



# Memorandum

## E-resept Forskrivningsmodul

Thula – Nordic Source Solutions

**Subject** | Step-by-step instructions to install new RF certificates

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## 1 Document control

*This section describes how to version, file, distribute and improve this document.*

### 1.1 Revision tracking

This document is subject to revision control so that after each formal change a new version shall be created with a new data and revision number. At any given time the revision with the highest version number is considered the official and valid version of this document.

### 1.2 Document source, storage and distribution

The source of this document is maintained by Thula, and stored in the Thula document repository. This document shall be distributed in PDF format only.

### 1.3 Revision history

Date	Version	Author/Approved by	Description
2017-02-17	2.1	Atli Sturluson	Updated to refer to a newer version of the RF certificate. Added section on updating the certificate using the FM Admin client
2015-12-09	2.0	Ægir Örn Leifsson	Status set to approved.
2015-11-19	1.0	Fernando Meira	Distributed version.

### 1.4 Reader comments

If you have any comments on the contents of this document please send those by e-mail to the author.

### 1.5 Glossary

Abbreviation	Explanation or web reference
CA	Certification Authority
MMC	Microsoft Management Console
UAC	User Access Control
FM	Forskrivning Module

## 2 Intro

This document aims at providing instructions in a step-by-step form for installing the new RF public certificate, along with the Bypass trusted Root and CA certificates that validates it. It also instructs on how to add the Bypass trusted Root and CA certificates used in the FEST communication.

## 3 Gathering all required files

To proceed with the installation the following files are required:

File	Description
RF_sert_2017_2020_krypt_Prod.cer	RF public certificate - valid 2015-2018 Thumbprint: d08106634977caef21645bd095dcd0de64cf808
BPClass3CA3.cer	Bypass Class 3 CA 3. Only needed when installing the RF certificate for the first time Thumbprint: d08106634977caef21645bd095dcd0de64cf808
BPClass3RootCA.cer	Bypass Class 3 Root CA. Only needed when installing the RF certificate for the first time Thumbprint: dafaf7fa6684ec068f1450bdc7c281a5bca96457

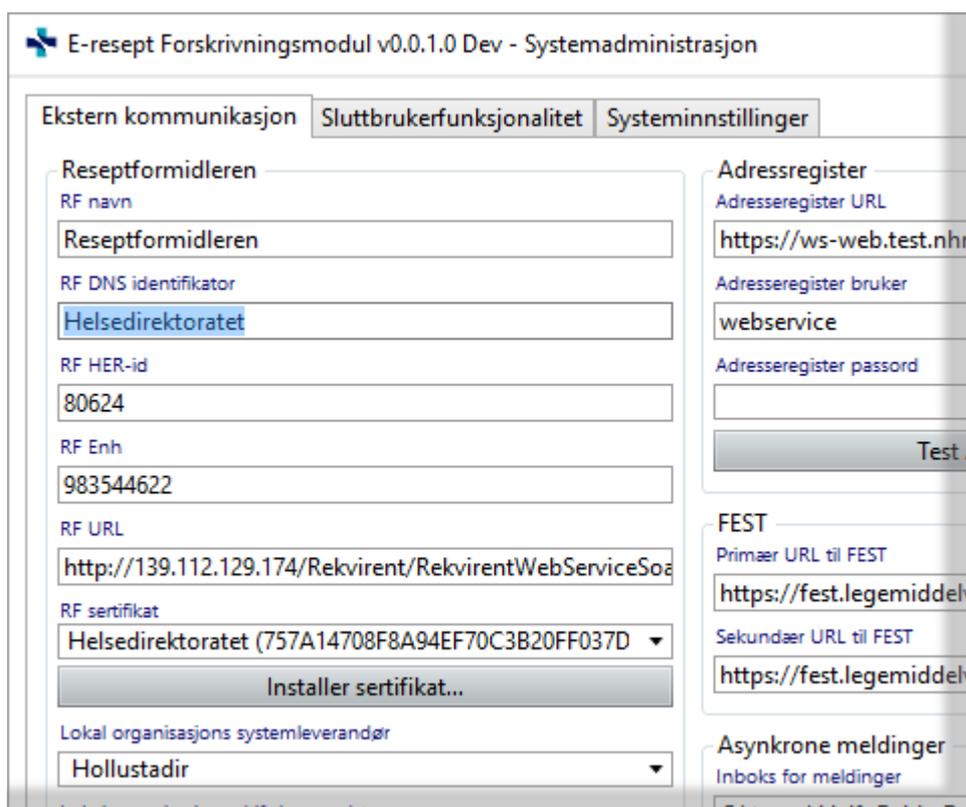
## 4 Updating the RF certificate using the FM Amin client

