STEP05**】Start up Server

- DFM Core Server

```
#rootless mode
dfm start dfm-console

#root mode
sudo dfm start dfm-console
```

【Validation】

Make sure the DFM Core Server container is in a healthy state. It may take some time until its state is healthy.

```
# If it is redhat 8.4 version, run health check
podman healthcheck run dfm-console

#rootless mode
podman ps -a

#root mode
sudo podman ps -a
```

Example)

CONTAINER ID	IMAGE	STATUS	NAMES
9baaf3c0338a	localhost/mysql/enterprise-server:8.0	Up 36 seconds ago (**healthy**)	dfm-mysql
77d1f27b3038	localhost/minio/minio:RELEASE.28-03Z	Up 38 seconds ago (**healthy**)	dfm-minio
15dd23fb2355	localhost/dfm-core:1.0.1.7	Up 32 seconds ago (**healthy**)	dfm-core
c49a291fbede	localhost/dfm-console:1.0.1.7	Up 32 seconds ago (**healthy**)	dfm-console

1.4.8. DFM proxy start

【**STEP 1**】change haproxy.cfg file

```
#overwrite haproxy.cfg file
cp /tmp/dfm/haproxy-config/haproxy.cfg /dfm/haproxy/config/
```

After copying the file, please proceed with the additional setting by referring to the **4.9. (STEP08) Configure HAProxy** of the installation guide.

【**STEP 2**】start proxy service

```
#rootless mode
dfm start dfm-proxy

#root mode
sudo dfm start dfm-proxy
```

【STEP 3】check proxy service

If it is redhat 8.4 version, run health check
podman healthcheck run dfm-proxy

#rootless mode
podman ps -a

#root mode
sudo podman ps -a

Example)

CONTAINER ID	IMAGE	STATUS	NAMES
9baaf3c0338a	localhost/mysql/enterprise-server:8.0	Up 36 seconds ago (**healthy**)	dfm-mysql
77d1f27b3038	localhost/minio/minio:RELEASE.28-03Z	Up 38 seconds ago (**healthy**)	dfm-minio
15dd23fb2355	localhost/dfm-core:1.0.1.7	Up 32 seconds ago (**healthy**)	dfm-core
c49a291fbede	localhost/dfm-core:1.0.1.7	Up 32 seconds ago (**healthy**)	dfm-console
d6a91751a3c3	localhost/haproxytech/haproxy-debian:2.1.4	Up 32 seconds ago (**healthy**)	dfm-proxy

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