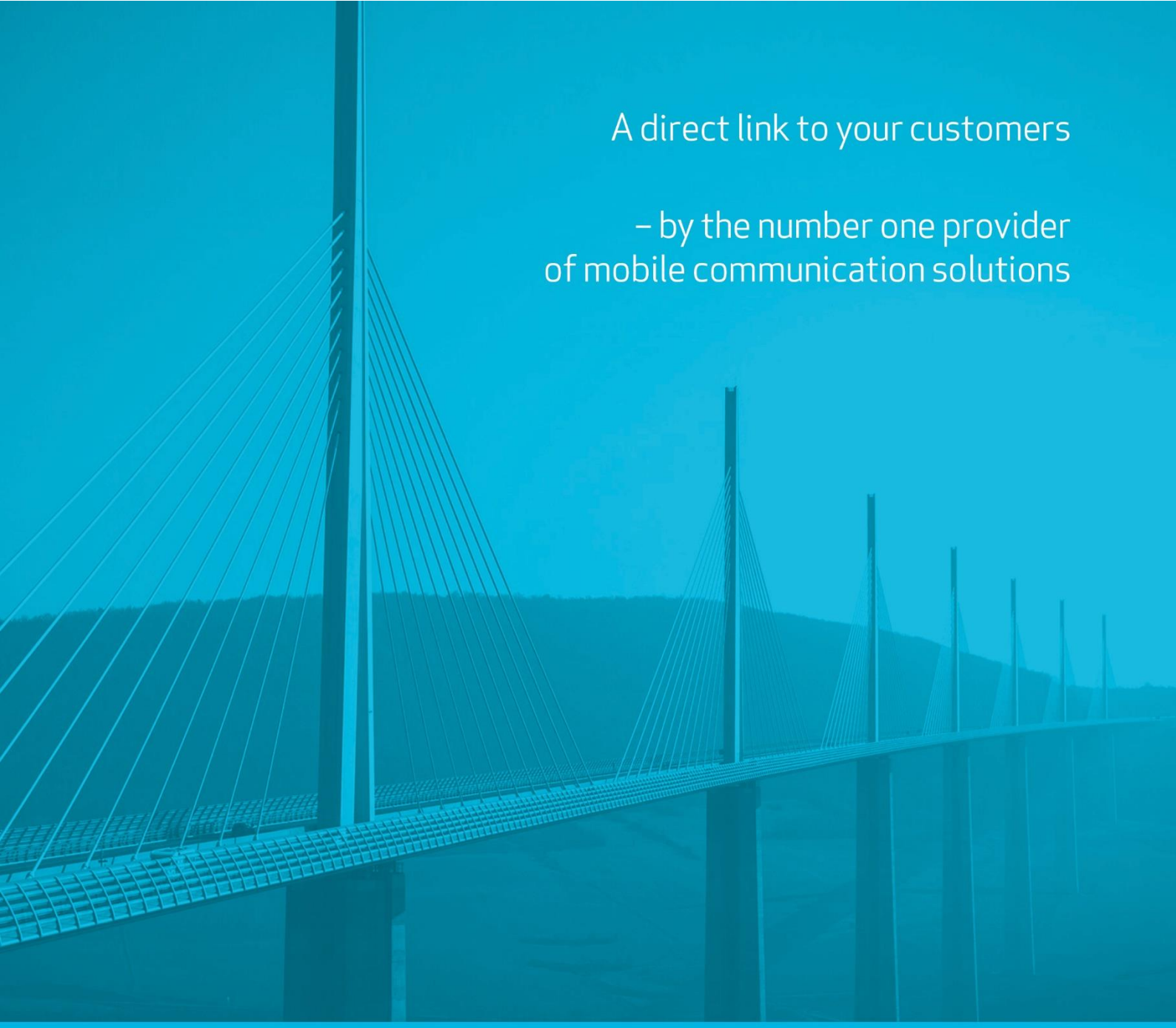

LINK Mobility
Address Lookup REST API Description

Address Lookup

Version 1.8; Last updated July 3, 2025

For help, contact support@linkmobility.com

The most up-to-date version of this document is available at https://www.linkmobility.com/developer/

link mobility

Contents

Before you begin

Please make sure that Link Mobility Support has provided you with **Username**, **Password**, **PlatformId**, **PartnerId** and – if you intend to use the service asynchronously – a **GateId**. To provide a GateId support will need a result receiver URL to which addresses can be delivered.
Please make an opening in your firewall if necessary so that Common can connect to your system. For a list of the addresses Common will connect from, see below.

