Data Collection and Visualization

An introduction to TAGS and Gephi

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Outline

1. Data Collection using TAGS
    a. Background
    b. How it collect data?
2. Data Visualization using Gephi
    a. Background
    b. Data
    c. How to visualize data?

TAGS - an Introduction

TAGS - Background

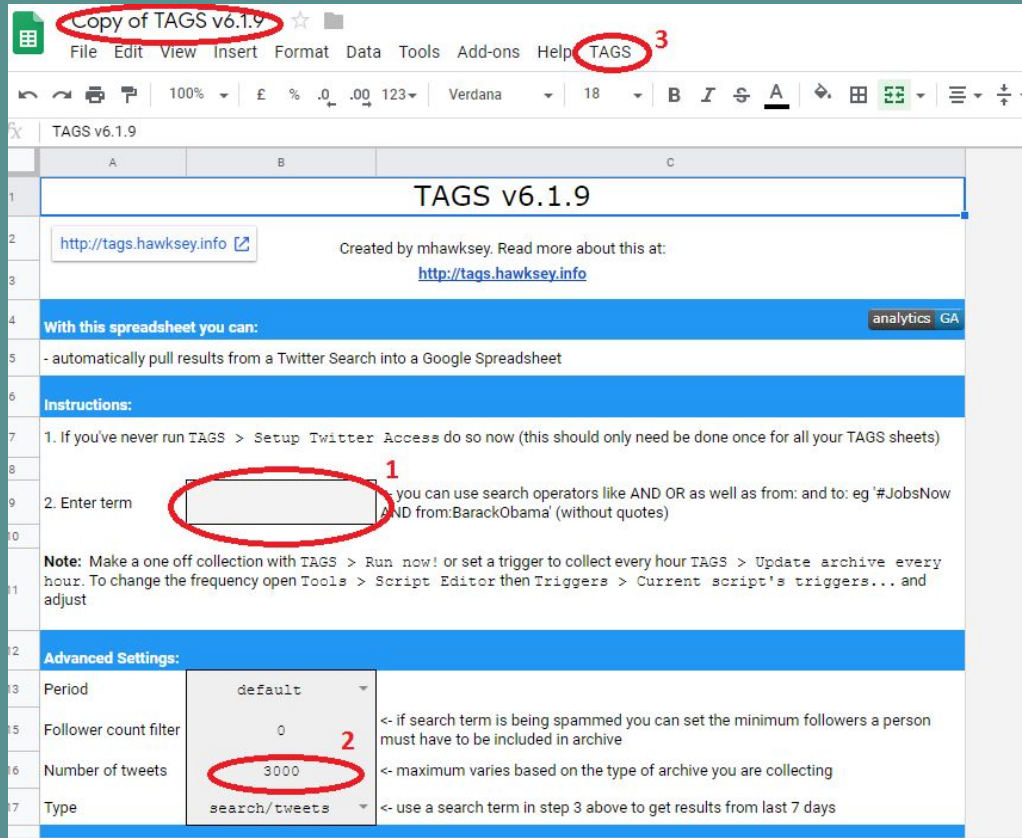
- TAGS stands for **T**witter **A**rchiving **G**oogle **S**heets
- Developed as a ‘hobby project’ by Martin Hawksey in june 2010
- Six major versions have been released since its origin. Learn more about its history here.

TAGS - How to collect data?

- Requirements:
  - A Twitter account, and a Google account for authentication
- Getting started:
  1. Visit the url https://tags.hawksey.info/ to start
  2. Click on '**Get TAGS**' to proceed; then click on '**TAGS v6.1**'
  3. Click on '**Make a copy**' to get started
- The entire data collection process is also available here.

