NodeXL Pro Tutorial:

How to Automate NodeXL Pro

Last updated: February 12th, 2019

NODE XL Pro

A project from the socialmedia RESEARCH FOUNDATION

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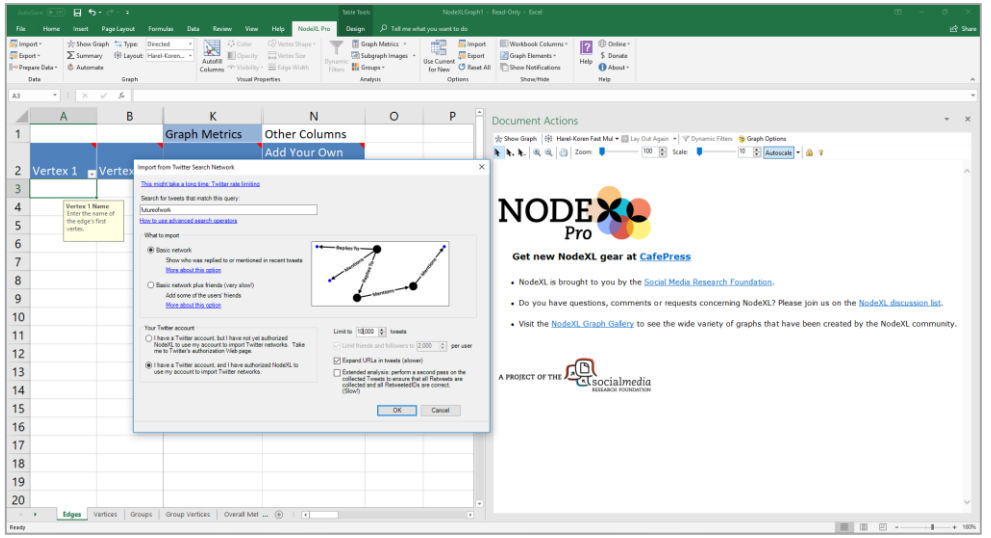
This tutorial shows you how to use the most powerful feature of NodeXL Pro: **Automation**.

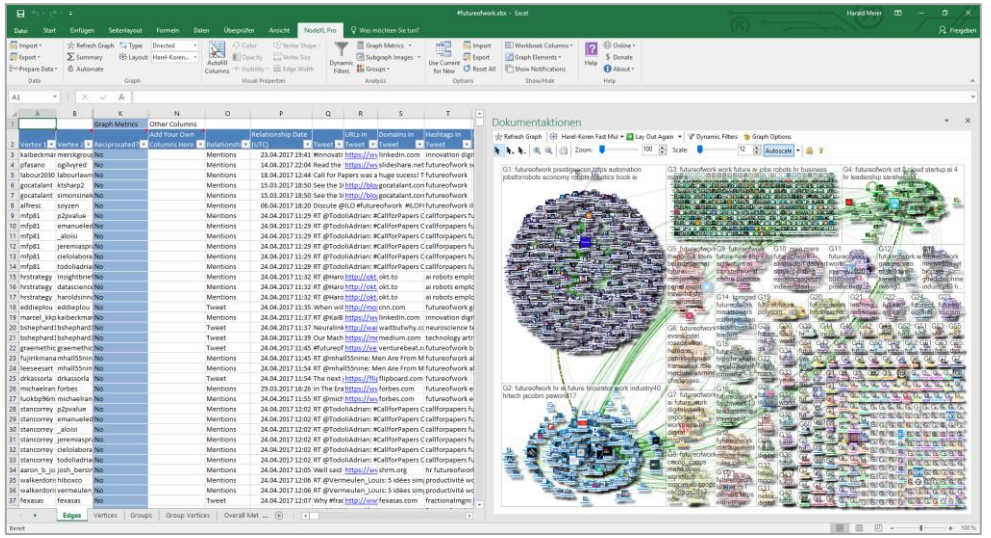
The automation feature allows you to run all steps of a **social network and content analysis with a single click**: Data preparation, cluster analysis, metrics calculation, time series analysis, top content analysis, visualization and data export.

