

**eHealth AddressBook REST
Cookbook
Version 1.3**

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eHealth platform

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To the attention of: "IT expert" willing to integrate this web service.



1. Document Management

1.1 Document History

Version	Date	Author	Description of changes / remarks
1.0	15/03/2024	Smals healthcareAddressBook Team	Initial version
1.1	05/08/2025	Smals healthcareAddressbook Team eHealth Platform	Added 'und' languagecode and 8 new search combinations Review
1.2	14/10/2025	Smals healthcareAddressbook Team	Introduction of pagination functionality
1.3	24/03/2026	eHealth Platform	Update tracing section

2. Introduction

2.1 Goal of the Service

The Addressbook REST consultation service is a **REST-based implementation of the existing Addressbook SOAP service**. It enables users to search and retrieve contact information for healthcare professionals and organizations.

While both services access the same backend and data sources, it's important to note that **all future functional improvements will only be applied to the REST service**. The SOAP version will continue to exist for compatibility but will not evolve functionally.

2.2 Goal of the Document

This document is not a programming tutorial for internal applications. Instead, it provides essential functional and technical information to help organizations to integrate the REST-based AddressBook service into their own applications. This document will provide all the necessary elements to get you started developing. It explains in that context:

- the key concepts and design principles behind the service
- how to use the AddressBook
- the technical details required to call and interact with the service

This information should allow (the IT department of) an organization to integrate and use the WS call. However, in order to interact in a smooth, homogeneous and risk controlled way with a maximum of partners, these partners must commit to comply with all the requirements the eHealth platform has described in this document.

In addition, our partners in the healthcare sector must also comply with the business rules of validation and integration of data within their own applications in order to minimize errors and incidents. In other words, technical and business requirements must be met in order to allow the integration and validation of the eHealth platform service in the client application.

2.3 eHealth Platform Document References

The following documents are available on the eHealth platform portal and may be useful for integration. Refer to the most recent version when integrating with the AddressBook service:

Always consult the [eHealth platform portal](#) for the latest documentation and guidelines.¹

ID	Title	Version	Date	Author
1	SOA – Error guide	1.0	10/06/2021	eHealth platform
2	Request test case template	3.0	22/02/2018	eHealth platform
3	eHealth Services – Web Access	2.0	12/07/2018	eHealth platform
4	eHealthBox Supported Qualities	1.4	22/12/2021	eHealth platform
5	eHealth platform SSO eHealth AddressBook	1.2	22/04/2020	eHealth platform

¹ www.ehealth.fgov.be

2.4 External Document References

The following publicly available documents provide standards and guidelines relevant to the REST service. While these resources are not maintained by the eHealth platform, they are essential for proper integration:

ID	Title	Source	Date	Author
1	Basic Profile Version 1.1	http://www.ws-i.org/Profiles/BasicProfile-1.1-2004-08-24.html	24/08/2004	Web Services Interoperability Organization
2	Federal Vocabulary	https://github.com/belgif/fedvoc	04/04/2025	Federal Vocabularies Workgroup
3	Belgian Interoperability Framework reusable yaml schemas	https://github.com/belgif?q=openapi	17/04/2025	belgif@bosa.fgov.be
4	Belgif REST Guidelines	https://www.belgif.be/specification/rest/api-guide/	28/01/2025	belgif@bosa.fgov.be

2.5 Service History

This section summarizes the key changes made between the different versions of the Addressbook service.

Note: Future functional updates will be applied exclusively to the REST service. The SOAP version remains available but will no longer receive functional improvements.

Previous version	Previous release date	Changes
1.0	07/02/2024	Initial release of the REST implementation, based on the existing Addressbook SOAP web service.
1.1	17/04/2025	Added support for the 'und' (undetermined) language code and introduced 8 new search combinations—4 for organizations and 4 for professionals.
1.2 CURRENT VERSION	12/09/2025	Added pagination functionality with removal of the "total" element. Bugfix on municipalityName to allow minimum 2 letter searches instead of 3 previously. Bugfix on Professional searches with optional professionType (in combination with unique identifier ssn and nihsNumber)

2.6 Changes in this REST Addressbook Implementation

Version 1.1 introduces the following changes:

- **Support for 'und' language code:**
When a language is undetermined in an authentic source, it will be returned using the code 'und'.
This value can appear in the output but **cannot be used as a search criterion**.



- **Expanded search capabilities:**

Eight new search combinations have been added:

- 4 for organizations
- 4 for professionals

Version 1.2 introduces the following changes:

- **Added of pagination related changes**

- Introduction of optional page and pageSize query parameters
- Paginated results
 - Link to first page
 - Link to previous page (omitted in first page)
 - Link to next page (omitted in last page)
- Removal of property “total” in the response with the total number of elements due to performance considerations

- **Bugfix on Professionals: fix of optional search parameter professionType**

- Professionals searches on unique identifiers **nihdiNumber** and **ssin** now support the additional optional search criterion **professionType**

- **Search on municipalityName requires only 2 instead of previously 3 significant characters**



3. Support

3.1 Helpdesk eHealth Platform

3.1.1 Certificates

In order to access the secured eHealth platform environment you have to obtain an eHealth platform certificate, used to identify the initiator of the request. In case you do not have one, please consult the chapter about the eHealth Certificates on the portal of the eHealth platform

- <https://www.ehealth.fgov.be/ehealthplatform/nl/ehealth-certificaten>
- <https://www.ehealth.fgov.be/ehealthplatform/fr/certificats-ehealth>

For technical issues regarding eHealth platform certificates

- Acceptance: acceptance-certificates@ehealth.fgov.be
- Production: support@ehealth.fgov.be

