

# Interface

# CareFlex Chemie

## *REST (v2.4.1)*

## General information about the project

This description presents an interface for the export of HR data for the private nursing care insurance as part of the CareFlex project.

Prerequisite for using the interfaces is a successful registration in the Careflex Chemie company portal. To register, you need a CareFlex ID for each system and for each company to be administered, which you received with the transmission of this interface description.

Note:

- Interface componente highlighted in blue are new since the last version of this document.
- Interface components highlighted in yellow are in development and are not or not completely available.

<b>Urls of the company portal</b>	
<b>System</b>	<b>Url</b>
Test	<i>(not available)</i>
Staging	<a href="https://staging.unternehmen.careflexchemie.de">https://staging.unternehmen.careflexchemie.de</a>
Produktion	<a href="https://unternehmen.careflexchemie.de">https://unternehmen.careflexchemie.de</a>

## Version history

Version	Date	Changes	Author
2.3.0	03.11.2020	Initial (separated REST from REST/SOAP interface)	Alexander Kirch
2.3.1	04.12.2020	Changing taxId to employeId: <ul style="list-style-type: none"> <li>• The taxId itself may no longer be used</li> <li>• Instead of the fieldname “taxId” the fieldname “employeId” should be used. In both cases the field has to contain the personnel number of the employee.</li> <li>• If not possible otherwise the fieldname “taxId” can still be used and contain the personnel number, however in future versions of the interface this will be not possible anymore and the field will have to be named “employeId”.</li> </ul>	Alexander Kirch
2.3.2	04.06.2021	<ul style="list-style-type: none"> <li>• Feedback Interface removed</li> <li>• deprecated endpoints removed</li> <li>• Testsystem removed</li> <li>• FAQ removed</li> <li>• EmployeeID = PersonellNumber</li> <li>• TaxID removed</li> </ul>	Alexander Kirch
2.3.3	11.06.2021	<ul style="list-style-type: none"> <li>• NoIncident removed</li> <li>• employmentStatus AZUBI removed</li> </ul>	Julia Fürtjes
2.4.1	05.04.2022	<ul style="list-style-type: none"> <li>• new HR Incident EVV</li> <li>• new HR Incident EVK with new field “targetCompanyCareflexId” and new method</li> <li>• new validations of “valid_from” dates</li> <li>• new OpenApi Scheme files</li> </ul>	Alexander Kirch

## General information about the interfaces

There exist three interfaces to the CareFlex HR-portal each with another technology being used (CSV, REST and SOAP). This document describes the option with REST.

For each legal entity, a CareFlex ID is generated. Each HR-incident has to be reported with the corresponding CareFlex ID. In one message, only one CareFlex ID can be used.

For one CareFlex ID however, several packets can be reported, for performance reasons limited to 100 HR-incidents at once.

Interface: REST  
Encoding: UTF-8

<b>Interface definitions</b>		
<b>System</b>	<b>Type</b>	<b>Url</b>
Staging	Open API	<a href="https://ingress-careflex-staging.n4group.eu/rest/api-docs/careflex-tenant-v2.4">https://ingress-careflex-staging.n4group.eu/rest/api-docs/careflex-tenant-v2.4</a>
	Swagger	<a href="https://ingress-careflex-staging.n4group.eu/rest/swagger-ui">https://ingress-careflex-staging.n4group.eu/rest/swagger-ui</a>
Prod	Open API	<a href="https://api.unternehmen.careflexchemie.de/rest/api-docs/careflex-tenant-v2.4">https://api.unternehmen.careflexchemie.de/rest/api-docs/careflex-tenant-v2.4</a>
	Swagger	<a href="https://api.unternehmen.careflexchemie.de/rest/swagger-ui">https://api.unternehmen.careflexchemie.de/rest/swagger-ui</a>

## System-Endpoints

### EP1: oAuth - Authentication (the same for REST and SOAP)

System	Endpoint
Staging	<a href="https://staging.unternehmen.careflexchemie.de/oauth/token">https://staging.unternehmen.careflexchemie.de/oauth/token</a>
Prod	<a href="https://unternehmen.careflexchemie.de/oauth/token">https://unternehmen.careflexchemie.de/oauth/token</a>

(Beispiele weiter unten)

### EP3: REST

System	Endpoint
Staging	<a href="https://ingress-careflex-staging.n4group.eu/rest/hr/v2.4/incident/new">https://ingress-careflex-staging.n4group.eu/rest/hr/v2.4/incident/new</a>
Produktion	<a href="https://api.unternehmen.careflexchemie.de/rest/hr/v2.4/incident/new">https://api.unternehmen.careflexchemie.de/rest/hr/v2.4/incident/new</a>

(Beispiele weiter unten)

## **REST-Endpoints**

The REST interface offers the following functionality:

### **Reporting of HR-incidents with and without employee data**

- REST-Endpoint: `incident/new`

Note: Up to 100 HR-incidents in one message are possible.

