

5th Case Reconstruction and Promotion

“What are the Panama Papers? A guide to history’s biggest data leak” by the Guardian

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The original news story

<http://www.theguardian.com/news/2016/apr/03/what-you-need-to-know-about-the-panama-papers>

Analysis: The original story consists of 3 bubble charts.

Preparation steps

1. You need Chrome browser;
2. You need Tableau Public installed on your computer;
3. You need Excel to deal with the data.

PART 1: Scraping data from ICIJ official website & Visualize data in Tableau Public

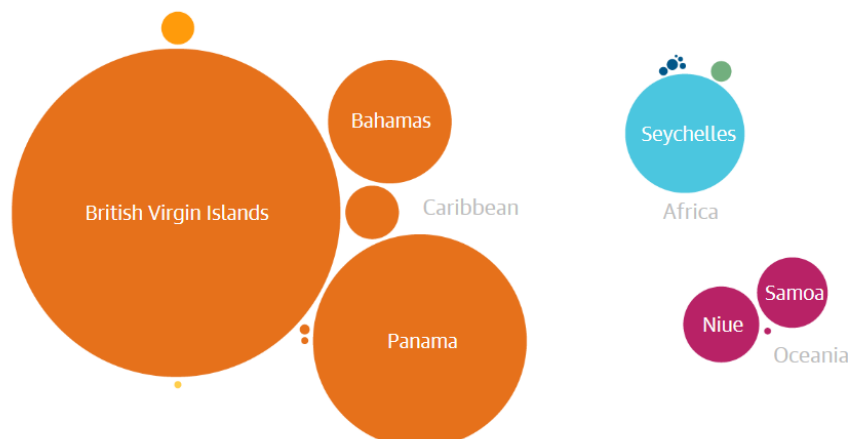
In this part, you are going to

1. scrape data from ICIJ official website using Chrome developer tool;
2. Visualize data in Tableau Public using packed bubble chart.

1st original bubble chart: The hiding places

The hiding places

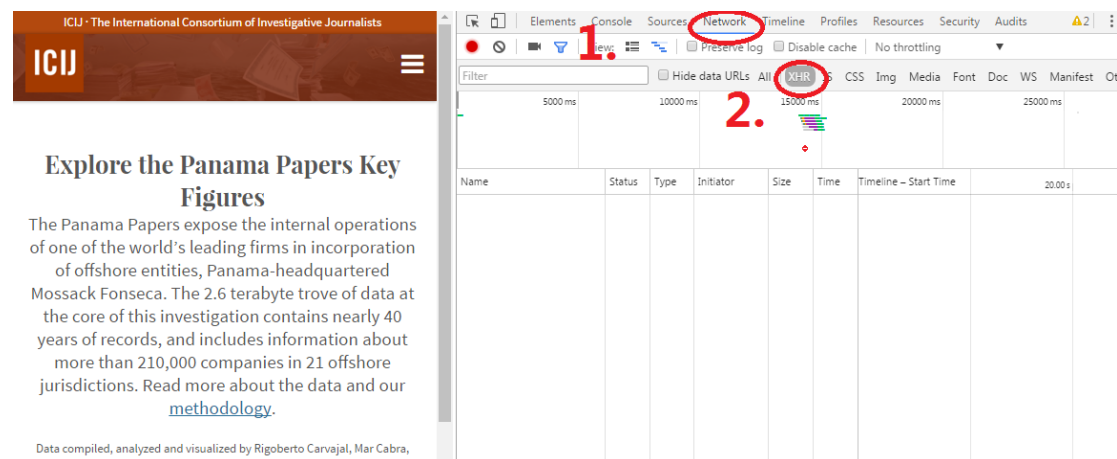
Mossack Fonseca data seen by the Guardian relates to more than 200,000 companies for which the firm acted as registered agent. Often used lawfully to anonymously hold property and bank accounts, these companies were registered in a range of tax havens and this map shows the most popular locations among its clients. The British Virgin Islands held more than 100,000 companies.



