

#### LOCATE XL BULK GEOCODER & REVERSE GEOCODER



#### What is LocateXL?

• An add-in to SpatialXL which is an open extensible Geocoder that works within Microsoft Excel or as a standalone application if you need to process hundreds of thousands or even a million records at a time.

#### Why use LocateXL?

- LocateXL uses a revolutionary full text and structured approach to process all kinds of datasets. Datasets may be totally unstructured or have some or all address fields specified. LocateXL is able to work with fields holding possible two address fields in one column extending the precision of the geocoding and the range of datasets it can successfully process.
- With LocateXL you are even able to build your own geocoding reference data for your country and region, from SQL databases, Shape Files or other sources.
- We supply datasets for South Africa right out of the box.
- Using the familiar Microsoft Excel environment you are able to filter out bad records, geocode subsets and change settings to match filtered subsets to easily geocode almost any dataset. During the geocoding process the correct canonical address is given back.
- Reverse geocoding (getting addresses back from Latitude and Longitude coordinates) is also possible one on one or in batch at very high speed.



#### Who uses LocateXL?











The above companies use or have used LocateXL plus a number of consultants that do geocoding type work.

## Settings in LocateXL

- LocateXL an use structured or unstructured geocoding or a combination of these.
- Uses different settings to determine the weight of a particular column, such as city, province or road names, thereby gearing the results perfectly to achieve the best possible matches.

Enabled	oled				Columns 👻 了			Geocode database: C:\LocateXL\GeocodeData				
Load Column -	Address Columns 🔻					Help		Loaded				
Classification file		Address	ddress 🕨			Telp						
Classification		Number 🕨		Distance Check H		Help/About		LocateXL Version 2.1.0.3	1			
Betting World (Pty) Ltd Street Address Cnr Hennie Alberts and Michelle Av Cnr Elston & Wilstead Road, Benoni Cnr Century and Elsburg Roads, Br Cnr Mercia & Ernest Oppenheimer S Cnr Beach and Elm Streets, Edenva		Road	•		ID							
		Ext	►		SUBURB		D			Е		
		Suffix	•	> >	Province		S	UBURB	Province			
		Crossing			Name Street Address		A	lberton	Gauteng			
		Suburb					В	enoni	Gauteng			
				<b>v</b>			Brakpan		Gauteng	Gauteng		
		Town					Bruma		Gauteng			
		✓ Province ▶					E	denvale	Gauteng	_		
cnr Stanley Road & Max Street, Ge	r	Code	- F	_			G	ermiston	Gauteng			





## Special settings

- A unique feature is that a distance check can be used as an additional measure for success to the original town or suburb to the geocoded record.
- Other settings are that it can also geocode to a set of points of interests or postal codes.
- Items to ignore that appear in the data but have no meaning such as shop, building etc, can be set to be ignored in a list.

## Batch geocoding

 Batch geocoding of tens or even hundreds of thousands of records at any one time can be run. In fact the only limitation is Excel itself.

## Quick geocoder

- The quick geocoder is to find a single address or set of addresses quickly and look at these on a map.
- o It does this by searching and filtering in a grid.

	_		Geo	code l	Reference [	Data			×			
Se	ettings	Items to ignore	Projection Buil	d Datas	et							
	Descr	iption		Us	Regular Expr	ession		Replace				
*	* Click here to add a new row											
	• Comr			$\checkmark$		<b></b>						
	Shop/	/Room		$\checkmark$		A						
	Unit			$\checkmark$		A						
	Floor			$\checkmark$		A						
	Add	Insert	Delete		Move Up	Move Down	Set Defau	ilts				
1	Test address: shop 23 3rd floor union building pretoria gauteng											
I	Result:											
	Close	e Save Set	tings						_			

lambert	port alfred		
er	Road	Ext 📍	Suffix
		h	
	Lambert	Road	
	Dickinson	Road	
	Lambert	Road	
	Alfred	Road	



#### Results

The results have scores, and codes to indicate the level of match achieved. This allows you to eliminate successful matches fast by filtering and working on the remainder to achieve better results with multiple runs as needed.

The results that are returned are the following – amongst others:

- o Status
- o Number in road
- o Road name
- POI match in road name (if applicable)