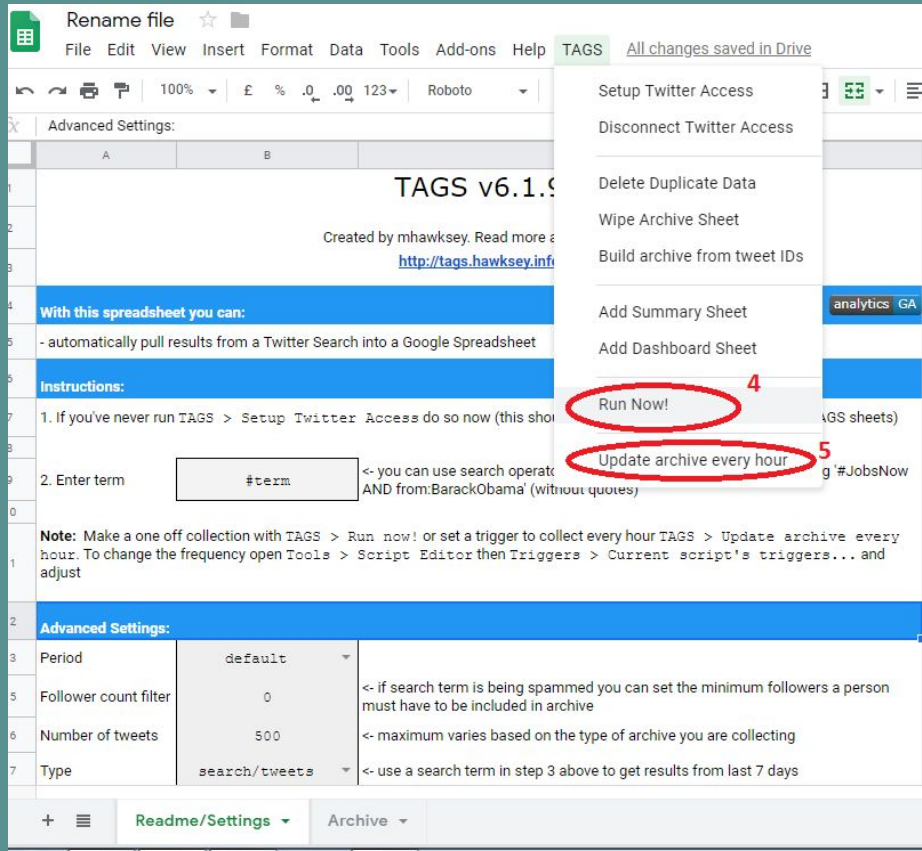
TAGS - How to collect data?

- Steps 1, 2 and 3:



TAGS - How to collect data?

- Step 4, 5:
  - The output can be found in the '**Archive**' sheet from bottom left



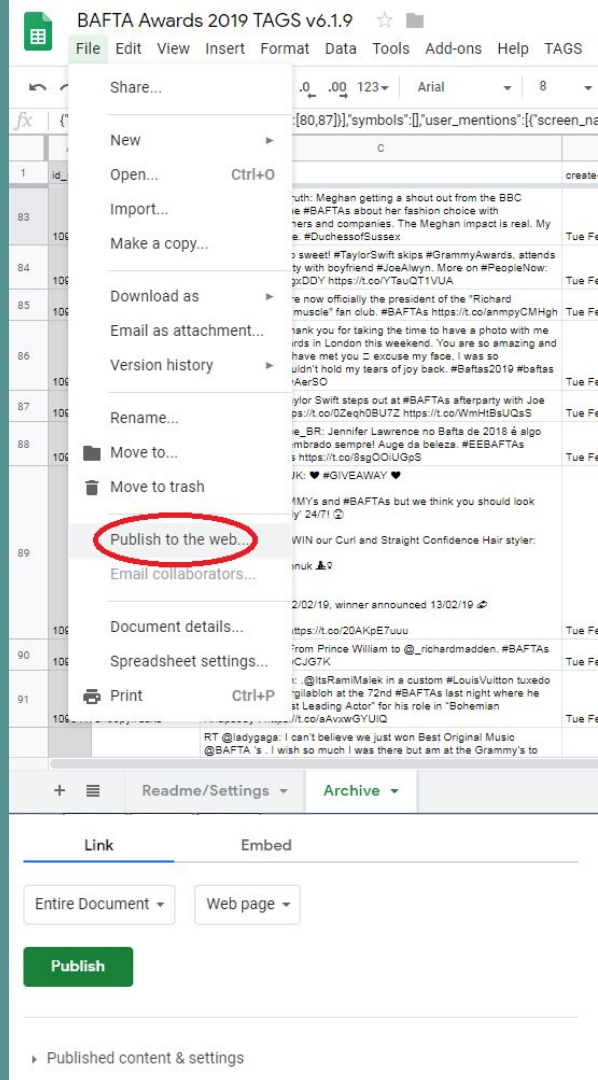
TAGS - How to collect data?