3.1.2 For issues in Production

eHealth platform contact centre:

- Phone: 02 788 51 55 (on working days from 8 am till 6 pm)
- Mail: support@ehealth.fgov.be
- Contact Form :
 - <https://www.ehealth.fgov.be/ehealthplatform/nl/contact> (Dutch)
 - <https://www.ehealth.fgov.be/ehealthplatform/fr/contact> (French)

3.1.3 For Issues in Acceptance

Integration-support@ehealth.fgov.be

3.1.4 For Business Issues

- regarding an existing project: the project manager in charge of the application or service
- regarding a new project or other business issues: info@ehealth.fgov.be

3.2 Status

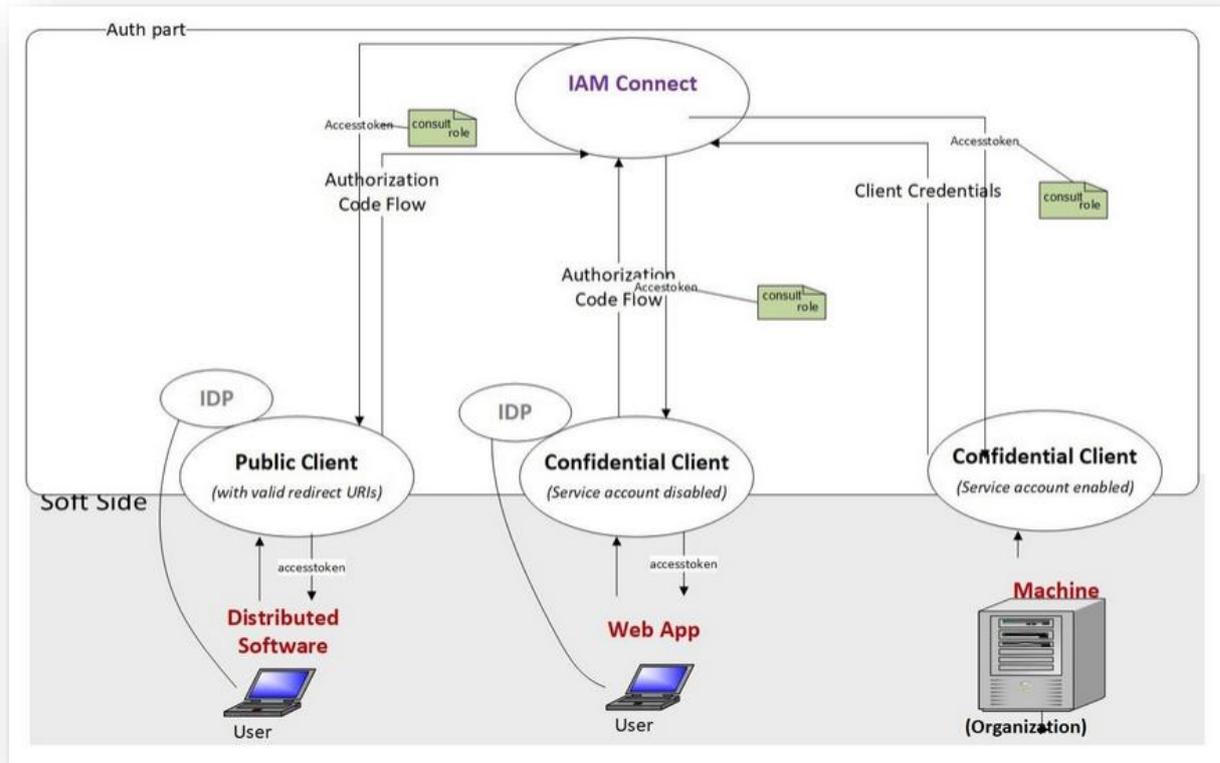
The website <https://status.ehealth.fgov.be> is the monitoring and information tool for the ICT functioning of the eHealth services that are partners of the Belgian eHealth system.



