MCM-Service Installation
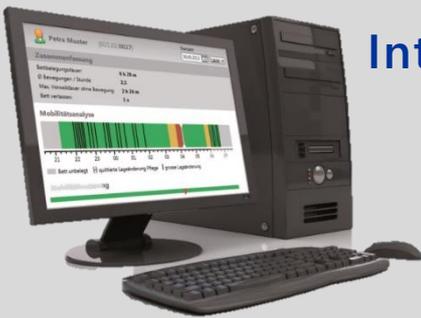
Integration with RAIsoft ePDok – Manual

Release Date: 16.01.2023

INS-000061.en – 1.2.0

Content

1.   Scope

This document describes the installation procedure for the software interface "MCM-Service".

MCM-Service is a REST-API for the *Mobility & Care Manager* database. This enables the integration into 3rd-party applications such as RAIsoft ePDok.

Installation of the *Mobility & Care Manager* application is not covered by this document (→ see instruction M-000011).

2.   Terms

Term	Meaning
MCM	Mobility & Care Manager
DB	Database
MCM-Service	Product name of the REST-service
ePDok	Nursing documentation software from Q-Sys RAIsoft

3. Preparation

3.1. Update Mobility & Care Manager

Make sure that the latest revision of MCM is installed.

3.2. DB Backup

Take a backup of the database. By default, the DB is named "MobilityMonitoring".

3.3. License for MCM-Service

Apply for an online license for the MCM-Service.

4. Installation procedure

4.1. Installation preparation

- An older Version of MCM-Service is installed
    - Stop the existing Service
    - Deinstall the existing Service
- Make sure **.Net Core 3.1** and **ASP.NET Core Runtime 3.1** are installed

4.2. Run preparation script

When updating from a MCM version < 1.2.6.0, then there are no Patient numbers. This provides a way to mark all existing patients with a dummy "number" string (e.g., 'MCM').
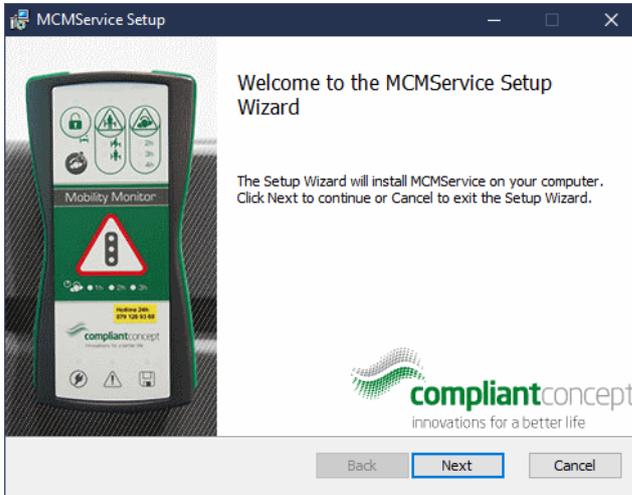
```sql
Update [dbo].[Patient]
set [PatientNumber] = 'MCM', [Lastname] = [Lastname]+'_'
where [PatientNumber] = null or [PatientNumber] = '';

select p.Lastname, p.Firstname, p.PatientNumber from [dbo].[Patient] p;
```

Script_Merge-Patients_01Preparation.sql
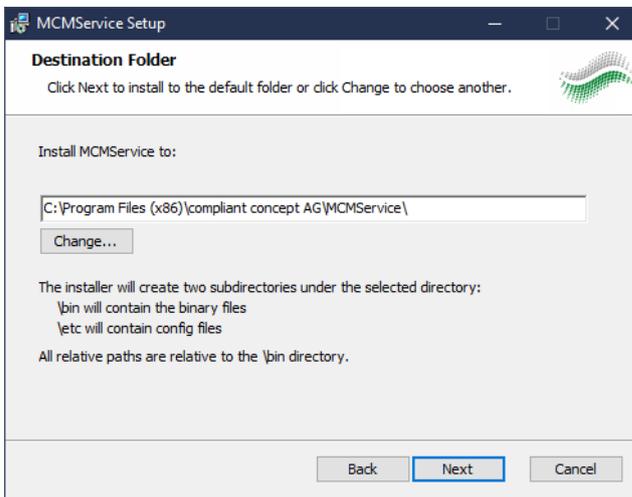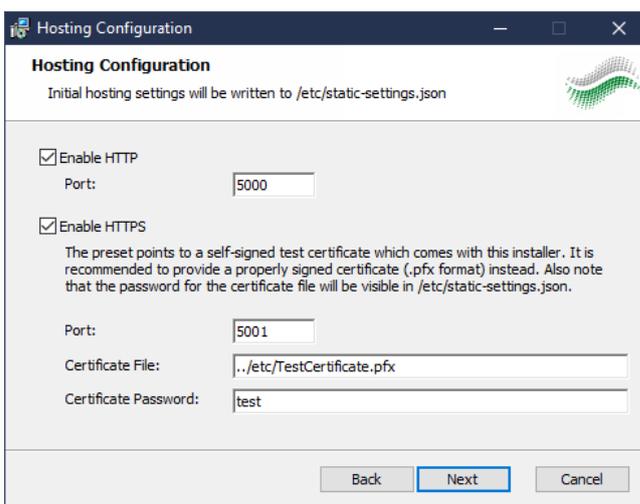
4.3. Install MCM-Service