- Data Snippet:
  - The dataset is available to view here.

id_str	from_user	text	created_at	time	geo_coordinates	user_lang	in_reply_to_user_id_	in_reply_to_screen_r	from_user_id_str	in_reply_to_status_id	source	profile_image_url
109512	toogoodyy	RT @royallymegtruth: Meghan getting a shout out from the BBC commentator at the #BAFTAs about her fashion choice with sustainable designers and companies. The Meghan impact is real. My girl ain't even there. #DuchessofSussex	Tue Feb 12 00:43:48	12/02/2019 00:43:48		en			1594557132		<a href="http://twitter.	http://pbs.twimg.com/
109512	perez_lorenzo1	RT @peopletv: So sweet! #TaylorSwift skips #GrammyAwards, attends #BAFTAs afterparty with boyfriend #JoeAlwyn. More on #PeopleNow: https://t.co/82FsugxDDY https://t.co/YTauQT1VUA	Tue Feb 12 00:43:31	12/02/2019 00:43:31		es			941414241449283584		<a href="http://twitter.	http://pbs.twimg.com/
109512	MariaBelenn_3	RT @enews: We're now officially the president of the "Richard Madden's left jaw muscle" fan club. #BAFTAs https://t.co/anmpyCMHgh	Tue Feb 12 00:43:17	12/02/2019 00:43:17		en			1029870067083866115		<a href="http://twitter.	http://pbs.twimg.com/
109512	louisaharriet	@MRodOfficial Thank you for taking the time to have a photo with me at the BAFTA awards in London this weekend. You are so amazing and I am honoured to have met you ☐ excuse my face, I was so overwhelmed. Couldn't hold my tears of joy back. #Baftas2019 #baftas https://t.co/wqHSyAerSO	Tue Feb 12 00:43:16	12/02/2019 00:43:16		en	51219631	MRodOfficial	50399071		<a href="http://twitter.	http://pbs.twimg.com/
109512	lizandersoo	RT @billboard: Taylor Swift steps out at #BAFTAs afterparty with Joe Alwyn: see pic https://t.co/0Zeqh0BU7Z https://t.co/WmHtBsUQsS	Tue Feb 12 00:40:43	12/02/2019 00:40:43		es			1559182224		<a href="http://twitter.	http://pbs.twimg.com/
109512	selenativist	RT @JenLawrence_BR: Jennifer Lawrence no Bafta de 2018 é algo que merece ser lembrado sempre! Auge da beleza. #EEBAFTAs #BAFTA #BAFTAs https://t.co/8sgOOiUGpS	Tue Feb 12 00:40:42	12/02/2019 00:40:42		pt			3289935290		<a href="http://twitter.	http://pbs.twimg.com/

TAGS - Visualization

- Walkthrough:
  - Important! - Make sure the file sharing is set to **public**
  - You will need to publish your work on the web
  - Click on '**TAG Explorer**' to visualize your data
  - You can view a sample visualization here.