### **Empty notification**

- No longer required.

## **Definition of HR Incidents**

### ***New Incident - New Incident with employee data***

For the HR incidents "NEU", "SDA", "SDB", "SDC" a notification with employee data must be sent. Which fields are required exactly can be seen in the table "Definition of the fields".

In case of the "NEU" incident, a new employee is reported to the portal. Please note that an error occurs if an employee (identified by the tax number) is reported several times for a Careflex ID as "NEU".

In case of incident "SDA", "SDB", "SDC" the master data of the employee is adjusted.

### ***New Incident - New Incident without employee data***

For all other HR incidents a "Plain Incident" is required. The master data of the employee to be reported is already known and does not need to be changed. Only the status of the person to be reported changes.

An exception is the HR incident "EVK", where the CareFlexID of the new company has to be transferred in the field "targetCompanyCareflexId".

### ***No Incident - No Incident within a period***

No longer required.

## Field definitions

Field name	Field mandatory for HR incident?						Field type (allowed characters / length)	Example	Description
	New Incident								
	NEU	SDA	SDB	SDC	EVK	(rest)			
careflexId	yes	yes	yes	yes	yes	yes	alphanumeric (hexadecimal / 0-9 and a -f, 16 digits)	a1234567890b1234	Careflex_ID is the identification of the company and is assigned to the companies with a registration in the company portal
targetCompany CareflexId	n.a.	n.a.	n.a.	n.a.	yes	n.a.	alphanumeric (hexadecimal / 0-9 and a -f, 16 digits)	a1234567890b1235	CareFlex_ID of the <b>new</b> eligible company to which the already existing employee will be transferred within the group.  Only required in case of EVK incident, otherwise ignored.
apiToken	yes	yes	yes	yes	yes	yes	uuid / alphanumeric + "-" (hexadecimal / 0-9, a -f, "-", 36 digits)	fac88c7b-7fb6-4a92-b01f-d48776109356	Permanently valid token that is associated with the Careflex_ID. Can be generated in the portal.
externalId	no	no	no	no	no	no	alphanumeric (hexadecimal / 0-9 and a -f, 256 digits)	Kunden-Id-1234-xx	Unique id of the company for a specific HR-incident. (Has to be permanently unique, i.e. must not be used again in the future)
type	yes	yes	yes	yes	yes	yes	3	NEU	Type of HR incident, possible abbreviations under point 3 (the HR TYPE HELP is not used in the corporate area, but only by the employee via the portal)
createdAt	yes	yes	yes	yes	yes	yes	Date YYYY-MM-DD, not in the future, at most one month in the past	2020-07-15	Day on which the HR incident was posted / creation date
validFrom	yes	yes	yes	yes	yes	yes	Date YYYY-MM-DD	2020-07-01	Effective date / date of entry into force of the HR incident / effective date
title	no	no	n.a.	n.a.	n.a.	n.a.	Text	Prof. Dr.	Title of the employee
firstName	yes	n.a.	yes	n.a.	n.a.	n.a.	Text	Thomas	First name of the employee
lastName	yes	n.a.	yes	n.a.	n.a.	n.a.	Text	Mustermann	Last name of the employee
birthday	yes	n.a.	n.a.	yes	n.a.	n.a.	Date YYYY-MM-DD, Date must not lie in the future. Minimum age is 18, maximum age is 100.	1979-01-15	Employee's date of birth
sex	yes	yes	n.a.	n.a.	n.a.	n.a.	Text (1 digit) (m/f/d)	m	Gender of the employee m - male