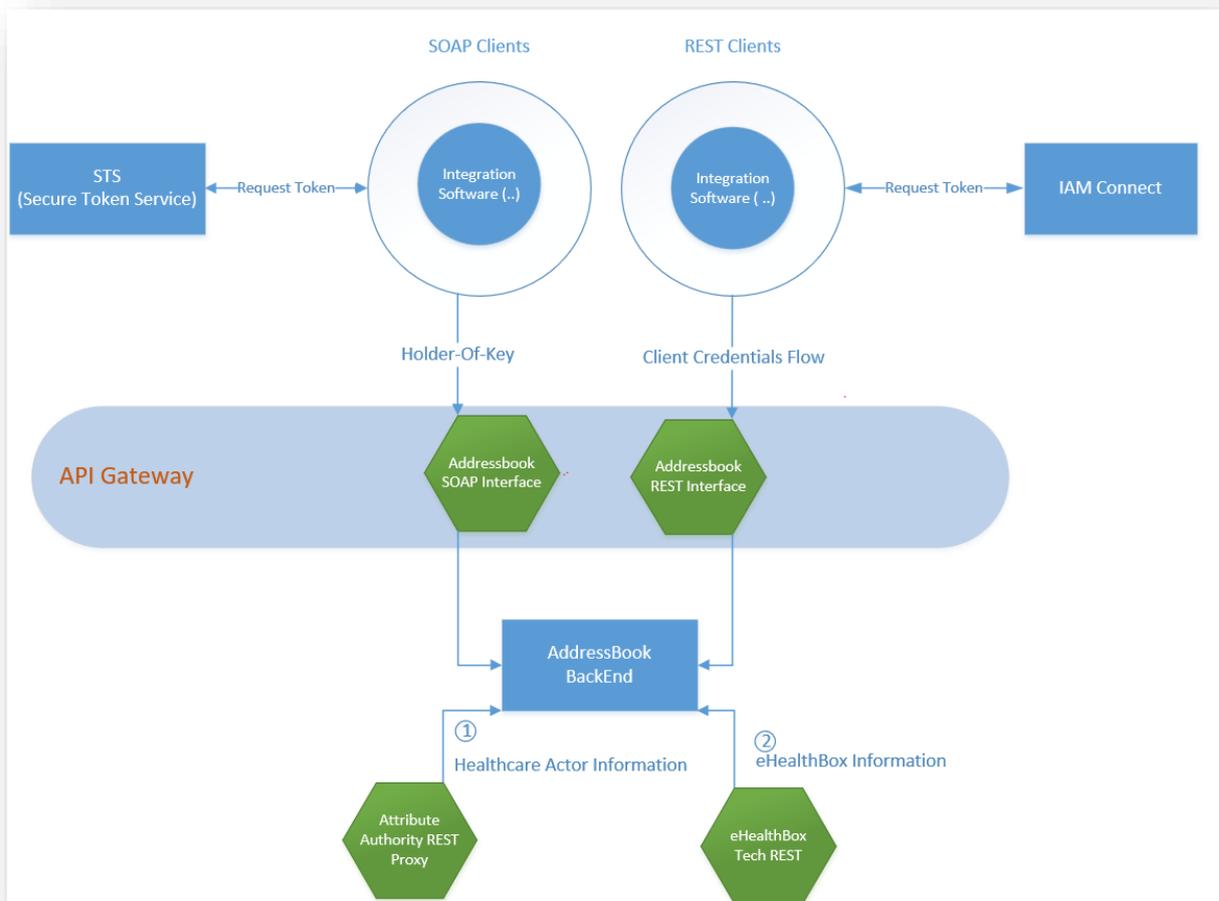
4. Global overview

4.1 Overview on how to access the eHealth AddressBook

Access to the Addressbook REST service requires an **access token** issued by the eHealth authentication server (IAM Connect). The authorization flows are similar to those used by other eHealth services such as eHealthBox.



The diagram below illustrates the architecture for the **Client Credentials Flow**, one of the three supported authentication flows.



Both the SOAP and REST interfaces of the Addressbook rely on a **shared backend** that queries two authentic sources:

- **CoBRHA**, accessed via the eHealth Attribute Authority REST Proxy
- **eHealthBox**, accessed via the eHealthBox REST Proxy

4.2 REST and JSON

SOAP and REST are two API styles that approach data transmission from a different point of view. SOAP is a standardized protocol sending messages using other protocols such as HTTP and SMTP. As opposed to SOAP, REST is not a protocol but an architectural style. The REST architecture lays down a set of guidelines you need to follow if you want to provide a RESTful web service, for example, stateless existence and the use of HTTP status codes. As SOAP is an official protocol, it comes with higher complexity, it requires more bandwidth and resources that can lead to slower page load times. REST was created to address the problems of SOAP. Therefore, it has a more flexible architecture. It allows different messaging formats, such as HTML, JSON, XML, and plain text, while SOAP only allows XML. REST is also a more lightweight architecture, so **RESTful web services have a better performance**.

The REST architecture allows API providers to deliver data in multiple formats such as plain text, HTML, XML, YAML, and JSON, which is one of its most loved features. Thanks to the increasing popularity of REST, the lightweight and human-readable JSON format has also quickly gained traction, as it is an easy-to-parse and lightweight data-interchange format. In spite of its name, JSON is completely language-agnostic, so it can be used with any programming language, not just JavaScript.

JSON files consist of collections of name/value pairs and ordered lists of values that are universal data structures used by most programming languages. Therefore, JSON can be easily integrated with any language.

The difference in approach and philosophy means that this additional REST API goes beyond simply translating the SOAP service technically into a REST service. Efforts have been made to ensure that this service is compliant with the Federal Vocabulary and utilizes the tools and structures provided by the Belgian Interoperability Framework.

4.3 Endpoints

The last version of REST interface described with a JSON / Swagger API is available on the [eHealth API Portal](#) :

ACC: <https://portal-acpt.api.ehealth.fgov.be/>

PROD: <https://portal.api.ehealth.fgov.be/>

4.4 Technical Requirements

4.4.1 WS-I Basic Profile 1.1

Your request must be WS-I compliant (See Chap 2.4 - External Document Ref 1).

4.4.2 Tracing

To use this service, the request SHOULD contain the following two http header values (see RFC <https://datatracker.ietf.org/doc/html/rfc7231#section-5.5.3>):

1. **User-Agent:** information identifying the software product and underlying technical stack/platform. It MUST include the minimal identification information of the software such that the emergency contact (see below) can uniquely identify the component.
 - a. Pattern: {minimal software information}/{version} {minimal connector information}/{connector-package-version}
 - b. Regular expression for each subset (separated by a space) of the pattern: `[[a-zA-Z0-9-\\V]*\\V[0-9azA-Z-_.]*`
 - c. *Examples:*
User-Agent: myProduct/62.310.4 Technical/3.19.0
User-Agent: Topaz-XXXX/123.23.X freeconnector/XXXXX.XXX
2. **From:** email-address that can be used for emergency contact in case of an operational problem.

Examples:

From: *info@mycompany.be*

Exception for Browser-Based Clients

Browsers control the User-Agent header natively and may block client-side modification for security reasons. When operating in a browser-based environment, supplying the custom User-Agent header is **not required**. That said, it **must** be included whenever the environment permits it.

