

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><b>What</b></i>	<i><b>Ver.</b></i>	<i><b>When</b></i>
<p><b>I. Added:</b> 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</p>	<b>Ver1.5</b>	<b>Jun 2024</b>
<p><b>I. Added:</b> 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</p>	<b>Ver1.4</b>	<b>Oct 2023</b>
<p><b>I. Added:</b> 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</p>	<b>Ver1.3</b>	<b>Apr 2023</b>
<p><b>I. Added:</b> Guidance for upgrade to DFM 1.0.1.5 ← There are a couple of items that have changed: 1) changed Podman image files</p>	<b>Ver1.2</b>	<b>Jul 2022</b>
<p><b>I. Added:</b> 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</p>	<b>Ver1.1</b>	<b>Mar 2022</b>
<p><b>I. Added:</b> Guidance for upgrade to DFM 1.0.1.3 ← There are a couple of items that have changed: 1) changed Podman image files</p>	<b>Ver1.0</b>	<b>Jan 2022</b>

## [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 ( <b>healthy</b> )	dfm-mysql
77d1f27b3038	localhost/minio/minio:RELEASE.28-03Z	Up 38 seconds ago ( <b>healthy</b> )	dfm-minio
15dd23fb2355	localhost/dfm-core:1.0.1.8	Up 32 seconds ago ( <b>healthy</b> )	dfm-core
c49a291fbede	localhost/dfm-core:1.0.1.8	Up 32 seconds ago ( <b>healthy</b> )	dfm-console
d6a91751a3c3	localhost/haproxytech/haproxy-debian:2.1.4	Up 32 seconds ago ( <b>healthy</b> )	dfm-proxy

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