If the previous version of the RF certificate is already installed on the FM server machine, the FM Admin client (“Systemadministrasjon”) can be used to update the RF certificate to the latest version.

### 4.1 Installing the new RF certificate

To install the new version of the RF certificate, the following steps are needed:

1. On the machine where the FM Server is installed, run the FM Systemadministrasjon application as an Windows administrator (right-click the Systemadministrasjon icon and select “Run as administrator”). This will open the FM Amin client. After logging in, select “Administrer systemkonfigurering” to open the system setup, which should now look like this:



E-resept Forskrivningsmodul v0.0.1.0 Dev - Systemadministrasjon

Ekstern kommunikasjon | Sluttbrukerfunksjonalitet | Systeminnstillinger

**Reseptformidleren**

RF navn  
Reseptformidleren

RF DNS identifikator  
Helsedirektoratet

RF HER-id  
80624

RF Enh  
983544622

RF URL  
http://139.112.129.174/Rekvirent/RekvirentWebServiceSoa

RF sertifikat  
Helsedirektoratet (757A14708F8A94EF70C3B20FF037D)

Installer sertifikat...

Lokal organisasjons systemleverandør  
Hollustadir

**Adressregister**

Adresseregister URL  
https://ws-web.test.nhr

Adresseregister bruker  
webservice

Adresseregister passord

Test

**FEST**

Primær URL til FEST  
https://fest.legemidde

Sekundær URL til FEST  
https://fest.legemidde

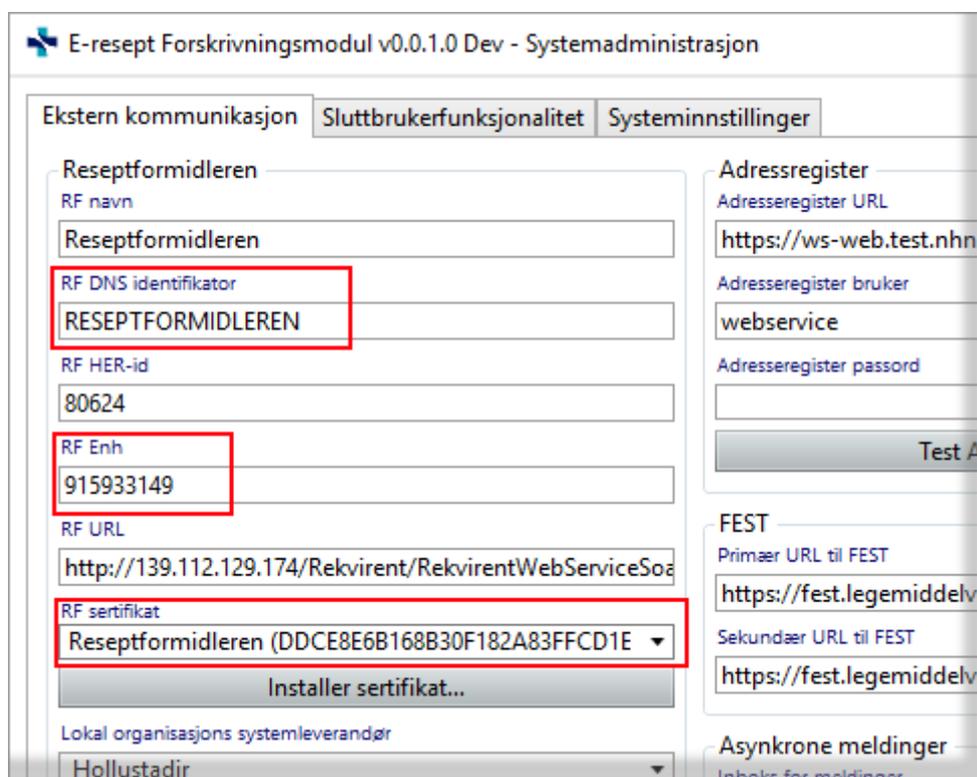
**Asynkrone meldinger**

Inboks for meldinger

2. Click the “Installer sertifikat...” button and navigate to the RF certificate file “RF\_sert\_2017\_2020\_krypt\_Prod.cer”. This will install the new certificate in the correct Windows certificate store.
3. In the “RF sertifikat” combo-box above the “Installer sertifikat...” button, select the new certificate (marked in red below):

