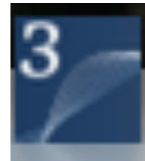


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# Condor 3



## User Manual

Updated as of August 11, 2015

## Welcome to Condor 3 by Peter Gloor (13:51)



<http://youtu.be/vfWfeywCskQ>

# Condor 3 User Manual

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# Welcome

Welcome to Condor 3!

Condor 3 is a software program developed by galaxyadvisors, which enables a single user, a team, or a company to visualize and measure the structure, content, sentiment and influence of social communication networks over time.

Condor 3 is available in both a desktop version and a server version called CondorCore, which is expected to be released in 2015.

**Use Condor 3 to  
Explore Earth's Digital Activity**



- 144.8 billion emails sent worldwide per day
- 1 billion web sites in 2013, doubling every 18-24 months
- 1.19 billion Facebook monthly active users
- 200 million Twitter monthly active users who tweet 500 million tweets per day
- 32 million pages in Wikipedia with 4 million articles

See: <http://www.internetlivestats.com>

# Key Features

## CONDOR 3:

1. Has the ability to generate interactive movies of communication flows for in-depth analysis.
2. Enables you to analyze different social media channels including: The Web, Email, Facebook, Twitter, Wikipedia, and more, all in a single visualization.
3. Runs on a Mac, a Windows PC, Linux, and in the Cloud.
4. Is menu driven, no programming required.
5. Can export data easily to other software packages for additional analysis, graphing or mapping.

## Condor 3

Handles Gigabytes of data:

- Load: 1 million nodes /  
20 million edges
  - Process: 100,000 nodes /  
500,000 edges
  - Visualize: 5000 nodes /  
50,000 edges
- ... From one or multiple sources.

# Why use Condor 3?

Condor 3 is a dynamic network analysis software package that can help researchers and business practitioners understand social networks both *inside* and *outside* the firm.

For example:

- Organizational communication networks and their relationship to performance at the inter-organizational, organization, team, and individual levels
- Innovation networks for creativity and diffusion of innovations
- The influence of individual members of the network
- Network reach to the community of stakeholders outside the organization
- How the structure of networks and the content that flows through them relate to each other
- Where possible bottlenecks or vulnerabilities might lie or where new opportunities for collaboration might be possible
- What customers and the media are saying about a firm's products or services
- Who the major players are in a given industry or domain
- How best to communicate and through whom to get a message out

Condor provides the ability to visualize, monitor, measure and manage communication networks dynamically, over time.



# Cost

Please contact: Peter Gloor at [pgloor@galaxyadvisors.com](mailto:pgloor@galaxyadvisors.com) for commercial pricing and use.

Condor 3 is free for academic use, when users show proof of their academic status, such as, a web url, “name.edu” address, and describe the research purpose of their project.

# Contacts

1. General: Peter Gloor at [pgloor@galaxyadvisors.com](mailto:pgloor@galaxyadvisors.com)
2. This user manual: Ken Riopelle at [kenriopelle@me.com](mailto:kenriopelle@me.com)

Welcome Page 1 References:

Email:

<http://mashable.com/2012/11/27/email-stats-infographic/>

Websites:

<http://toni.org/2012/05/03/1-billion-web-sites-in-2013/>

Facebook:

<http://thenextweb.com/facebook/2013/10/30/facebook-pas-ses-1-19-billion-monthly-active-users-874-million-mobile-users-728-million-daily-users/#!uCYWl>

Twitter:

<http://abcnews.go.com/Business/twitter-ipo-filing-reveals-500-million-tweets-day/story?id=20460493>

Wikipedia:

<http://en.wikipedia.org/wiki/Wikipedia:Statistics>

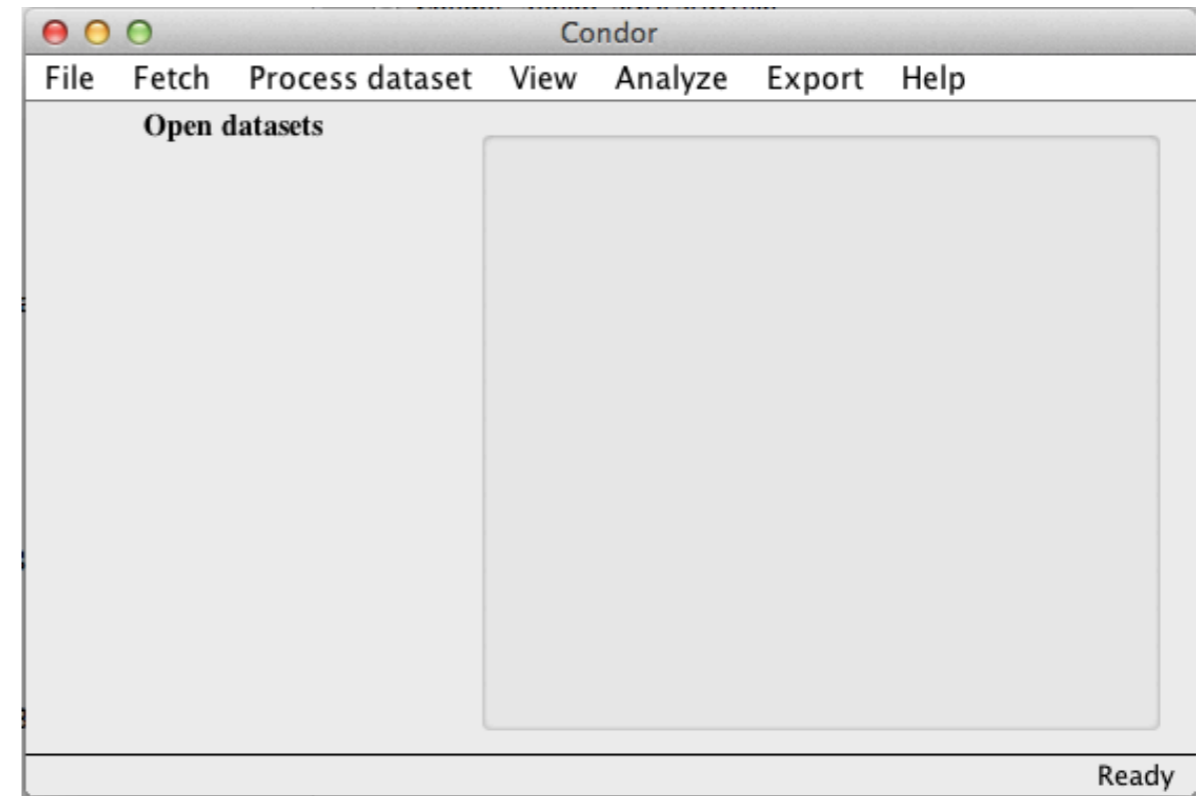
For additional internet stats see:

<http://www.internetlivestats.com>

# Overview

Condor 3 is a software program for the research analyst. As such, it is under continuous development and, therefore, requires a mindset of experimentation. This user manual will get you started and enable you to visualize and measure the structure, content, sentiment and influence of social or communication networks over time.

## Condor 3's Main Menu



---

# About this User Manual

This user manual is divided into nineteen chapters:

## **Chapter 1 Welcome**

provides a welcome message and highlights the key features of of the software, reasons for using it, its costs, and key contacts.

## **Chapter 2 Overview**

provides an overview of the entire manual.

## **Chapter 3 Installation on a Mac**

describes how to install Condor 3 on a Mac and the software pre-requisites of Java, MySQL database server, and the Condor 3~.jar program itself. Three additional optional installations are covered which include: the free Google Custom Search Engine (CSE) API Key, the four free Twitter API Keys, and the free MySQL Workbench graphical user interface for the MySQL database server. Navicat is another MySQL GUI option, but does cost.

## **Chapter 4 Starting Condor 3 on a Mac**

describes two ways to start Condor 3 on a Mac. The first method is via the Condor 3 ~.jar and the second method is via the Terminal app, which assigns a designated amount of memory to help analyze very large datasets.

## **Chapter 5 Installation on a PC**

describes how to install Condor 3 on a PC and the software pre-requisites of Java, MySQL database server, and the Condor 3~.jar program itself. See Chapter 3 to learn how to install the free Google Custom Search Engine (CSE) API Key, the four free Twitter API Keys, Note: For a PC the MySQL Workbench is installed when MySQL is installed and does not need a separate installation.

## **Chapter 6 Starting Condor 3 on a PC**

explains two different methods to start Condor 3 on a PC. The first method is via the Condor 3 ~.jar and the second method is via a .bat command file, which sets the Java path and assigns a designated amount of memory to help analyze very large datasets.

## **Chapter 7 Main Menu**

highlights the seven main menu items and their functions. Review this chapter to get an idea of all the menus and sub-menu options.

## **Chapter 8 Graphical user Interface**

highlights the graphical user interface or GUI to refine your visualizations.

## **Chapter 9 Examples**

provides examples of the types of data analysis possible including: Email, Facebook, Web, Twitter, Twitter Account, Wiki Evolution and Wiki Categories. A suggested series of analysis steps are provided along with sample visualizations and user tips.

## **Chapter 10 Condor 3 Updates**

Documents recent Condor 3 updates in chronological order. As of August 3, 2015 the current version is 3.2.0 Build 1913.

## **Chapter 11 Bing Map for Geocoding**

explains how to use the website:

<http://www.gpsvisualizer.com/geocoder/> to find a city's geocodes, map it and draw a range ring around it to have a sense of the geographic coverage of your Twitter Fetch. It also explains how to obtain a free Bing Map key to obtain 5 or more city geocodes at one time.

## **Chapter 12 - Nodes and Edge Properties**

Names the node and edge properties by data sources, such as , email, Facebook, Twitter, Twitter Accounts, Wiki Evolution and Wiki Categories.

## **Chapter 13 - Structure and Content Measures**

defines Condor 3's network Structure and Content Measures. The first section defines Structure measures or centralities for individual measures: betweenness, closeness and degree; and the group measures: group betweenness, group degree and density. The second section defines the five content measures: activity, sentiment, emotionality complexity, and influence.

Section three articulates the Coolhunting and Coolfarming Collaborative Innovation Networks (COINs) and their analytics as described in the introduction movie by Peter Gloor.

## **Chapter 14 - YouTube Links**

provides the YouTube Playlists and video links for installation on a Mac or PC, including examples of fetching and analysis for Email, Facebook, Web, Twitter, Twitter Account, Wiki Evolution and Wiki Categories, Social Network Basics, obtaining a BING Map Key, a Google Map key and creating a Google Earth .kml file or a Google Earth zip .kmz file.

## **Chapter 15 - Social Network Basics**

Review this chapter if you are not familiar with the basic social network concepts of nodes and links, degree, betweenness centrality, etc. and popular social network books.

## **Chapter 16 - COINs Conferences, Websites & Publications**

lists the COINs Conferences by year along with links to websites and publications.

## **Chapter 17 - Recommended Books**

## **Chapter 18 - CondorConverter**

explains how to download and use CondorConverter. Condor Converter is java program that converts older Condor 2.6.6 databases and datasets to the newer Condor 3 universal database and dataset format.

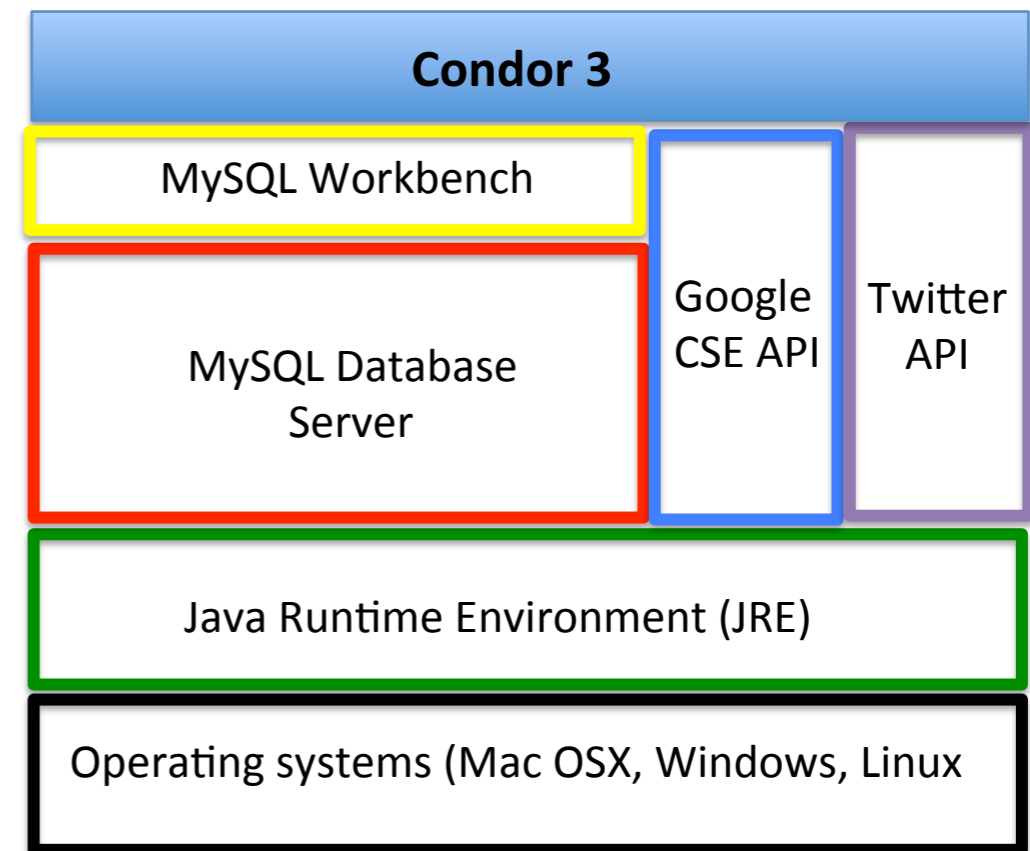
## **Chapter 19 - Frequently Asked Questions (FAQ)**

# Installation on a Mac

To install Condor 3 on a Mac requires Lion (10.7) or higher and the installation of Java 7 or 8, the MySQL database server, and finally the Condor 3 ~.jar. Note: Java 6 is not supported.

In addition, we recommend users install a graphical user interface for MySQL, such as, the free MySQL Workbench or other software, obtain the free Google Custom Search Engine (CSE) API Key to conduct a Google Web CSE search, and the four free Twitter API Keys to conduct a Twitter search.

## Condor 3 Software Building Blocks



Condor 3 depends upon many software programs to run:

- At the lowest level is the computer's operating system (Mac OS X, Windows, or Linux)
- Next is the Java Runtime Environment (JRE)
- The MySQL database server is where Condor 3 stores all the network data nodes and links from Facebook, Web, Twitter, Wikipedia, and Email.
- MySQL Workbench acts a graphical user interface for MySQL database server
- Last, the Application Program Interfaces or APIs from Google and Twitter enable custom query fetching.

# Install Java on a Mac

## JAVA INSTALLATION

1. At a minimum, Mac users need Lion (10.7) or higher and Java 7 or 8 Runtime Edition (JRE) installed.
2. For Mac's with Yosemite (10.10) to start Condor 3 from the Terminal app with a set amount of memory, users need to install the Java 8 Update 25 or later SE Development Kit (JDK), which is strongly recommended, especially when working with large networks.
3. Macs purchased on or *after* October 20, 2010 do not have Java preinstalled, which means users need to install Oracle Java 7 or 8, for Lion 10.7, Mt. Lion 10.8, Mavericks 10.9, or Yosemite 10.10.
4. Macs purchased *before* October 20, 2010 with Snow Leopard 10.6 and below need to upgrade to Lion 10.7 or higher and install Java 7 or Java 8.

## What is Java?

Java is a programming language and computing platform first released by Sun Microsystems in 1995. <sup>1</sup>

In January 2010, Oracle purchased Sun Microsystems and now maintains Oracle Java.

Condor 3 requires Java 7 or 8 to run. Java 6 is not supported.

<sup>1</sup> [http://www.java.com/en/download/faq/whatis\\_java.xml](http://www.java.com/en/download/faq/whatis_java.xml)

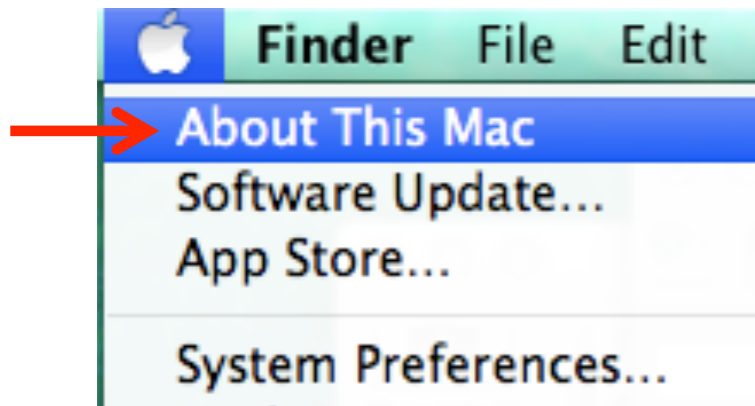


**Condor 3 needs Lion OS X 10.7 at a minimum.**



1. Click on the black Apple in the upper left corner of your Mac

2. Click on “About this Mac



3. If your Mac OS X version is 10.7.3 or higher, then install Oracle Java 7 or 8 higher



4. For Mac OS X 10.6 (Snow Leopard) and below you need to upgrade to Lion (10.7.3) or higher to install Oracle Java 7 or later, and only on 64 bit systems.<sup>2</sup>

Then proceed to Step 17 and download and install Java 7 or 8.

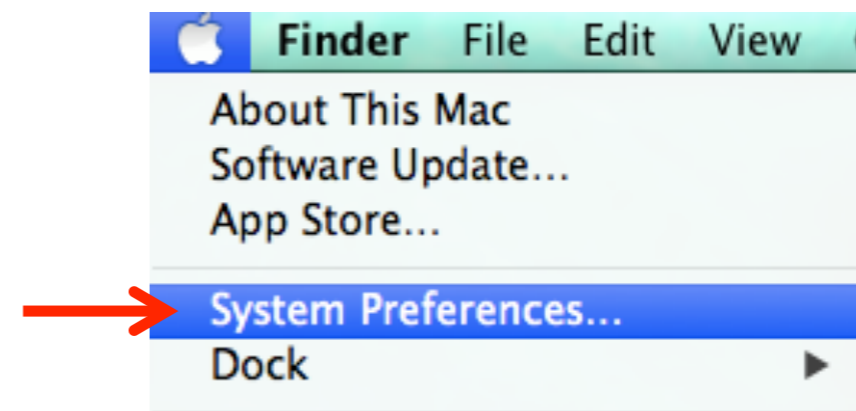
<sup>2</sup> [http://www.java.com/en/download/faq/java\\_mac.xml#java6](http://www.java.com/en/download/faq/java_mac.xml#java6)

**Now, for Macs with OS X Lion (10.7), Mt. Lion 10.8), Mavericks (10.9), Yosemite (10.10)**



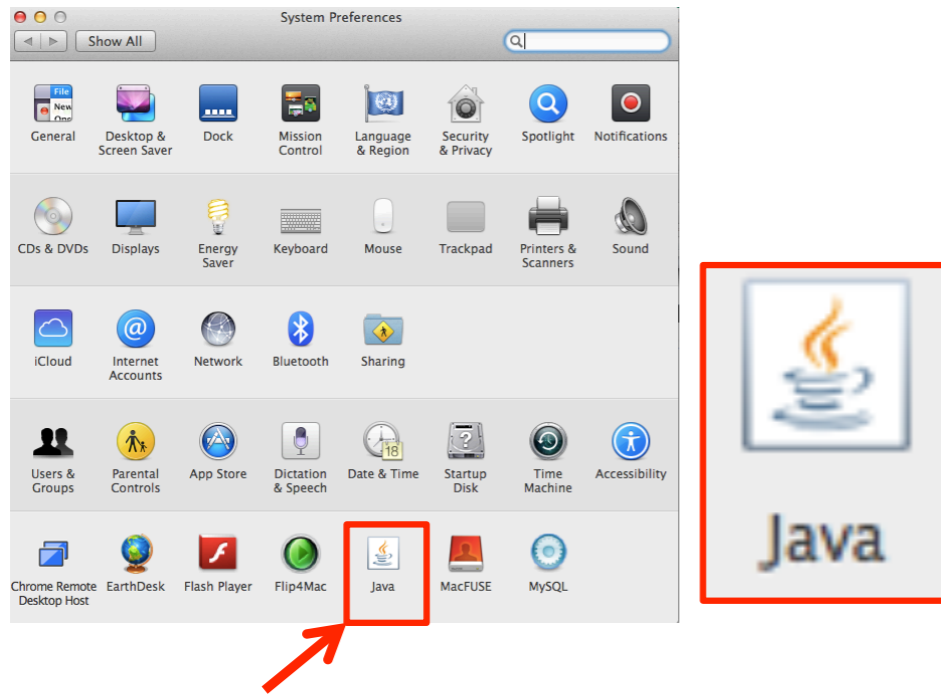
5. Click on the black Apple in the upper left corner of your Mac

6. Click on “System Preferences ...”





## 7. The System Preferences window opens



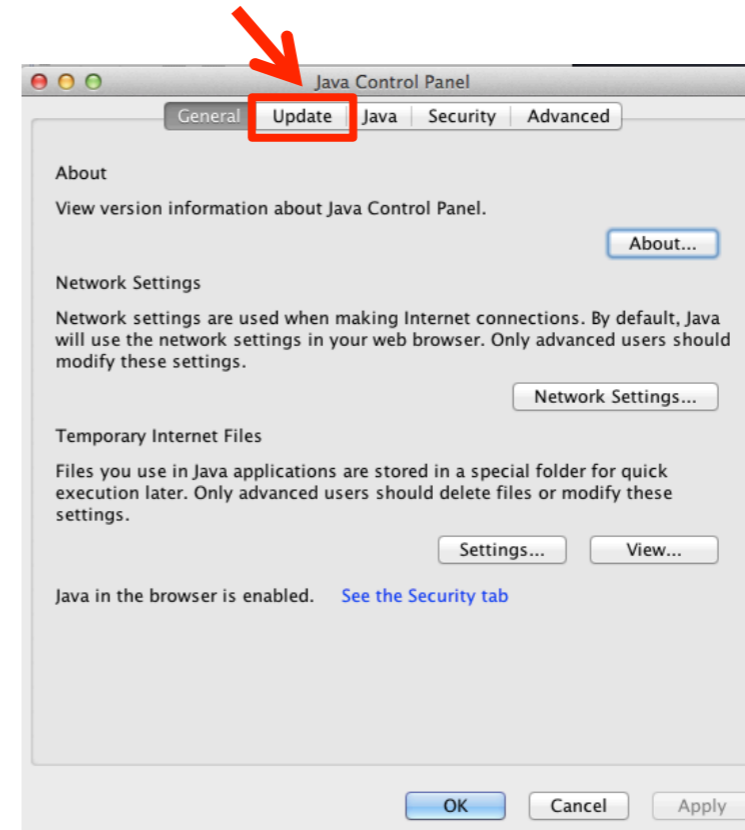
## 8. Do you have the Java icon? If yes, click on it

9. If you do see the Java icon, and you clicked on it, then Java is installed and a message appears, indicating that the Java Control Panel will open in a separate window. *Note: if you do not see the Java icon, then go to step 17 on page 13 and download Java.*



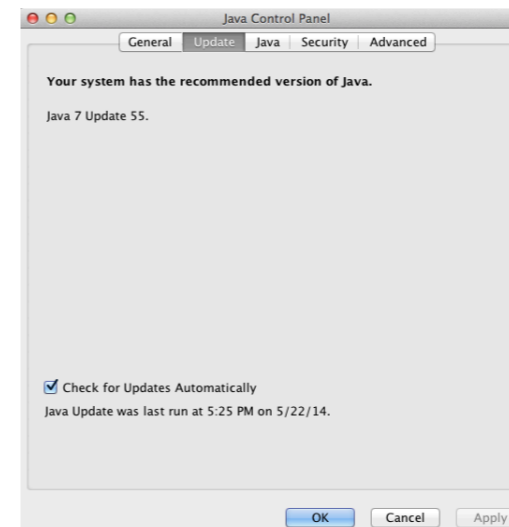
## 10. The Java Control Panel opens

## 11. Click on the Update tab

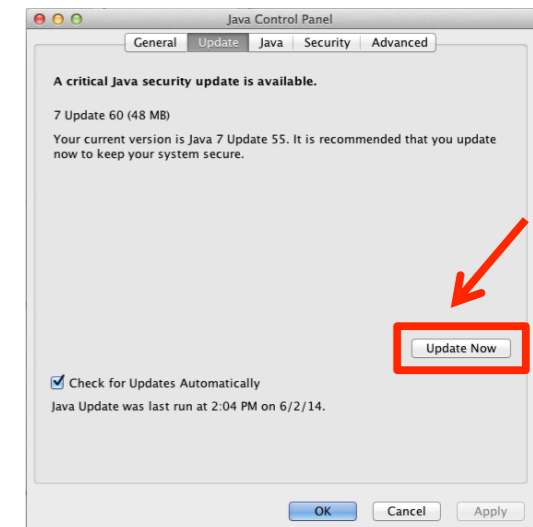


## 12. Update Java, if needed.

### Java up-to-date

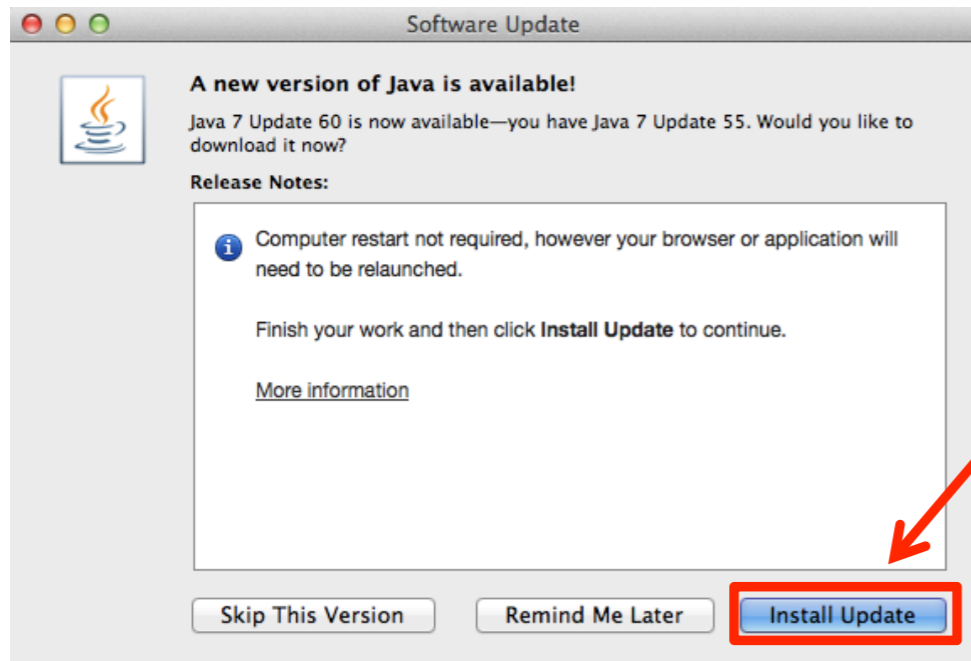


### Java needs updating

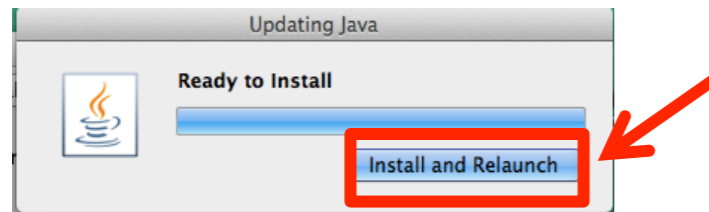


*Note: Continue to step 13, if Java needs updating.*

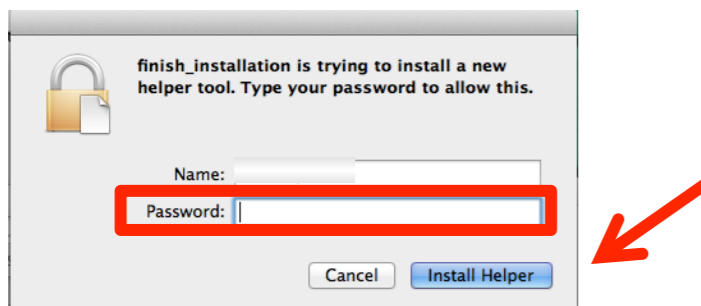
### 13. Click Install Update



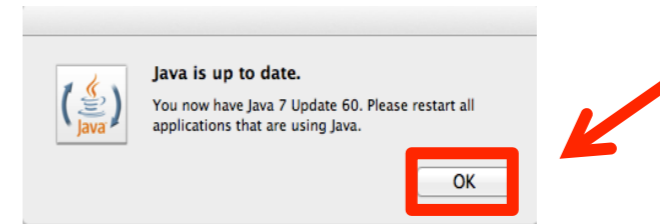
### 14. Click Install and Relaunch



### 15. Enter Computer password, Click Install Helper



### 16. Click OK

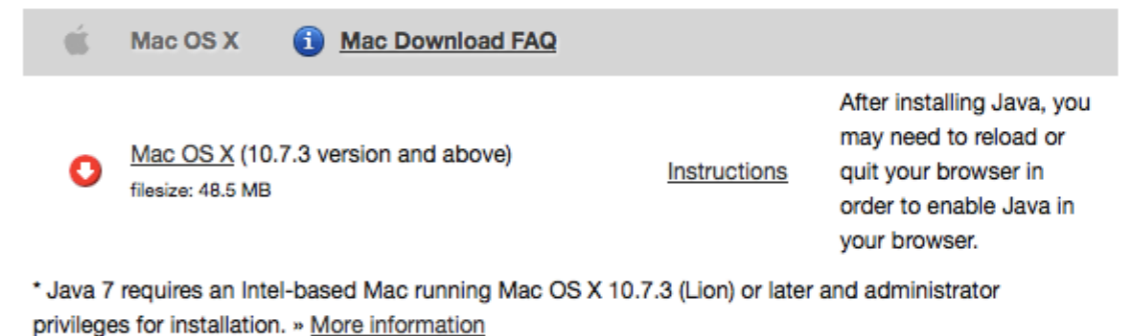


**Note: At step 16, Java is installed and updated, skip to install MySQL on page 14**

**Continue to step 17, if Java is not installed.**

*17. If you do not see the Java icon in the System Preferences window, then download Java at this url.*

<http://java.com/en/download/manual.jsp#mac>



18. Go to your Downloads folder and Double click on jre~.dmg file to install



20. Click “Continue” at the install window.



19. Double click on Java package icon to install



21. Click “Install.”

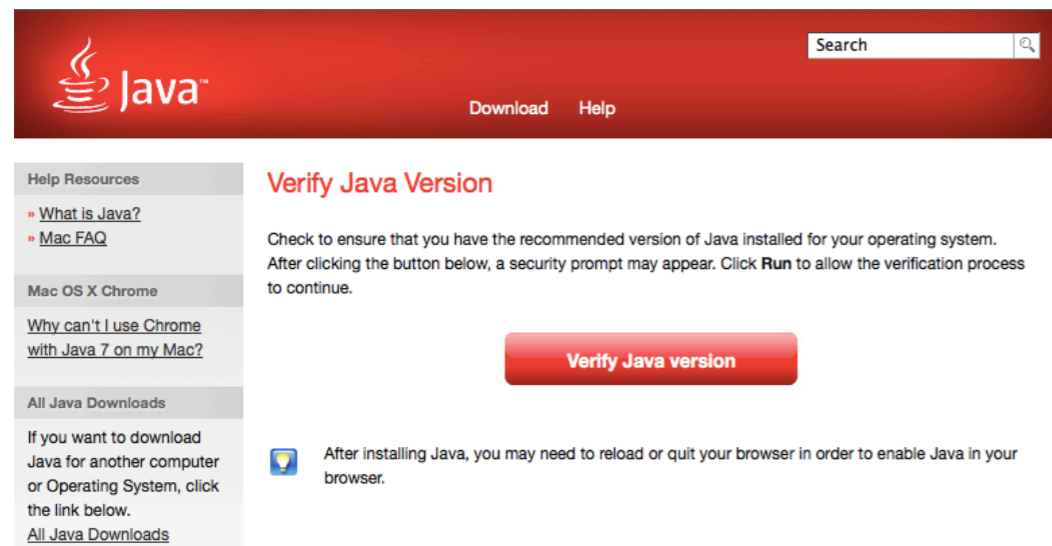


22. Click “Close, “after Install Succeeded.



23. Test you Java installation with this test applet at:

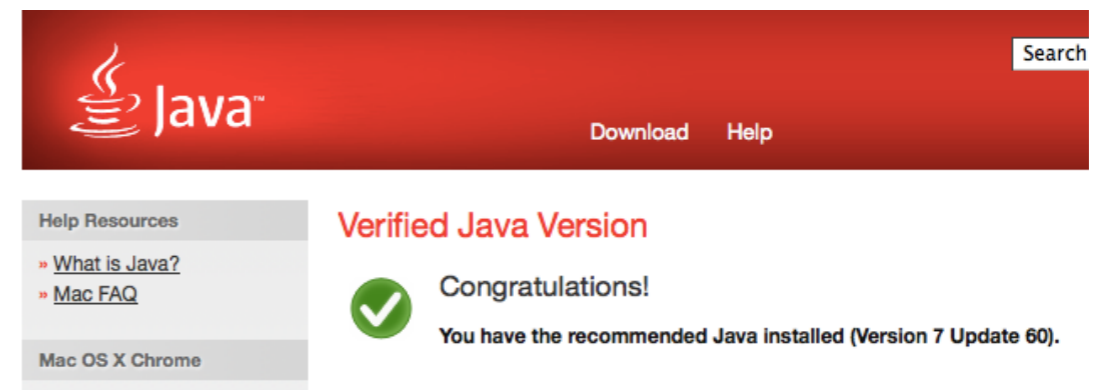
<http://java.com/en/download/installed.jsp>



24. Click “Run.”



25. Java is verified, Congratulations

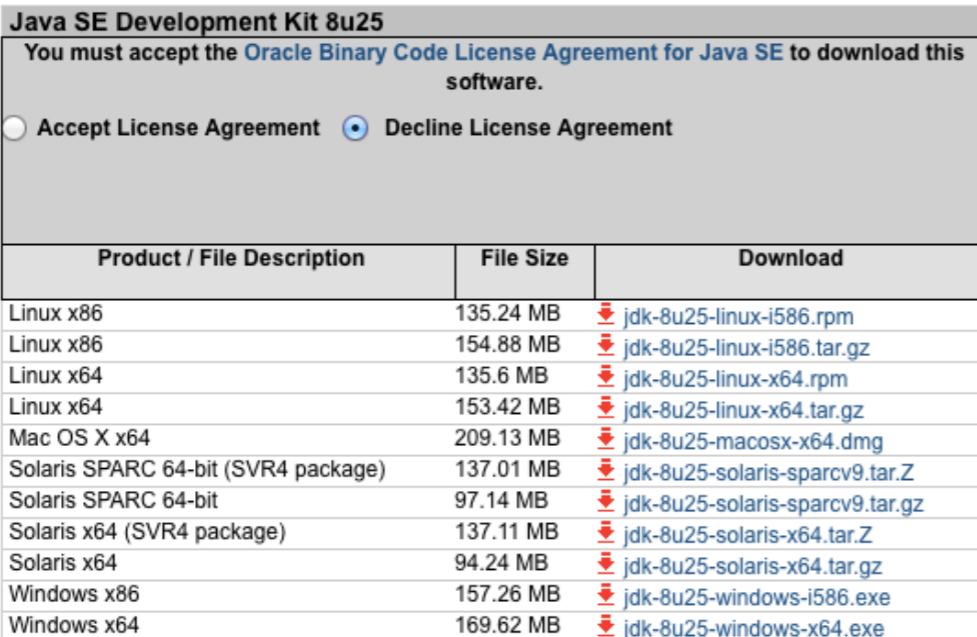


26. If you have Yosemite (10.10), then we recommend you install the Java Development Kit (JDK) 8 update 25 or later, in order start Condor using the Terminal app to set a memory allocation for better response when working with large networks.

To install the Java JDK 8 follow these steps:

27. Download the Java 8 JDK at this link:

<http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>



**Java SE Development Kit 8u25**  
You must accept the [Oracle Binary Code License Agreement for Java SE](#) to download this software.

Accept License Agreement  Decline License Agreement

Product / File Description	File Size	Download
Linux x86	135.24 MB	<a href="#">jdk-8u25-linux-i586.rpm</a>
Linux x86	154.88 MB	<a href="#">jdk-8u25-linux-i586.tar.gz</a>
Linux x64	135.6 MB	<a href="#">jdk-8u25-linux-x64.rpm</a>
Linux x64	153.42 MB	<a href="#">jdk-8u25-linux-x64.tar.gz</a>
Mac OS X x64	209.13 MB	<a href="#">jdk-8u25-macosx-x64.dmg</a>
Solaris SPARC 64-bit (SVR4 package)	137.01 MB	<a href="#">jdk-8u25-solaris-sparcv9.tar.Z</a>
Solaris SPARC 64-bit	97.14 MB	<a href="#">jdk-8u25-solaris-sparcv9.tar.gz</a>
Solaris x64 (SVR4 package)	137.11 MB	<a href="#">jdk-8u25-solaris-x64.tar.Z</a>
Solaris x64	94.24 MB	<a href="#">jdk-8u25-solaris-x64.tar.gz</a>
Windows x86	157.26 MB	<a href="#">jdk-8u25-windows-i586.exe</a>
Windows x64	169.62 MB	<a href="#">jdk-8u25-windows-x64.exe</a>

The file will be similar to :“jdk-8u25-macosx-x64.dmg”.  
The update version may change.

28. Click to Accept License Agreement.

29. Goto your downloads folder and double click on the jdk-8u25-macosx-64.dmg to begin the install and follow the on screen instructions.

Then when using the Terminal app and entering this Java command:

```
Java -Xmx2G -Djava.library.path=. -jar Condor-3.2.0.jar
```

Condor 3 will start. In this example the “2G” means allocate 2 gigabyte of memory to run Condor 3.