Scope of this document

This document will describe the Application Programming Interface (API) to perform address lookups based on phone number (MSISDN), social security number (SSN) or queries. Common is a REST API. Responses will be delivered in JSON format. A basic familiarity with REST APIs and JSON is assumed.

Capabilities of "Common" platform

Common is a high-capacity, high-stability service which will allow you to make synchronous and asynchronous address lookups based on name, street, city, phone number or social security number.

IP addresses

When delivering an address to you asynchronously, the requests will be coming from the following IP addresses:

Hostname	IP address
socks1.sp247.net	195.84.162.34
socks2.sp247.net	194.71.165.71
socks3.sp247.net	195.84.162.16
socks4.sp247.net	194.71.165.98
socks5.sp247.net	195.84.162.3
socks6.sp247.net	194.71.165.122

Please add openings in your firewalls so that these six hosts can connect to you.

Character encoding

All communication to and from Common will be encoded using **UTF-8**.

Data types

Address

When requesting an address, the response will contain the following data.

Parameter	Data type	Description
firstname	String	First name of person.
middlename	String	Middle name of person.
lastname	String	Last name of person.
company	String	Company where person is employed.
address	String	The street address.
streetnumber	String	The street number.

Parameter	Data type	Description
postalCode	String	Postal code or zip code.
area	String	Area, city or locality.
coAddress	String	The C/O address.
country	String	Two letter country code (ISO3166).
socialSecurityNumber	String	The social security number or personal number. Country specific.
birthdate	String	Birthdate on the form YYYY-MM-DD
mobileNumber	String	Primary mobile telephone number in MSISDN format. Example: +46732594083
telephoneNumber	String	Primary land line telephone number in MSISDN format.
customParameters	KeyValue	Key-value map containing lookup provider specific data (such as sex, exact position, secondary phone numbers, etc.)

Request data (asynchronous requests only)

Data POSTed to service when requesting an asynchronous address lookup.

Parameter	Data type	Description
refId	String	This ID can be used to identify a callback address. Generated by service if not set.
gateIds	List<String>	A list of GateIds to which the callback address should be delivered.

Response data (asynchronous requests only)

Object returned by service when requesting an asynchronous address lookup.

Parameter	Data type	Description
refId	String	ID created by the user or the service.

Callback address (asynchronous requests only)

This data will be delivered when the service is used asynchronously.

Parameter	Data type	Description
refId	String	The ID either set in your asynchronous request or generated by the service.
status	Integer	0 = Success 1 = Error 2 = Address not found
address	Address	See above.

Address collection (query based lookups only)

This is the object returned on query based requests.

Parameter	Data type	Description
totalHits	Integer	Total number of hits. If this parameter equals the size of the hits list, this collection is complete.
startIndex	Integer	Index of first hit in collection.
hits	List<Address>	See above.

Error response

Object describing an error.

Parameter	Data type	Description
status	Integer	See Status codes.
description	String	Textual description of the problem.
translatedDescription	String	Textual description of the problem based on “Accept-Language”.

Looking up an address

Base URL

`https://wsx.sp247.net/addresslookup`

HTTP methods, statuses and actions

Method	Request ok	Invalid request	Invalid login	No access	No resource
GET	**200 OK** Returns Address	**400 Bad Request** Returns Error Response	**401 Un-authorized** Returns Error Response	**403 Forbidden** Returns Error Response	**404 Not found** Returns Error Response
POST	**200 OK** Returns Request Data	**400 Bad Request** Returns Error Response	**401 Unauthorized** Returns Error Response	**403 Forbidden** Returns Error Response	-

Basic authentication

For all requests; set the header “Authorization” to “Basic [encoded string]” where [encoded string] is a base 64 encoded string of your username and password separated by a colon.

Synchronous phone number to address

`GET /platform/[platformId]/partner/[partnerId]/msisdn/[msisdn]`

URI Parameter	Data type	Description
platformId	String	Provided by Link Mobility.

