Geocoder API

Release Notes

Version 6.2.104

Contents

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Chapter
1

Overview

Topics:

- *D65 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.

D65 Highlights

- Added support for new address schema INWANI in Qatar.
- Improved matching of numbered street names in Mexico, The Netherlands, and Italy so that queries can contain spelled out or numeric forms regardless of that is in the map data.
- Improved matching in Romania and Hungary for queries where words with low relevance from street names are omitted.
- To improve the representation of the Polish administrative structure, changes were made to the administrative leveling in the Geocoder.
- China: For International users the navigable map is replaced by an entry level map with major city coverage.
- 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 Q1/2016 data releases.

The exceptions are as follows:

- Hong Kong and Macau remain at Q3/2015. Not updated weekly.

The following changes were made to **China mainland and Macau maps** in the Geocoder API:

- For International users the navigable map is replaced by an entry level map with major city coverage.
- The China mainland map and the Macau map changed from shifted to un-shifted coordinates. This means, that previously stored favorites for China mainland and Macau will not be displayed at the right position anymore.

Here is what "shifted" and "un-shifted" means:

- Shifted: GCJ-02 coordinates. GCJ-02 is a coordinate system that follows Chinese regulations where coordinates based on WGS-84 standard are offset by a few hundred meters using a special shifting algorithm.
- Un-shifted: GPS coordinates expressed using WGS-84 standard.

All maps for China mainland, Macau, and Hong Kong that are provided to International users are now un-shifted in the Geocoder API.

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

D65 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	Wrong display position and side of street for interpolated address.
	In rare cases the Geocoder responds with a display position that is not orthogonal to the road link for interpolated address results. In some cases the display position is instead placed close to or directly on the link. The side of street can be wrong in these cases as well.
	This is fixed. This happened in cases where the navigation position is located on a strongly curved link.
	Example:
	Query:
	``` searchtext=Avenida Juruá, 747, Barueri – SP, 06455-010, Brasil&gen=9&locationattributes=mapReference ```
	Previous result:
	``` ... mapReference: { ... sideOfStreet: "neither" ... ```
	Current result:
	``` ... mapReference: { ... sideOfStreet: "right" ... ```
2	The location Ids 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 Ids was wrong. This is fixed. For example, instead of "NT_4KfFx2Rhef4Et0dqRayEOA_yID_yID" it should be "NT_4KfFx2Rhef4Et0dqRayEOA_yID". The additional "_yID" was wrong.
	MAKANI numbers were introduced in Dubai in early 2015 to uniquely locate buildings in Dubai. The Geocoder supports these numbers since D62.

Enhancements

The following table contains enhancements.

#	Description
1	Added support for new address schema INWANI in Qatar.

INWANI is the Qatar Area Referencing System issued by the Centre for GIS – Ministry of Municipality & Urban Planning. It is a unique 10 digit code for locating a building in Qatar.

The 10 digits number identifying a building combines the zone number, the street number and the building number. For example, the code 0408500021 is a combination of zone 04 (2 digits), street 0850 (4 digits), and building number 0021 (4 digits).

The Forward Geocoder recognizes a few variations of the code:

- Complete number with padded zeros: 0408500021
- Number with padded zeros replaced by space: 04 850 21
- Number with padded zeros replaced by hyphen: 04-850-21 (this is also how the number is shown in results)
- Qualified form all in single search field: Zone 04 Street 850 Building no 21

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

Example:

Query:

```
searchtext=0408500021
```

Result:

```
relevance:  1,
    matchLevel:  "houseNumber",
    matchQuality: {
       building:  1
    },
    matchType:  "pointAddress",
...
 address: {
        label:  "04-850-21, Al Maymoun Street 21, Mushaireb, Doha, Qatar",
        country:  "QAT",
        county:  "Doha",
        city:  "Doha",
        district:  "Mushaireb",
        street:  "Al Maymoun Street",
        houseNumber:  "21"
        building:  "04-850-21"
...
```

2	Improved matching of numbered street names in Mexico, The Netherlands, and Italy so that queries can contain spelled out or numeric forms regardless of that is in the map data.

For Mexico: The Geocoder now recognizes spelled out forms of cardinal and ordinal street names when the street names are only numeric in the map data. The same is also supported vice versa.

Example:

"Calle Sexta" in English means "6th Street". This is the spelled form of the numeric form "6TA", which is in the database.

#	Description
	Query:

Query:

```
Calle Sexta 64A, Seminarista, 30780 Tapachula, CHIS, Mexico
```

Previous result:

Match to a wrong house number in the wrong street.