The From header carries no such restriction and **must** be present in all requests, regardless of environment.



5. API Description

5.1 General

5.1.1 Principles and Remarks

The AddressBook REST API provides structured search and retrieval of contact information. Key usage rules and behaviors include:

- **Result specificity:** Contact details are only returned when the search is specific enough to return **exactly one result**.
- **Search limitations:** Only specific search parameter combinations are allowed for organizations and professionals (see sections 5.2 and 5.3).
- **Case and accents:** Searches are **case-insensitive**, and accented characters are normalized. For instance, searching with “e” may return results with “é”, “è”, or “ë”.
- **Special character restrictions:** Characters like {, }, (,), |, \, +, %, & are not allowed and may cause errors or inconsistent results.
- **Fallback language behavior:** If a requested language is unavailable for a field, all available languages will be returned. The code und (undetermined) may appear in results but **cannot be used as a filter**.
- **Identifiers:** The NIHDI number is the preferred identifier for professionals. The SSIN is only returned when a NIHDI number is unavailable for at least one profession.
- **Email validation:** Searches on email require an **exact match**, including @ and at least one dot (.).
- **Postal code standards:** Searches on postCode must use 4-digit Belgian postal codes.
- **Municipality name:** requires **at least 2 significant characters**.
- **Organization name searches:** requires **at least 3 significant characters**.
- **Family name searches :** requires at least 2 significant characters

5.1.2 Wildcard Searches and Examples

An asterisk ‘*’ can be used as a wildcard to perform search with partial words. Wildcards can only be put on the beginning and/or on the end of the word. Intermediate wildcard(s) will be ignored.

Wildcard searches in combination with a limited number of characters, may result in degraded performance (high response times that might even result in a technical error).

Example of search behaviour when looking for organization name “Institut Bordet”:

You may find result with ...	You may not find result with ...
bor	bordete*
institut	bordeti
instit	*bor det*
*b*or*	Bo
det	Bo*
inst_itut	In*
BoR	

When searching on name, at least 3 significant characters are required. The searches on ‘Bo’, ‘Bo*’ and ‘In*’ will fail because the minimum number of significant characters of 3.

Example, you are looking for municipalityName “Bruxelles”:



You may find result with ...	You may not find result with ...
bru	brux
bru*x*	bruxellless
bru*	br ux*
*xelles	*r*
bruxelles	*B*
br_u*	*B
Bru*	
br*	
bR	

When searching on municipalityName, at least 2 significant characters are required. The searches on 'B*', '*B*' and '*r*' will fail because the minimum number of significant characters of 2.

5.1.3 Pagination

Search results are now paginated.

As a result, the former error **"Query returns too many results."** (triggered when more than 100 results were returned) no longer applies.

Optional Query Parameters

- page — The index of the page to retrieve. The first (and default) page is 1.
- pageSize — The number of items per page. The default (and maximum) is 100.

Response Properties

- first — Root-relative path to the first page.
- prev — Root-relative path to the previous page (omitted on the first page).
- next — Root-relative path to the next page (omitted on the last page).
- page — The current page index.
- pageSize — The number of items returned per page.

Note: for performance reasons, the total property is no longer returned.

5.2 Organizations

GET /organizations

Search healthcare organizations and retrieve contact information for a specific organization.

This service returns specific contact information (see the 'embed' parameter) on the condition that the search was specific enough to return only one result.



5.2.1 Searching for Healthcare Organizations

5.2.1.1 Allowed Search Combinations

	nihdi Number	enterprise Number	ehp Number	institution Type	name	postCode	municipality Name	email
Search 1	Required information			Optional information				
Search 2		Required information		Optional information				
Search 3			Required information	Optional information				
Search 4				Optional information	Required information			
Search 5				Optional information		Required information		
Search 6				Optional information			Required information	
Search 7								Required information
Search 8*				Optional information	Required information	Required information		
Search 9*				Optional information	Required information		Required information	

Legend:

Required information	
Optional information	

(*) are new search combinations since v1.1

This table outlines valid combinations of required and optional search parameters. These combinations determine whether a request is accepted by the service.

5.2.1.2 Organization Specific Search Rules

When optional information is specified as search criterion, it will act as a filter. E.g. In the case of Search 1, 2 and 3: if an institutionType is optionally given in combination with a nihdiNumber, only information for the specified institutionType will be returned. If the organization is from another institutionType, no information is returned because there is no match. As in the example described below nihdiNumber **71014391** matches an organization of type **HOSPITAL**. In this search combination (Search 1 from the table above), the organization would only be returned when searching for this nihdiNumber, optionally in combination with this specific institutionType **HOSPITAL**.

institutionType particularities linked to organizations of type CBE or EHP

- institutionType is implicitly set to:
 - 'ENTERPRISE', when searching on a **enterpriseNumber** (commonly known as a CBE number)
 - 'EHP', when searching on a **ehpNumber**.
- For combinations requiring institutionType (Search 4, 5, 6, 8 and 9), the 3 **subtypes related to CBE** : ENTERPRISE, CONSORTIUM, and TREAT_CENTER **are not allowed**.



