How-To Library

Informatica

Address Verification Best Practices for Italy

Abstract

This document tells you how to connect the elements in an Italy address to the appropriate address elements in Informatica Address Verification. This document also describes best practices that you can implement when you verify addresses in Italy.

Supported Versions

- Informatica Address Verification 3.0 and later
- Informatica Address Verification (On-Premises) 5.x

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Introduction

Informatica Address Verification can validate and enhance addresses from Italy. This how-to article provides you with configuration information and best practices that you can follow to get the most from the addresses. The best practices include advice on how to select the appropriate XML elements for Italy address data.

To verify the quality of an input address, Address Verification compares the address information to the data in one or more reference data files. You can configure Address Verification to identify the different types of address information in the input data.

When you select the input address elements, you must ensure that the elements are correct for the different types of input information. The country that the address identifies determines the elements that you need.

An address in Italy can contain different types of information, including street information and locality information. You must map each item of address information to an appropriate element in Address Verification.

Process Modes

Informatica Address Verification supports the following process modes for Italy addresses:

- BATCH
- COUNTRY RECOGNITION
- FAST COMPLETION
- INTERACTIVE

- PARSE

Character Set

Italy reference address databases store address data in the Latin-1 script. By default, Informatica Address Verification returns the verified Italy addresses in the Latin-1 script.

Address Format and Address Structure

You improve the performance of Address Verification when you define the input address in the format that the postal service expects.

The Italy postal service recognizes the following structure for a postal address:

```
Line 1: RECIPIENT OR CONTACT NAME
Line 2: SUB-BUILDING INFORMATION
Line 3: STREET TYPE STREET NAME HOUSE NUMBER
Line 4: POSTAL CODE CITY PROVINCE
Line 5: COUNTRY
```

The following sample address illustrates the structure:

```
VIA DEL CASTELLO 12
00020 PISONIANO RM
ITALY
```

Key Address Elements

Address Verification is unlikely to verify an address successfully if one of the following items is absent from the address:

- House Number
- Street
- Locality
- Postal Code

Mapping Input Address Data to Address Elements

To verify an address, map the input address information to appropriate elements in Address Verification.

The following table shows how you can map the input address to the address elements:

Information Type	Address Information	Address Elements
Street Type, Street Name	VIA DEL CASTELLO	Street
House Number	12	HouseNumber
Apartment	Not used in this address	Sub-building
Postal Code	00020	PostalCode

Information Type	Address Information	Address Elements
City	PISONIANO	Locality
Province	RM	ProvinceAbbreviation

Input and Result XML in Address Verification (On-Premises)

The following example shows how you can map the address information to the XML address elements in Address Verification (On-Premises).

You enter the following input address:

```
<InputData>
    <AddressElements>
        <Country Item="1" Type="NAME">ITA</Country>
        <Locality Item="1" Type="COMPLETE">PISONIANO</Locality>
        <PostalCode Item="1" Type="UNFORMATTED">00020</PostalCode>
        <Province Item="1" Type="COUNTRY_STANDARD">RM</Province>
        <Street Item="1" Type="COMPLETE">VIA DEL CASTELLO</Street>
        <Number Item="1" Type="COMPLETE">12</Number>
    </AddressElements>
</InputData>
```