RF sertifikat		Sekundær URL til FEST		Organisasjonsnummer/ID: 12	
Navn:	Reseptformidleren	Utgitt for:	RESEPTFORMIDLEREN		
Gyldig til:	3.1.2020	Utgitt av:	Buypass Class 3 CA 3		
Tiltenkt bruk:	DataEncipherment, DigitalSignature, KeyEncipherment, None	Avtrykk:	DDCE8E6B168B30F182A83FFCD1E8A7A0603FFEB		
Navn:	Thula Legekantor	Utgitt for:	THULA LEGEKONTOR		
Gyldig til:	18.1.2020	Utgitt av:	Buypass Class 3 Test4 CA 3		
Tiltenkt bruk:	NonRepudiation, None	Avtrykk:	87F4F9D8D31FB452980829347FCA5211E8852584		
Navn:	Helsedirektoratet	Utgitt for:	HELSEDIREKTORATET		
Gyldig til:	1.9.2018	Utgitt av:	Buypass Class 3 CA 3		
Tiltenkt bruk:	DataEncipherment, DigitalSignature, KeyEncipherment, None	Avtrykk:	757A14708F8A94EF70C3B20FF037DD5F6B315F07		
Navn:	Thula Legekantor	Utgitt for:	THULA LEGEKONTOR		
Gyldig til:	18.1.2020	Utgitt av:	Buypass Class 3 Test4 CA 3		
Tiltenkt bruk:	DataEncipherment, DigitalSignature, KeyEncipherment, None	Avtrykk:	1373FBC99E4B79ABA795998DDC60D0204AF729EB		
Navn:	Ukjent	Utgitt for:	Ukjent		
Gyldig til:	Ukjent	Utgitt av:	Ukjent		
Tiltenkt bruk:	Ukjent	Avtrykk:			

- Update the “RF DNS indentifikator” field to “RESEPTFORMIDLEREN”
- Update the “RF Enh” field to “915933149”. The window should now look like this:

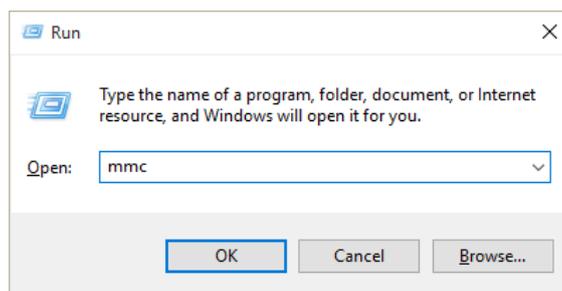


- Press “Lagre” and you are done!
- The RF connection can be tested by selecting “Administrer organisasjonskonfigurering” and pressing the “Test RF kobling” button.

