

Address Verification Best Practices for Mexico Addresses

Abstract

This document provides an overview of Mexico address verification in Informatica Address Verification. This document also contains information about best practices that you can implement to optimize Mexico address verification.

Supported Versions

- Informatica Address Verification (On-Premises) 5.11 or later
- Informatica Address Verification 2.0 or later
- Mexico reference databases from Q4 2016 or later

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Language and Character Set

Informatica Address Verification verifies Mexico address in the Spanish language.

The default character set for Mexico addresses is Latin 1 - Western European.

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 postal service in Mexico recognizes the following structure for a postal address:

```
Line 1: Street type, Street name, House number
Line 2: Neighborhood, Municipality
Line 3: Postal code, City, State
Line 4: Country
```

The sample address has the following format on an envelope or label:

```
PRIVADA UNIÓN 10
COL. AGRÍCOLA PANTITLÁN, IZTACALCO
08100 CIUDAD DE MÉXICO, CDMEX
MEXICO
```

The following table shows how the input address data maps to the Address Verification address elements:

Address Element	Address Information	Information Type
Street	PRIVADA UNIÓN	Street Type and Street Name
HouseNumber	10	House Number
Locality_2	COL. AGRÍCOLA PANTITLÁN	Neighborhood, Quarter, or Settlement
Province_2	IZTACALCO	Municipality
PostalCode	08100	Postal Code
Locality_1	CIUDAD DE MÉXICO	City
Province_Abbreviation	CDMEX	State
Country	MEXICO	Country

The following example shows the fielded input format for an address:

```
Street: PRIVADA UNIÓN
House Number: 10
Locality 2: COL. AGRÍCOLA PANTITLÁN
Province 2: IZTACALCO
Postal Code: 08100
Locality 1: CIUDAD DE MÉXICO
Province Abbreviation: CDMEX
Country: MEXICO
```

The following example shows the hybrid or partially-fielded input format for an address:

```
Delivery Address Line (DAL): PRIVADA UNIÓN 10
Locality 2: COL. AGRÍCOLA PANTITLÁN
Province 2: IZTACALCO
Postal Code: 08100
Locality 1: CIUDAD DE MÉXICO
Province Abbreviation: CDMEX
Country: MEXICO
```

Address Elements and State or Federal District Names

Address Verification uses Province elements to identify states within Mexico. Address Verification treats the federal district of Mexico City as a state for verification purposes. You can use a PROVINCE element in place of a PROVINCE_ABBREVIATION element for the state or federal district name. The province name for CDMEX is Ciudad de México.

Address Verification can return the name of a municipality or borough within a state in the PROVINCE_2 element. For example, the locality of Ciudad de México is within the borough of Iztacalco in Mexico City.

Process Modes

You can process the Mexico addresses in the following process modes:

- BATCH
- COUNTRY RECOGNITION
- FAST COMPLETION
- INTERACTIVE

- PARSE

Enrichment for Mexico Addresses

You can configure Informatica Address Verification to include the following enrichments for validated Mexico addresses:

Enrichments	Database	Notes
Arrival Point Geocoding	MEX5GCAP.MD	Retrieves the arrival point geocoordinates for valid Mexico addresses.
CAMEO	MEX5CA.MD	Retrieves the CAMEO profiles from the Callcredit Information Group as enrichment to valid Mexico addresses. CAMEO profiles provide consumer classification systems that indicate the socioeconomic and geodemographic profiles of neighborhoods across the world.
Standard Geocoding	MEX5GC.MD	Retrieves the standard, interpolated geocoordinates for valid Mexico addresses.

Configuring GeoCoding and CAMEO for Address Verification (On-Premises)

For Mexico addresses, you can configure Informatica Address Verification (On-Premises) to return geocoding information in the result output. You can also specify the type of geocoding to include in the output. You can also configure Address Verification to include CAMEO demographic profile information as an enrichment to addresses.

Before you enable geocoding and CAMEO enrichment, you must install the geocoding and CAMEO reference address databases, and specify the corresponding unlock codes in the `SetConfig.xml` file.

To configure geocoding and CAMEO, in the `Parameters.xml` file, configure the following attributes of the `Process` element:

EnrichmentGeocoding

Returns geocoordinates for the validated address.

