

# ETV Inside REST

## User Documentation

### General Information

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## II. List of abbreviations

API	Application Programming Interface
BUS	Binary Unit System
CORS	Cross-Origin Resource Sharing
ETV	Electronic telephone directory
HTTPS	Hypertext Transfer Protocol Secure
OAuth 2.0	Open Authentication Version 2
LV03	National survey
REST	Representational State Transfer
SOAP	Single Object Access Protocol
TLS	Transport Layer Security
URL	Uniform Resource Locator
VOIP	Voice over Internet Protocol
WCF	Windows Communication Foundation

# 1 Introduction

ETV Inside Webservices offers professional access to the daily updated directory data of Swisscom Directories AG within the scope of VoIP telephony.

All ETV Inside functionalities are available both as RESTful and WCF SOAP web services. This documentation describes the RESTful Webservices.

The APIs are available as "Postman Collections". If you are interested, please contact us at [etv@directoriesdata.ch](mailto:etv@directoriesdata.ch). The API tool "Postman" can be downloaded for free at <https://www.postman.com/downloads>.

## 2 Authentication

Opening an OAuth2 user account is a prerequisite for using the ETV Inside APIs. The user account (e-mail address/password) is required for logging in to the Open Authentication Server and for the technical invocation of the APIs in the production and integration environments. The user account is valid for both environments.

### 2.1 Open user account

The following is the procedure for creating an account:

- a. Call up the website <https://api.multisource.ch/admin>
- b. Open an account (register with an e-mail address)
- c. Activate your account via the mail sent to you
- d. Call up user profile via URL <https://auth.local.ch/secure/me>



Figure 1: OAuth User Profile with «Identification» and «Username»

- e. Report the information «username» (email address of the OAuth account) and «Identification» to [etv@directoriesdata.ch](mailto:etv@directoriesdata.ch) for activation

Afterwards directoriesDATA will activate the account and inform you via e-mail.

### 2.2 Open Authentication

The ETV Inside Search Services are accessed via localsearch's Open Authentication Server.

By submitting a request to the OAuth server, you will receive a valid 'Access Token' for access to ETV Inside functionality. The following figure shows the process for obtaining a valid access token.

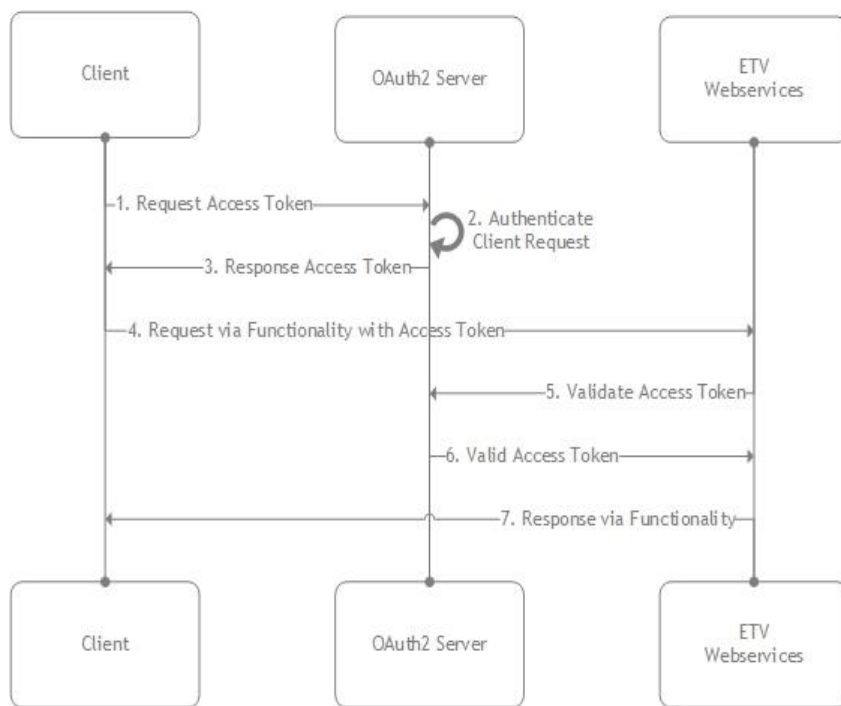


Figure 2: Open Authentication process

### 2.2.1 Access Points Authentication

The following are the access points for obtaining a valid Access Token.