Run the setup wizard for the MCM-Service on the application server.
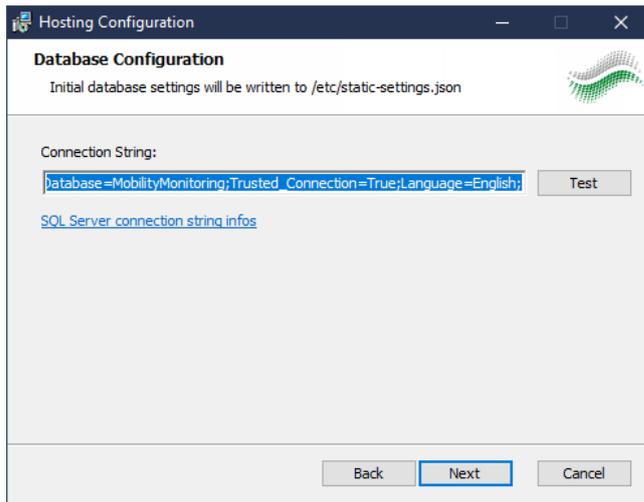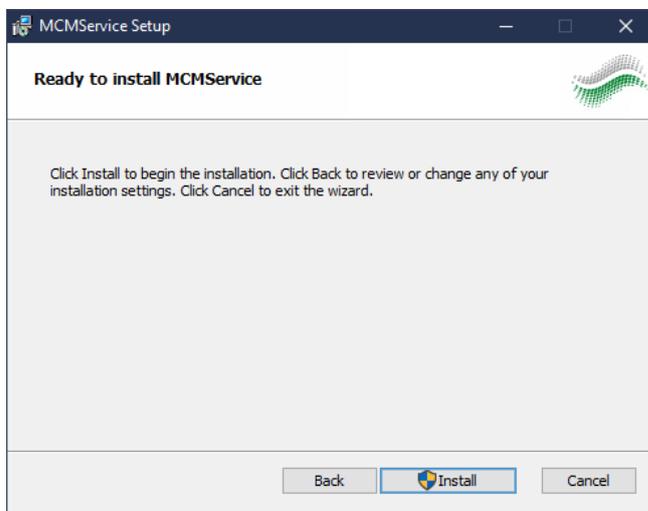

- Click **Next**

- If necessary, you can adjust the installation folder here.
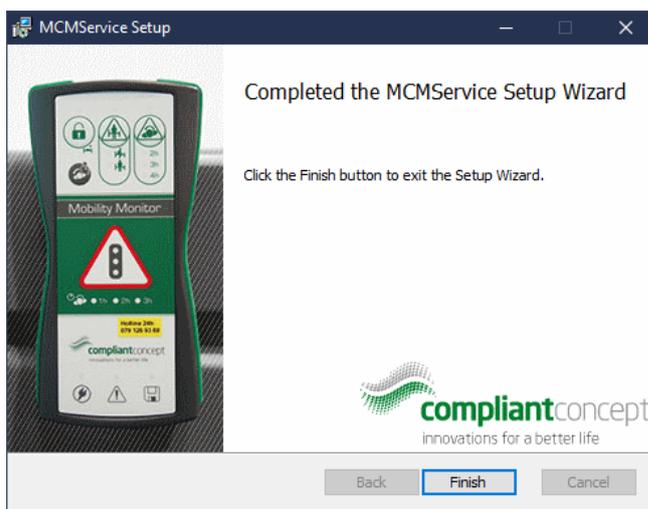
- Then click **Next**.