## 5 Manual installation of the RF-related certificates (for advanced users)

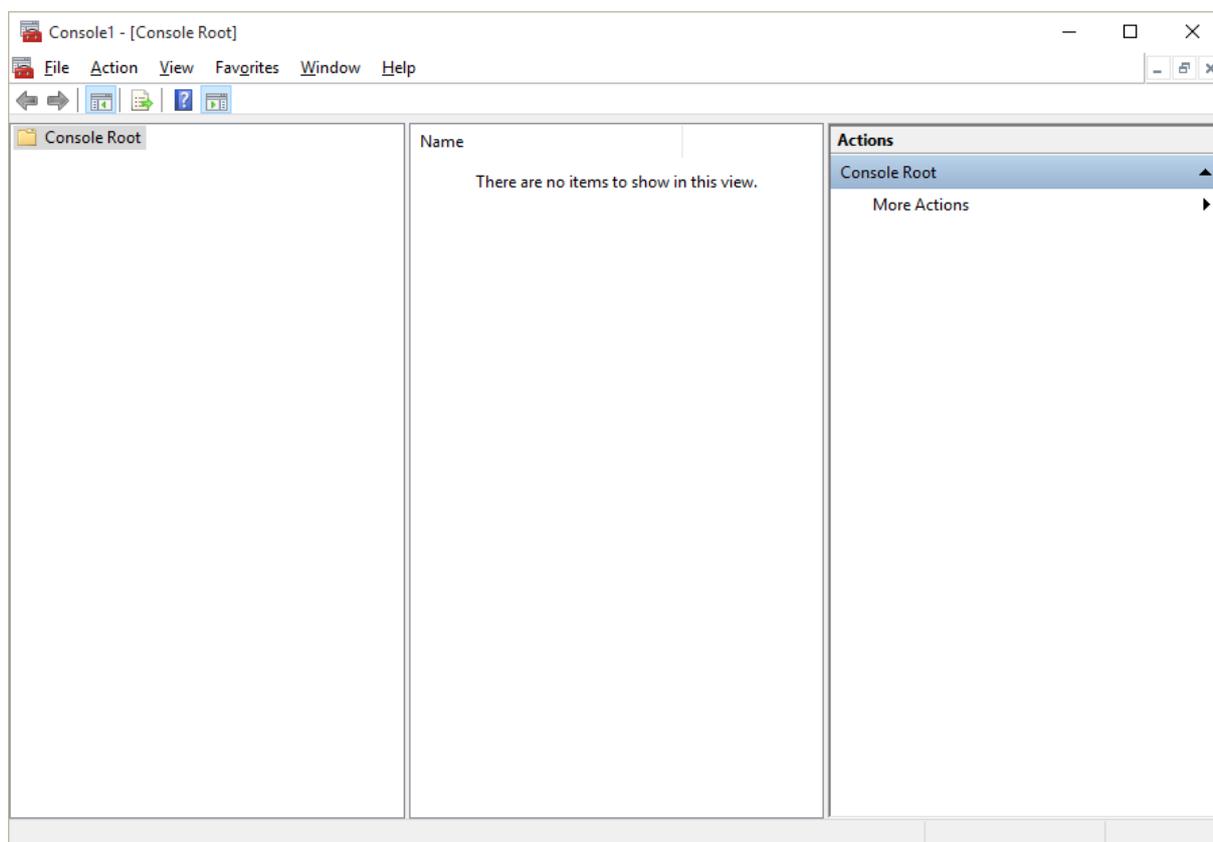
### 5.1 Open the Microsoft Management Console

As a user with high privileges, open the Microsoft Management Console (MMC) by running a command (START > select “Run...” or START > type “run”, depending on the version of Windows).



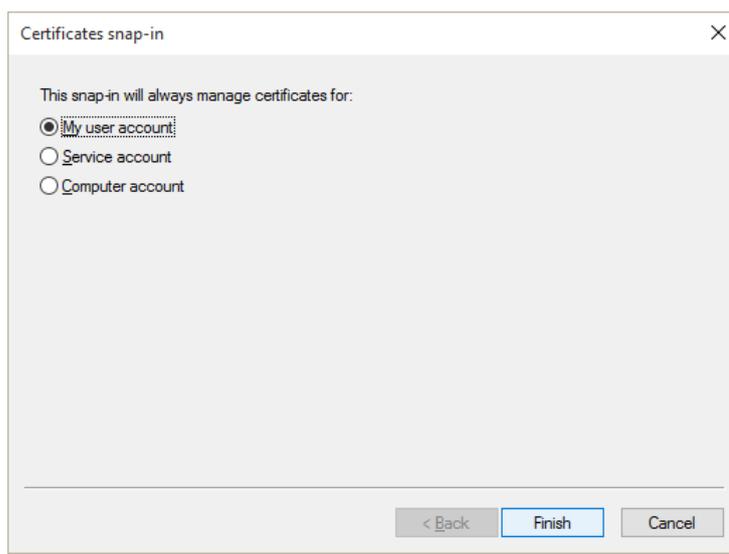
Depending on your UAC settings, a popup dialog may appear asking to confirm that you want to execute the MMC application. If so, select yes.

