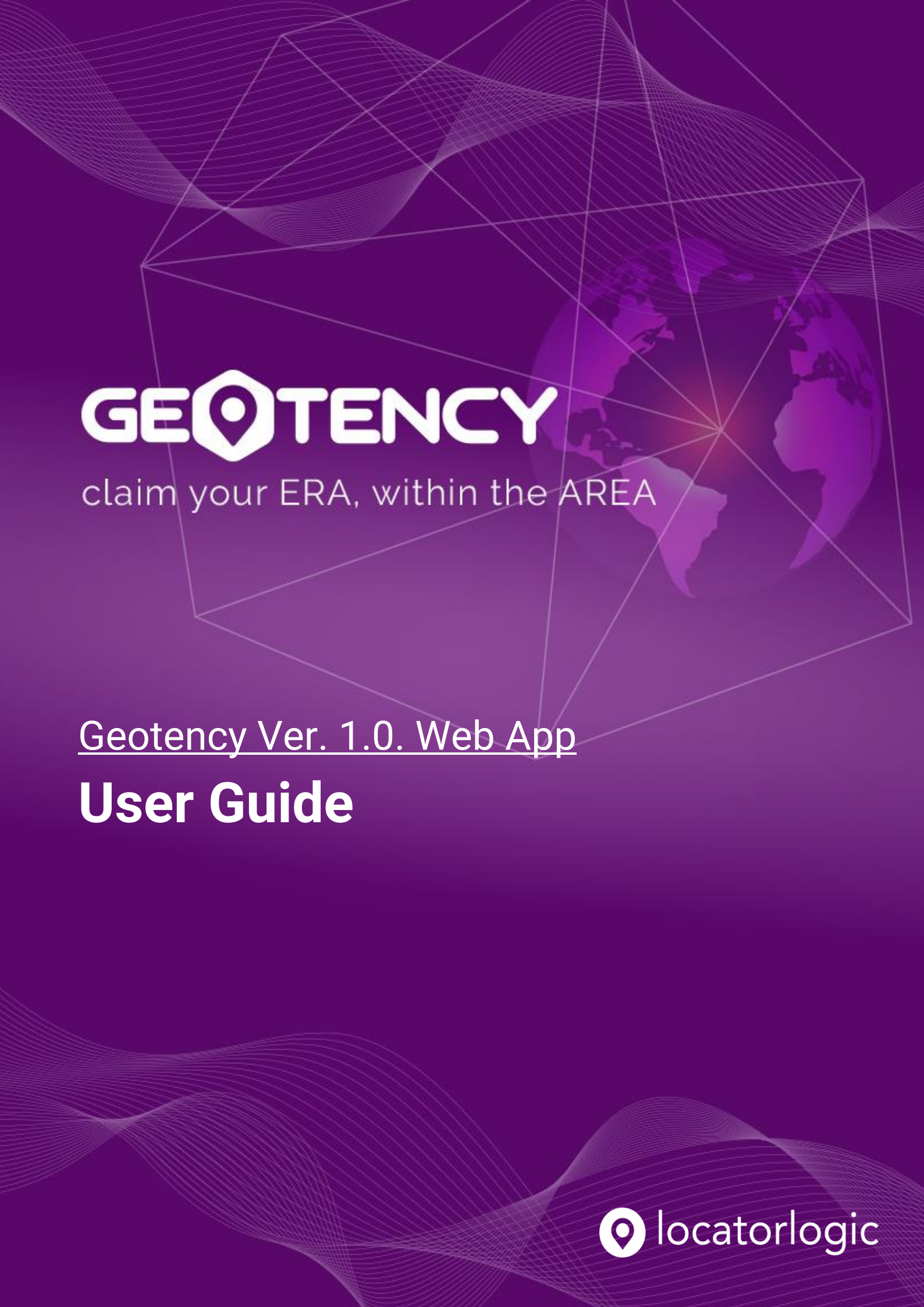


Geotency Ver. 1.0. Web App

User Guide

locatorlogic

Table of Contents

1. Accessing and Logging in to App

1.1. Accessing the App

1. Open your browser (highly recommended to use Mozilla Firefox).
2. Type https://www.geotency.com into the address bar.
3. Tap enter.
4. Wait until the page is fully loaded

1.2. Logging in to the App

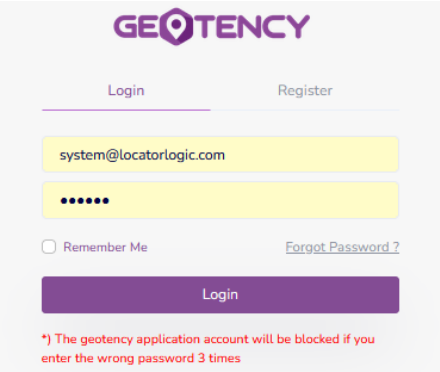


Figure 1. Application Login Interface

1. Enter the correct login credentials.
2. Click **Login**.
3. Click **Forgot Password** if you forget your credentials.

If you are not registered as a user yet, contact your admin to register one for you

1.3. Password Reset Procedure

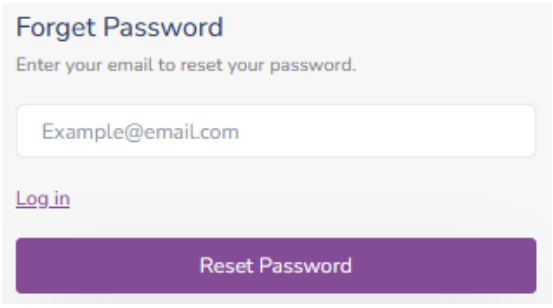


Figure 2. Password Reset Interface

1. Input your registered email.
2. Click “Reset Password” button.
3. Wait for password reset authorization in your email inbox.
4. Follow the steps in your authorization mail.

2. Home Page

2.1. Navigating the Home Page

2.1.1. Layer Viewer

Figure 3. Homepage Sidebar (Collapsed)

Layer Viewer Markers:

1. GeoTency Logo (redirects to home page when clicked).
2. Layer search bar.
3. Layer viewer options.

2.1.2. Home Page Interface

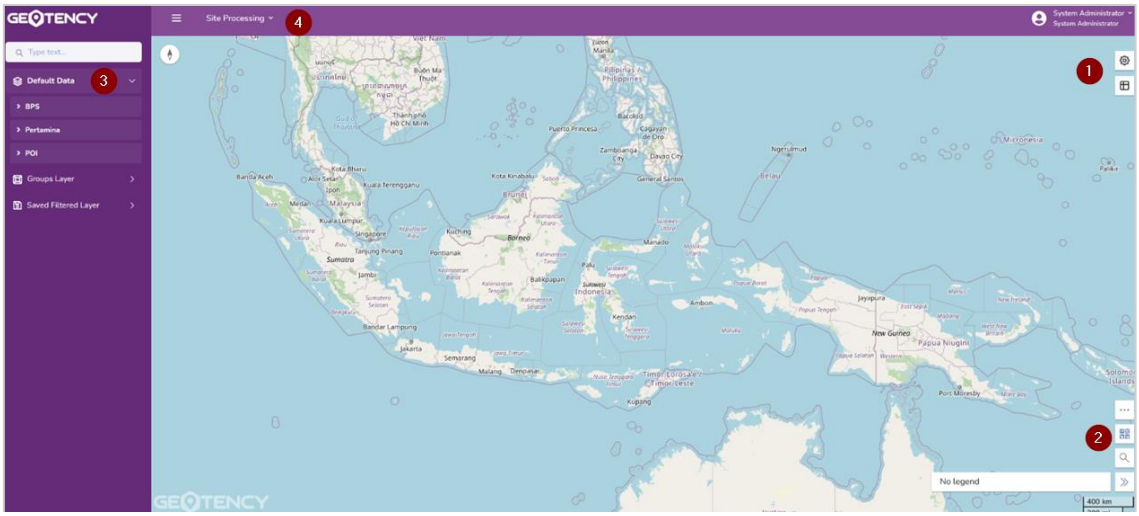


Figure 4. Geotency Homepage Interface

Home Page Markers:

1. Layer configuration and tabular view button.
2. Map view controls and layer color legend.
3. Layer viewer sidebar.
4. Site processing drop-down menu.

2.1.3. Map Interface Controls

On the bottom right corner of the map interface, there are several controls:

 = Expands into several options of terrain view when clicked.

 = Expands into an address search bar when clicked.

 = Expands into layer color legends list when clicked.

3. Viewing Data Layers Using Map View

3.1. Default Data Layers

1. Click on the **Default Data** drop-down menu to expand layer options.
2. Select one or more layers to view.
3. Wait for map to display selected data layers.

Layers may take up to 30 seconds to render in the map view

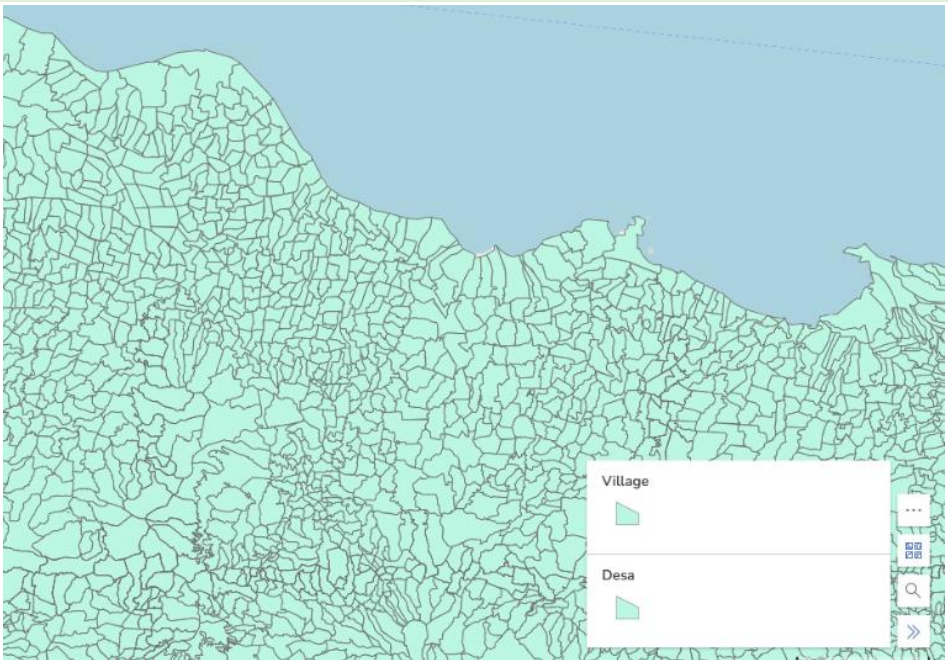


Figure 5. Map View with Several Layers Enabled

4. Clicking a layer area will display a pop-up information window for that specific area.

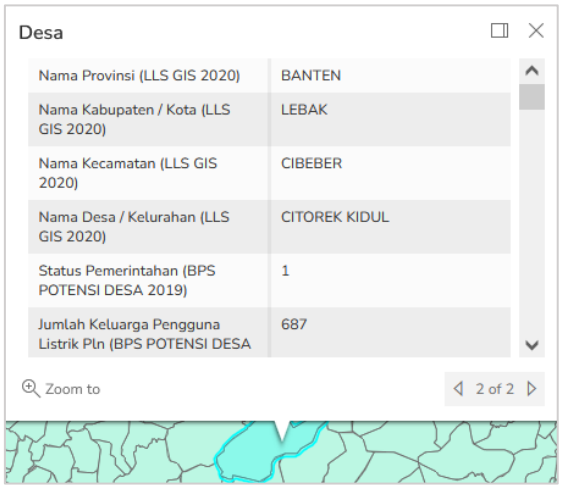


Figure 6. Pop-up Information Display on Map View

3.2. Data Visualization Configuration

Layer configuration requires one or more enabled layers

Visualization is done through layer configuration

1. Access the layer configuration interface by clicking the gear icon on the top right corner of the map view as shown in the figure below:

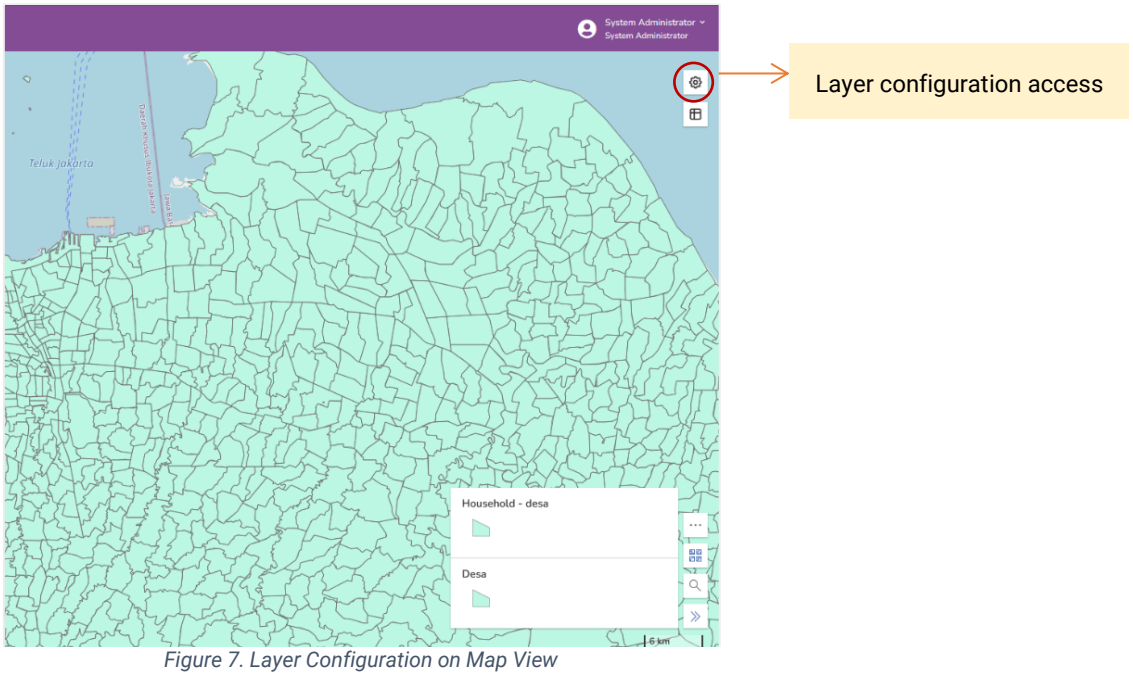


Figure 7. Layer Configuration on Map View

2. A drop-down menu will appear for each selected layers:

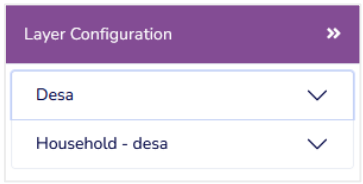


Figure 8. Layer Configuration Toolbar

3. Each item corresponds to currently enabled layers, when clicked, it will expand into a configuration interface for the selected layer(s):

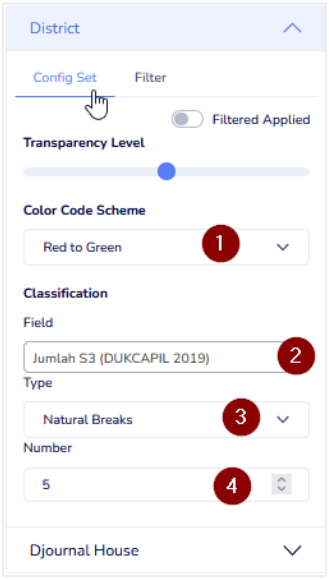


Figure 9. Layer Configuration Options

Available configuration options:

a. Color code schemes

i. Red to Green

ii. Green to Blue

iii. Blue to Red

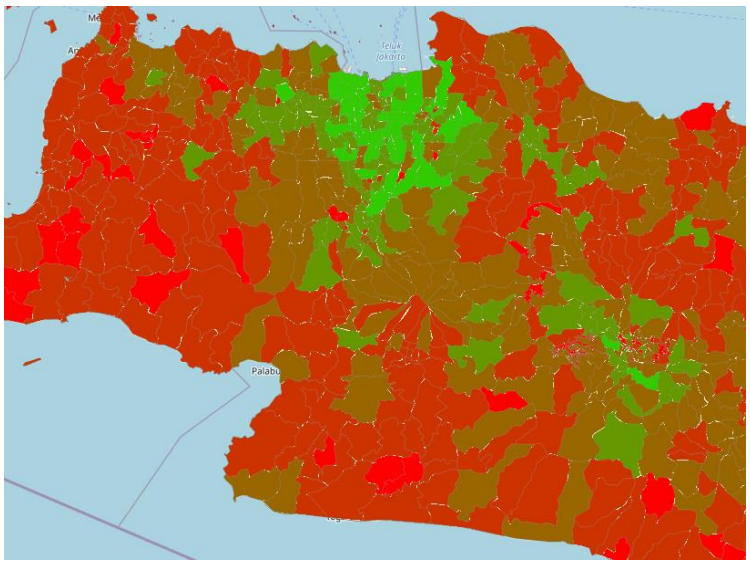


Figure 10. Red to Green Color Scheme

Color scheme represents field quantitative values on the map

- Values are classified and displayed in the map view using the selected color scheme.
- Red to Green means lower values will be represented by the color red, and as the value increases the color will gradually shift to green, note that color shift depends on the number of classes that are set.

b. Field

- Amount of selectable fields may differ across different layers

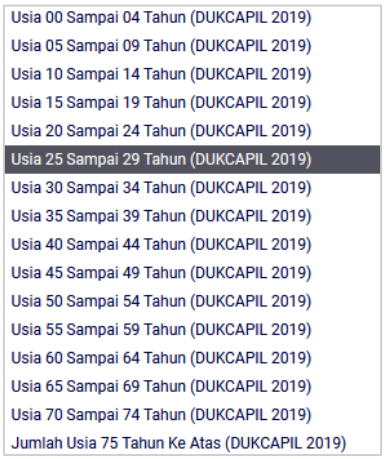


Figure 11.BPS Data Fields Sample

c. Classification Type

i. Natural Breaks

Natural breaks assigns values with similar characteristics into their own classes

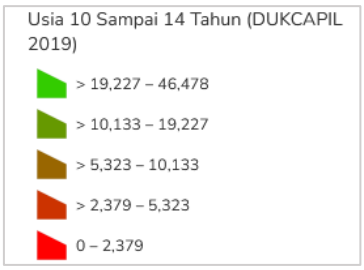


Figure 12. Natural Breaks Classification

ii. Equal Interval

Equal interval assigns values into same-sized classes

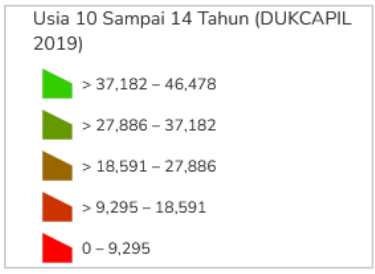


Figure 13. Equal Interval Classification'

iii. Quantile

Quantile assigns values proportionally throughout classes

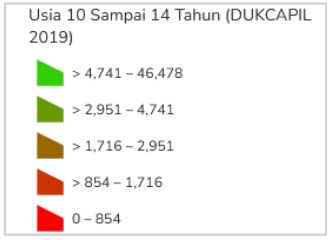


Figure 14. Quantile Classification

iv. Manual

Manual classification lets you define your own class ranges

An interface to configure manual classification will automatically appear in layer configuration options as shown in **Figure 30**:

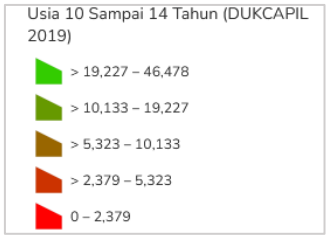


Figure 15. Manual Classification

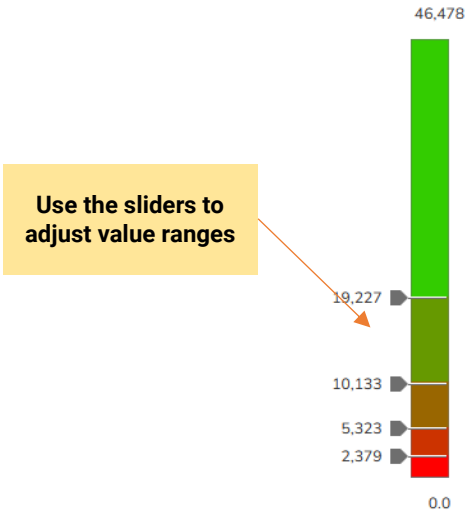


Figure 16. Manual Classification Setup Interface

d. Number

Number simply sets the amount of classes in the layer viewer

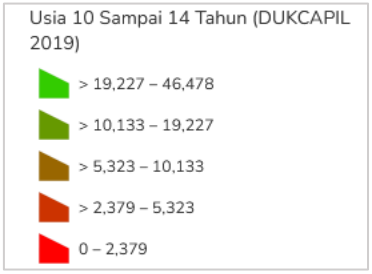


Figure 17. Number set to 5

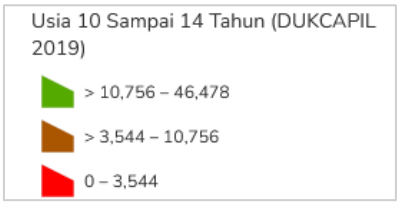


Figure 18. Number set to 3

3.3. Layer Map View Filtering

1. Access the layer Filter menu by clicking **Filter** in the layer configuration sidebar.

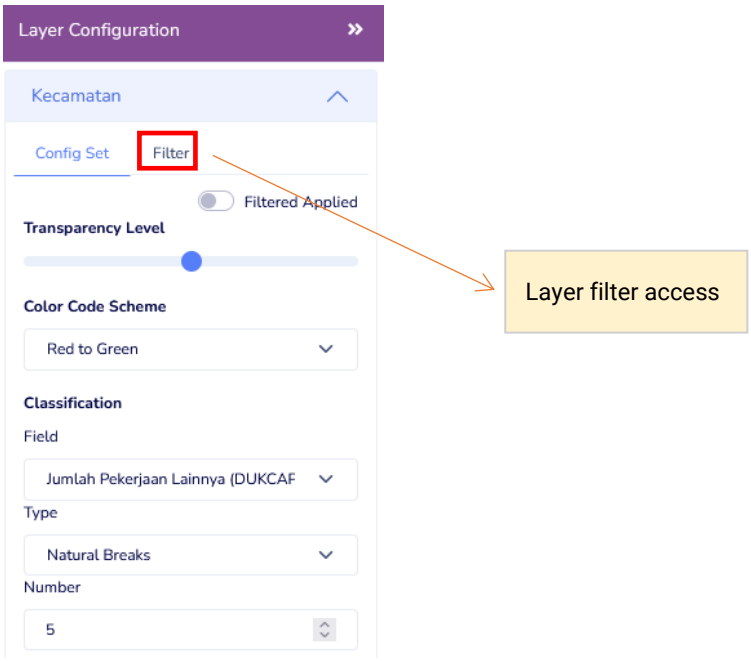
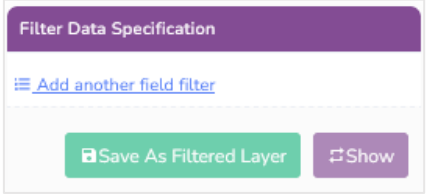