URI Parameter	Data type	Description
partnerId	String	Provided by Link Mobility.
msisdn	String	The MSISDN to look up (exclude + sign or URL encode)

Returns an Address object or Error response on failure.

Asynchronous phone number to address

```
POST /platform/[platformId]/partner/[partnerId]/msisdn/[msisdn]
```

URI Parameter	Data type	Description
platformId	String	Provided by Link Mobility.
partnerId	String	Provided by Link Mobility.
msisdn	String	The MSISDN to look up (exclude + sign or URL encode)

A Request data object must be sent as content. Returns a Response data object. Resulting Callback address will be forwarded to provided gate(s).

Synchronous social security number to address

```
GET /platform/[platformId]/partner/[partnerId]/ssn/[ssn]
```

URI Parameter	Data type	Description
platformId	String	Provided by Link Mobility.
partnerId	String	Provided by Link Mobility.
ssn	String	The social security number to look up.

Returns an Address object or Error response on failure.

Asynchronous social security number to address

```
POST /platform/[platformId]/partner/[partnerId]/ssn/[ssn]
```

URI Parameter	Data type	Description
platformId	String	Provided by Link Mobility.
partnerId	String	Provided by Link Mobility.
ssn	String	The social security number to look up.

A Request data object must be sent as content. Returns a Response data object. Resulting Callback address will be forwarded to provided gate(s).

Synchronous query to address

```
GET /platform/[platformId]/partner/[partnerId]/query?{key}=[val]&…
```

URI Parameter	Data type	Description
platformId	String	Provided by Link Mobility.

URI Parameter	Data type	Description
partnerId	String	Provided by Link Mobility.

Query parameter (key)	Data type	Description
name	String	Name of person to look up. (Optional)
address	String	Street address of person to look up. (Optional)
postalCode	String	Postal code or zip code of person to look up. (Optional)
area	String	Area or locality. (Optional)
country	String	Two letter country code (ISO3166).
companyNumber	String	The number of the company to look up. The country parameter query key and value need to be declared to get an accurate result.
start	Integer	Index of first hit to be returned. (Optional, default = 0)
results	Integer	Number of hits to return (Optional, default = 20)

Returns an Address object or Error response on failure.

Availability

Country	MSISDN to address	MSISDN to address + SSN	SSN to address	Query lookup
Norway	Yes	No	No	Yes
Sweden	Yes	Yes	Yes	Yes
Denmark	Yes	No	No	Yes
Finland	Yes	No	No	No

Result codes

Result code	Description
105000	Unknown error
105001	Success
105100	Invalid authentication
105101	Forbidden
105201	Invalid PlatformId
105202	Invalid PartnerId
105203	Invalid MSISDN
105204	Invalid social security number
105205	No gates provided
105300	Address not found

Result code	Description
105301	Lookup not supported for country
105302	Lookup provider error
105303	Configuration error

Examples

Synchronous phone number to address

Running the following curl command…

```
curl --user yourUsername:yourPassword \
https://wsx.sp247.net/addresslookup/platform/yourPlatformId/partner/
yourPartnerId/msisdn/46735555555
```

…will, assuming the subscriber exists, give the following Address object as response:

```
{
    "firstname": "Test",
    "middlename": null,
    "lastname": "Testson",
    "company": null,
    "address": "Testroad",
    "streetnumber": "2",
    "postalCode": "12345",
    "area": "Test town",
    "coAddress": null,
    "country": "SE",
    "socialSecurityNumber": null,
    "birthdate": "1970-01-01",
    "telephoneNumber": null,
    "mobileNumber": "+46735555555",
    "customParameters": {
        "apartment": "lgh 1002",
        "sex": "M"
    }
}
```

If the subscriber is non-existent, the following Error response will be returned:

```
{
    "status": 105300,
    "description": "Address not found"
}
```

Asynchronous social security number to address

Running the following curl command…

```
curl -XPOST \
```

```
-H "Content-Type: application/json" \
-d "{\"refId\":\"ref1\",\"gateIds\":[\"gate1\"]}" \
-u yourUsername:yourPassword \
https://wsx.sp247.net/addresslookup/platform/yourPlatformId/partner/
yourPartnerId/ssn/7001010000
```

