

Technical Documentation
of the
service d'adresse mondial

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Technical Documentation

service d'adresse mondial

service d'adresse mondial (French: worldwide address service), abbreviation: *sedamo*, is an Internet based service for conveying postal addresses (mailing addresses) especially in non-Latin characters (such as Chinese, Japanese, or Korean). Any postal address gets a unique eight letter code, the *sedamo* address code, which can be used to retrieve the original address in native writing.

Background

Especially people from the Asian world face the problem that “westerners” (people from Europe and USA) cannot write the postal address in their native language. Though workarounds exist (such as writing the address using a romanization), these are error-prone and slow down the postal delivery, due to two reasons:

1. Romanisations of Chinese, Japanese, Thai etc. contains ambiguities, thus, a romanised address cannot be re-translated into the original language.
2. The postmen in the destination countries are not used to recognise addresses written in a foreign (Latin) alphabet.

The *service d'adresse mondial* offers an easy way to ensure correctly written and formatted addresses. The address can be retrieved from the *sedamo* web site as an image (bitmap) and can be printed directly onto an envelope or address label. The letter-sending user has not to install any special software or foreign language font.

Usage

In the first step, the receiver looks up the *sedamo* address code of the destination address. This code is forwarded to the sender. In the second step, the sender uses the code to print out the foreign address in an international format (as recommended by the Universal Postal Union). The *sedamo* system automatically generates a romanisation of any address. This romanisation can be used if an express company only accepts addresses written in Latin.

The *sedamo* Address Code

The *sedamo* address code consists of eight Latin letters of the form AB-CD-EF-GH. The dashes are for better readability only and can be omitted.

The code may consist of 8 out of the following 20 Latin characters:

A, B, C, D, E, F, G, H, J, K, L, M, P, Q, R, T, U, W, X, Y

These letters intentionally have been omitted:

“I” which can be mistaken for “1” or “J”,

“N” pronounced similar to “M”,
“O” similar shape to “0”,
“S” similar shape to “5”,
“V” similar shape to “U” or “W”,
and “Z” similar shape to “2”.

Check digit

The first letter of a *sedamo* address code is a check digit. Its value is computed by multiplying the value of each letter according to the following list with the position in the string minus 1, i.e., the first letter times 0, the second times 1, the third times 2 etc.

Values:

A→0, B→1, C→2, D→3, E→4, F→5, G→6, H→7, J→8, K→9, L→10, M→11, P→12, Q→13, R→14,
T→15, U→16, W→17, X→18, Y→19

The modulo by 20 of the sum of these products is the check digit which is placed in front of the other seven letters.

$$\text{mod}_{20} \left(\sum_{i=2}^8 \text{value}(\text{letter}_i) \cdot (i-1) \right) = \text{value}(\text{letter}_1)$$

This check digit allows to notice simple errors such as a single mistyped letter, or the permutation of two successive letters.

Special *sedamo* Codes

The *sedamo* address code describes the address, not a receiver (person or company). The only exception is the code AA-AA-AA-AA which directs to the address of the *sedamo* division of the Cross-Cultural Communication Club which is the operator of the *service d'adresse mondial*.

The *sedamo* code AB-CD-EF-GH is a valid code (according to the check digit computation described above) but will never be assigned to a postal address and remains empty.

Writing of *sedamo* address codes

sedamo address codes should be printed in capital letters of a non-serif font. For better readability, it should be grouped in pairs of letters, separated by a hyphen:

AB-CD-EF-GH

To mark the sender's address code, a double arrow should be put behind (right side) the code:

AB-CD-EF-GH >>

To mark the receiver's address code, a double arrow should be put in front of the code:

>> AB-CD-EF-GH

Sender's and receiver's address codes can be put together:

AA-AA-AA-AA >> AB-CD-EF-GH

For automation purposes, the code should be printed as a Code 39 barcode with a leading

“%+” (percent sign followed by plus sign) for the receiver's code and a “%-” (percent sign followed by minus sign) for the sender's code without dashes. The star “*” is the synchronisation character of the Code 39 and has to be put in front of and behind the code.