$\sim$	Extension	F	G	Н		J	К	L	м	N	0	Р	Q	R	S	T
0	LAICHSIOH	Geocode Status	Geocode Number Geo	ocode Road	Geocode Ext	Geocode Suffix	Geocode Crossing	Geocode Suburb	Geocode Town	Geocode Province	Geocode Code	Geocode Score	Geocode Ty	pe Geocode Source	X '	Y
• Crossing	Creative	_R_C_TP_	Her	nnie Alberts	Street		Michelle	Meyersdal Ext 17	Alberton	Gauteng		4	Cnr	Mapit	28.0897848	-26.2895902
	Crossing	_RCUTP_	Elst	ton	Avenue		Wilstead	Benoni	Benoni	Gauteng		5	Cnr	Mapit	28.3231519	-26.1842592
	0	_RUTP_	12 Bra	akpan	Avenue			Brakpan	Brakpan	Gauteng		4	Str	Mapit	28.3593231	-26.2270256
$\sim$	Suburb	_RU_P_	23 Erne	est Oppenheir	Avenue			Bruma	Bedfordview	Gauteng		3	Str	Mapit	28.1076862	-26.1819078
0 3000	300010	_RUTP_	2 Elm	n	Street			Edenvale	Edenvale	Gauteng		4	Str	Mapit	28.1423837	-26.134958
	-	UTP_	36 Vict	toria	Street			Germiston	Germiston	Gauteng		3	Str	Mapit	28.159211	-26.2076498
0	Town	_RUTP_	Paa	ardekraal	Drive			Krugersdorp	Krugersdorp	Gauteng		4	Str	Mapit	27.77794	-26.1091274
<u> </u>		_R_CUTP_	Jaca	aranda	Avenue		Albert	Lenasia	Lenasia	Gauteng		5	Cnr	Mapit	27.8253548	-26.3254522
_	Province	_RP_	8 Nau	ude	Street			Krugersdorp Wes	Krugersdorp	Gauteng		2	Str	Mapit	27.752966	-26.1019656
0	Province	1.775		10.00	00.10 T 01			6.1	n - 1	e		-	201	**	22 4 22 4 42	05 354050

- Distance check (if applicable)
- o Latitude
- o Longitude
- o Confidence scoring (if applicable)



Replace.

Test

Set Defaults

Geocode Reference Data

Us... Regular Expression

Move Up

A

A

A

A Move Down

Click here to add a new row

 $\checkmark$ 

 $\checkmark$ 

 $\checkmark$ 

Delete

shop 23 3rd floor union building pretoria gautene

Settings Items to ignore Projection Build Dataset

Insert

Save Settings

Description

Shop/Room

Comma

Unit

Floor

Add

Test address:

Close

Result:

## Codes for assigning

- The accuracy of the matches are mostly done by using codes to show what the match consisted off (as the below shows)
- This is shown in Excel and can further be analysed and used there.

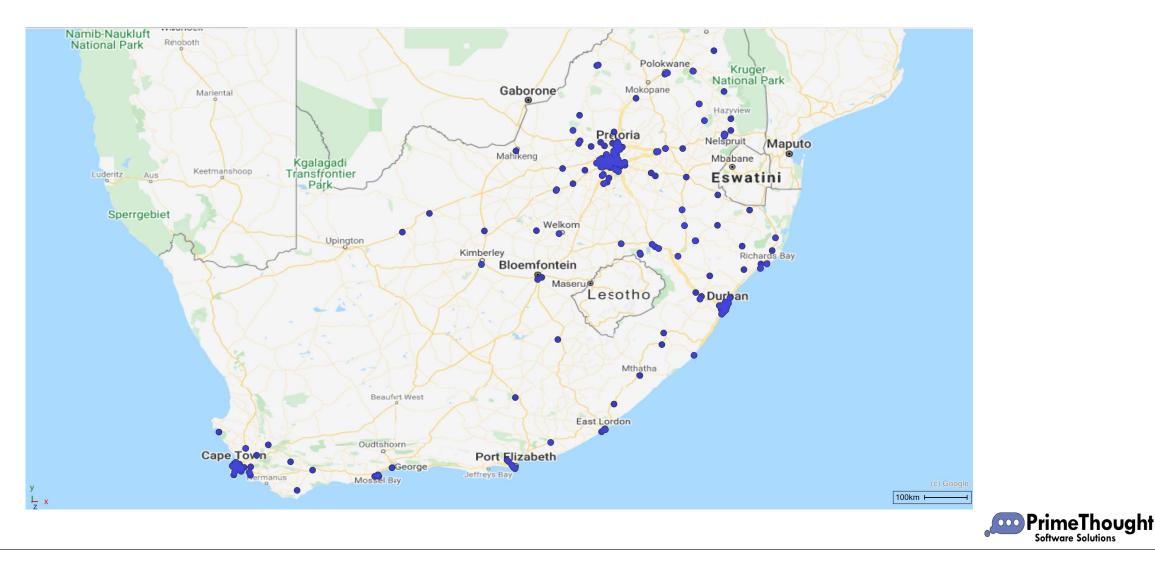
#### NRESCUTPO

- ✤ N = Number match (example <u>18</u> Falcon Street)
- R = Road match (example 18 <u>Falcon</u> Street)
- E = Extension match (example 18 Falcon <u>Street</u>)
- S = Suffix match (example West, South, North such as Main Street West)
- C = Crossing match. When a crossing is in the result, it will display the name of the second street (example Cnr Falcon and Smith Street)
- ✤ U = Suburb match
- T = Town match
- P = Province match
- ✤ O = Postal code match
- ✤ F = Fail
- ✤ \_ = No match



### Displaying results on a map

• Geocoded records can be displayed on a map using SpatialXL.



# What our clients say

 "A lot of our clients have postal codes and it is very helpful that we can use these to locate some address when all else fails."

 "I have used this geocoder on my rural data and it gives me flexibility because I can control the settings to get better results."

 "We have used this product to locate in excess of 4 million records, saving years of man hours."





### THANK YOU

Visit primethought.biz for more information

or email

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