										f - female d - various
employeeId	yes	yes	yes	yes	yes	yes	Text	1569		Personal identification number of the employee within the company (staff number)
street	yes	yes	n.a.	n.a.	n.a.	n.a.	Text	Musterstraße		Street (private address of the employee)
houseNumber	yes	yes	n.a.	n.a.	n.a.	n.a.	Text	9		House number (private address of the employee)
addressSuffix	No	No	n.a.	n.a.	n.a.	n.a.	Text	c/o Max Hauptmieter		Additional address information (private address of the employee)
zipCode	yes	yes	n.a.	n.a.	n.a.	n.a.	alphanumeric (10 Stellen)	01234		ZIP code (private address of the employee)
city	yes	yes	n.a.	n.a.	n.a.	n.a.	Text	London		City (private address of the employee)
country	yes	yes	n.a.	n.a.	n.a.	n.a.	Text (2 digits), Codierung as in ISO-3166 (ALPHA-2)	DE		Country (private address of the employee)
employmentSite	yes	yes	n.a.	n.a.	n.a.	n.a.	Text	Geschäftsstelle 1		Location affiliation / location name (The location of the employee is primarily important for the question "Where does the employee's consultation take place? Accordingly, in the case of an employee who cannot be permanently assigned to a location, the location where this employee is to be advised should be set).
employmentStatus	yes	yes	n.a.	n.a.	n.a.	n.a.	Text (T/AT)	T		Employment status T - tariff AT - non-tariff
startOfEmployment	yes	yes	n.a.	n.a.	n.a.	n.a.	Date YYYY-MM-DD, max. 100 years in the past; max. 36 months in the future, has to be before the effectivity date of the NEU message	2020-07-01		Start date of the employment
personnelNumber	yes	yes	n.a.	n.a.	n.a.	n.a.	Text	1569		Internal personal number
management	yes	yes	n.a.	n.a.	n.a.	n.a.	True / False	True		True if employee is part of the management, false otherwise. Allows for a separate HR management level in the portal.
emailBusiness	No	No	n.a.	n.a.	n.a.	n.a.	Text	thomas.mustermann@musterfirma.de		Business contact data of the employee: Email-address
mobileBusiness	No	No	n.a.	n.a.	n.a.	n.a.	Text	0123 12345678		Business contact data of the

ness										employee: Mobile phone number
landlineBusiness	No	No	n.a.	n.a.	n.a.	n.a.	Text	030 12345678		Business contact data of the employee: Landline number

(Remark: The field definitions can also be found in the OpenApi-JSON file. If mandatory fields are missing the whole request will be rejected.)

### **Meaning of “yes” and “no”**

The word “yes” indicates that the field is mandatory. The message is rejected if not all mandatory fields are filled. The word “no” indicates that it is an optional field. It can be transferred with a value, empty or not at all.

### **Meaning of “n.a.”**

The field must not be transferred. If the field is transferred it will be ignored.

### **Validation of the valid\_from date field**

Depending on the HR incident type, the dates on which an incident can become valid are fixed:

NEU, WIK, ASP, EVK	first day of a month
RST, EVR, EVW, EVS, EVV	first or last day of a month
SDA, SDB, SDC, EVT	no restrictions

## HR-Incidents

Vorfall	
NEU	Neuer Mitarbeiter*
RST	Ruhendstellung des Vertrages
WIK	Wiederaufnahme Entgeltzahlung
EVW	Mitarbeiter verlässt das Unternehmen
EVK	Mitarbeiter wechselt den Arbeitgeber innerhalb des Konzerns
EVT	Mitarbeiter ist verstorben
EVR	Mitarbeiter geht in Altersrente
EVS	Wechsel des Beschäftigungsstatus
EVV	Mitarbeiter verzichtet auf CareFlex Chemie
SDA	Anpassung der Stammdaten notwendig (mit Ausnahme von Namen und Geburtsdatum)
SDB	Anpassung des Namens notwendig
SDC	Anpassung des Geburtsdatums notwendig
ASP	Änderung des Datums der Anspruchsberechtigung

### Changes to the table of available HR incidents

- KOR: not applicable anymore
- EVV: new incident "End of contract due to waive".
- EVK: new incident "End of contract due to change within the group".

## Examples

1. Combination of a change of address and a suspension of the contract:

Two messages must be transmitted for this.

RST: for the rest position

SDA: for the change of address (the change of address is only considered with the HR incident SDA)

2. Change of employer within the associated companies (this also applies to a change within a company if the company divisions have different CareflexIDs)

For this purpose, 2 reports must be submitted (by the respective company).

EVW: for deregistration from the original company with its CareflexID.