Each of these steps are explained in the **NodeXL Pro Tutorial: Social network and content analysis with Twitter network data – step by step.**

More NodeXL Tutorials can be found here:

https://www.smrfoundation.org/nodexl/documentation/





If you have any questions, please send us an email: info@smrfoundation.org

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What is a NodeXL Pro Options file?

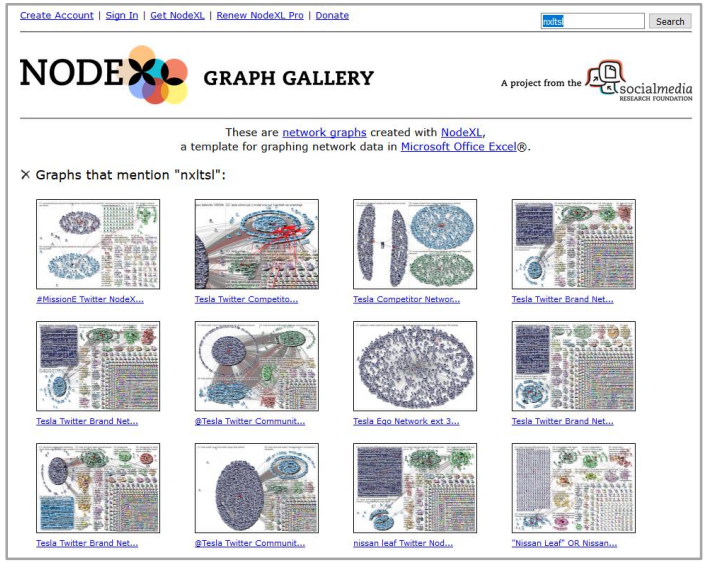
Network datasets from different sources such as Twitter, Facebook or Youtube contain different metadata and thus require customized approaches for analysis.

A **NodeXL Pro Options file** is a customized “data recipe“ that contains a list of specified tasks that will be applied to a network dataset.

Where to find NodeXl Pro Options files?

Download a zip-file with a collection of data recipes from our homepage: https://www.smrfoundation.org/nodexl/automation/

Download single data recipes from network reports published on NodeXL Graph Gallery: https://nodexlgraphgallery.org (see next page)