Change the memory allocation based upon your computer’s memory installation leaving at least 1 GB for other operations.

# Install MySQL on a Mac

## MYSQL INSTALLATION STEPS

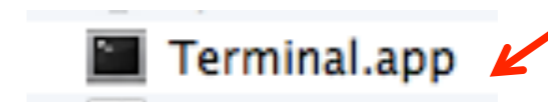
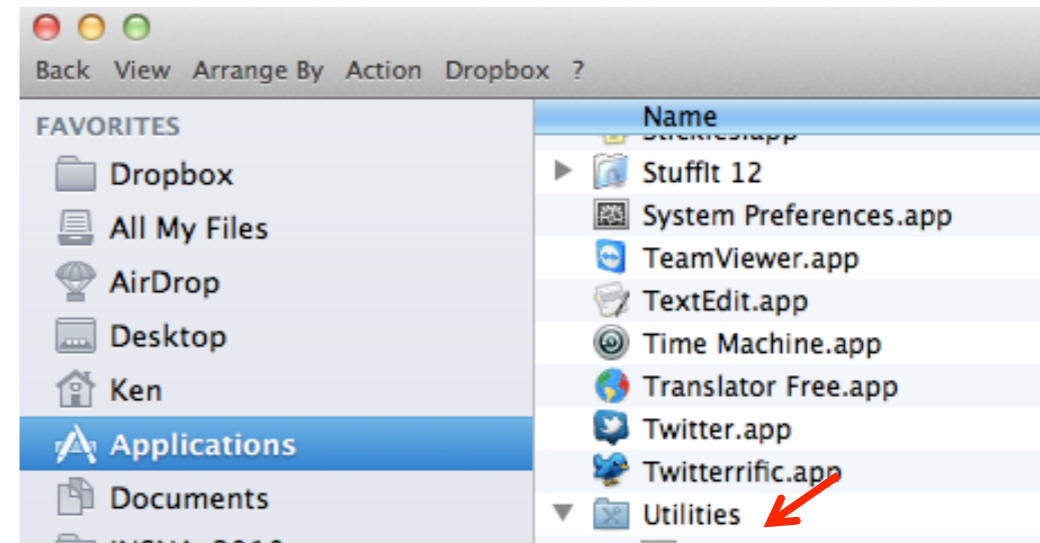
1. Identify your Mac kernel as 32 or 64 bit.  
(Don't worry this step is easy)
2. Download and install the appropriate MySQL version
3. For the older MySQL 10.7 package install the MySQL preference pane to manually Start and Stop the MySQL server or enable it to start automatically when your Mac starts.

### **NOTE: The newer versions of MySQL**

**“MAC OS X 10.9 or 10.8 (x86, 64bit) DMG” files have only has one package, which includes the preference pane. There is no separate preference pane package installation.**

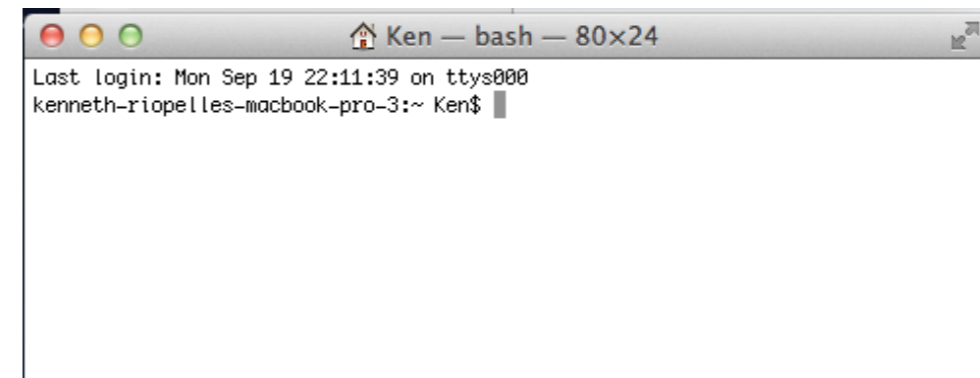
**The first step is to determine if your machine is running a 32 or 64 bit kernel.**

1. Open a Finder window, click on Applications, scroll down to the Utilities folder, and then scroll down and click on the Terminal.app



A Terminal.app window will open

2. Double Click the Terminal.app:



3. At the terminal prompt type: `uname -a`

```
Ken — bash — 80x24
Last login: Sun Aug 28 08:48:20 on console
kenneth-riopelles-macbook-pro-3:~ Ken$ uname -a
Darwin kenneth-riopelles-macbook-pro-3.local 11.1.0 Darwin Kernel Version 11.1.0
: Tue Jul 26 16:07:11 PDT 2011; root:xnu-1699.22.81~1/RELEASE_X86_64 x86_64
kenneth-riopelles-macbook-pro-3:~ Ken$
```

If you see “x86\_64” at the end you are running 64 bit, thus download and use the MySQL 64 version.

If you see “i386” that means a 32 bit kernel, thus

4. To download MySQL, click on this link:

<http://dev.mysql.com/downloads/mysql/>

Select the appropriate Mac OS X ~.dmg file

Note: For Yosemite (10.10) download MySQL (10.9)

## Apple OS X



Lion 10.7, Mt. Lion 10.8, Mavericks 10.9, Yosemite 10.10

Select the appropriate Mac OS X ~.dmg file  
Note: For Yosemite (10.10) download MySQL (10.9)

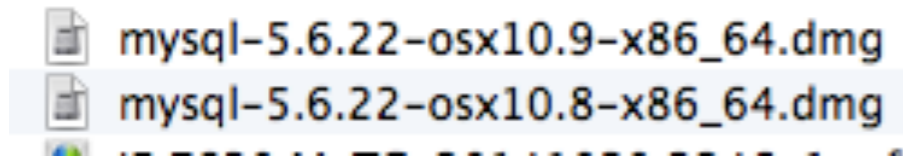
<b>Mac OS X 10.9 (x86, 64-bit), DMG Archive</b>	5.6.22	167.2M	<a href="#">Download</a>
<b>Mac OS X 10.8 (x86, 64-bit), DMG Archive</b> (mysql-5.6.22-osx10.8-x86_64.dmg)	5.6.22	167.2M	<a href="#">Download</a>
MD5: 16edb8077d7a03416b273a0c6bb7cb2a   <a href="#">Signature</a>			
<b>Mac OS X 10.7 (x86, 32-bit), DMG Archive</b> (mysql-5.6.19-osx10.7-x86.dmg)	5.6.19	151.7M	<a href="#">Download</a>
<b>Mac OS X 10.7 (x86, 64-bit), DMG Archive</b> (mysql-5.6.19-osx10.7-x86_64.dmg)	5.6.19	157.1M	<a href="#">Download</a>
MD5: 37e037577f8f544e13cae6a225042d21   <a href="#">Signature</a>			

*Note: Do not download the Compressed TAR*

5. Login, Sign Up or,  
No thanks, just start my download



6. After downloading,  
double click the .dmg file



A window will open with one file.

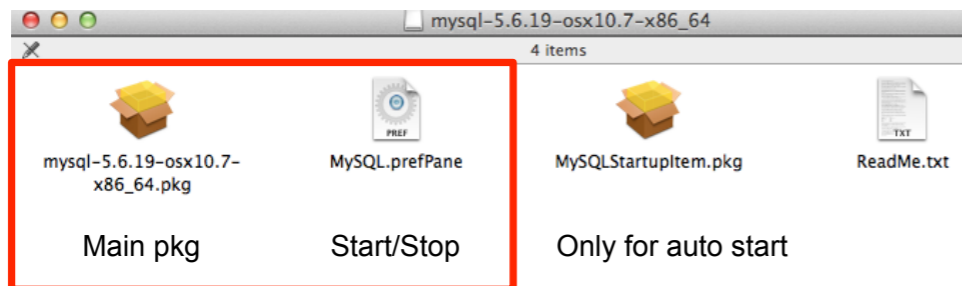
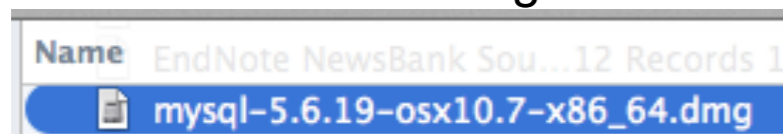


Note: The System Preferences MySQL prefPane will be installed with this one package.



**Note: if you are installing the older 10.7 version, then four files will appear.**

6. After downloading,  
double click the .dmg file

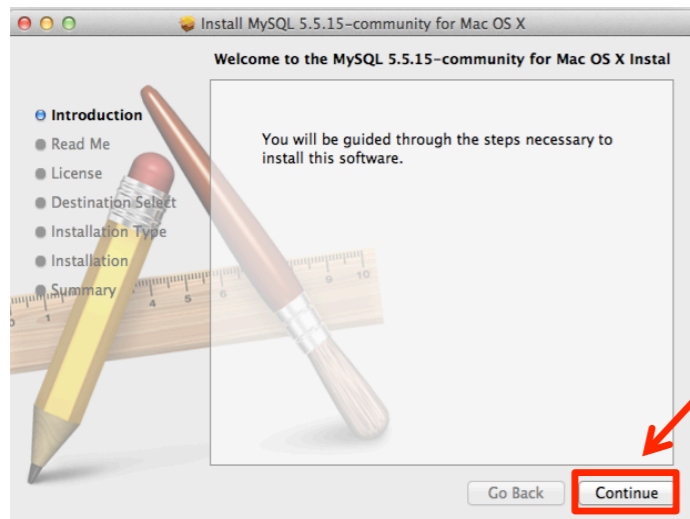


7. Double click on your package:  
mysql-5.6.19-osx10.9-x86\_64.pkg  
mysql-5.6.19-osx10.8-x86\_64.pkg  
mysql-5.6.19-osx10.7-x86\_64.pkg

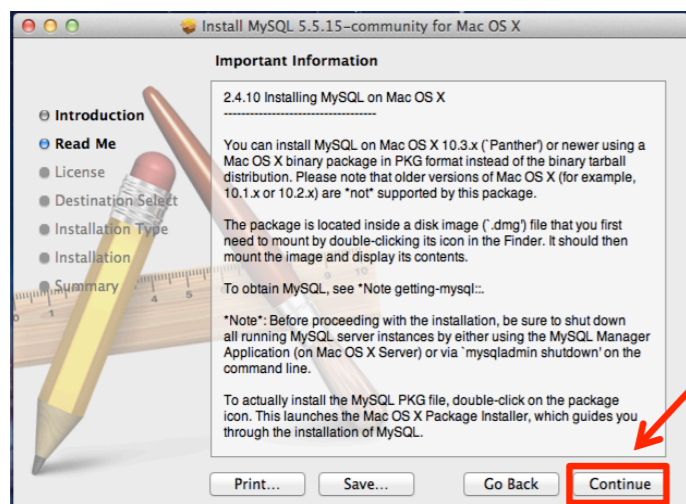


8. An installation window will open, click “Continue.”

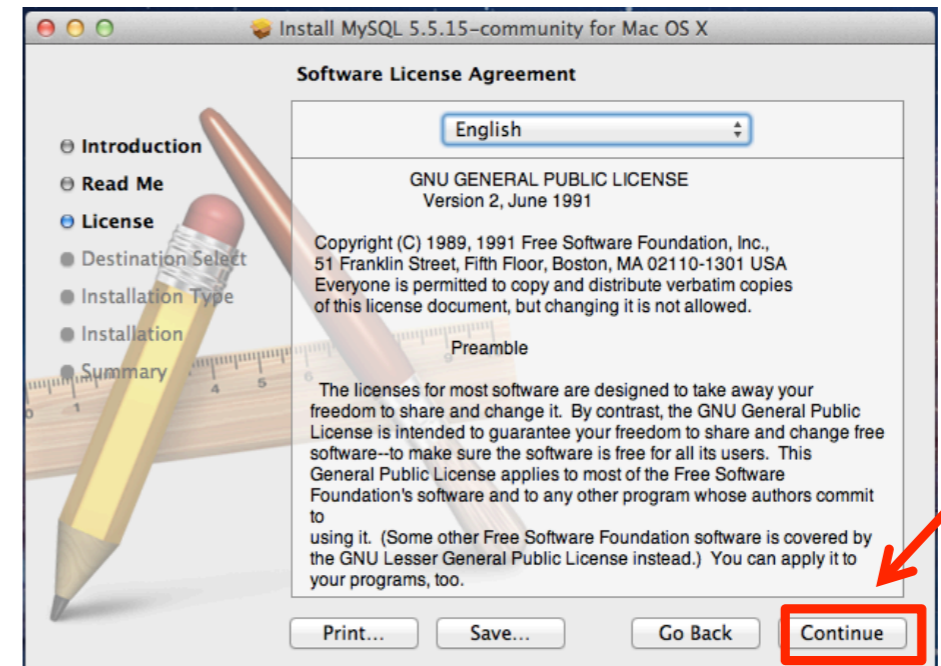
**Note: The newer MySQL Mac OS X 10.9 or 10.8 installation steps have a slightly different window sequence. Just click through the steps.**



9. Click, “Continue.”



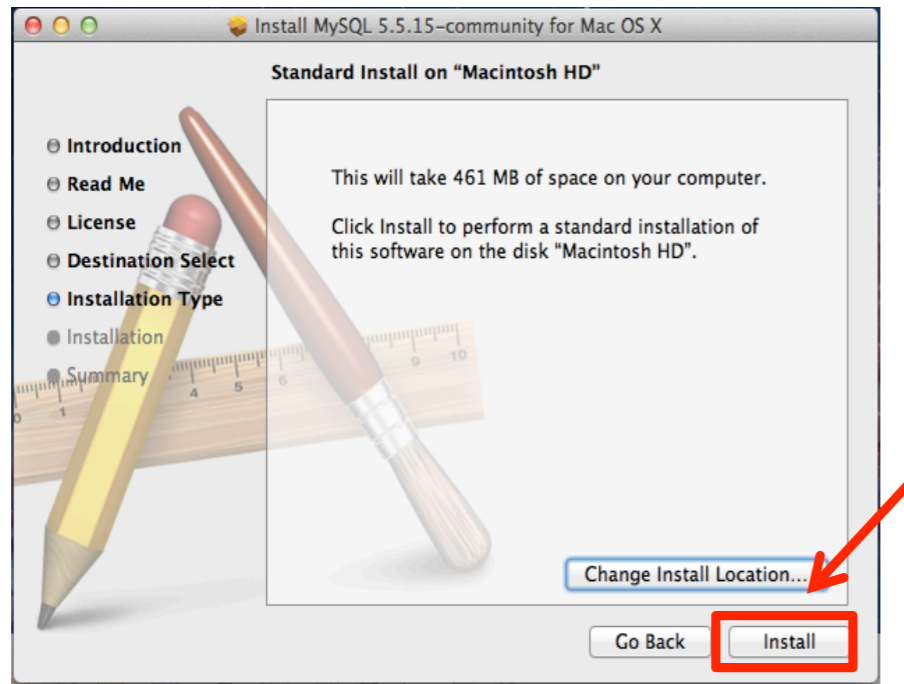
10. Select English, click “Continue.”



11. Click “Agree.”

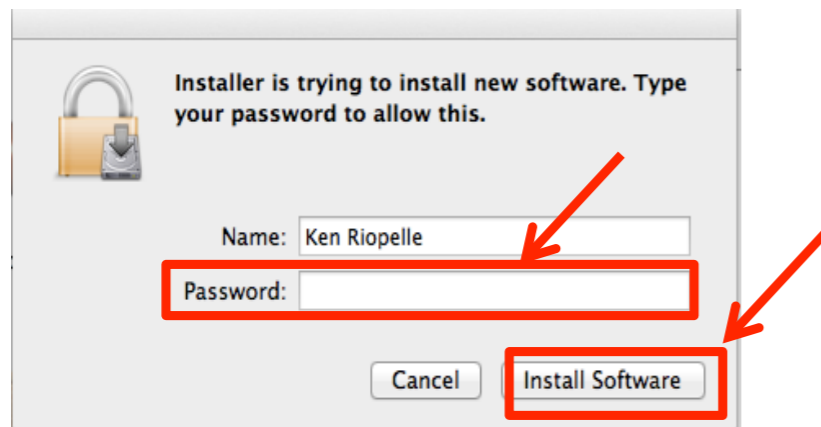


12. Click “Install.”

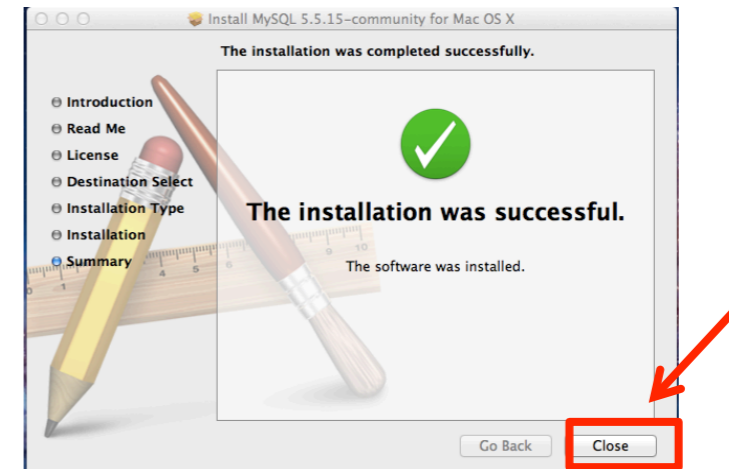


13. Type your computer’s password.

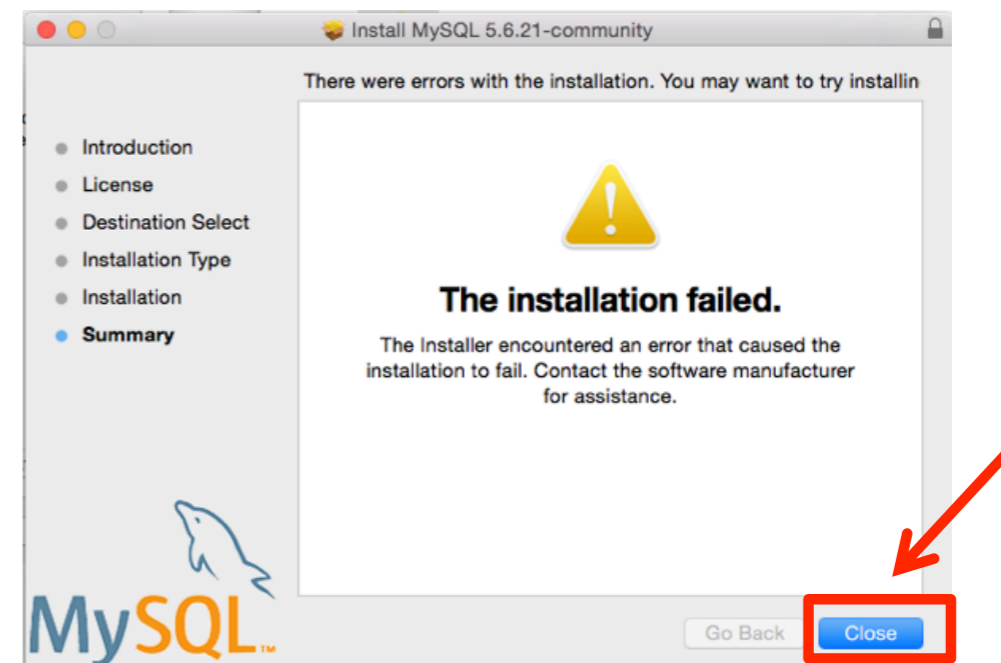
14. Click, “Install Software.”



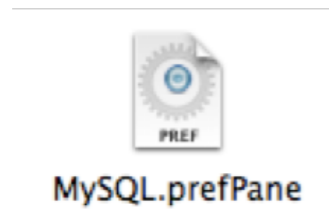
15. A series of installation messages will appear, with a final Success message. Click “Close.”



**At the Installation Summary page you may get a message that “The Installation Failed.” This is not true. Click Close and Skip to Step 19 to Start MySQL**



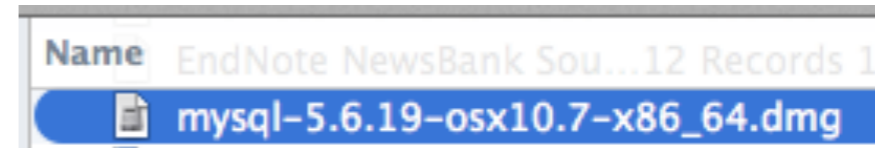
16. Next install MySQL PrefPane



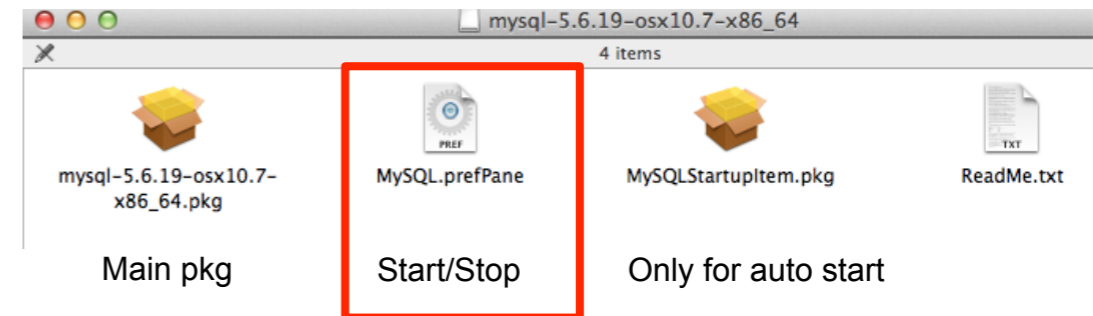
**Note: If you are installing an older version of MySQL (OS X 10.7 ) then install the preference pane. Newer versions, such as, MAC OS X 10.9 or 10.8 have the preference pane installed with the base package and this step is not needed. Skip to step 19.**

Note: The MySQL.prefPane enables you to Start and Stop the MySQL server

17. Again, double click the dmg file.



A set of four files will appear.



18. Double click the MySQL.prefPane.



Follow the install instructions.  
Note: you only need to install this once.

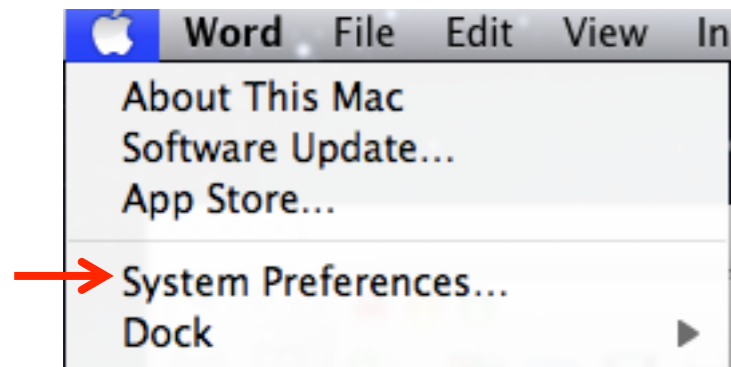
Note: This completes the one time MySQL installation.

## To start the MySQL server:

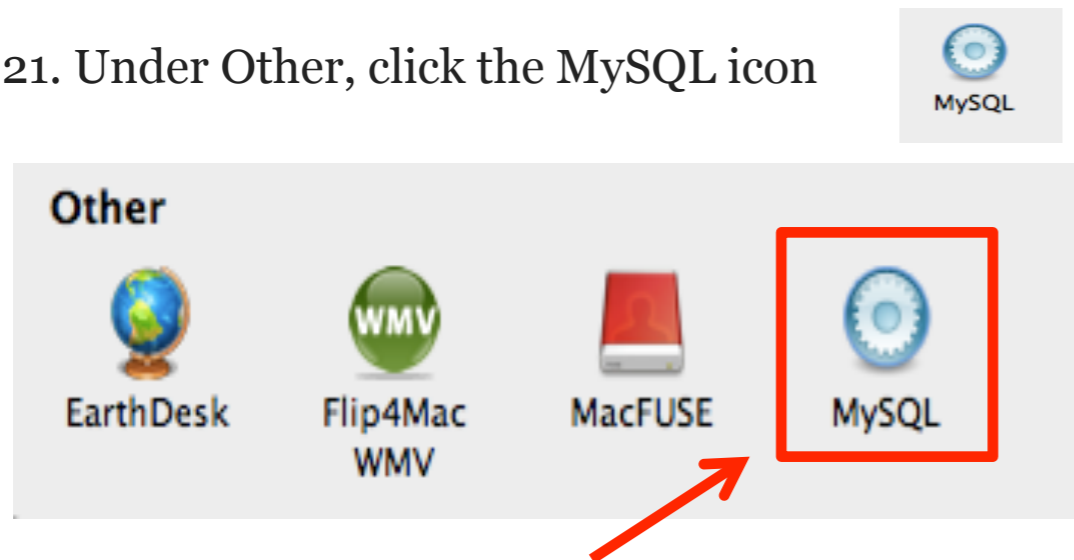
19. Click the Black Apple in the upper left corner.



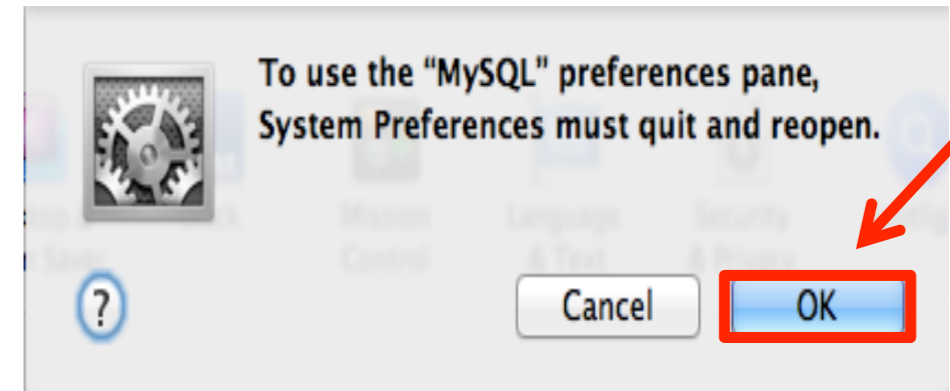
20. Click “System Preferences ...”



21. Under Other, click the MySQL icon



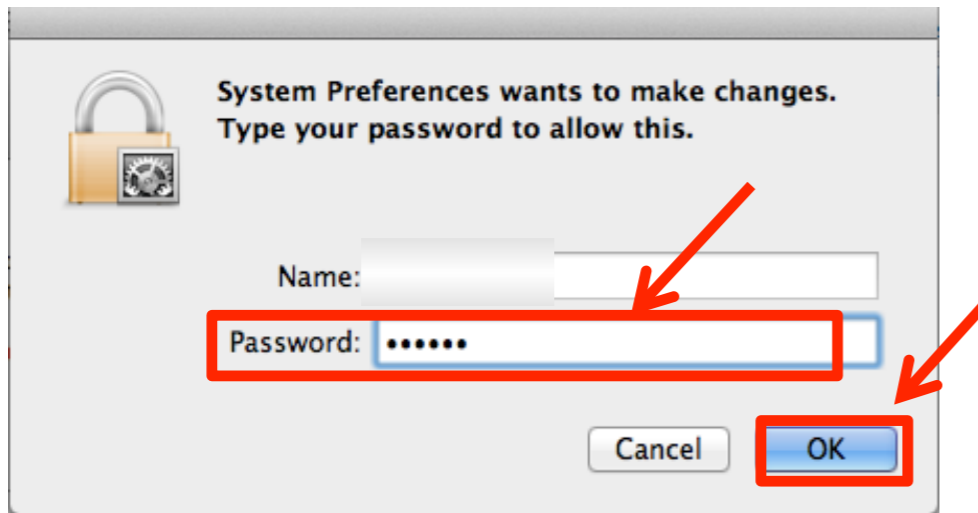
22. At the prompt, Click “Ok.”



23. Click the “Start MySQL Server” button



24. Enter your computer's password.
25. Click, "OK."



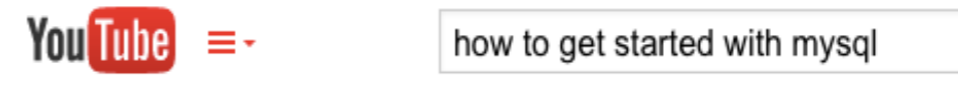
26. A message will appear stating that MySQL server instance is running



*Note: To Stop the MySQL server, click the "Stop MySQL Server" button.*  
*If you wish, you can automatically have the MySQL start on Startup by checking that option.*

To learn more about MySQL go to:

27. <https://www.youtube.com/>
28. In the YouTube search box, type in:  
how to get started with mysql



*Note: Here you will find a number of MySQL video tutorials*

Other online MySQL Resources are:

Manuals:

<http://dev.mysql.com/doc/>

[www.MySQL.com](http://www.MySQL.com)

[www.Oracle.com](http://www.Oracle.com)

# Install the Condor 3~.jar

## CONDOR 3 INSTALLATION STEPS

1. Complete Condor 3's Sign up Form to obtain your license key.
2. Validate your email address
3. Download Condor 3 from the License Manager.
4. Start Condor 3 and enter your license key.
5. After the 14 day trial period ends, users need to email Peter Gloor at: [pgloor@galaxyadvisors.com](mailto:pgloor@galaxyadvisors.com) and request a yearly license for a commercial use or a free academic license.

With the installation of Java, MySQL, and the Condor 3 ~.jar, this will complete the minimum requirements to start Condor 3.

Note: it is recommended to continue and install the Google CSE API Key, the four Twitter API Keys, and

1. Complete Condor 3's Sign up Form to obtain your license key at:

<http://guardian.galaxyadvisors.com/guardian/>

A Welcome message appears  
Click Sign up

The screenshot shows a web form titled "Login". It has two input fields: "Email/Username" with the placeholder text "Enter email or username" and "Password" with the placeholder text "Enter password". Below these fields are two buttons: "Sign in" and "Sign up". The "Sign up" button is highlighted with a red rectangular box, and a red arrow points to it from the right.

2. Complete Condor 3's Sign up form, and Then click "Sign up."

### Sign up

**Username**  
Enter username

**Email**  
Enter email

**Password**  
Enter password

**Password repeat**  
Repeat password

**First name**  
Enter first name

**Last name**  
Enter last name

**Company**  
Enter company

**Sign up**

3. A validation message displays, click OK.

### Condor-License-Server

To complete the sign up process please validate your email address through the received link.

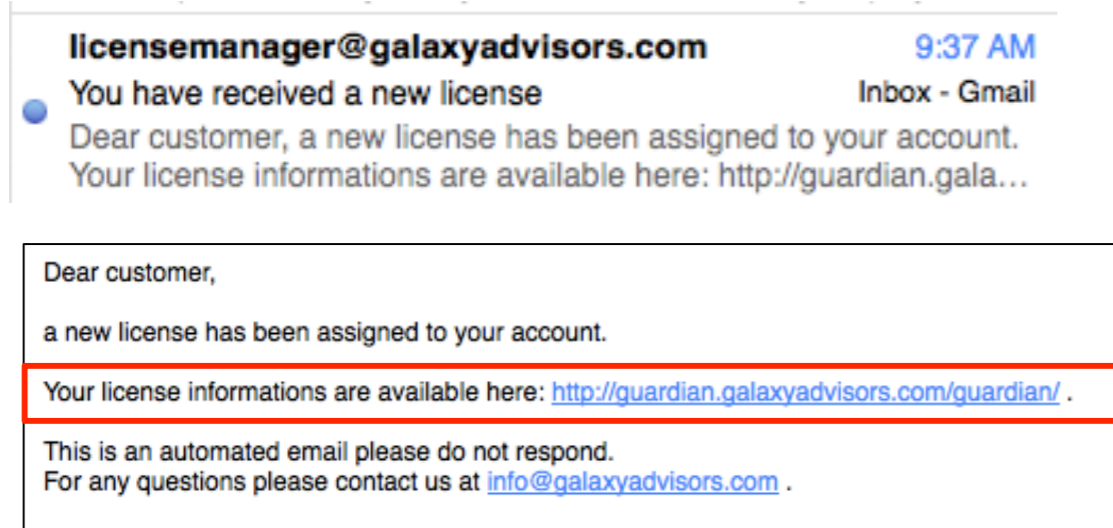
**Ok**

4. Check your email and validate your email address. Click "Verify email address."

**licensemanager@galaxyadvisors.com** 9:35 AM  
Welcome to the Condor-License-Manager Inbox - Gmail  
Dear customer, welcome to the Condor-License-Manager. Thanks for your interest in our products. If you validate your email address...

Dear customer,  
welcome to the Condor-License-Manager. Thanks for your interest in our products. If you validate your email address with the following link you will receive a free 14 day Condor trial license.  
[Verify email address](#)

## A License Confirmation email sent



### Important Note:

After the 14 day trial period ends, users need to email Peter Gloor at: [pgloor@galaxyadvisors.com](mailto:pgloor@galaxyadvisors.com) and request a yearly license for:

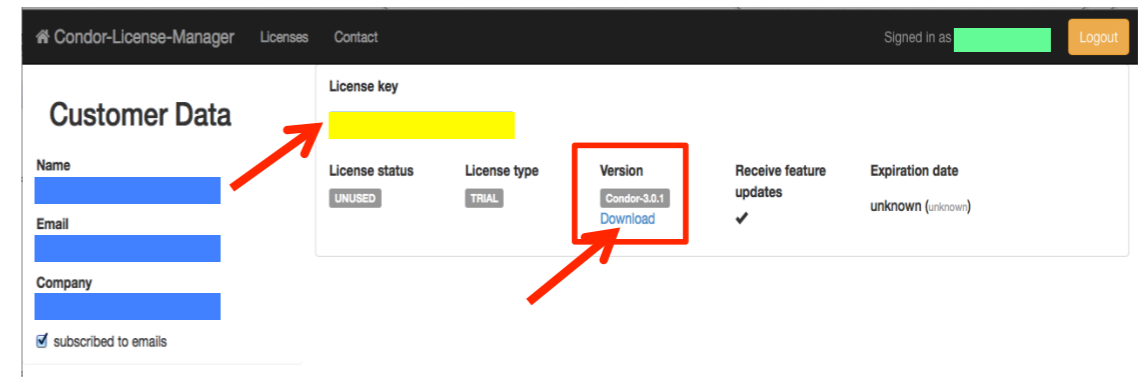
- A commercial license for commercial use, or
- A free academic license showing proof of their academic status, such as, a web url, "name.edu" address, and describe the research purpose of their project.

After your request is approved and processed, you will receive a confirmation email. Users may Login to the Condor License Manager at

<http://guardian.galaxyadvisors.com/guardian/> and confirm their license type has been updated from "TRIAL" to "YEAR". Then the next time you start Condor 3 with an internet connection, your updated user license will be authenticated and Condor 3 will be available for use.

5. Download the latest version of Condor 3 from the License Manager link

6. Select and Copy your License key



Note: You may return to the License Manager link to Sign in, Reset your password, or Download an updated version

## Login

### Username

Enter username

### Password

Enter password

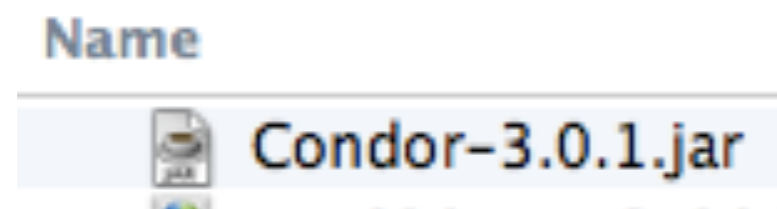
Sign in

Sign up

Reset password

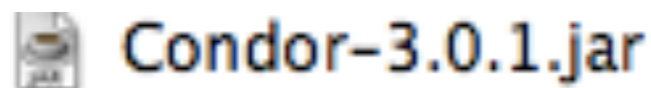


7. After the file is downloaded you will see the Condor 3 jar in your Mac Downloads



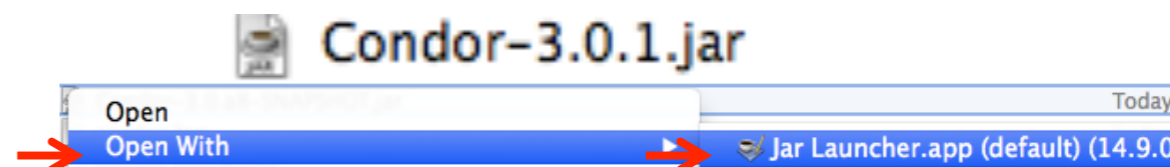
8. Using Finder create a New Folder, such as "Condor3" and then copy and paste the Condor 3~. jar file" into it.

