



**DATA
DRIVEN
PERFORMANCE**



GEOINTELLIGENCE SERVICES

/ GEOINTELLIGENCE SERVICES

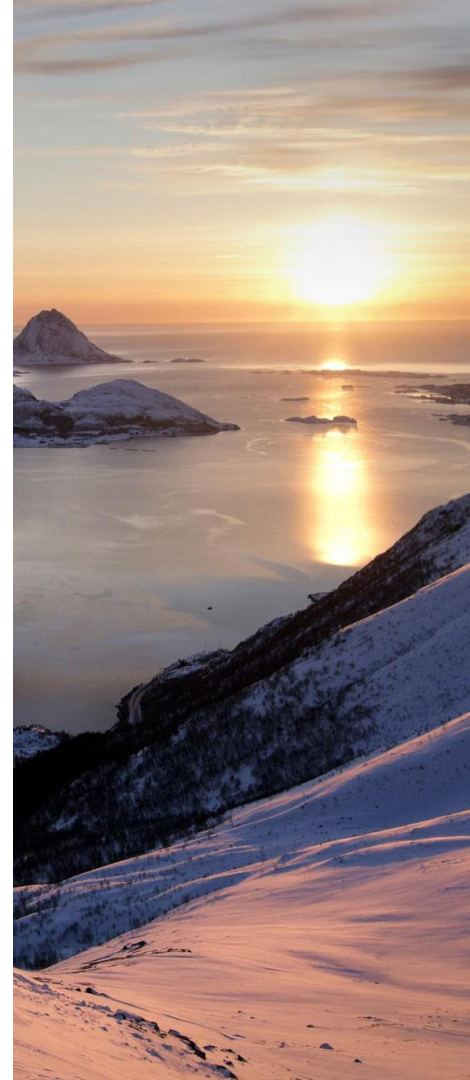
 EMAIL VALIDATOR

 PHONE VALIDATOR

 GEOCODER SERVICES

- NORMALIZATION
- AUTOCOMPLETE
- REVERSE GEOCODING
- DATA ENRICHMENT

 VAT VALIDATOR



SERVICE MODE

/GEOINTELLIGENCE SERVICE MODE

SERVICE MODE FOR GEOINTELLIGENCE SERVICES:



BATCH

The list checker 'BATCH' works on your uploaded data and adds results into new columns ready for you to download.



WEBSERVICE

The real-time check service goes into more detail. Within milliseconds it tells you information about every email that's knocking on your door so your systems can take real-time action.



WEBSERVICE

Explore a universe of
email validation with our
comprehensive API

/ GEOINTELLIGENCE SERVICE MODE

Get accurate results quickly and analyze every email address you check. The easy-to-call API adds value to your data so that you can enhance your business performance.



Professional processing on secure
Cloud servers in Europe



Service level agreement of >99.5%
RESTful GET over HTTPS

GEOINTELLIGENCE EMAIL VALIDATION

/ What is email validation?

JAKALA GEOINTELLIGENCE EMAIL VALIDATION SERVICES:

Our email validation services can help you reach real people who want to deal with you, improve your results and help make your processes more effective.



Who is it for?

People who want to integrate an email validation API into their business systems. To use it you'll need to know how to call an API and use the results, so integration is usually done by developers



What does it do?

GEOINTELLIGENCE EMAIL VALIDATION checks email addresses in real-time, returning results from more data points. It's used in many ways, for example, filtering online sign-ups, cleaning CRM systems and adding value to data.



How do I use it?

Use it like any other API. Within seconds you can call the API and check any email address.



/ GEOINTELLIGENCE EMAIL VALIDATION



Clear results

Act on results from multiple datapoints. Create workflows and messaging to suit every situation, whether you're stopping typos on a CRM or filtering gibberish from sign-up forms.



MX record checking

It's no use looking for emails with no MX records. MAIL supplies every MX record and tells you if any are missing. No MX record = undeliverable.



Which mail system?

Segment data better. Mail system detection gives detail about the mail system, so you can tailor communications and improve delivery rates.