- Enable HTTP and adjust the Port.

- Then click **Next**.

- If necessary, Adjust the connection String.

- Then click **Next.**

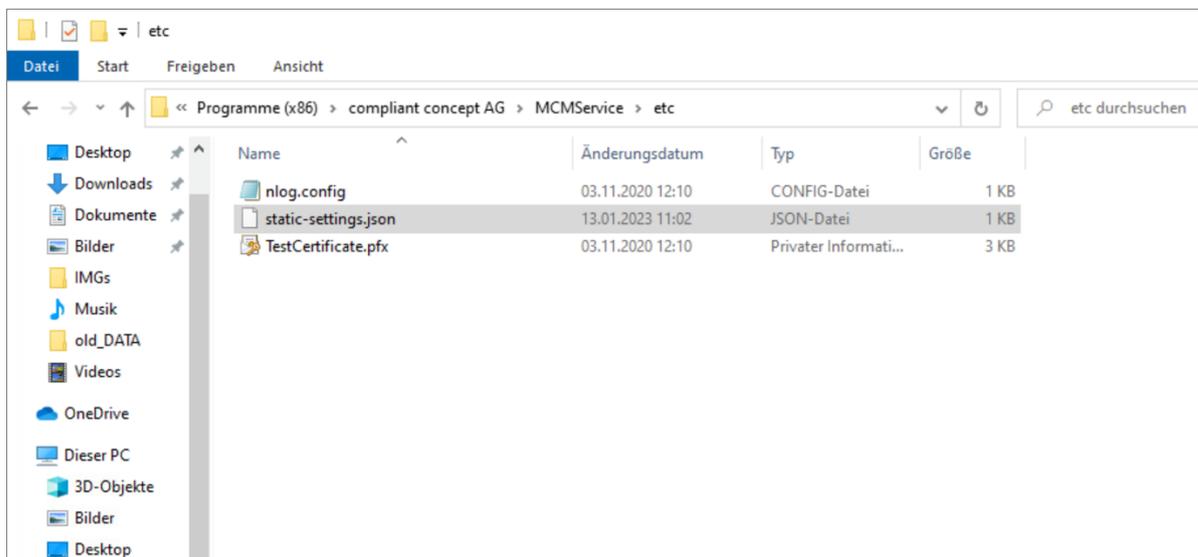- Click **Install**.

- Click **Finish**.

4.4. Open Firewall

Open ports 5000 – 5001 for incoming TCP traffic on the server.

4.5. Customise Authentication for Operation with SQL Server 2019 Express

If MCM-Service is operated in combination with MS SQL Server 2019 Express, it is possible that the service cannot be started, because MCM-Service tries to log on to the SQL Server with a wrong Microsoft user. The problem can be circumvented by adjusting the authentication.

1. Navigate in Explorer to: C:\Program Files (x86)\compliant concept AG\MCMService\etc

2. Open the file "static-settings.json" with an editor that you can run as an admin
   (e.g. *https://notepad-plus-plus.org/downloads/*   or   *https://code.visualstudio.com/*):

3. As in the cased line below (original setting), change from "Trusted_Connection=True" to "User=sa; Password=<your-password>" (altered setting), and specify the user and password of the SQL server.
   ➔ According to the Instructions INS-000033_2.0.1, step "Database Engine Configuration", on page 8, you have assigned a PW for the SQL server/database for the SuperAdmin (sa). Replace <your password> with the password you set in the step "Database Engine Configuration".