…will return the following Response data object:

```
{
    "refId": "ref1"
}
```

If the subscriber exists, the following Callback address will be forwarded to the URL(s) associated with gate1:

```
{
    "requestStatus": 0,
    "refId": "ref1",
    "address": {
        "firstname": "Test",
        "middlename": null,
        "lastname": "Testsson",
        "company": null,
        "address": "Test street",
        "streetnumber": "2",
        "postalCode": "12622",
        "area": "Test area",
        "coAddress": null,
        "country": "SE",
        "socialSecurityNumber": "00000000",
        "birthdate": "1981-05-05",
        "telephoneNumber": null,
        "mobileNumber": "+46730000000",
        "customParameters": {
            "apartment": "lgh 1002",
            "sex": "M"
        }
    }
}
```

If the subscriber does not exist, the resulting callback address object will look like this:

```
{
    "requestStatus": 2,
    "refId": "ref1",
    "address": null
}
```

Synchronous query to address

Running the following curl command…

```
curl -XGET \
-u yourUsername:yourPassword \
https://wsx.sp247.net/addresslookup/platform/SEND/partner/1/query?name=Test+Testsson&area=Test+town&country=SE
```

…will, assuming any subscribers exists, give the following Address collection object as response:


```
{
    "totalHits": 1,
    "startIndex": 0,
    "hits": [
        {
            "firstname": "Test",
            "middlename": null,
            "lastname": "Testsson",
            "company": null,
            "address": "Test street",
            "streetnumber": "76",
            "postalCode": "12345",
            "area": "Test town",
            "coAddress": null,
            "country": "SE",
            "socialSecurityNumber": null,
            "birthdate": "1970-01-01",
            "telephoneNumber": null,
            "mobileNumber": "+46755555555",
            "customParameters": {
                "latitude": "37.397914",
                "longitude": "-116.227283"
            }
        }
    ]
}
```

Appendix 1

Supported TLS versions

To ensure the highest level of security and performance, TLS 1.3 is strongly recommended for all connections to the API. TLS 1.3 offers several advantages over previous versions, including:

- Improved Performance: Faster handshake process, reducing connection latency.
- Stronger Security: Removal of obsolete and vulnerable cryptographic algorithms (e.g., SHA-1, RC4, and static RSA).
- Forward Secrecy: Enhanced protection of session keys, preventing decryption even if the server's private key is compromised.
- Simplified Protocol: Reduced complexity leads to fewer implementation errors and better maintainability.

Although TLS 1.2 is still supported for backward compatibility, it is considered legacy. Clients and servers should be updated to use TLS 1.3 wherever possible.

HTTP is deprecated and LINK **strongly recommend** using HTTPS if HTTP is being used today.

Supported Ciphers

TLS	**Ciphers**
1.3	TLS_AES_128_GCM_SHA256 (0x1301) TLS_AES_256_GCM_SHA384 (0x1302) TLS_CHACHA20_POLY1305_SHA256 (0x1303)
1.2	TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256 (0xc02f) TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384 (0xc030) TLS_ECDHE_RSA_WITH_CHACHA20_POLY1305_SHA256 (0xcca8) Support for the following ciphers below is removed 2025-10-15: TLS_DHE_RSA_WITH_AES_128_GCM_SHA256 (0x9e) TLS_DHE_RSA_WITH_AES_256_GCM_SHA384 (0x9f) TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384 (0xc028) TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256 (0xc027) TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA (0xc013) TLS_RSA_WITH_AES_256_CBC_SHA256 (0x3d) TLS_RSA_WITH_AES_128_CBC_SHA256 (0x3c)

Changelog of this document

Date	Version	Author	Changes
2015-12-07	1.0	JA	Initial version
2017-08-24	1.1	KCN	Minor changes
2020-08-28	1.2	EPT	Appendix 1 added
2021-02-19	1.3	TL	The URL for Developers, From HTTP to HTTPS
2021-04-29	1.4	TL	Changed to new homepage URL
2023-01-25	1.6	KCN	Changed from semi colon to colon
2025-03-21	1.7	EPT	Added the *companyNumber* query parameter
2025-07-03	1.8	KCN	Appendix 1 updated with TLS changes.