directoriesDATA

ETV Access REST
User Documentation

General Information

File names	ETV-Access-REST-Documentation-V1.3-EN.docx
Version	1.3
author(s)	Antonino Artese

Change notices

Version	Date	Who	Remarks/reason for change
1.0	22.12.2020	Antonino Artese	First version
1.1	06.01.2021	Antonino Artese	Chapter 3.2 / Addition of example code snippet for function SearchLight Chapter 3.3 / Table 5: Addition of search-object «typeCode» Chapter 3.4 / Table 8: Adaption description search-object «value» Chapter 3.7.1 / Table 11: Adaption return values for object «typeGrpCode»
1.2	16.02.2021	Antonino Artese	Chapter 3.3 / Table 5: Adaption object name «geoSearch» to «geo» and Example «geo»
1.3	21.04.2021	Antonino Artese	Chapter 2.2.1/ Table 2 : Introduction credentials over request body Chapter 3.3 / Table 9: Introduction parameter «Precision-Group-Type» Chapter 4 / Tables 23/24: Addition «Authentication» error message

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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
LV3	National survey
REST	Representational State Transfer
SOAP	Single Object Access Protocol
TLS	Transport Layer Security
URL	Uniform Resource Locator
WCF	Windows Communication Foundation

1 Introduction

The ETV Access Webservices offer professional access to the daily updated directory data of Swisscom Directories AG.

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. 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 Access APIs. The user account (e-mail address/password) is required to log in to the Open Authentication Server and to technically call 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 for activation

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

2.2 Open Authentication

The ETV Access Search Services are accessed via the Open Authentication Server from localsearch.

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

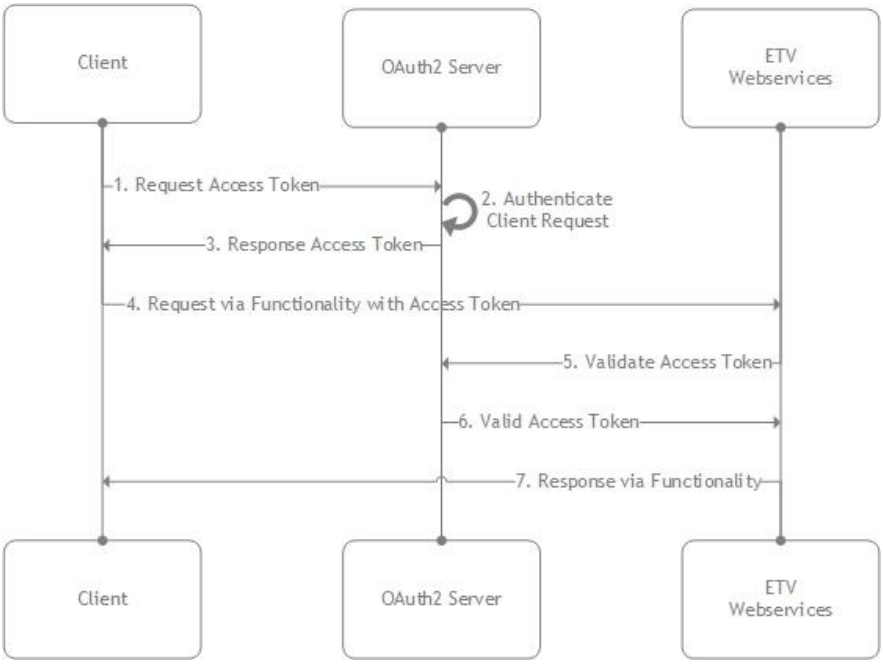

Figure 2: Open Authentication process

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
https://apitep.multisource.ch/api/auth/AccessToken?username=User123&password=Password123	Integration	POST
https://api.multisource.ch/api/auth/AccessToken?username=User123&password=Password123	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
https://apitep.multisource.ch/api/auth/AccessToken	{ "username": "Enter username", "password": "Enter password" }	Integration	POST
https://api.multisource.ch/api/auth/AccessToken		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

{
"access_token": "af186c00-679b-4b0c-b727-e9e3581373f2",
"token_type": "bearer",
"expires_in": 21599,
"scope": "read write"
}
	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 Access for queries to the published entry data in the telephone book:

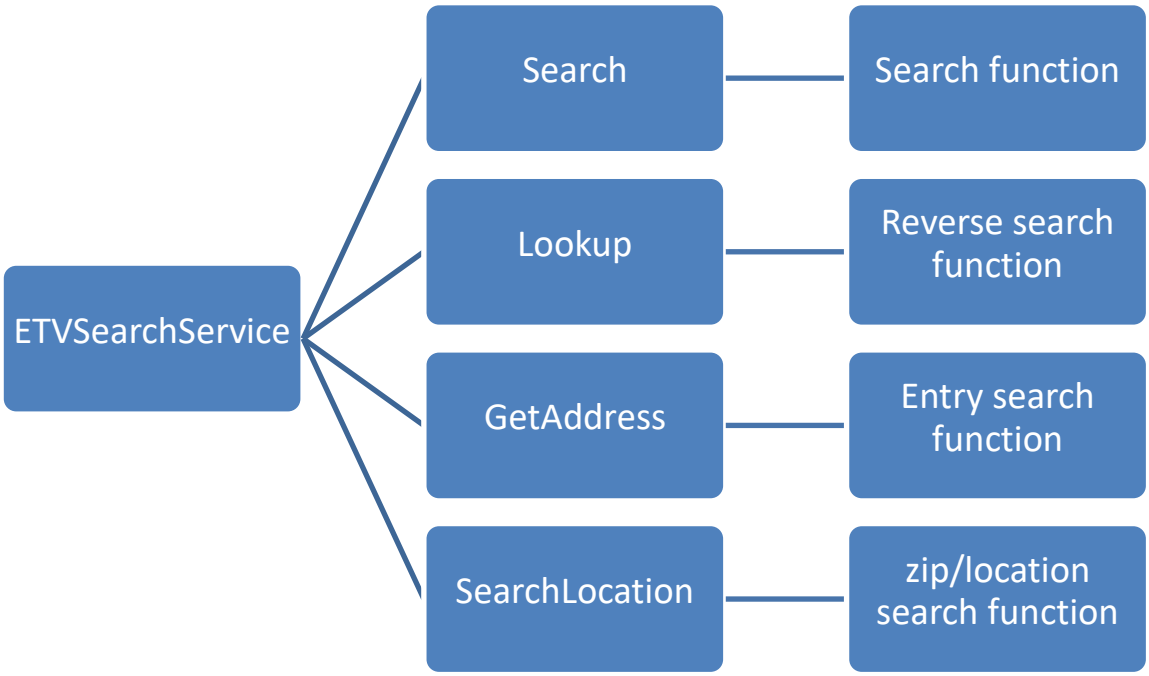

Figure 3: Overview ETV Inside Search Service functionalities

Optionally, the searched entries can be enriched with geographic country coordinates (LV03).

The ETV Access 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
https://apitep.multisource.ch/api/etv/search	ETV search function	POST
https://apitep.multisource.ch/api/etv/lookup	ETV Phone number breakdown function	POST
https://apitep.multisource.ch/api/etv/getaddress	ETV lookup function with "EntryId	POST
https://apitep.multisource.ch/api/etv/searchlocation	ETV lookup function with "ZIP" or "Location	POST
https://apitep.multisource.ch/api/user/getuser	Retrieve user information	GET
https://apitep.multisource.ch/api/user/getuserconfig	Retrieve user configuration	GET

https://apitep.multisource.ch/api/user/resetusercon-fig	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 RESTful ETV functionalities are available in the production environment via the following access points:

Table 5: Access Points Production

Access points	Description	Method
https://api.multisource.ch/api/etv/search	Access point for the ETV search function in the productive environment.	POST
https://api.multisource.ch/api/etv/lookup	Access point for the ETV phone number breakdown function in the production environment.	POST
https://api.multisource.ch/api/etv/getaddress	Access point for the ETV lookup function with "EntryId" in the productive environment.	POST
https://api.multisource.ch/api/etv/searchlocation	Access point for the ETV lookup function with "ZIP" or "Location" in the productive environment.	POST
https://api.multisource.ch/api/user/getuser	Retrieve user information	GET
https://api.multisource.ch/api/user/getuserconfig	Retrieve user configuration	GET
https://api.multisource.ch/api/user/resetuserconfig	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.

