

# RED interchange API - E-Prescription

The RED telematik API connects systems to E-Rezept-Fachdienst and provides functions to retrieve stored electronic prescriptions and to send dispense requests.

## Create electronic prescription

If a physician creates an electronic prescription in RED the system sends prescription data to E-Rezept-Fachdienst. If data was received successfully E-Rezept-Fachdienst returns a PrescriptionID for each prescription. The PrescriptionID is represented by the datamatrix-barcode on the Patientenausdruck. Alternatively patients may use the gematik mobile application to assign their prescriptions to a pharmacy which then is notified (see [RED interchange API - Messaging](#)).

### Ausdruck zur Einlösung Ihres E-Rezeptes

für <b>Marcel Diederich</b>	geboren am <b>26.07.1958</b>
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1x OMEPRASOL 1A PHARMA 10MG /  
30 HKN N1  
>>0-1-1-0<<  
PZN:00634845



Example for a Patientenausdruck for a single prescription. The barcode represents a PrescriptionID and AccessCode for each prescription. The barcode contains a string containing an array of urls; each url is represented by a string with this format:

### URL for a single prescription

```
Task/<Prescription ID>/$accept?ac=<AccessCode>
```

The barcode for the example Patientenausdruck above contains a single prescription with this content:

### Content of example barcode

```
{ "urls": [ "Task/160.000.165.685.331.97/$accept?  
ac=ba7aa9a32005be428e644dd86ed2e09ac297ba352967354db4a348ccbbc6e1b2" ] }
```

In this example the prescriptionID is 160.000.165.685.331.97 and AccessCode is ba7aa9a32005be428e644dd86ed2e09ac297ba352967354db4a348ccbbc6e1b2.

Prescriptions also may be created externally and sent to RED using the FHIR interface. In this scenario RED receives a data request including medication information (see [RED interchange API - Create Data Medication](#)). The request is extended by an action that tells RED to start the creation of an electronic prescription right after the patient and medication data has been created. RED initiates the prescription, prompts the user for the electronic signature, sends the signed prescription to Fachdienst and returns the task-id via interface.

### POST request to create new data and execute prescription submission

```
{{baseUrl}}/{{tenant}}/Bundle?action=$createerp
```

Creation of a new external prescription and processing may also be separated into two requests. In this scenario RED receives one or more data requests including medication information (see [RED interchange API - Create Data Medication](#)) and stores them in the database. Processing of the electronic prescriptions ist triggered by a separate request (e.g. at the end of the day). RED processes all stored prescriptions that have not been processed yet, prompts the user for the electronic signature, sends the signed prescriptions to Fachdienst and returns an array of all task-ids [RED interchange API - E-Prescription / Physician / Create prescriptions and bulk processing](#)

#### GET request triggering bulk processing requests for electronic prescriptions

```
{{baseURL}}/{{tenant}}/TI?action=$processerp
```

A specific SMC-B card to be used can be identified by additional parameter:

- cardreader: gives the IP address of the card terminal where the SMC-B is inserted
- cardname: if the SMC-B has been given a name (in terminal administration) it may be addressed by its name

#### Example of a request with additional parameter for card terminal ip address

```
{{baseURL}}/{{tenant}}/Task?action=$reject&prescriptionid=160.000.225.916.176.35  
&accesscode=e9ca6f1ac5038683183ec6137bad7bab8b4dc645bb2db5711f8c43c1a5594d19&cardreader=172.20.129.41
```

A name may be assigned to a SMC-B card in terminal administration

**KARTENLESER UND TELEMATIK-INFRASTRUKTUR**  
| **Referenz** IP-Adresse 172.20.129.249 | Mandant Mandant1 | Client ClientID1 | Workplace WorkplaceID1  
Authentifizierung Zertifikat  
[TI-Konnektor ändern](#) [BCS-Kartenleser hinzufügen](#) [TI-Kartenleser hinzufügen](#) [Client-Zertifikat herunterladen](#)  
 **Chipkarten-Simulator** Chipkarten-Simulator  
Dateien im Ordner /Users/alexanderwilms/Schnittstellen/Chipkartensimulator/Daten | Character-Set win [Kartenleser löschen](#)  
 **ORGA 900 USB Virtual Com Port BCS-Leser**  
DLL Ctorg32 | Port 0 [Ports ändern](#) [Kartenleser testen](#) [Kartenleser löschen](#)  
 **ST-1506-RU-TEST KT | DECHY**  
Ctld 00:1B:B5:07:A2:63 [Kartenleser löschen](#)  
 **SMB SMC-B Praxis Dr. Steffi SänderTEST-ONLY** Telematik-ID 1-SMC-B-Testkarte-883110000117848  
[Praxiskarte2](#) [Gültigkeit ermitteln](#) [PIN SMC-B](#)  
 **ORGA6100-014200000110BF KT | INGHC**  
Ctld 00:0D:F8:08:AD:79 [Kartenleser löschen](#)  
 **SMB SMC-B Apotheke am SeeTEST-ONLY** Telematik-ID 3-SMC-B-Testkarte-883110000116808  
[Seeapotheke](#) [Gültigkeit ermitteln](#) [PIN SMC-B](#)  
  
[NAME SPEICHERN](#)  
 **HBA Andreas Blöch-BauerTEST-ONLY** gelesen von 00:0D:F8:08:AD:79  
[PIN HBA](#) [PIN QES](#)

#### Example of a request with additional parameter for SMC-B name

```
{{baseURL}}/{{tenant}}/Task?  
action=$accept&accesscode=a84d78e962be44647911cd9fd07b7ad478508a9de94439fe82fa47df56a45daa&prescriptionid=160.  
000.225.916.178.29&cardname=Seeapotheke
```

## Accept prescription

To fetch the prescription data from E-Rezept-Fachdienst and to lock the prescription an accept prescription request (GET) is sent to RED. A successful request requires

- A SMC-B card for a pharmacy must be available in a card terminal accessible to RED and the card must have been authorized using the PIN code (see [RED interchange API - Card Operations](#))
- Routes to the E-Rezept-Fachdienst must have been set on the computer (10.30.0.0, 10.30.10.0, 10.30.11.0)

The accept prescription request can be used for the initial fetch of prescription data as well as later requests to retrieve the same data. When the FHIR bundle initially is returned from Fachdienst a second access code ("secret") is added. All further requests to Fachdienst (in order to retrieve prescription data again, cancel or dispense the prescription) must include this secret to prove the requesters authorization to access the data. RED stores the secret in its database and adds it automatically for every further processing action of this request.

[RED interchange API - E-Prescription / Pharmacy / Get Task](#)

[RED interchange API - E-Prescription / Pharmacy / Accept Task](#)

## Reject Prescription

After the pharmacy has requested an electronic prescription from Fachdienst and received the FHIR bundle the Fachdienst locks the prescription to prevent others from fetching and claiming the same data. If the pharmacy is not able to deliver the prescribed products the prescription must be rejected in order to allow others to access the prescription.

To return a prescription a reject prescription request (GET) is sent. RED automatically includes the secret in addition to PrescriptionID and AccessCode.

[RED interchange API - E-Prescription / Pharmacy / Reject or Abort Task](#)

## Dispense a prescription

After a pharmacy has dispensed the prescription a dispense request (POST) must be created and sent to the Fachdienst. The dispense request contains a FHIR bundle of type MedicationDispense. RED automatically includes the secret for the given prescriptionID.

[RED interchange API - E-Prescription / Pharmacy / Task receipt](#)