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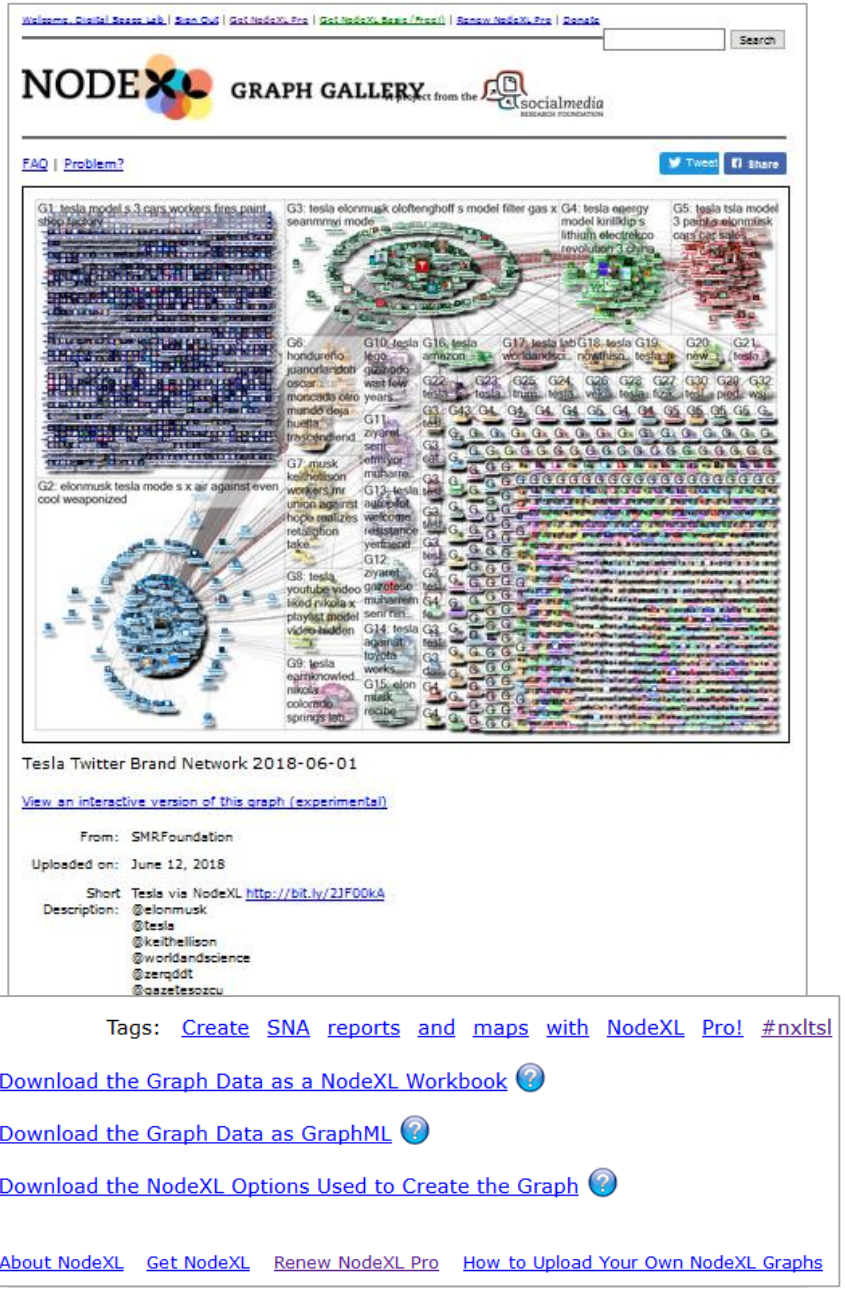
The NodeXL Graph Gallery is a good source for NodeXL Pro Options files. Many NodeXL users upload their network datasets including the options files to the gallery.

1. Go to https://nodexlgraphgallery.org and have a look at the latest published NodeXL Pro network reports.

2. Open a network report of your choice and scroll down to the bottom.

3. If the author of the network report has chosen to upload the corresponding NodeXL workbook, you will see a few download links.