```
Seminarista 6A, Seminarista, 30780 Tapachula, CHIS, Mexico
```

Current result:

```
Calle 6TA 64A, Seminarista, 30780 Tapachula, CHIS, Mexico
```

For Netherlands:

Match ordinal numbers in street names (examples: 1E, 2E) in the same way as spelled out variants (Eerste, Tweede).

Example:

Query:

```
2e Brandenburgerweg 40 3721 CH BILTHOVEN
```

Previous result:

Match to the wrong address.

```
Oude Brandenburgerweg 2E, 3721 DX Bilthoven, Netherlands
```

Current result:

```
Tweede Brandenburgerweg 40, 3721 CH Bilthoven, Netherlands
```

For Italy:

Improved matching of Arabic, Roman and spelled out numbers in street names.

Example:

Query:

```
via 28 aprile 7, 12100 Cuneo, Italy
```

Previous result:

Match to the wrong address.

```
Via XXV Aprile, 7, 12010 Bernezzo CN, Italy
```

Current result:

```
Via Ventotto Aprile, 7, 12100 Cuneo CN, Italy
```

| 3 | India: Improved house number matching when house number is prefixed with house number descriptors. |

In India, it is common that people prefix house numbers in address search. The Geocoder now recognizes those prefixes and tries to match the number that follows to a house number.

Supported prefixes are: "Plot No", "Shop No", "Flat No", "Building No", and "House No"

The "No" portion of the prefix can also be one of the following: "Number", "No", "Nr", "N" and "#"

Example:

#	Description
	Query:
	``` Siddhi Vinayak Residency Plot no 18, Sec 20 ,Kharghar, Navi Mumbai, Maharashtra – 410210 ```
	Previous result:
	Match to wrong house number 20 in wrong sector 11. Expected is the house number 18 in sector 20.
	``` 20, Sector 11, Kharghar, Navi Mumbai 410210, India ```
	Current result:
	``` 18, Sector 20, Kharghar, Navi Mumbai 410210, India ```

4   Improved matching in Romania and Hungary for queries where words with low relevance from street names are omitted.

In Romania and Hungary addressing, it is very common to name streets after famous people. Street names often consist of multiple words with first, middle, last names and sometimes also titles. In queries, however, users tend to omit some of the words. The Geocoder is now tolerant to many of those omissions and responds with a high confidence match if the omitted word is not required to identify the street or to disambiguate between multiple streets.

Example for Romania:

For all of the following query variants the Geocoder responds with the same high confidence result (`relevance`: 100%, `matchQuality.street`: 100%). Before, the relevance and street match quality was much lower than 100% or the address was not found at all for the variants (2 to 4 in the example below) that do not match the exact street name in the data .

```
searchtext=Strada Capitan Mircea Mihail G. Vasilescu 12, 040184 Bucharest
searchtext=Strada Mircea Mihail G. Vasilescu 12, 040184 Bucharest
searchtext=Strada Capitan G. Vasilescu 12, 040184 Bucharest
searchtext=Strada Cpt M M G. Vasilescu 12, 040184 Bucharest
```

Result:

```
relevance:  1,
    matchLevel:  "houseNumber",
    matchQuality: {
        city:  1,
        street: [
            1
        ],
        houseNumber:  1,
        postalCode:  1
    }
...
address: {
    label:  "Strada Capitan Mircea Mihail G. Vasilescu 12, 040184 Bucharest,
 Romania"
```

Example for Hungary:

```
searchtext=Jáky utca 12, Polgárdi 8154
```

Previous result:

City match with low overall relevance.

```
relevance:  0.58,
    matchLevel:  "city",
```

#	Description

```
    matchQuality: {
        city:  1,
        postalCode:  1
    }
...
address: {
    label:  "Polgárdi, Fejér, Hungary"
```

Current result:

Correct address match. No penalties for relevance and street match quality.

```
relevance:  1,
    matchLevel:  "houseNumber",
    matchQuality: {
        city:  1,
        street: [
            1
        ],
        houseNumber:  1,
        postalCode:  1
    }
...
address: {
    label:  "Jáky József utca 12, Polgárdi 8154, Hungary"
```

5	Improved administrative structure for Poland.

To improve the representation of the Polish administrative structure, changes were made to the administrative leveling in the Geocoder and to the result labels.

Rural Areas

To distinguish between addresses in rural localities, the `city` field represents a Polish Gmina (municipality). The `district` field represents a village in rural localities. This village name is reflected in the label.

The example below shows an address in the village "Kaczorów". It belongs to the municipality "Bolków" but it is located outside the "Bolków" city boundaries. For these cases, the label now shows the village name.