The MMC application opens empty as shown the next screenshot.



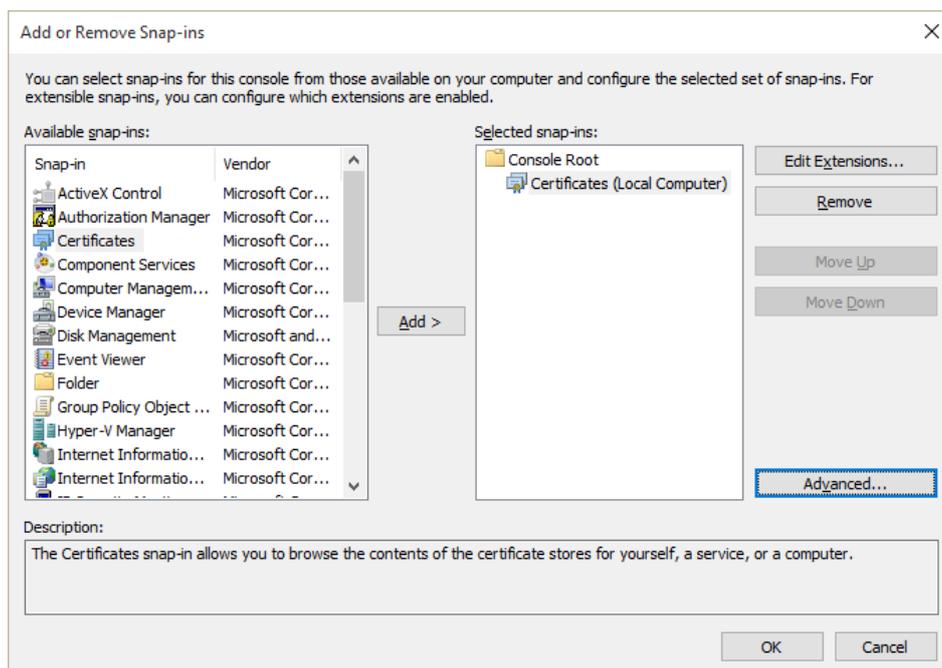
Load the certificate lists by doing the following:

1. File > Add/Remove Snap-in... (or use shortcut key CTRL+M).
2. Select “Certificates” from the available snap-ins list.
3. Press the “Add >” button located between the two lists.
4. The following popup appears.
5. Select to manage certificates for “Computer account”.



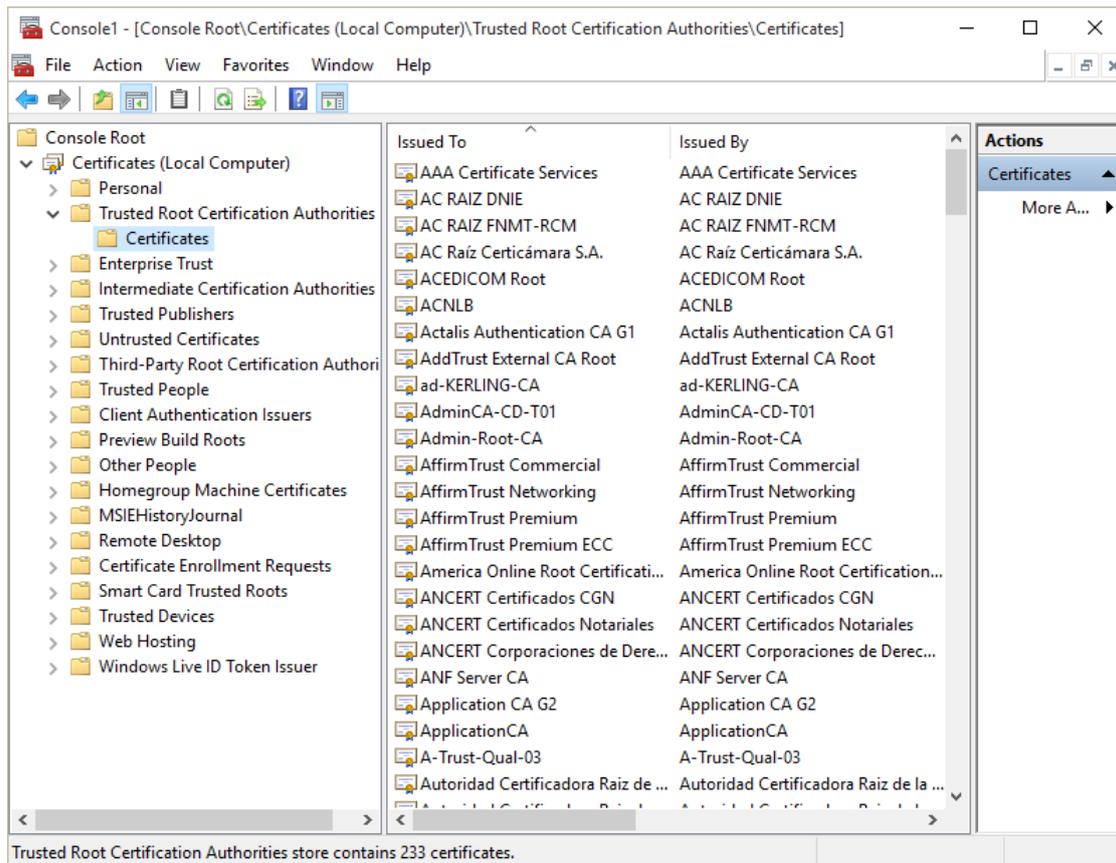
6. A “select computer” dialog is shown. Change the default selection to “Local computer”, and press the Finish button.