4. Click on **Download the NodeXL Options file Used to Create the Graph** and save the file to your machine.



https://nodexlgraphgallery.org/Pages/Graph.aspx?graphID=155439

Import a NodeXL Pro Options file

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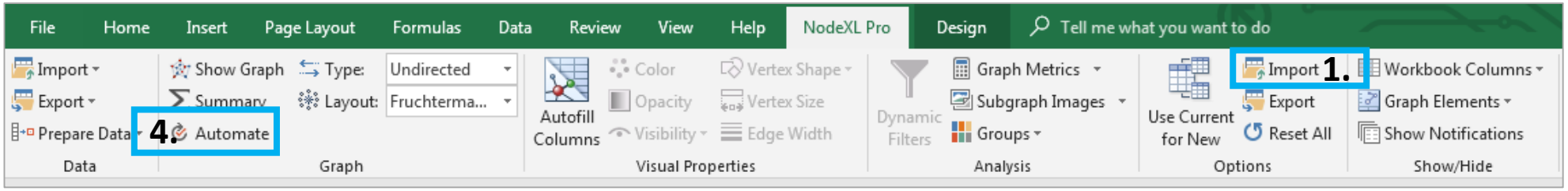
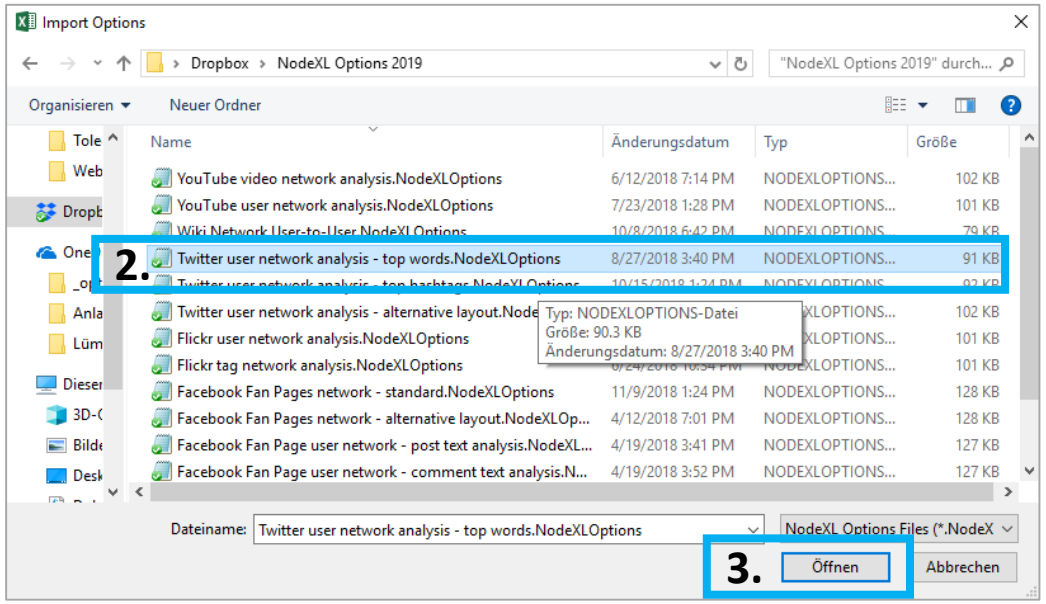


1. Open a new NodeXL Pro workbook and click on **Options > Import** to open the Windows explorer. Navigate to the folder where you have placed the previously downloaded data recipes.
2. Select the NodeXL Options file that corresponds with the network data you want to analyze.
3. Click **Open**.
4. To take a look at the tasks and options settings that were just imported, click on **Graph > Automate** to open the **Automate** window. After reviewing the tasks and options click **Cancel**. (There is no data in the workbook to analyze yet.)