Table 1: Access points for authentication

Access points	Description	Method
<a href="https://apitep.multisource.ch/api/auth/AccessToken?username=User123&amp;password&gt;Password123">https://apitep.multisource.ch/api/auth/AccessToken?username=User123&amp;password&gt;Password123</a>	Integration	POST
<a href="https://api.multisource.ch/api/auth/AccessToken?username=User123&amp;password&gt;Password123">https://api.multisource.ch/api/auth/AccessToken?username=User123&amp;password&gt;Password123</a>	Production	POST

Parameter values marked red in the access point must be replaced with the e-mail address and password of the previously created oAuth2 user account (see chapter 2.1).

Alternatively, the credentials (e-mail address and password) can be submitted in the request body.

Table 2: Access points for authentication

Access points	JSON Body	Description	Method
<a href="https://apitep.multisource.ch/api/auth/AccessToken">https://apitep.multisource.ch/api/auth/AccessToken</a>	<pre>{   "username": "Enter user-name",   "password": "Enter password" }</pre>	Integration	POST
<a href="https://api.multisource.ch/api/auth/AccessToken">https://api.multisource.ch/api/auth/AccessToken</a>		Production	POST

If the API is integrated via JavaScript, the request domain must be stored as a valid access domain (CORS).

You will receive a valid Access Token as a response.

**Table 3: Response Token Query**

JSON	Description
<pre>{   "access_token": "af186c00-679b-4b0c-b727-e9e3581373f2",   "token_type": "bearer",   "expires_in": 21599,   "scope": "read write" }</pre>	The Access Token is valid for 6 hours. The validity of the token is extended by 6 hours if it is used in the last 60 minutes before the expiry time.

### 3 Webservice functionalities

The following API functionalities are available for ETV Inside for queries on the published entry data in the telephone book:

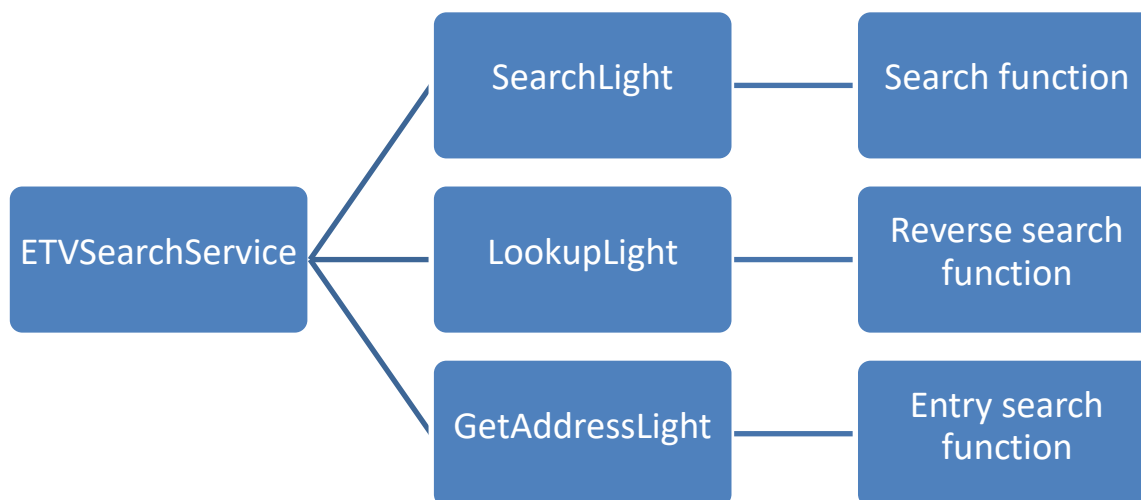


Figure 3: Overview ETV Inside Search Service functionalities

The ETV Inside Search Service functionalities are optimized for different use cases in terms of performance. The functionalities have to be used according to the intended use.