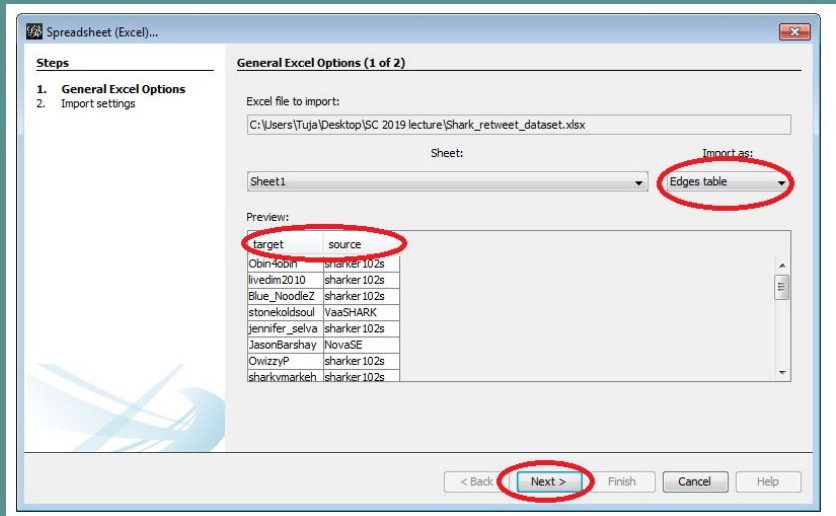
TAGS - Visualization

- Pros:
  - Visualization can be done with just one click
  - Can get better insights without data preprocessing
- Cons:
  - Limited to only three types of networks, reply, mention and retweets
  - Cannot make any visual changes
  - Hard to visualize big datasets

