

SAMSUNG ELECTRONICS

Knox E-FOTA On-Premises

**Guidance for Upgrade to DFM 1.0.1.6
from DFM 1.0.1.5**

Version : 1.0

Last Update : Apr 2023

Document History】

<i>What</i>	<i>Ver.</i>	<i>When</i>
Initial Release	Ver1.0	Apr 2023

[ADDENDUM] : Upgrade from 1.0.1.5 to 1.0.1.6

1.1. Purpose of this document

The purpose of this document is to provide instructions to **upgrade a system with DFM 1.0.1.5 to 1.0.1.6**. If DFM has never been installed on the server, skip this process and follow the new installation process document.

1.2. Why should DFM Docker images be patched?

- Various bug fixes
- New feature: Configurable device group polling

1.3. What is changed in version 1.0.1.6?

	Category	Summary
1	Set up device group polling	<ul style="list-style-type: none"> - Using DFM cli
2	Mysql	<ul style="list-style-type: none"> - Alter config file - Alter table
3	Docker image	<ul style="list-style-type: none"> - dfm-core image - dfm-console image

1. Changed two Docker image files from the previous DFM 1.0.1.5 version:
 - dfm-core
 - dfm-console

Docker images	DFM 1.0.1.5	DFM 1.0.1.6
dfm-core	repository : dfm-core tag : 1.0.1.5	repository : dfm-core tag : 1.0.1.6
dfm-console	repository : dfm-console tag : 1.0.1.5	repository : dfm-console tag : 1.0.1.6
dfm-minio	repository : minio/minio tag : RELEASE.2020-06-01T17-28-03Z	repository : minio/minio tag : RELEASE.2020-06-01T17-28-03Z
dfm-mysql	repository : mysql/enterprise-server tag : 8.0	repository : mysql/enterprise-server tag : 8.0
dfm-proxy	repository : haproxytech/haproxy-debian tag : 2.1.4	repository : haproxytech/haproxy-debian tag : 2.1.4

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 v1.0.1.6 DFM Module Package

Here is a command showing how to install the v1.0.1.6 Debian package:

1) check if v1.0.1.6 is installed

```
dpkg -l | grep sec-dfm
```

example:

```
$ dpkg -l | grep sec-dfm
ii  sec-dfm  1.0.1.6   all  Samsung Enterprise fota dfm package
$
```

2) install

```
sudo dpkg -i sec-dfm_1.0.1.6.deb
```

example:

```
$ sudo dpkg -i sec-dfm_1.0.1.6.deb
(Reading database ... 265246 files and directories currently installed.)
Preparing to unpack sec-dfm_1.0.1.6.deb ...
Unpacking sec-dfm (1.0.1.6) over (1.0.1.5) ...
Setting up sec-dfm (1.0.1.6) ...
$
```

```
$ dpkg -l | grep sec-dfm
ii  sec-dfm  1.0.1.6   all  Samsung Enterprise fota dfm package
$
```

1.4.2. Configure Device Group polling

【STEP 1】 Check the DFM CLI version.

```
dfm version  
version: 1.0.5
```

【STEP 2】 Set whether to enable device groups (Allowed values: “true”, “false”).

Example)
`dfm config set device_group_enable =true`

【STEP 3】 Confirm the “device_group_enable” configuration.

```
dfm config get device_group_enable
```

1.4.3. Alter Mysql config file

1) Edit the “my.cnf” file.

Add "group_concat_max_len=4096" to the bottom of the file.

【STEP 1】 Edit the “my.cnf” file

```
vi /dfm/mysql/config/my.cnf
```

```
[mysqld]  
user=mysql  
default-time-zone='+00:00'  
event_scheduler = ON  
general_log = 0  
slow-query-log = 1  
long_query_time = 4  
lower_case_table_names = 1  
collation-server = utf8mb4_unicode_ci  
init-connect='SET NAMES utf8mb4'  
character-set-server = utf8mb4  
group_concat_max_len = 4096
```

【STEP 2】 Restart the “dfm-mysql” container

```
dfm cluster restart dfm-mysql
```

【Validation】

Run the following command to ensure the mysql container is in a healthy state. It takes some time until its state is healthy.

```
docker ps -a
```

1.4.4. 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_1.0.1.6.sql
```

1.4.5. DFM Core Update

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

- Docker image : dfm-core-1.0.1.6.tar
- repository : dfm-core
- tag : 1.0.1.6

【STEP 1】 Stop the running core server.

```
dfm terminate dfm-core
```

【STEP 2】 Load the released Docker image.

```
docker load < /tmp/dfm/docker-images/dfm-core-1.0.1.6.tar
```

【STEP 3】 Change the repository and tag configuration

```
dfm config set core_img_rep=dfm-core  
dfm config set core_img_tag=1.0.1.6
```

【STEP 4】 Confirm the changed repository and tag configuration

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

【STEP 5】 Start up the Server

- DFM Core Server

```
dfm cluster start dfm-core
```

【Validation】

Run the following command to ensure the core container is in a healthy state. It takes some time until its state is healthy.

```
docker ps -a
```

1.4.6. DFM Admin Console Update

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

- docker image : dfm-console-1.0.1.6.tar
- repository : dfm-console
- tag : 1.0.1.6

【STEP 1】 Stop the running console server

```
dfm terminate dfm-console
```

【STEP 2】 Load the released Docker image.

```
docker load < /tmp/dfm/docker-images/dfm-console-1.0.1.6.tar
```

【STEP 3】 Change repository and tag configuration

```
dfm config set console_img_rep=dfm-console  
dfm config set console_img_tag=1.0.1.6
```

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

【STEP 4】 Confirm the changed repository and tag configuration**【STEP 5】** Start up the server

- Admin Console Server

```
dfm cluster start dfm-console
```

【Validation】

Make sure the admin console container is in a healthy state. It takes some time until its state is healthy.

```
docker ps -a
```

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