#### 3.1 Access Point Integration

The ETV functionalities are available in the integration environment for the RESTful web services via the following access points

Table 4: Access Points Integration

Access points	Description	Method
<a href="https://apitep.multisource.ch/api/etv/searchlight">https://apitep.multisource.ch/api/etv/searchlight</a>	ETV search function	POST
<a href="https://apitep.multisource.ch/api/etv/lookuplight">https://apitep.multisource.ch/api/etv/lookuplight</a>	ETV Phone number breakdown function	POST
<a href="https://apitep.multisource.ch/api/etv/getaddresslight">https://apitep.multisource.ch/api/etv/getaddresslight</a>	ETV lookup function with "Entryld"	POST
<a href="https://apitep.multisource.ch/api/user/getuser">https://apitep.multisource.ch/api/user/getuser</a>	Retrieve user information	GET
<a href="https://apitep.multisource.ch/api/user/getuserconfig">https://apitep.multisource.ch/api/user/getuserconfig</a>	Retrieve user configuration	GET
<a href="https://apitep.multisource.ch/api/user/resetuserconfig">https://apitep.multisource.ch/api/user/resetuserconfig</a>	Reset user information in the cache of the web server	GET

Access is only possible via https (TLS 1.3). The downgrading of TLS is not allowed. Backend programming is recommended because no CORS occurs. The number of queries per API are limited to **100 transactions** per day in the integration environment.



## 3.2 Access Points Production

The ETV functionalities are available in the production environment for the RESTful web services via the following access points:

Table 5: Access Points Production

Access points	Description	Method
<a href="https://api.multisource.ch/api/etv/searchlight">https://api.multisource.ch/api/etv/searchlight</a>	ETV search function	POST
<a href="https://api.multisource.ch/api/etv/lookuplight">https://api.multisource.ch/api/etv/lookuplight</a>	ETV Phone number breakdown function	POST
<a href="https://api.multisource.ch/api/etv/getaddresslight">https://api.multisource.ch/api/etv/getaddresslight</a>	ETV lookup function with "EntryId"	POST
<a href="https://api.multisource.ch/api/user/getuser">https://api.multisource.ch/api/user/getuser</a>	Retrieve user information	GET
<a href="https://api.multisource.ch/api/user/getuserconfig">https://api.multisource.ch/api/user/getuserconfig</a>	Retrieve user configuration	GET
<a href="https://api.multisource.ch/api/user/resetuserconfig">https://api.multisource.ch/api/user/resetuserconfig</a>	Reset user information in the cache of the web server	GET

Access is only possible via HTTPS (TLS 1.3). The downgrading of TLS is not allowed. Back-end programming is recommended because no CORS occurs.

Below is a code snippet for calling the search function as an example:

```
function sendData() {
  var url = "https://api.multisource.ch/api/etv/searchlight";
  var tokAc = token.access_token;

  $.ajax({
    url: url,
    type: "POST",
    dataType: "json",
    contentType: "application/json",
    data: JSON.stringify({ Lastname:"Swisscom Directories AG"}),
    beforeSend: function (xhr) {
      xhr.setRequestHeader('Authorization', 'bearer ' + tokAc);
    },
    success: function (data) {
      $("#dataResult")[0].innerText = JSON.stringify(data, null, 4);
    }
  });
}
```

Figure 4: Code snippet ETV SearchLight

## 3.3 SearchLight Objects

The API SearchLight is used to search the record data database. The following table lists all objects that can be used for SearchLight queries.

Table 6: Input Objects SearchLight

Objects	Example	Description
firstname		first name
lastname	localsearch	Last name / Company name
femalename		Ledignames

Street	Förrlibuckstrasse	Street name
houseNo	62	House number
zip	8005	Zip code Location
location	Zurich	Place
stateCode	ZH	Canton
typeCode	BUS	Search restriction according to private (RES) or business (BUS) entries.
service	0800 86 80 86	Fixnet/mobile numbers, email, URL
profession		Profession

With the following parameters the Search-Type can be defined individually for each object. On the system side, the search type "Fix-Match" is defined as standard.

**Important note:** The search types 1 and 2 can influence the response times of the functionality and the effectiveness of the search results.

**Table 7: Parameter Search-Type**

Objects	Example	Description
firstnameSearchType	1	0 = Fix-Match Search (Standard) 1 = Like Search 2 = Phonetic Search 3 = Fix-Match Search
lastnameSearchType		
streetSearchType		
zipSearchType		
locationSearchType		
professionSearchType		

The following parameter can be used to individually limit the amount of results returned by the functionality. The system default is a result set of 50 entries. The maximum allowed result set is 200 entries.

**Table 8: Parameter Result set restriction**

Objects	Example	Description
maxResultCount	70	In this example, the functionality returns a maximum of 70 entries.