At the end of this process there should be one certificate list chosen, visible on the right-hand-side (“Selected snap-ins”) as shown the following screenshot.



Pressing OK should show those two lists on the MMC window.

Start by expanding the list marked as “Certificates (Local Computer)” and within that list expand the “Trusted Root Certification Authorities” folder and select the inner “Certificates” folder. A list of already installed certificates should appear in the central panel, as shown in the following screenshot.

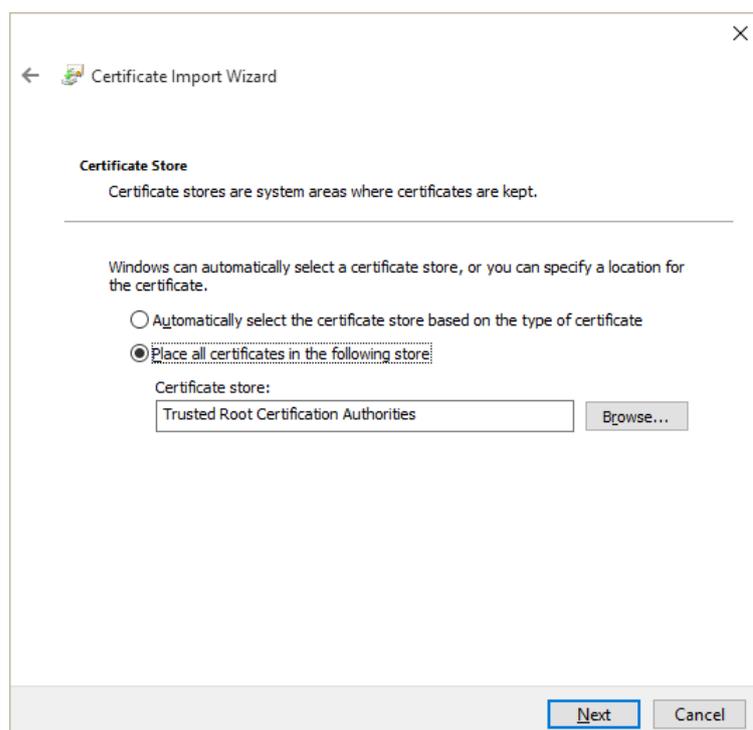


## 5.2 Import CA certificates

This step is only needed if the Bypass certificates have not already been installed on the machine. This will not be need when updating the RF certificate from a previous version.