Import Data Options

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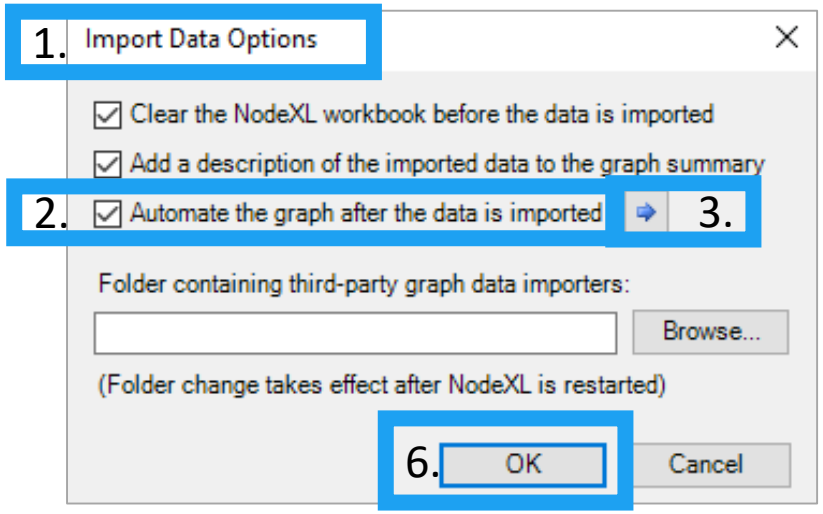
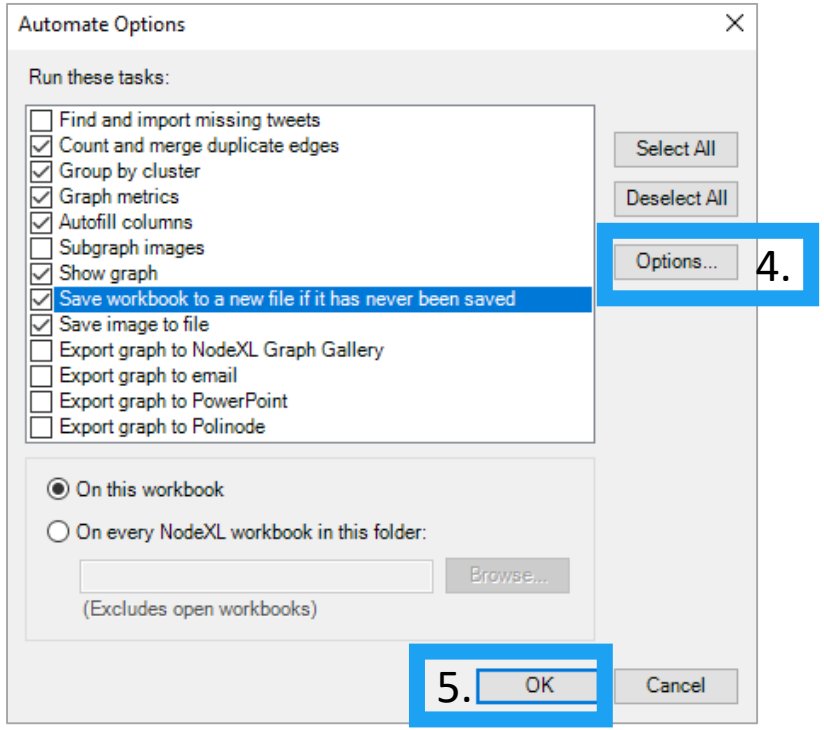
1. Open the **Import Data Options** window to select basic options related to the data import: **Data > Import > Import Options**
2. Select the option **Automate the graph after the data is imported**.
3. Click on the button with the blue arrow to open the **Automate Options** window which shows you all tasks and options that have been set by the imported data recipe.
4. Go to task **Save the workbook to a new file if it has never been saved** and click on **Options**. This will open the Windows Explorer so you can pick a folder on your machine where the workbook will automatically be saved after automation.
5. Click **OK** to save and close the **Automate Options** window.
6. Click **OK** to save and close the **Import Data Options** window.