With the following parameters the Precision-Group-Type can be defined individually per object. The Precision-Group-Type enables the search for an input value in several database fields.

**Important note:** The system default is Precision Group Type 0. Precision Group Type 1 may affect the response times of the functionality and the effectiveness of the search results.

**Table 9: Parameter Precision-Group-Type**

Objects	Value	Description
firstnamePg	0	Search input in field: <ul style="list-style-type: none"> <li>• firstname</li> </ul>
	1	Search input in fields: <ul style="list-style-type: none"> <li>• firstname</li> <li>• lastname</li> <li>• femalename</li> <li>• category</li> </ul>
lastnamePg	0	Search input in field: <ul style="list-style-type: none"> <li>• lastname</li> </ul>
	1	Search input in fields: <ul style="list-style-type: none"> <li>• firstname</li> <li>• lastname</li> <li>• femalename</li> <li>• category</li> </ul>
femalenamePg	0	Search input in field: <ul style="list-style-type: none"> <li>• femalename</li> </ul>
	1	Search input in fields: <ul style="list-style-type: none"> <li>• firstname</li> <li>• lastname</li> <li>• femalename</li> <li>• category</li> </ul>
categoryPg	0	Search input in field: <ul style="list-style-type: none"> <li>• category</li> </ul>
	1	Search input in fields: <ul style="list-style-type: none"> <li>• firstname</li> <li>• lastname</li> <li>• femalename</li> <li>• category</li> </ul>
professionPg	0	Search input in field:

		<ul style="list-style-type: none"> <li>profession</li> </ul>
	1	Search input in fields: <ul style="list-style-type: none"> <li>profession</li> <li>category</li> </ul>

### 3.4 LookupLight objects

The API LookupLight is used to break down fixnet and mobile numbers and thus display the corresponding entry information. The following table lists all objects that can be used in LookupLight queries.

Table 10: Input Objects LookupLight

Objects	Description	Examples	mandatory fields
value	Fixnet/mobile numbers	0800 00 00 24	Yes

### 3.5 GetAddressLight Objects

The API GetAddressLight is used to search for specific entries based on the entry identifier. The following table lists all objects that can be used with GetAddressLight queries.

Table 11: Input Objects GetAddressLight

Objects	Description	Examples	mandatory fields
entryId	Identifier entry record	30731710	Yes
from	Valid from date yyyy-mm-dd		
to	Valid to date yyyy-mm-dd		

### 3.6 Response objects

A standard wrapper is returned as response for all ETV Inside functionalities. The output of the return values is done in the property "Data".

Table 12: Standard wrapper

Objects	Description	Return values
requestDate	Time of the query	yyyy-mm-dd hh:mm:ss
responseDate	Time of response	yyyy-mm-dd hh:mm:ss
executionId	Query identifier	Numerical
isError	Could the function be performed successfully.	False = OK true = NOK

errorCode	Error Code	
errorText	Error Description	
dataCount	Number of records in the property "data".	Numeric
data	In this property all return values are output.	
etvrecords	In this property, the found entry data is output.	
entryId	Numerical entry identifier	30731710
typeCode	Alphanumeric Entry type: BUS = Business RES = Residential	BUS
entryCode	Entry Code	
validFrom	Valid from date	2020-05-12T00:00:00
validTo	Valid to date	2099-01-01T00:00:00
hierarchies	In this property, the hierarchy or organisational structure information of the found entry data is output.	
hierarchield	Numerical Organisation structure identifier	
level	Level Organisation structure	
name	Name Organisation structure	
entryAdds	In this property the found address information of the entry data is output.	
entrySortNo	Sort number entries	0
title	Titel	
firstName	first name	
lastName	Last name / Company name	localsearch
lastnameSuffix	Additional information last name / company name	Swisscom Directories AG
street	Street name	Förrlibuckstrasse
houseNo	House number	62
poBox	P.O. Box address	P.O. Box 8021 Zurich 1
zip	Zip code Location	8005