Previous Result	Current Result
ulica Nowa Wieś 8, 59-421 **Bolków**, Poland	ulica Nowa Wieś 8, 59-421 **Kaczorów**, Poland
country: POL	country: POL
state: Woj. Dolnośląskie	state: Woj. Dolnośląskie
county: Powiat Jaworski	county: Powiat Jaworski
city: Bolków	city: Bolków
district: Kaczorów	district: Kaczorów
street: ulica Nowa Wieś	street: ulica Nowa Wieś
houseNumber: 8	houseNumber: 8
postalCode: 59-421	postalCode: 59-421

#	Description

For cases where the locality carries the same name as the municipality, we added the name to the `district` field as well. But the label does not change.

Previous Result	Current Result
ulica Niepodległości 8, 59-420 Bolków, Poland	ulica Niepodległości 8, 59-420 Bolków, Poland
country: POL	country: POL
state: Woj. Dolnośląskie	state: Woj. Dolnośląskie
county: Powiat Jaworski	county: Powiat Jaworski
city: Bolków	city: Bolków
street: ulica Niepodległości	**district**: Bolków
houseNumber: 8	street: ulica Niepodległości
postalCode: 59-420	houseNumber: 8
	postalCode: 59-420

For cases, where the address is not inside the Gmina but there is also no particular village name for the location, we removed the Gmina name from the label. For the example below, "Bolków" was previously returned in the label and this suggested that the location is inside the village of "Bolków". Now the name is removed from the label to indicate that the street "3" (National road 3) is outside of the village. "Bolków" is more than 5 km away from the current location. The municipality name can still be found in the `city` field of the address block.

Previous Result	Current Result
3, 59-420 **Bolków**, Poland	3, 59-420, Poland
country: POL	country: POL
state: Woj. Dolnośląskie	state: Woj. Dolnośląskie
county: Powiat Jaworski	county: Powiat Jaworski
city: Bolków	city: Bolków
street: 3	street: 3
postalCode: 59-420	postalCode: 59-420

Urban Areas

For large cities such as Wroclaw or Cracow, the `city` field represents the municipality and the `district` field represents the locality. In addition, sub-localities - where available in the map data - are provided in the `subdistrict` field. The label uses the locality name coming from the `district` field.

Previous Result	Current Result
ulica Praska 52, 30-322 Cracow, Poland	ulica Praska 52, 30-322 Cracow, Poland
country: POL	country: POL

#	Description

state: Woj. Małopolskie

county: Cracow

city: Cracow

district: Dębniki

street: ulica Praska

houseNumber: 52

postalCode: 30-322

state: Woj. Małopolskie

county: Cracow

city: Cracow

district: Cracow

subdistrict: Dębniki

street: ulica Praska

houseNumber: 52

postalCode: 30-322

In Warsaw, the capital of Poland, the `city` and `district` fields remain unchanged (reflecting the municipality and borough, respectively). An additional neighborhood name is provided in the `subdistrict` field. The locality in the label remains unchanged, referring to the municipality name.

Previous Result

ulica Rajców 5, 00-220 Warsaw, Poland

country: POL

state: Woj. Mazowieckie

county: Warsaw

city: Warsaw

district: Śródmieście

street: ulica Rajców

houseNumber: 5

postalCode: 00-220

Current Result

ulica Rajców 5, 00-220 Warsaw, Poland

country: POL

state: Woj. Mazowieckie

county: Warsaw

city: Warsaw

district: Śródmieście

subdistrict: Nowe Miasto

street: ulica Rajców

houseNumber: 5

postalCode: 00-220

Outside of built-up areas of urban municipalities the `district` field is left empty. For these municipalities, the label uses the municipality name.

Note: In an up-coming release these municipalities such as "Lodz" will be adapted to also have a locality (district) covering the complete municipality.

No change in D65

ulica Franciszka Plocka, 94-109 Lodz, Poland

country: POL

state: Woj. Łódzkie

county: Lodz

city: Lodz

#	Description
	street: ulica Franciszka Plocka
	postalCode: 94-109

Names of small villages added to Polish addresses

Another improvement in Poland is that the names of small villages are now available in the `district` field to identify the locality. This locality name is now shown in the label. Previously, the municipality name was shown in the label. But these municipalities can contain a number of different localities. So the label is now more precise.

Previous Result	Current Result
Aleksandrów 4, 08-450 **Łaskarzew (Gmina)**, Poland	Aleksandrów 4, 08-450 **Aleksandrów**, Poland
country: POL	country: POL
state: Woj. Mazowieckie	state: Woj. Mazowieckie
county: Powiat Garwoliński	county: Powiat Garwoliński
city: Łaskarzew (Gmina)	city: Łaskarzew (Gmina)
	district: Aleksandrów
street: Aleksandrów	street: Aleksandrów
houseNumber: 4	houseNumber: 4
postalCode: 08-450	postalCode: 08-450

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 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

#	Description
	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.