

SAMSUNG ELECTRONICS

# Knox E-FOTA On-Premises

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

**Version : 1.3**

Last Update : Apr 2023

## Document History

<b><i>What</i></b>	<b><i>Ver.</i></b>	<b><i>When</i></b>
<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	<b>Ver1.3</b>	<b>Apr 2023</b>
<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	<b>Ver1.2</b>	<b>Jul 2022</b>
<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	<b>Ver1.1</b>	<b>Mar 2022</b>
<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	<b>Ver1.0</b>	<b>Jan 2022</b>

## [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 1.0.1.4 to 1.0.1.5**. If DFM has never been installed on the server, skip this process and follow the new installation process document.

Items		User privilege		Description
		root	rootless	
Selinux mode	Permissive	CASE Red Hat 1	CASE Red Hat 3	
	Enforcing	CASE Red Hat 2		

Table 1-1 The Red Hat Case

### 1.2. Why patch DFM Podman images, etc.?

- Updated bug issues
- New feature: Configurable device group polling

### 1.3. What changed in version 1.0.1.6 ?

	Category	Summary
1	Set up device group polling	- Using DFM cli
2	Mysql	- Alter config file - Alter table
3	Docker image	- dfm-core image - dfm-console image

1. Changed two Docker image files when compared with the previous DFM 1.0.1.3 version:
  - dfm-core
  - dfm-console

Podman images	DFM 1.0.1.5	DFM 1.0.1.6 【CASE Red Hat 1】 【CASE Red Hat 2】	DFM 1.0.1.6 【CASE Red Hat 3】
dfm-core	repository : localhost/dfm-core tag : 1.0.1.5	repository : localhost/dfm-core tag : 1.0.1.6	repository : localhost/dfm-core tag : 1.0.1.6-rootless
dfm-console	repository : localhost/dfm-console tag : 1.0.1.5	repository : localhost/dfm-console tag : 1.0.1.6	repository : localhost/dfm-console tag : 1.0.1.6-rootless
dfm-minio	repository : localhost/minio/minio tag : RELEASE.2020-06-01T17-28-03Z	repository : localhost/minio/minio tag : RELEASE.2020-06-01T17-28-03Z	repository : localhost/minio/minio tag : RELEASE.2020-06-01T17-28-03Z
dfm-mysql	repository : localhost/mysql/enterprise-server tag : 8.0	repository : localhost/mysql/enterprise-server tag : 8.0	repository : localhost/mysql/enterprise-server tag : 8.0

dfm-proxy	repository : localhost/haproxytech/ haproxy-debian tag : 2.1.4	repository : localhost/haproxytech/haproxy-debian tag : 2.1.4	repository : localhost/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

The following command shows you how to install the v1.0.1.6 tar compress package:

Items		User privilege	
		root	rootless
Selinux mode	Permissive	CASE Red Hat 1 <a href="#">sec-dfm_1.0.1.6.tar.gz</a>	CASE Red Hat 3 <a href="#">sec-dfm_1.0.1.6-rootless.tar.gz</a>
	enforcing	CASE Red Hat 2 <a href="#">sec-dfm_1.0.1.6-root-enforcing.tar.gz</a>	

#### 1) extract package

```
tar -zxvf sec-dfm_1.0.1.6-{package type}.tar.gz -C /tmp
```

#### example)

```
$ tar -zxvf sec-dfm_1.0.1.6-rootless.tar.gz
/tmp/sec-dfm_1.0.1.6-rootless/
/tmp/sec-dfm_1.0.1.6-rootless/tmp/
....
/tmp/sec-dfm_1.0.1.6-rootless/usr/
/tmp/sec-dfm_1.0.1.6-rootless/usr/bin/
/tmp/sec-dfm_1.0.1.6-rootless/usr/bin/dfm
```

### 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.

Please add "group\_concat\_max\_len=4096" at 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 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.

```
podman ps -a
```

### 1.4.4. Alter Table

1) Alter table using an SQL script

**1) Executing an SQL script**

```
podman exec -i dfm-mysql mysql -uroot -p[password] < /tmp/sec-dfm_1.0.1.6-rootless/tmp/mysql-
query/patch_1.0.1.6.sql
```

**1.4.5. DFM CLI Update****【STEP 1】** Copy the DFM CLI.

```
cp /tmp/sec-dfm_1.0.1.6{package type}/usr/bin/dfm /dfm/bin/
```

**Example)**

```
cp /tmp/sec-dfm_1.0.1.6rootless/usr/bin/dfm /dfm/bin
```

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

```
ll /dfm/bin/dfm
```

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

```
dfm version
```

```
version: 1.0.5 Red Hat Enterprise Linux release 8.4 (Ootpa)
```

**1.4.6. DFM Core Update**The released **Core** image information is as follows:**【STEP01】** Stop the running core server.

```
dfm terminate dfm-core
```

**【STEP02】** Load the released podman image.**【CASE Red Hat 1】**

```
podman load -i /tmp/sec-dfm_1.0.1.6tmp/dfm/images/dfm-core_1.0.1.6tar
```

**【CASE Red Hat 2】**

```
podman load -i /tmp/sec-dfm_1.0.1.6root-enforcing/tmp/dfm/images/dfm-core_1.0.1.6tar
```

**【CASE Red Hat 3】**

```
podman load -i /tmp/sec-dfm_1.0.1.6rootless/tmp/dfm/images/dfm-core_1.0.1.6rootless.tar
```

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

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

**【CASE Red Hat 1】 【CASE Red Hat 2】**

```
dfm config set core_img_tag=1.0.1.6
```

**【CASE Red Hat 3】**

```
dfm config set core_img_tag=1.0.1.6-rootless
```

**【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

```
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.

```
podman healthcheck run dfm-core
healthy
```

### 1.4.7. DFM Admin Console Update

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

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

```
dfm terminate dfm-console
```

**【CASE Red Hat 1】**

```
podman load -i /tmp/sec-dfm_1.0.1.6/tmp/dfm/images/dfm-console_1.0.1.6tar
```

**【CASE Red Hat 2】**

```
podman load -i /tmp/sec-dfm_1.0.1.6-root-enforcing/tmp/dfm/images/dfm-console_1.0.1.6.tar
```

**【CASE Red Hat 3】**

```
podman load -i /tmp/sec-dfm_1.0.1.6-rootless/tmp/dfm/images/dfm-console_1.0.1.6-
rootless.tar
```

**【STEP02】** Load the released podman image.**【STEP03】** Change the repository and tag's configuration.

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

**【CASE Red Hat 1】 【CASE Red Hat 2】**

```
dfm config set console_img_tag=1.0.1.6
```

**【CASE Red Hat 3】**

```
dfm config set console_img_tag=1.0.1.6-rootless
```

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

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

**【STEP05】** Start up the server.

- Admin Console Server

```
dfm start dfm-console
```

**【Validation】**



Make sure the “mysql” container is in a healthy state. It may take some time until its state is healthy.

```
podman healthcheck run dfm-console  
healthy
```

< EOF (End Of File) >