Set the `EnrichmentGeocoding` attribute of the `Process` element to ON.

Default is OFF.

EnrichmentGeocodingType

Specifies the type of geocoding.

Set the `EnrichmentGeocodingType` attribute of the `Process` element to one of the following values:

- `ARRIVAL_POINT`. Enables the arrival point geocoding.
- `NONE`. Enables the standard geocoding.

Default is `ARRIVAL_POINT`.

EnrichmentCAMEO

Returns CAMEO consumer profiles from the Callcredit Information Group.

Set the `EnrichmentCAMEO` attribute of the `Process` element to ON.

Default is OFF.

Configuring Geocoding and CAMEO for Address Verification

You can configure the `Enrichment` parameter in Informatica Address Verification to return geocoding and CAMEO information in the result output.

To configure geocoding and CAMEO, set the `Type` attribute of the `Enrichment` parameter within Request XML or SOAP request to one of the following values:

GEOCODING

Returns geocoordinates for the validated address.

To receive geocoordinates as address enrichments, you require `GEOCODING` type transactions.

GeoCodingType

Specifies the type of geocoordinates that you want Address Verification to include in the result output.

Set the value of `GeoCodingType` to one of the following values:

- `NONE`. Includes the standard geocoordinates.
- `ARRIVAL_POINT`. Includes the arrival point geocoordinates.

Default is `ARRIVAL_POINT`.

CAMEO

Returns CAMEO consumer profiles from the Callcredit Information Group.

To receive CAMEO consumer profiles as enrichments, you require `CAMEO` type transactions.

Address Verification Tips and Best Practices

Note the following points when you verify Mexico addresses:

- Mexico addresses often contain zonal indicators.
The following table lists the zonal indicators:

Zonal Indicators	Description
Ampliación	Extension
Barrio	Neighborhood
Centro	Centre
Ciudad, Cd.	City
Colonia, Col.	Neighborhood or Quarter
Congregación	Assembly, meeting
Conjunto Habitacional, Conjunto Residencial	Housing complex, Residential complex
Ejido	Cooperative
Fraccionamiento, Fracc.	Division, development
Hacienda	Estate, ranch

Zonal Indicators	Description
Parque Industrial	Industrial Park
Pueblo	Village, small town
Rancho, Lechería	Ranch, Dairy
Sección, Secc.	Section
Sector, Sect.	Section
Unidad	Unit
Unidad Habitacional	Housing unit
Villa	Town

Note: Address Verification maps the zonal indicators to a Locality address element.

- Mexico addresses can contain multiple terms and abbreviations. The following table lists a range of terms or abbreviations and the corresponding descriptions:

Term/Abbreviation	Description
Estado	State
Municipio	Municipality (major subdivision of estado, similar to a county)
Localidad	City or town within a municipio
Población	A populated place (city, town, or village)
Delegación	Administrative division of a city, such as a borough
Asentamiento	Subdivision of a municipio
Apartado	Apartado Postal, Apartado de Correos, Casilla Postal (Post Office Box)
Calle	Street
CP	Código Postal (postal code)

- A Mexico postal code consists of five digits. Each digit corresponds to a geographical area of the country. The first two digits indicate the federal entity. In the case of Mexico City, the first two digits indicate a neighborhood. The third digit indicates an important town or city, a municipality, or one of the ten areas into which Mexico City is divided. The fourth digit indicates a municipality or suburb or estate within a town. The final digit indicates a group of blocks or the specific street address of a large user.
- To parse the input address accurately, enter `Calle` before the street information when you enter the input address.

- For optimum results, use the hybrid or partially-fielded input address format for the following address elements:

- Delivery Address Lines
- Locality
- Postal Code
- Province

- The following sample code shows an input address in Address Verification (On-Premises) XML:

```
<InputData>
  <AddressElements>
    <Country Item="1" Type="NAME">MEXICO</Country>
    <Locality Item="1" Type="COMPLETE">CIUDAD DE MÉXICO</Locality>
    <Locality Item="2" Type="COMPLETE">COL. AGRÍCOLA PANTITLÁN</Locality>
    <PostalCode Item="1" Type="UNFORMATTED">08100</PostalCode>
    <Province Item="1" Type="COUNTRY_STANDARD">CIUDAD DE MÉXICO</Province>
    <Province Item="1" Type="ABBREVIATION">CDMEX</Province>
    <Province Item="2" Type="COUNTRY_STANDARD">IZTACALCO</Province>
    <Street Item="1" Type="COMPLETE">PRIVADA UNIÓN</Street>
    <Number Item="1" Type="COMPLETE">10</Number>
  </AddressElements>
</InputData>
```