No spam traps

Trust the Spam Trap Assessment Score. Avoid mailboxes that squawk or trap you on a ransom blacklist. Every result is scored so you can determine outcomes.



Find 'Catch all' mail servers

Get a handle on the real value of your data. Learn which mail servers leave their doors wide open and take delivery for any old junk email address. Emails sent to 'Catch-alls' have low open rates



Freemail detection

Sort business and private email - a valuable tool for 'timed delivery' email marketing

/ GEOINTELLIGENCE – EMAIL



EMAIL

File	Valid
Jakala_Email_36k_Noregdate.csv	92%
Jakala_Email_796k_today.csv	89%
Jakala_Email_715k_31122019.csv	83%
Jakala_Email_724k_31122020.csv	87%
Jakala_Email_738k_31122018.csv	82%

OUTPUT EXAMPLES

Email	Status	Account	Domain	Free Email	MX Found	MX Record	SMTP Provider
valid@example.com	valid	Valid	gmail.com	TRUE	TRUE	gmail-smtp-in.l.google.com	google
niag691@gmail.com	valid	niag691	gmail.com	TRUE	TRUE	gmail-smtp-in.l.google.com	google
piettocippalippa@gmail.com	valid	Piettocippalippa	gmail.com	TRUE	TRUE	gmail-smtp-in.l.google.com	google
pappareale@gmail.com	valid	pappareale	gmail.com	TRUE	TRUE	gmail-smtp-in.l.google.com	google

GEOINTELLIGENCE PHONE VALIDATION

/ What is phone validation?

JAKALA GEOINTELLIGENCE PHONE VALIDATION SERVICE:

Our phone validation services can parse, format and validate international phone numbers.



Who is it for?

People who want to integrate a phone validation API into their business systems.



What does it do?

GEOINTELLIGENCE PHONE VALIDATION parses phone numbers in real-time, returning formatted data. It's used in many ways, for example, filtering mobile registration, cleaning DB systems and adding value to data (country, phone types).



How do I use it?

Use it like any other API. Within seconds you can call the API and check any phone number.



/ GEOINTELLIGENCE PHONE VALIDATION



Number Type

Get the type of number based on the number itself; able to distinguish Fixed-line, Mobile, Toll-free, Premium Rate, Shared Cost, VoIP, Personal Numbers, UAN, Pager, and Voicemail (whenever feasible)



Valid Number

Full validation of a phone number for a region using length and prefix information



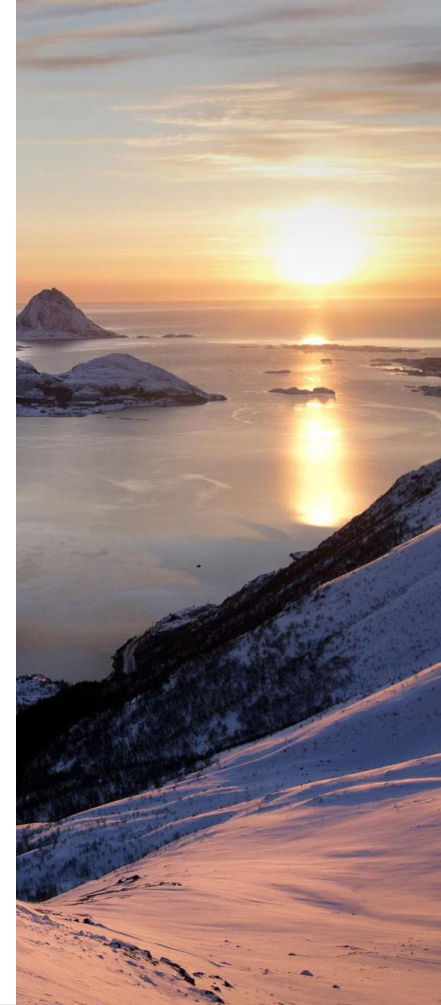
Offline Geocoder

Provides geographical information related to a phone number (whenever feasible)