zipCity	Postal code municipality	8000
location	Place	Zurich
locationPostId	Zip code with additional digit	800500
locationPostName		Zurich
country	Country	CHE
stateCode	Canton	ZH
firstnameSuffix	Additional information First names	
femalename	Ledignames	
profession	Profession	
professionSuffix	Additional information profession	
streetSuffix	Additional Information Street	
houseDesc	Building name	
apartment	Apartment	
floor	Floor	
locationPostSuffix	Additional information	
services	In this property the contact information of the entry is displayed.	
typeGrpCode	Type of service	<ul style="list-style-type: none"> <li>• TEL</li> <li>• EMAIL</li> <li>• URL</li> <li>• FAX</li> <li>• NATEL</li> <li>• TELFAX</li> <li>• VOIP</li> <li>• COMBOX</li> <li>• PAGER</li> </ul>
value	Value	0800 86 80 86
valuePre	Additional information about Value	Geschäftskunden, Service clientèle professionnelle, Corporate Customer Service, CHF 0.00/Min.
validFrom	Valid from date	2013-10-04T00:00:00
validTo	Valid until date	2099-01-01T00:00:00
isNoAdvert	Contact information has advertising stars	False

	Yes = True No = False	
sortNo	Sort number Contact information	1
typeGrpCode	Type of service	EMAIL
value	Value	customercare@localsearch.ch
valuePre	Additional information about Value	
validFrom	Valid from date	2018-02-27T00:00:00
validTo	Valid until date	2099-01-01T00:00:00
isNoAdvert	Contact information has advertising stars Yes = True No = False	True
sortNo	Sort number Contact information	2
typeGrpCode	Type of service	TEL
value	Value	0848 86 80 86
valuePre	Additional information about Value	Private clients, Clients Privés, Clienti Privati, CHF 0.08/min.
validFrom	Valid from date	2018-08-31T00:00:00
validTo	Valid until date	2099-01-01T00:00:00
isNoAdvert	Contact information has advertising stars Yes = True No = False	false
sortNo	Sort number Contact information	3
typeGrpCode	Type of service	EMAIL
value	Value	datamanagement@local-search.ch
valuePre	Additional information about Value	
validFrom	Valid from date	2018-08-31T00:00:00
validTo	Valid until date	2099-01-01T00:00:00
isNoAdvert	Contact information has advertising stars Yes = True No = False	True
sortNo	Sort number Contact information	4

typeGrpCode	Type of service	URL
value	Value	https://www.localsearch.ch
valuePre	Additional information about Value	
validFrom	Valid from date	2020-05-12T00:00:00
validTo	Valid until date	2099-01-01T00:00:00
isNoAdvert	Contact information has advertising stars Yes = True No = False	False
sortNo	Sort number Contact information	5
locationsDir	The ETV Inside functionalities do not return any values.	
categories	The ETV Inside functionalities do not return any category values.	
validFrom	Valid from date	
validTo	Valid until date	
sourceInfo	In this property the status information of the queried source database is fixed.	
sourceId	System-Id source database	14
sourceDescription	Description Source database	ETV
parameter	The parameter information of the queried source database is stored in this property.	0
sortOrder	Prioritization of the data source	A-Z (A= highest priority / Z= lowest priority)
must	The source database must return a result	false
resultCount	Number of results returned from the corresponding source	Numerical
statusId	Status Identifier Source Database	5
statusDescription	Source database status	ok
errors	If the data source returned an error	Numerical
infos	This property contains additional information about the result of the queried source database.	According to information code list in chapter 5



## 3.7 Example SearchLight

### 3.7.1 Request

Table 13: Example Input SearchLight Function

JSON	Description
<pre>{   "lastname": "localsearch",   "street": "Förllibuckstrasse",   "houseNo": 62,   "zip": 8005,   "location": "Zürich" }</pre>	Objects search query

