# **Geocoder API**

**Release Notes** 

**Version 6.2.96** 



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# **Document Information**

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# Chapter

1

# **Overview**

## **Topics:**

• D62 Highlights

The scope of this document is to provide the release notes for the Geocoder API for a particular release version. It also includes the issues resolved and issues remaining in this release.



## **D62 Highlights**

- Modified India address matching in order to identify cross street information.
- Modified India address parsing to recognize references to landmarks and to exclude these from matching.
- Added support for new address schema MAKANI in Dubai.
- Added sub-district "ward" name to results for municipalities in Vietnam.
- Added the disputed area Dokdo/Takeshima Islands (Liancourt Rocks). The area is now a no-man's land in the International view. No other view is supported).
- Modified Reverse Geocoding for Colombia in order to always return the street block name that includes the cross street number.
- Modified map data version for Hong Kong from Q2/2014 to Q3/2015.
- Other enhancements and bug fixes.



# Chapter

2

# **Release Major Changes**

## **Topics:**

- API Changes
- Map Data Version

This section documents major changes to the release that may require users to change their applications and/or associated map data.



## **API Changes**

There are no API changes in this release.

## **Map Data Version**

The Geocoder provides weekly map updates based on Stable Baseline. The baseline for the map schema is currently Q1/2015. Weekly map data updates are based on Q3/2015 data releases.

The exceptions are as follows:

- South Africa remains at Q2/2015. Currently not updated weekly.
- Estonia and Latvia remain at Q1/2015. Not updated weekly.
- China and Macau remain at Q4/2014. Not updated weekly.
- Hong Kong was updated from Q2/2014 to Q3/2015. Not updated weekly.

Geocoder results contain map version information in the MapReference section if requested via locationattributes=mapReference.

MapVersion: Version of the map schema. Format: QQ/YYYY, e.g. Q1/2015

MapId: Map version details containing the baseline for the map schema and an identifier for the weekly update. Format: <4-letter region>YYQ<weekly update>. Example: NAAM15135 (region: North America (NAAM), map schema: Q1/2015 (151), weekly update 35)



# Chapter

3

# **D62 Issues**

## **Topics:**

- Resolved Issues
- Enhancements
- Known Issues

This section lists resolved issues and enhancements in the current release. It also lists known issues in the current release.



## **Resolved Issues**

The following table contains resolved issues. The list summarizes major resolved issues relevant for a broad audience.

| # | Description  |
|---|--|
| 1 | Modified the Reverse Geocoder to return the correct street name for addresses if alternative names exist in map data.  |
|   | If multiple alternative names exist for a street segment in the map data, then the Reverse Geocoder now responds with the street name with which the house number is associated to. Previously, the Reverse Geocoder simply returned the first name on the list. |
|   | Examples:  |
|   | Query:   |
|   | prox=50.7596617,5.7597854,20   |
|   | Previous result:   |
|   | label: "1-Septemberstraat 1, 3798 Voeren, België"  |
|   | Current result:  |
|   | The buildings on the left side of the street (odd numbers) are associated with the street name "Gemeenteplein".  |
|   | label: "Gemeenteplein 1, 3798 Voeren, België"  |
|   | Query:   |
|   | prox=50.7594352,5.7599710,20   |
|   | Previous and current result:   |
|   | The buildings on the right side of the street (even numbers) are associated with the street name "1-Septemberstraat".  |
|   | label: "1-Septemberstraat 2, 3798 Voeren, België"  |
|   | Query:   |
|   | prox=48.1283507,11.5946902,50  |
|   | Previous result:   |
|   | label: "Rosenheimer Platz 63, 81667 München, Deutschland"  |
|   | Current result:  |
|   | The house number 63 is associated with "Rosenheimer Straße", not with "Rosenheimer Platz".   |
|   | label: "Rosenheimer Straße 63, 81667 München, Deutschland"   |