You should see a file similar to this in your "Condor3" folder:

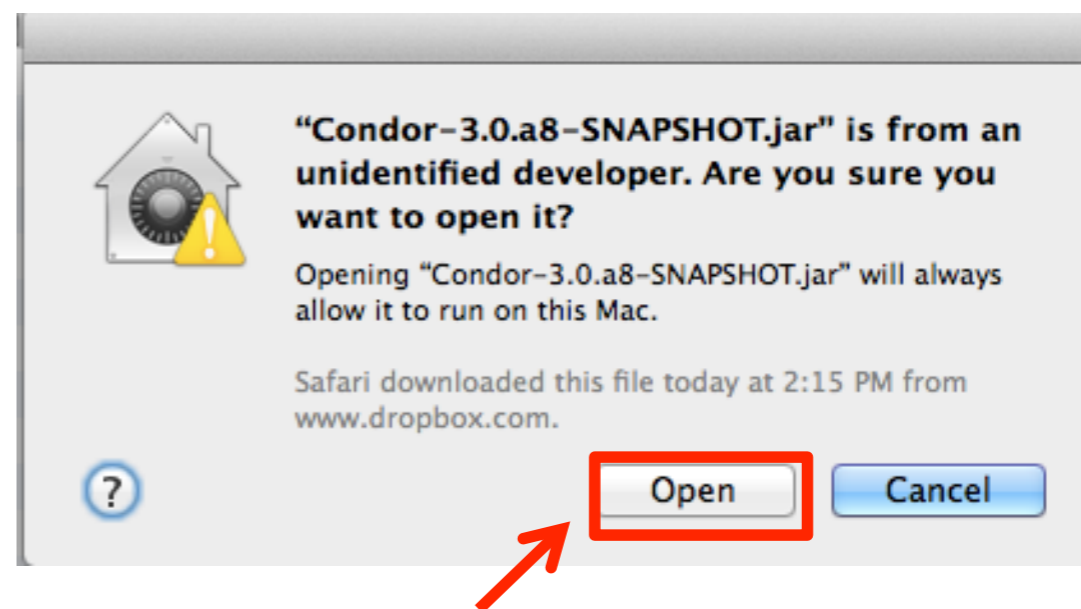


9. Remember to Start MySQL if you have not done so.

10. In the Condor folder, Right Click the "Condor-3 ~.jar." Select "Open With" and "Jar Launcher"

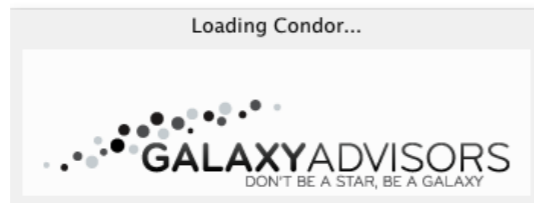


11. Click, Open.

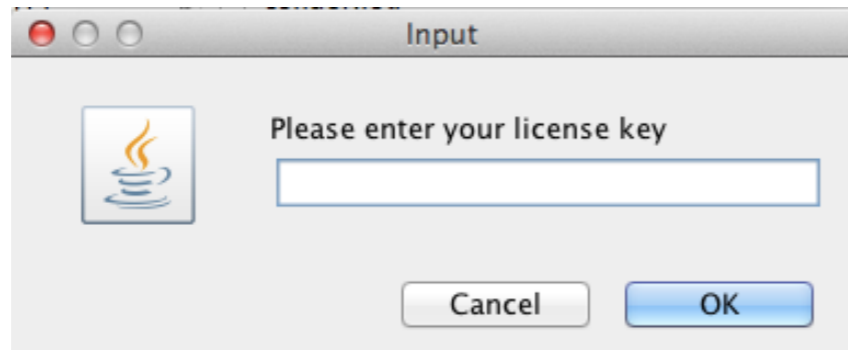


**Note:** You only have to do this the first time. Afterwards you can just double click the Condor 3 ~ jar.

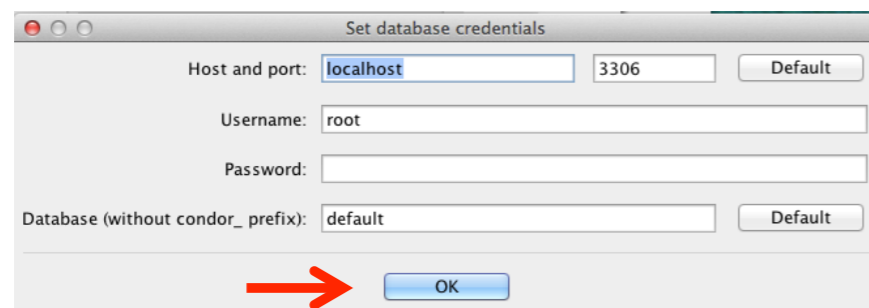
12. Condor 3's loading screen appears



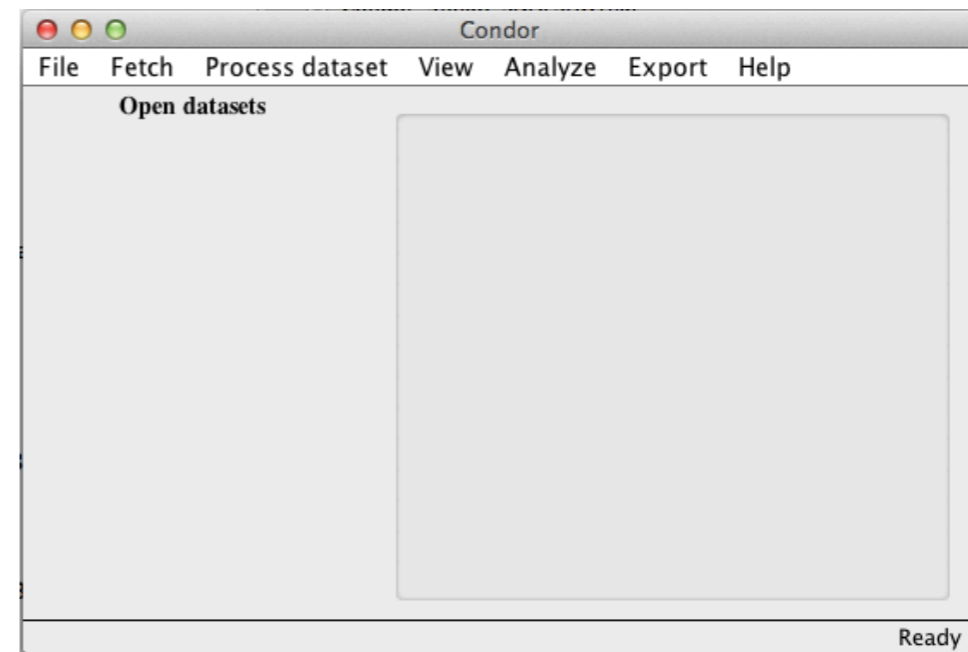
13. Enter or paste in your license key,  
Click OK. **Note: you only do this once.**



14. Next, a set database credentials window opens. Enter your MySQL password, if you have one, or just click, OK.



## Condor 3's Main Menu



This completes the Condor 3 installation steps.

# Install Google CSE API Key

## GOOGLE CSE API INSTALLATION STEPS

NOTE: UPDATED AS OF 8/11/2015.

1. Create a Google account, if you do not already have one

<https://accounts.google.com/signup?service=mail>

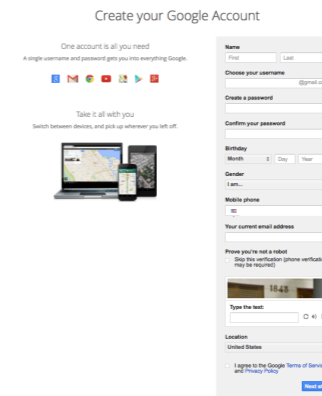
2. Sign in to the Google Console and create a CSE API Key

<https://code.google.com/apis/console/>

3. Start Condor 3, do a Web Fetch and enter in your Google CSE API Key and the Condor CX Key. Only required first time.

Create a Google Account, if you do not have one. If you have a Google account, such as, a gmail email address, then skip to step 2.

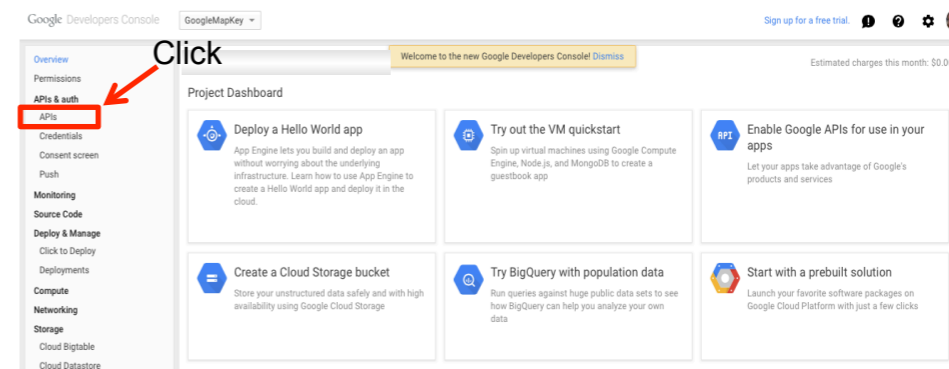
1. Go to this Google accounts URL and sign up: <https://accounts.google.com/signup?service=mail>



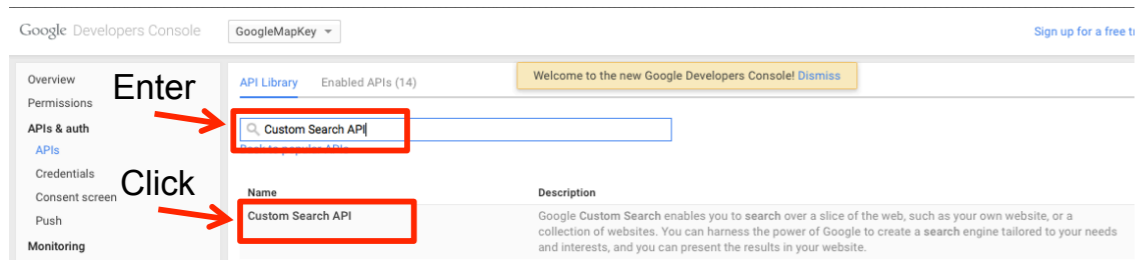
2. Go to this Google console URL and sign in: <https://code.google.com/apis/console/>

Note: The next web page that displays depends upon your Google account and existing projects.

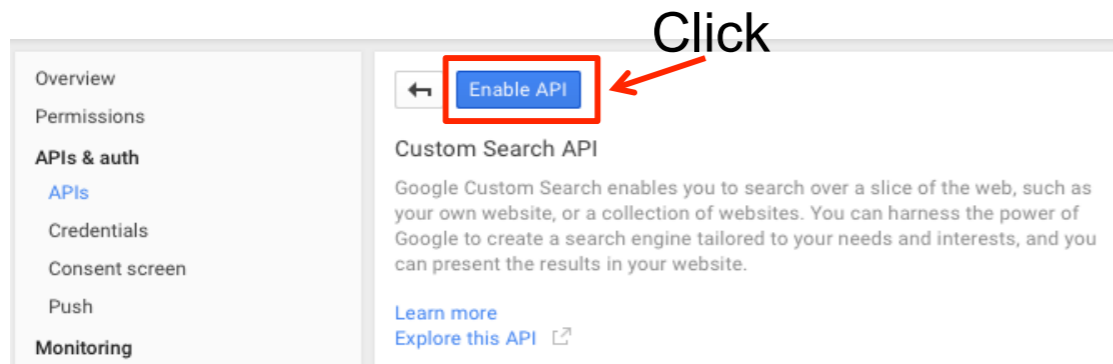
3.



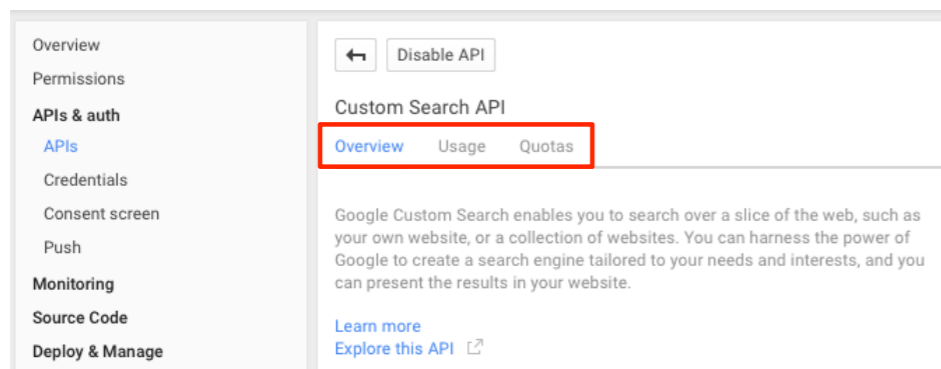
4. Enter “Custom Search API” into the search box
5. Click on Custom Search API link



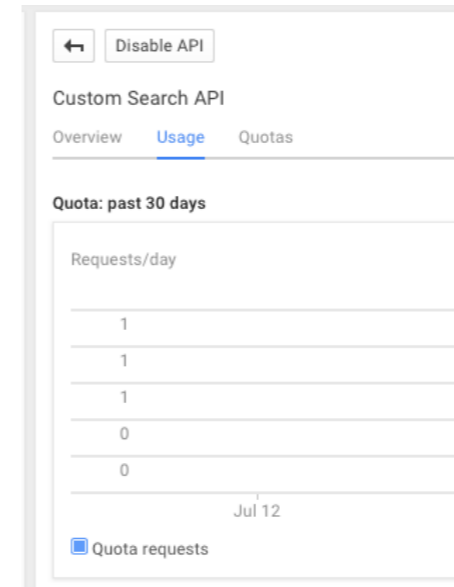
6. Click on the blue Enable API



7. The Custom Search API is now enabled  
The hot link terms: Overview, Usage, Quotas will provide additional information



## Usage



## Quotas

The 'Quotas' tab displays the following information:

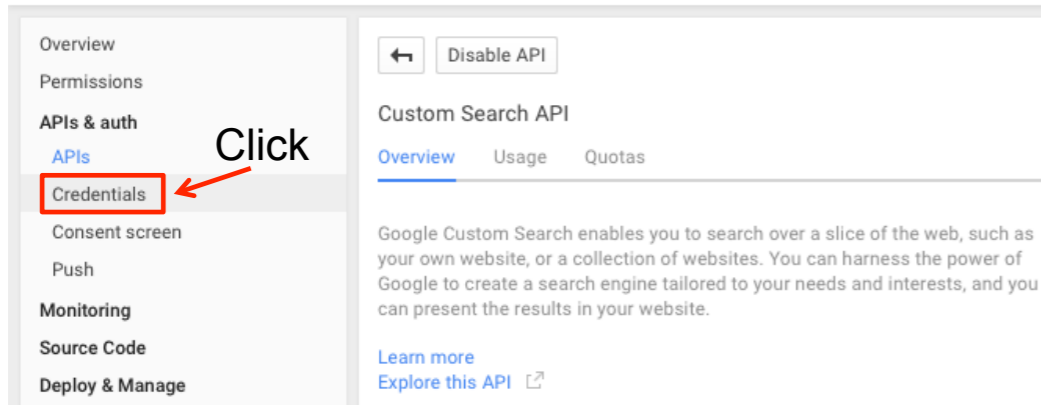
- Disable API** button
- Custom Search API** title
- Navigation tabs: Overview, Usage, **Quotas**
- Billing status**: This API is limited by the free quota shown below. [Enable billing](#) to receive a higher quota.
- Quota summary**: Daily quota resets at midnight Pacific Time (PT).
- Free quota**: 100 requests/day
- Total quota**: 100 requests/day
- Remaining**: 100 requests/day (100% of total)
- Per-user limit**: 1 requests/second/user

NOTE: First 100 searches per day are free

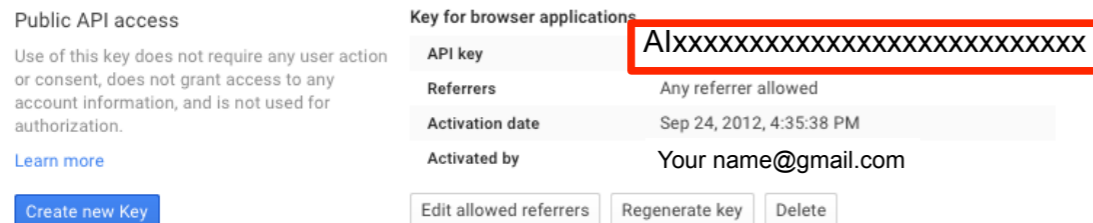
For more information on billing, see:

<https://developers.google.com/console/help/new/#billing>

8. Now, click “Credentials” on the left under “APIs & auth”



9. Save your Google CSE API Key



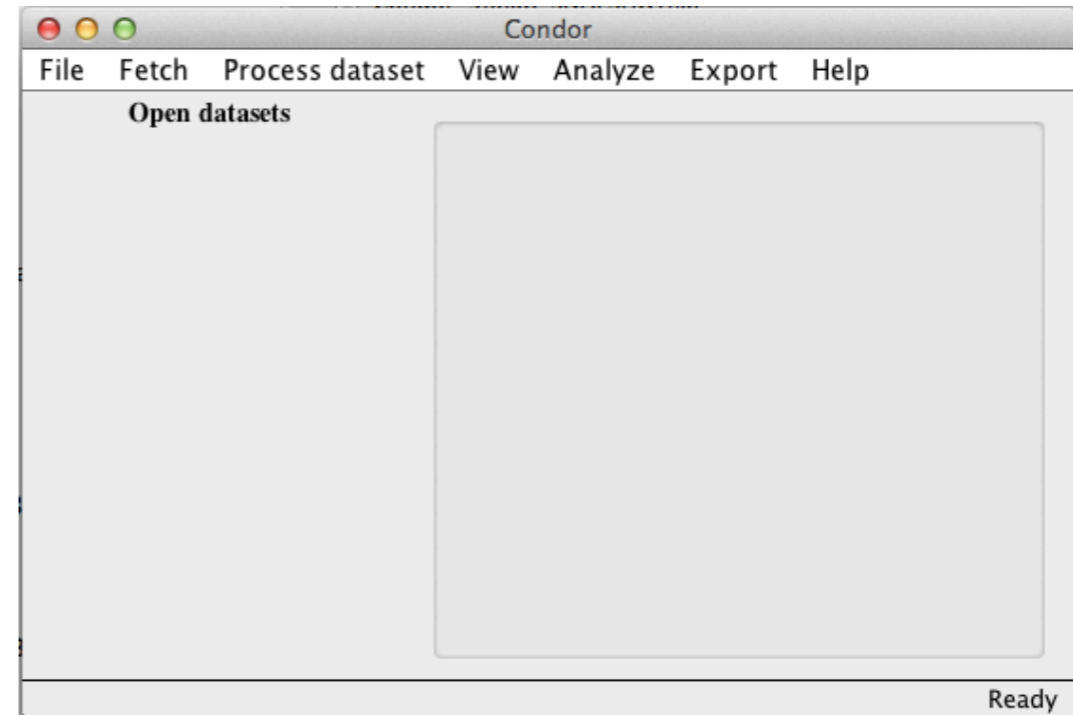
Next Steps

- Start Condor 3 do a Web Fetch
  - Enter your Google CSE API Key, and
  - Enter the Condor CX Key:  
000229616349723713761:mlcaolv1mpw
- Note: these keys will be saved in a file called “condor.properties”

10. Start Condor 3

- Remember to start MySQL first

11. Create or switch to your database and open an existing dataset or create a new one.



## Do a Web Fetch

12. Select Google CSE

13. Enter your Google CSE Key:

14. Enter the Condor CX key:

Web fetcher

Fetcher API:  Google AJAX  Google CSE

Google CSE key:

Google CSE cx:

Query:

Results per query:

Max depth (search results are at depth 1, sources of first backlinks at depth 2):

Restrict to recent results (Only CSE), time unit:

Time quantity:

Restrict to specific language (only CSE, all if not specified):

Restrict to specific country (only CSE, all if not specified):

Save snippet:

Save content:

Only consider domain level:

< Back Next > Cancel

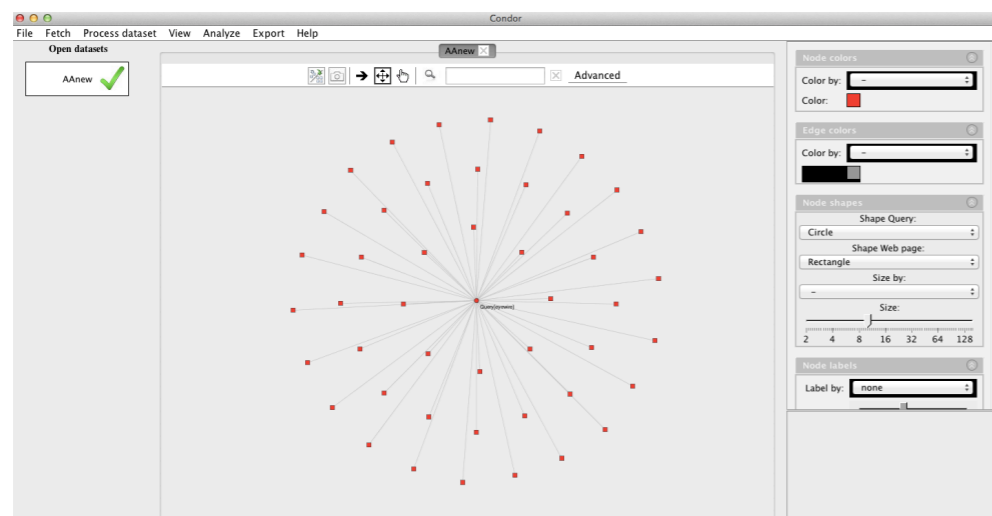
*Note: Alternatively, after you obtain your Google CSE API key, you can edit the “condor.properties” file located in the your folder where the Condor 3~.jar is found and paste in your Google CSE API Key and the Condor CX API Key.*

The CSE and CX Keys are saved in condor.properties file

```
Name
Condor-3.0.a8-SNAPSHOT.jar
condor.log
condor.properties
```

```
#Autogenerated properties
#Wed Jun 11 09:30:39 PDT 2014
google.cse.cx= xxxxxxxxxxxxxxxx Condor Provided Key
twitter.oauth.accessToken=
twitter.oauth.accessTokenSecret=
twitter.oauth.consumerSecret=
google.cse.key= xxxxxxxxxxxxxxxx Your personal key
twitter.oauth.consumerKey=
```

## Sample Condor 3 Google CSE Web Fetch Results



Note: Return to the Google Console for APIs Reports

<https://code.google.com/apis/console>

Overview Permissions APIs & auth APIs Credentials Consent screen Push Monitoring Source Code Deploy & Manage

Custom Search API

Overview Usage Quotas

Usage

Requester/Day	Requests
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1

Quotas

Resource	Usage	Limit
Requests	1000	1000 requests/day
Bytes	1000	1000 bytes/day
Errors	0	100% of total

# Install Twitter API Keys

## TWITTER API KEYS INSTALLATION STEPS

1. Create a Twitter account, if you do not already have one.

<https://twitter.com/login>

2. Create a new Twitter app, which enables you to obtain the four Twitter API Keys.

<https://apps.twitter.com>

3. Copy the four required Twitter API Keys into the “condor.properties” file

Note: You only do this once.

After the four Twitter Keys are entered into the “condor.properties” file then you can do a Condor3 Twitter Fetch.

## Preliminary Step

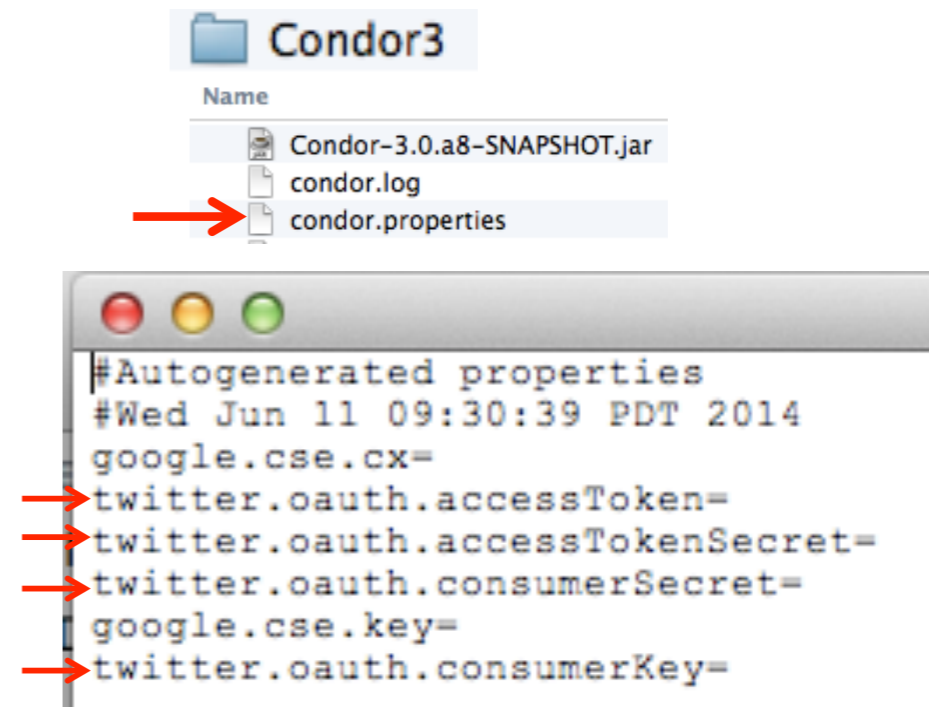
To create the “condor.properties” file:

- Start MySQL, start Condor 3
- Switch or create to your desired database and create or open a dataset.
- Select Fetch Twitter under the Fetch menu

This will create the “condor.properties” file, which is located in the same folder where the Condor 3~.jar is found.

Note: you only have to do this once.

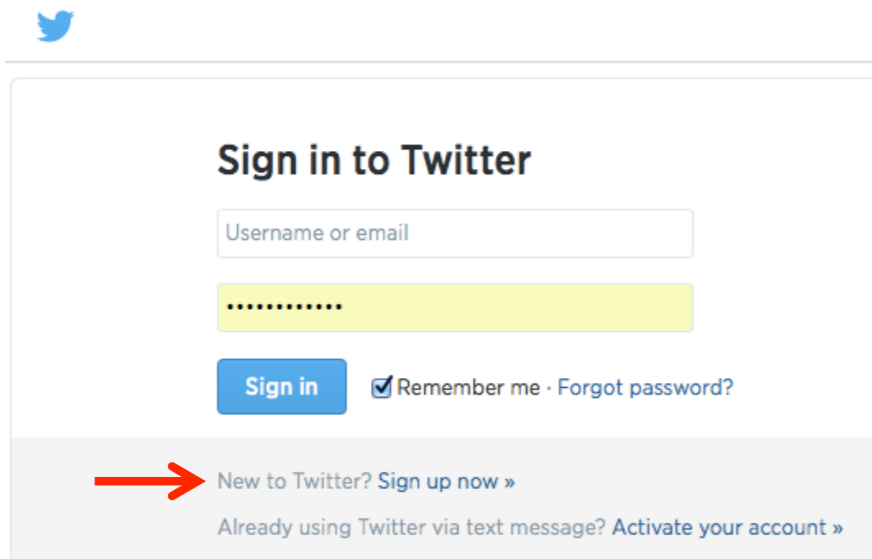
## condor.properties file



1. Create a Twitter account, if you do not have one
2. Click on this link and select Sign up now.

<https://twitter.com/login>

*If you do have a Twitter account, skip to step 2.*



2. Sign in to create a new Twitter app

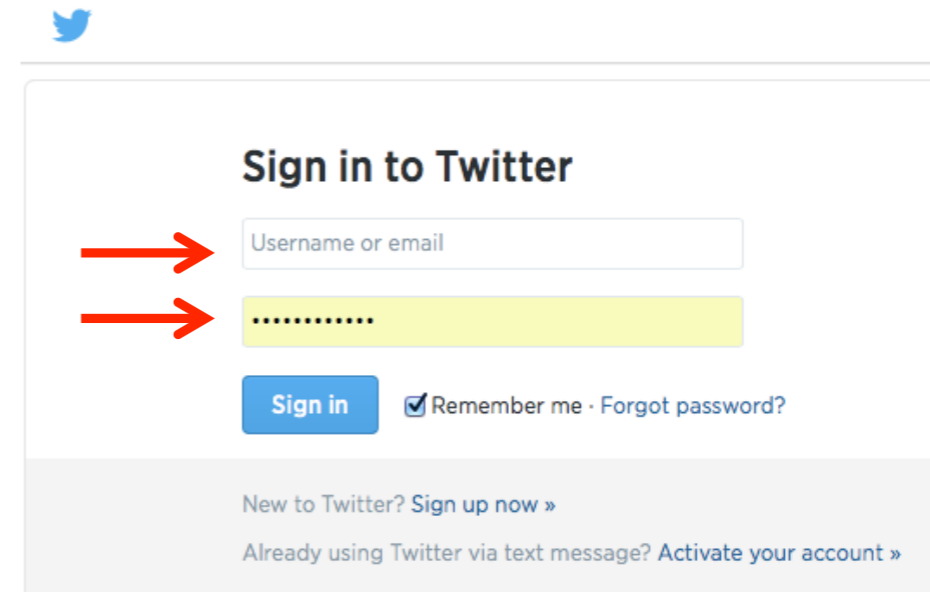
<https://apps.twitter.com>

Application Management

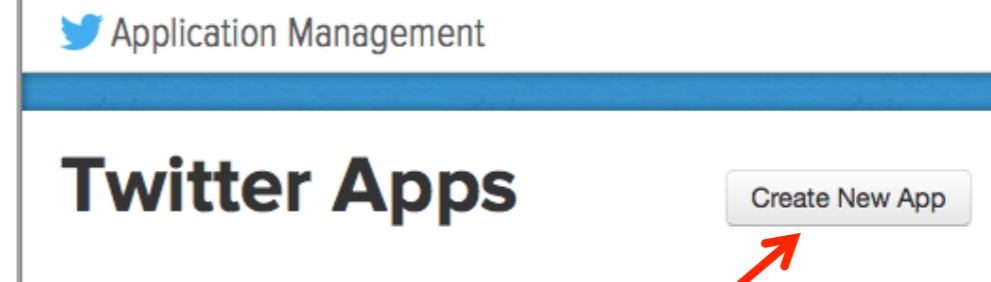
## Twitter Apps

Please [sign in](#) with your Twitter Account to create and maintain Twitter Apps.

3. Enter your Twitter Username or email and password



4. Click, Create New App





## 5. Click, Create New App

Create an application

**Application Details**

Name: \*  
MyDataFetcher  
Your application name. This is used to attribute the source of i

Description: \*  
collects data for my own analysis  
Your application description, which will be shown in user-facin

Website: \*  
http://www.mysite.com  
Your application's publicly accessible home page, where users qualified URL is used in the source attribution for tweets creati (if you don't have a URL yet, just put a placeholder here but re

Callback URL:

Note: Needs to be a unique name

Note: Leave blank

## 6. Scroll down, and check I agree

Yes, I agree  
By clicking the "I Agree" button, you acknowledge

## 7. Scroll to the bottom of the form,

Create your Twitter application

*Two of the four Twitter app API Keys are created. Another step will create two more Token Access Keys.*

## 8. Click, Keys and Access Tokens, or

Your application has been created. Please take a moment to review and adjust your application's settings.

### MyDataFetcher4

Test OAuth

Details Settings **Keys and Access Tokens** Permissions

collect tweets for my own analysis  
http://www.mysite.com

#### Organization

Information about the organization or company associated with your application. This information is optional.

Organization	None
Organization website	None

#### Application Settings

Your application's Consumer Key and Secret are used to [authenticate](#) requests to the Twitter Platform.

Access level	Read and write ( <a href="#">modify app permissions</a> )
Consumer Key (API Key)	[REDACTED] ( <a href="#">manage keys and access tokens</a> )

## 9. At bottom of page, under "Token Actions," Click "Create my access token"

Token actions

Create my access token

*This will create the remaining two Token Access Keys.*

10. Click, "Refresh" in the Status message

Status  
Your application access token has been successfully generated. It may take a moment for changes you've made to reflect.  
[Refresh](#) if your changes are not yet indicated.

11. After page refreshes, the four Twitter API Keys are now created to use with Condor 3's Twitter Fetch:

### Application settings

Consumer Key (API Key) XXXXXXXXXXXXXXXXXXXX

Consumer Secret (API Secret) XXXXXXXXXXXXXXXXXXXX

### Your access token

Access token XXXXXXXXXXXXXXXXXXXX

Access token secret XXXXXXXXXXXXXXXXXXXX

12. Copy and paste the 4 keys one at a time into "condor.properties" file

```
#Autogenerated properties
#Tue Jun 10 14:55:29 PDT 2014
google.cse.cx=0002296163497237137+
twitter.oauth.accessToken=
twitter.oauth.accessTokenSecret=
twitter.oauth.consumerSecret=
google.cse.key=
twitter.oauth.consumerKey=
```

*Be careful to match the correct key, they are not in the same order.*

*Paste each API Key on the right side of the "=" sign.*

### Application settings

Consumer Key (API Key) XXXXXXXXXXXXXXXXXXXX → twitter.oauth.consumerKey=

Consumer Secret (API Secret) XXXXXXXXXXXXXXXXXXXX → twitter.oauth.consumerSecret=

### Your access token

Access token XXXXXXXXXXXXXXXXXXXX → twitter.oauth.accessToken=

Access token secret XXXXXXXXXXXXXXXXXXXX → twitter.oauth.accessTokenSecret=

### condor.properties Names

Or, when doing a Twitter Fetch, a window will open, and

Enter your four Twitter API keys.

### Application settings

Consumer Key (API Key) XXXXXXXXX

Consumer Secret (API Secret) XXXXXXXXX

### Your access token

Access token XXXXXXXXX

Access token secret XXXXXXXXX

### condor.properties Names

Twitter Fetcher

OAuth access token:

OAuth access token secret:

OAuth consumer key:

OAuth consumer secret:

< Back Next > Cancel

*Be careful to match the correct key, they are not in the same order.*

*Note: the next time your four Twitter API Keys will be displayed.*

13. Sign out

Application Management

## MyDataFetcher4

Details Settings Keys and Access Tokens Permissions

Back to dev.twitter.com  
Back to Twitter  
Sign out

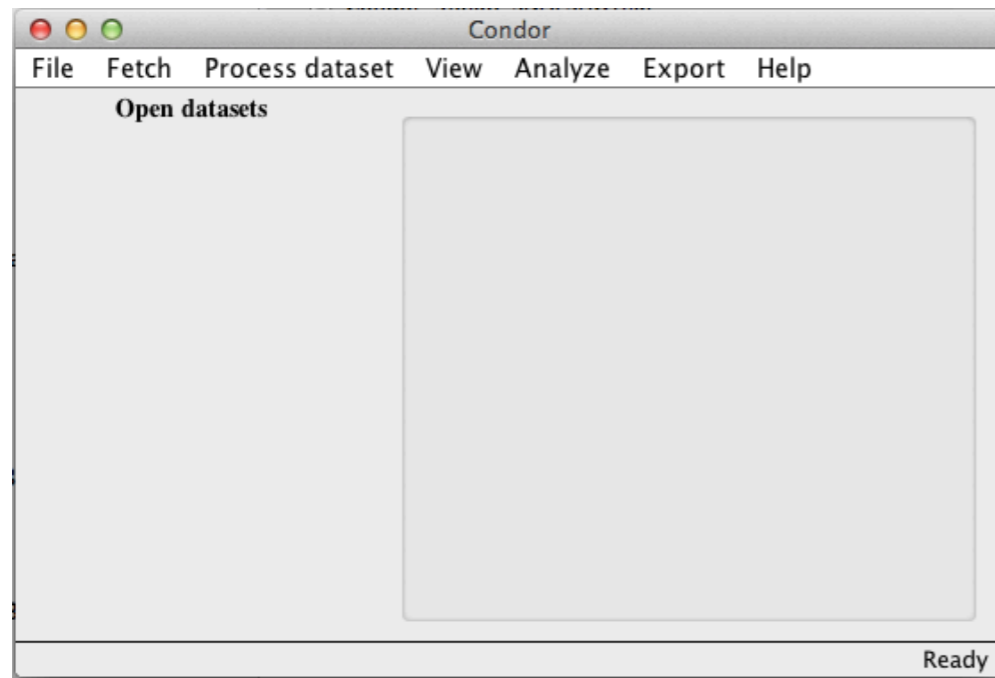
To Log back in:

<https://apps.twitter.com>

14. Start Condor 3

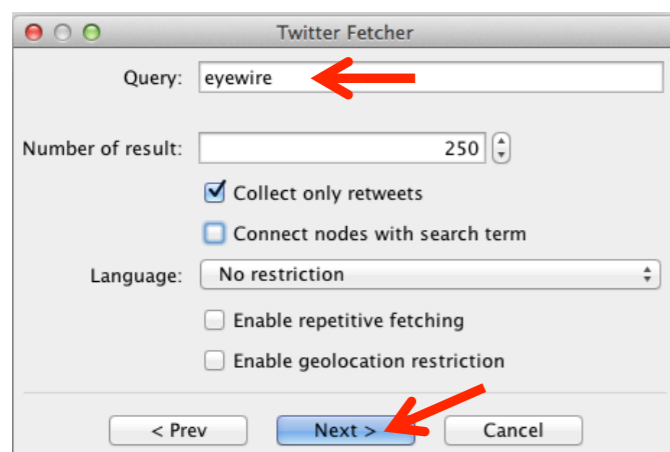
*Remember to start MySQL first*

15. Create or switch to your database and open and existing dataset or create a new one.

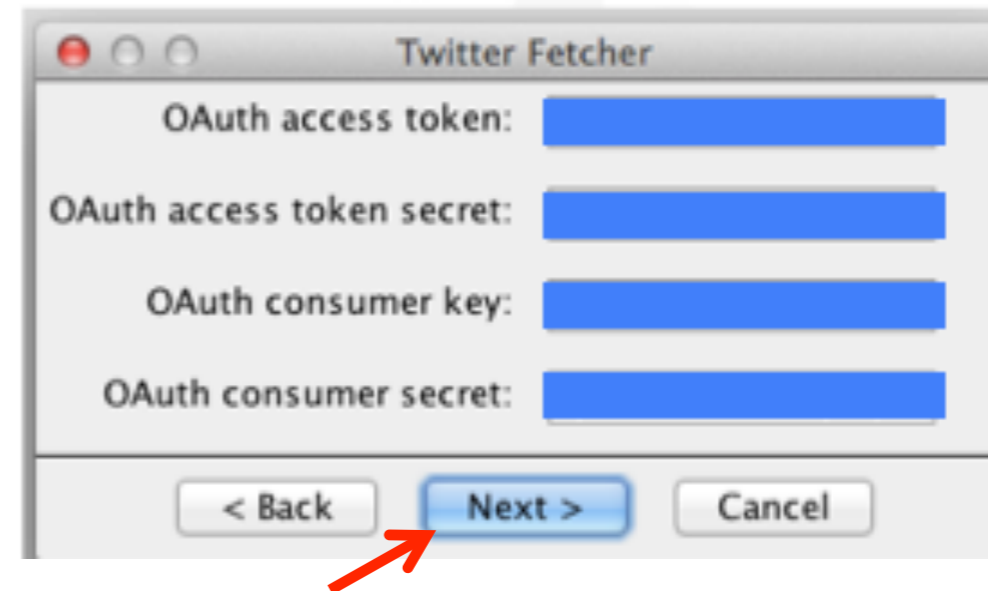


Do a Twitter Fetch

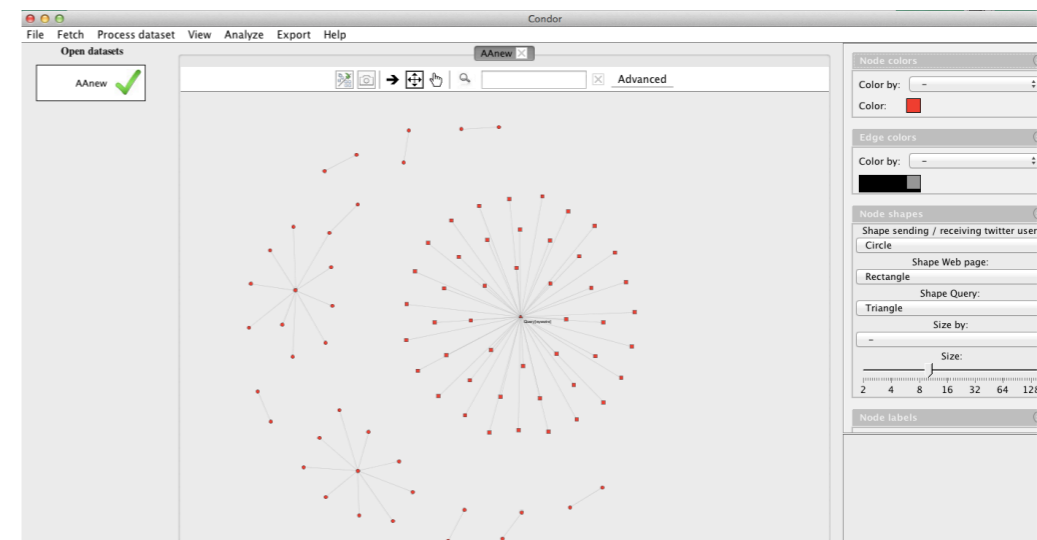
16. Enter a query, click Next



17. Your four Twitter Keys will be displayed, or enter them, click Next



## Condor 3 Twitter Fetch Results



## *A few additional notes about the Twitter API*



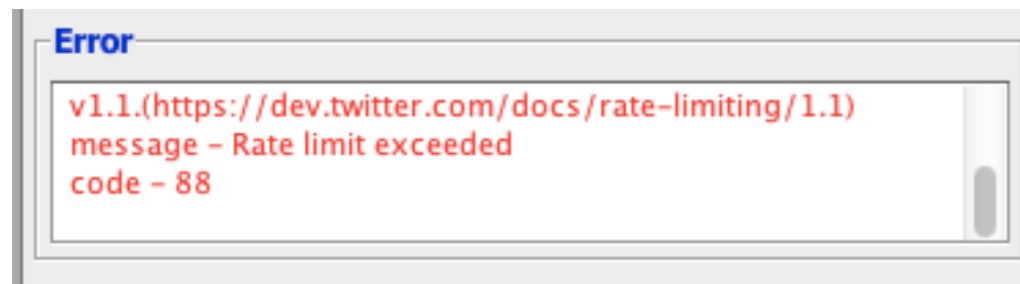
### Note: **New** Twitter Rate Limits for V1.1

“Rate limits in version 1.1 of the API are divided into 15 minute intervals, which is a change from the 60 minute blocks in version 1.0.”