## Authentication

All companies must authenticate themselves using a time-limited **access token** (oAuth Bearer Token). For this purpose, they receive the data for the service user (ID and Secret) via the portal (in the tab "Settings for data import"). The company can use this data to request a time-limited access token via the interface. The access token must then be transferred to the incident interface as a bearer token within the authentication headers during HTTP communication with the REST interface (same for SOAP).

If a company manages other companies, the access token is only to be generated for the CareFlex-ID of the managing company. All other companies have to use this same access token. So, there is only one combination of Service-User with Service-User-Secret that is used to manage a group of combined companies.

## Authorization

All companies are required to submit both **API tokens** and **CareFlex ID** when reporting.

They must submit the CareFlex ID (of the Eligible Company) and the API Token (of the Reporting Company) with the notification.

The API token can be generated in the company portal under "CRM" / "Settings for data import". There is only one API token for all entities managed by a company.

The correctness of the Careflex ID in combination with the API token is not checked when the message is sent, but can be checked via the feedback function after the sent message has been successfully imported into the portal.

## Examples

### Communication example

Access-Token request:

```
POST EP1 (siehe oben)

with json body:
{
  "grant_type": "password",
  "username": "<user_id (service user)>",
  "password": "<user_secret (service user)>"
}

and headers:
"Content-Type: application/json"
```

The answer contains an access token that is valid for 12 hours:

```
{
  "access_token": "P7kmfo8HXItLLOReHq65o4%$ggg45dYhSm50Dc",
  "token_type": "Bearer",
  "expires_in": 43200,
  "created_at": 1589887223
}
```

*The access token is used as a bearer token when communicating with the interface:*

## **REST**

POST EP3 (siehe oben)

with SOAP headers:

```
"Authorization: Bearer P7kmfo8HXItLL0ReHq65o4%$ggg45dYhSm50Dc"
```

```
"Content-Type: application/json;charset=UTF-8"
```

## Payload-Examples

### REST-Interface:

#### Reporting with and without master data:

##### REQUEST

```
{
  "careflexId": "09ce3580d84bf087",
  "apiToken": "maL0HMDszA2b9PKiqCAZRGh0ZDpVjmvc",
  "incidentList": [
    {
      "externalId": "1000",
      "type": "NEU",
      "employeeId": "49239697103",
      "createdAt": "2020-10-24",
      "validFrom": "2020-10-24",
      "employee": {
        "title": "Prof. Dr.",
        "firstName": "Thomas",
        "lastName": "Mustermann",
        "birthday": "1979-01-15",
        "sex": "m",
        "address": {
          "street": "Musterstraße",
          "houseNumber": 9,
          "addressSuffix": "c/o Max Hauptmieter",
          "zipCode": "01234",
          "city": "Musterstadt",
          "country": "DE"
        },
        "job": {
          "employmentSite": "Geschäftsstelle 1",
          "employmentStatus": "T",
          "startOfEmployment": "2020-04-24",
          "personnelNumber": "string",
          "management": false
        },
        "contact": {
          "emailBusiness": "thomas.mustermann@musterfirma.de",
          "mobileBusiness": "0123 12345678",
          "landlineBusiness": "030 12345678"
        }
      }
    },
    {
      "externalId": "1234-xx",
      "type": "SDB",
      "createdAt": "2021-06-30",
      "validFrom": "2021-07-01",
      "employeeId": "12345678901",
      "employee": {
        "firstName": "Thomas",
        "lastName": "Mustermann"
      }
    }
  ]
}
```

```
    },
    {
      "type": "WIK",
      "employeeId": "49239697103",
      "createdAt": "2020-09-24",
      "validFrom": "2020-08-24"
    }
  ]
}
```

*RESPONSE*

```
{
  "importId": "8d2adbc0-4d63-4cec-a8f4-445b08a3e33e",
  "incidentResponseList": [
    {
      "rowNumber": 0,
      "incidentId": "8ba8977c-a75b-4ec0-9798-7a7f14209720",
      "externalId": "1000",
      "employeeId": "49239697103",
      "type": "NEU"
    },
    {
      "rowNumber": 1,
      "incidentId": "916aebfc-2feb-429b-8631-52703a195ad9",
      "externalId": "1234-xx",
      "employeeId": "12345678901",
      "type": "SDB"
    },
    {
      "rowNumber": 2,
      "incidentId": "e8b77933-2a31-404c-9e23-8b547b37068f",
      "externalId": null,
      "employeeId": "49239697103",
      "type": "WIK"
    }
  ]
}
```