As a part of the Russian political view of the Crimea, the default language has been changed from Ukrainian to Russian.



| # | Description  |
|---|--|
| 3 | Modified the default response language for the West Bank and East Jerusalem in the Forward Geocoder.                                       |
|   | The Geocoder responded with the wrong default language for the West Bank.  |
|   | In cases where the client application does not specify a response language, the following is expected:                                     |
|   | <ul> <li>For the West Bank, the default language is ENG where available, otherwise HEX (Hebrew<br/>transliterated) is returned.</li> </ul> |
|   | Previous behavior for romanized results:   |
|   | County and State were in Arabic.   |
|   | Previous and current behavior for Hebrew results:  |
|   | Everything in HEB (correct).   |

# **Enhancements**

The following table contains enhancements.

| # | Description  |
|---|--|
| 1 | Modified India address matching in order to identify cross street information.   |
|   | People enter cross street information in search queries to state more precisely which location they are looking for.   |
|   | For example, looking for house number 4 on 1st Main Road, which is close to the 12th Cross road intersection: "4 1st Main Road, 12th Cross , BTM Layout, 560076, Bengaluru"                            |
|   | The intention of the query is to find the address. Not the intersection.   |
|   | Previously, the Geocoder was not able to handle the extra information. This can lead to ambiguous results (multiple locations), low confidence results, or empty results because of noise in the query |
|   | Now, the Geocoder tries to identify cross street information in India queries.   |
|   | Example:   |
|   | Query:   |
|   | searchtext=4 1st Main Road, 12th Cross , BTM Layout, 560076, Bengaluru   |
|   | Previous result:   |
|   | Three results. None of them is close to the referenced cross street. The relevance is reduced.   |
|   | relevance: 0.82<br>label: "4 1st Main Road, BTM Layout, Bengaluru 560076, India"   |
|   | relevance: 0.82<br>label: "4 1st Main Road, BTM Layout, Bengaluru 560076, India"   |
|   | relevance: 0.82<br>label: "4 1st Main Road, BTM Layout, Bengaluru 560076, India"   |
|   | Current result:  |



### # Description

Single result, close to the referenced cross street ("12th Cross Road"). The relevance is now 100% because the Geocoder was able to match all query tokens.

```
relevance: 1
```

label: "4 1st Main Road, 2nd Stage, BTM Layout, Bengaluru 560076, India"

The image shows the 3 false previous results (red markers) and the single correct new result (green marker).



2 Modified India address parsing to recognize references to landmarks and to exclude these from matching.

In India, it is very common to use references to landmarks or POIs when looking for an address. For example, a user might add "Behind Upphar Sagar Hotel" to the query. In many cases, these references are important to find the correct location. But, there are also cases where the correct or near-by location can be found without understanding this additional reference information. The Geocoder currently cannot resolve these references and treats them as noise. This can lead to false matches, matches with low confidence, or empty results.

As a first step, the Geocoder can now identify near-by landmark information and remove these references from the query text.

### Example:

### Query:

searchtext=No. 726, 23rd Cross Road, Visnhu Vardan Road, K R Road, Behind Upphar Sagar Hotel, Bangalore - 560070, Karnataka, India