- The following sample code shows an output address in Address Verification (On-Premises) XML:

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

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

<Result ProcessStatus="V4"
  ModeUsed="INTERACTIVE"
  Count="1"
  CountOverflow="NO"
  CountryISO3="MEX"
  PreferredScript="DATABASE"
  PreferredLanguage="DATABASE">

<ResultData ResultNumber="1"
  MailabilityScore="5"
  ResultPercentage="100.00"
  ElementResultStatus="FOFFFFFF0F000000000E0"
  ElementInputStatus="60666660600000000060"
  AddressResolutionCode="00000000000000000000"
  ExtElementStatus="0050000000000000000000"
  ElementRelevance="10111010100000000010"
  AddressType="S"
  LanguageISO3="SPA">
  <AddressElements>
    <Country Type="NAME_EN" Item="1">MEXICO</Country>
    <Locality Item="1">CIUDAD DE MÉXICO</Locality>
    <Locality Item="2">COL. AGRÍCOLA PANTITLÁN</Locality>
    <PostalCode Item="1">08100</PostalCode>
    <Province Item="1">CDMEX</Province>
    <Province Item="2">IZTACALCO</Province>
    <Street Item="1">PRIVADA UNIÓN</Street>
    <Number Item="1">10</Number>
  </AddressElements>
  <AddressLines>
    <DeliveryAddressLine Line="1">PRIVADA UNIÓN 10</DeliveryAddressLine>
    <CountrySpecificLocalityLine Line="1">08100 CIUDAD DE MÉXICO, CDMEX</CountrySpecificLocalityLine>
    <FormattedAddressLine Line="1">PRIVADA UNIÓN 10</FormattedAddressLine>
    <FormattedAddressLine Line="2">COL. AGRÍCOLA PANTITLÁN, IZTACALCO</FormattedAddressLine>
    <FormattedAddressLine Line="3">08100 CIUDAD DE MÉXICO, CDMEX</FormattedAddressLine>
    <FormattedAddressLine Line="4">MEXICO</FormattedAddressLine>
```

```

    </AddressLines>
    <AddressComplete>PRIVADA UNIÓN 10
    COL. AGRÍCOLA PANTITLÁN, IZTACALCO
    08100 CIUDAD DE MÉXICO, CDMEX
    MEXICO</AddressComplete>
</ResultData>
</Result>

```

- The following sample code shows an address request in Address Verification XML:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v4="http://validator5.AddressDoctor.com/Webservice5/v4">
  <soapenv:Header/>
  <soapenv:Body>
    <v4:Process>
      <v4:login>*****</v4:login>
      <v4:password>*****</v4:password>
      <v4:parameters>
        <v4:ProcessMode>BATCH</v4:ProcessMode>
        <v4:ServiceParameters>
        </v4:ServiceParameters>
        <v4:ValidationParameters>
        </v4:ValidationParameters>
      </v4:parameters>
      <v4:addresses>
        <v4:Address>
          <v4:Street>
            <v4:string>Privada Unión</v4:string>
          </v4:Street>
          <v4:HouseNumber>
            <v4:string>10</v4:string>
          </v4:HouseNumber>
          <v4:Locality>
            <v4:string>Ciudad de México</v4:string>
            <v4:string></v4:string>
          </v4:Locality>
          <v4:PostalCode>
            <v4:string>08100</v4:string>
          </v4:PostalCode>
          <v4:Country>
            <v4:string>Mexico</v4:string>
          </v4:Country>
        </v4:Address>
      </v4:addresses>
    </v4:Process>
  </soapenv:Body>
</soapenv:Envelope>