5.2.2 Request

Path parameters

Path parameter	Description
nihdiNumber	8-digit identifier issued by the National Institute for Health and Disability Insurance (NIHDI).
enterpriseNumber	Identifier issued by Crossroads Bank for Enterprises (CBE)
ehpNumber	Special identifier issued by eHealth-platform Belgium
name	Name of the organization. At least 3 significant characters are required. Wildcards are automatically applied at the start and end. Multiple words are interpreted with AND
institutionType	Coded value representing the type of organization (e.g., HOSPITAL, PHARMACY).
municipalityName	Name of the municipality. At least 3 significant characters are required.
postCode	Belgian 4-digit postal code
email	Email has to be an exact match. Must contain @ and one or more dots (.)
embed(*)	Contact information are only returned when: <ul style="list-style-type: none">• the entity can be uniquely identified (the query returns only 1 result)• and the information is explicitly requested Available values that can be combined: <ul style="list-style-type: none">• addresses• ehealthBoxes• alternativeContactChannels
lang	Preferred language code: nl , fr , de , or en . Multiple values not supported. If the preferred language is not provided, or unavailable, all available values are returned. The und (undetermined) language code cannot be used as a filter.
page	The index of the page to retrieve. The first (and default) page is 1.
pageSize	The number of items per page. The default (and maximum) is 100.

* = Required path parameter

Example:

```
GET https://api-acpt.ehealth.fgov.be/healthcareActorAddressBook/v1/organizations?nihdiNumber=71014391&embed=addresses&embed=ehealthBoxes&embed=alternativeContactChannels&lang=en&page=1&pageSize=100
```

5.2.3 Response

The response contains a success status code and general information on the eHealth

Element	Description
items	Array of matching organization records (can be empty).
pageSize	The number of items returned per page.
page	The current page index.



first	The root-relative path to the first page.
prev	The root-relative path to the previous page (omitted on the first page).
next	The root-relative path to the next page (omitted on the last page).
id	Object containing source, type, and value of the identifier.
id/authenticSource	Authentic Source of the identification information
id/type	Type of the organization within the authentic source
id/value	Identification value as identified by the authentic source
type	Object with type code and type name of the institution as detailed in the Annex 'List of organization qualities'
type/code	Object with the code of the institutionType as defined by the authenticSource.
type/name	Name of the InstitutionType
name	Name of the Organization
addresses	Object with addresses
alternativeContactChannels	Object with alternative contact channels
eHealthBox	Object with eHealthBox

For performance reasons, the total property has been removed from the response since pagination was introduced.

Example:

```
{
  "items": [
    {
      "id": {
        "authenticSource": "NIHII",
        "type": "HCI",
        "value": "71014391"
      },
      "type": {
        "code": {
          "authenticSource": "EHP",
          "type": "code",
          "value": "HOSPITAL"
        },
        "name": {
          "nl": "Ziekenhuis",
          "fr": "Hôpital",
          "de": "Krankenhaus"
        }
      },
      "name": {
        "en": "UNIVERSITAIR ZIEKENHUIS BRUSSEL CAMPUS JETTE"
      },
      "addresses": [
        {
          "type": "contact",
          "street": {
            "name": {
              "en": "LAARBEEKLAAN 101"
            }
          }
        }
      ]
    }
  ]
}
```



```

    },
    "municipality": {
      "postCode": "1090",
      "nisCode": 21010
    },
    "country": {
      "isoCode": "BE",
      "name": {
        "nl": "België",
        "fr": "Belgique"
      }
    }
  }
},
],
"eHealthBox": [
  {
    "id": "71014391",
    "type": "NIHII",
    "quality": "HOSPITAL",
    "lastUserActivity": "2024-01-12"
  }
]
},
],
"pageSize": 100,
"page": 1,
"first":
"/organizations?nihdiNumber=71014391&embed=addresses&embed=ehealthBoxes&embed=alternativeCo
ntactChannels&lang=en&pageSize=100&page=1"
}

```

5.3 Professionals

This endpoint retrieves contact information for healthcare professionals based on specific search parameters. As with organizations, contact details are only returned if the query results in exactly one unique match and the relevant embed parameters are provided.

The next section will detail:

- Supported search combinations
- Rules and filtering logic
- Parameter definitions
- Example query and response

GET /professionals

Search healthcare professionals and retrieve contact information for a specific professional.

This service returns specific contact information (see the 'embed' parameter) on the condition that the search was specific enough to return only one result.



5.3.1 Searching for Professionals

5.3.1.1 Allowed Search Combinations

	nihdi Number	ssin	family Name	given Name	profession Type	Municipality Name	postCode	email
Search 1	Required				Optional			
Search 2		Required			Optional			
Search 3			Required	Optional	Required			
Search 4					Required	Required		
Search 5					Required		Required	
Search 6								Required
Search 7*			Required	Optional			Required	
Search 8*			Required	Optional		Required		
Search 9*			Required	Optional	Required		Required	
Search 10*			Required	Optional	Required	Required		

Legend:	Required information
	Optional information

(*) new search combinations since v1.1

5.3.1.2 Search Principles and Rules

- **Filters act as restrictions:** For example, if a professionType is provided with a ssin, only professionals matching *both* criteria will be returned. If no match exists, the result is empty.
- **NIHDI number format:** Has to be exactly 8 digits. The common 3-digit competence code that follows a NIHDI number is **not** part of the identifier.
- **Name requirements:** familyName must contain at least **2 significant characters**.
- **Sorting:** Results are sorted by familyName and then givenName.