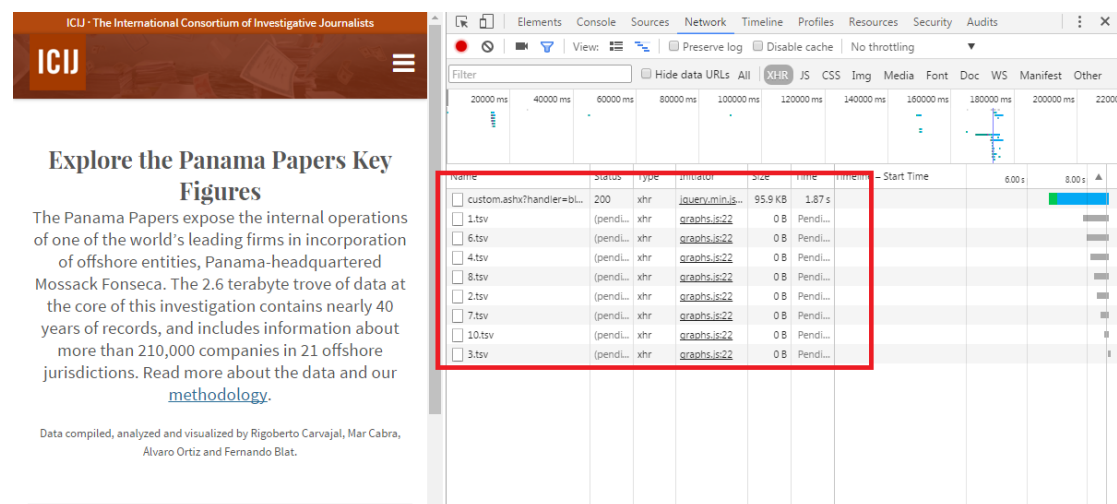
Step 1.1:

Go to ICIJ official website; <https://panamapapers.icij.org/graphs/>, and you will see 9 graphs showing the overview of Panama Papers.

Right click on the webpage, and then **Inspect Element**. Click on the **Network** tab, and then click on **XHR**.



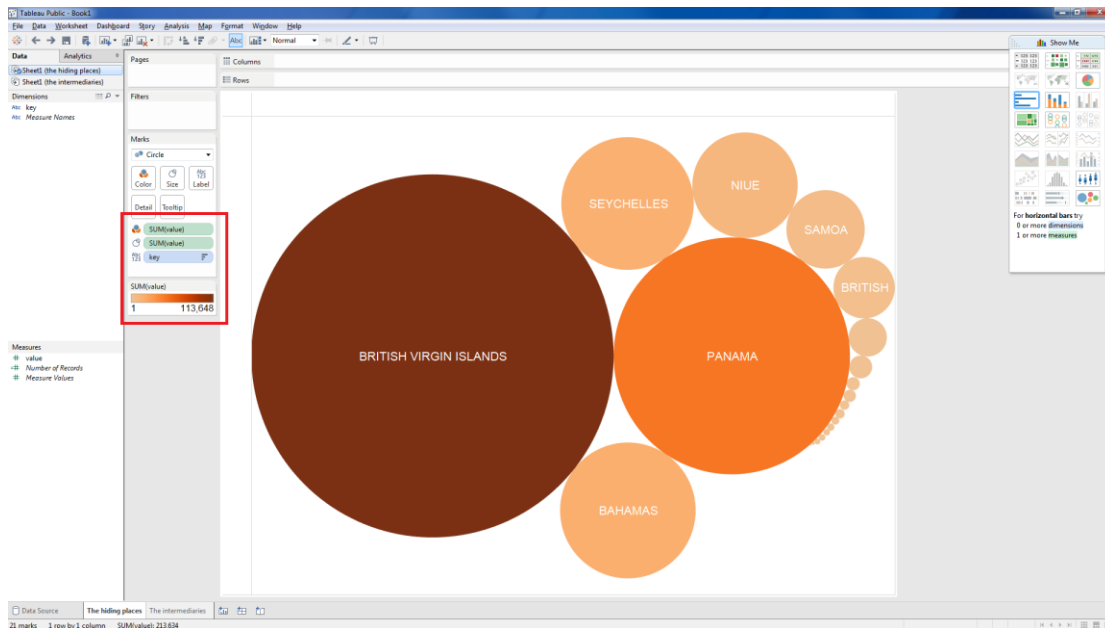
Reload the webpage, then you will see the file list in the console.



You will find that **"4.tsv"** file is consistent to the graph **"The 10 most popular tax havens in the Panama Papers"** when you click on the file to open it. Copy the data in the **"Preview"** tab and then paste it in Excel.

