

SAMSUNG ELECTRONICS

Knox E-FOTA On-Premises

**Guidance for Upgrade to DFM 1.0.1.8
from DFM 1.0.1.7**

Version : 1.5

Last Update : Jun 2024

Document History

<i>What</i>	<i>Ver.</i>	<i>When</i>
I. Added: Guidance for upgrade to DFM 1.0.1.8 ← There are a couple of items that have changed: 1) changed Podman image files, 2) alter table, 3) New Feature: Configurable license app enabled, port, core run command, 4) Background app setting	Ver1.5	Jun 2024
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 1.0.1.7 to 1.0.1.8

1.1. Purpose of this document

The purpose of this document is to provide instructions to **upgrade a system with DFM 1.0.1.7 to 1.0.1.8**. 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 license app port and license app enabled, Console makes download URL of apk file into qr-code

1.3. What changed in version 1.0.1.8 ?

	Category	Summary
1	background app setting	- Create directory - Copy files - Start background app
2	Set-up license app port and license app enabled, core run command	- Using DFM cli
3	Docker image	- dfm-core image - dfm-console image
4	Mysql	- Alter table

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

1.4. 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 v1.0.1.8 DFM Module Package

The following command shows you how to install the v1.0.1.8 tar compress package:

1) delete exist dfm folder

```
rm -rf /tmp/dfm
```

2) extract package

```
tar -zxvf sec-dfm_1.0.1.8.tar.gz -C /tmp
```

example)

```
$ tar -zxvf sec-dfm_1.0.1.8.tar.gz
```

```
/tmp/dfm/
```

```
....
```

```
/tmp/dfm/usr/
```

```
/tmp/dfm/usr/bin/
```

```
/tmp/dfm/usr/bin/dfm
```

1.4.2 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-xr-x. 1 efotadm efotadm 2902624 Mar  2 07:42 dfm
```

dfm version

```
version: 1.0.8 Red Hat Enterprise Linux release 8.4 (Ootpa)
```

1.4.3 Copy Background app files

【STEP 1】 Create Directories

Example)

```
sudo mkdir -p /dfm/background  
sudo chwon -R nightwatch:nightwatch /dfm/background
```

【STEP 2】 copy background files, set executable

Example)

```
cp /tmp/dfm/licenseApp /dfm/background/  
cp /tmp/dfm/efota-license.service /etc/systemd/system/efota-license.service
```

```
sudo chmod 744 /dfm/background/licenseApp  
sudo chcon -t bin_t /dfm/background/licenseApp
```

1.4.4 Start up Background app file

【STEP 1】 Command to run the background app

Example)

```
sudo systemctl daemon-reload  
sudo systemctl enable efota-license.service  
sudo systemctl start efota-license.service
```

【STEP 2】 Validation

Example)

```
sudo systemctl status efota-license.service  
Loaded: loaded (/etc/system/system/efota-license.service; enabled; vendor preset: enabled)  
Active: active (running) since Tue 2024-XX-XX 06:39:10 UTC; 7s ago  
Main PID: 2028 (licenseApp)
```

1.4.5 Configure license app port and license app enabled

【STEP 1】 Check the DFM CLI version.

```
dfm version
version: 1.0.1.8
```

【STEP 2】 Set the license app IP(sudo is required in root mode.)

If you enter an empty value in ip, it is set automatically.

```
dfm config set license_app_ip={ip}
Example)
#root mode
sudo dfm config set license_app_ip=
#rootless mode
dfm config set license_app_ip=
```

【STEP 3】 Set the license app port (Allowed values: integer type).

```
Example)
dfm config set license_app_port=10030
```

【STEP 4】 Confirm the configurations.

```
dfm config get license_app_ip
dfm config get license_app_port
```

1.4.6 Configure core run command

【STEP 1】 Check the DFM CLI version.

```
dfm version
version: 1.0.1.8
```

【STEP 2】 Set the core run command

```
Example)
dfm config set opt_core_run_cmd="--log-driver json-file --log-opt max-size=5m --log-opt max-
file=10 --restart=on-failure --security-opt=no-new-privileges --health-cmd='curl --fail
http://127.0.0.1:10080/index.html || exit 1'"
```

【STEP 3】 Confirm the configurations.

```
dfm config get opt_core_run_cmd
```

1.4.7 Alter Table

1) Alter table using an SQL script

```
1) Executing an SQL script
docker exec -i dfm-mysql mysql -uroot -p[password] < /tmp/dfm/mysql-query/patch_1.0.1.8.sql
```

1.4.8 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_1.0.1.8.tar

#rootless mode
podman load -i /tmp/dfm/images/dfm-core_1.0.1.8.tar
```

【STEP03】 Change repository and tag's configuration

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

dfm config set core_img_tag=1.0.1.8
```

【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:1.0.1.8	Up 32 seconds ago (healthy)	dfm-core

1.4.9 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_1.0.1.8.tar

#rootless mode
podman load -i /tmp/dfm/images/dfm-console_1.0.1.8.tar
```

【STEP03】 Change repository and tag's configuration

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

dfm config set console_img_tag=1.0.1.8
```

【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:1.0.1.8	Up 32 seconds ago (healthy)	dfm-core
c49a291fbede	localhost/dfm-console:1.0.1.8	Up 32 seconds ago (healthy)	dfm-console

1.4.10 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:1.0.1.8	Up 32 seconds ago (healthy)	dfm-core
c49a291fbede	localhost/dfm-core:1.0.1.8	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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