Figure 19. Layer Filter Access

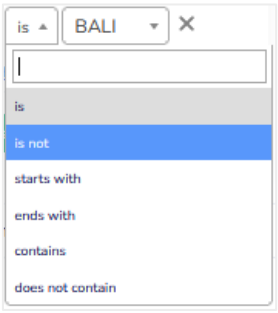
2. Click on **Add another field filter**



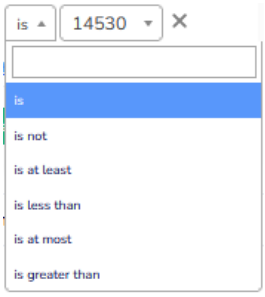
3. Set filter parameters with these steps:

1. Select field
2. Configure filter logic
3. Select parameters

a. Qualitative fields filter logic:



4. Fields showing quantitative numbers will return quantitative logic and parameters
   a. Quantitative fields filter logic:



5. Click **Show** to immediately show results in the map

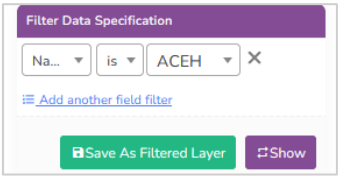


Figure 20. Show Filter in Map View

Figure 21. Map View with Filter Applied

6. Click **Save as Filtered layer** and give your filter configuration a name, then hit **Save**.

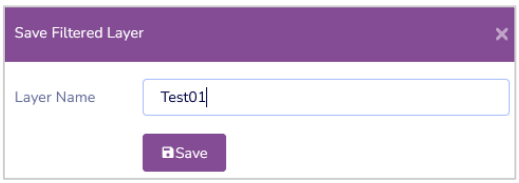


Figure 22. Save Filtered Layer

The system automatically saves your configuration once you click the Save button

Your filter configuration is now usable in Config Set

To apply your filter in the layer viewer, follow these steps:

1. In the layer side bar, click **Saved Filtered Layer** to expend the menu**.**

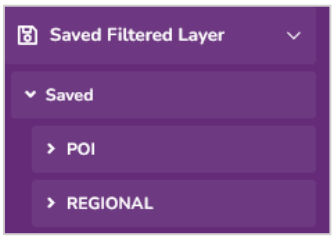


Figure 23. Accessing Saved Layer Filters

2. Filters will be saved in two different locations, **POI** exclusively stores POI filters, and **Regional** stores regional filters.
3. Previously **Test01** filter was made for Aceh area, therefore it is stored in the **Regional** section.
4. Click on **Test01** checkbox.

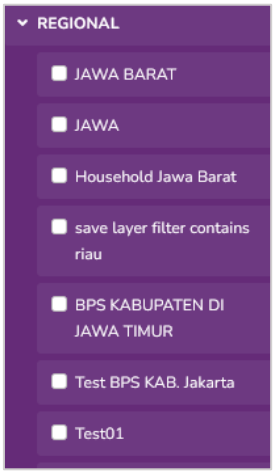


Figure 24. Accessing Regional Filter

5. Filter is applied as shown in **Figure 20.** Show Filter in Map View

To configure visualization for your set filter, simply enable your selected filter then follow the steps mentioned in **Chapter 3.2 Data Visualization Configuration**

4. Viewing Data Layers using Tabular View

Using Tabular View requires one or more enabled layers

1. Click  on the right side of map view to access the tabular view.
2. The tabular view will show your currently enabled layers.

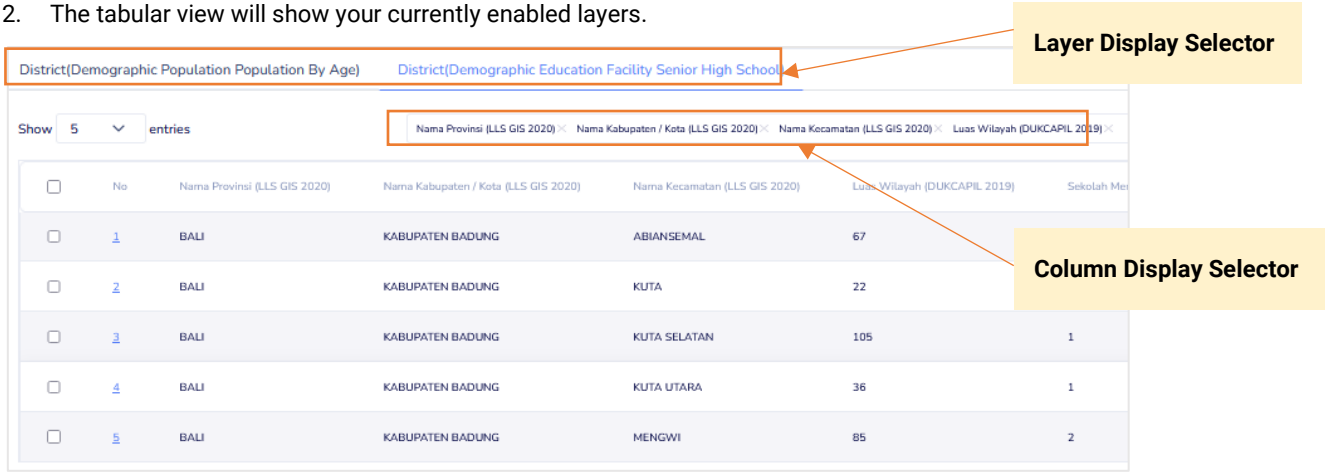


Figure 25. Tabular Viewer Navigation

3. Select which layers to show using **Layer Display Selector**
4. Select which columns to show using **Column Display Selector**
5. To search particular administrative areas, use the **Search** function and input your corresponding area into the search bar on the upper-right corner of the tabular view
6. To export and instantly download the tabular view results, click the **Download** button on the bottom-right corner of the tabular view.

Geotency will only export currently displayed data in the tabular view

For example if you searched “Badung” the tabular viewer will only return areas named “Badung”, thus, only those areas will be exported

4.1. Tabular View Filter Functions

1. Click Filter on the upper-right corner of the tabular view, above the search bar, this will show filtering configuration options.

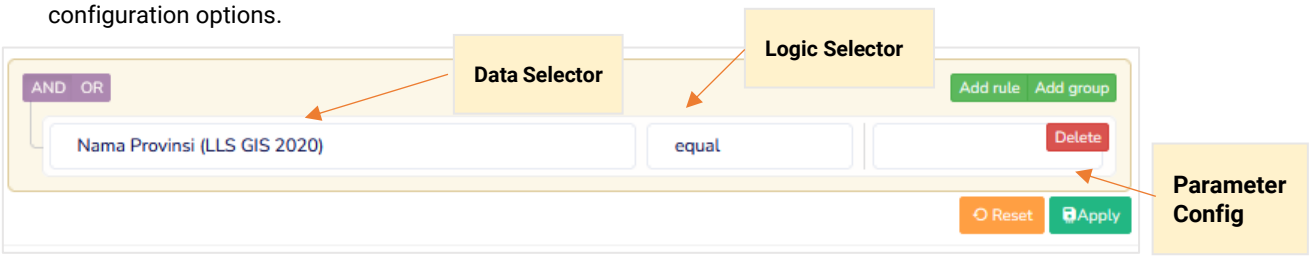


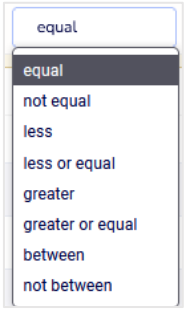
Figure 26. Tabular View Filter Config

2. Choose data using **Data Selector**, a drop-down menu that contains all data fields will appear

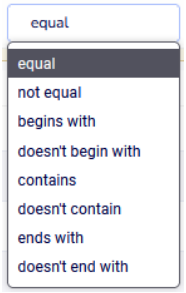
Figure 27. Tabular View Data Selection

3. Set your filter logic by using **Logic Selector,** note that available configurations will differ across qualitative and quantitative data.

    a. Quantitative logical parameters



    b. Qualitative logical parameters



4. Configure your parameter by typing in either a number (for quantitative data) or an administrative area name (for qualitative data)

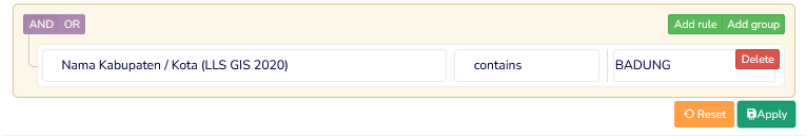


Figure 28. Tabular View Configuration

Area names in Geotency are written in UPPERCASE, use UPPERCASE letters when inputting one

Currently all area names in Geotency are written using all UPPERCASE

5. Click **Apply**
6. Now the tabular view should return data rows based on your configuration

No	Nama Provinsi (LLS GIS 2020)	Nama Kabupaten / Kota (LLS GIS 2020)	Nama Kecamatan (LLS GIS 2020)
1	BALI	KABUPATEN BADUNG	ABIANSEMAL
2	BALI	KABUPATEN BADUNG	KUTA
3	BALI	KABUPATEN BADUNG	KUTA SELATAN
4	BALI	KABUPATEN BADUNG	KUTA UTARA
5	BALI	KABUPATEN BADUNG	MENGWI
6	BALI	KABUPATEN BADUNG	PETANG

Figure 29. Tabular Filter Results

7. As illustrated in Figure 13, the tabular view returns every area that contains “Badung” in their district names.

4.1.1. Applying Multiple Filters

1. From the **Filter** drop-down menu, click **Add Rule** to add additional filter rule
2. A new empty filter row will show

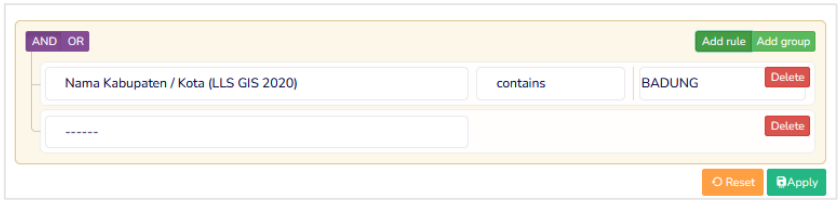


Figure 30. Add New Filter Rule

3. Simply repeat the steps as shown in Chapter **4.1**

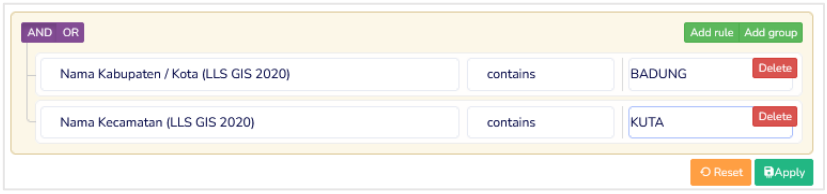


Figure 31. Multiple Filter Rules

4. Multiple filters requires you to specify the selection logic, either **AND** or **OR** on the top-left corner of the filter configuration
    a. **AND** returns results where both **Rule A** and **Rule B** are true
    b. **OR** returns results where at least one of the set rules are true
5. Click **Apply**
6. Tabular view will return results according to your configuration.