Data Import

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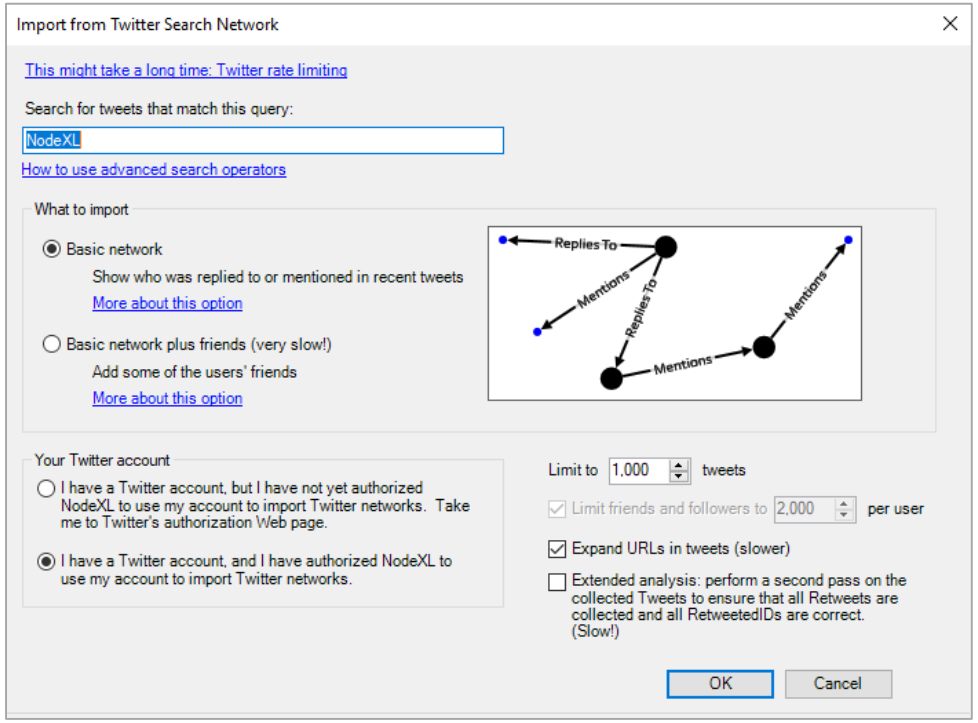
1. Open the NodeXL Pro Importer that corresponds with the imported data recipe. Here we use the Twitter Search Network importer: **Data > Import > From Twitter Search Network…**
2. Enter a search query of your choice.
3. Click **OK** and wait. Depending on the number of tweets, your CPU and RAM, this may take a while. Start with a low number of tweets.
4. When the data has been downloaded, automation will start automatically.



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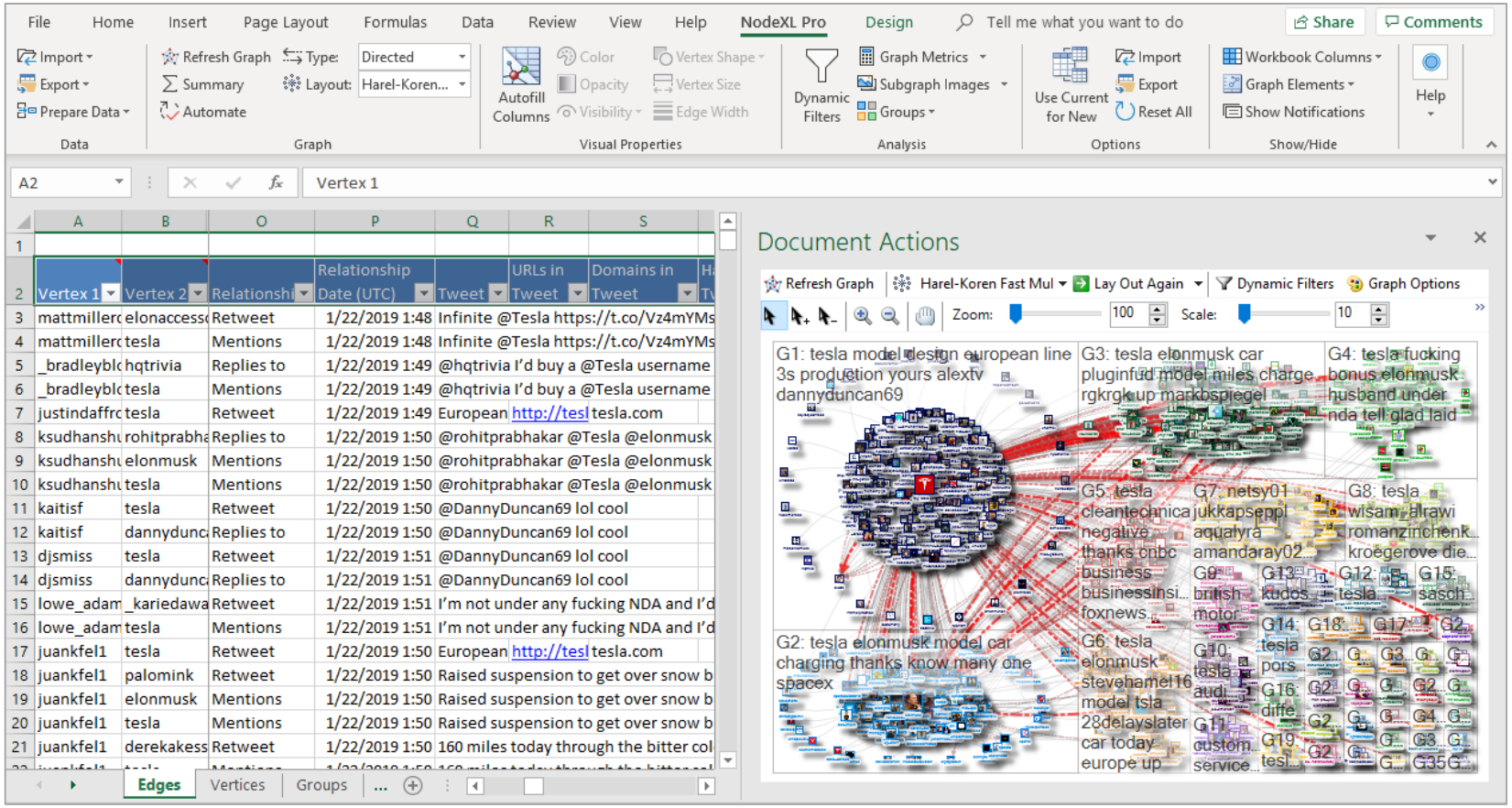
When all tasks are completed, you are able to see the network map in the graph pane.