Import the Bypass Root CA certificate by doing the following:

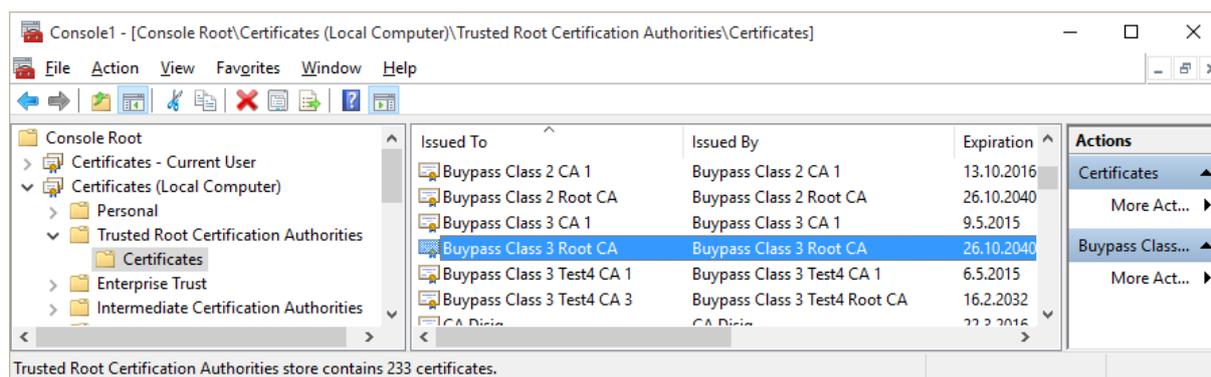
1. With the Certificates folder selected, inside Trusted Root Certification Authorities, open the import wizard by selecting Action > All Tasks > Import...
2. A welcome screen should appear with the Local Machine store pre-selected. Click "Next".
3. Use the file dialog to select the "BPClass3RootCA.cer" file.
4. Press "Next" on the File to import screen.
5. A dialog to choose the Certificate Store appears. It should have preselected the option "Place all certificates in the following store" and have the working folder selected on the Certificate



store textbox, i.e., it should say “Trusted Root Certification Authorities”, as in the following screenshot. If that store is not pre-selected, use the “Browse” button to select it from the list of available stores. Press “Next”.

6. A final wizard screen appears presenting the overview of the import process. Confirm that everything is as expected and press “Finish”.
7. A dialog is shown informing that the import was successful.

You should now be able to find the imported certificate in the list of installed certificates, located in the central panel of the MMC window, like in the example:



To install the Buypass Class 3 CA 3 certificate, repeat all previous 7 steps but select the file named “BPClass3CA3.cer” during step 3.

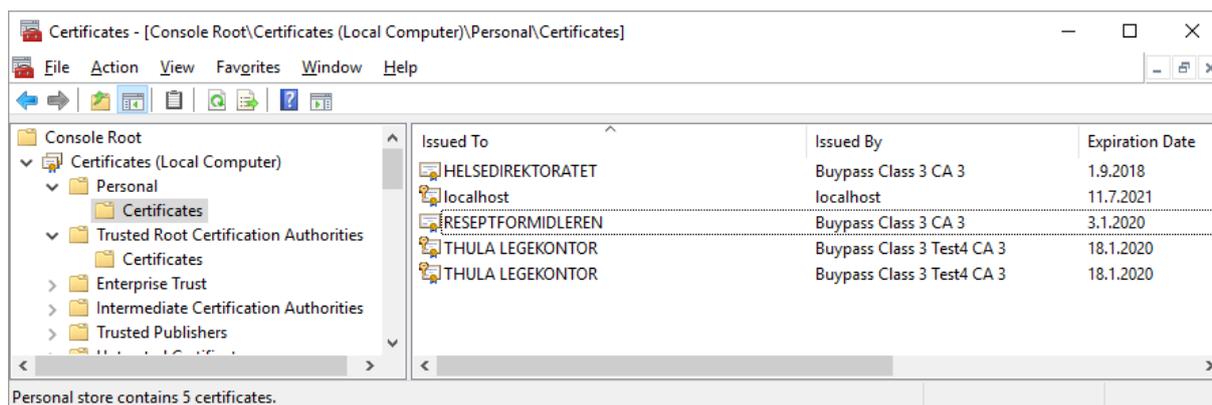
### 5.3 Install the RF public certificate

The RF public certificate should be installed in the Personal folder of the Local computer store.