### 3.7.2 Response

Table 14: Example Output SearchLight Function

JSON
<pre>{   "RequestDate": "2020-07-16T14:19:55.3950573+02:00",   "ResponseDate": "2020-07-16T14:19:56.2231715+02:00",   "ExecutionId": 0,   "IsError": false,   "ErrorCode": 200.0,   "ErrorText": null,   "DataCount": 1,   "Data": [     {       "EtvRecords": [         {           "EntryId": "23460724",           "TypeCode": "BUS",           "EntryCode": null,           "EntryAdds": [             {               "EntrySortNo": 0,               "Title": "",               "Firstname": null, </pre>

```
"LastName": "localsearch",
"LastNameSuffix": "Swisscom Directories AG",
"Street": "Förllibuckstrasse",
"HouseNo": "62",
"PoBox": "Postfach 8021 Zürich 1",
"Zip": "8005",
"ZipCity": "8000",
"Location": "Zürich",
"LocationPostId": "800500",
"LocationPostName": "Zürich",
"Country": "CHE",
"StateCode": "ZH",
"FirstnameSuffix": null,
"Femalename": null,
"Profession": null,
"ProfessionSuffix": null,
"StreetSuffix": null,
"HouseDesc": null,
"Appartment": null,
"Floor": null,
"LocationPostSuffix": null,
"Services": [
  {
    "TypeGrpCode": "TEL",
    "Value": "0800 86 80 86",
    "ValuePre": "Geschäftskunden, Service clientèle professionnelle, Servizio clienti
aziendali, CHF 0.00/Min.",
    "ValidFrom": "2013-10-04T00:00:00",
    "ValidTo": "2099-01-01T00:00:00",
    "IsNoAdvert": false,
    "SortNo": 1
  },
  {
    "TypeGrpCode": "EMAIL",
    "Value": "customercare@localsearch.ch",
    "ValuePre": "",
    "ValidFrom": "2018-02-27T00:00:00",
    "ValidTo": "2099-01-01T00:00:00",
    "IsNoAdvert": true,
    "SortNo": 2
  },
  {
```

```
        "TypeGrpCode": "TEL",
        "Value": "0848 86 80 86",
        "ValuePre": "Privatkunden, Clients Privés, Clienti Privati, CHF 0.08/Min.",
        "ValidFrom": "2018-08-31T00:00:00",
        "ValidTo": "2099-01-01T00:00:00",
        "IsNoAdvert": false,
        "SortNo": 3
    },
    {
        "TypeGrpCode": "EMAIL",
        "Value": "datamanagement@localsch.ch",
        "ValuePre": "",
        "ValidFrom": "2018-08-31T00:00:00",
        "ValidTo": "2099-01-01T00:00:00",
        "IsNoAdvert": true,
        "SortNo": 4
    },
    {
        "TypeGrpCode": "URL",
        "Value": "https://www.localsch.ch",
        "ValuePre": "",
        "ValidFrom": "2020-05-12T00:00:00",
        "ValidTo": "2099-01-01T00:00:00",
        "IsNoAdvert": false,
        "SortNo": 5
    }
],
"Geo": null
}
},
"LocationsDir": null,
"Categories": null,
"ValidFrom": "2020-01-28T00:00:00",
"ValidTo": "2099-01-01T00:00:00"
}
],
"SourceInfo": [
    {
        "SourceId": 13,
        "SourceDescription": "ETV",
        "Parameter": {
            "SortOrder": 0,
```

```

        "Must": false
      },
      "ResultCount": 0,
      "StatusId": 5,
      "StatusDescription": "Ok",
      "Errors": null,
      "Infos": null
    }
  ]
}
]
}