“Search will be rate limited at 180 queries per 15 minute window for the time being.”

See: <https://dev.twitter.com/docs/rate-limiting/1.1>

You may get a Twitter error message , like the following. If so, just wait 15 minutes and try again.

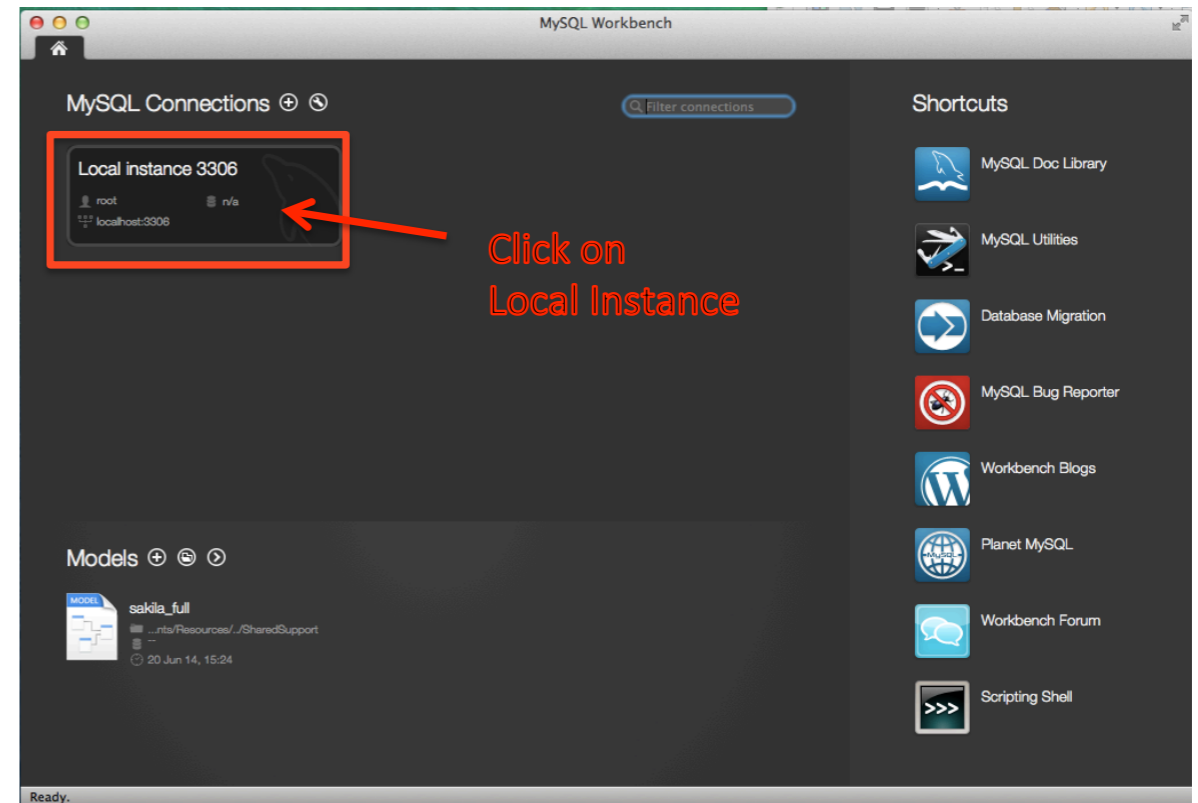


# Install MySQL Workbench On a Mac

## MySQL WORKBENCH INSTALLATION STEPS

*Note: MySQL Workbench is free and available for Windows, Mac OS X and Linux. These instructions are for a Mac OS X.*

1. Download MySQL Workbench at:  
<http://dev.mysql.com/downloads/workbench/>
2. Select your Operating System platform: Windows, Mac OS X, or Linux, choose Mac
3. Begin Download by Login, Sign Up, or No Thanks option
4. Locate “mysql-workbench~.dmg file in Downloads Folder
5. Double click on file to install
6. Drag icon to Applications
7. MySQL Workbench is now installed in Applications folder



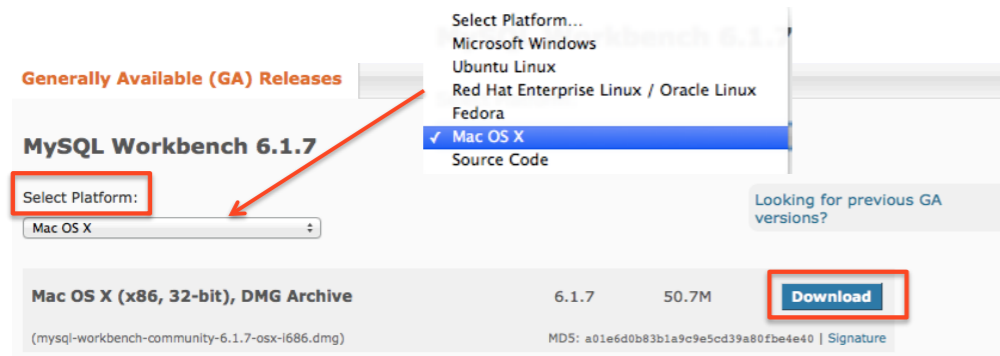
# What is MySQL Workbench?



MySQL Workbench is a unified visual tool for database architects, developers, and DBAs. MySQL Workbench provides data modeling, SQL development, and comprehensive administration tools for server configuration, user administration, backup, and much more. MySQL Workbench is available on Windows, Linux and Mac OS X.

## Installation Steps:

1. Download MySQL Workbench at:  
<http://www.mysql.com/products/workbench/>
2. Select your Operating System platform  
Windows, Mac OS X, Linux, choose Mac OS X
3. Click Download



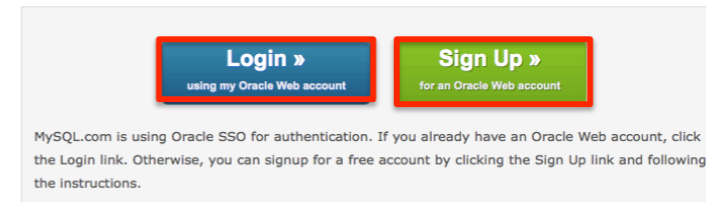
## 4. Begin Download by Login, Sign Up, or No Thanks

### Begin Your Download - mysql-workbench-community-6.1.7-osx-i686.dmg

Login Now or Sign Up for a free account.

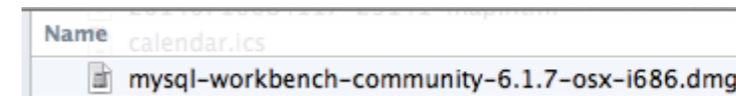
An Oracle Web Account provides you with the following advantages:

- Fast access to MySQL software downloads
- Download technical White Papers and Presentations
- Post messages in the MySQL Discussion Forums
- Report and track bugs in the MySQL bug system
- Comment in the MySQL Documentation



No thanks, just start my download.

## 5. Locate "mysql-workbench~.dmg" file in Downloads Folder

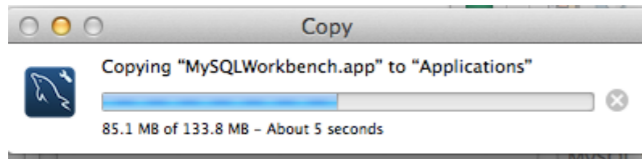


## 6. Double Click on file to Install

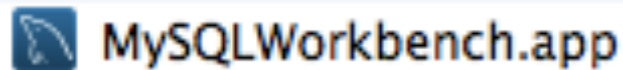
## 7. Drag icon to Applications



8. A copy message appears



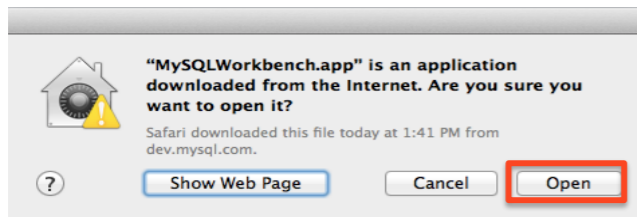
9. When completed, the MySQLWorkbench.app is in applications folder



10. Start your MySQL server

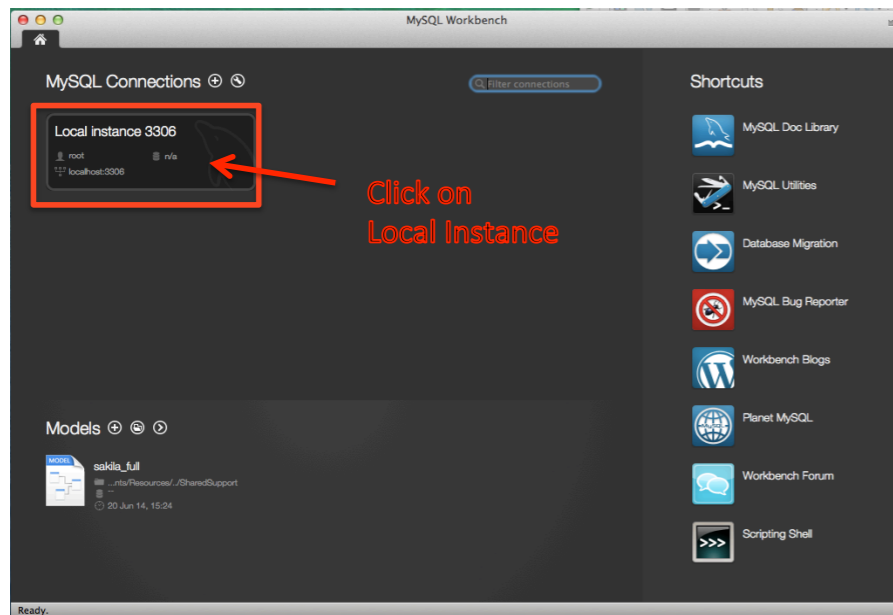
11. Double click on MySQLWorkbench.app to start

12. Click Open at message



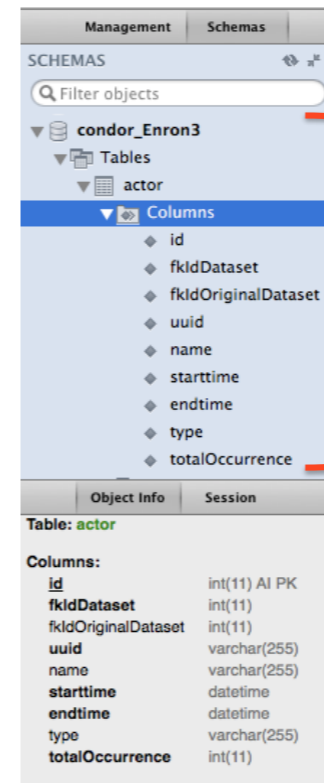
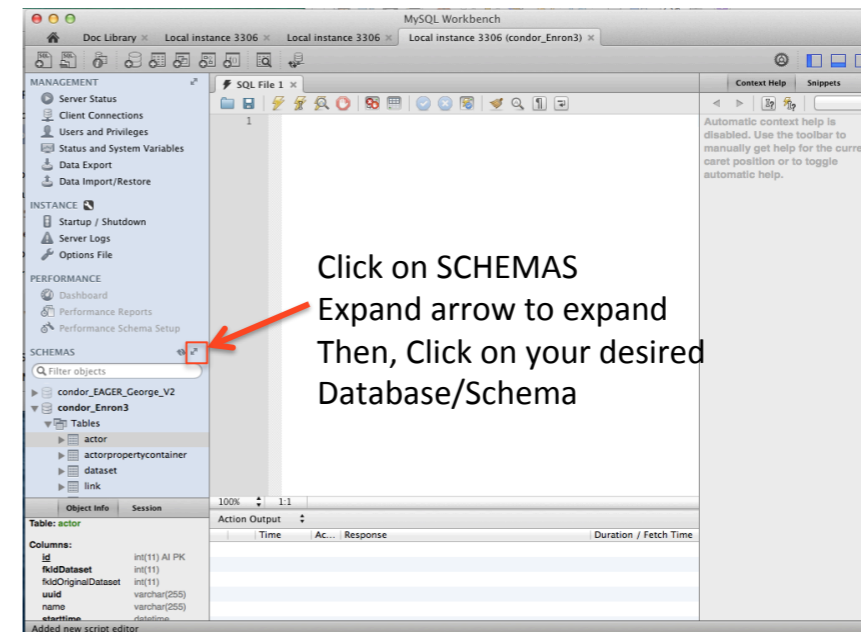
13. The MySQL Workbench Main Screen appears

14. Click on Local Instance, which displays local port #



15. MySQL WorkBench Local Instance Window opens

16. Click on SCHEMAS expand double arrow icon to expand



17. Select a Database

18. Expand Tables

19. Review Tables and Columns

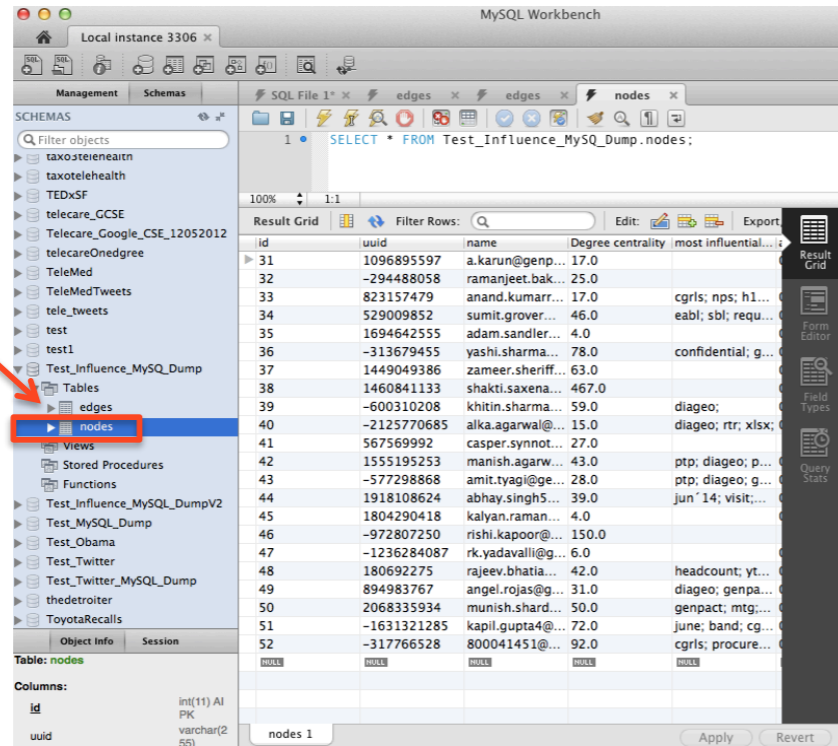
20 . Right click on a Table,  
 21. Choose “Select Rows – Limit 1000”  
 Then Table data appears in window

Right Click on a  
 Table Name

Select Rows - Limit 1000

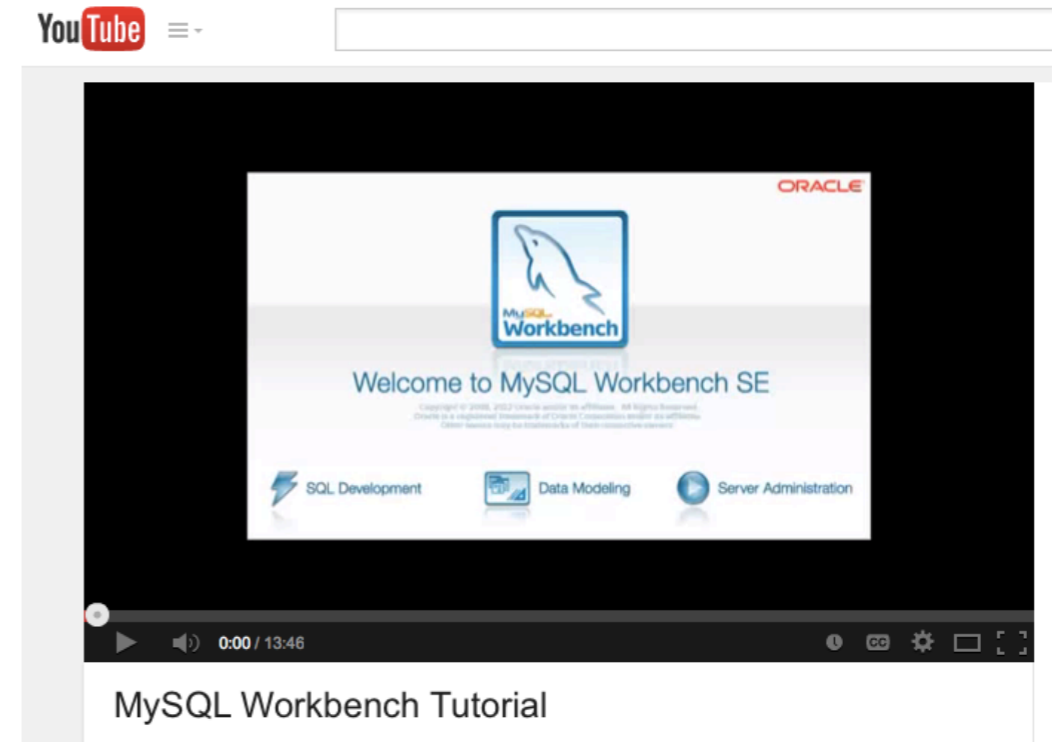
Table Inspector

- Copy to Clipboard
- Send to SQL Editor
- Create Table...
- Create Table Like...
- Alter Table...
- Table Maintenance...
- Drop Table...
- Truncate Table...
- Search Table Data...
- Refresh All



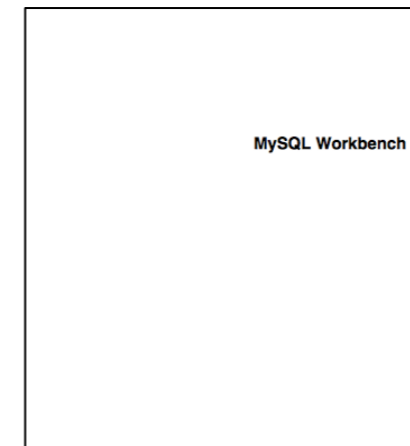
22. For 14 minute MySQL Workbench Tutorial see:

[https://www.youtube.com/watch?v=X\\_umYKqKaFo](https://www.youtube.com/watch?v=X_umYKqKaFo)



23. Download the 372 page MySQL Workbench manual at:

<http://downloads.mysql.com/docs/workbench-en.pdf>





# Install Navicat for Mac MySQL

## NAVICAT FOR MAC MYSQL INSTALLATION STEPS

**NOTE: Navicat is optional and not required. It is alternative to the MySQL WorkBench.**

1. Check System Requirements to confirm you have Mac OS X 10.6 (Snow Leopard) or higher.
2. Download free 30-day trial at:  
<http://www.navicat.com/download/navicat-for-mysql>
3. Double click on navicat~.dmg to install
4. Agree to enduser agreement
5. Drag Navicat to Applications folder

Note: Remember to start MySQL before starting Navicat. If purchased, enter 16 digit registration key and click Activate for online activation.

Navicat Pricing at:

<http://www.navicat.com/store/navicat-for-mysql>

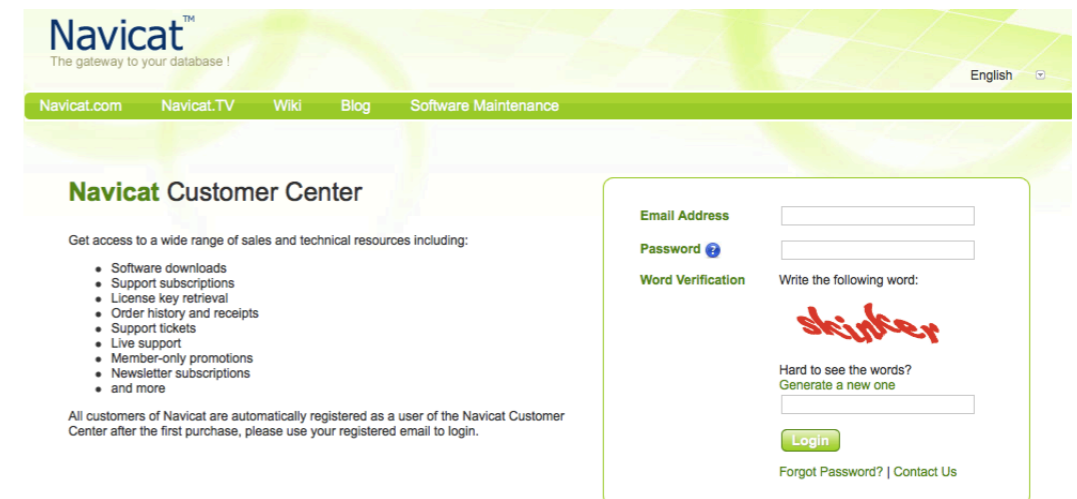
## Install Navicat for Mac MySQL

1. Start your browser
2. Go to this URL:  
<http://www.navicat.com/download/navicat-for-mysql>
3. Click on a Navicat for MySQL Download location button.

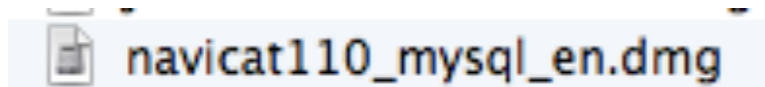


4. Note: if you wish free 30-day support, register before downloading at:

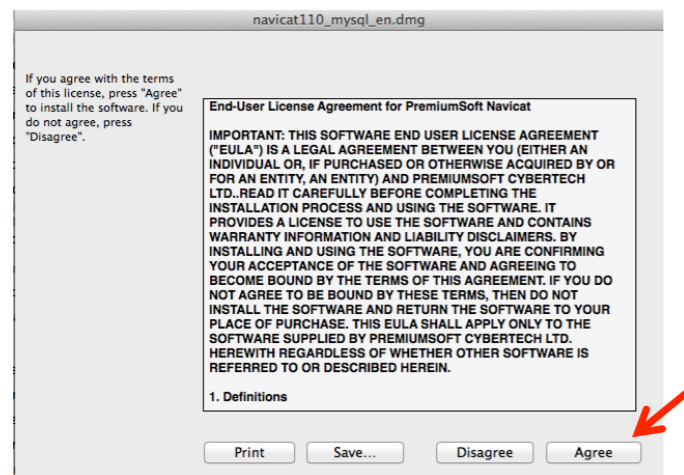
<https://customer.navicat.com>



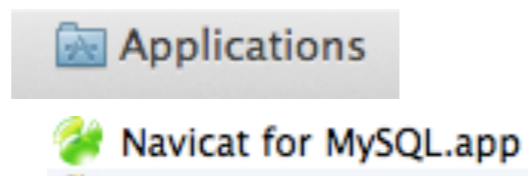
5. After downloading, go to your downloads folder and double click on the “navicat~.dmg” file to start the install process.



6. Click, “Agree” to end user agreement.

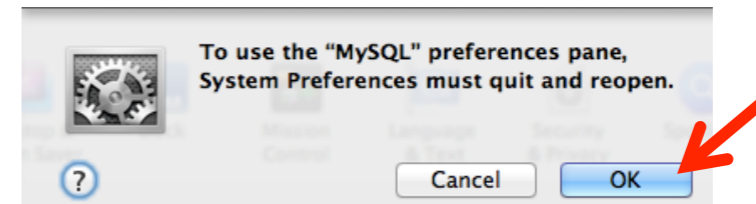
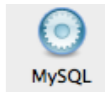


7. Drag Navicat to your Applications folder to install.  
Note: A copy message will appear. After the file has been copied, close the window, Navicat for MySQL is now installed in your Applications folder.

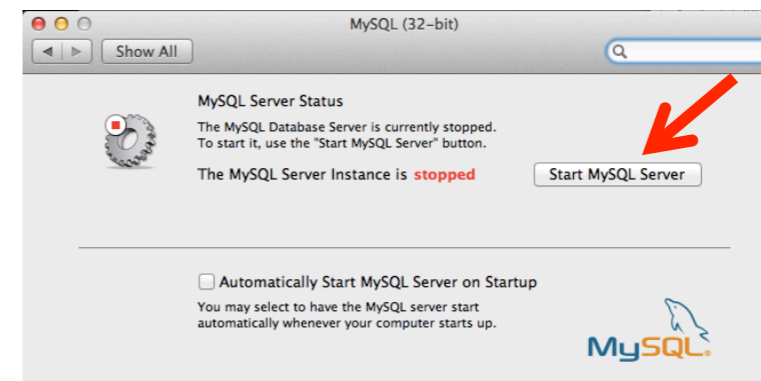


8. Next, to start Navicat, first start your MySQL server, if it is not configured to start automatically Recall,

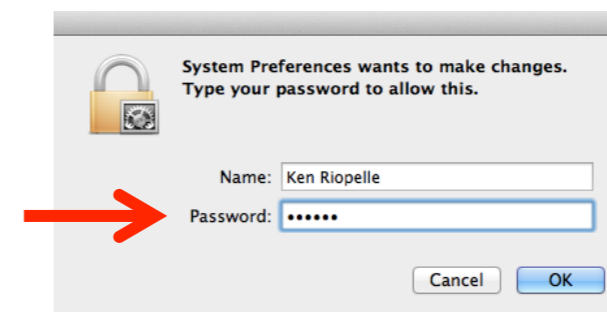
- a. Click the black Apple in the upper left corner
- b. Click “System Preferences ...”
- c. Double click the MySQL icon
- d. Click “OK” at the message



e. Click “Start My SQL server”



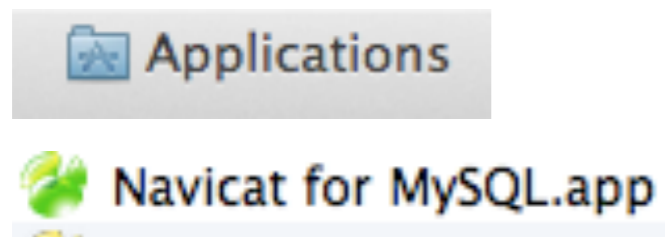
f. Enter your Computer password



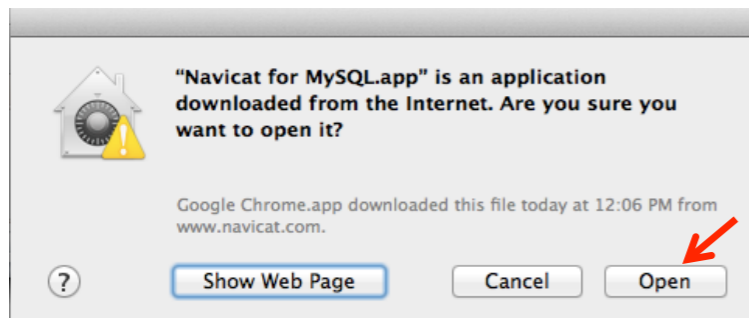
MySQL is now running.



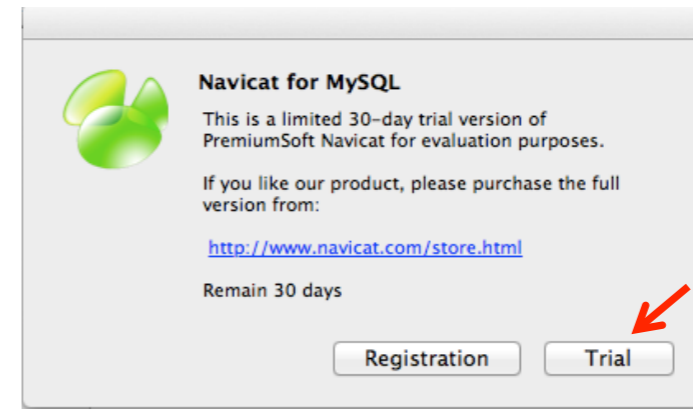
Continue to Start Navicat for MySQL  
9. In the Applications folder, double click on the “Navicat for MySQL.app” to start it.



10. Click Open at the message

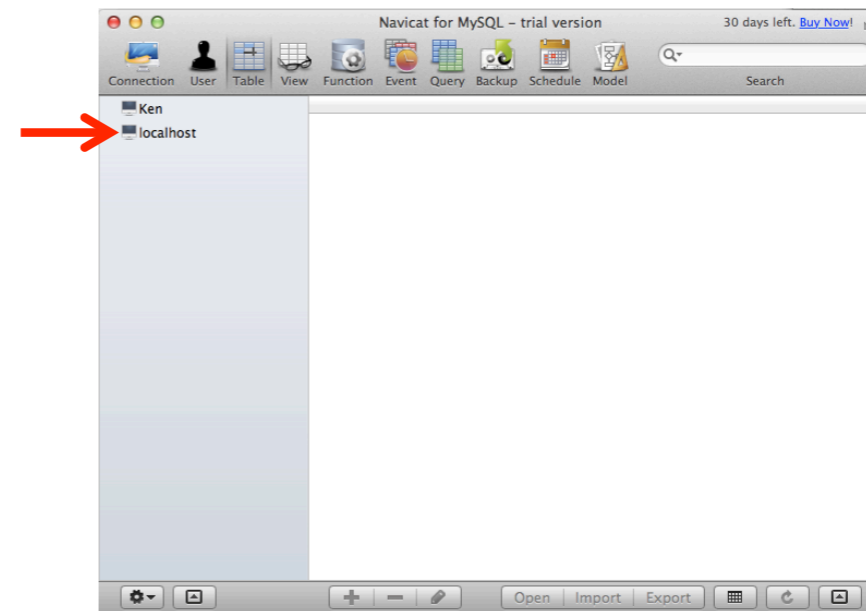


11. Click “Trial,”  
Or “Registration,” if purchased.

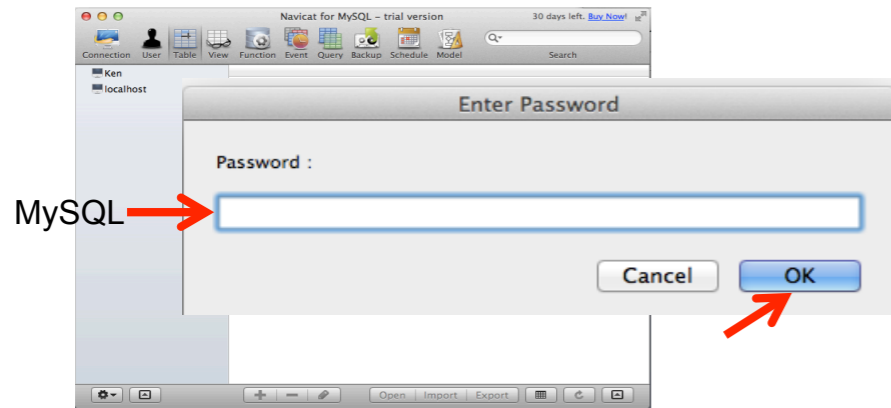


Note: if purchased, when first started, enter the 16 digit Registration Key and click Activate.

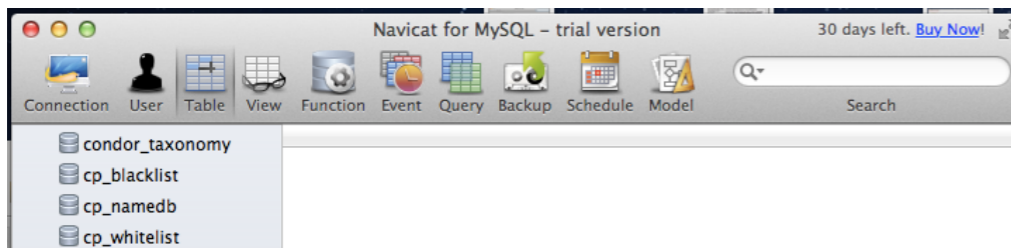
12. Click on “localhost” to see databases



13. Enter your MySQL password,  
If you have one.
14. Click, “OK.”



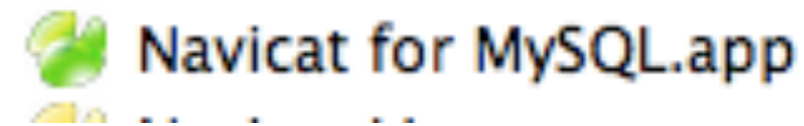
Navicat is ready to use



*Next time you start Navicat ...*

- a. Start MySQL server, if needed
- b. In the Applications folder double click on the “Navicat for MySQL.app” to start it.
- c. Enter your MySQL server password, if you have one, or just press return.