   ℹ️ **INS-000033** can be downloaded from our website: http://www.compliant-concept.ch/de/support/
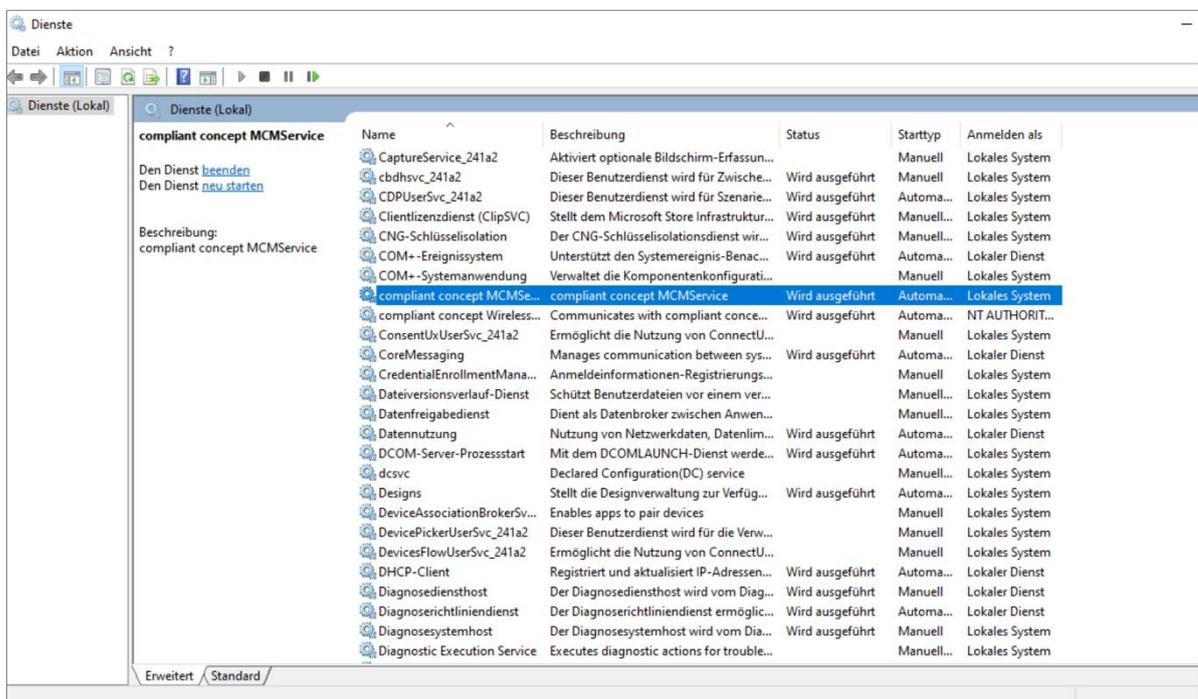
Original setting

```
{
  "Urls": "http://*:5000;https://*:5001",
  "Https": {
    "Enabled": true,
    "CertificateFile": "../etc/TestCertificate.pfx",
    "Password": "test"
  },
  "Database": {
    "ConnectionString": "Server=.\\SQLEXPRESS;Database=MobilityMonitoring;Trusted_Connection=True;Language=English;"
  }
}
```

Altered setting	

```json
{
    "Urls": "http://*:5000;https://*:5001",
    "Https": {
        "Enabled": true,
        "CertificateFile": "../etc/TestCertificate.pfx",
        "Password": "test"
    },
    "Database": {
        "ConnectionString": "Server=.\\SQLEXPRESS;;Database=MobilityMonitoring;User ID=sa;Password=<Ihr-Passwort>;Language=English;"
    }
}
```

4. Save the customised file "static-settings.json" in the folder
    C:\Program Files (x86)\compliant concept AG\MCMService\etc

5. Reboot the server / client

6. In "Services", check if the "compliant concept MCMService" can now be started.

4.6. Test service installation

In a web browser, enter the URL of the newly installed MCM-Service.
Example: http://localhost:5000/swagger

5. Integration with ePDok

5.1. Admin settings in ePDok

Enter the MCM-Service endpoint in the ePDok settings.

When successful, then the wards (departments) and patients from ePDok are synchronized to Mobility & Care Manager.

5.2. Check Patient list in in MCM

Check if for each patient in the Mobility & Care Manager database, there are two entries. One with the dummy patient number 'MCM' from the preparation script in step → 4.1.