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

```
function sendData() {
    var url = "htttps://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 Search Objects

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

Table 6: Input Objects Search

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
service	0800 86 80 86	Fixnet/mobile numbers, email, URL
profession		Profession
category		Category
geo	{"x":"681265;681265","y":"249578;249578"}	Transfer of top-left and bottom-right coordinates. Restriction of search results by coordinates only possible in combination with at least one of the following objects: • Load name • First name/Company name • Femalename • Profession • Service • Category

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 5 entries. The maximum allowed result set is 200 entries.

Important note: For customers who are billed with the price model "data elements", the increase of the maximum result quantity can influence the monthly billing.

Table 8: Parameter Result set restriction

Objects	Example	Description
maxResultCount	10	In this example, the functionality returns a maximum of 10 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: • firstname
	1	Search input in fields: • firstname • lastname • femalename • category
lastnamePg	0	Search input in field: • lastname
	1	Search input in fields: • firstname

		• lastname • femalename • category
femalenamePg	0	Search input in field: • femalename
	1	Search input in fields: • firstname • lastname • femalename • category
categoryPg	0	Search input in field: • category
	1	Search input in fields: • firstname • lastname • femalename • category
professionPg	0	Search input in field: • profession
	1	Search input in fields: • profession • category

3.4 Lookup Objects

The API Lookup 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 lookup queries.

Table 10: Input Objects Lookup

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

3.5 GetAddress Objects

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

Table 11: Input Objects GetAddress

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 SearchLocation Objects

The API SearchLocation is used for the targeted search of specific entries based on the entry identifier. The following table lists all objects that can be used in SearchLocation queries.

Table 12: Input Objects SearchLocation

Objects	Description	Examples	mandatory fields
zip	Zip code	8005	
name	Place	Zurich	

3.7 Response Objects

3.7.1 Standard Wrapper

As response a standard wrapper is returned for the ETV Access functionalities "Search", "Lookup" and "GetAddress". The output of the return values is done in the property "Data".

Table 13: 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	
validTo	Valid to date	
hierarchies	In this property, the hierarchy or organisational structure information of the found entry data is output.	
hierarchieId	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	Title	
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	
appartment	Apartment	
floor	Floor	
locationPostSuffix	Additional information	
services	In this property the contact information of the entry is displayed.	
typeGrpCode	Type of service	TEL
value	Value	0800 86 80 86
valuePre	Additional information about Value	Geschäftskunden, Service clientèle profesionelle, 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 Yes = True No = False	False
sortNo	Sort number Contact information	1
typeGrpCode	Type of service	• TEL • EMAIL • URL • FAX • NATEL • TELFAX • VOIP • COMBOX

		• PAGER
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@localsearch.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 Access functionalities do not return any values.	
categories	This property displays the phone directory section information of the entry.	
categoryId	Category identifier	1386
cateLangCode	Category language	EN
Name	Category name	Marketing
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

3.7.2 SearchLocation Wrapper

The response of the ETV Access functionality "SearchLocation" is a dedicated wrapper. The return values are output in the property "Data".

Table 14: SearchLocation 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.	
locations	In this property the Location return values are output.	
Name	Place name	Zurich
zip	Zip code Location	8005
zipCity	Postal code municipality	8000
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

3.8 Example Search

3.8.1 Request

Table 15: Example Input Search Function

JSON	Description

{
"lastname": "localsearch",
"street": "Förrlibuckstrasse",
"houseNo": 62,
"zip": 8005,
"location": "Zürich"
}
	Objects search query

3.8.2 Response

Table 16: Example Output Search Function

JSON