Navicat starts



Note: Navicat for Mac MySQL Prices at:

<http://www.navicat.com/store/navicat-for-mysql>

Apple Mac version: 11	Prices (USD)	Qty	
Navicat for MySQL (Mac OS X) Enterprise Edition #	US\$ 159.00	1	<a href="#">Add to Cart</a>
Navicat for MySQL (Mac OS X) Standard Edition	US\$ 129.00	1	<a href="#">Add to Cart</a>
Navicat for MySQL (Mac OS X) Non-Commercial Edition	US\$ 79.00	1	<a href="#">Add to Cart</a>

# Starting Condor 3 on a Mac 3

There are two ways to start Condor 3:

1. Click on the Condor 3~.jar
2. Use a Java Terminal.app command

Note: Remember to start MySQL first

*It is recommended to start Condor 3 with the Terminal.app because it is not only more efficient, but Java often does not allocate sufficient memory to work with large files.*

# Starting Condor 3 via .jar

## STARTING CONDOR 3 VIA THE .JAR

1. Right click on the Condor ~3.jar
2. Open with the “Jar Launcher”

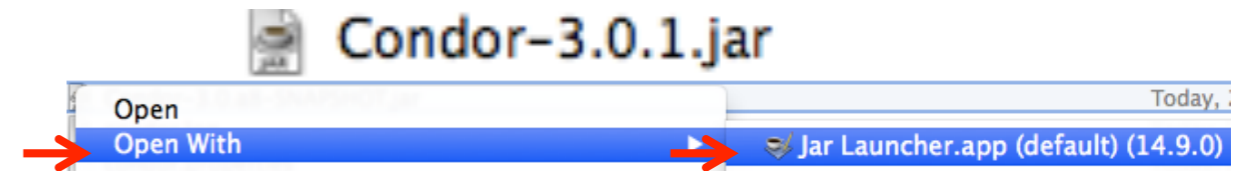
Note: Remember to start MySQL first

*You only have to do this the first time.*

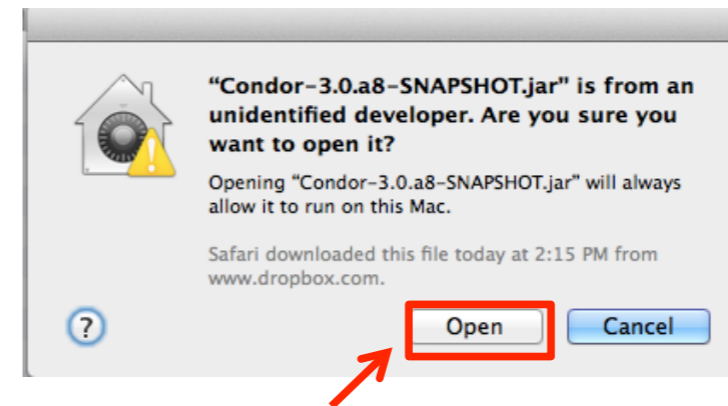
*Afterwards you can just double click the Condor 3 ~ jar.*

*Remember to start MySQL if you have not done so.*

1. In the Condor folder,  
Right Click the “Condor-3 ~.jar.”  
Select “Open With” and “Jar Launcher”

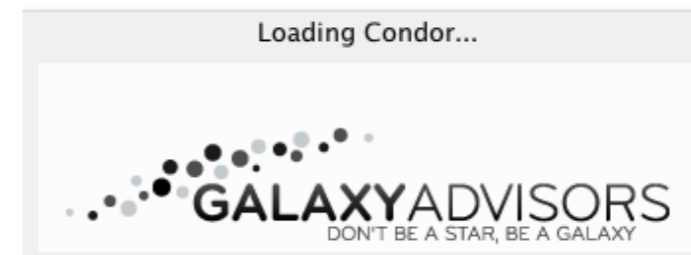


2. Click, Open.



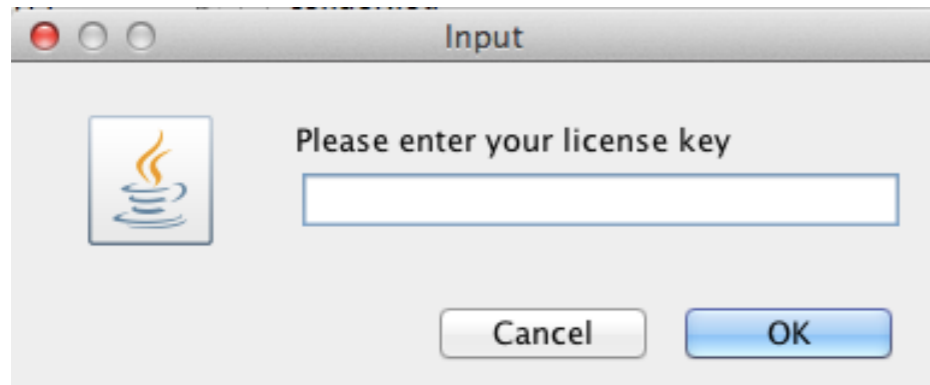
*Note: You only have to do this the first time. Afterwards you can just double click the Condor 3 ~ jar.*

3. Condor 3’s loading screen appears

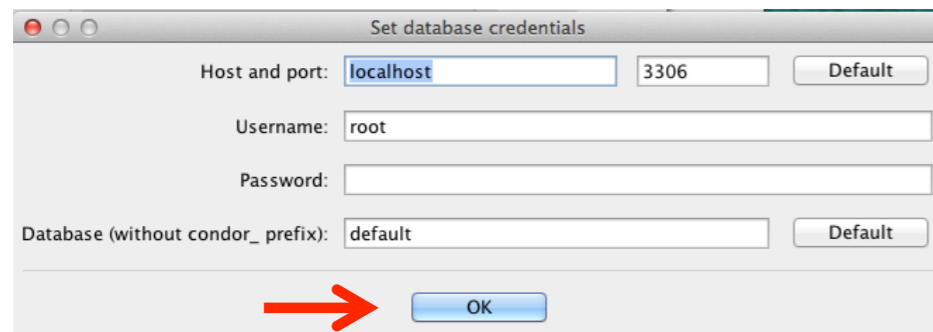


4. Enter or paste in your License Key:

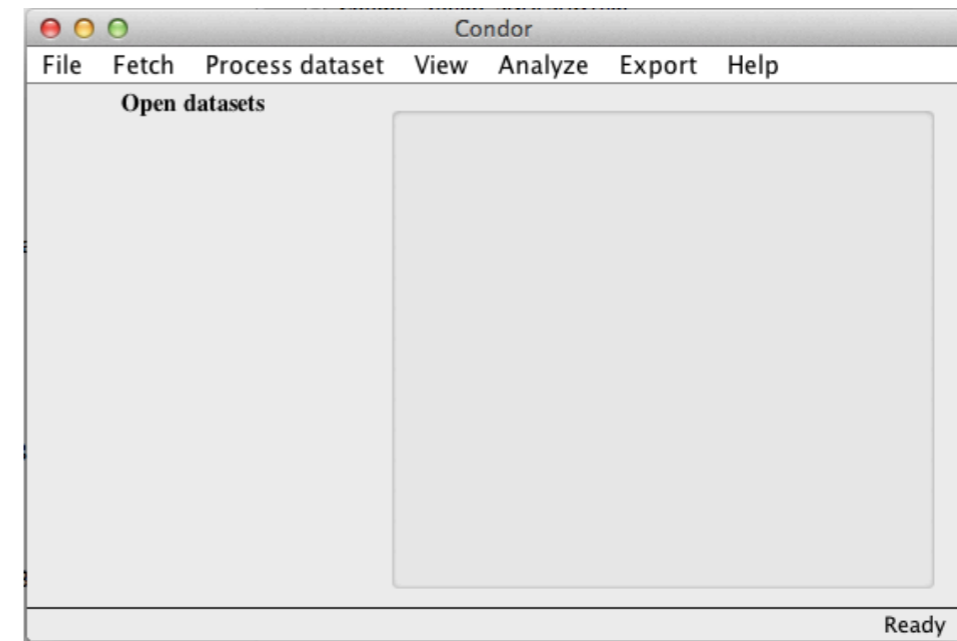
Note: you only have do this once.



5. Next, a set database credentials window opens.  
Enter your MySQL password, if you have one.  
Or, just click, “OK.”



Condor 3's Main Menu Opens



Next it is recommended to . . .

- Install the Google CSE API Key,
- Install the Twitter API Keys, and
- Install the MySQL WorkBench GUI interface for the Mac.

Note: On a PC, the MySQL WorkBench is automatically installed with the MySQL database server

# Starting Condor 3 via Terminal App Terminal.app

## STARTING CONDOR 2 VIA THE TERMINAL.APP

1. Use the Terminal.app with a Java command that allocates a set amount of memory to run Condor 3.

For example,

```
java -Xmx2G -Djava.library.path=. -jar Condor-3.2.0.jar
```

The “2G” sets the memory use.

2. Create a text file, such as, “Condor3\_Terminal.txt” to save the Java command for reuse.

*It is recommended to start Condor 3 with the Terminal.app because it is not only more efficient, because Java often does not allocate sufficient memory to work with large files.*

*Note: MAC users with Java 8 need to install the Java Development Kit (JDK) to start Condor with the Terminal app. See Chapter 3 for details.*

*Remember to start MySQL if you have not done so.*

Use the Terminal.app with a Java command that allocates a set amount of memory to run Condor 3.

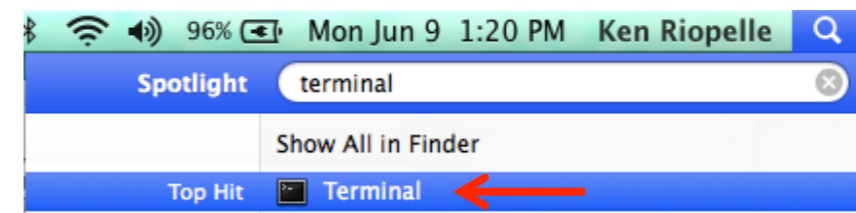
Allocating more memory is more efficient to work with large files

1. Create a text file, such as , “Condor3\_Terminal.txt” with this java command:

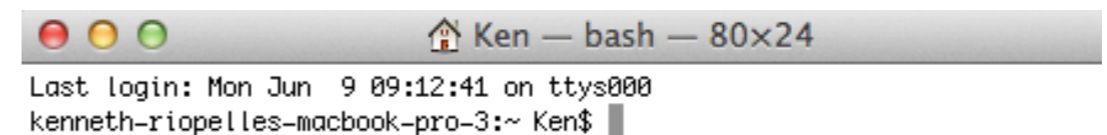
```
java -Xmx2G -Djava.library.path=. -jar Condor-3.2.0.jar
```

*Note: In this example, 2GB on a MacBook Pro with 4GB of memory will be used to run Condor 3  
Condor 3 has been run with 100s of GB in the cloud*

2. Click on the Spotlight magnifying glass, in the upper right corner, and type in the word: Terminal
3. Click on the Terminal.app, to start it



A Terminal window will open

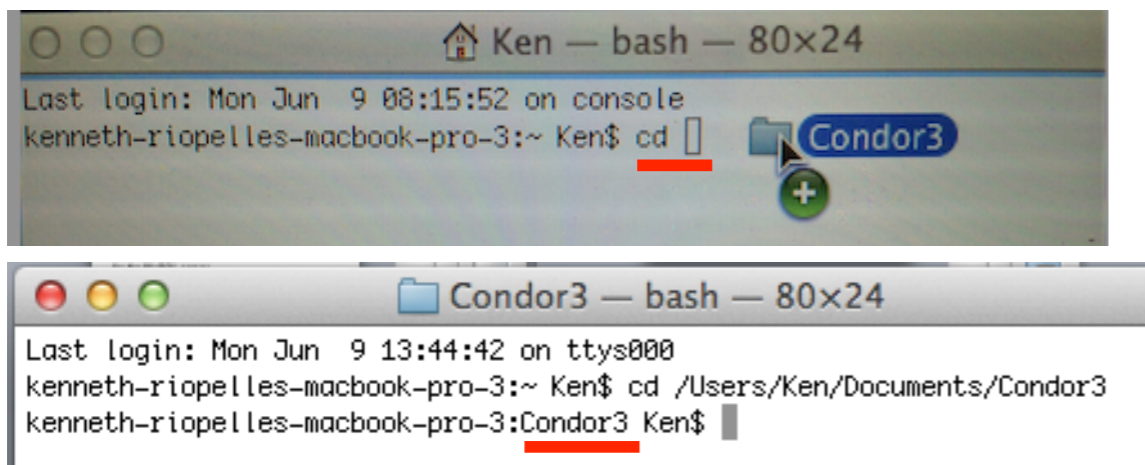




4. In the Terminal window, type: `cd`  
and then press the space bar once.

“cd” means “change directory”

5. Next, use Finder to select your Condor3 folder and drag it over into the Terminal window, which will be indicated by a green + and the folder name, and release, and press return/enter.



You should see your Condor 3 directory or folder name in the file path, such as, Condor3 underlined in red above.

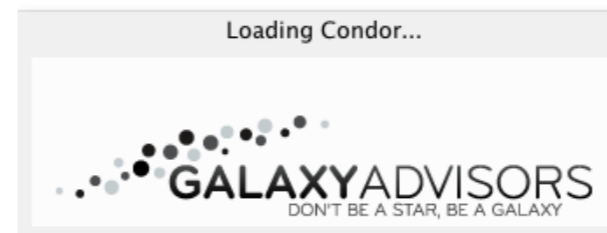
6. Copy and paste the Java command :

**java -Xmx2G -Djava.library.path=. -jar Condor-3.2.0.jar**  
into the Terminal window. Press enter/return

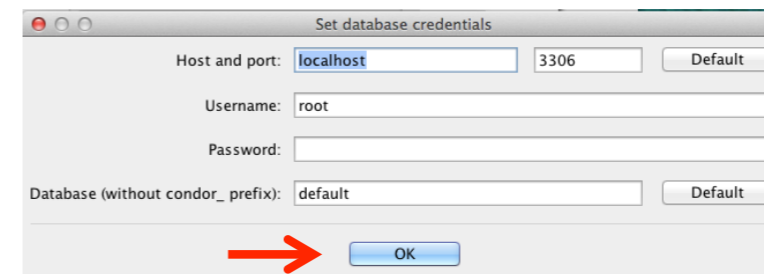
Condor will now start with the specified memory allocation

```
Last login: Mon Aug 10 18:14:25 on ttys001
kenneth-riopelles-macbook-pro-3:~ Ken$
kenneth-riopelles-macbook-pro-3:~ Ken$ cd /Users/Ken/Documents/Condor3
kenneth-riopelles-macbook-pro-3:Condor3 Ken$
kenneth-riopelles-macbook-pro-3:Condor3 Ken$ java -Xmx2G -Djava.library.path=. -jar Condor-3.2.0.jar
```

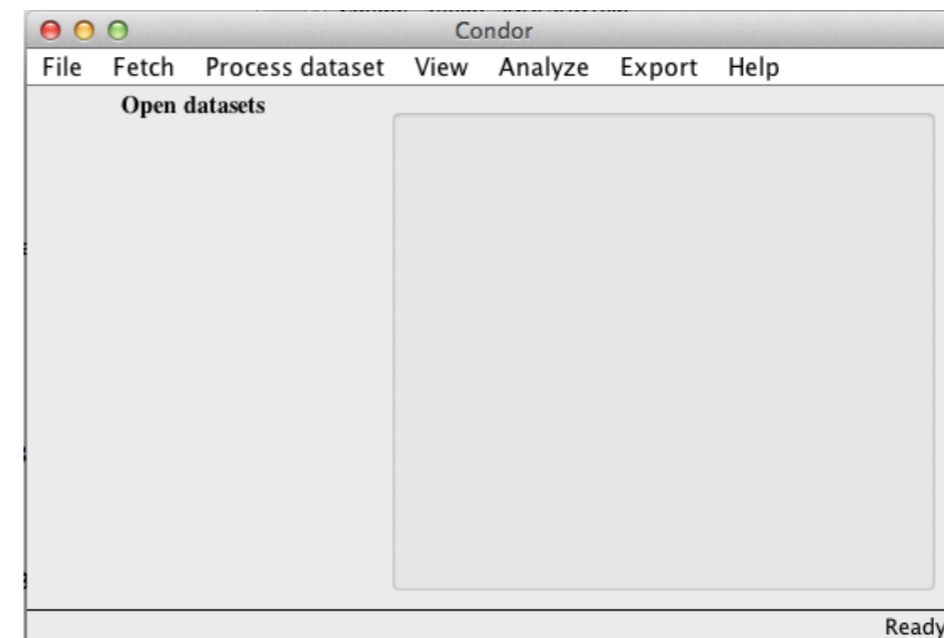
The Condor loading screen appears



7. Next, a set database credentials window opens.  
Enter your MySQL password, if you have one.  
Or, just click, “OK.”



Condor 3's Main Menu Opens



# Installation on a PC

There are four steps to installing Condor 3 on a PC:

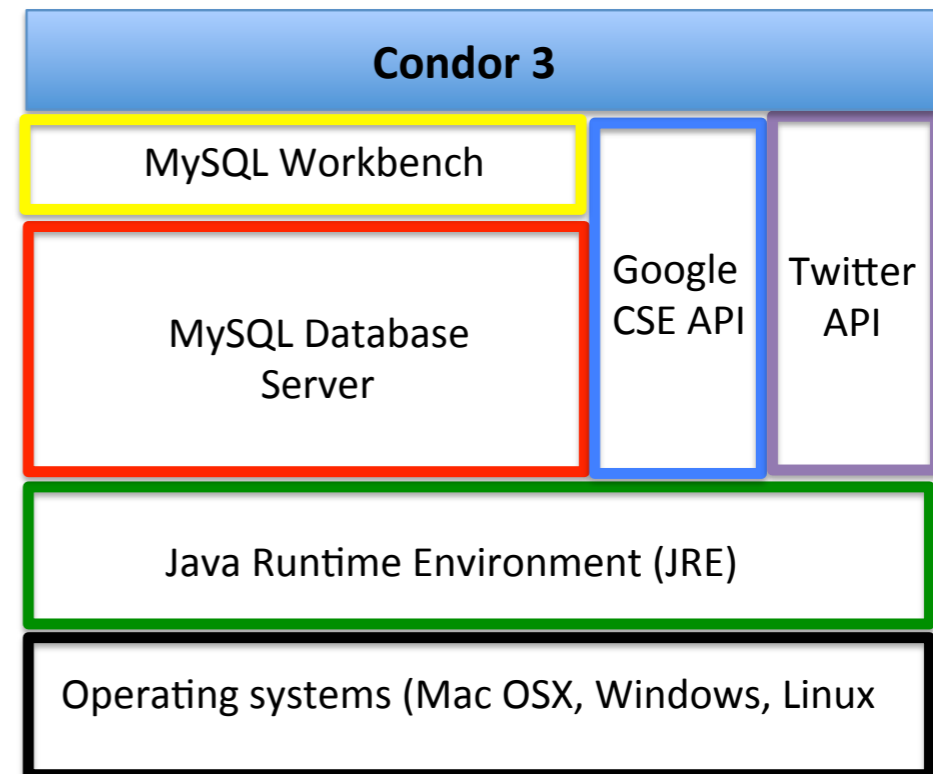
1. Check to make sure you have all the Microsoft High Priority Updates installed
2. Check to make sure you have the latest Java 7 or 8 update installed.

**Note: Java 6 is not supported.**

3. Install the MySQL database server, and
4. Install the Condor 3 software

**Note:** The MySQL Workbench software which acts as graphical user interface for the MySQL server will be installed with the MySQL installation.

## Condor 3 Software Building Blocks



Condor 3 depends upon many software programs to run:

- At the lowest level is the computer's operating system (Mac OS X, Windows, Linux)
- Next is the Java Runtime Environment (JRE)
- The MySQL database server is where Condor 3 stores all the network data nodes and links from Facebook, Web, Twitter, Wikipedia, and Email.
- MySQL Workbench acts a graphical user interface for MySQL database server
- Last, the Application Program Interfaces or APIs from Google and Twitter enable custom query fetching.

# Install Microsoft Updates

## INSTALL MICROSOFT UPDATES

This section describes how to install Microsoft updates.

### Note:

This illustration uses AWS Workspaces.

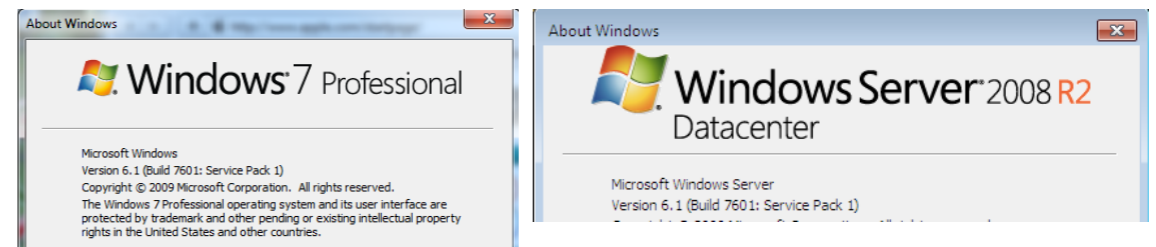
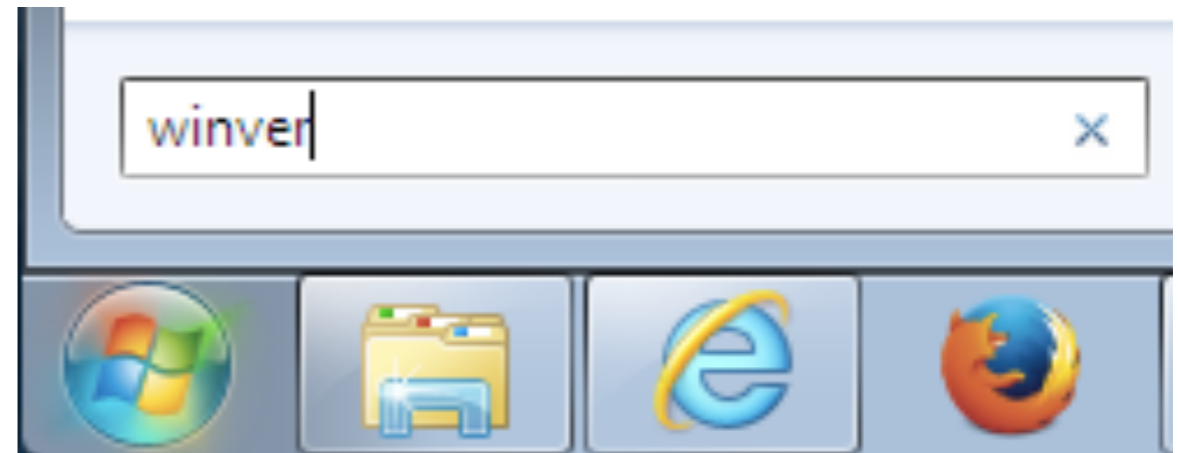
A Windows 8 or higher version may vary slightly.

Amazon Workspaces uses a Windows Server 2008 R2 SP1, (version 6.1 Build: 7601, SP1).

To identify what version of Windows you are running,

go to Start and type in: `winver` and press Enter.

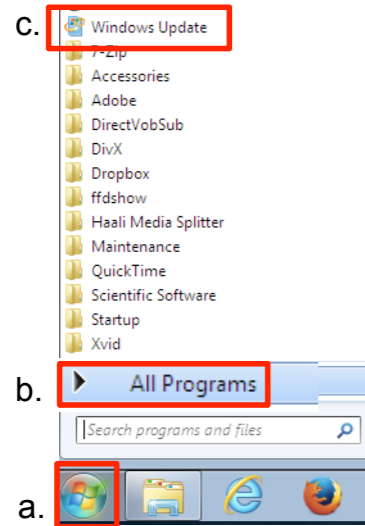
A window will pop up with the Windows version you are running. Windows 7 is version 6.1 (Build: 7601, SP1)



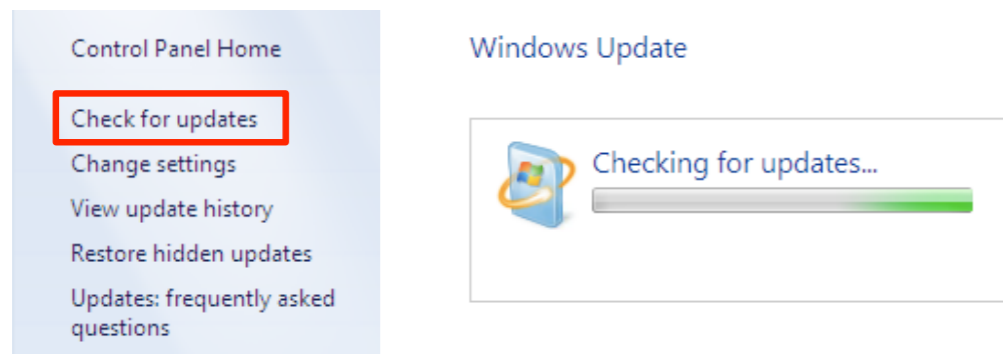
[http://en.wikipedia.org/wiki/Windows\\_7](http://en.wikipedia.org/wiki/Windows_7)

# Step 1: Check that your Microsoft High Priority Updates are installed

1. Click, the Windows Start (a) > All Programs (b)> Windows Update (c)

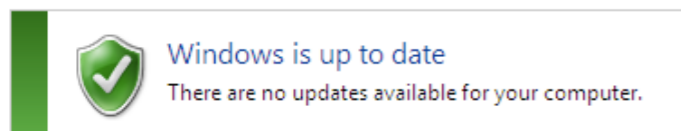


2. In the left hand panel, Click Check for updates



3. If needed, install updates until Windows is up to date.

Windows Update



# Install Java on a PC

## INSTALL JAVA ON A PC

This section describes how to install or update Java on a PC.

**Java 7 or 8 is required. Java 6 is not supported.**

What is Java?

Java is a programming language and computing platform first released by Sun Microsystems in 1995. <sup>1</sup>

In January 2010, Oracle purchased Sun Microsystems and now maintains Oracle Java. Condor 3 requires Java to run.

<sup>1</sup> [http://www.java.com/en/download/faq/whatis\\_java.xml](http://www.java.com/en/download/faq/whatis_java.xml)

**Java is free.**

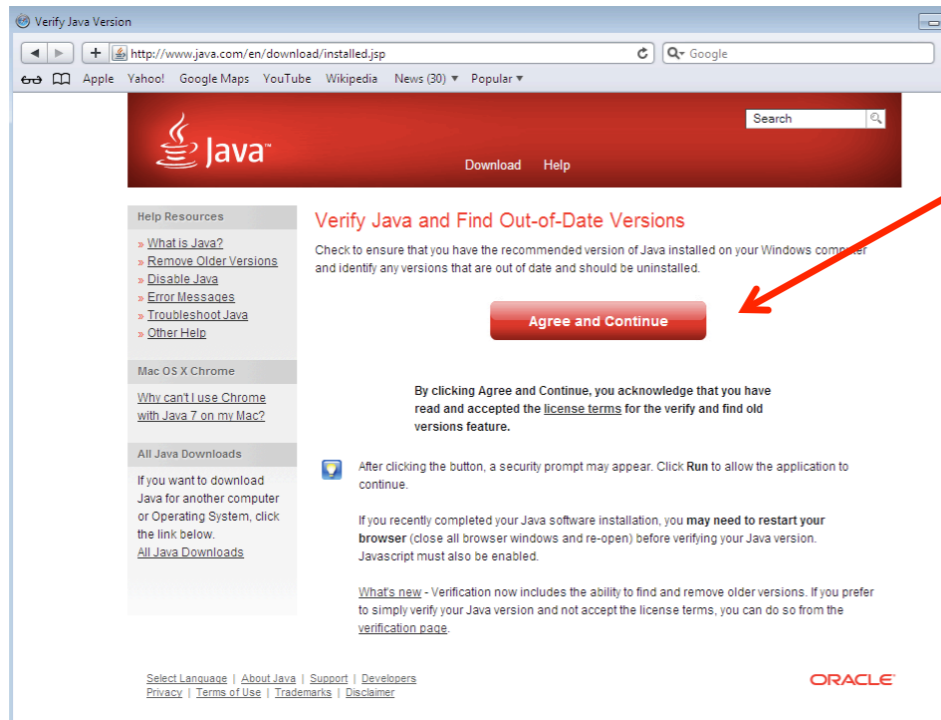
## Step 2: Install or update Java

1. Start your browser, such as Safari, Firefox, IE, etc.
2. Go to this URL:

<http://www.java.com/en/download/testjava.jsp>



### 3. Click Agree and Continue

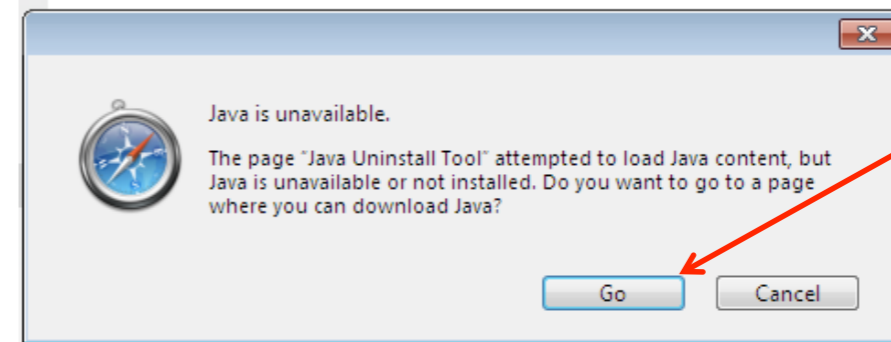


If the latest version of Java is installed, then you will get a message like this.



### 4. If not, Click GO

The next series of steps will install Java

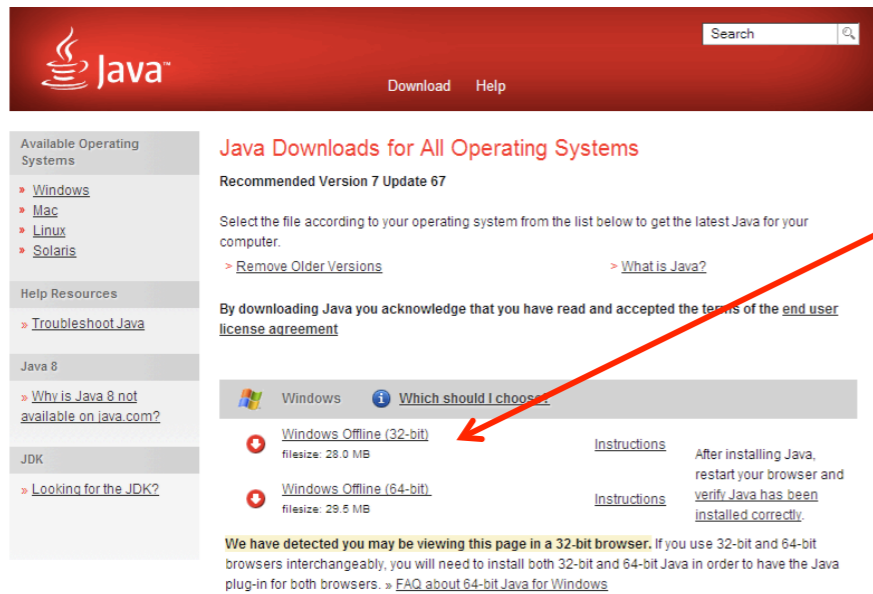


### 5. Click Free Java Download



<http://www.java.com/en/>

## 6. Click on Windows Offline 32-bit

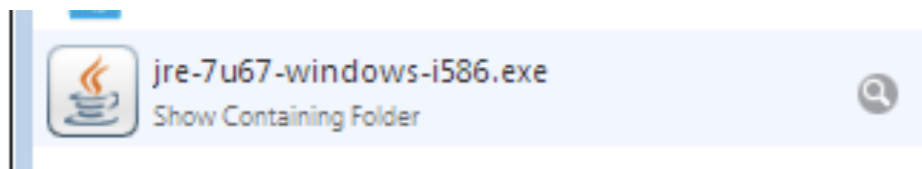


<http://www.java.com/en/download/manual.jsp?locale=en>

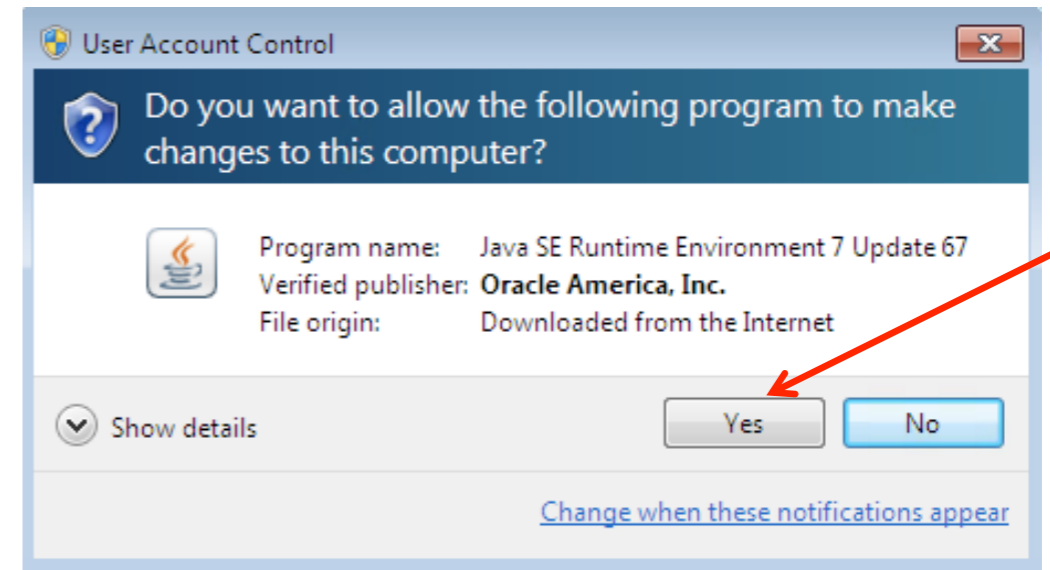
## 7. Click Save



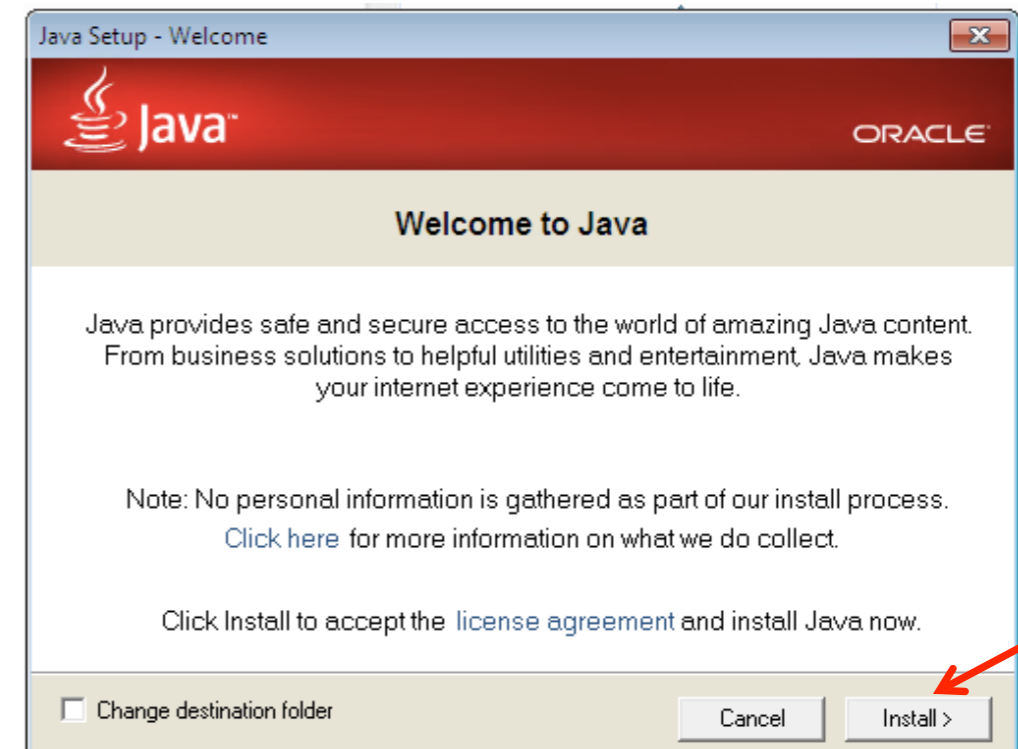
## 8. Go to your Downloads Folder and double click on the jre~.exe file



## 9. Click Yes



## 10. Click Install



## 11. A Java Setup Progress bar appears



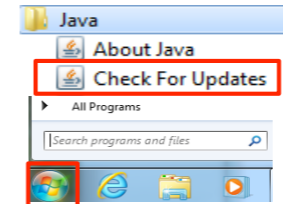
## 12. A Java Complete messages appears that you have successfully installed Java

## 13. Click Close

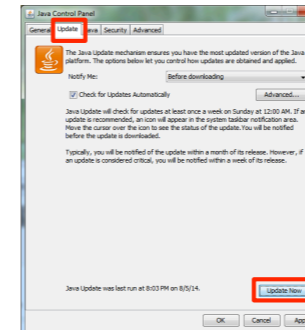


## To check for Java Updates

## 14. Click Start > All Programs > Java > Check for Updates”



## 15. Click Update Tab, Update Now.



You have completed two of the four steps to installing Condor 3 on a PC.

- ✓ 1. All the Microsoft High Priority Updates are installed
- ✓ 2. The latest Java update is installed.

The Next two steps are:

1. Install the MySQL database server
2. Install the Condor 3 software



# Install MySQL on a PC

## INSTALL MYSQL ON A PC

This section describes how to install MySQL on a PC.

You have completed two of the four steps to installing Condor 3 on a PC.

- 1. All the Microsoft High Priority Updates are installed
- 2. The latest Java update is installed.

The Next two steps are:

- 3. Install the MySQL database server, and
- 4. Install the Condor 3 software

Note: The MySQL Workbench software which acts as graphical user interface for the MySQL server will be installed with the MySQL installation.

## Step 3: Install MySQL

1. Start your browser: IE, Safari, Firefox, etc.
2. Go to this URL:

<http://dev.mysql.com/downloads/mysql/>

3. Click the Download button for MySQL Installer 5.6 for Windows



### Note:

Different browsers have slightly different page rendering and security messages prompts, but the following steps will serve as a close guide for you to follow.

## 4. Click, Download

Note: The “web-community” option assumes you have an internet connection to your PC or AWS Workspace during installation

**Download MySQL Installer**

MySQL Installer provides an easy to use, wizard-based installation experience for all your MySQL software needs. Included in the product are the latest versions of:

- MySQL Server
- MySQL Connectors
- MySQL Workbench and sample models
- Sample Databases
- MySQL for Excel
- MySQL Notifier
- MySQL for Visual Studio
- Documentation

MySQL open source software is provided under the GPL License. OEMs, ISVs and VARs can purchase commercial licenses.

**Choosing the right file:**

- If you have an online connection while running the MySQL Installer, choose the `mysql-installer-web-community` file.
- If you do NOT have an online connection while running the MySQL Installer, choose the `mysql-installer-community` file.

Note: MySQL Installer is 32 bit, but will install both 32 bit and 64 bit binaries.

Windows (x86, 32-bit), MSI Installer	5.6.20	1.5M	<b>Download</b>
--------------------------------------	--------	------	-----------------

(mysql-installer-web-community-5.6.20.0.msi) MD5: 47ec82e813b9d2f94f2d2b1e6bc9a15fd | Signature

<http://dev.mysql.com/downloads/windows/installer/5>

## 5. Click: Login, Sign up, or “No thanks, just start my download”

**Begin Your Download - mysql-installer-web-community-5.6.20.0.msi**

Login Now or Sign Up for a free account.