### Previous result:

empty result

#### **Current result:**



| # | Description   |
|---|---|
|   | Correct house number match.   |
|   | label: "726 23rd Cross Road, 2nd Stage, Banashankari, Bangalore 560070, India"  |
|   | The Geocoder applies a one percent penalty to the Relevance.  |
| 3 | Modified the result label for India addresses to add sub-district information, where it is available in the map data.   |
|   | The sub-district names are important in India to disambiguate results. Now the sub-district name is included into the address response label.   |
|   | Example:  |
|   | Query:  |
|   | searchtext=Jain Mandir Marg, Karol Bagh Delhi   |
|   | Previous result:  |
|   | Two results at different locations showing the same label information. The user cannot distinguish between both results based on the label.   |
|   | label: "Jain Mandir Marg, Karol Bagh, Delhi 110005, India"<br>label: "Jain Mandir Marg, Karol Bagh, Delhi 110005, India"  |
|   | Current result:   |
|   | Two results in two different sub-districts.   |
|   | label: "Jain Mandir Marg, Beadon Pura-Pocket 46, Karol Bagh, Delhi 110005,<br>India"<br>label: "Jain Mandir Marg, Beadon Pura-Pocket 47, Karol Bagh, Delhi 110005,<br>India"  |
| 4 | Modified house number parsing in India.   |
|   | In India the Geocoder now tolerates different separators for compound house numbers: House numbers "D-393" and "D/393" are now treated in the same manner.  |
| 5 | Modified postal code and house number parsing in Brazil to understand numbers where digits are grouped using a thousands separator.   |
|   | The Geocoder now recognizes postal codes and house numbers where digits are grouped using the thousands separator '.' (point).  |
|   | Examples: Postal code "38.703-236" is now recognized in queries in the same way as "38703-236". House number "4.924" is now recognized in queries in the same way as "4924".  |
| 6 | Modified postal code parsing in Brazil to recognize "CEP" in front of postal codes.   |
|   | The Geocoder now recognizes the abbreviation "CEP" in front of postal codes in queries. "CEP" stands for "Código de Endereçamento Postal" (Postal Addressing Code). Prefixing postal codes with this abbreviation is typical for Brazil addressing. Previously, the Geocoder did not recognize the abbreviation and treated it either as noise or falsely matched it to something else. |
| 7 | Added support for new address schema MAKANI in Dubai.   |
|   | The MAKANI number is a unique 10 digit code locating a building in Dubai. With this number, a person can locate himself or others within a square-meter precision.  |
|   |   |



#### # Description

The Forward Geocoder recognizes the official input format (for example, 14070 76513) and hyphenated (for example, 14070-76513) or concatenated (for example, 1407076513) variations.

Forward and Reverse Geocoder results provide the MAKANI number in the building field of the address element. The match quality of the MAKANI number for Forward Geocoder results is provided in the building field of the matchQuality element.

If a result has a MAKANI number, then the number is also shown in the result label. In this case, the house number is not shown in the label.

If a search text follows the traditional schema including a house number, then the response does not contain the MAKANI number.

#### **Examples:**

#### Queries:

```
searchtext=17990 76735
searchtext=17990 76735 24B Street, Al Barsha 3 Dubai, United Arab Emirates
mode=retrieveAddresses&prox=25.0954627,55.1951080,20
```

#### Result:

```
relevance: 1,
matchLevel: "houseNumber",
matchQuality: {
   building: 1 // for Forward Geocoding
matchType: "pointAddress",
location: {
   address: {
         label: "17990 76735, 24B Street, Al Barsha 3 Dubai, United Arab
 Emirates",
         country: "ARE",
         county: "Dubai",
         city: "Dubai",
         district: "Al Barsha 3",
         street: "24B Street",
         houseNumber: "22",
         additionalData: [
                value: "United Arab Emirates",
               key: "CountryName"
                value: "Dubai",
               key: "CountyName"
         building: "17990 76735"
```

8 Added sub-district "ward" name to results for municipalities in Vietnam.

A ward (prefix with "phường") in Vietnam is an urban sub-district. The Geocoder can now match wards in queries and adds the ward name in results in the subdistrict field where available and provides a subdistrict matchQuality. The ward name is also part of the result label.