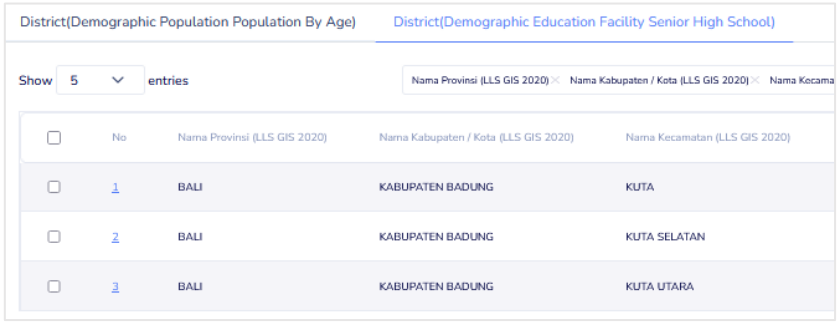


Figure 32. Filter Config using AND Logic

4.1.2. Applying Filter Groups

1. Filter group allows you to create a new child group below the parent group
2. Each child group consists of their own set rules and selection logic
3. Child group rules will only apply after their respective parent group is applied
4. To add a new rule group, simply click **Add Group** from **Filter** drop-down menu
5. A new empty row will show, with a slight right indentation to indicate that the row is a child group

Figure 33. New Rule Group

6. Fill all the required columns as shown in Chapter **4.1**

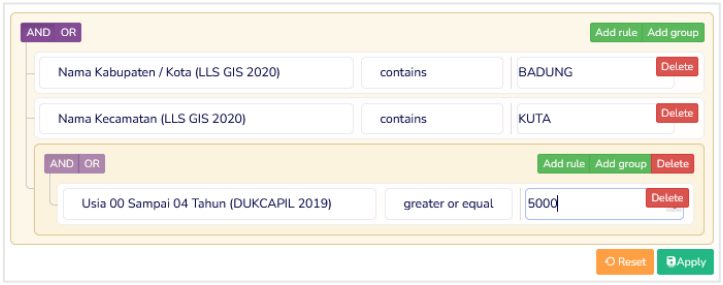


Figure 34. Rule Group Setting

7. You may also add multiple rules in a group and specify your selection logic as mentioned in Chapter **4.1.1**
8. Click **Apply**
9. Tabular view will return results according to your configuration

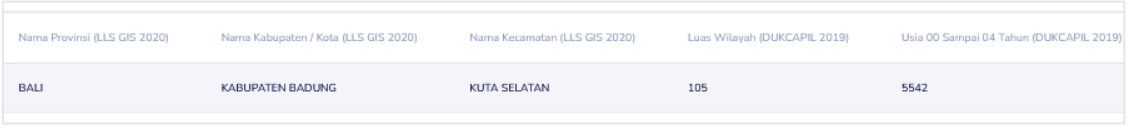


Figure 35. Rule Group Results

5. Layer Grouping

1. Layers can be grouped, but only your admin has the authority to do this.
2. Any previuosly saved layer groups are shown in the **Groups Layer** drop down menu within layer viewer sidebar.

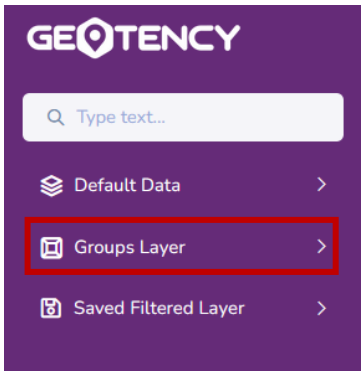


Figure 36. Grouped Layer Access

6. Radius and Driving Time Analysis

6.1. Site Management

6.1.1. Navigating the Site Management Menu

Click **Site Processing** drop-down menu, you'll find **Site Management** in there

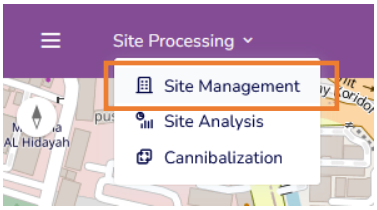


Figure 37. Accessing Site Management Interface

6.1.2. Create and Save New Site Point

1. To create new site, click **Create** in **Site/Location Data Management**

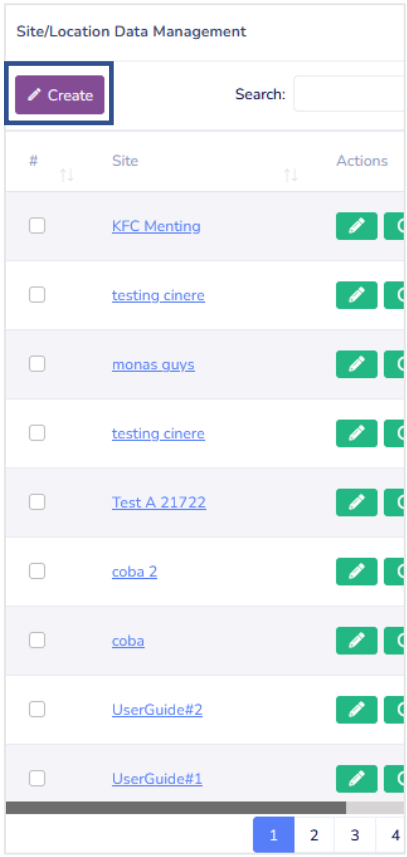


Figure 38. Create New Site

2. Click your desired location in the map view, or alternatively, search the location first using the search function on bottom right corner of the map view.

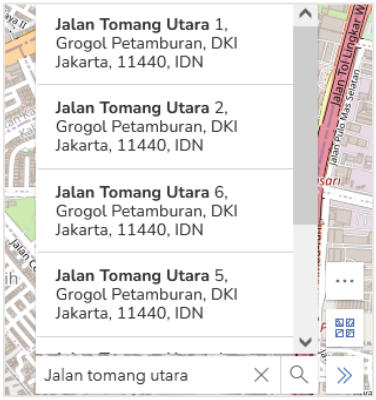


Figure 39. Address Search

3. Several recommendations will appear, click the one closest to your desired location.
4. The map will show your selected location.

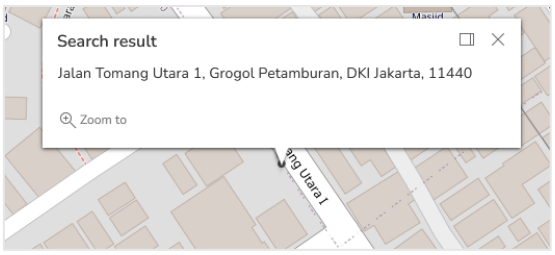


Figure 40. Address Search Result

5. Now point your cursor in your desired area, click once, then click the location marker to show site point pop-up.

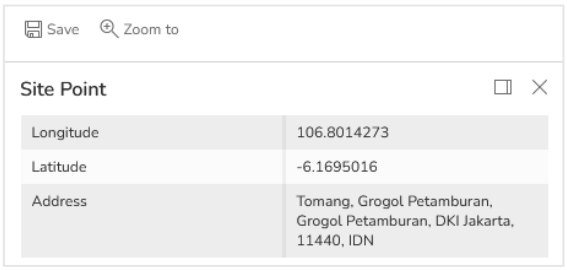


Figure 41. Site Point Pop-Up

6. Click **Save.**
7. Fill **Site/Location Data Form.**

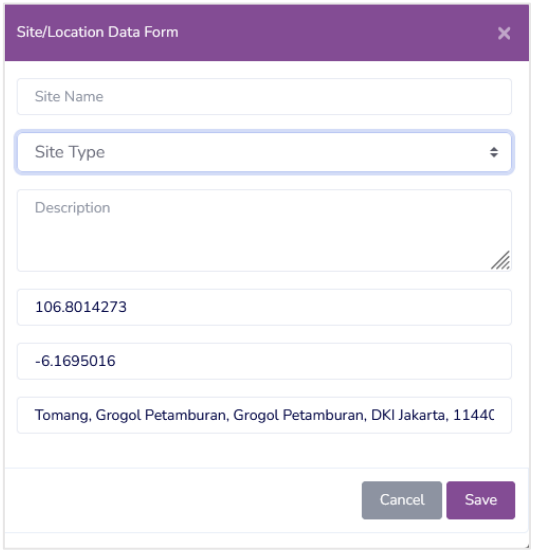


Figure 42. Site Data Form

8. Input **Site Name** and **Description** with the relevant information.
9. Choose one of the availabe **Site Type.**

Figure 43. Site Types

Site types are for your information only, it will not affect site analysis

Use site types to distinguish sites based on their respective category

10. Your new site now can be accessed via **Site/Location Data Management.**

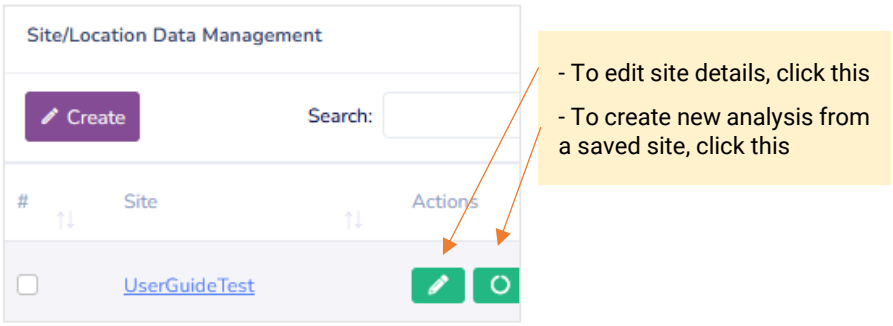


Figure 44. New Site in Site Management

6.1.3. Create New Analysis from Saved Site Point

1. Click  in **Site/Location Data Management.**
2. **Site Analysis Form** will show up.

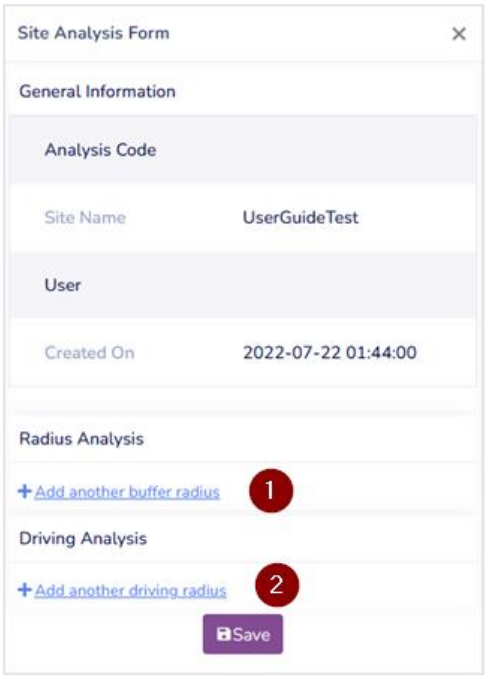


Figure 45. Site Analysis Form

3. There are two types of analysis, **Radius Analysis** and **Driving Analysis**.
    a. **Radius** analysis uses a circular area buffer, you have to set the radius and type manually.
    b. **Driving** analysis draws an area by estimated driving time/distance towards or outwards from the area, you have to set the driving time/distance and type manually.
4. There are also two types of area buffer, this applies both in **Radius Analysis** and **Driving Analysis.** To illustrate how the two types of buffer works, observe **Figure 46** below:

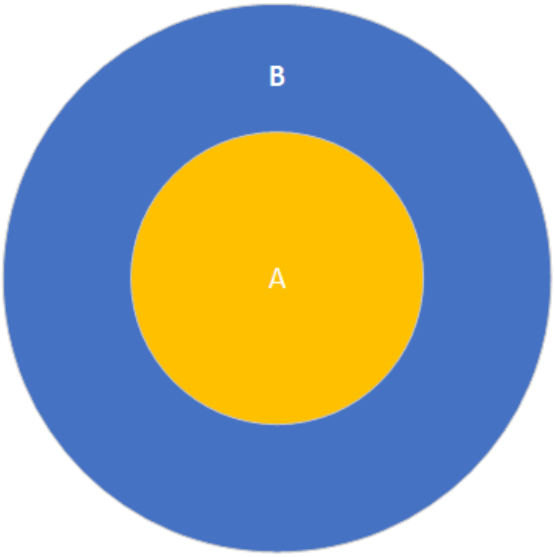


Figure 46. Analysis Type Properties

a. **Segmentation**
   i. **A** and **B** are treated as two different buffer areas.
   ii. **B** is the outer circle, **A** is the inner circle.
   iii. **B** on its own is shaped like a donut, because **B** does not account for **A**.

b. **Aggregation**
   i. **A** is an area of its own, but **B** is **A and B** combined.
   ii. **A** is the inner circle, **B** accounts for both inner and outer circle.

Do note that in Driving Time Analysis, Segmentation and Aggregation works the same way as illustrated

6.1.4. Radius Analysis

1. In **Radius** section within **Site Analysis Form,** click **Add another buffer radius,** then set the **Type, Area Value, and Measurement Unit**.

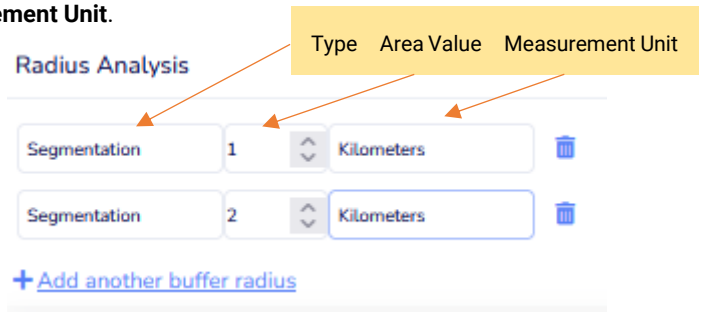


Figure 47. Radius Buffer Analysis

1. Click **Save** in the **Site Analysis Form.**
2. Assign a **Name.**

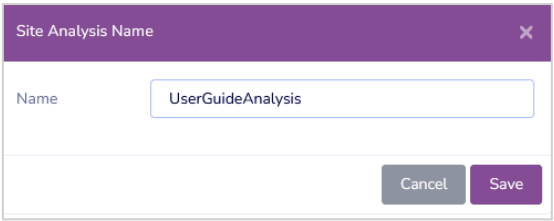


Figure 48. Site Analysis Name Configuration (Radius)

3. Click **Save.**

Saving a site analysis might take a while, wait until it is done

The system will notify you once this process is complete

4. Now your newly created analysis can be accessed in **Site Analysis.**

6.1.5. Driving Time Analysis

1. In **Driving Time** section within **Site Analysis Form,** click **Add another driving radius,** then set the **Type, Driving Time or Distance, Measurement Unit, Data Type** and **Direction**.
2. There are two different **Data Type, Typical** and **Live**
   a. **Typical** lets you manually assign **Typical Day** and **Typical Time.**
   b. **Live** sets day and time based on the time that the analysis was created.

3. Direction is either **Away From Site** or **Towards Site**, choose one that suits your needs.

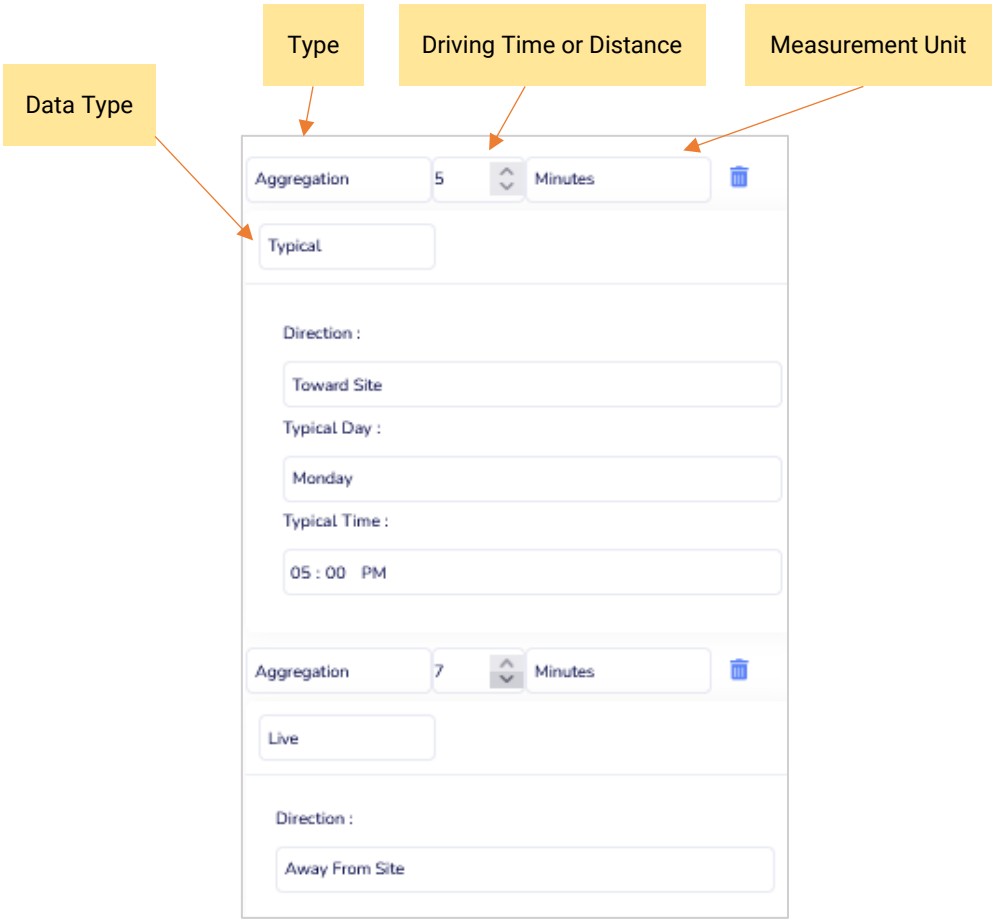


Figure 49. Driving Time Analysis Configuration

Typical Time uses 12 hr clock format (Hour : Minute : AM/PM)

Typical day and time is exclusive only for **Typical data type**

4. To save your settings, click **Save** in **Site Analysis Form.**
5. Assign a name for your newly created analysis

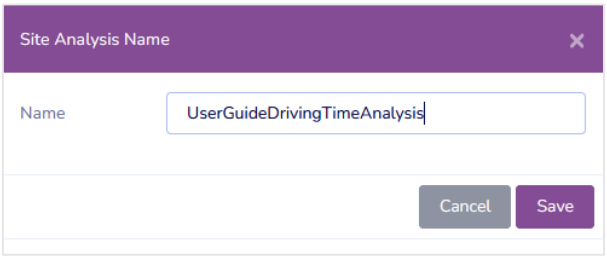


Figure 50. Site Analysis Name Configuration (Driving Time)

6. Click **Save.**
7. Now your newly created analysis can be accessed in **Site Analysis.**

Please note that a site analysis can consist of multiple Driving Time and Radius simultaneously

For exemplary purposes, this is done in separately using two different site analysis

6.2. Site Analysis

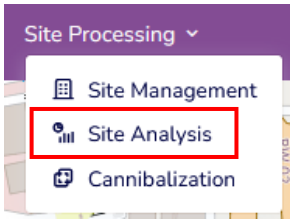
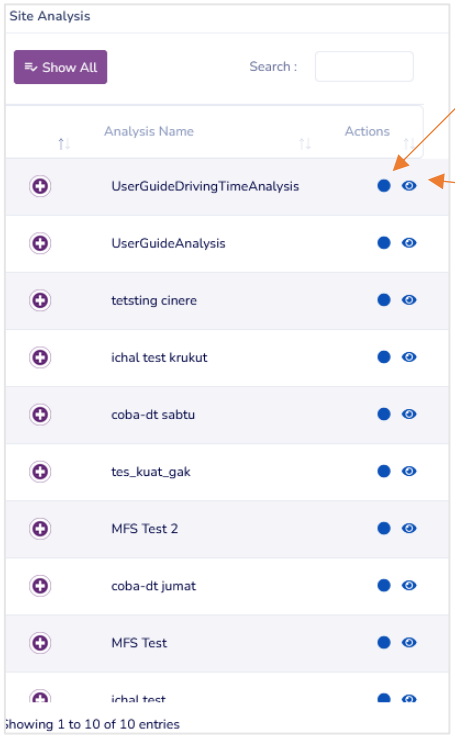


Figure 51. Site Analysis Access

6.2.1. Selecting Layers to Display

1. Locate your previously saved site in the **Site Analysis** sidebar.



Click this icon to select layers for displaying analysis results in map view

Click this icon to configure analysis results export preview

Figure 52. Site Analysis Sidebar

2. Click  to configure layers for your selected site.

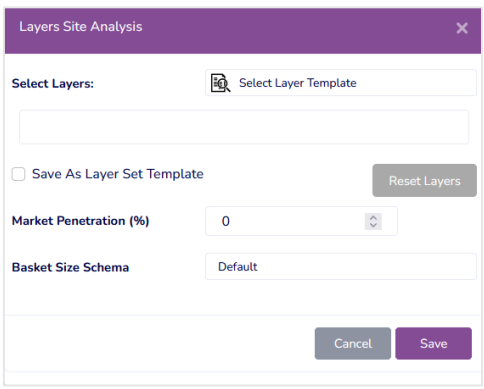


Figure 53. Layer Site Analysis

3. Select layers on **Layer Selector**

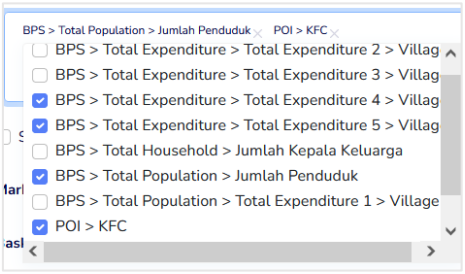


Figure 54. Layers Selection

4. Set **Market Penetration** value.
5. Set **Basket Size Scheme**.
    a. Basket size is the estimated amount of money your client would spend in your outlet within one visit.
    b. **Default Basket Size** value is Rp50.000
    c. Setting your own custom basket size value requires your administrator to do so