Step 1.2: Import data and visualize it in Tableau

Open tableau and then import data. Drag **"key"** to Columns, and **"value"** to Rows, choose **"packed bubbles"** in "Show Me" panel. Drag **"value"** to "Color", edit color and change it to orange. You will see the result like this:



Explanation:

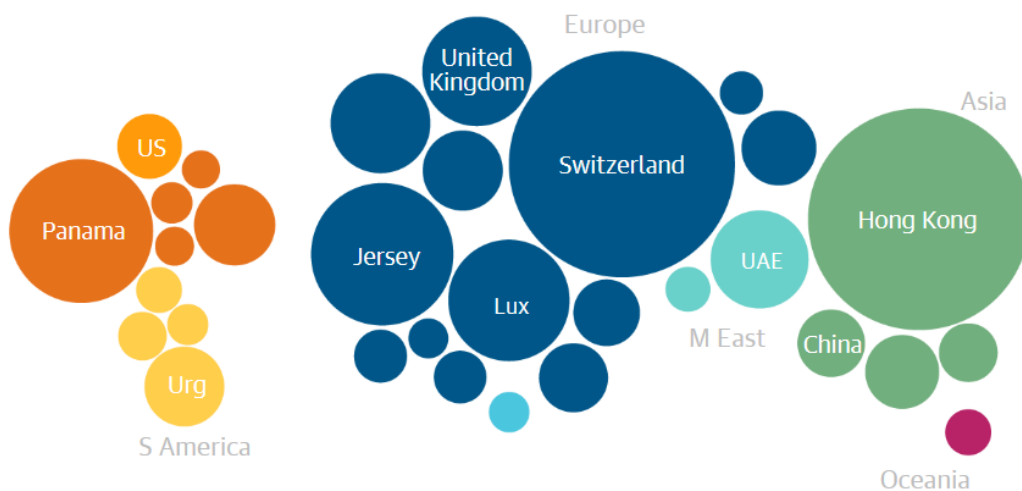
1. The original bubble chart only has 18 data points, while the official data has 21 data points actually.
2. The original bubble chart is spearted by 3 areas: Caribbean, Africa and Oceania. However, the names of small bubble are not showed, and the colors are misleading the readers.
3. Our visualization clearly showed the leading areas of realeased paname papers.

Step 1.3: Make 2nd bubble chart – Scrap dataset from the website

2nd bubble chart: The intermediaries

The intermediaries

Rather than dealing directly with company owners, Mossack Fonseca mostly acted on instructions from intermediaries, usually accountants, lawyers, banks and trust companies. In Europe, these offshore facilitators are concentrated in Switzerland, Jersey, Luxembourg and the United Kingdom.



Go back to official ICIJ website, you will find that file “6.tsv” is the correspondent data set of graph

“Top 10 countries where intermediaries operate”, copy it and then paste it in Excel.

×	Headers	Preview	Response	Cookies	Timing
1	key value				
2	HONG KONG S.A.R.	2212			
3	SWITZERLAND	1223			
4	UNITED KINGDOM	1924			
5	LUXEMBOURG	405			
6	PANAMA	558			
7	CYPRUS	110			
8	URUGUAY	298			
9	ISLE OF MAN	208			
10	SINGAPORE	57			
11	RUSSIA	73			
12	PEOPLE'S REPUBLIC OF CHINA	260			
13	MONACO	170			
14	UNITED STATES	617			
15	TAIWAN	49			
16	BAHAMAS	109			
17	CANADA	102			
18	PERU	23			
19	UNITED ARAB EMIRATES	134			
20	LIECHTENSTEIN	117			
21	CZECH REPUBLIC	11			
22	ECUADOR	324			
23	COLOMBIA	230			
24	GIBRALTAR	71			
25	BRAZIL	403			
26	LATVIA	12			
27	SPAIN	201			
28	GUATEMALA	444			
29	MAURITIUS	56			
30	THAILAND	185			
31	ESTONIA	9			
32	COSTA RICA	118			
33	VENEZUELA	186			
34	HUNGARY	12			
35	ISRAEL	133			
36	MALTA	43			
37	DOMINICAN REPUBLIC	63			
38	SOUTH AFRICA	56			
39	ANDORRA	21			
40	NETHERLANDS ANTILLES	24			
41	ITALY	50			
42	LEBANON	42			
43	GREECE	70			
44	ARUBA	5			
45	ARGENTINA	93			
46	GERMANY	70			
47	FRANCE	100			
48	UKRAINE	13			
49	EL SALVADOR	31			
50	PORTUGAL	32			
51	POLAND	15			
52	IRELAND	36			
53	SAINT KITTS & NEVIS	5			
54	NETHERLANDS	50			
55	BERMUDA	23			
56	CHILE	65			
57	BELIZE	8			

Step 1.4: Import data in Tableau Public

Like step 1.2, import data and visualize it accordingly. The explanation is same as the first bubble chart.