Carrier Mapper / Time Zone Mapper

Provides carrier/time zone information related to a phone number (whenever feasible)



/ GEOINTELLIGENCE PHONE VALIDATOR - EXAMPLE



PHONE

FILE	VALID %	NO VALID %
Jakala_Phone_36k_example1_validated	99.91	0.09
Jakala_Phone_715k_example2_validated	97.19	2.81
Jakala_Phone_724k_example3_validated	98.66	1.34
Jakala_Phone_738k_example8_validated	92.84	7.16
Jakala_Phone_796k_today_validated	98.61	1.39

OUTPUT EXAMPLES

393405866666	+393405866666	True	MOBILE	39	3405866666	IT
393923704444	+393923704444	True	MOBILE	39	3923704444	IT
393757777777	+393757777777	True	MOBILE	39	3757777777	IT
393701400000		False			3701400000	

GEOINTELLIGENCE GEOCODER

/ Geocoder (*)



Autocomplete

Endpoint improves the user's search experience by allowing submittal of free-form, incomplete and misspelled addresses to the endpoint.



Normalization and geocoding of territorial information (*)

Ensure the consistency of available territorial data as the customer addresses and obtain reliable assets with verified punctual information as the Latitude and Longitude coordinates.



Reverse geocoding

The reverse geocoding service makes it possible to find the address corresponding to a pair of coordinates or responds with nearby point-type features address, place, or a nearby point on a street segment based on input geo-coordinates.



Data Enrichment through socio-economic and demographic segmentation Polis® (Italy)

Leverage on Polis® territorial segmentation and uncover territorials, demographics, economics, occupational, socials, and properties information

*depends on availability of each service/country



/ GEOINTELLIGENCE GEOCODER

Normalization and geocoding examples

```
"items": [  
  {  
    "title": "Corso Giuseppe Garibaldi, 5, 20121 Milano MI, Italia",  
    "id": "jakala:af:streetsection:VD5k1hPU02o5b7QJaS5GxB:EAIaATU",  
    "resultType": "houseNumber",  
    "houseNumberType": "interpolated",  
    "address": {  
      "label": "Corso Giuseppe Garibaldi, 5, 20121 Milano MI, Italia",  
      "countryCode": "ITA",  
      "countryName": "Italia",  
      "state": "Lombardia",  
      "countyCode": "MI",  
      "county": "Milano",  
      "city": "Milano",  
      "district": "Brera",  
      "street": "Corso Giuseppe Garibaldi",  
      "postalCode": "20121",  
      "houseNumber": "5"  
    },  
    "position": {  
      "lat": 45.4723,  
      "lng": 9.1837  
    },  
  },  
]
```

```
"access": [  
  {  
    "lat": 45.47232,  
    "lng": 9.18389  
  },  
],  
"mapView": {  
  "west": 9.18242,  
  "south": 45.4714,  
  "east": 9.18498,  
  "north": 45.4732  
},  
"scoring": {  
  "queryScore": 0.99,  
  "fieldScore": {  
    "city": 1,  
    "streets": [  
      0.95  
    ],  
    "houseNumber": 1  
  }  
}
```

/ GEOINTELLIGENCE GEOCODER

DEMO



Enrichment through socio-economic and demographic:

Enrichment of (personal and non-personal) **customer** data with: Demographic **data** (Population, Family), economic estimates (Income, Consumption) associated with the reference address; identification of the reference **Polis Cluster**.

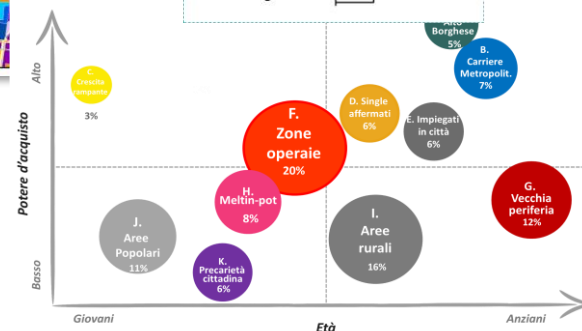
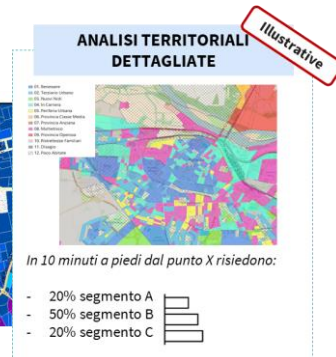
Jakala implemented the **segmentation** of the **Italian population** into **11 socio-demographic groups** that represent synthetic profiles of the population: they make it possible to **segment** the territory on the **basis of consumption** and **demographic characteristics**.