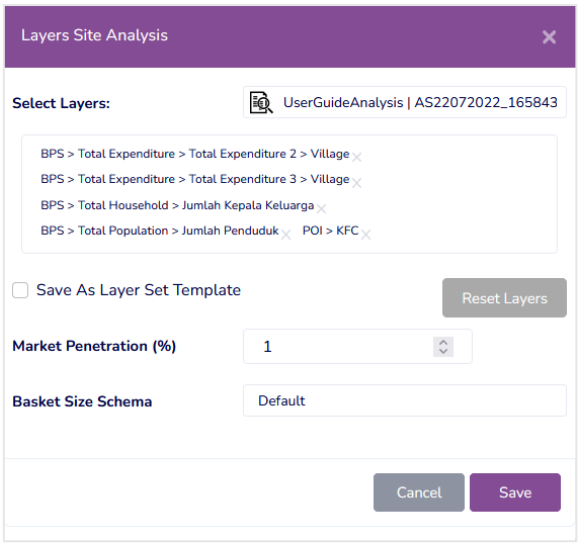


Figure 55. Configured Layers Site Analysis

6. To save your current layer site analysis configuration, check **Save As Layer Set Template**
7. Click **Save** on the bottom right corner of **Layers Site Analysis**

The map will now render your site analysis based on your set configuration

Configurations can also be stored for future use

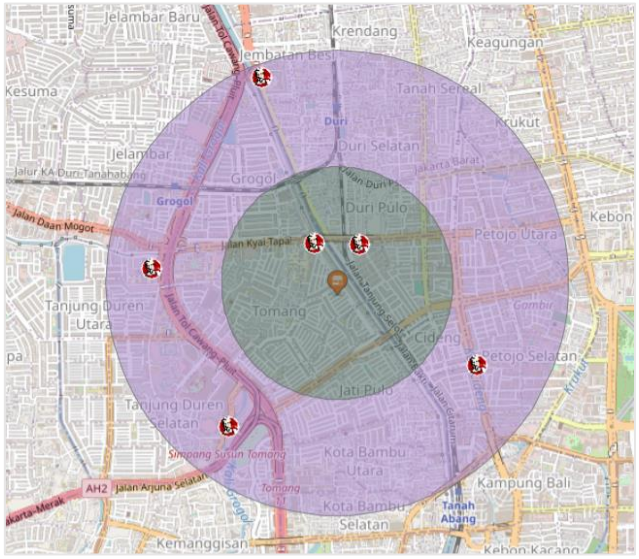


Figure 56. Radius Site Analysis

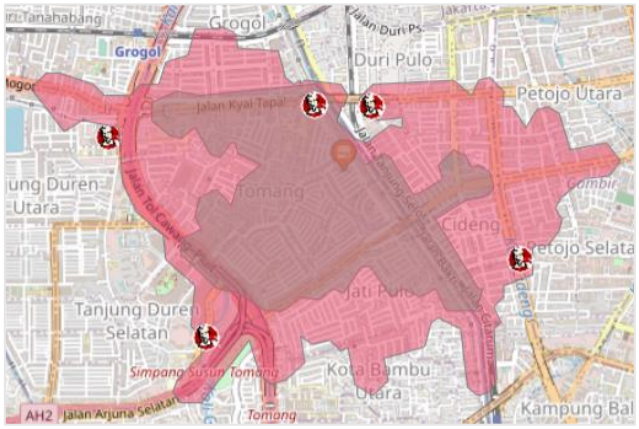


Figure 57. Driving Time Site Analysis

To configure buffer display, follow the steps below:

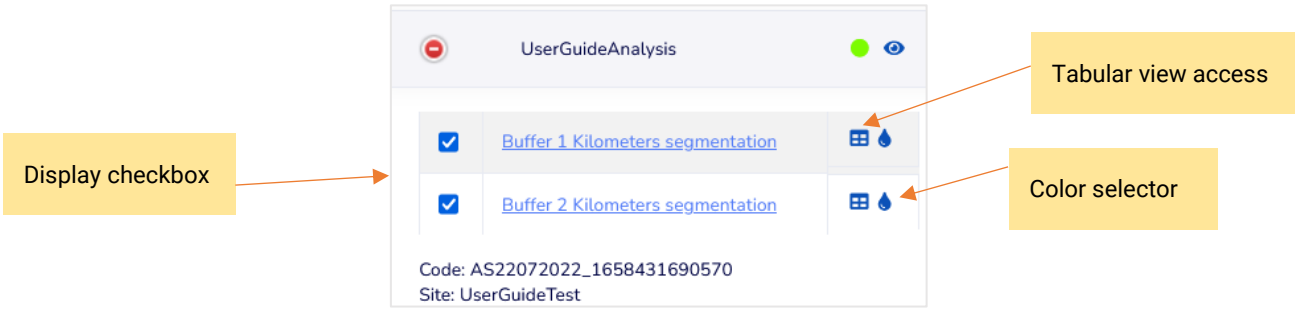


Figure 58. Buffer Display Configuration

1. To select which buffer/driving time to display, use **Buffer display checkbox**
2. To view analysis results in tabular format, use **Tabular view access**
3. To change buffer/driving time color in map view, use **Buffer color selector**

6.2.2. Using Layer Template

1. Your previously saved layer template can be accessed in **Select Layer Template** within **Layers Site Analysis** interface.
2. Layer templates are saved using the **Analysis Name** where you created the layer template with.

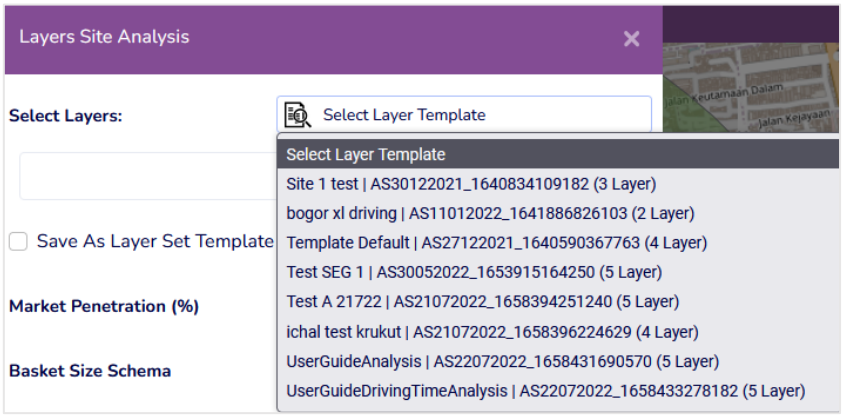


Figure 59. Layer Template Selection

3. Select your desired **Layer Template**.
4. The web app will automatically select your layers based on the selected **Layer Template**

Figure 60. Applied Layer Template

5. Click **save**.
6. The map view will display radius/driving time analysis layers.

6.2.3. Viewing Analysis Results in Tabular View

1. Click the  icon in the **Site Analysis** sidebar.

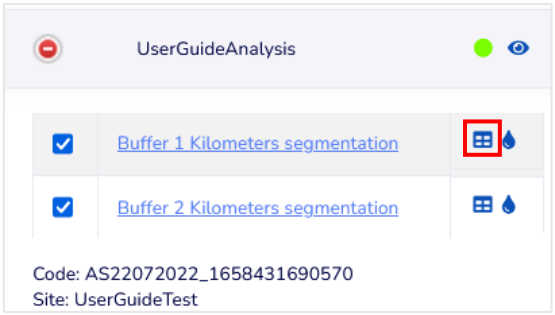


Figure 61. Site Analysis Tabular View Access

2. A tabular view bar will show up at the bottom of the screen. It will show the analysis results based on the layers you selected before in **Layers Site Analysis.**

3. Tabular view controls:
    a. Add another tabular view from **Site Analysis** sidebar

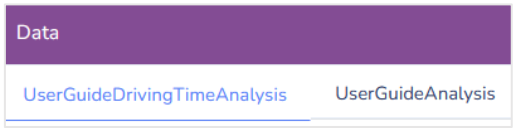


Figure 62. Navigating between Tables

Added tables will show as tabs in the tabular view, to navigate, simply click the tab you wish to view

    b. Open table in a separate window
    c. Expand table to full screen view
    d. Hide tabular view