The NodeXL workbook has been populated with a lot of data and is now ready to explore.



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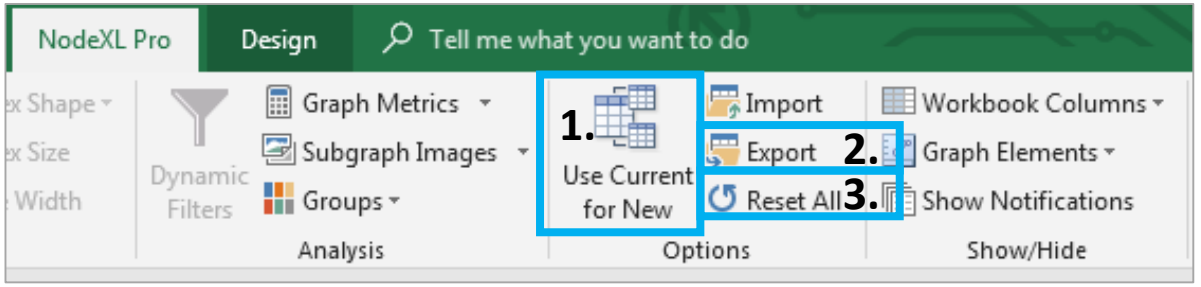

1. If you want to create a series of analyses with the same data recipe, click on **Options > Use Current for New** to automatically open any new NodeXL workbook with the current set of options.
2. If you have made changes to any options settings and would like to save them, click on **Options > Export** to save your data recipe to a new file.
3. Click **Reset All** to reset all options settings. This is useful when creating a new data recipe from scratch.

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Social Media Research Foundation: http://www.smrfoundation.org/

NodeXL Graph Gallery: https://nodexlgraphgallery.org/

Video: Marc Smith | Network Mapping the Ecosystem: https://www.youtube.com/watch?v=kDiGl-2m868

Video: How to Automate NodeXL Pro: https://www.youtube.com/watch?v=mjAq8eA7uOM

Twittter search operators: https://developer.twitter.com/en/docs/tweets/rules-and-filtering/overview/standard-operators

Literature

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Smith, Marc A., Lee Rainie, Ben Shneiderman and Itai Himelboim (2014): Mapping Twitter Topic Networks: From Polarized Crowds to Community Clusters. PEW Research Report: https://www.pewinternet.org/2014/02/20/mapping-twitter-topic-networks-from-polarized-crowds-to-community-clusters/

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