Examples in clear text and barcode (given in clear text and encoded):

AB-CD-EF-GH >> *%-ABCDEFGH* 
>> AB-CD-EF-GH *%+ABCDEFGH* 
AA-AA-AA-AA >> AB-CD-EF-GH
%-AAAAAAA%+ABCDEFGH or *%+ABCDEFGH%-AAAAAAA*
 or 
or separated as two blocks of barcode:
 
 

Embedding the *sedamo* address input dialogue into a web-page

The address input dialogue of the *sedamo* system can easily be used via the Internet. The result of using the dialogue is the *sedamo* code, and, optionally, the name and company name (nameline1, nameline2), the sex, the day of birth, the phone number, and the e-Mail address.

The *sedamo* dialogue can either be embedded into your own web-page by an <IFRAME>, or you can redirect the user to the *sedamo* website, from where he will be re-directed to a web-page (URL) defined by you.

The URL for accessing the *sedamo* dialogue is <http://sedamo.info/sam.php> with the parameter a=w

The following fields have to be defined:

Field name	Meaning	Value (Example)
a	action	w
u	user	testuser
p	password	12345678
l	language	en
e	eMail (<i>optional</i>)	user@example.com
d	destination	http://www.example.com/address_done.html
s	stylefile (<i>optional</i>)	http://www.example.com/mystyle.css

The field values have to be URL-encoded. The full URL with the sample values from above would be:

http://sedamo.info/sam.php?a=w&u=testuser&p=12345678&l=en&e=user%40example.com&d=http%3A%2F%2Fwww.example.com%2Faddress_done.html

&s=http%3A%2F%2Fwww.example.com%2Fmystyle.css

The following fields are POSTed back to the destination URL:

Field name	Contents	Example
nameline1	name	Mr George Miller
nameline2	company	Miller and Sons Ltd.
sedamo	<i>sedamo</i>	ABCDEFGH
sex	sex	male
birthday	birthday	1902-12-31
phone	phone	+44-123-4567890
email	e-Mail	miller@example.com

Please bear in mind that all fields are optional, and that the formatting is depending on the user's input. All fields may contain non-Latin, Unicode characters.

Requesting an address for a given *sedamo* address code

An address to a given *sedamo* code can be received by POSTing the data fields described below to the URL

<http://extern.sedamo.info/request.php>

Fields:

Field name	Description	Example
sam	8 letters <i>sedamo</i> code, capital Latin letters, no dashes etc.	AAAAAAAA
username	The user name as given by the CCCC.	sampleuser
password	The password as given by the CCCC.	samplepassword
tan	One transaction authorisation number (TAN) as prior transmitted by the CCCC. Each TAN can only be used once.	1234567890
newline	The character which is added at the end of each line of the formatted address. This can be a single character, such as the Line Feed (LF) character, or a string, such as the HTML sequence " "	

flagAIRMAIL	If the formatted address is designated for sending by air mail or not. (Valid values are "0" and "1")	1
flagREGISTERED	If the formatted address is designated for sending by registered mail or not. (Valid values are "0" and "1")	0
nameline1	The first name line within the formatted address, for example the addressee. (optional)	Mr George Miller
nameline2	The second name line within the formatted address, for example the addressee's company. (optional)	Miller and Sons Ltd.
sedamoVersion	The version number of your <i>sedamo</i> software, as prior arranged with the CCCC.	55-1.02

The transaction authorisation number (TAN) are provided by an automated mailer. The TAN are attached in a ".tan" file, which lists the TAN. Each TAN (including the last one) is followed by a pipe symbol "|" (ASCII code dec 124 or hex 7c), example:

324627858 | 719315444 | 491860293 | 397630735 | 379269745 |

The XML answer is:

```
<?xml version="1.0" encoding="utf-8" ?>
<address>
  <sedamo>AAAAAAA</sedamo>
  <addtype>office</addtype>
  <format>11</format>
  <comment>This address may change!</comment>
  <countryENGLISH>United Kingdom</countryENGLISH>
  <countryFRENCH>Royaume-Uni</countryFRENCH>
  <countryFRENCHcap>ROYAUME-UNI</countryFRENCHcap>
  <latin>
    <addline1>service d'adresse mondial</addline1>
    <addline2>p/a Cross-Cultural Communication Club Ltd.</addline2>
    <street>Old Gloucester Street</street>
    <housetno>27</housetno>
    <district></district>
    <postcode>WC1N 3AX</postcode>
    <city>London</city>
    <province>Greater London</province>
    <formatted>
      service d'adresse mondial
      p/a Cross-Cultural Communication Club Ltd.
      27 Old Gloucester Street
      London
      Greater London
      WC1N 3AX
      United Kingdom
      ROYAUME-UNI
    </formatted>
  </latin>
  <native>
    <addline1>service d'adresse mondial</addline1>
    <addline2>p/a Cross-Cultural Communication Club Ltd.</addline2>
    <street>Old Gloucester Street</street>
    <housetno>27</housetno>
    <district></district>
    <postcode>WC1N 3AX</postcode>
    <city>London</city>
    <province>Greater London</province>
    <formatted>
      service d'adresse mondial
      p/a Cross-Cultural Communication Club Ltd.
      27 Old Gloucester Street
      London
      Greater London
      WC1N 3AX
      United Kingdom
      ROYAUME-UNI
    </formatted>
  </native>
</address>
```

The `<sedamo></sedamo>` field contains the *sedamo* code of the following address.
The `<addtype></addtype>` field contains the value home for standard addresses, of-
fice for office buildings, pobox for post office box mailing addresses (P. O. Box), parcel

for parcel delivery addresses, other for all addresses which does not fit in any category mentioned above.

The `<format></format>` field contains a number (integer) depicting the country-specific formatting of the address. This field is reserved for later use.

The `<comment></comment>` field may contain a comment on the given address in English language.

The `<countryENGLISH></countryENGLISH>` field contains the name of the destination country in English language, the `<countryFRENCH></countryFRENCH>` field in French language, and the `<countryFRENCHcap></countryFRENCHcap>` field in French language as well, but in ALL CAPS.

The `<native></native>` field contains the address elements in the language of the destination country, that may be Latin letters for the UK, Cyrillic letters for Russia, Chinese characters for China etc. The `<latin></latin>` field contains the identical address elements, but in the official Latin transcription. If the fields `namline1` and/or `namline2` have been posted, the contents of these fields will be placed at the appropriate position.

For addressing a letter in an international format as recommended by the Universal Postal Union, the `<formatted></formatted>` address within the `<native></native>` field should be used.

The `<street></street>` field contains the street name of the address, if relevant. In some countries, such as Japan, a street is not necessarily part of an address, but the name of the living compartment is given instead. This name would be given in the `<addline2></addline2>` field.

The `<housetno></housetno>` field contains the house number, if part of the address. In some countries, such as United Kingdom, a house name may be given instead, which would be given in the `<addline2></addline2>` field.

The `<addline1></addline1>` field contains the smallest, most detailed part of the address, such as, the apartment number.

The `<district></district>` field may contain the district as part of a bigger city, or the village if the village is not identical with the postal town.

The `<city></city>` field contains the city, or, to be precise, the postal town of the address. For destinations in rural areas, this may be the closest bigger town or city, and the village name itself is given in the `<district></district>` field.

The `<province></province>` field contains the dividing part which is larger than the postal town but smaller than the country of destination (or confederation of states of destination) itself.

The `<postcode></postcode>` field contains the postcode, which in some countries is non-numerical and/or contains spaces. Not every country uses postcodes.

This completes the technical description of the *sedamo* system. In case of questions, please contact the CROSS-CULTURAL COMMUNICATION CLUB, Ltd.

Address:

service d'adresse mondial
p/a Cross-Cultural Communication Club Ltd.
27 Old Gloucester Street
London
Greater London
WC1N 3AX
United Kingdom
ROYAUME-UNI

e-Mail:

sedamo@sedamo.info

sedamo address code:

AA-AA-AA-AA :-)