5.3.2 Request

Path parameters

Path parameter	Description
nihdiNumber	8-digit identifier issued by the National Institute for Health and Disability Insurance (NIHDI). The optional 3-digit competence code is not part of this field.
ssin	Social Security Identification Number issued by the National Register or CBSS
givenName	First name of the professional.
familyName	Last name of the professional. Requires at least 2 significant characters .



professionType	Coded value for the type of profession (see Annex).
municipalityName	Name of the municipality
postCode	Belgian 4-digit postal code.
email	Must be an exact match , and include both @ and at least one dot (.).
embed(*)	Contact information are only returned when: <ul style="list-style-type: none"> the entity can be uniquely identified (the query returns only 1 result) and the information is explicitly requested Available values : <ul style="list-style-type: none"> addresses ehealthBoxes alternativeContactChannels
lang	Preferred language code: nl, fr, de, or en. Multiple values not supported. If the preferred language is not provided, or unavailable, all available values are returned. The und (undetermined) language code cannot be used as a filter.
page	The index of page to be retrieved. The default and first page is 1.
pageSize	The maximum number of items per page. The default and maximum pageSize is 100.

* = Required path parameter

Example:

```
GET https://api-acpt.ehealth.fgov.be/healthcareActorAddressBook/v1/professionals?nihdiNumber=49133197&embed=ehealthBoxes&embed=addresses&embed=alternativeContactChannels
```

5.3.3 Response

The response contains a success status code and general information on the eHealth

Element	Description
items	0-to-more item tag(s) containing the search results
pageSize	The number of items returned per page.
page	The current page index.
first	The root-relative path to the first page.
prev	The root-relative path to the previous page (omitted on the first page).
next	The root-relative path to the next page (omitted on the last page).
individual	Information of the individual
individual/ssin	Social Security Identification Number issued by the National Register or CBSS. The SSIN is never returned in the response if NIHDI numbers are known for all Professions.



individual/familyName	Family name - the last name - of the individual.
individual/givenName	The first given name only
individual/givenNames	All the given names, including the first name.
individual/language	Language code (nl, fr, de, en, or und).
individual/gender	Gender of a person, following the ISO 5218 standard: 0 = Unknown, 1 = male, 2 = female'
individual/birthDate	Birthdate of the individual (YYYY-MM-DD)
individual/deathDate	The date of death of the individual (YYYY-MM-DD)
addresses (*)	Object with addresses. See section "Common objects"
alternativeContactChannels	Object with alternative contact channels. See section "Common objects"
professions	Object with professions.

(*) **Note:** Personal addresses of individuals are never returned; only **professional** addresses are included.

For performance reasons, the total property has been removed from the response since pagination was introduced.

5.3.3.1 Professions

Element	Description
type	Type of the institution as detailed in the Annex 'List of organization qualities'
type/code	Code of professionType (See list of available professions in Annex)
type/name	Name of the professionType
nihdiNumber	Identifier issued by the National institute for health and disability insurance (NIHDI). The NIHDI number has 8 digits.
nihdiCompetenceCode	The competence code of 3 digits that is commonly added to the NIHDI number, but that is not a part of the NIHDI number.
specialities	List of specialisations
specialities/code	Code of the speciality
specialities/name	Name of the speciality
addresses	Addresses related to the profession
alternativeContactChannels	Additional communication methods for this specific role.
eHealthbox	eHealthBox relating to the profession

Example:

```
{
  "items": [
    {
      "individual": {
        "familyName": "DELBOELEKE",
        "givenName": "DOMI",
        "givenNames": "DOMI ANDRE",

```

```

        "language": "nl",
        "gender": 1,
        "birthDate": "1924-06-24"
    },
    "professions": [
        {
            "type": [
                {
                    "code": {
                        "authenticSource": "EHP",
                        "type": "code",
                        "value": "NURSE"
                    },
                    "name": {
                        "nl": "Verpleegkundige",
                        "fr": "Infirmier",
                        "de": "Krankenpfleger/in"
                    }
                }
            ],
            "nihdiNumber": "49133197",
            "nihdiCompetenceCode": "575"
        },
        {
            "type": [
                {
                    "code": {
                        "authenticSource": "EHP",
                        "type": "code",
                        "value": "MIDWIFE"
                    },
                    "name": {
                        "nl": "Vroedvrouw",
                        "fr": "Sage-femme",
                        "de": "Hebamme"
                    }
                }
            ],
            "nihdiNumber": "40397924",
            "nihdiCompetenceCode": "006"
        }
    ]
}
],
"pageSize": 100,
"page": 1,
"first":
"/professionals?nihdiNumber=49133197&embed=ehealthBoxes&embed=addresses&embed=alternativeContactChannels&pageSize=100&page=1"
}

```

5.4 Common Objects

5.4.1 Addresses

Describes a professional or organizational location. Only professional addresses are included — never private or personal ones.

Element	Description
type	Type of the address. E.g. contact, activity
street	Object with street information
street/rrnCode	Street code assigned by National Registry
houseNumber	This field contains the number in the street.
boxNumber	This field contains the postbox.
municipality	Object with municipality information
municipality/postCode	Postcode of the municipality. 4 digit Belgian postcode from bpost.
municipality/nisCode	Numeric code to identify a Belgian municipality
municipality/name	Name of the municipality
country	Object with country information
country/icode	Country represented by an ISO 3166-1 alpha-2 code
country/nisCode	NIS code representing a country as defined by statbel.fgov.be
country/name	Country name in one or more languages.

5.4.2 alternativeContactChannels

Element	Description
[nameofalternativeContactChannel]	Value of alternativeContactChannel

The names of alternativeContactChannels can be subject to change but are currently limited to:

- 'Mail'
- 'Fax'
- 'Phone'
- 'Cell phone'
- 'Mail2'
- 'Fax2'
- 'Phone2'
- 'Cell phone2'
- 'Mail3'
- 'Fax3'
- 'Phone3'
- 'Cell phone3'



Example :

```
"alternativeContactChannels": [  
  {  
    "Cell phone": "0470/475440",  
    "Fax": "02/12345789"  
  }  
]
```

5.4.3 eHealthBox

Element	Description
id	Numeric ID (e.g., SSIN, NIHDI number, enterprise number, or EHP number).
type	eHealthBox's identifier type ("INSS", "NIHII", "CBE", "EHP").
subtype	Further qualifier for organizations (e.g. HOSPITAL, GROUP).
quality	eHealthBox's Quality. See Section List of organization qualities and List of professional qualities.
lastUserActivity	Date of last known use of the eHealthBox

6. Risks and Security

6.1 Security

6.1.1 Business Security

In case the development adds a use case based on an existing integration, the eHealth platform must be informed at least one month in advance. A detailed estimate of the expected load is necessary to be able to ensure an effective capacity management.