5.3. Merge patients in database

Run the following script:

```sql
/* Merge Patients from MCM with Patients synced by MCM-Service -- STEP 2 */

/* Move all data assigned to patient
   from: Patient with Lastname ending with '_'
   to: Patient with same Lastname and Firstname and Patientnumber is not 'MCM'
 */

-- Move Data
update [dbo].[MonitoringFile]
set [PatientId] = pRai.[PatientId]
from Patient pRai
join Patient pMCM on (substring(pMCM.Lastname, 0, len(pMCM.Lastname)) = pRai.Lastname
and pMCM.Firstname = pRai.Firstname)
where pRai.PatientNumber not like 'MCM' and [MonitoringFile].PatientId =
pMCM.PatientId;

-- Move Comments
update [dbo].[Comment]
set [PatientId] = pRai.[PatientId]
from Patient pRai
join Patient pMCM on (substring(pMCM.Lastname, 0, len(pMCM.Lastname)) = pRai.Lastname
and pMCM.Firstname = pRai.Firstname)
where pRai.PatientNumber not like 'MCM' and [Comment].PatientId = pMCM.PatientId;

-- Move [dbo].[CustomMonitoringEvent]
update [dbo].[CustomMonitoringEvent]
set [PatientId] = pRai.[PatientId]
from Patient pRai
join Patient pMCM on (substring(pMCM.Lastname, 0, len(pMCM.Lastname)) = pRai.Lastname
and pMCM.Firstname = pRai.Firstname)
where pRai.PatientNumber not like 'MCM' and [CustomMonitoringEvent].PatientId =
pMCM.PatientId;

-- Move [dbo].[Event]
update [dbo].[Event]
set [PatientId] = pRai.[PatientId]
from Patient pRai
join Patient pMCM on (substring(pMCM.Lastname, 0, len(pMCM.Lastname)) = pRai.Lastname
and pMCM.Firstname = pRai.Firstname)
where pRai.PatientNumber not like 'MCM' and [Event].PatientId = pMCM.PatientId;
```

```sql
-- Move [dbo].[MobilityToleranceSettings]
update [dbo].[MobilityToleranceSettings]
set [PatientId] = pRai.[PatientId]
from Patient pRai
join Patient pMCM on (substring(pMCM.Lastname, 0, len(pMCM.Lastname)) = pRai.Lastname
and pMCM.Firstname = pRai.Firstname)
where pRai.PatientNumber not like 'MCM' and [MobilityToleranceSettings].PatientId =
pMCM.PatientId;

-- Move [dbo].[Observation]
update [dbo].[Observation]
set [PatientId] = pRai.[PatientId]
from Patient pRai
join Patient pMCM on (substring(pMCM.Lastname, 0, len(pMCM.Lastname)) = pRai.Lastname
and pMCM.Firstname = pRai.Firstname)
where pRai.PatientNumber not like 'MCM' and [Observation].PatientId = pMCM.PatientId;

-- Move [dbo].[Observation]
update [dbo].[Observation]
set [PatientId] = pRai.[PatientId]
from Patient pRai
join Patient pMCM on (substring(pMCM.Lastname, 0, len(pMCM.Lastname)) = pRai.Lastname
and pMCM.Firstname = pRai.Firstname)
where pRai.PatientNumber not like 'MCM' and [Observation].PatientId = pMCM.PatientId;
```

Script_Merge-Patients_02.sql

5.4. Cleanup

Run the following script to cleanup the database.

```sql
/* Merge Patients from MCM with Patients synced by MCM-Service -- STEP 3 */

/* cleanup after Merging Patients */
/* delete Patients where Lastname ends with '_' and PatientNumber = 'MCM' */

-- select Patients without data (and PatientNumber is 'MCM'):
select p.PatientNumber, p.Lastname, p.Firstname, f.* from Patient p
left join dbo.MonitoringFile f on f.PatientId = p.PatientId
where MonitoringFileId is null and p.PatientNumber = 'MCM'
order by p.Lastname asc;

-- now delete!
delete p
from Patient p
left join dbo.MonitoringFile f on f.PatientId = p.PatientId
where MonitoringFileId is null
      and Lastname like '%_' and PatientNumber = 'MCM';

-- remove PatientNumber "MCM":
update Patient
set PatientNumber = null
where PatientNumber = 'MCM';
```

Script_Merge-Patients_02.sql

6. Technical Support

Do you have any questions about the *Mobility & Care Manager* or one of its utilities?
Our support team will be happy to assist you by phone or email.

Switzerland

Telephone, main number:	+41 44 552 15 00
Telephone, support:	+41 44 552 15 03
Email:	support@compliant-concept.ch

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CH-5430 Wettingen
www.compliant-concept.ch

International	Support and contact addresses of distributors
	http://www.compliant-concept.ch/de/support

7. Change History

Version	Date	Change	Prepared	Reviewed	Approved
1.0.0	20.06.2018	First release	men	oca	bhu
1.0.1	21.11.2019	Front page design and table of contents unified	oca	blö	bhu
1.1.0	27.07.2021	Installation process clarified, .NET Core 3.1, Design 2021 integrated	oca	kba	oca
1.1.1	30.06.2022	Ch. 4.1: "ASP.NET Core Runtime" added	kba	oca	oca
1.2.0	16.01.2023	Ch. 4.5: "Customise Authentication for Operation with SQL Server 2019 Express" added, Ch. 6 "Technical Support" added, Ch. 7 "Change History" added,	sko	oca	