```
{
   "RequestDate": "2020-08-27T15:17:49.1942322+02:00",
   "ResponseDate": "2020-08-27T15:17:51.8349563+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": "",
        "Lastname": "localsearch",
        "LastnameSuffix": "Swisscom Directories AG",
        "Street": "Förrlibuckstrasse",
        "HouseNo": "62",
        "PoBox": null,
        "Zip": "8005",
        "ZipCity": null,
        "Location": "Zürich",
        "LocationPostId": "800500",
        "Country": "CHE",
        "StateCode": "ZH",
        "FirstnameSuffix": "",
        "Femalename": "",
        "Profession": "",
        "ProfessionSuffix": "",
        "StreetSuffix": "",
        "HouseDesc": "",
        "Appartment": "",
        "Floor": "",
        "LocationPostSuffix": "",
        "Services": [
          {
            "TypeGrpCode": "EMAIL",
            "Value": "customercare@localsearch.ch",
            "ValuePre": "",
            "ValidFrom": null,
            "ValidTo": null,
            "IsNoAdvert": false,
            "SortNo": null
          },
          {
            "TypeGrpCode": "EMAIL",
            "Value": "datamanagement@localsearch.ch",
            "ValuePre": "",
            "ValidFrom": null,
            "ValidTo": null,
```

```
                        "IsNoAdvert": false,
                        "SortNo": null
                     },
                     {
                        "TypeGrpCode": "TEL",
                        "Value": "0800 86 80 86",
                        "ValuePre": "Geschäftskunden, Service clientèle profesionelle, Servizio clienti
aziendali",
                        "ValidFrom": null,
                        "ValidTo": null,
                        "IsNoAdvert": false,
                        "SortNo": null
                     },
                     {
                        "TypeGrpCode": "TEL",
                        "Value": "0848 86 80 86",
                        "ValuePre": "Privatkunden, Clients Privés, Clienti Privati",
                        "ValidFrom": null,
                        "ValidTo": null,
                        "IsNoAdvert": false,
                        "SortNo": null
                     },
                     {
                        "TypeGrpCode": "URL",
                        "Value": "https://www.localsearch.ch",
                        "ValuePre": "",
                        "ValidFrom": null,
                        "ValidTo": null,
                        "IsNoAdvert": false,
                        "SortNo": null
                     }
                  ],
                  "Geo": {
                     "X": "681265",
                     "Y": "249578",
                     "Hight": "402",
                     "CoordSource": null,
                     "CoordType": 1,
                     "Source": "Etv",
                     "CoordTypeDescription": "LV03"
                  },
                  "TypeCode": null,
```

```
                "ValidFrom": "0001-01-01T00:00:00",
                "ValidTo": "0001-01-01T00:00:00"
              }
            ],
            "LocationsDir": [
              {
                "Value": "Zürich"
              }
            ],
            "Categories": [
              {
                "CategoryId": 1386,
                "CateLangCode": "DE",
                "Name": "Marketing"
              },
              {
                "CategoryId": 2204,
                "CateLangCode": "DE",
                "Name": "Werbung"
              }
            ],
            "ValidFrom": "2020-05-12T00:00:00",
            "ValidTo": "2099-01-01T00:00:00"
          }
        ],
        "SourceInfo": [
          {
            "SourceId": 11,
            "SourceDescription": "ETV",
            "Parameter": {
              "SortOrder": 0,
              "Must": false
            },
            "ResultCount": 0,
            "StatusId": 5,
            "StatusDescription": "Ok",
            "Errors": null,
            "Infos": null
          }
        ]
      }
  ]
```

```
} ]
}
```


3.9 Example Lookup

3.9.1 Request

Table 17: Example Input Lookup Function

JSON	Description
{ "value": "0800 86 80 86" }	Objects search query

3.9.2 Response

Table 18: Example Output Lookup Function

JSON


```
{
   "RequestDate": "2020-08-27T15:17:49.1942322+02:00",
   "ResponseDate": "2020-08-27T15:17:51.8349563+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": "",
                     "Lastname": "localsearch",
                     "LastnameSuffix": "Swisscom Directories AG",
```