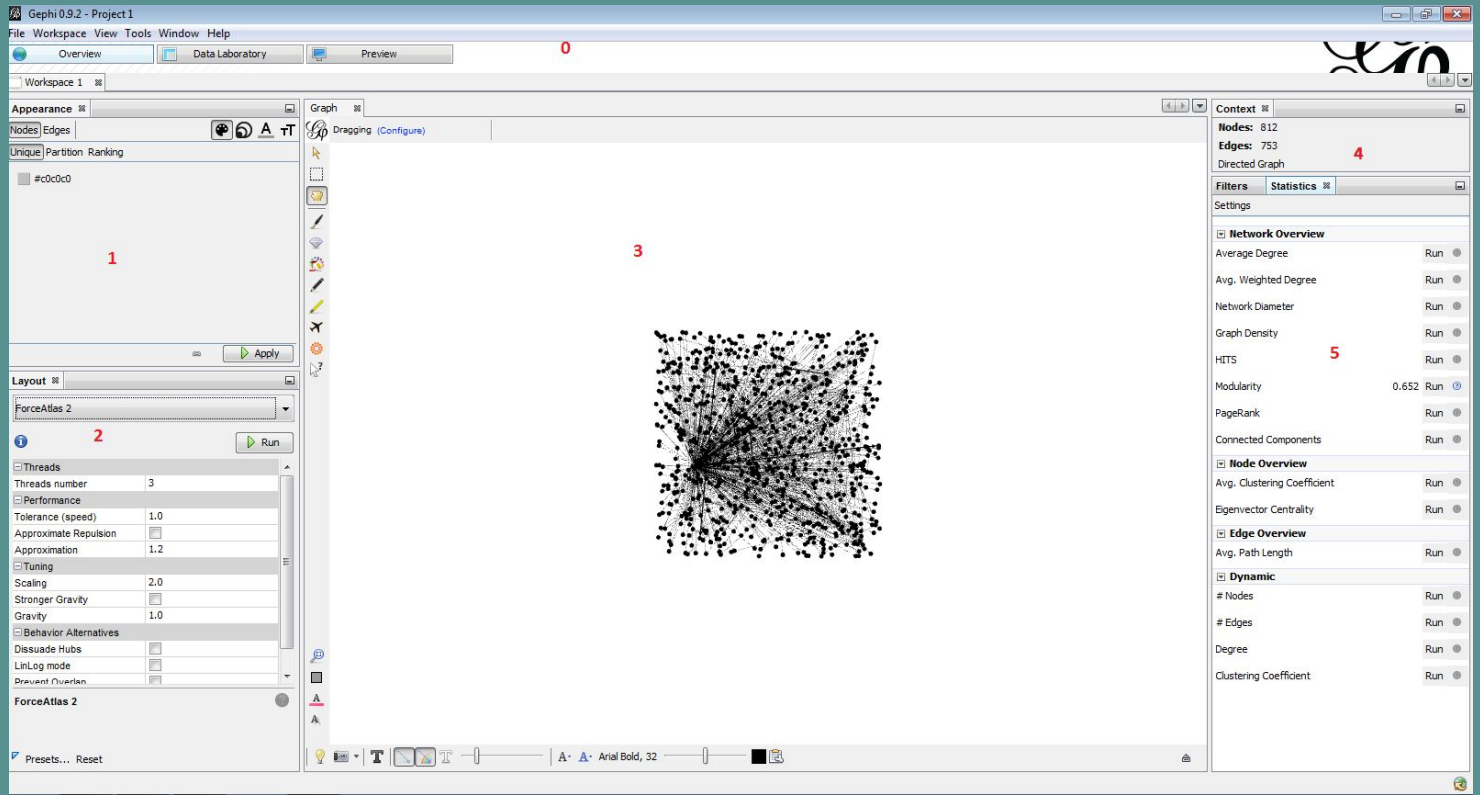
Gephi - a graph visualization tool

Gephi - Install and Import

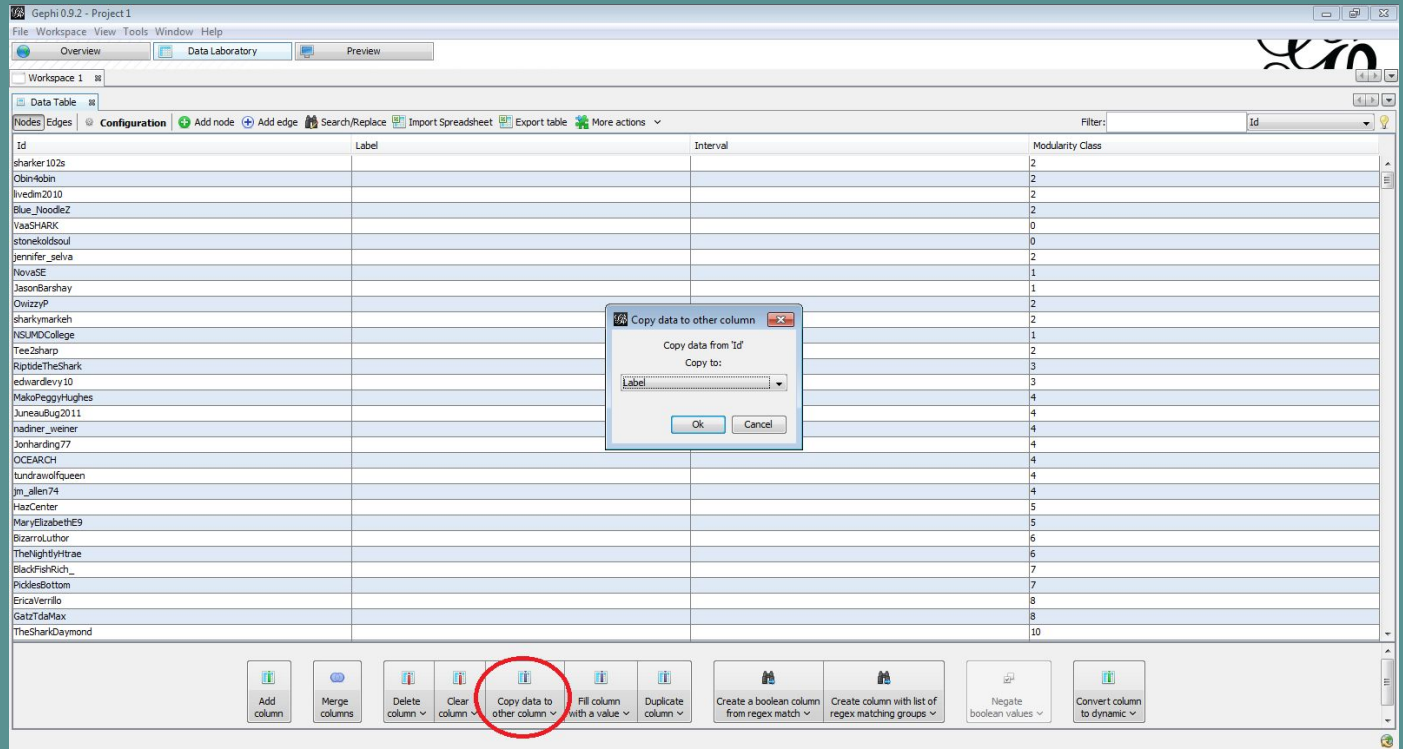
- Step 1: Get set up
  - Download Gephi, install it, open it up and start a new project.
- Step 2: Import a Spreadsheet
  - Input file needs two columns, “Source” and “Target.”
  - Click *File > Import spreadsheet*
  - Select ‘directed’ from the next screen