The entire national **territory** has been **divided** into about **400,000 sections** containing an average of **170 inhabitants** and **67 families**, defining :

- 11 macroprofiles
- 39 detail subprofiles



Cluster Polis – Milano



Only available for Italy

GEOINTELLIGENCE VAT VALIDATOR

/ What is vat validation?

JAKALA GEOINTELLIGENCE VAT VALIDATION SERVICE:

It is a service for validating VAT-identification



Who is it for?

People who want to verify the VAT number of your customer.



What does it do?

GEOINTELLIGENCE VAT VALIDATION parses VAT registration in real-time, check the formal form, returning formatted data and check that is registered in the European Union.



How do I use it?

Use it like any other API. Within seconds you can call the API and check any VAT number.



/ GEOINTELLIGENCE VAT VALIDATION



IsFormallyCorrect

Checking the format and checking the rules of construction of the VAT



CountryCode Country code of the VAT number



Vat Number

VAT without country



Name (only EU)

Company name



Vat (complete)

VAT with country



Address (only EU)

Address of the company

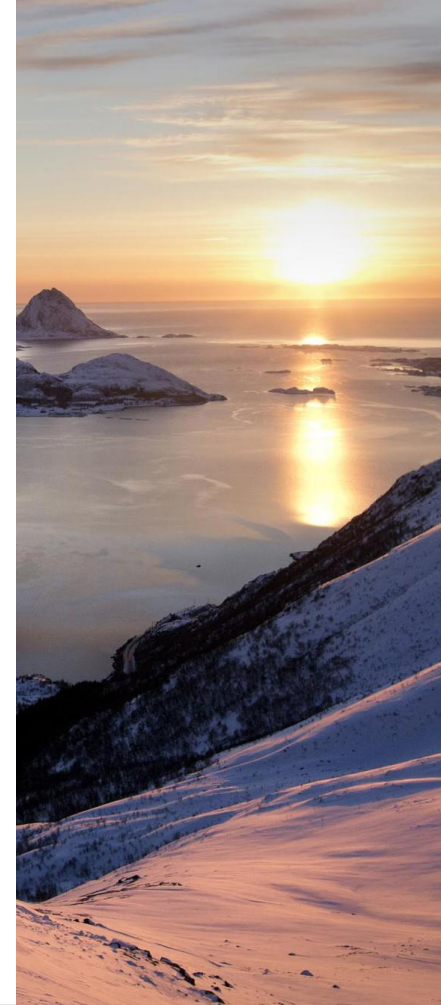


Valid (only EU)

Yes, valid VAT number

No, invalid VAT number:

- Either the VAT Number is not active
- Or the VAT number is not allocated



/ GEOINTELLIGENCE VAT VALIDATOR

VAT CHECKER

EUROPE

```
{  
  "IsFormallyCorrect": true,  
  "Valid": true,  
  "Name": "JAKALA S.P.A. SOCIETA' BENEFIT",  
  "Address": "CORSO DI PORTA ROMANA N 15 20122 MILANO MI",  
  "CountryCode": "IT",  
  "VatNumber": "08462130967",  
  "Vat": "IT08462130967",  
  "isEU": true  
}
```

OUT OF EUROPE

```
{  
  "IsFormallyCorrect": true,  
  "CountryCode": "GB",  
  "VatNumber": "239299618",  
  "Vat": "GB239299618",  
  "isEU": false  
}
```

THANK YOU