```

### 3.8 Example LookupLight

#### 3.8.1 Request

Table 15: Example Input LookupLight Function

JSON	Description
<pre>{   "value": "0800 86 80 86" }</pre>	Objects search query

#### 3.8.2 Response

Table 16: Example Output LookupLight Function

JSON
<pre>{   "RequestDate": "2020-07-16T14:21:01.7233109+02:00",   "ResponseDate": "2020-07-16T14:21:01.7545536+02:00",   "ExecutionId": 0,   "IsError": false,   "ErrorCode": 200.0,   "ErrorText": null,   "DataCount": 1,   "Data": [     {       "EtvRecords": [         {           "EntryId": "23460724", </pre>

```
"TypeCode": "BUS",
"EntryCode": null,
"EntryAdds": [
  {
    "EntrySortNo": 0,
    "Title": "",
    "Firstname": null,
    "Lastname": "localsearch",
    "LastnameSuffix": "Swisscom Directories AG",
    "Street": "Förllibuckstrasse",
    "HouseNo": "62",
    "PoBox": "Postfach 8021 Zürich 1",
    "Zip": "8005",
    "ZipCity": "8000",
    "Location": "Zürich",
    "LocationPostId": "800500",
    "LocationPostName": "Zürich",
    "Country": "CHE",
    "StateCode": "ZH",
    "FirstnameSuffix": null,
    "Femalename": null,
    "Profession": null,
    "ProfessionSuffix": null,
    "StreetSuffix": null,
    "HouseDesc": null,
    "Appartment": null,
    "Floor": null,
    "LocationPostSuffix": null,
    "Services": [
      {
        "TypeGrpCode": "TEL",
        "Value": "0800 86 80 86",
        "ValuePre": "Geschäftskunden, Service clientèle professionnelle, Servizio clienti
aziendali, CHF 0.00/Min.",
        "ValidFrom": "2013-10-04T00:00:00",
        "ValidTo": "2099-01-01T00:00:00",
        "IsNoAdvert": false,
        "SortNo": 1
      },
      {
        "TypeGrpCode": "EMAIL",
        "Value": "customercare@localsearch.ch",
```

```
        "ValuePre": "",
        "ValidFrom": "2018-02-27T00:00:00",
        "ValidTo": "2099-01-01T00:00:00",
        "IsNoAdvert": true,
        "SortNo": 2
    },
    {
        "TypeGrpCode": "TEL",
        "Value": "0848 86 80 86",
        "ValuePre": "Privatkunden, Clients Privés, Clienti Privati, CHF 0.08/Min.",
        "ValidFrom": "2018-08-31T00:00:00",
        "ValidTo": "2099-01-01T00:00:00",
        "IsNoAdvert": false,
        "SortNo": 3
    },
    {
        "TypeGrpCode": "EMAIL",
        "Value": "datamanagement@localsearch.ch",
        "ValuePre": "",
        "ValidFrom": "2018-08-31T00:00:00",
        "ValidTo": "2099-01-01T00:00:00",
        "IsNoAdvert": true,
        "SortNo": 4
    },
    {
        "TypeGrpCode": "URL",
        "Value": "https://www.localsearch.ch",
        "ValuePre": "",
        "ValidFrom": "2020-05-12T00:00:00",
        "ValidTo": "2099-01-01T00:00:00",
        "IsNoAdvert": false,
        "SortNo": 5
    }
},
"Geo": null
}
],
"LocationsDir": null,
"Categories": null,
"ValidFrom": "2020-01-28T00:00:00",
"ValidTo": "2099-01-01T00:00:00"
}
```

```

    ],
    "SourceInfo": [
      {
        "SourceId": 14,
        "SourceDescription": "ETV",
        "Parameter": {
          "SortOrder": 0,
          "Must": false
        },
        "ResultCount": 0,
        "StatusId": 5,
        "StatusDescription": "Ok",
        "Errors": null,
        "Infos": null
      }
    ]
  }
]
}