When technical issues occur on the WS, the partner can obtain support from the contact centre (see Chap 3)

If the eHealth platform should find a bug or vulnerability in its software, the partner must update his application with the latest version of the software, within ten (10) business days.

If the partner finds a bug or vulnerability in the software or web service made available by the eHealth platform, he is obliged to contact and inform us immediately. He is not allowed, under any circumstances, to publish this bug or vulnerability.

6.1.2 The Use of Username, Password and Token

The username, password, and token are strictly personal.

Each user takes care of his username, password and token, and he is forced to confidentiality of it. It is prohibited to transfer them to partners and clients. Until inactivation, each user is responsible for each use, including the use by a third party.

7. Implementation Aspects

7.1 Procedure

This chapter explains the procedures for testing and releasing an application in acceptance or production.

7.1.1 Initiation

If you intend to use the eHealth platform service, please contact info@ehealth.fgov.be. The project department will provide you with the necessary information and mandatory documents.

7.1.2 Development and Test Procedure

You have to develop a client in order to connect to our WS. Most of the required integration info to integrate is published on the portal of the eHealth platform.

In some cases, the eHealth platform provides you, upon request, with test cases in order for you to test your client before releasing in the acceptance environment.

7.1.3 Release Procedure

When development tests are successful, you can request to access the acceptance environment of the eHealth platform. From this moment, you start the integration and acceptance tests. The eHealth platform suggests testing during minimum one month.

After successful acceptance tests, the partner sends his test results and performance results with a sample of “eHealth request” and “eHealth answer” by email to his point of contact at the eHealth platform.

Then the eHealth platform and the partner agree on a release date. The eHealth platform prepares the connection to the production environment and provides the partner with the necessary information. During the release day, the partner provides the eHealth platform with feedback on the test and performance tests.

For further information and instructions, please contact: integration-support@ehealth.fgov.be.

7.1.4 Operational Follow-Up

Once in production, the partner using the eHealth platform service for one of his applications will always test first in the acceptance environment before releasing any adaptations of its application in production. In addition, he will inform the eHealth platform on the progress and test period.

7.2 Error and Failure Messages Http Codes

These are the error status codes that can be returned by the eHealth AddressBook Rest service:

Code	Message	Description
200	OK	The resource has been fetched and is transmitted in the message body or the resource describing the result of the action is transmitted in the message body.
400	Bad request	The structure of the query parameters or the JSON body is not correct.
404	Not Found	The resource or the endpoint does not exist.
500	Internal server error	An unexpected error occurred, but the service is not down (to remove).
503	Service temporarily unavailable	The eHealth AddressBook service is down.



7.3 Business Error Codes

Mail delivery system error codes originating from the application.

These error codes indicate a problem with the message and/or its recipients and are generated synchronously.

The API can send the following errors as response:

Code	Message	Description
400 badRequest	Required request parameter 'embed' for method parameter type List is not present.	At least one occurrence of embed is required as search path parameter
400 badRequest	Search criterion cannot be empty.	A value is required if a search parameter is used in the path
400 badRequest	Search criterion '[fieldName]' is invalid.	<ul style="list-style-type: none">- The minimum number of characters was not respected- The search value is not a valid enumeration value- The value is detected as invalid based on checkdigits or length (enterpriseNumber, nihdiNumber, ehpNumber)
400 badRequest	Searching on institutionType and [fieldName] is not supported for CBE types.	Searches on institutionType CBE is name cannot be done for types TREAT_CENTER, CONSORTIUM, ENTERPRISE
400 badRequest	This combination of search criteria is not supported.	<ul style="list-style-type: none">- The search combination is not allowed. Mind the special exceptions that apply for Organization searches with institutionType relates to 'CBE'.- Unsupported characters where used in the search
500 serverError	Cache has not been filled yet, please retry.	Error that may occur on initialization of the service. A simple retry of the request resolves the issue.

The error **"Query returns too many results."** (triggered when more than 100 results were returned) no longer applies since the introduction of the pagination functionality.

Example:

```
{
  "type": "badRequest",
  "title": "Bad Request",
  "status": 400,
  "detail": "Search criterion 'name' is invalid.",
  "instance": "error:ticket:1710502662934"
}
```



8. Annexes

8.1 institutionType: List of Organization Qualities

The list of supported values for institutionType:

