

MCM-Service Installation

Integration with RAIsoft ePDok – Manual

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INS-000061.en - 1.2.0





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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 (\rightarrow see instruction M-000011).

2. Terms

Term	Meaning
МСМ	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').

```
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.





Hosting Configuration Database Configuration Initial database settings will be written to /etc/static-settings.json Connection String: Patabase=Mobility/Monitoring;Trusted_Connection=True;Language=English; Test SQL Server connection string infos Back Next Cancel	 If necessary, Adjust the connection String. Then click Next.
MCMService Setup	• Click Install .
MCMService Setup Completed the MCMService Setup Wizard Click the Finish button to exit the Setup Wizard. Click the Finish button to exit the Setup Wizard. Click the Finish button to exit the Setup Wizard. Monorept Finish Cancel	• 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/*):



 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".

INS-000033 can be downloaded from our website: <u>http://www.compliant-concept.ch/de/support/</u>

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





- 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.

Dienste							
atei Aktion An	sicht ?						
Dienste (Lokal)	S Dienste (Lokal)						
	compliant concept MCMService	Name	Beschreibung	Status	Starttyp	Anmelden als	
	a high state in a share of the state in the state of the	CaptureService_241a2	Aktiviert optionale Bildschirm-Erfassun		Manuell	Lokales System	
	Den Dienst <u>beenden</u>	Cbdhsvc_241a2	Dieser Benutzerdienst wird für Zwische	Wird ausgeführt	Manuell	Lokales System	
	Den Dienst <u>neu starten</u>	CDPUserSvc_241a2	Dieser Benutzerdienst wird für Szenarie	Wird ausgeführt	Automa	Lokales System	
		Clientlizenzdienst (ClipSVC)	Stellt dem Microsoft Store Infrastruktur	Wird ausgeführt	Manuell	Lokales System	
	Beschreibung:	CNG-Schlüsselisolation	Der CNG-Schlüsselisolationsdienst wir	Wird ausgeführt	Manuell	Lokales System	
	compliant concept MCMService	COM+-Ereignissystem	Unterstützt den Systemereignis-Benac	Wird ausgeführt	Automa	Lokaler Dienst	
		COM+-Systemanwendung	Verwaltet die Komponentenkonfigurati		Manuell	Lokales System	
		compliant concept MCMSe	compliant concept MCMService	Wird ausgeführt	Automa	Lokales System	
		🔍 compliant concept Wireless	Communicates with compliant conce	Wird ausgeführt	Automa	NT AUTHORIT	
		ConsentUxUserSvc_241a2	Ermöglicht die Nutzung von ConnectU		Manuell	Lokales System	
		CoreMessaging	Manages communication between sys	Wird ausgeführt	Automa	Lokaler Dienst	
		CredentialEnrollmentMana	Anmeldeinformationen-Registrierungs		Manuell	Lokales System	
		Dateiversionsverlauf-Dienst	Schützt Benutzerdateien vor einem ver		Manuell	Lokales System	
		🖏 Datenfreigabedienst	Dient als Datenbroker zwischen Anwen		Manuell	Lokales System	
		Q Datennutzung	Nutzung von Netzwerkdaten, Datenlim	Wird ausgeführt	Automa	Lokaler Dienst	
		DCOM-Server-Prozessstart	Mit dem DCOMLAUNCH-Dienst werde	Wird ausgeführt	Automa	Lokales System	
		🔄 dcsvc	Declared Configuration(DC) service		Manuell	Lokales System	
		🖏 Designs	Stellt die Designverwaltung zur Verfüg	Wird ausgeführt	Automa	Lokales System	
		DeviceAssociationBrokerSv	Enables apps to pair devices		Manuell	Lokales System	
		DevicePickerUserSvc_241a2	Dieser Benutzerdienst wird für die Verw		Manuell	Lokales System	
		DevicesFlowUserSvc_241a2	Ermöglicht die Nutzung von ConnectU		Manuell	Lokales System	
		DHCP-Client	Registriert und aktualisiert IP-Adressen	Wird ausgeführt	Automa	Lokaler Dienst	
		Diagnosediensthost	Der Diagnosediensthost wird vom Diag	Wird ausgeführt	Manuell	Lokaler Dienst	
		Diagnoserichtliniendienst	Der Diagnoserichtliniendienst ermöglic	Wird ausgeführt	Automa	Lokaler Dienst	
		Diagnosesystemhost	Der Diagnosesystemhost wird vom Dia	Wird ausgeführt	Manuell	Lokales System	
		Diagnostic Execution Service	Executes diagnostic actions for trouble	-	Manuell	Lokales System	

4.6. Test service installation

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



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 \rightarrow 4.1.

5.3. Merge patients in database

Run the following script:

```
/* 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;
```



```
-- 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.

```
/* 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: Telephone, support: Email:	+41 44 552 15 00 +41 44 552 15 03 <u>support@compliant-concept.ch</u>
compliant concept AG Jurastrasse 58 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	оса	bhu
1.0.1	21.11.2019	Front page design and table of contents unified	оса	blö	bhu
1.1.0	27.07.2021	Installation process clarified, .NET Core 3.1, Design 2021 integrated	оса	kba	оса
1.1.1	30.06.2022	Ch. 4.1: "ASP.NET Core Runtime" added	kba	оса	оса
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	оса	