An Oracle Web Account provides you with the following advantages:

- Fast access to MySQL software downloads
- Download technical White Papers and Presentations
- Post messages in the MySQL Discussion Forums
- Report and track bugs in the MySQL bug system
- Comment in the MySQL Documentation

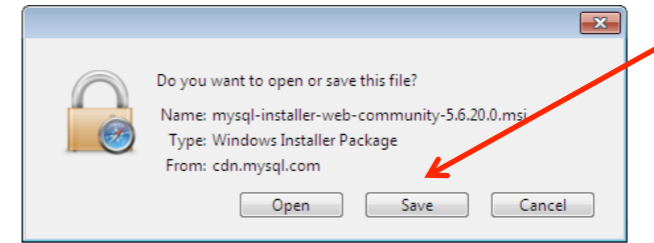
[Login »](#) using my Oracle Web account

[Sign Up »](#) for an Oracle Web account

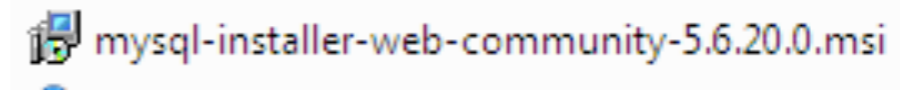
MySQL.com is using Oracle SSO for authentication. If you already have an Oracle Web account, click the Login link. Otherwise, you can signup for a free account by clicking the Sign Up link and following the instructions.

[No thanks, just start my download.](#)

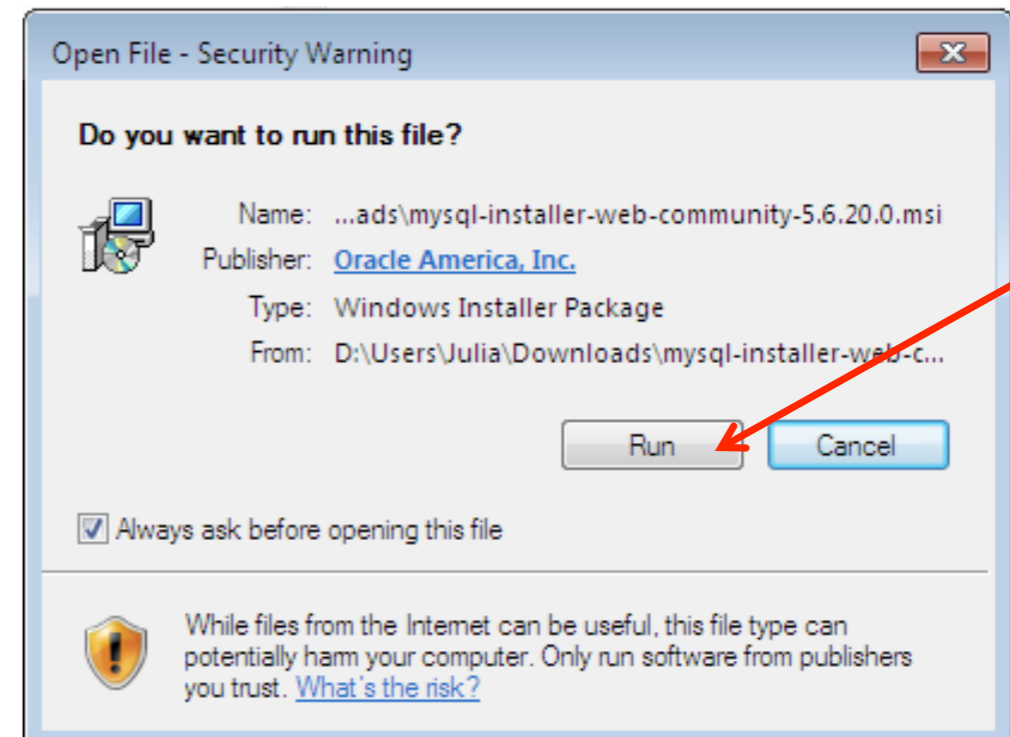
## 6. Click Save



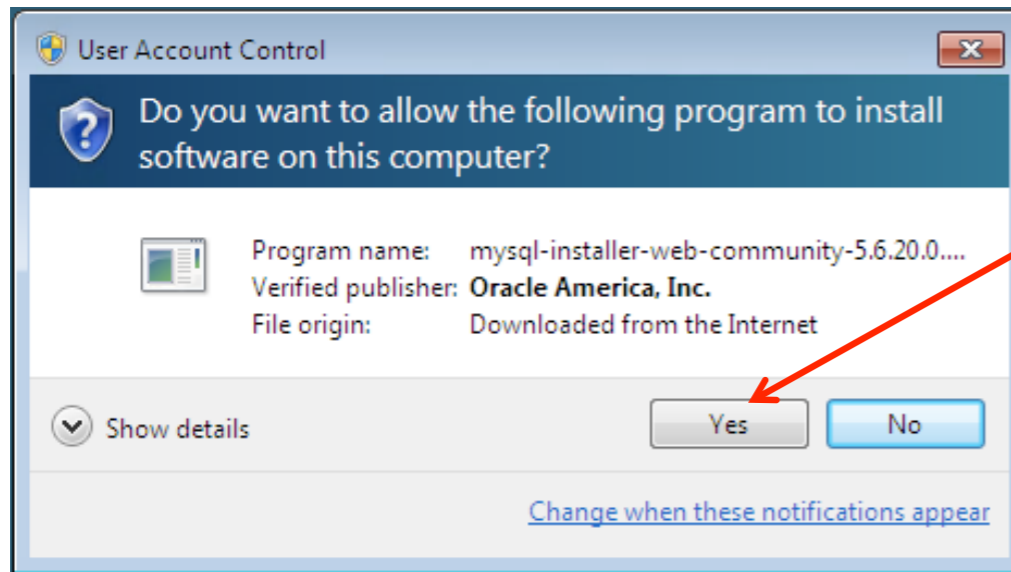
## 7. Go to your Downloads Folder and double click on the file “mysql~.msi” file



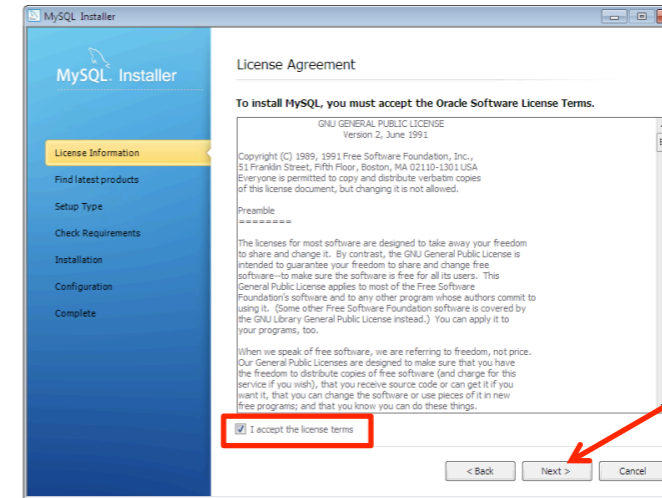
## 8. Click Run



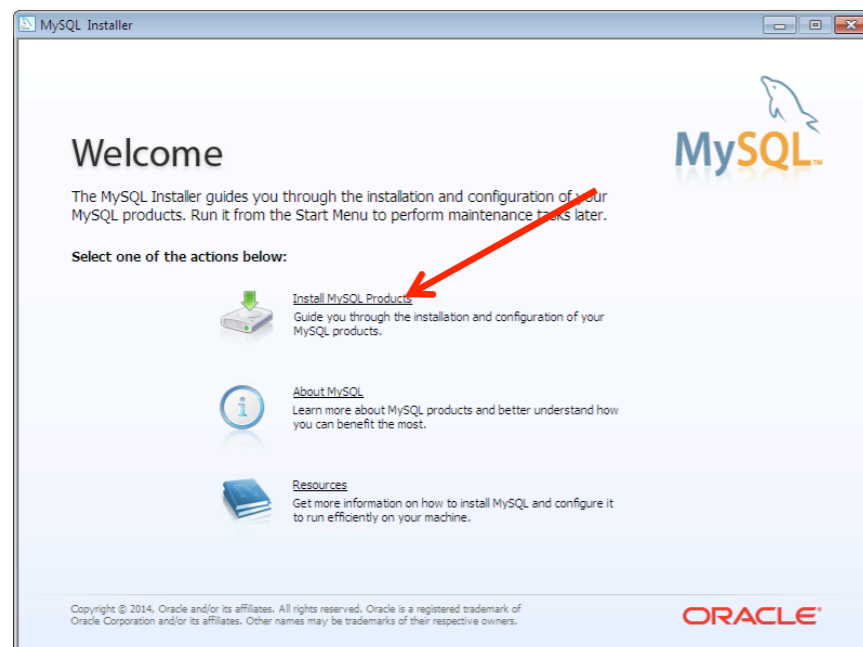
## 9. Click Yes



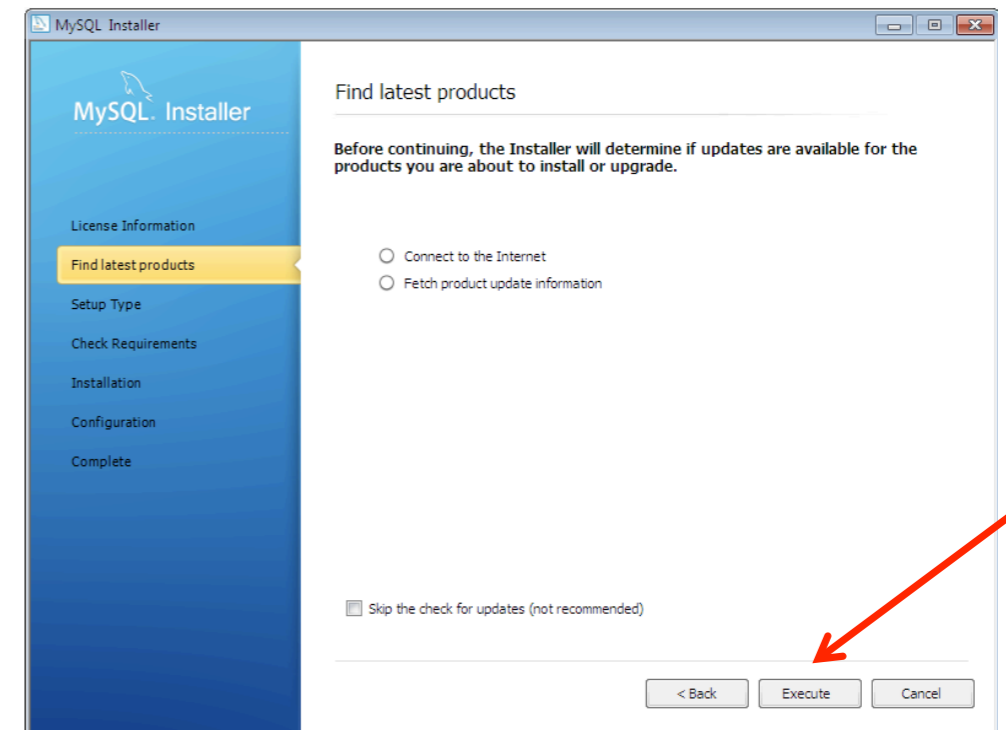
- 11. Check the box, "I accept the license terms"
- 12. Click Next.



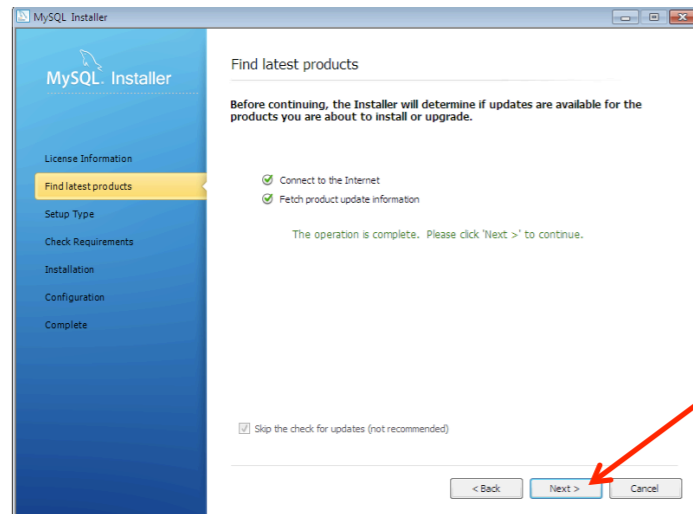
## 10. Click Install MySQL Products



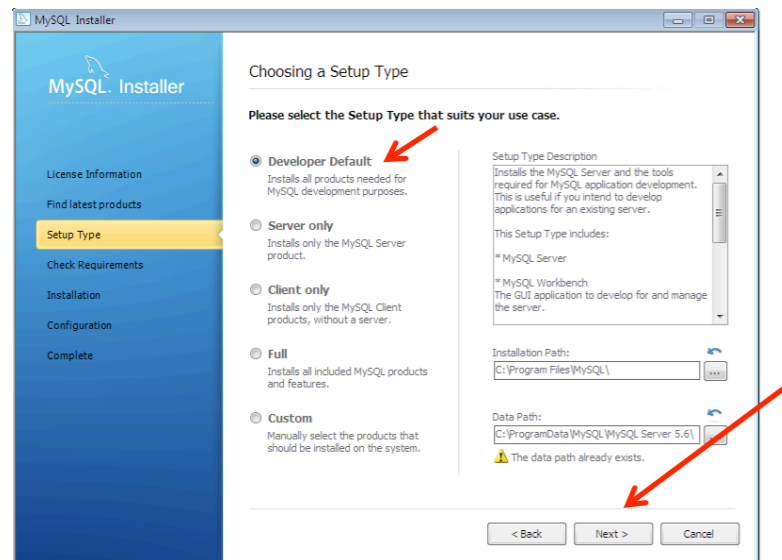
## 13. Click Execute



## 14. Click Next (after “operation is complete”)



## 15. Choose Developer, Click Next



## Note: Developer Installs the following:

Installs the MySQL Server and the tools required for MySQL application development. This is useful if you intend to develop applications for an existing Note

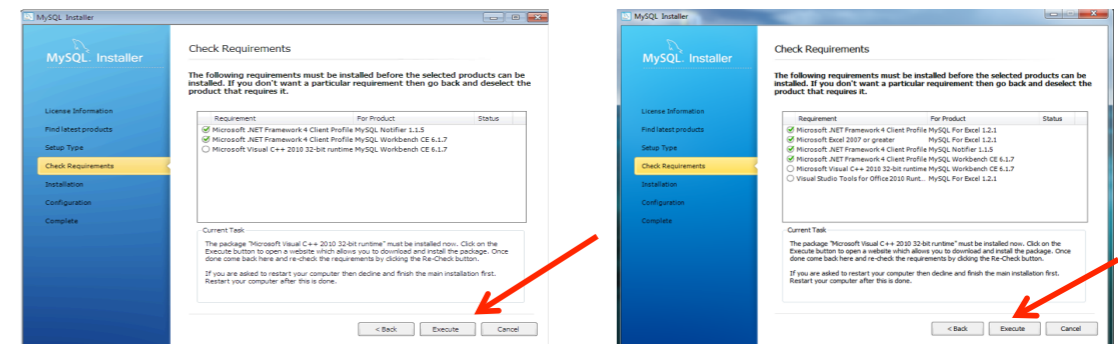
This Setup Type includes:

- MySQL Server
- \* MySQL Workbench  
The GUI application to develop for and manage the server.
- \* MySQL Visual Studio Plugin  
To work with the MySQL Server from VS.
- \* MySQL Connectors  
Connector/Net, Java, C/C++, ODBC and others.
- \* Examples and tutorials  
To help you get started with your development.
- \* Documentation  
Allows you to read the documentation offline.

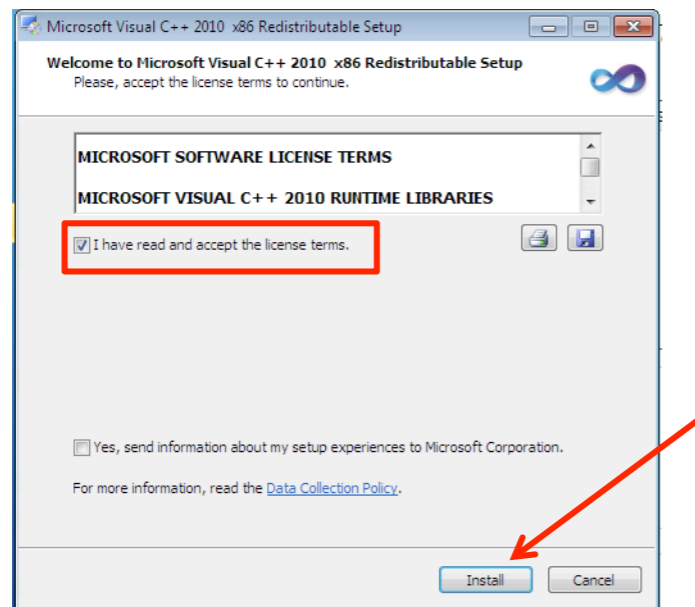
## 16. Click Execute, to add required software

Note: The required list of software will vary depending upon your existing software installation.

Here are two examples.

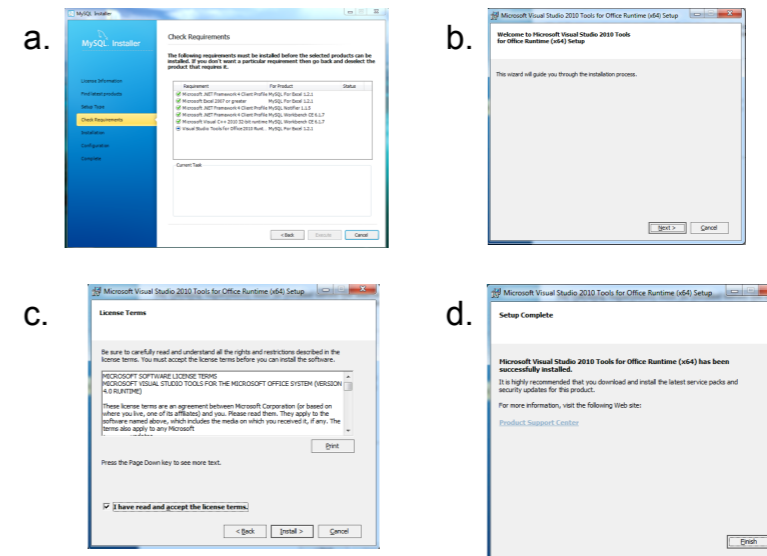


## 17. Check “I have ...”, and Click Install

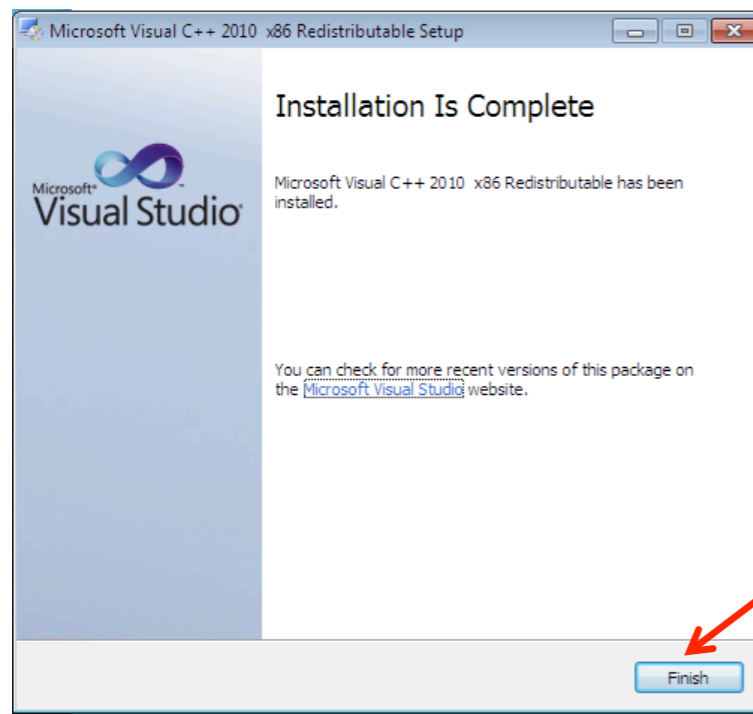


Note: If you have more than one added pre-requisite software to install, you will be stepped through additional installations.

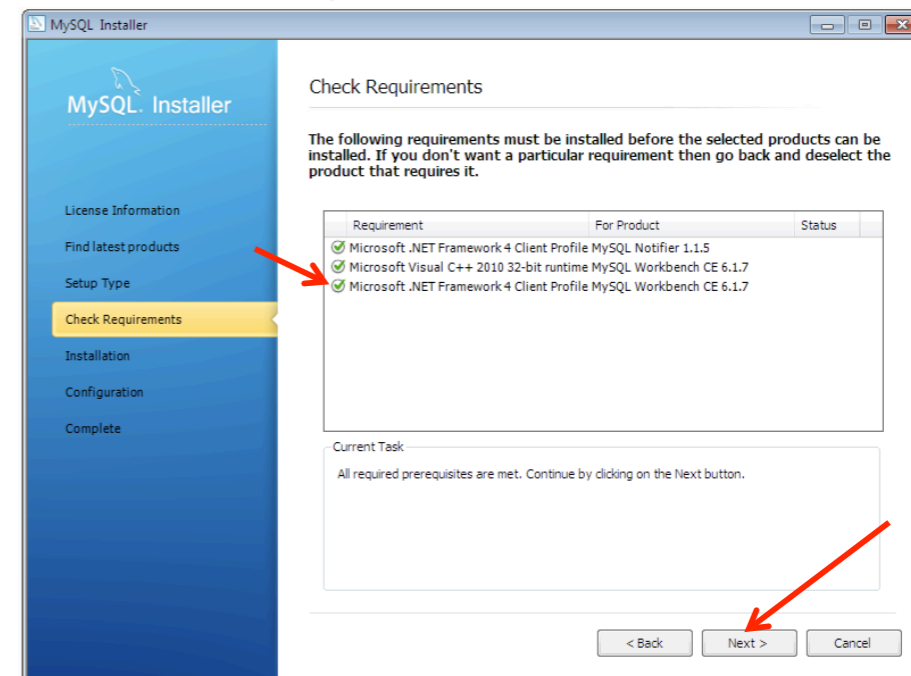
For example, here is second required installation and the four next screens (a ,b, c and d).



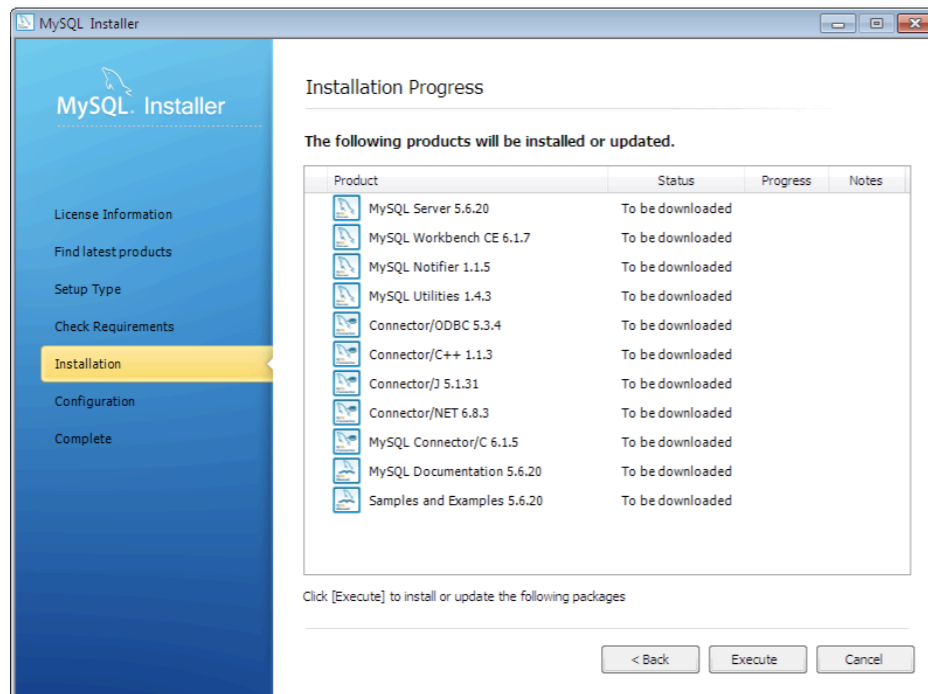
## 18. Click Finish



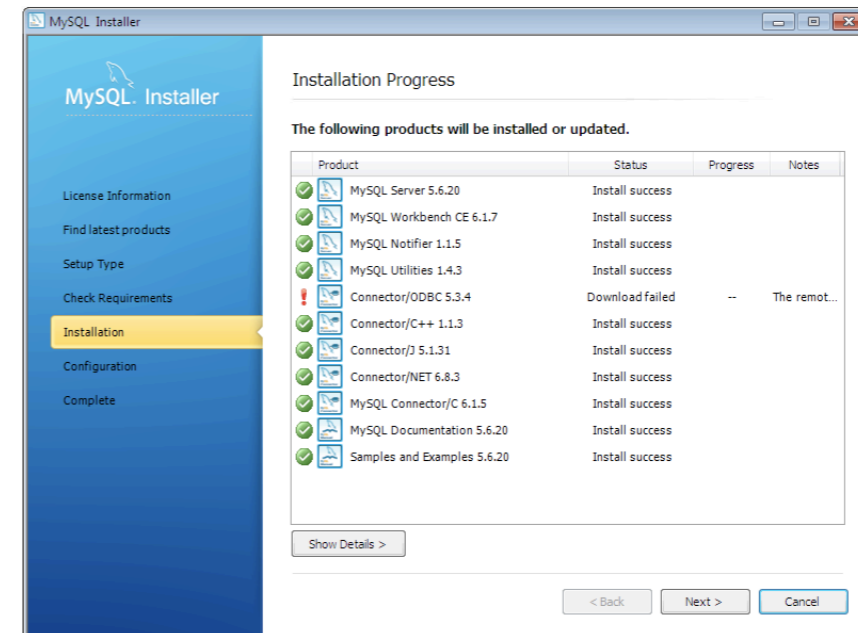
## 19. Click Next (final requirement installed)



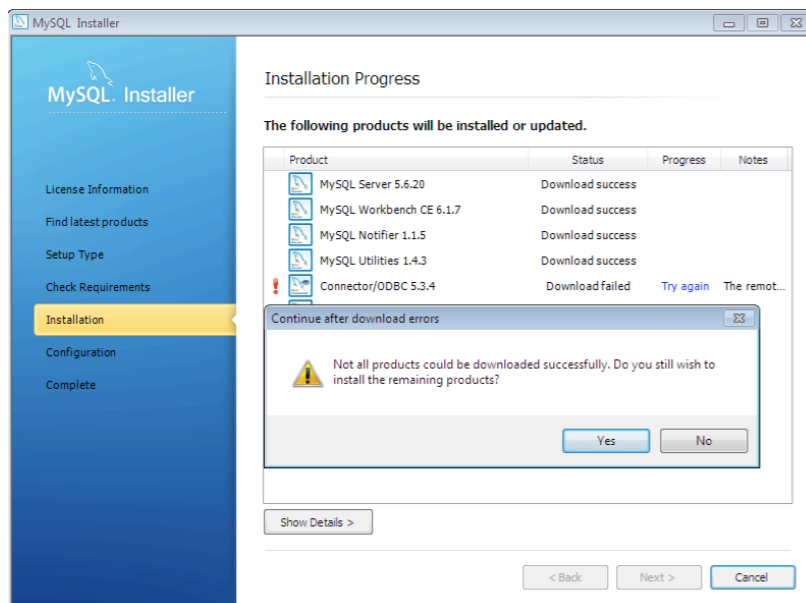
## 20. Click Execute



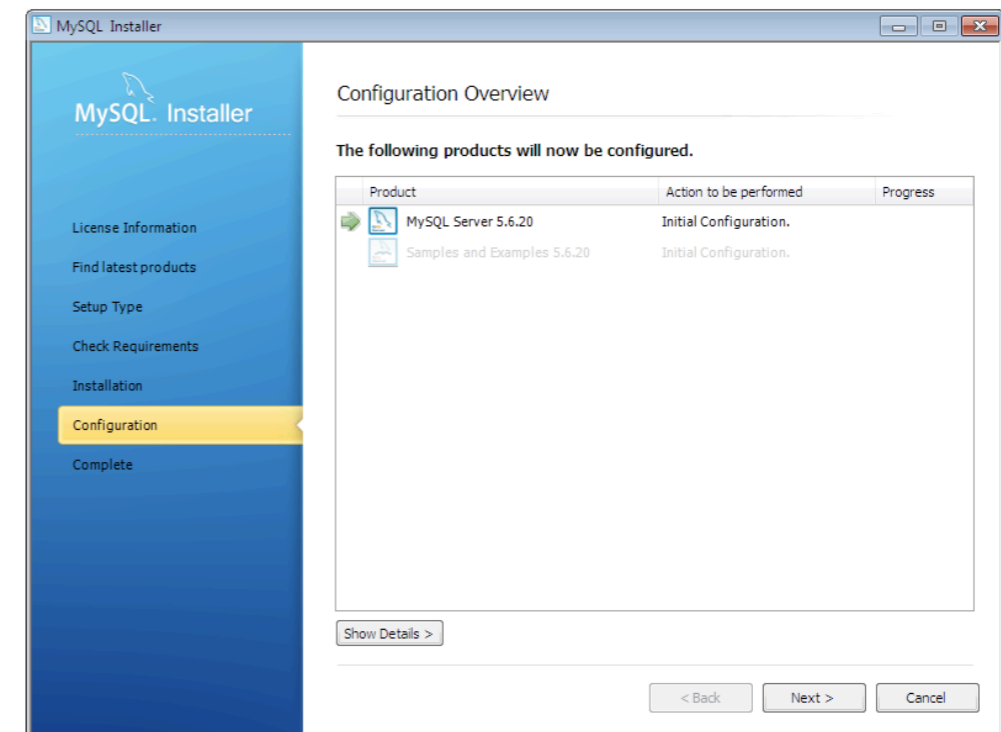
## 22. Click Next after all the files have been downloaded



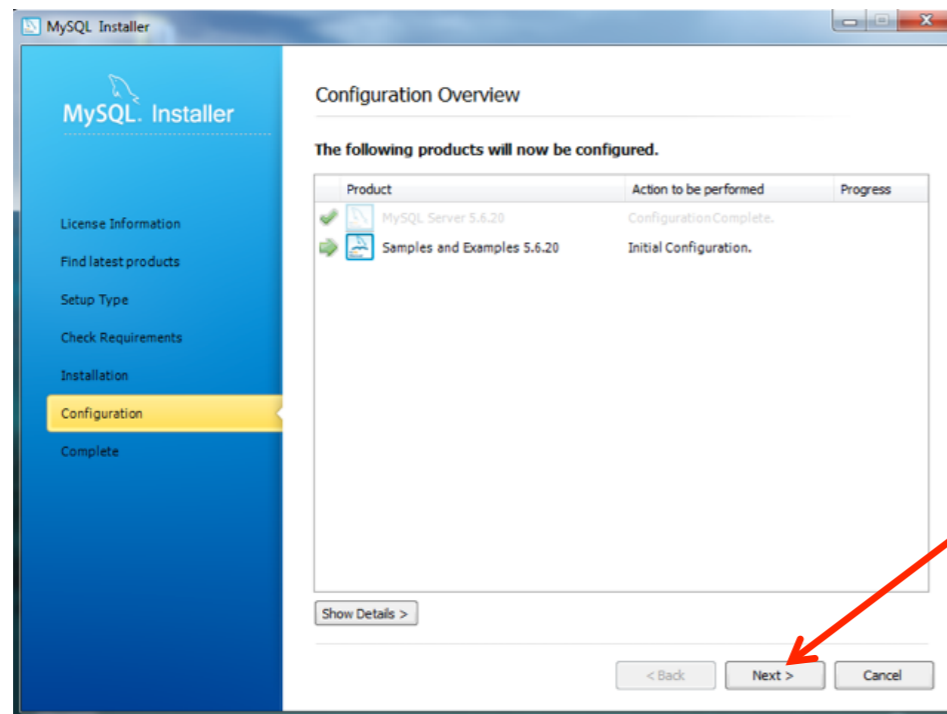
## 21. Click Yes (Note: you did not need this to run Condor 3)



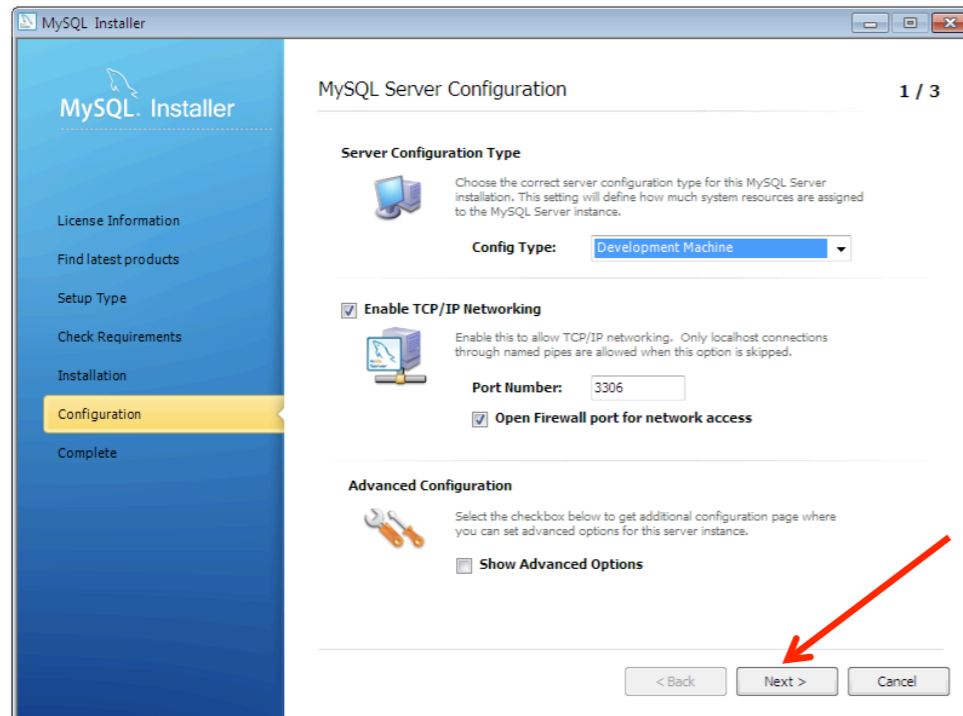
## 23. Click Next



## 24. Click Next

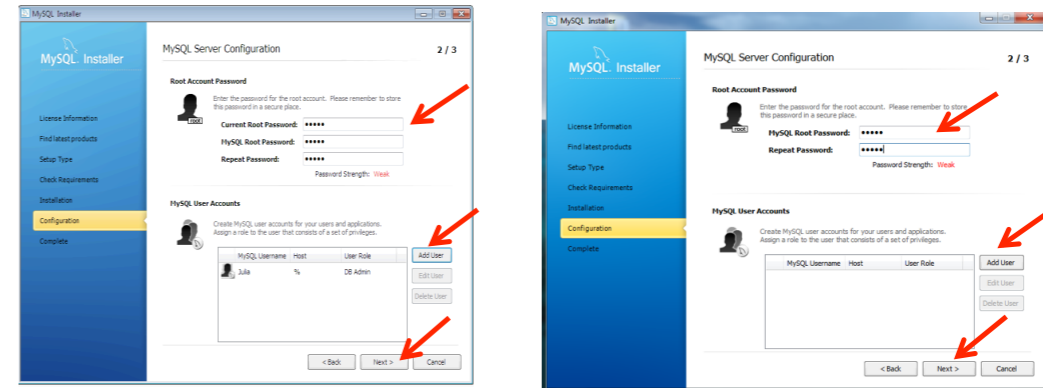


## 25. Click Next

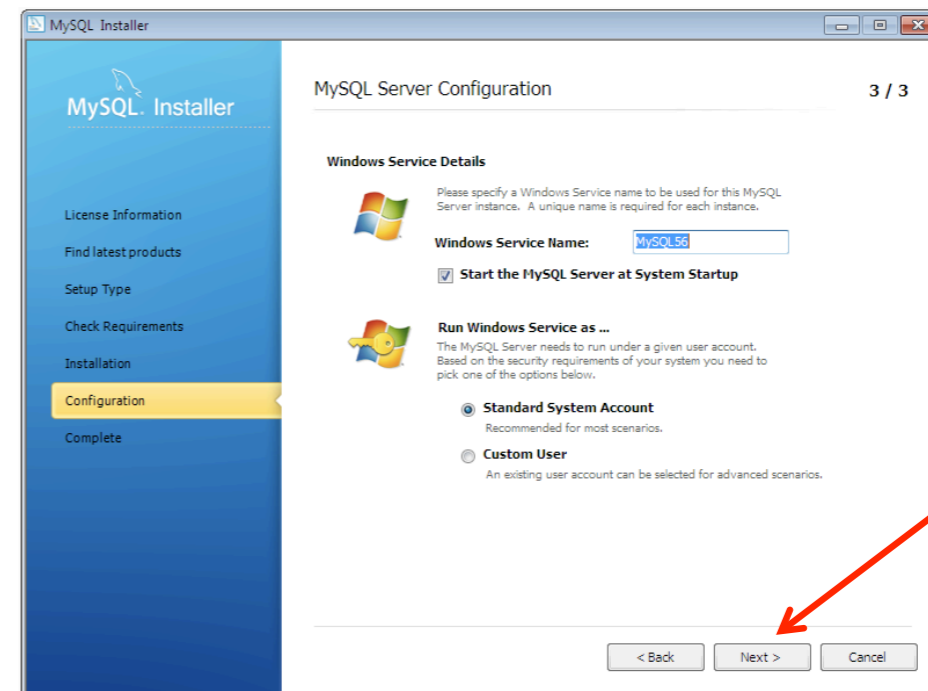


## 26. Create a Root Password is required 27. Add a User Account and Password 28. Click Next

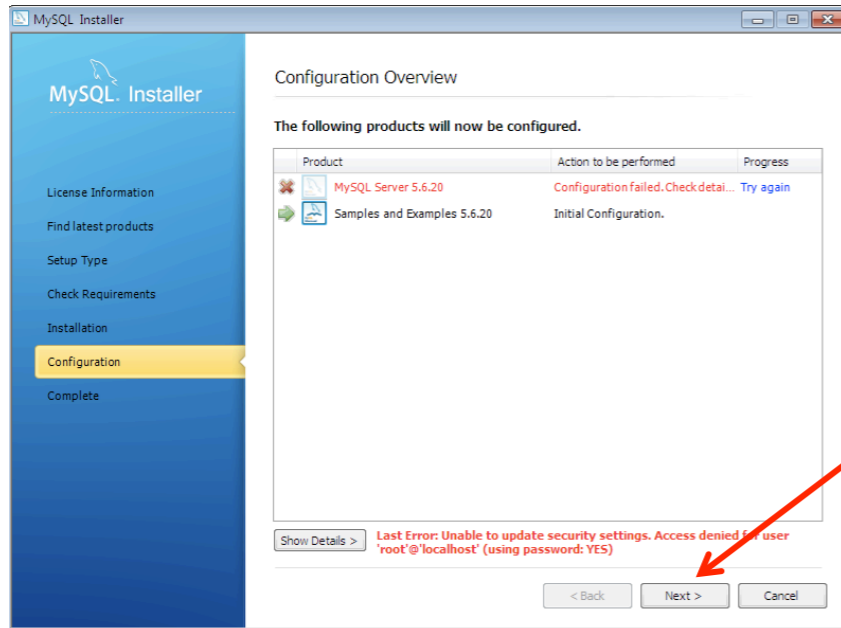
Note: this screen may vary, with asking for the current root password and others not.