Institution type	Type	Dutch Description	Desc NL
AMBU_SERVICE	NIHDI	Service ambulancier	Ambulancedienst
CONSORTIUM	CBE	Consortium dépistage du cancer	Consortium kankerbevolkingsonderzoek
CTRL_ORGANISM	EHP	Organisme de contrôle	Controle organisme
GROUPOFNURSES	NIHDI	Groupement d'infirmiers	Groepering van verpleegkundigen
GROUPOFDOCTORS	NIHDI	Groupement de médecins généralistes à différents lieux d'installation	Groepering van huisartsen op verschillende installatieplaatsen
GUARD_POST	NIHDI	Poste de garde	Wachtpost
HOME_SERVICES	NIHDI	Service de soins intégrés à domicile	Geïntegreerde diensten voor thuisverzorging
HOSPITAL	NIHDI	Hôpital	Ziekenhuis
ICP	NIHDI	Projet de soins intégrés	Geïntegreerd zorgproject
ENTERPRISE	CBE	Entreprise	Onderneming
EHP	EHP	Entité spéciale reconnue par la plateforme eHealth	Speciale door het eHealth-platform erkende entiteit
LABO	NIHDI	Laboratoire	Laboratorium
LEGAL_PSY	NIHDI	Centre de psychiatrie légale	Forensisch psychiatrisch centrum
MEDICAL_HOUSE	NIHDI	Maison médicale	Medisch huis
OFFICE_DOCTORS	NIHDI	Groupement de médecins généralistes au même lieu d'installation	Groepering van huisartsen op dezelfde installatieplaats
OTD_PHARMACY	NIHDI	Office de tarification	Tariferingsdienst
PALLIATIVE_CARE	NIHDI	Soins palliatifs	Palliatieve Zorgen
PHARMACY	NIHDI	Pharmacie	Apotheek
PROT_ACC	NIHDI	Initiatives d'habitation protégée pour patients psychiatriques	Initiatieven van beschut wonen voor psychiatrische patiënten
PSYCH_HOUSE	NIHDI	Maison de soins psychiatrique	Psychiatrische verzorgingstehuis
REEDUCATION	NIHDI	Maison de rééducation	Rehabilitatiehuis

RETIREMENT	NIHDI	Maison de repos	Rusthuis
BELRAI	NIHDI	Projet BelRAI	BelRAI project
BELRAI_SCREEN	NIHDI	BelRAI Screening project	BelRAI Screening project
SORTING_CENTER	NIHDI	Centre de triage	Triagecentra

8.2 professionType: List of professional qualities

The list of supported values for professionType:

professionType	French description	Dutch description
AMBULANCE_RESCUER	Ambulancier	Ambulancier
APPLIED_PSYCH_BACHELOR	Bachelier en psychologie appliquée	Bachelor in de toegepaste psychologie
AUDICIAN	Audicien	Audicien
AUDIOLOGIST	Audiologue	Audioloog
BIOLOGIST_PHARMACIST	Pharmacien-biologiste	Apotheker-bioloog
CLINICAL_ORTHOPEDIC_PEDAGOGUE	Orthopédagogue clinicien	Klinisch orthopedagoog
CLINICAL_PSYCHOLOGIST	Psychologue clinicien	Klinisch psycholoog
DENTIST	Dentiste	Tandarts
DENTAL_HYGIENIST	Hygiéniste bucco-dentaire	Mondhygiënist
DIABETE_EQUIPMENT_SUPPLIER	Fournisseur de matériel d'autogestion diabétique	Leverancier van materiaal voor diabeteszelfregulatie
DIETICIAN	Diététicien	Dietist
PHYSICIAN	Médecin	Dokter
FAMILY_SCIENCE_BACHELOR	Bachelier en science de la famille	Bachelor in de gezinswetenschappen
GERONTOLOGY_MASTER	Master en gérontologie	Master in de gerontologie
IMAGING_TECHNOLOGIST	Technologue en imagerie médicale	Technoloog in de medische beeldvorming
IMPLANTPROVIDER	Dispensateur d'implants	Implantaten verdeler
LAB_TECHNOLOGIST	Technologue de labo	Laborant
LOGOPEDIST	Logopède	Logopedist
MIDWIFE	Sage-femme	Vroedvrouw
NURSE	Infirmier/Infirmière	Verpleegkundige
OCCUPATIONAL_THERAPIST	Ergothérapeute	Ergotherapeut
OPTICIAN	Opticien	Opticien
ORTHOPEDAGOGIST_MASTER	Master en orthopédagogie	Master in de orthopedagogie

ORTHOPEDIST	Orthopédiste	Orthopedist
ORTHOPTIST	Orthoptiste	Orthoptist
PHARMACIST	Pharmacien	Apotheker
PHARMACIST_ASSISTANT	Assistant pharmacien	Assistent apotheker
PHYSIOTHERAPIST	Kinésithérapeute	Kinésitherapeut
PODOLOGIST	Podologue	Podoloog
PRACTICAL_NURSE	Aide-soignant	Verzorger
PSYCHOLOGIST	Psychologue	Psycholoog
PSYCHOMOTOR_THERAPY_MASTER	Master thérapie psychomotrice	Master in de psychomotoriek
READAPTATION_BACHELOR	Bachelier en réadaptation	Bachelor in de rehabilitatie
SOCIAL_WORKER	Assistant social	Maatschappelijk werker
SPECIALIZED_EDUCATOR	Educateur spécialisé	Gespecialiseerde educator
TRUSS_MAKER	Bandagiste	Bandagist
OPTOMETRIST	Optométriste	Optometrist
OT_MOBILITY_IMPROVEMENT	TO-Aides à la mobilité	OT-Mobiliteitshulpmiddelen
OT_BANDAGES_ORTHOESIOLOGY	TO-Bandagisterie et orthésioologie	OT-Bandagisterie en orthesiologie
OT_PROTHESIOLOGY	TO-Prothésioologie	OT-Prothesiologie
OT_SHOE_TECHNOLOGY	TO-Technologie de la chaussure	OT-Schoentechnologie
MIDWIFE_PRACTITIONER_NURSING	Infirmier avec un visa de sage-femme	Verpleegkundige met een visum als vroedvrouw
HOMEOPATH	Homéopathe	Homeopaat