```

### 3.9 Example GetAddressLight

#### 3.9.1 Request

Table 17: Example Input GetAddressLight Function

JSON	Description
<pre>{   "entryId": 23460724 }</pre>	Object search query

#### 3.9.2 Response

Table 18: Example Output GetAddressLight Function

JSON
<pre>{   "RequestDate": "2020-07-16T14:21:01.7233109+02:00",   "ResponseDate": "2020-07-16T14:21:01.7545536+02:00",   "ExecutionId": 0,   "IsError": false, }</pre>

```
"ErrorCode": 200.0,
"ErrorText": null,
"DataCount": 1,
"Data": [
  {
    "EtvRecords": [
      {
        "EntryId": "23460724",
        "TypeCode": "BUS",
        "EntryCode": null,
        "EntryAdds": [
          {
            "EntrySortNo": 0,
            "Title": "",
            "Firstname": null,
            "Lastname": "localsearch",
            "LastnameSuffix": "Swisscom Directories AG",
            "Street": "Förllibuckstrasse",
            "HouseNo": "62",
            "PoBox": "Postfach 8021 Zürich 1",
            "Zip": "8005",
            "ZipCity": "8000",
            "Location": "Zürich",
            "LocationPostId": "800500",
            "LocationPostName": "Zürich",
            "Country": "CHE",
            "StateCode": "ZH",
            "FirstnameSuffix": null,
            "Femalename": null,
            "Profession": null,
            "ProfessionSuffix": null,
            "StreetSuffix": null,
            "HouseDesc": null,
            "Appartment": null,
            "Floor": null,
            "LocationPostSuffix": null,
```



```
"Services": [  
  {  
    "TypeGrpCode": "TEL",  
    "Value": "0800 86 80 86",  
    "ValuePre": "Geschäftskunden, Service clientèle professionnelle, Servizio clienti  
aziendali, CHF 0.00/Min.",  
    "ValidFrom": "2013-10-04T00:00:00",  
    "ValidTo": "2099-01-01T00:00:00",  
    "IsNoAdvert": false,  
    "SortNo": 1  
  },  
  {  
    "TypeGrpCode": "EMAIL",  
    "Value": "customercare@localsearch.ch",  
    "ValuePre": "",  
    "ValidFrom": "2018-02-27T00:00:00",  
    "ValidTo": "2099-01-01T00:00:00",  
    "IsNoAdvert": true,  
    "SortNo": 2  
  },  
  {  
    "TypeGrpCode": "TEL",  
    "Value": "0848 86 80 86",  
    "ValuePre": "Privatkunden, Clients Privés, Clienti Privati, CHF 0.08/Min.",  
    "ValidFrom": "2018-08-31T00:00:00",  
    "ValidTo": "2099-01-01T00:00:00",  
    "IsNoAdvert": false,  
    "SortNo": 3  
  },  
  {  
    "TypeGrpCode": "EMAIL",  
    "Value": "datamanagement@localsearch.ch",  
    "ValuePre": "",  
    "ValidFrom": "2018-08-31T00:00:00",  
    "ValidTo": "2099-01-01T00:00:00",  
    "IsNoAdvert": true,  
  }  
]
```

```
        "SortNo": 4
      },
      {
        "TypeGrpCode": "URL",
        "Value": "https://www.localsearch.ch",
        "ValuePre": "",
        "ValidFrom": "2020-05-12T00:00:00",
        "ValidTo": "2099-01-01T00:00:00",
        "IsNoAdvert": false,
        "SortNo": 5
      }
    ],
    "Geo": null
  }
],
"LocationsDir": null,
"Categories": null,
"ValidFrom": "2020-01-28T00:00:00",
"ValidTo": "2099-01-01T00:00:00"
}
],
"SourceInfo": [
  {
    "SourceId": 14,
    "SourceDescription": "ETV",
    "Parameter": {
      "SortOrder": 0,
      "Must": false
    },
    "ResultCount": 0,
    "StatusId": 5,
    "StatusDescription": "Ok",
    "Errors": null,
    "Infos": null
  }
]
```

```
}  
]  
}
```

## 4 Error Code List

In case of an error, the MCW functions return error codes. The Errors are used for troubleshooting or localization of error causes. It is recommended to check every response for errors.

In the following table the error code categories are listed.

Table 19: Error Code Categories

Code	Category
200	Authentication
401	Authorization
500	Internal execution error

The following table describes the error codes.

Table 20: Error Code List

Group	Code	Sub-Code	Message	Description
Authen-tication	200		{ "error": "invalid_grant", "error_description": "Es existiert kein Konto mit dieser E-Mail-Adresse" }	Wrong oAuth username
Authen-tication	200		{ "error": "invalid_grant", "error_description": "Das Passwort ist falsch" }	Wrong oAuth password
General	401	1	Requested LocalUserId is not Connected to Multi-source Webservice	API: API request was made with a valid token, but the corresponding Local-ID is not yet associated with a Multisource Webservice user.
General	401	2	No Access to the current Functionality	The user has no authorization to access this functionality.
General	401	3	No Configuration for this User	The user is not configured.
General	401	4	No Product Access.	The user has no access to the product.
General	401	5	The user ist deactivated.	The user is deactivated.

General	500	0	"Exception Message"	An unintercepted error was triggered. A system exception is thrown.
General	500	1	No Request Data	The functionality requires additional request parameters.

## 5 Informations-Code List

The information codes provide general additional information on the query result.

In the following table the info code categories are listed.

Table 21: Info-Code Categories

Code	Category
100	General Informations

The following table describes the information codes.

Table 22: Info-Code List

Group	Source	Code	SubCode	Message	Description
Action Source	General	100	6	Search returned too much data. Result is reduced to 50.	The search has exceeded the applicable limit for the number of results. The result quantity was restricted to the specified value. The standard result set is 5 entries.
Action Source	General	100	7	Search returned more data than the internal maximum of 200.	The search has exceeded the maximum result set of 200 entries.

## 6 Support

If you have technical problems, such as not being able to access a function or if you have questions about your user name or password, please contact [etv@directoriesdata.ch](mailto:etv@directoriesdata.ch) for assistance.

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