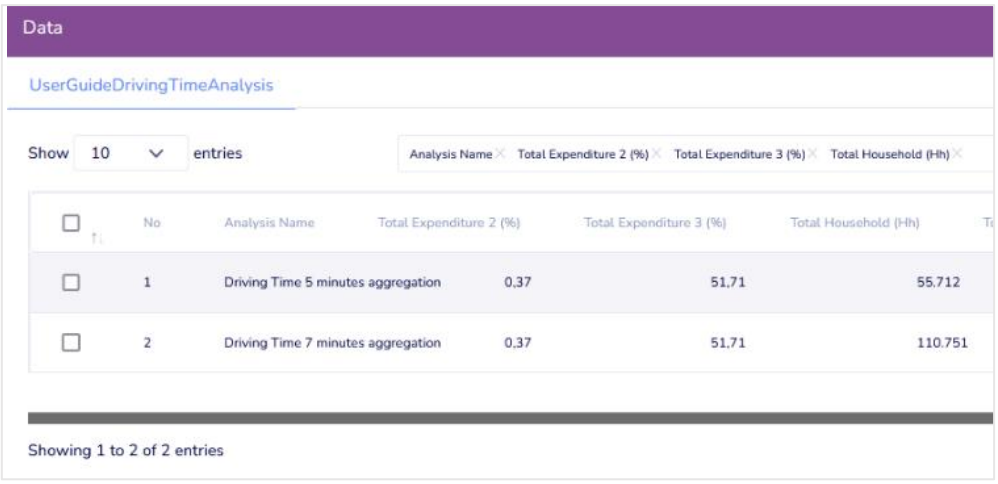


Figure 63. Site Analysis Tabular View

6.2.4. Exporting Analysis Results to PDF or CSV

1. Run the site analysis you wish to save by clicking on

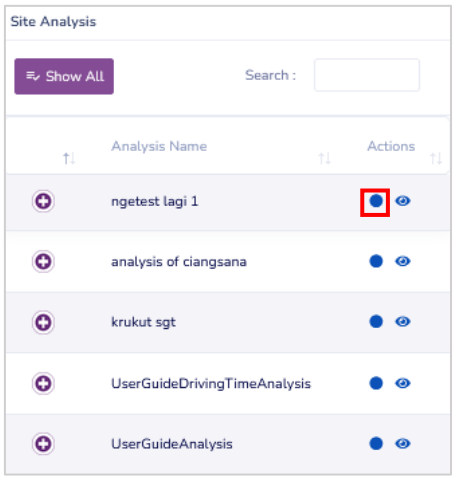


Figure 64. Executing Site Analysis

2. Select **layers**, **market penetration rate**, and **basket size scheme**

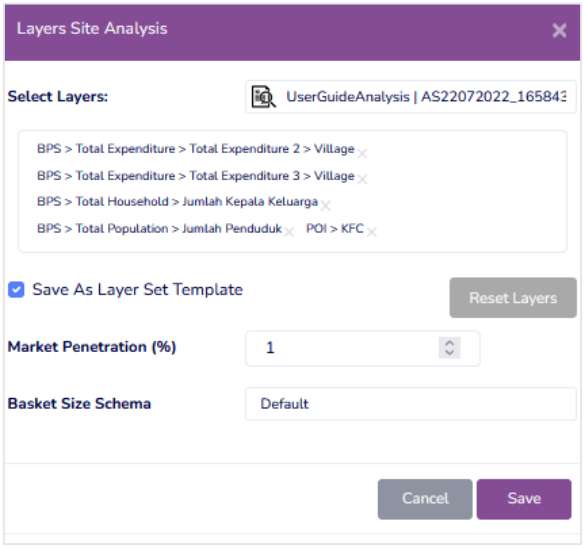


Figure 65. Layer Site Analysis Config

3. Click **Save**
4. Click on in **Site Analysis** sidebar

Figure 66. Showing Site Analysis Export Preview

5. Choose File Format to preview

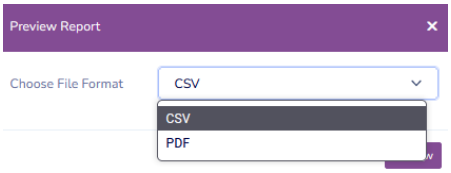


Figure 67. Preview Report

6. Click **Preview**
7. CSV export output sample:

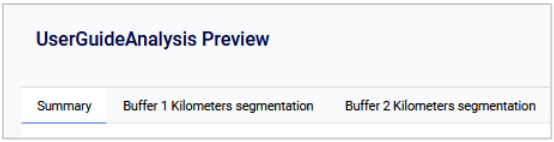


Figure 68. CSV Preview Tab Navigation

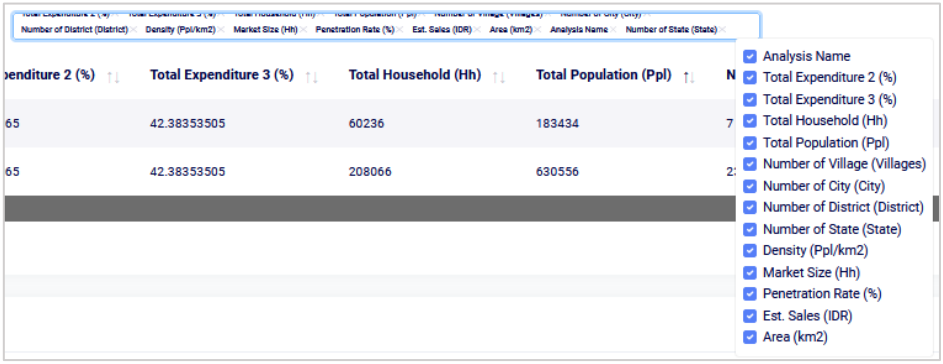
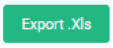


Figure 69. CSV Preview Field Selector

8. Click 

to export and download analysis results into an excel spreadsheet.

Fields that are shown in the exported document depends on the fields you selected before

9. PDF file is now exported and will be automatically downloaded by your browser.

7. Cannibalization

Cannibalization requires at least 2 previously created sites in Site Management

7.1. Navigating the Cannibalization Interface

1. Access the **Cannibalization** interface in the **Site Processing** drop-down menu

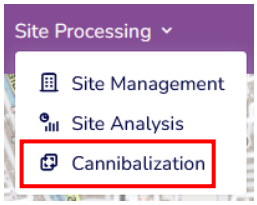


Figure 70. Accessing the Cannibalization Interface

2. **Cannibalization** sidebar will show up on the left side of the screen

Figure 71. Cannibalization Sidebar

7.2. Selecting Sites to Cannibalize

1. Start by clicking **Create** on the top left of **Cannibalization** sidebar

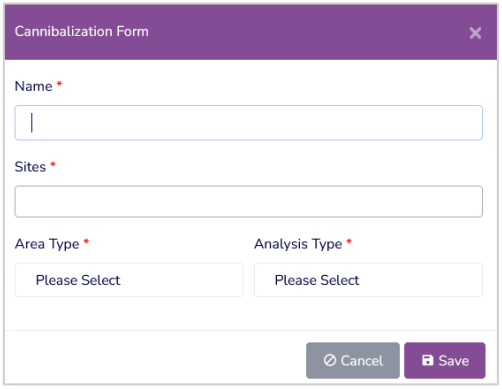


Figure 72. Cannibalization Form

2. Fill **Name**
3. Select **2 or more sites** you wish to cannibalize

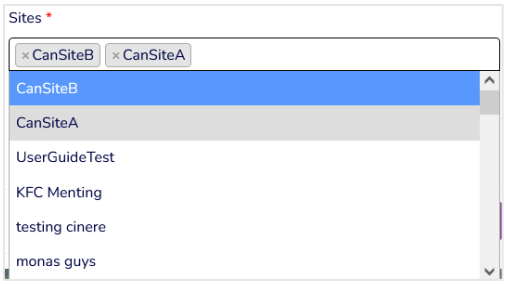


Figure 73. Choosing Sites to Cannibalize

4. Select an area type

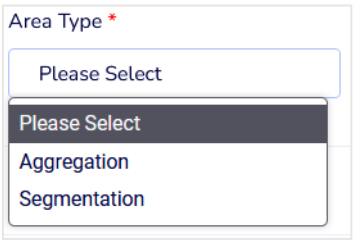


Figure 74. Area Type Selection for Cannibalization

Area type works the same way as illustrated in Figure 46. Analysis Type

5. Select analysis type

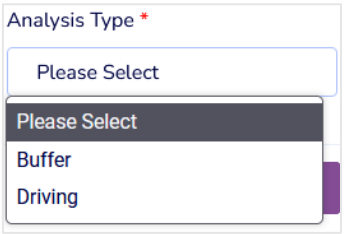


Figure 75. Cannibalization Analysis Types

6. **Cannibalization Buffer Analysis**
    a. Set buffer radius by choosing one of the available options:

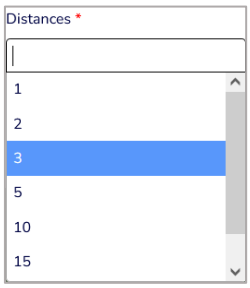


Figure 76. Cannibalization Buffer Radius Setup

You can select multiple buffer radius, this will produce different size buffers on the selected sites

b. Set measurement unit

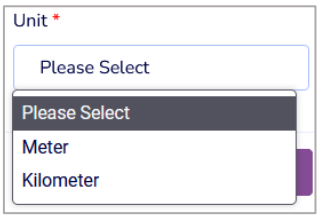


Figure 77. Cannibalization Buffer Measurement Units

c. Click **Save**

7. **Cannibalization Driving Analysis**

a. Select **Driving Data**

Figure 78. Cannibalization Driving Analysis Setup

Live and Typical driving data is explained in Chapter 6.1.5

Configuring Live and Typical works and behaves the same way as in Figure 49. Driving Time Analysis Configuration

b. Select **Driving Direction**

Figure 79. Cannibalization Driving Analysis Setup#2

c. Select **Distances**

Distance is the time it takes to drive away or towards the site

You can select multiple distances, which will produce multiple driving time areas on the selected sites

d. Select **Measurement Unit**

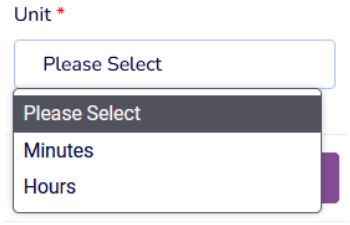


Figure 80. Cannibalization Driving Analysis Setup #3

e. Click **Save**

8. Now you can access your saved configurations in the **Cannibalization** sidebar

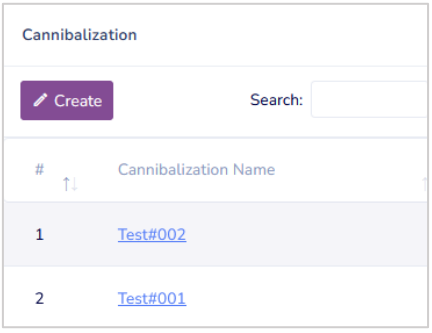


Figure 81. Saved Cannibalization Config

7.3. Setting up Cannibalization Layer Display

Layer setup remains identical with site analysis as in Chapter 6.2.1

However, in cannibalization you have to set market penetration rate for each buffer/driving time radius that you have configured

1. Set **Layer Analysis** (you can choose multiple of them)
2. Set **Penetration** for each buffer/driving time radius
3. Set **Basket Size Group**

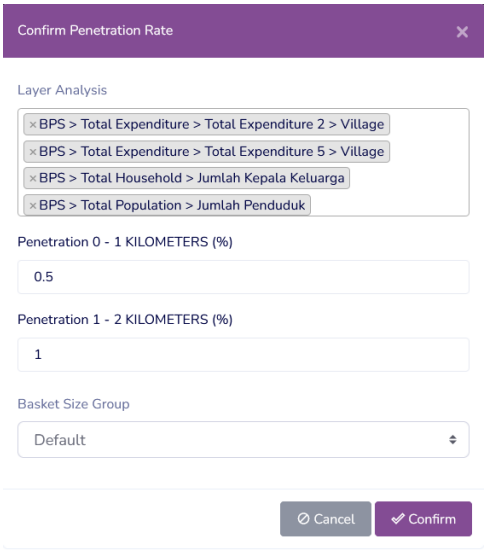


Figure 82. Cannibalization Layers Setup

Default basket size is the same as in site analysis, Rp50.000

4. Click **Confirm**

It may take some time for the map to render cannibalization results

5. Once rendering is completed, results view sidebar will show on the left side of the map view:

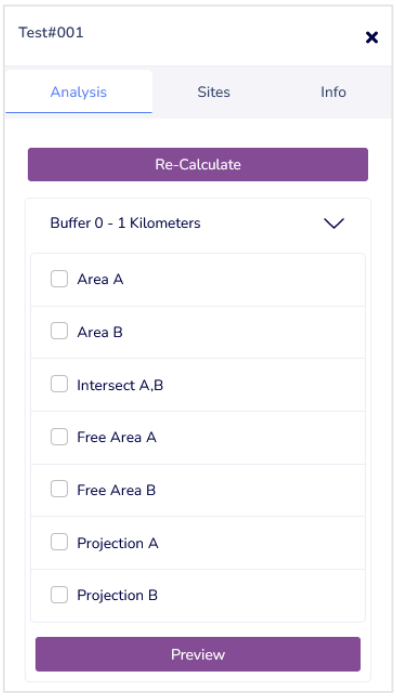


Figure 83. Cannibalization Results Sidebar

7.4. Viewing Cannibalization Results

Cannibalization areas can intersect and interact with one another, all possible interactions and their respective properties are as follows:

1. Area A intersects Area B

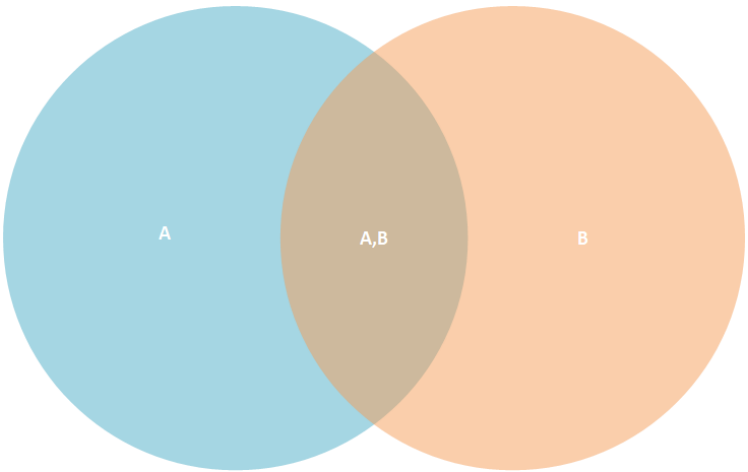


Figure 84. Cannibalization Areas Intersects with One Another

Properties:

a. Area A

Figure 85. Cannibalization Area A

b. Area B

Figure 86. Cannibalization Area B

c. Intersect area A,B

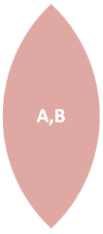


Figure 87. A,B Intersection

d. Free area A (Area A - Intersect A,B)

e. Free area B (Area B - Intersect A,B)