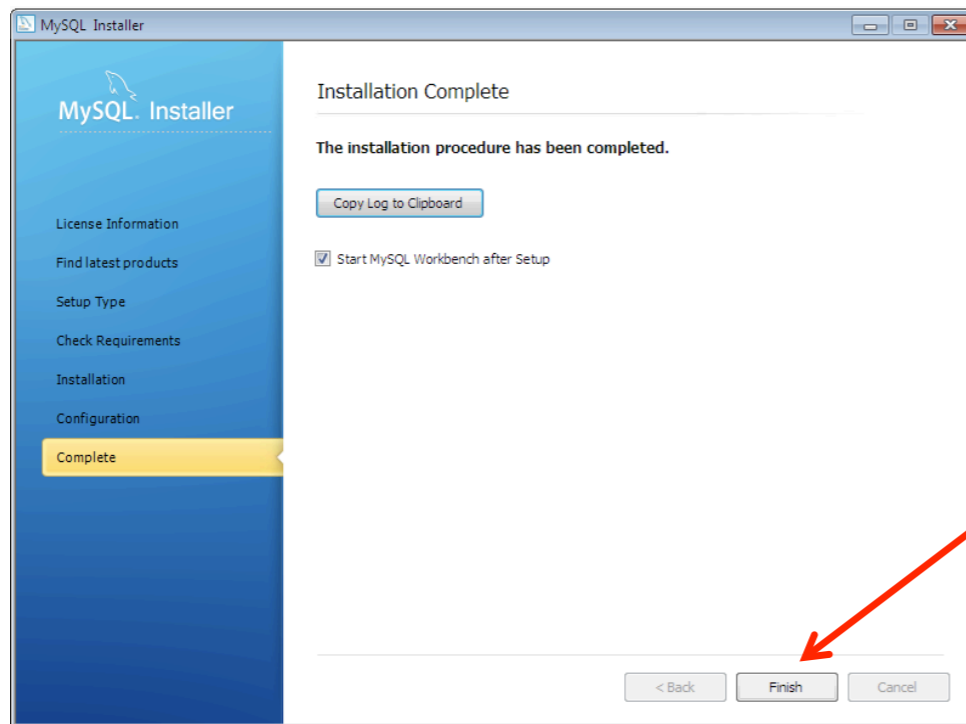
## 29. Click Next



30. Click Next, Note: ignore error if present

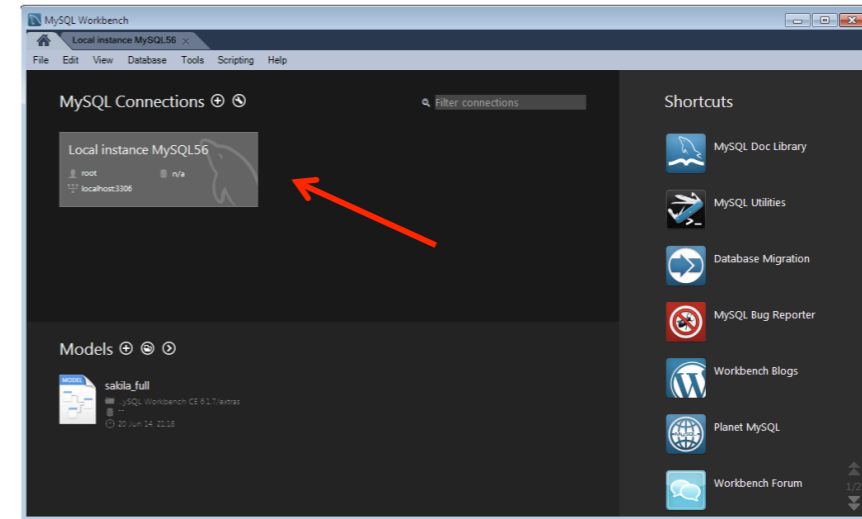


31. Click Finish



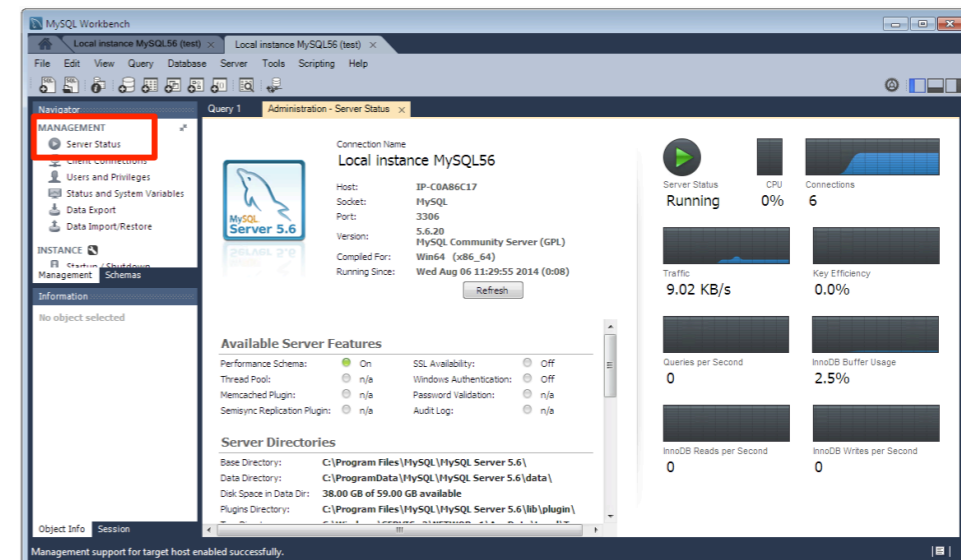
32. MySQL Workbench starts after a short time

33. Click on Instance



34. Click on Management, Server Status

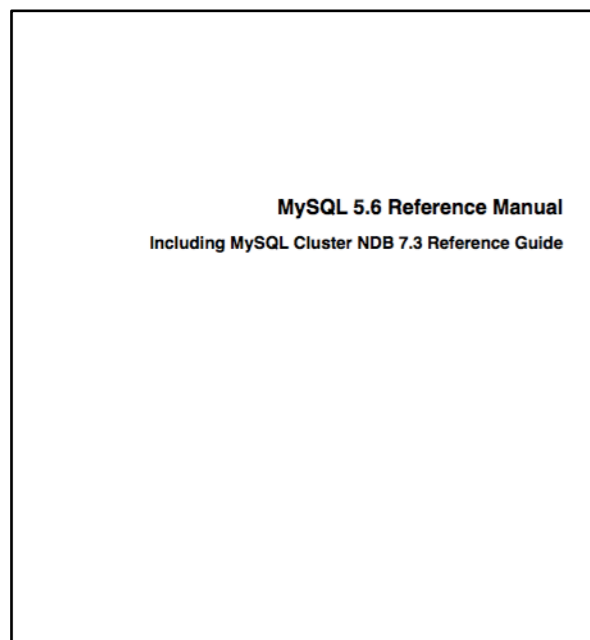
This Confirms MySQL is running 😊





Note: The MySQL 5.6 Server Reference Manual (31.5 MB) can be downloaded at:

<http://downloads.mysql.com/docs/refman-5.6-en.a4.pdf>



You have completed three of the four steps to installing Condor 3 on a PC.

- 1. All the Microsoft High Priority Updates are installed
- 2. The latest Java update is installed.
- 3. Install the MySQL database server

Next, and last step:

- 4. Install the Condor 3 software

# Install the Condor 3 ~.jar on a PC

## INSTALL THE CONDOR 3~.JAR

This section describes how to install the Condor 3 ~.jar software.

You have completed three of the four steps to installing Condor 3 on a PC.

- 1. All the Microsoft High Priority Updates are installed
- 2. The latest Java update is installed.
- 3. Install the MySQL database server

Next, and last step:

- ➔ 4. Install the Condor 3 software

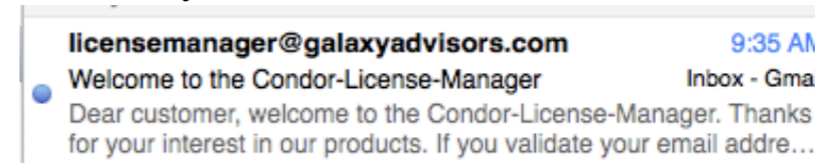
### Note:

After the 14 day Condor 3 trial period ends, users need to email Peter Gloor at: [pgloor@galaxyadvisors.com](mailto:pgloor@galaxyadvisors.com) and request a yearly license for a commercial use or a free academic license.

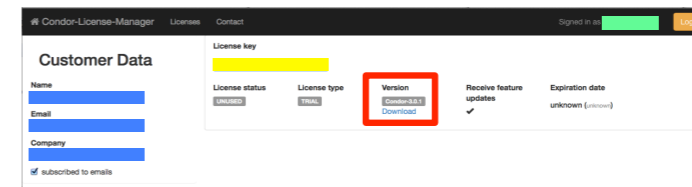
## Install Condor 3 - Overall Steps

1. Complete Condor 3's Sign up Form to obtain your license key:  
<http://guardian.galaxyadvisors.com/guardian/>

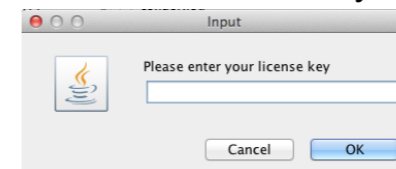
2. Validate your email address



3. Download Condor 3 from the License Manager link



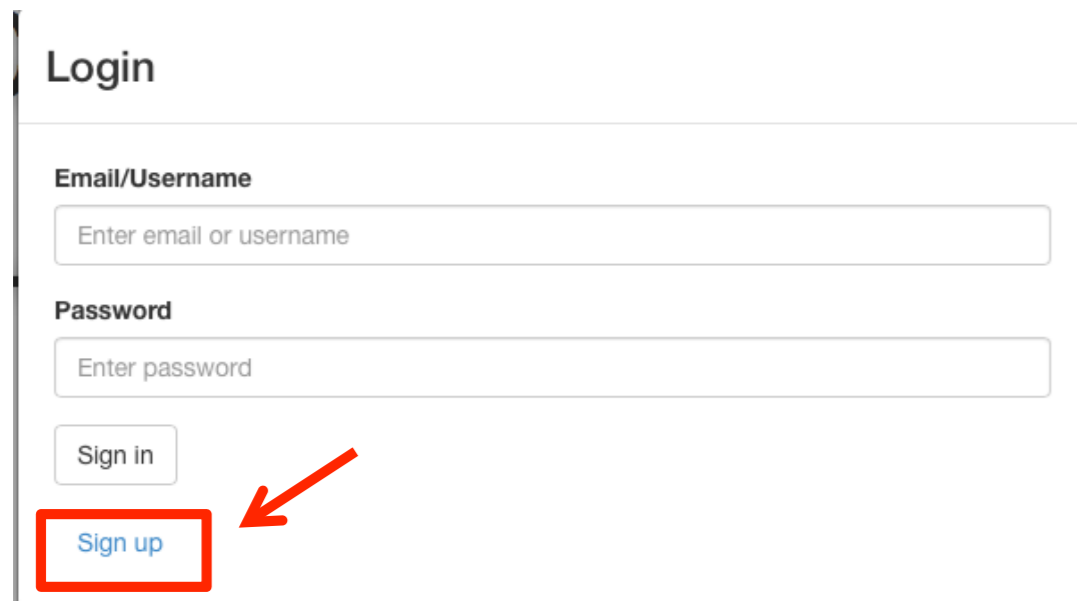
4. Start Condor 3 and enter your license key:



1. Complete Condor 3's Sign up Form to obtain your license key:

<http://guardian.galaxyadvisors.com/guardian/>

A Welcome message appears  
Click Sign up

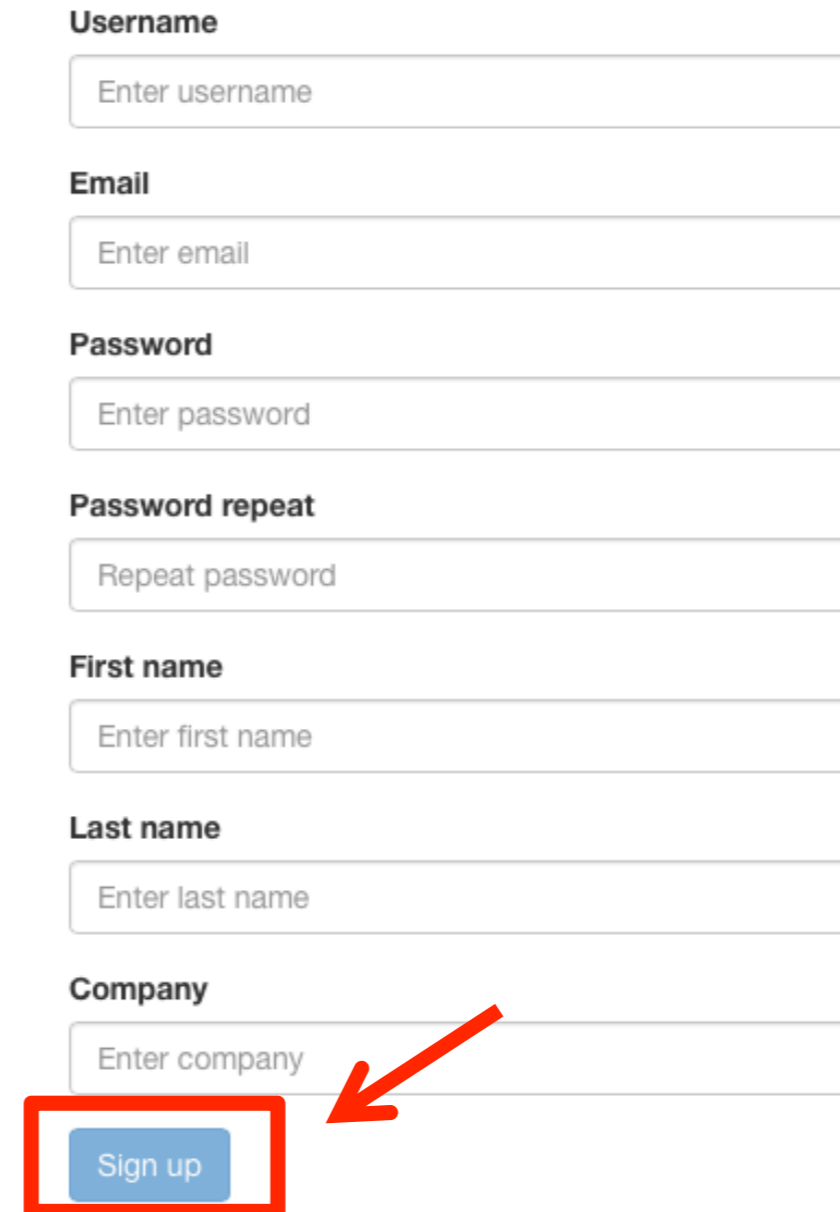


The screenshot shows a 'Login' form with the following fields and buttons:

- Login** (Section Header)
- Email/Username** (Label) with a text input field containing the placeholder 'Enter email or username'.
- Password** (Label) with a text input field containing the placeholder 'Enter password'.
- Sign in** (Button)
- Sign up** (Button, highlighted with a red box and a red arrow pointing to it).

2. Complete Condor 3's Sign up form, and Then click "Sign up."

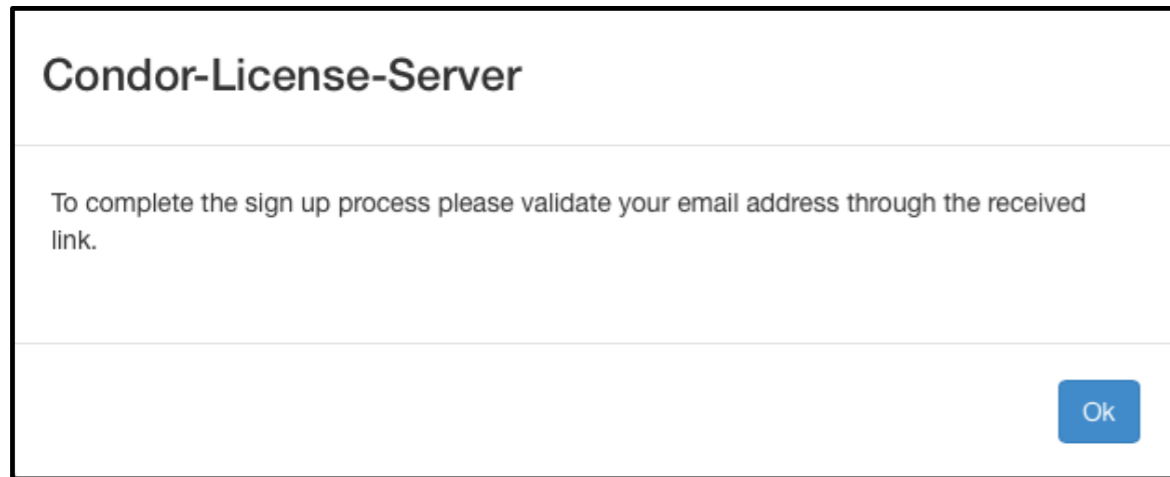
## Sign up



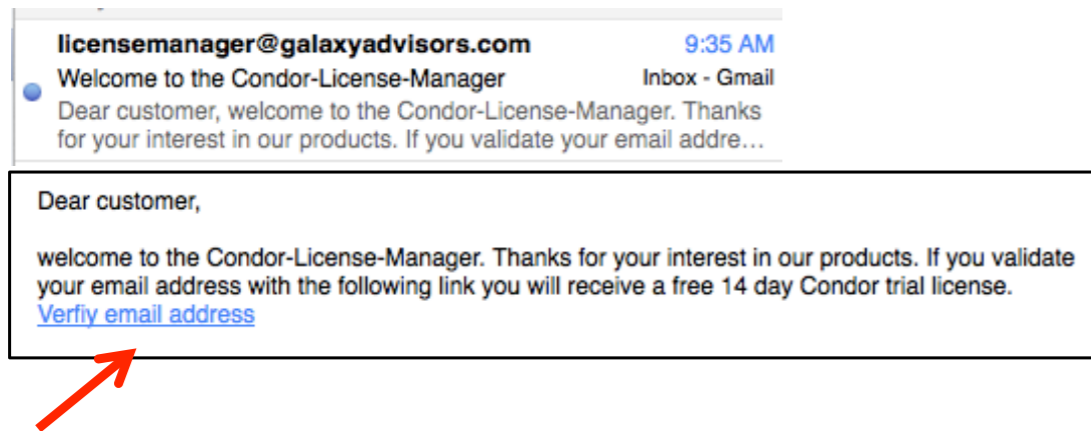
The screenshot shows a 'Sign up' form with the following fields and buttons:

- Username** (Label) with a text input field containing the placeholder 'Enter username'.
- Email** (Label) with a text input field containing the placeholder 'Enter email'.
- Password** (Label) with a text input field containing the placeholder 'Enter password'.
- Password repeat** (Label) with a text input field containing the placeholder 'Repeat password'.
- First name** (Label) with a text input field containing the placeholder 'Enter first name'.
- Last name** (Label) with a text input field containing the placeholder 'Enter last name'.
- Company** (Label) with a text input field containing the placeholder 'Enter company'.
- Sign up** (Button, highlighted with a red box and a red arrow pointing to it).

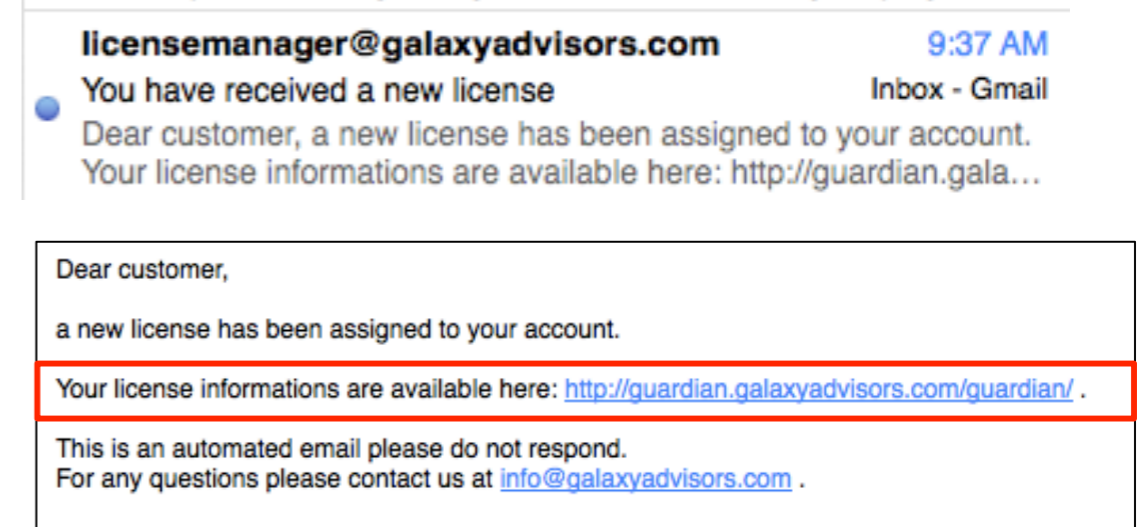
### 3. A validation message displays, Click Ok.



### 4. Check your email and validate your email address



### A License Confirmation email sent



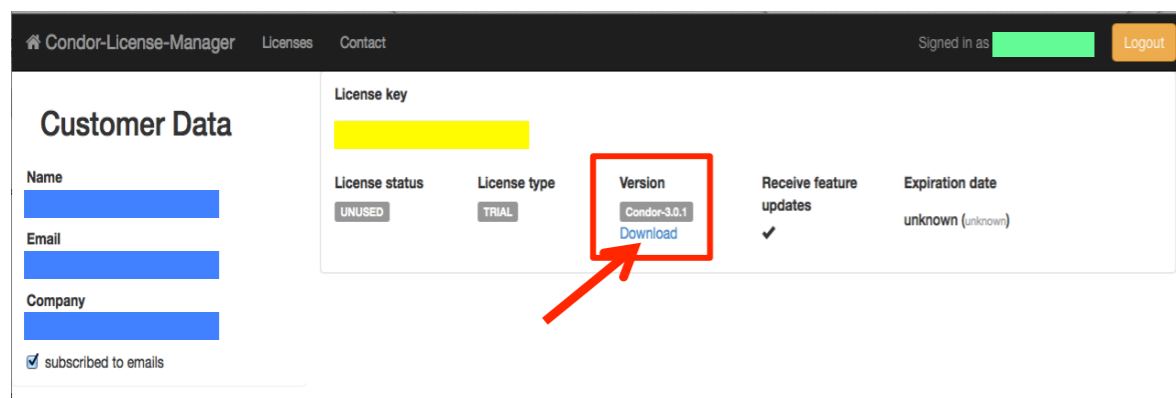
#### Important Note:

After the 14 day trial period ends, users need to email Peter Gloor at: [pgloor@galaxyadvisors.com](mailto:pgloor@galaxyadvisors.com) and request a yearly license for:

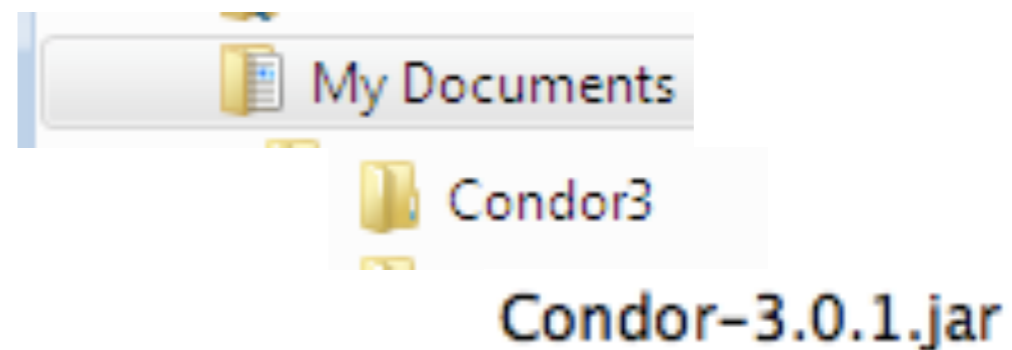
- A commercial license for commercial use, or
- A free academic license showing proof of their academic status, such as, a web url, "name.edu" address, and describe the research purpose of their project.

After your request is approved and processed, you will receive a confirmation email. Users may Login to the Condor License Manager at <http://guardian.galaxyadvisors.com/guardian/> and confirm their license type has been updated from "TRIAL" to "YEAR". Then the next time you start Condor 3 with an internet connection, your updated user license will be authenticated and Condor 3 will be available for use.

5. Download the latest version of Condor 3 from the License Manager link
6. Select and Copy your License key

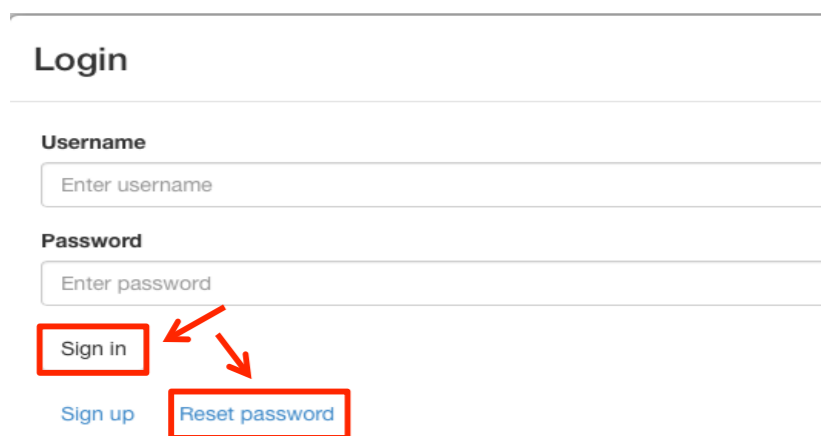


7. Under My Documents, create a new folder "Condor3"
8. 4. Move the Condor3~.jar into that folder



Note: You may return to the License Manager link to Sign in, Reset your password, or Download an updated version

<http://guardian.galaxyadvisors.com/guardian/>



# Starting Condor 3 on a PC

There are two options to start Condor 3:

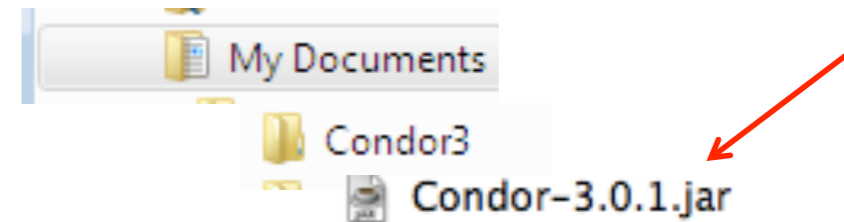
1. Double Click on the Condor~.jar, Or
2. Use a Condor3.bat command file and set the Java path and memory

It is recommended to use the .bat command file to ensure Condor 3 has enough memory to use, especially when working with large files.

**Note:** Before starting Condor 3 make sure your computer has an internet connection for the Condor server to validate your License and MySQL is running.

## Starting Condor 3 on a PC: Option 1

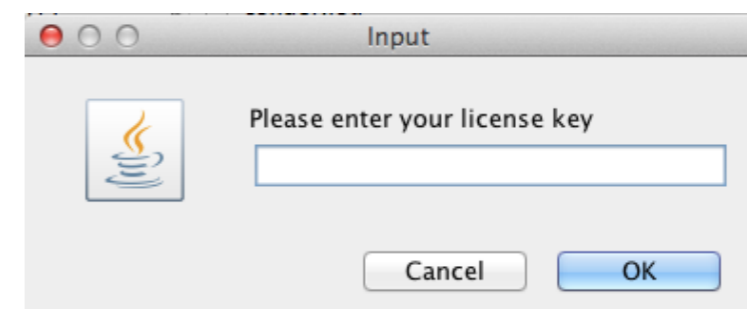
1. Double Click on the Condor~.jar



2. Loading Condor message appears

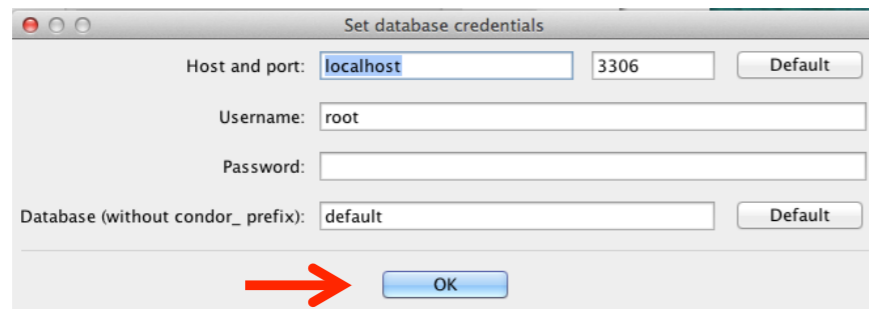


3. Enter or paste in your license key, Click OK. **Note: you only do this once.**

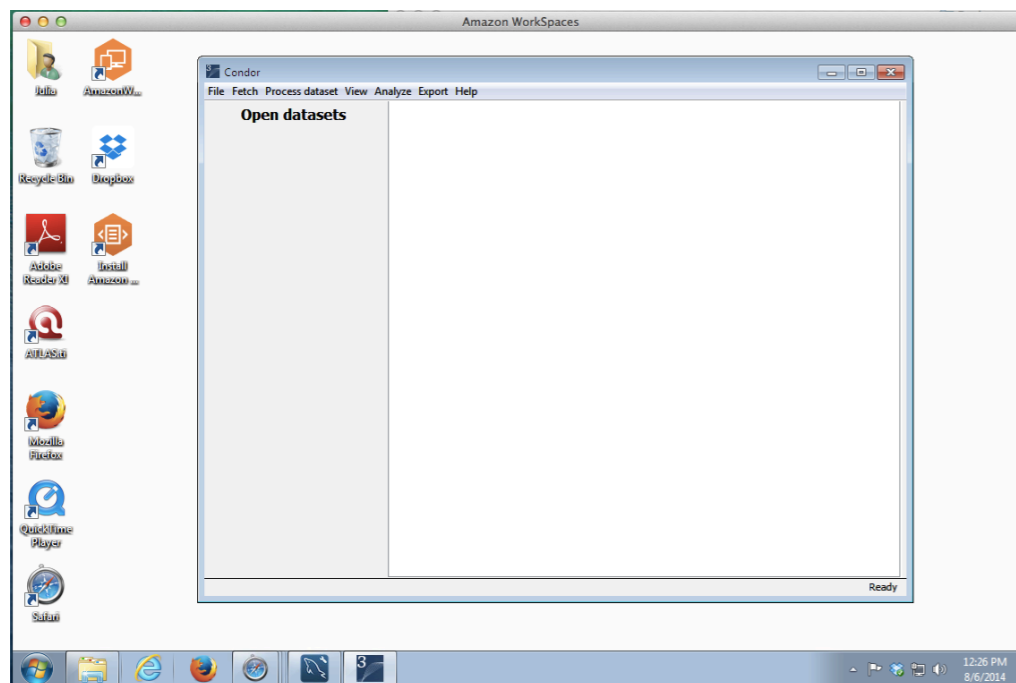


4. Next, a set database credentials window opens. Enter your MySQL password, if you have one, or just click, OK.

*Note: If you received the error on MySQL Install step about “using password: Yes”, then no Password is needed. Just click OK.*



5. Condor 3 starts and is ready to use



## Starting Condor 3 on a PC: Option 2

1. Save the following two Java commands in a file called: Condor3.bat

```
set path=%path%;C:\Program Files (x86)\Java\jre7\bin
```

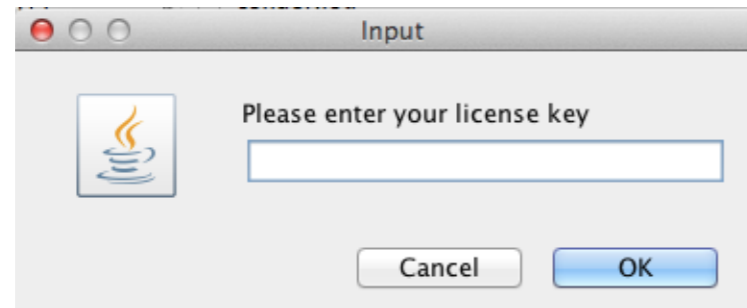
```
java -Xmx2G -jar Condor-3.2.0.jar
```

*Note: Change the “2G” to the desired memory allocation. And, adjust the set path depending upon what version of Java you have installed, such as, “jre8”, where it is located, and the Condor jar version.*

2. Double click on the Condor3.bat file to start Condor 3 with a set memory

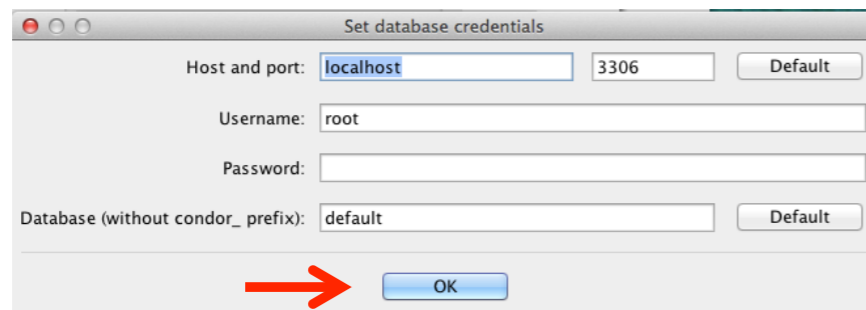


3. Enter or paste in your license key, Click OK. **Note: you only do this once.**

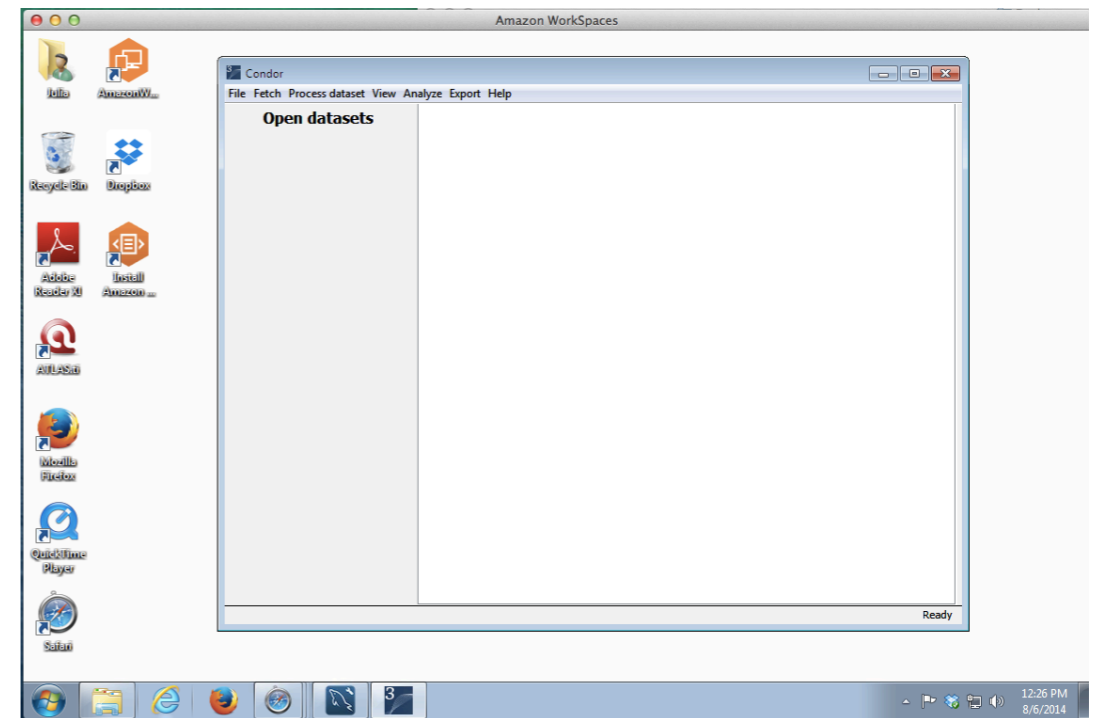


4. Next, a set database credentials window opens. Enter your MySQL password, if you have one, or just click, OK.

*Note: If you received the error on MySQL Install step about "using password: Yes", then no Password is needed. Just click OK.*



5. Condor 3 starts and is ready to use





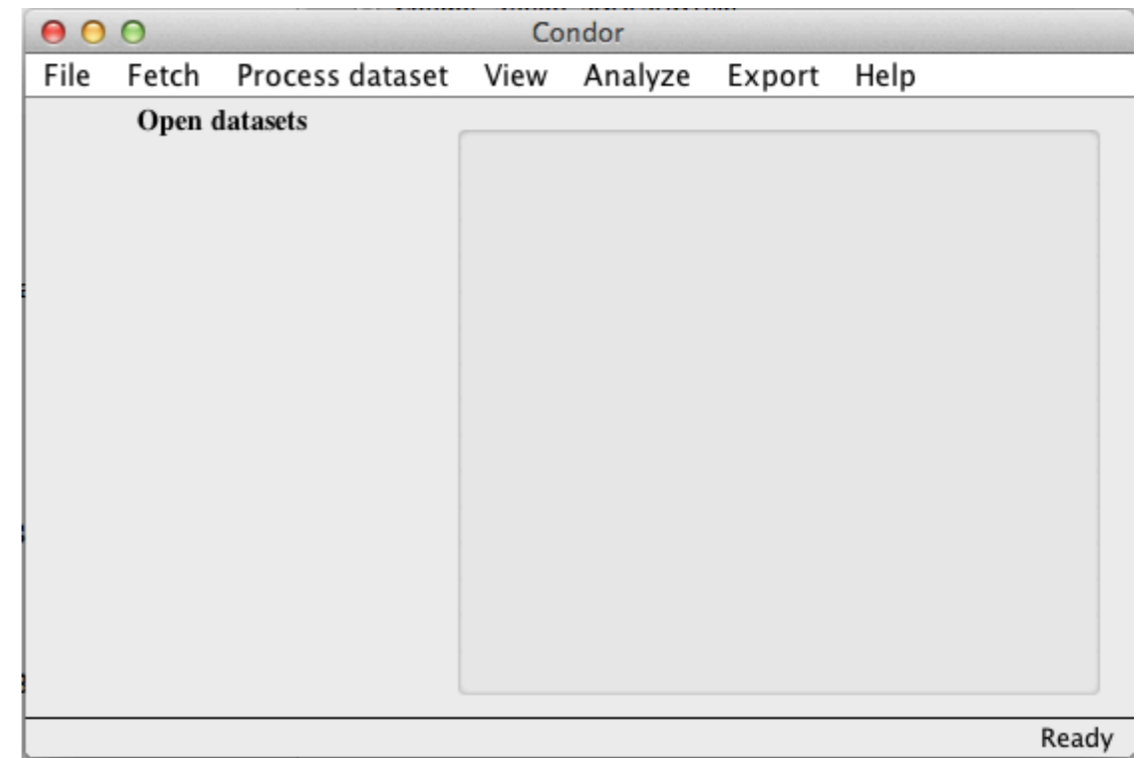
# Main Menu

Condor 3 is menu driven software program.