### Example:



▶ D62 Issues

```
Description
              Query:
                searchtext="DUONG Pham Dinh Ho 78, Phuong 2, Quan 6, Ho Chi Minh City,
                 Vietnam"
              Result:
                relevance=1
                matchQuality: {
                       subdistrict: 1,
                location: {
                   address: {
                         label: "DUONG Pham Dinh Ho 78, Ho Chi Minh City, Vietnam",
                         country: "VNM",
                         county: "Thanh Pho Ho Chi Minh",
                         city: "Ho Chi Minh City",
                         district: "Quan 6",
                         subdistrict: "Phuong 2",
                         street: "DUONG Pham Dinh Ho",
                         houseNumber: "78",
9
              Added the disputed area Dokdo/Takeshima Islands (Liancourt Rocks). The area is now a no-man's land in
              the International view. No other view is supported).
              Example:
              Query:
                &prox=37.2393599,131.8758573,1000
              Previous result (unnamed street):
                label: "South Korea South Korea",
                country: "KOR",
                county: "South Korea",
                city: "South Korea",
              Current result:
                Empty response (neutral territory)
```

## **Known Issues**

The following table lists issues known to be present in the current release of the Geocoder API.

| # | Description  |
|---|--|
| 1 | Taiwan Geocoding - Island Names are not able to be geocoded - Q2 2013 TWN Map improvements |
|   | Islands to be considered as part of Taiwan.  |
| 2 | Taiwan - Street Fallback - Returning the Best Candidate                                    |



"\_yID" is wrong.

| # | Description  |
|---|--|
|   | If an address is not in the map, either a house number fallback or up-hierarchy street level match is expected. But in some cases, the Geocoder returns an address in the wrong street or lane.  |
|   | Example:   |
|   | 彰化縣彰化市介壽北路1號   |
|   | House number 1 is not in the map data. The result is therefore a fallback to house number 19:  |
|   | No. 19, Jie Shou N. Rd., Changhua City, Changhua County 500, Taiwan  |
|   | But if a house number fallback is not accepted (parameter: additionaldata=HouseNumberMode,Streetlevel), then the result is expected to be a street level match:  |
|   | Jie Shou N. Rd., Changhua City, Changhua County 500, Taiwan  |
|   | The current response is an address match in a different – though close - street (South instead of North) and in a lane while the request did not specify a lane:   |
|   | No. 1, Lane 36, Jie Shou S. Rd., Changhua City, Changhua County 500, Taiwan  |
| 3 | China: Reverse Geocoder retrieveAreas response not aligned with mode=retrieveAddresses   |
|   | The Reverse Geocoder retrieveAreas response is not aligned with the response from retrieveAddresses and Forward Geocoder. City and district names are only available in Chinese, the county information is incorrect and state is empty (should be Chinese provinces).   |
| 4 | Labels for highway exits do not include the exit number.   |
|   | The label only contains the highway name.  |
|   | Workaround: Use highway name and exit number from the name field.  |
| 5 | The navigation coordinate in the response for Hong Kong building name matches is not always correct. It is the same as the display coordinate. The navigation coordinate is correct only when the query matches a house number in addition to the building name (MatchQuality element houseNumber exists in the result). |
|   | Example:   |
|   | The queries  |
|   | Shek Wu Shui Baptist Chapel, Hong Kong   |
|   | and  |
|   | Shek Wu Shui Baptist Chapel, 33 Fu Hing St, Hong Kong  |
|   | both match to the same address. But the navigation coordinate is correct for the latter query only.  |
| 6 | Disputed areas: The Geocoder returns landmarks (for example, lakes) in Crimea as part of Ukraine despite the explicit request to respond for the political view in Russia.   |
| 7 | The location lds from locations in Dubai that contain a MAKANI number are incorrect and cannot be used to look up the location.  |
|   | The house number encoding in these location lds is wrong. For example, instead of "NT_4KfFx2Rhef4Et0dqRayEOA_yID_yID" it should be "NT_4KfFx2Rhef4Et0dqRayEOA_yID". The additional   |



► D62 Issues

| # | Description  |
|---|--|
|   | MAKANI numbers were introduced in Dubai in early 2015 to uniquely locate buildings in Dubai. The |
|   | Geocoder supports these numbers since D62.   |