Figure 88. Free Area A and B

f. Projection area A (Area A + Intersect A)

g. Projection area B (Area B + Intersect B)

6. *Figure 89. Projection Area A and B*

In case A and B does not Intersects, there will only be Area A and Area B

To view Cannibalization areas on map view, follow these steps:

1. Make sure you've created a cannibalization config and follow all the steps instructed in Chapter 7.3
2. Use the checkboxes on the left side on the screen to activate area previews
3. Click **Sites** tab to see cannibalization sites
4. Click **Info** tab to see site configuration

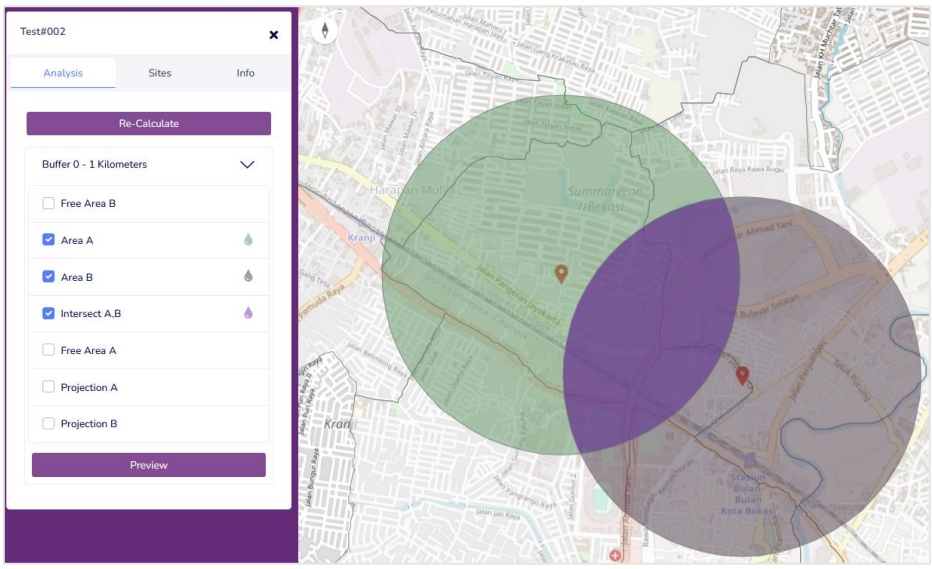


Figure 90. Area Preview with Area A,B and Intersect A,B Checked

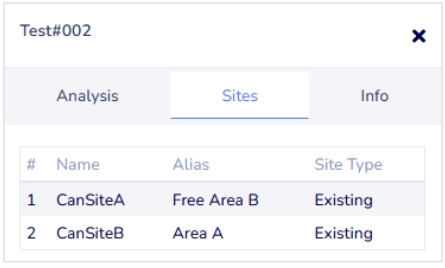


Figure 91. Site Tab

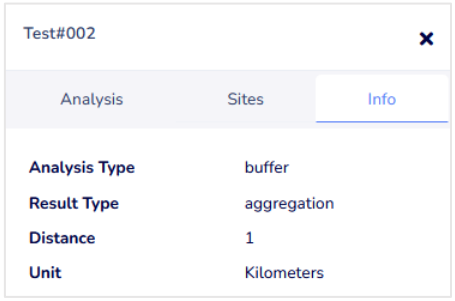


Figure 92. Info Tab

5. Clicking **Preview** will display cannibalization results in tabular view

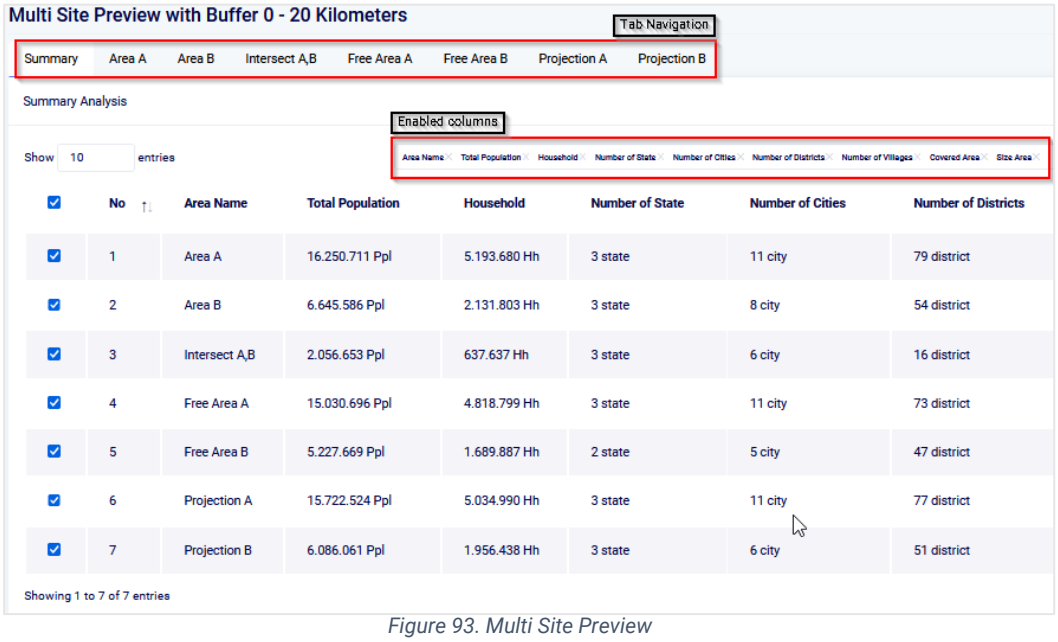
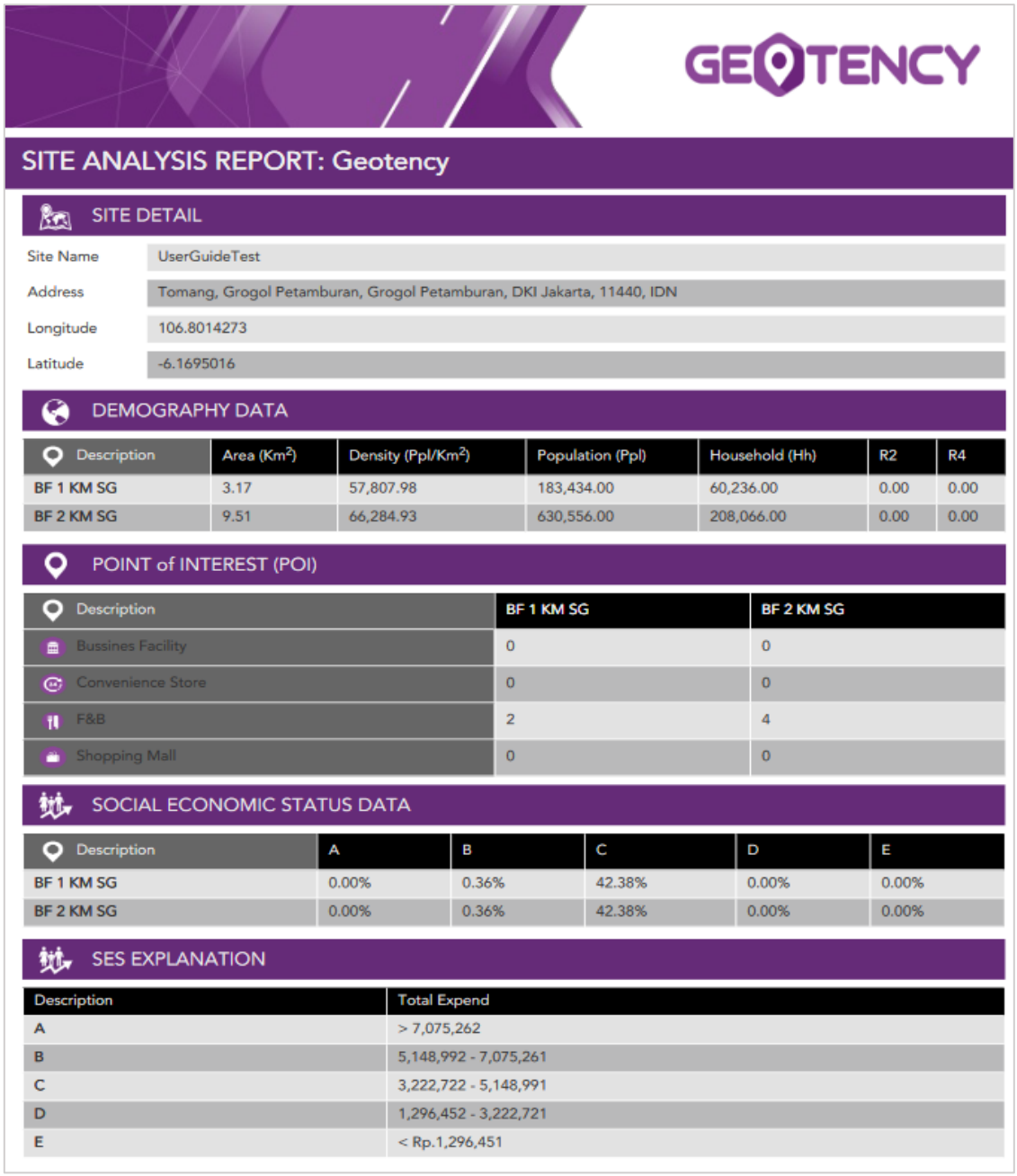


Figure 93. Multi Site Preview

6. To navigate between buffer selection, click one you wish to view in **Tab navigation**
7. Click **Export .xls** on the upper-right corner of **Multi Site Preview** to download tabular view in excel format

8. Attachments



SITE ANALYSIS REPORT: Geotency

SITE DETAIL

Site Name	UserGuideTest
Address	Tomang, Grogol Petamburan, Grogol Petamburan, DKI Jakarta, 11440, IDN
Longitude	106.8014273
Latitude	-6.1695016

DEMOGRAPHY DATA

Description	Area (Km^2)	Density (Ppl/Km^2)	Population (Ppl)	Household (Hh)	R2	R4
BF 1 KM SG	3.17	57,807.98	183,434.00	60,236.00	0.00	0.00
BF 2 KM SG	9.51	66,284.93	630,556.00	208,066.00	0.00	0.00

POINT of INTEREST (POI)

Description	BF 1 KM SG	BF 2 KM SG
Bussines Facility	0	0
Convenience Store	0	0
F&B	2	4
Shopping Mall	0	0

SOCIAL ECONOMIC STATUS DATA

Description	A	B	C	D	E
BF 1 KM SG	0.00%	0.36%	42.38%	0.00%	0.00%
BF 2 KM SG	0.00%	0.36%	42.38%	0.00%	0.00%

SES EXPLANATION

Description	Total Expend
A	> 7,075,262
B	5,148,992 - 7,075,261
C	3,222,722 - 5,148,991
D	1,296,452 - 3,222,721
E	< Rp.1,296,451

Figure 94. PDF Export Results