```

- The following sample code shows an address response in Address Verification XML:

```

<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/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>C4</ProcessStatus>
            <CountryISO3>MEX</CountryISO3>
            <ResultDataSet>
              <ResultData>
                <ResultNumber>1</ResultNumber>
                <MailabilityScore>4</MailabilityScore>
                <ResultPercentage>88.00</ResultPercentage>
                <ElementInputStatus>60600060600000000060</ElementInputStatus>
                <ElementResultStatus>F0F888F0F00000000E0</ElementResultStatus>
                <ElementRelevance>1011101010000000010</ElementRelevance>
                <ExtElementStatus>0050000000000000000</ExtElementStatus>
                <AddressResolutionCode>0000000000000000000</

```



```

AddressResolutionCode>
  <AddressType>S</AddressType>
  <LanguageISO3>SPA</LanguageISO3>
  <Address>
    <Street>
      <string>PRIVADA UNIÓN</string>
    </Street>
    <HouseNumber>
      <string>10</string>
    </HouseNumber>
    <Locality>
      <string>CIUDAD DE MÉXICO</string>
      <string>COL. AGRÍCOLA PANTITLÁN</string>
    </Locality>
    <PostalCode>
      <string>08100</string>
    </PostalCode>
    <Province>
      <string>CDMEX</string>
      <string>IZTACALCO</string>
    </Province>
    <Country>
      <string>MEXICO</string>
    </Country>
    <DeliveryAddressLines>
      <string>PRIVADA UNIÓN 10</string>
    </DeliveryAddressLines>
    <CountrySpecificLocalityLine>
      <string>08100 CIUDAD DE MÉXICO, CDMEX</string>
    </CountrySpecificLocalityLine>
    <FormattedAddress>
      <string>PRIVADA UNIÓN 10</string>
      <string>COL. AGRÍCOLA PANTITLÁN, IZTACALCO</string>
      <string>08100 CIUDAD DE MÉXICO, CDMEX</string>
      <string>MEXICO</string>
    </FormattedAddress>
    <AddressComplete>PRIVADA UNIÓN 10;COL. AGRÍCOLA PANTITLÁN,
IZTACALCO;08100 CIUDAD DE MÉXICO, CDMEX;MEXICO</AddressComplete>
  </Address>
</ResultData>
</ResultDataSet>
</Result>
</Results>
</ProcessResult>
</ProcessResponse>
</soap:Body>
</soap:Envelope>

```

Frequently Asked Questions

Is ISO 3166-2 province or state information available for Mexico addresses?

Yes, Address Verification can return the ISO 3166-2 code for each state and federal district in Mexico. Use the PROVINCE_ISO element to return the code.

Does Informatica Address Verification verify building and subbuilding in Mexico addresses?

Yes.

Do the users need to separate each field in the input address data with a comma?

No.

Does Address Verification support block type input?

Yes. Address Verification supports verification of the following block based data for Mexico addresses:

- Manzana. A block. Manzana is parsed to Building.
- Supermanzana. A group of blocks. Supermanzana is parsed to Locality2.
- Lote. Subsection of a Manzana or a building. Lote is parsed to Subbuilding.

Can Address Verification return the municipality or borough name in a formatted address line element?

Yes, Address Verification returns the municipality or borough name in a formatted address line element. The municipality or borough name also corresponds to a Province 2 element.

How can I define a Mexico address in a typical US style online address format?

The following table lists standard address fields in an online application and the elements that you can select to create the address structure in the Address Verification XML:

Input Field	Address Verification Element
Address Line 1	Delivery Address Line 1
Address Line 2	Locality 2, Province 2
City	Locality 1
State or Province	Province 1
Zip or Postal Code	Postal Code

Reference Address Databases

Informatica updates Mexico 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 supports the following Mexico reference address databases:

- MEX5GCAP.MD. For arrival point geocoding.
- MEX5BI.MD. For batch and interactive mode.
- MEX5CA.MD. For CAMEO customer segmentation.
- MEX5FC.MD. For fast completion mode.
- MEX5GC.MD. For standard geocoding.

Note: You must download databases only for Informatica Address Verification (On-Premises).

Additional Documentation Resources

For more information about Informatica Address Verification, see the Address Verification documentation at the following link:

<https://network.informatica.com>

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Acknowledgements

The author would like to thank Amarpal Kaur Sohi and Matthew Hall for their technical assistance.