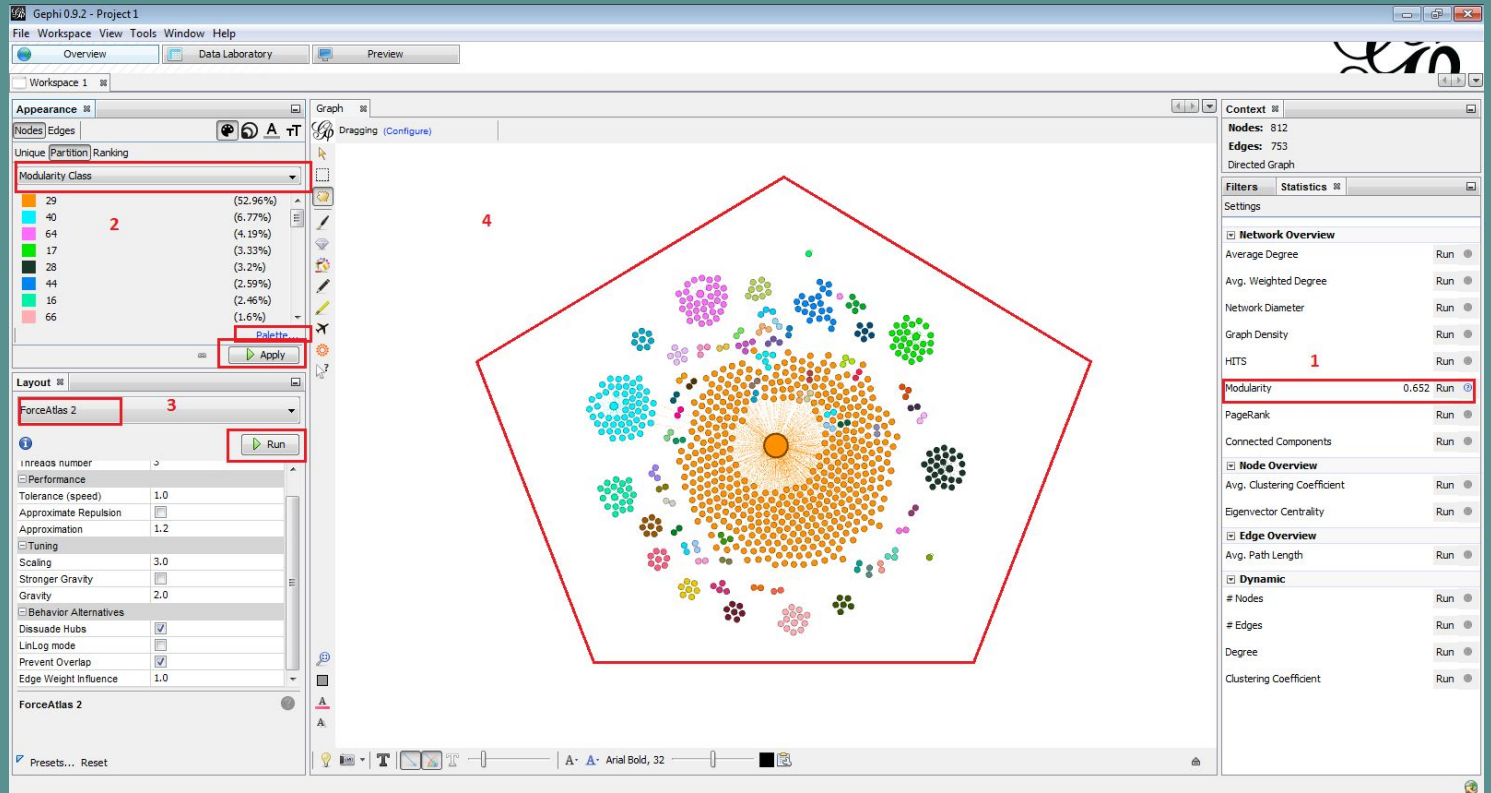
Gephi - understand the User Interface



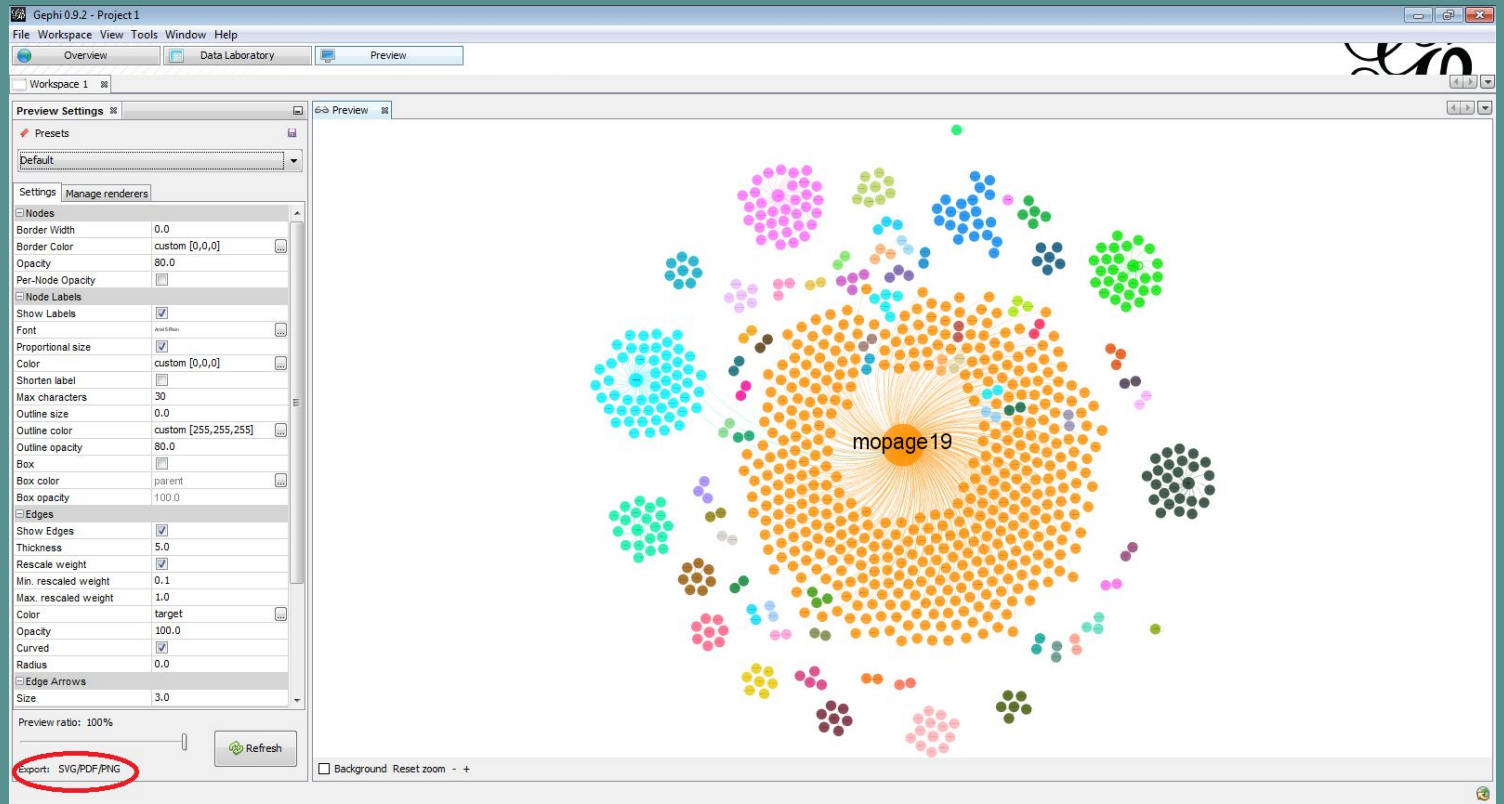
Gephi - creating labels



Gephi - How to visualize?

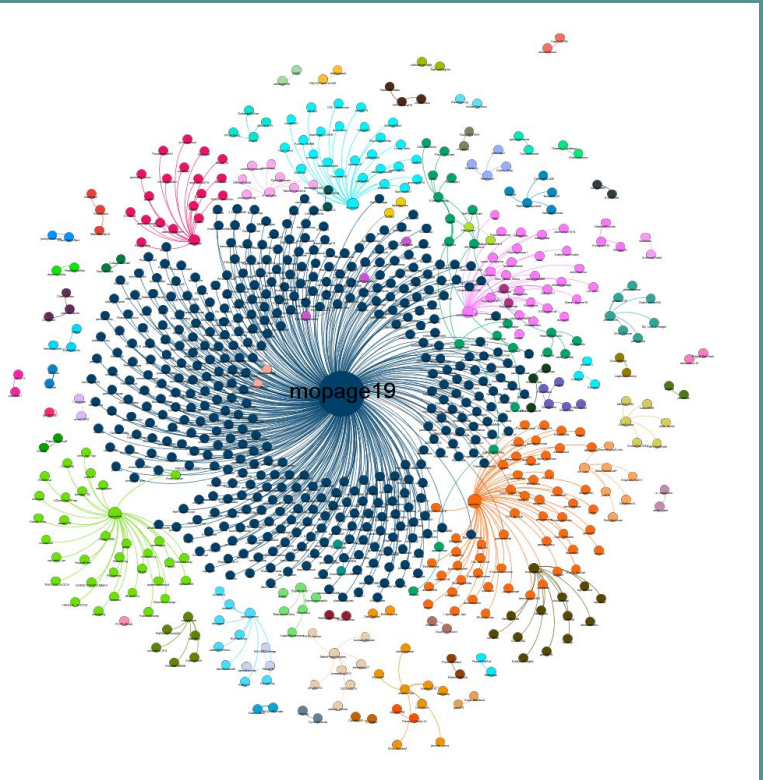


Gephi - How to visualize?



Sample Data and Visualization

	A	B	C	D
1	**target**	**source**		
2	Obin4obin	sharker102s		
3	livedim2010	sharker102s		
4	Blue_NoodleZ	sharker102s		
5	stonekoldsoul	VaaSHARK		
6	jennifer_selva	sharker102s		
7	JasonBarshay	NovaSE		
8	OwizzyP	sharker102s		
9	sharkymarkeh	sharker102s		
10	NSUMDCollege	NovaSE		
11	Tee2sharp	sharker102s		
12	edwardlevy10	RiptideTheShark		
13	JuneauBug2011	MakoPeggyHughes		
14	nadiner_weiner	MakoPeggyHughes		
15	Jonharding77	MakoPeggyHughes		
16	OCEARCH	MakoPeggyHughes		
17	tundrawolfqueen	MakoPeggyHughes		
18	jm_allen74	MakoPeggyHughes		
19	MaryElizabethE9	HazCenter		
20	TheNightlyHtrae	BizarroLuthor		



Thank You!

Questions?