It can be installed by performing the following steps:

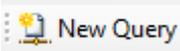
1. Select the folder “Certificates” inside “Personal” folder in MMC. See section 5.1 on how to initialize the MMC tool.
2. Open the import wizard by selecting Action > All Tasks > Import...
3. A welcome screen should appear with the Local Machine store pre-selected. Click “Next”.
4. Use the file dialog to select the “RF\_sert\_2017\_2020\_krypt\_Prod.cer” file.
5. Press “Next” on the File to import screen.
6. A dialog to choose the Certificate Store appears. It should have preselected the option “Place all certificates in the following store” and have the working folder selected on the Certificate store textbox, i.e., it should say “Personal”. If not, use the “Browse” button to select the Personal folder. Press “Next”.
7. A final wizard screen appears presenting the overview of the import process. Confirm that everything is as expected and press “Finish”.
8. A dialog is shown informing that the import was successful.

The central panel of the MMC window should now include the imported certificate, as shown in the following screenshot:



## 5.4 Update the FM system

In order for the FM installation to use the new RF certificate, three fields on the FM database need to be updated. The package with the certificates include a SQL file, which has these operations prepared. To use you only need to change the database name. Follow these steps to perform the required operations:

1. Open SQL Management Studio.
2. Connect to the database used by the FM installation to be updated with a user that has write permissions on the database.
3. The next steps are divided in two depending on if you are going to be using the provided SQL file or typing in the queries manually.
4. Open a new query window by using the shortcut CTRL+N or clicking on “New query button: 

5. Select the FM database used from the combobox or execute the following script (using as example “Leidolfsey” as the FM database name):

```
use Leidolfsey
```

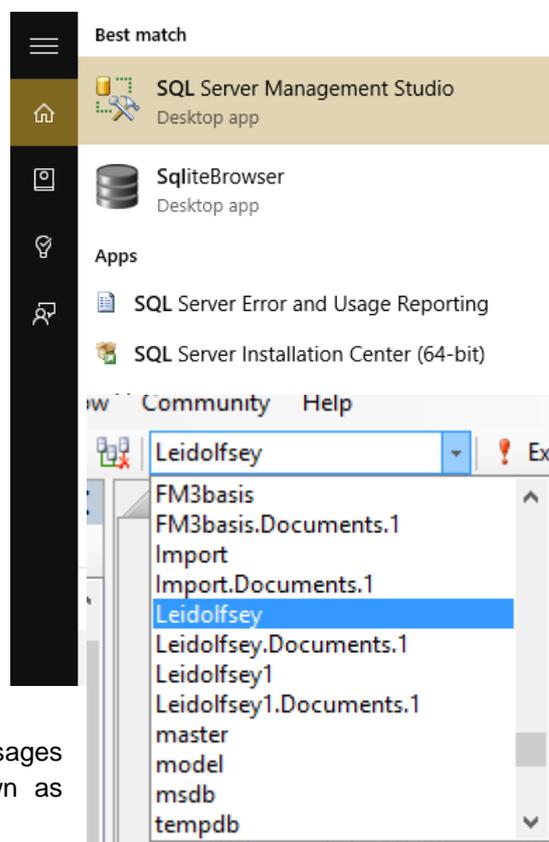
The following message should appear in messages panel and the database name should be shown as selected on the available databases combobox.

Command(s) completed successfully.

6. Erase all scripts, if any, and run the following script to update the RF certificate that FM uses (the value is the certificate’s thumbprint, available on the details of the certificate):

```
update SystemConfiguration
set Value = 'ddce8e6b168b30f182a83ffcd1e8a7a0603ffefb'
where Id = 'RF.Certificate'
```

7. Erase all scripts, if any, and run the following script to update the RF DNS identity (the value is present in the RF certificate details, under property Subject.CN):



```
update SystemConfiguration
  set Value = 'RESEPTFORMIDLEREN'
  where Id = 'RF.DnsIdentity'
```

8. Erase all scripts, if any, and run the following script to update the RF id (the value is present in the RF certificate details, under property Subject.SerialNumber):

```
update SystemConfiguration
  set Value = '915933149'
  where Id = 'RF.Id'
```

9. For steps 5 to 7, the following success message should appear on the messages panel:

```
(1 row(s) affected)
```

If all steps in this memo have been successfully performed, then the FM installation should be configured to use the new RF certificate and all the certificates needed should have been installed.