Informatica Address Verification (On-Premises) returns the following result:

```
<?xml version="1.0" encoding="UTF-16"?>

<!-- EngineVersion="5.11.0.41659" -->

<Result    ProcessStatus="V4"
    ModeUsed="BATCH"
    Count="1"
    CountOverflow="NO"
    CountryISO3="ITA"
    PreferredScript="LATIN_1"
    PreferredLanguage="ENGLISH">

<ResultData ResultNumber="1"
    MailabilityScore="5"
    ResultPercentage="100.00"
    ElementResultStatus="F0F0F0F0F000000000E0"
    ElementInputStatus="60606060600000000060"
    AddressResolutionCode="00000000000000000000"
    ExtElementStatus="00000000000000000000"
    ElementRelevance="10101010100000000010"
    AddressType="S"
    LanguageISO3="ITA">
    <AddressElements>
        <Country Type="NAME_EN" Item="1">Italy</Country>
        <Locality Item="1">Pisoniano</Locality>
        <PostalCode Item="1">00020</PostalCode>
        <Province Item="1">RM</Province>
        <Street Item="1">Via del Castello</Street>
        <Number Item="1">12</Number>
    </AddressElements>
    <AddressLines>
        <DeliveryAddressLine Line="1">Via del Castello 12</DeliveryAddressLine>
        <CountrySpecificLocalityLine Line="1">00020 Pisoniano RM</CountrySpecificLocalityLine>
        <FormattedAddressLine Line="1">Via del Castello 12</FormattedAddressLine>
        <FormattedAddressLine Line="2">00020 Pisoniano RM</FormattedAddressLine>
        <FormattedAddressLine Line="3">Italy</FormattedAddressLine>
    </AddressLines>
    <AddressComplete>Via del Castello 12
00020 Pisoniano RM
Italy</AddressComplete>
```

```
        </ResultData>
      </Result>
```

Input and Result XML in Address Verification

The following example shows how you can verify an Italy address in a SOAP call to Address Verification.

You submit the following request:

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:v="http://
validator5.AddressDoctor.com/Webservice5/v4">
 <soap:Header/>
 <soap:Body>
    <v:Process>
       <v:login>*****</v:login>
       <v:password>********</v:password>
       <v:parameters>
          <v:ProcessMode>BATCH</v:ProcessMode>
       </v:parameters>
       <v:addresses>
          <v:Address>
             <v:HouseNumber>
                <v:string>12</v:string>
             </v:HouseNumber>
             <v:Street>
                <v:string>VIA DEL CASTELLO</v:string>
             </v:Street>
             <v:Locality>
                <v:string>PISONIANO</v:string>
             </v:Locality>
             <v:PostalCode>
                <v:string>00020</v:string>
             </v:PostalCode>
             <v:Province>
                <v:string>RM</v:string>
             </v:Province>
             <v:Country>
                <v:string>ITA</v:string>
             </v:Country>
          </v:Address>
       </v:addresses>
    </v:Process>
 </soap:Body>
</soap:Envelope>
```

Informatica Address Verification returns the following response:

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://
www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
   <soap:Body>
      <ProcessResponse xmlns="http://validator5.AddressDoctor.com/Webservice5/v4">
         <ProcessResult>
            <StatusCode>100</StatusCode>
            <StatusMessage>OK</StatusMessage>
            <Results>
               <Result>
                  <ProcessStatus>V4</ProcessStatus>
                  <CountryISO3>ITA</CountryISO3>
                  <ResultDataSet>
                     <ResultData>
                        <ResultNumber>1</ResultNumber>
                        <MailabilityScore>5</MailabilityScore>
                        <ResultPercentage>100.00</ResultPercentage>
                        <ElementInputStatus>60606060600000000060</ElementInputStatus>
                        <ElementResultStatus>F0F0F0F0F000000000E0</ElementResultStatus>
                        <ElementRelevance>10101010100000000010</ElementRelevance>
                        <ExtElementStatus>00000000000000000000</ExtElementStatus>
                        <AddressResolutionCode>00000000000000000000</AddressResolutionCode>
                        <AddressType>S</AddressType>
                        <LanguageISO3>ITA</LanguageISO3>
                        <Address>
                           <Street>
```

```
                                    <string>VIA DEL CASTELLO</string>
                                </Street>
                                <HouseNumber>
                                    <string>12</string>
                                </HouseNumber>
                                <Locality>
                                    <string>PISONIANO</string>
                                </Locality>
                                <PostalCode>
                                    <string>00020</string>
                                </PostalCode>
                                <Province>
                                    <string>RM</string>
                                </Province>
                                <Country>
                                    <string>ITALY</string>
                                </Country>
                                <DeliveryAddressLines>
                                    <string>VIA DEL CASTELLO 12</string>
                                </DeliveryAddressLines>
                                <CountrySpecificLocalityLine>
                                    <string>00020 PISONIANO RM</string>
                                </CountrySpecificLocalityLine>
                                <FormattedAddress>
                                    <string>VIA DEL CASTELLO 12</string>
                                    <string>00020 PISONIANO RM</string>
                                    <string>ITALY</string>
                                </FormattedAddress>
                                <AddressComplete>VIA DEL CASTELLO 12;00020 PISONIANO RM;ITALY</
AddressComplete>
                            </Address>
                        </ResultData>
                    </ResultDataSet>
                </Result>
            </Results>
        </ProcessResult>
    </ProcessResponse>
  </soap:Body>
</soap:Envelope>
```

Address Enrichments

You can configure Informatica Address Verification to add enrichments to verified Italy addresses.