```
                    "Street": "Förrlibuckstrasse",
                    "HouseNo": "62",
                    "PoBox": null,
                    "Zip": "8005",
                    "ZipCity": null,
                    "Location": "Zürich",
                    "LocationPostId": "800500",
                    "Country": "CHE",
                    "StateCode": "ZH",
                    "FirstnameSuffix": "",
                    "Femalename": "",
                    "Profession": "",
                    "ProfessionSuffix": "",
                    "StreetSuffix": "",
                    "HouseDesc": "",
                    "Appartment": "",
                    "Floor": "",
                    "LocationPostSuffix": "",
                    "Services": [
                      {
                        "TypeGrpCode": "EMAIL",
                        "Value": "customercare@localsearch.ch",
                        "ValuePre": "",
                        "ValidFrom": null,
                        "ValidTo": null,
                        "IsNoAdvert": false,
                        "SortNo": null
                      },
                      {
                        "TypeGrpCode": "EMAIL",
                        "Value": "datamanagement@localsearch.ch",
                        "ValuePre": "",
                        "ValidFrom": null,
                        "ValidTo": null,
                        "IsNoAdvert": false,
                        "SortNo": null
                      },
                      {
                        "TypeGrpCode": "TEL",
                        "Value": "0800 86 80 86",
                        "ValuePre": "Geschäftskunden, Service clientèle profesionelle, Servizio clienti
aziendali",
```

```
                    "ValidFrom": null,
                    "ValidTo": null,
                    "IsNoAdvert": false,
                    "SortNo": null
                },
                {
                    "TypeGrpCode": "TEL",
                    "Value": "0848 86 80 86",
                    "ValuePre": "Privatkunden, Clients Privés, Clienti Privati",
                    "ValidFrom": null,
                    "ValidTo": null,
                    "IsNoAdvert": false,
                    "SortNo": null
                },
                {
                    "TypeGrpCode": "URL",
                    "Value": "https://www.localsearch.ch",
                    "ValuePre": "",
                    "ValidFrom": null,
                    "ValidTo": null,
                    "IsNoAdvert": false,
                    "SortNo": null
                }
            ],
            "Geo": {
                "X": "681265",
                "Y": "249578",
                "Hight": "402",
                "CoordSource": null,
                "CoordType": 1,
                "Source": "Etv",
                "CoordTypeDescription": "LV03"
            },
            "TypeCode": null,
            "ValidFrom": "0001-01-01T00:00:00",
            "ValidTo": "0001-01-01T00:00:00"
        }
    ],
    "LocationsDir": [
        {
            "Value": "Zürich"
        }
```

```
            ],
            "Categories": [
               {
                  "CategoryId": 1386,
                  "CateLangCode": "DE",
                  "Name": "Marketing"
               },
               {
                  "CategoryId": 2204,
                  "CateLangCode": "DE",
                  "Name": "Werbung"
               }
            ],
            "ValidFrom": "2020-05-12T00:00:00",
            "ValidTo": "2099-01-01T00:00:00"
         }
      ],
      "SourceInfo": [
         {
            "SourceId": 11,
            "SourceDescription": "ETV",
            "Parameter": {
               "SortOrder": 0,
               "Must": false
            },
            "ResultCount": 0,
            "StatusId": 5,
            "StatusDescription": "Ok",
            "Errors": null,
            "Infos": null
         }
      ]
   }
  ]
} ]
}
```

3.10 Example GetAddress

3.10.1 Request

Table 19: Example Input GetAddress Function

JSON	Description

{
"entryId": 23460724
}
	Object search query

3.10.2 Response

Table 20: Example Output GetAddress Function

JSON


```
{
   "RequestDate": "2020-08-27T15:17:49.1942322+02:00",
   "ResponseDate": "2020-08-27T15:17:51.8349563+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": "",
                     "Lastname": "localsearch",
                     "LastnameSuffix": "Swisscom Directories AG",
                     "Street": "Förrlibuckstrasse",
                     "HouseNo": "62",
                     "PoBox": null,
```

```
                "Zip": "8005",
                "ZipCity": null,
                "Location": "Zürich",
                "LocationPostId": "800500",
                "Country": "CHE",
                "StateCode": "ZH",
                "FirstnameSuffix": "",
                "Femalename": "",
                "Profession": "",
                "ProfessionSuffix": "",
                "StreetSuffix": "",
                "HouseDesc": "",
                "Appartment": "",
                "Floor": "",
                "LocationPostSuffix": "",
                "Services": [
                  {
                    "TypeGrpCode": "EMAIL",
                    "Value": "customercare@localsearch.ch",
                    "ValuePre": "",
                    "ValidFrom": null,
                    "ValidTo": null,
                    "IsNoAdvert": false,
                    "SortNo": null
                  },
                  {
                    "TypeGrpCode": "EMAIL",
                    "Value": "datamanagement@localsearch.ch",
                    "ValuePre": "",
                    "ValidFrom": null,
                    "ValidTo": null,
                    "IsNoAdvert": false,
                    "SortNo": null
                  },
                  {
                    "TypeGrpCode": "TEL",
                    "Value": "0800 86 80 86",
                    "ValuePre": "Geschäftskunden, Service clientèle profesionelle, Servizio clienti
aziendali",
                    "ValidFrom": null,
                    "ValidTo": null,
                    "IsNoAdvert": false,
```

```
                    "SortNo": null
                },
                {
                    "TypeGrpCode": "TEL",
                    "Value": "0848 86 80 86",
                    "ValuePre": "Privatkunden, Clients Privés, Clienti Privati",
                    "ValidFrom": null,
                    "ValidTo": null,
                    "IsNoAdvert": false,
                    "SortNo": null
                },
                {
                    "TypeGrpCode": "URL",
                    "Value": "https://www.localsearch.ch",
                    "ValuePre": "",
                    "ValidFrom": null,
                    "ValidTo": null,
                    "IsNoAdvert": false,
                    "SortNo": null
                }
            ],
            "Geo": {
                "X": "681265",
                "Y": "249578",
                "Hight": "402",
                "CoordSource": null,
                "CoordType": 1,
                "Source": "Etv",
                "CoordTypeDescription": "LV03"
            },
            "TypeCode": null,
            "ValidFrom": "0001-01-01T00:00:00",
            "ValidTo": "0001-01-01T00:00:00"
        }
    ],
    "LocationsDir": [
        {
            "Value": "Zürich"
        }
    ],
    "Categories": [
        {
```

```
                    "CategoryId": 1386,
                    "CateLangCode": "DE",
                    "Name": "Marketing"
                },
                {
                    "CategoryId": 2204,
                    "CateLangCode": "DE",
                    "Name": "Werbung"
                }
            ],
            "ValidFrom": "2020-05-12T00:00:00",
            "ValidTo": "2099-01-01T00:00:00"
        }
      ],
      "SourceInfo": [
        {
          "SourceId": 11,
          "SourceDescription": "ETV",
          "Parameter": {
            "SortOrder": 0,
            "Must": false
          },
          "ResultCount": 0,
          "StatusId": 5,
          "StatusDescription": "Ok",
          "Errors": null,
          "Infos": null
        }
      ]
    }
  ]
}  ]
}
```


3.11 Example SearchLocation

3.11.1 Request

Table 21: Example Input SearchLocation Function

JSON	Description

{
"zip": 8005
}
	Object search query

3.11.2 Response

Table 22: Example Output SearchLocation Function

JSON


```
{
   "RequestDate": "2020-08-27T15:19:04.6631813+02:00",
   "ResponseDate": "2020-08-27T15:19:04.7256198+02:00",
   "ExecutionId": 0,
   "IsError": false,
   "ErrorCode": 200.0,
   "ErrorText": null,
   "DataCount": 1,
   "Data": [
      {
         "Locations": [
            {
               "Name": "Zürich",
               "Zip": 8005,
               "ZipCity": 8000
            }
         ],
         "SourceInfo": [
            {
               "SourceId": 18,
               "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 trouble-shooting 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 23: Error Code Categories

Code	Category
200	Authentication
401	Authorization
500	Internal execution error

The following table describes the error codes.

Table 24: 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 Multisource 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 25: Info-Code Categories

Code	Category
100	General Informations

The following table describes the information codes.

Table 26: Info-Code List

Group	Source	Code	SubCode	Message	Description
Action Source	General	100	6	Search returned too much data. Result is reduced to 5.	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 for assistance.

7 List of Figures

8 List of tables