The following table lists the type of enrichments that you can add to an Italy address:

Enrichment Type	Description
CAMEO	You can retrieve CAMEO profiles as enrichments for valid Italy addresses. CAMEO profiles are consumer classification systems that provide socio-economic and demographic indicators about the residents at the address.
Country-Specific Address Enrichments	You can retrieve ISTAT code data as an enrichment for a valid Italy address. The ISTAT code contains a series of values that provide geographic and demographic information about the address, including the province, municipality, and region to which the address belongs. The Italian National Institute of Statistics (ISTAT) maintains the ISTAT codes.
Standard Geocoding	You can retrieve the standard, interpolated geocoordinates for valid Italy addresses.

Enrichment Type	Description
Arrival Point Geocoding	You can retrieve the arrival point geocoordinates for valid Italy addresses.
Parcel Centroid Geocoding	You can retrieve the parcel centroid geocoordinates for valid Italy addresses.

Frequently Asked Questions

Why does Address Verification return ISTAT code enrichments for an address that is not valid?

You receive ISTAT code enrichments for an Italy address based on the quantity and type of correct information in the address. Address Verification determines whether the input information is sufficient to return an enrichment.

For example, if the input address does not contain house number information, Address Verification can return enrichments that depend on locality, suburb, or street information. However, the relevant information in the input address must be a perfect match with the corresponding reference data.

Does Address Verification return address information in multiple languages for Italy?

Address Verification does not return address information in multiple languages for Italy.

Does the reference data for Italy contain San Marino or Holy See address data?

Italy reference data does not contain San Marino (SMR) or Holy See (VAT) data. Address Verification treats San Marino and the Holy See as countries. Each county has its own address reference databases.

If you are an On-Premises user, you can download the `SMR5BI.MD` database to verify San Marino addresses or download the `VAT5BI.MD` database to verify Holy See addresses.

Does Address Verification recognize an address that includes the SN (sin numero) house number indicator?

Yes. If a valid street address does not include a house number, and if you include SN in the street information, Address Verification parses SN as an indicator that the address does not use a house number.

How does Address Verification handle sub-building information in Italy?

Address Verification does not verify sub-building information because the reference data does not contain the information.

Address Verification can recognize sub-building information in an input address and return it in the output address if the information includes a valid sub-building descriptor. For best results, place the sub-building information alone on a line above the street information.

Reference Address Databases

Informatica updates the Italy reference address databases quarterly. You can download the latest database packages from the Informatica Database Download portal. For news about reference address databases and software updates for Address Verification, subscribe to the UpData newsletter from Informatica.

Informatica Address Verification provides the following reference databases for Italy:

- `ITA5BI.MD`. Batch and interactive modes.
- `ITA5FC.MD`. Fast completion mode.
- `ITA5GC.MD`. Standard geocoding.

- `ITA5GCAP.MD`. Arrival point geocoding.
- `ITA5GCPC.MD`. Parcel centroid geocoding.
- `ITA5E1.MD`. Supplementary data.
- `ITA5CA.MD`. CAMEO data.

Note: You download databases for Informatica Address Verification (On-Premises). You do not need to download databases for Informatica Address Verification, as Informatica Address Verification runs on Informatica Cloud.

Additional Documentation Resources

To view the latest documentation for Informatica Address Verification, click the following links:

https://network.informatica.com/community/informatica-network/products/data_quality/data-as-a-service/address-doctor

https://network.informatica.com/community/informatica-network/products/data_quality/data-as-a-service/address-doctor-cloud

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