No programming is required.

The purpose of this chapter is to reveal Condor 3's menu structure and fundamental process steps.

***Note: Review Chapter 10 for updates to the menus and submenus.***



# Main Menu At-a-Glance

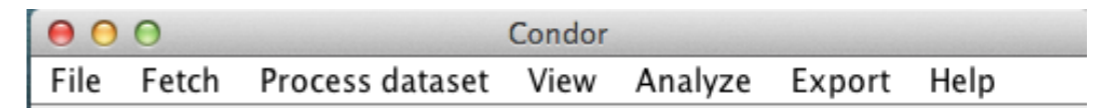
## CONDOR 3'S MAIN MENU

There are seven main menu choices

1. **File** - create and use databases and datasets
2. **Fetch** - retrieve social network data
3. **Process dataset** - filter, calculate, annotate
4. **View** - visualize static, dynamic, geographic, word, actor, adjacency, activity, sentiment and social surface views
5. **Analyze** - create collapse graph, term graph, and CoolPeople
6. **Export** - data and measures
7. **Help** - Condor 3 version and manual download links

Note: use these seven menus and their sub-menus to retrieve, visualize and measure the structure, content, sentiment, and influence of social communication networks over time. Import and export datasets using the Condor Data format (.cdf) for easy sharing and backup. Export dataset and measures to other software for additional analysis.

## Condor 3's Main Menu At-A-Glance



1. **File**: Create and switch databases; create, open, delete and merge datasets; Open a dataset with a two stage filtering sequence, which includes the use of Boolean logic to restrict Actors and/or Links; Import/Export Condor~.cdf files; Import CSV node and edge files; Import MySQL files, and Exit the program.
2. **Fetch**: Email, Outlook Exchange Calendar and email, Facebook, Web, Twitter, Twitter Accounts, Wiki Evolution, Wikipedia categories
3. **Process dataset**:
  - a. Prune, merge, remove, sample and filter by properties
  - b. Calculate centralities, oscillations, contribution index, AWVCI, turn-taking, graph density, sentiment and influence measures
  - c. Annotate by language, location, or remove all HTML
4. **View**:
  - a. Create: static and dynamic visualizations and word clouds
  - b. Plot: Actor Scatter Plot, Adjacency Matrix Plot, Contribution index, Group Centrality Measures (degree, betweenness, density), and
  - c. Graph: Activity, Sentiment, Emotionality, Complexity, Temporal Social Surface view, Geographic view and Word Usage over time
5. **Analyze**: Create a collapse graph, term graph; CoolPeople
6. **Export**: Data as CSV, time series, MySQL dump, turn-taking, and dataset properties
7. **Help**: About Condor 3: version name, release date and build number, manual download links and unregister license to migrate to another device..

# Menu Process Steps

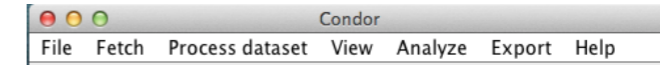
## CONDOR 3'S BASIC PROCESS STEPS

1. **File:** The first step is to use the File menu to create or switch to a new project Database and create a new Dataset or Open an existing dataset, which has a two stage filter sequence, that includes the use of Boolean logic to restrict Actors and/or Links. The File menu can also be used to Import/Export Condor ~.cdf (condor data format) files; Import CSV node and edge files; Import MySQL files, and Exit the program.
2. **Data Fetching:** use the Fetch menu to collect the desired data. Use the File menu again to repeat creating a new dataset and then use the Fetch menu to collect another type of data. Google CSE web fetching and Twitter fetching require free API keys.
3. **Process data, View and Analyze:** This third step is where users will spend the most time. The Process data menu enables a user to filter or subset a network by pruning, merging, removing, sampling, or filtering datasets by properties. This can be done before and/or after visualizing a dataset(s). Use the View menu to create a static or dynamic visualization depending upon the data type. The View menu enables users to Plot: Actor Scatter Plot, Contribution index, Group Centrality Measures (degree, betweenness, density), and Graph: Activity, Sentiment, Emotionality, Complexity and Word Usage over time. Datasets which have been filtered or modified can be saved for later re-use. The Analyze menu will create a collapse graph, term graph and CoolPeople.
4. **Export Data:** Last, users may export data for additional analysis, graphing or mapping in other software, such as, Excel, SPSS, Gephi etc.

*Note: Condor 3 uses a standardize data structure across all the various data sources for integrated BIG DATA analysis.*

### What are the basic Condor 3 process menu driven steps?

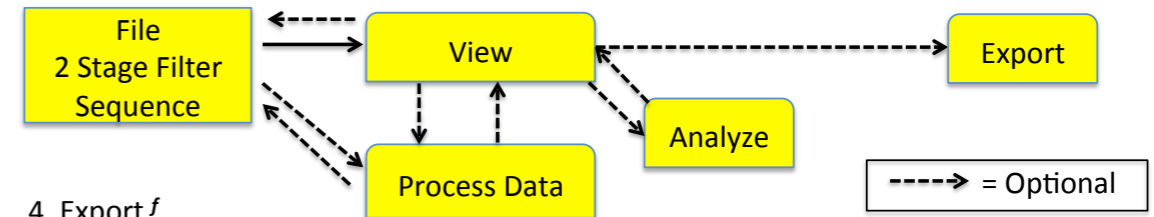
1. File <sup>a</sup>



2. Fetch Data <sup>a, b</sup>



3. File, Process Data, View, and Analyze <sup>a, c, d, e</sup>



4. Export <sup>f</sup>

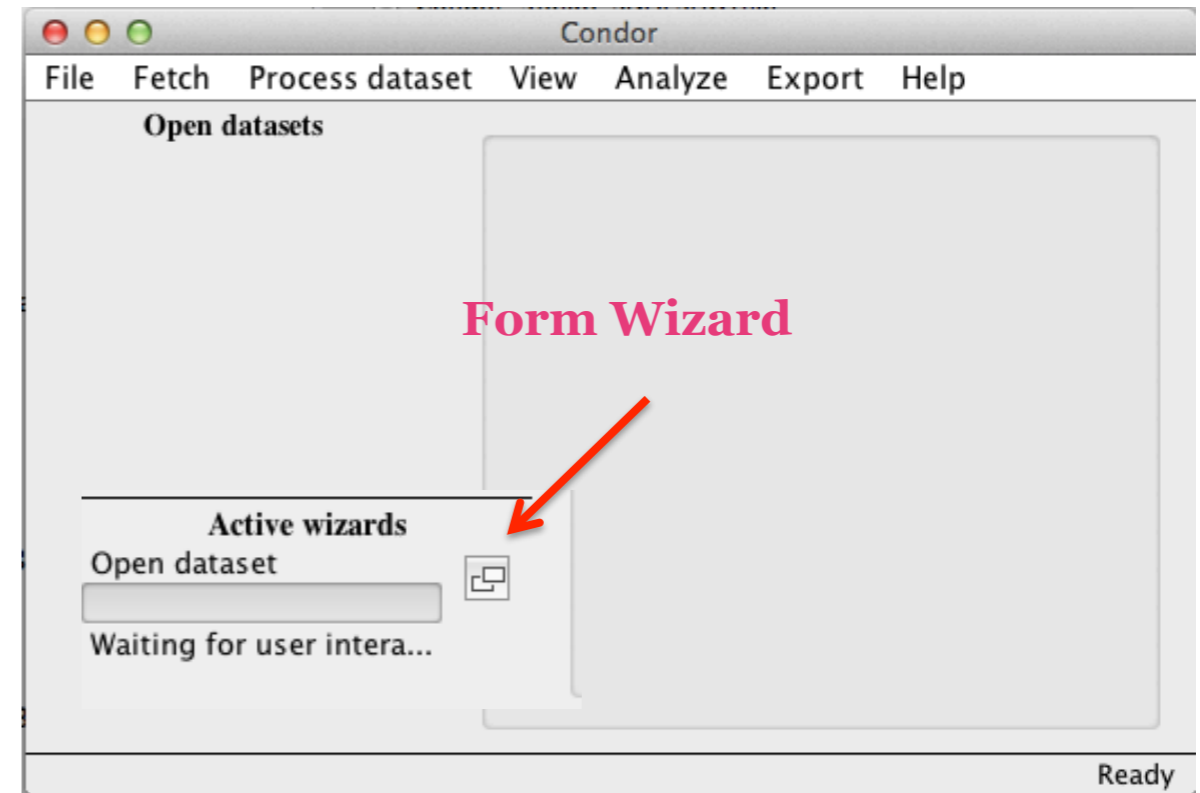
- a. Use File menu to Create/Access a Project Database, and its Dataset(s); Import/Export .cdf (condor data format) dataset files; Import .CSV node and link files, and Import MySQL files; File > Dataset > Open Dataset has a robust 2 stage filter sequence for node/edge selection
- b. Use Fetch menu to harvest desired data: Email, Outlook Exchange Calendar and email, Facebook, Web, Twitter, Twitter Accounts, Wiki Evolution, Wikipedia categories, etc.
- c. Use View menu to create static or dynamic visualizations; calculate and graph measures
- d. Use Process Dataset menu to filter or subset data before and/or after visualizing
- e. Use Analyze menu menu to create a collapse graph, term graph and CoolPeople
- f. Use Export menu to export datasets and network measures after customizing a network with View & Process Data menus

# The Form Wizard

## CONDOR 3 FORM WIZARD

Condor 3 uses a form wizard, always located in the lower left corner, that, when needed, steps the users through a sequence of forms that are needed to complete a task and that indicates when Condor is processing a command.

## Condor 3 Form Wizard



### TIP:

Sometimes an active form may disappear behind the main Condor window. To bring the active form to the front, just click on the double window insert in the Active Wizard.



# File Menu

## FILE MENU OVERVIEW

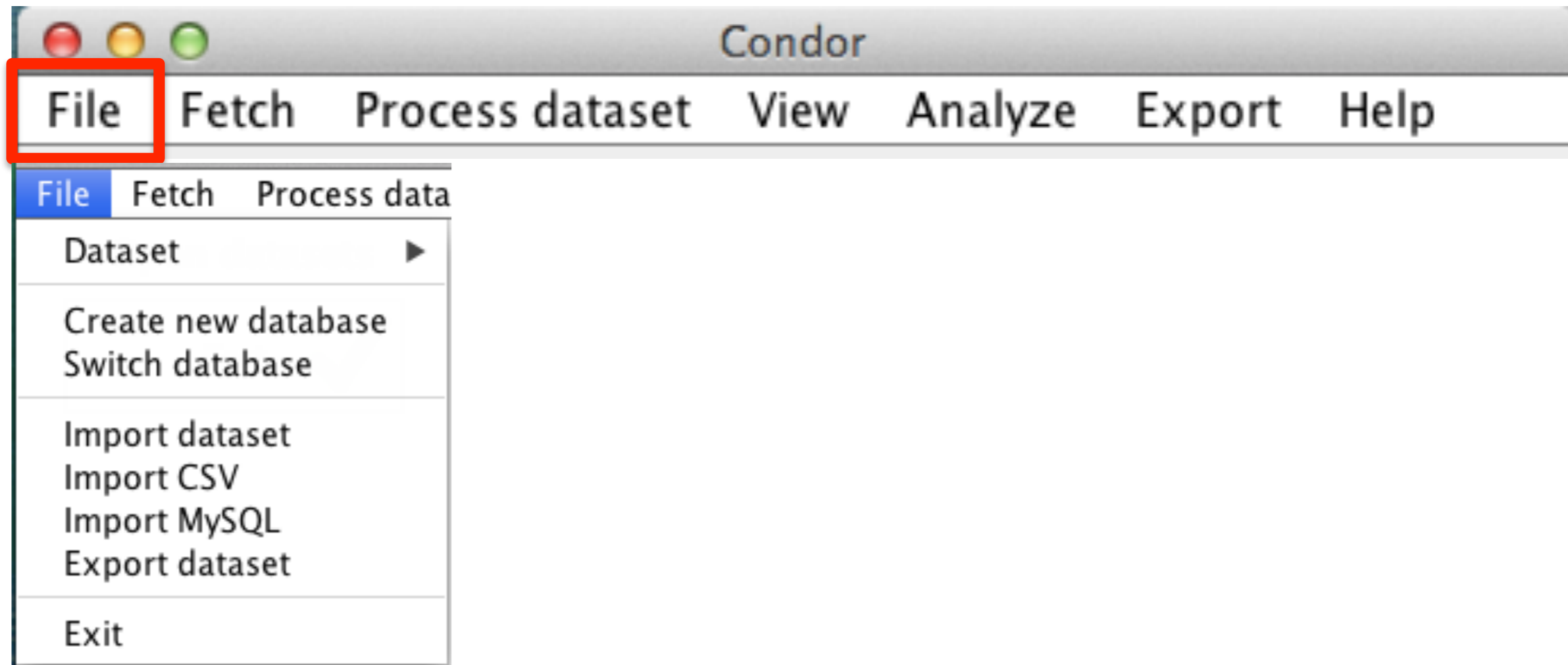
The File Menu is used to manage databases and datasets.

- Users can create and switch databases.
- Datasets can be created, opened deleted, and merged
- Condor datasets can be imported and exported using the Condor Data Format (.cdf) for transfer to other computers or to share with other Condor users
- External network datasets can be imported using .CSV node and edge files, and MySQL files
- The File > Dataset > Open Dataset sub-menu has a robust 2 stage filter sequence for node/edge selection, which includes the use of Boolean logic to Restrict Actors and Links.
- Last, Exit Condor from the File menu.

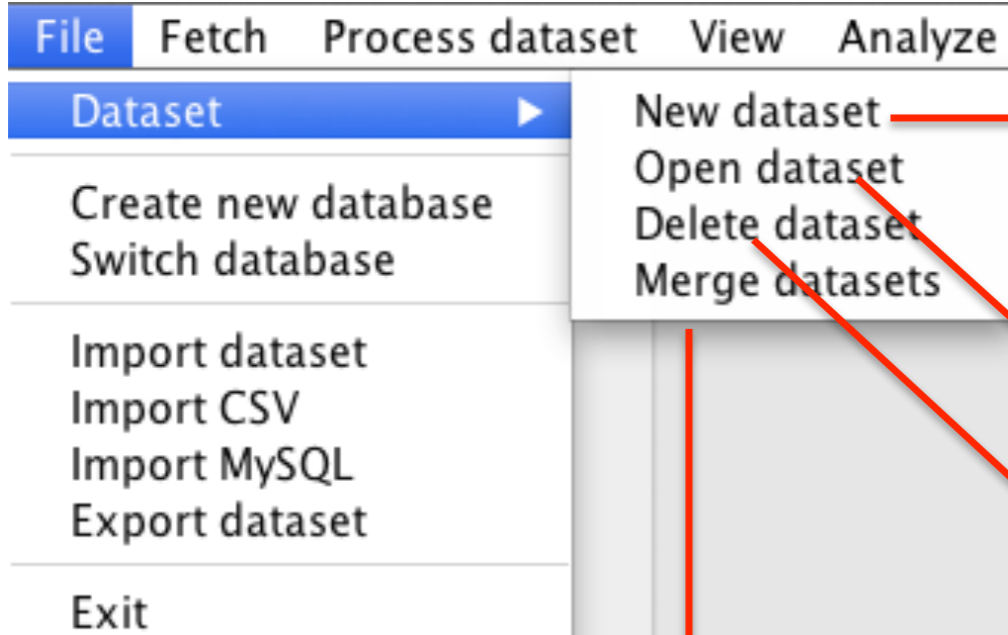
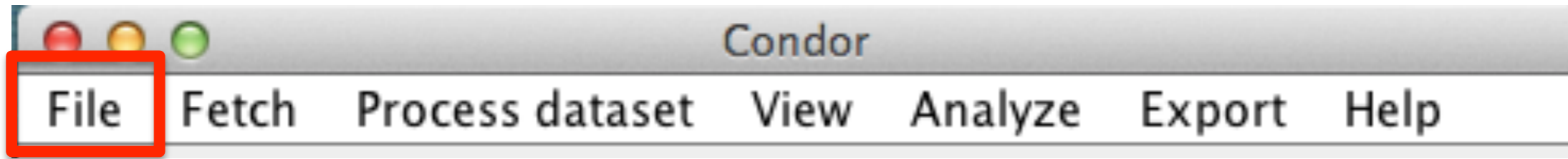
Note: There is no database delete command.

Users need to use a MySQL command to delete a database or use another GUI, such as, MySQL Workbench, Navicat or phpMyAdmin.

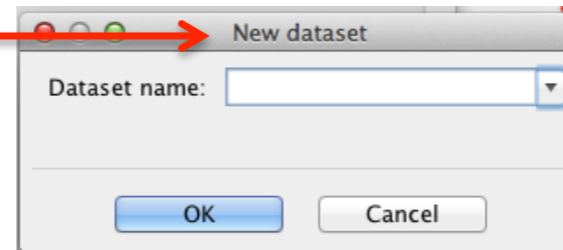
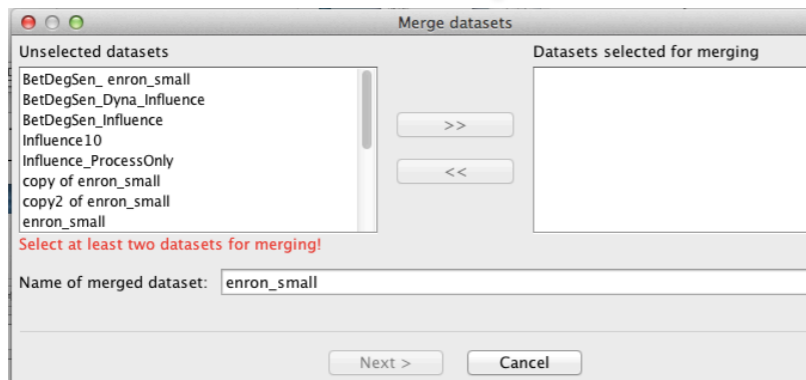




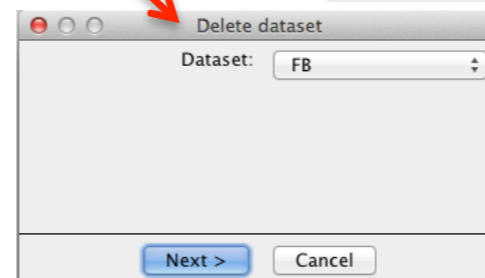
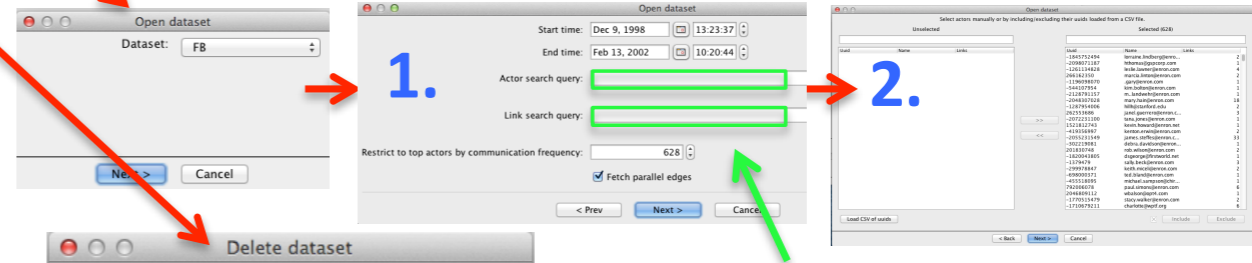
**File menu 1<sup>st</sup> Level**



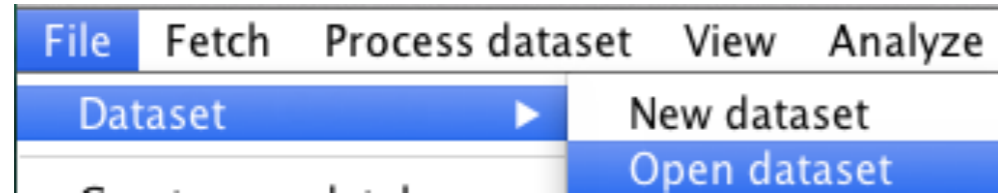
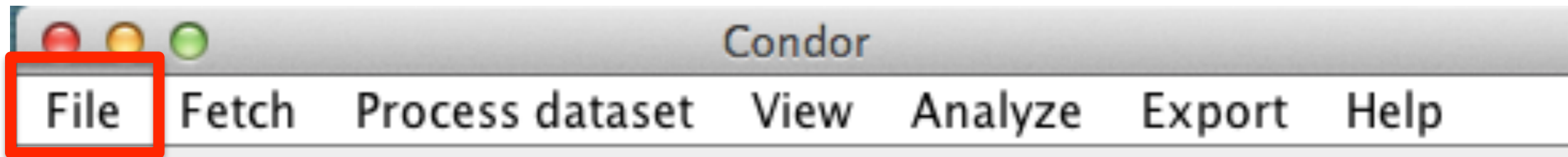
**File menu  
Dataset 2<sup>st</sup> Level  
And 3<sup>rd</sup> + Levels**



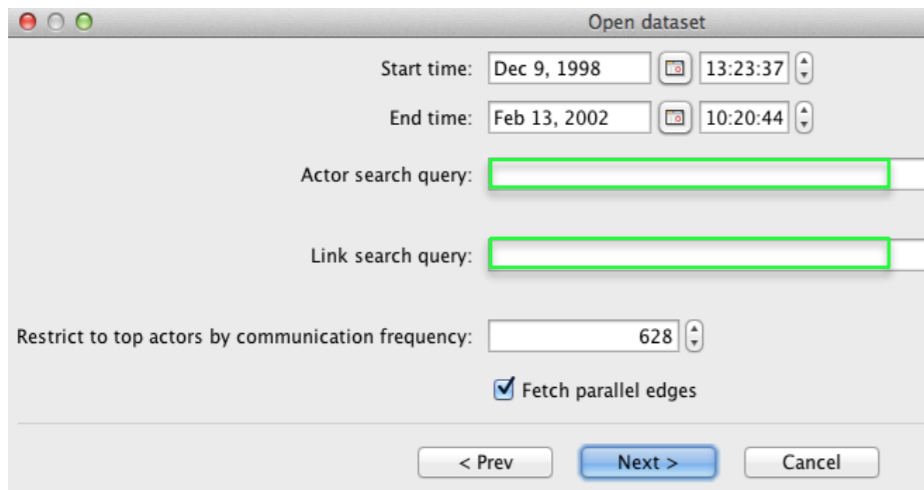
**Open Dataset – 2 stage filter sequence**



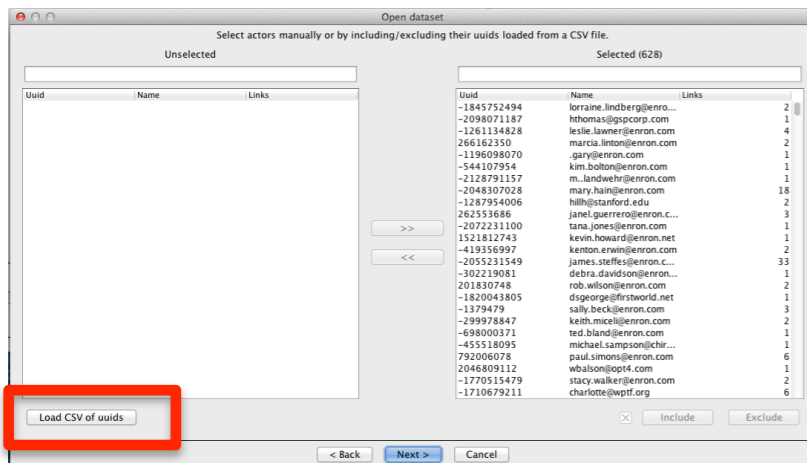
**Note: Boolean logic  
can be used to  
Restrict Actors and/  
or Links.**



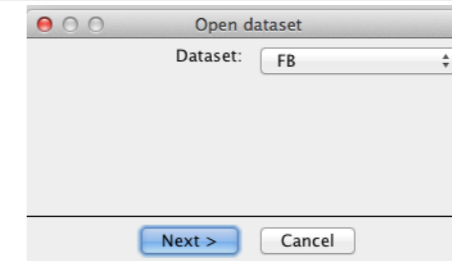
## 1<sup>st</sup> Stage Filter Options



## 2<sup>nd</sup> Stage Actor Filter Options



## Open Dataset



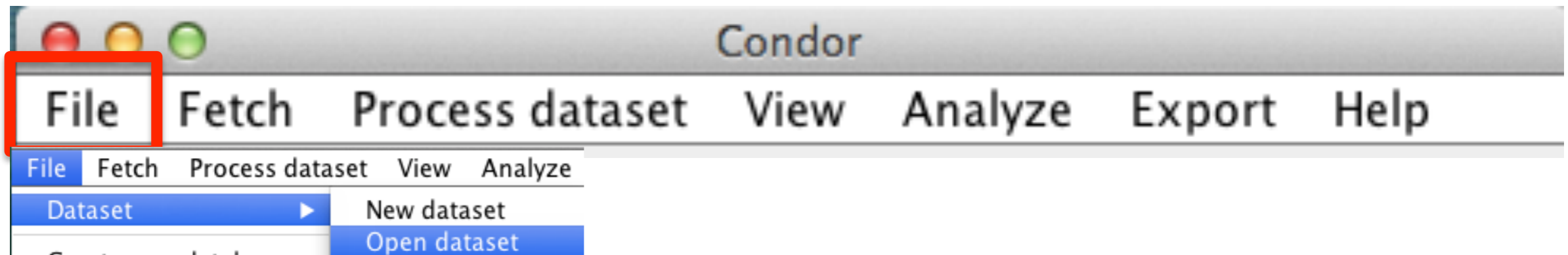
The File > Dataset > Open Dataset sub-menu has a two stage filter sequence:

1<sup>st</sup> Stage offers filtering by a combination of :  
 Start or End date, Actor or Link content, Top Actor Communication Frequency, and optionally loading parallel links or serial communication. Boolean logic can be used to Restrict Actors and/or Links.

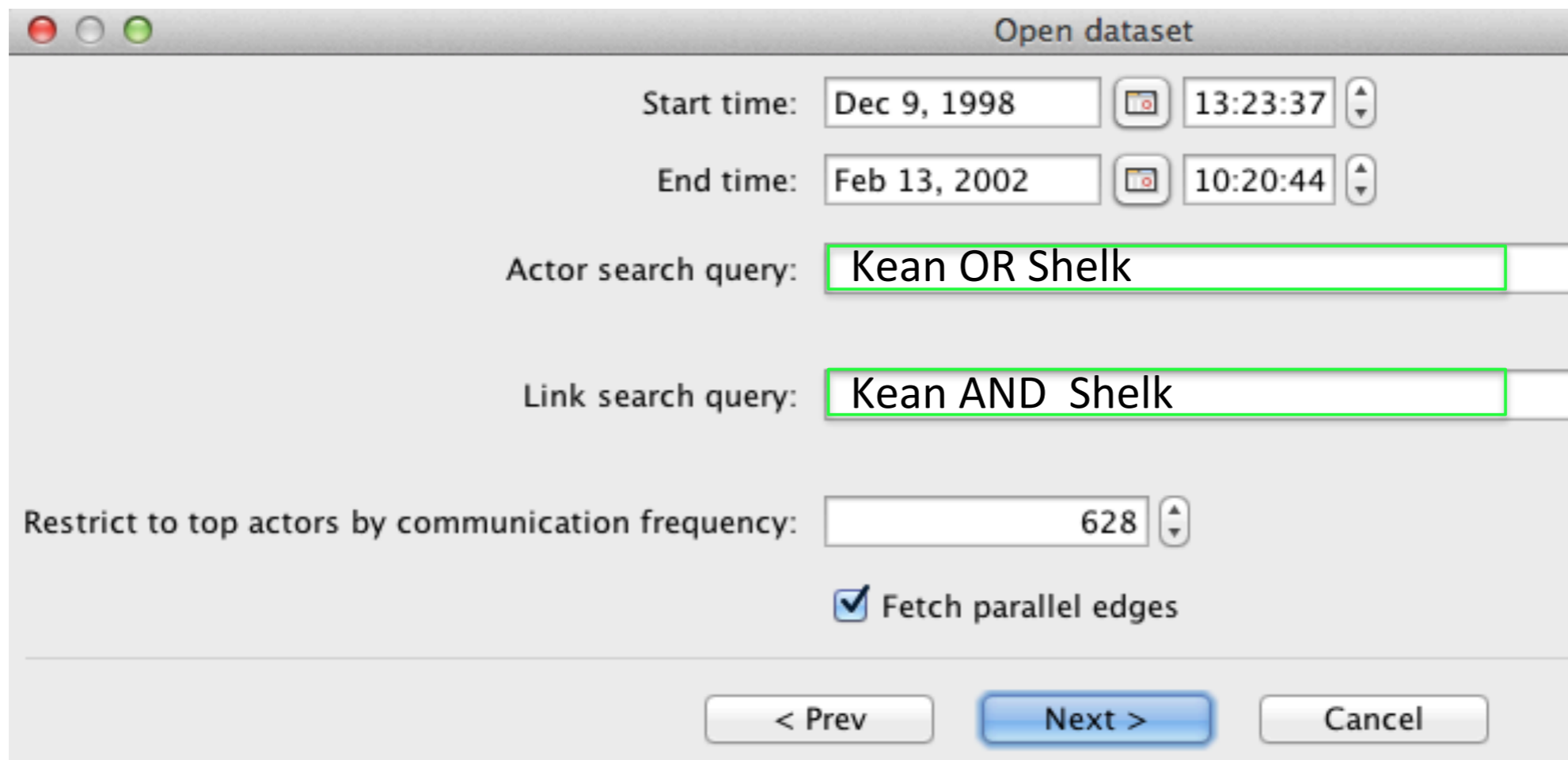
The next 2<sup>nd</sup> Stage Actor Filter enables users to select actors manually or by including/excluding their “uuids” loaded from a CSV file.

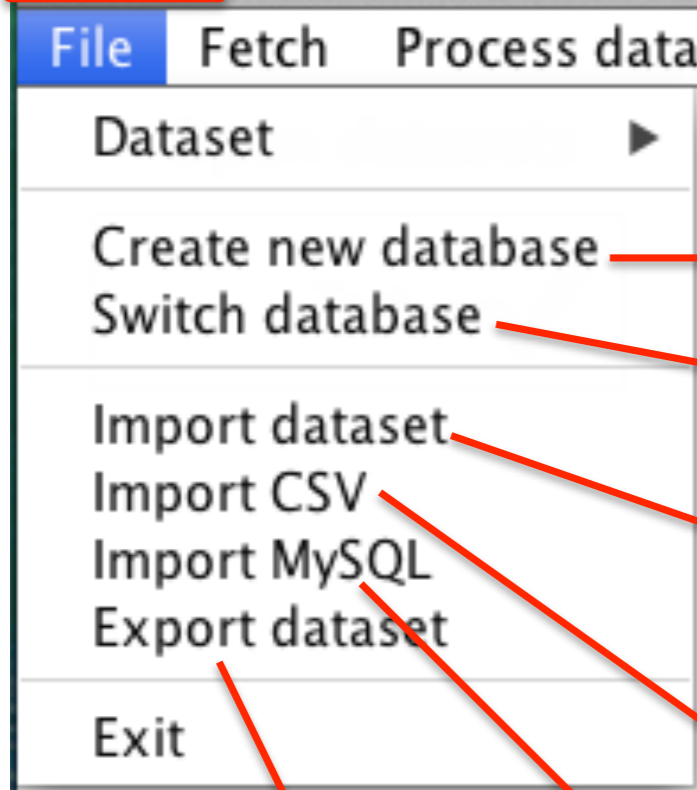
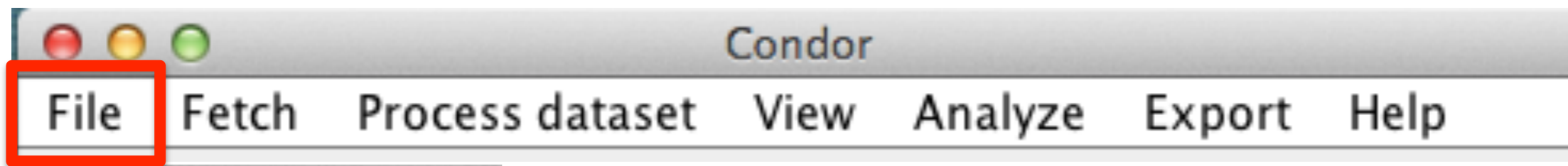
Note: After a dataset is open, use the Process Dataset menu for additional filtering options.



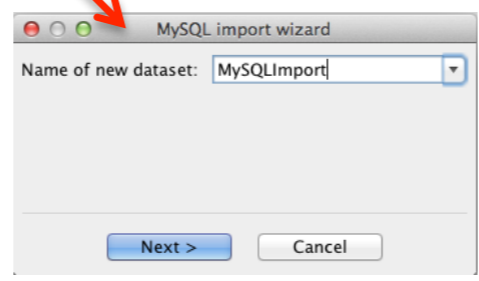
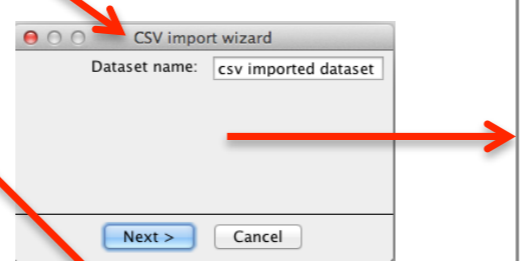
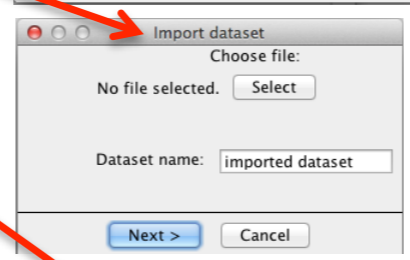
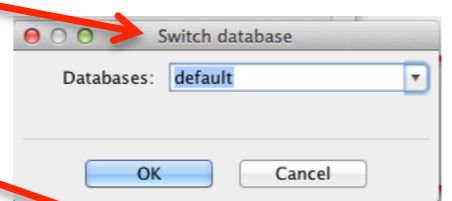
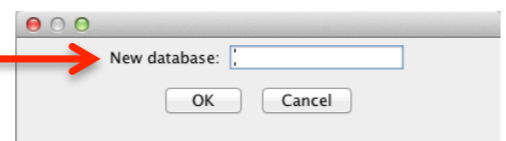


**Note: Users can use Boolean Logic in the Open dataset menu to Restrict search for Actors and/or Links**



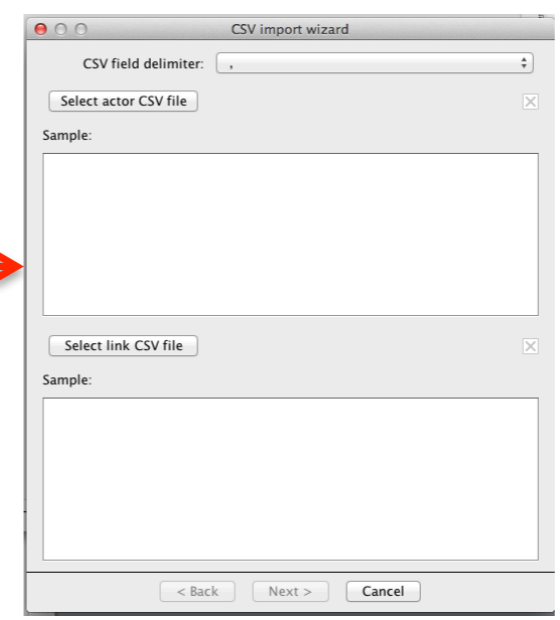
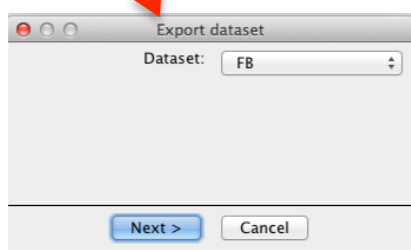


[4 Options: New, Open with 2 stage filter, Delete, Merge ]

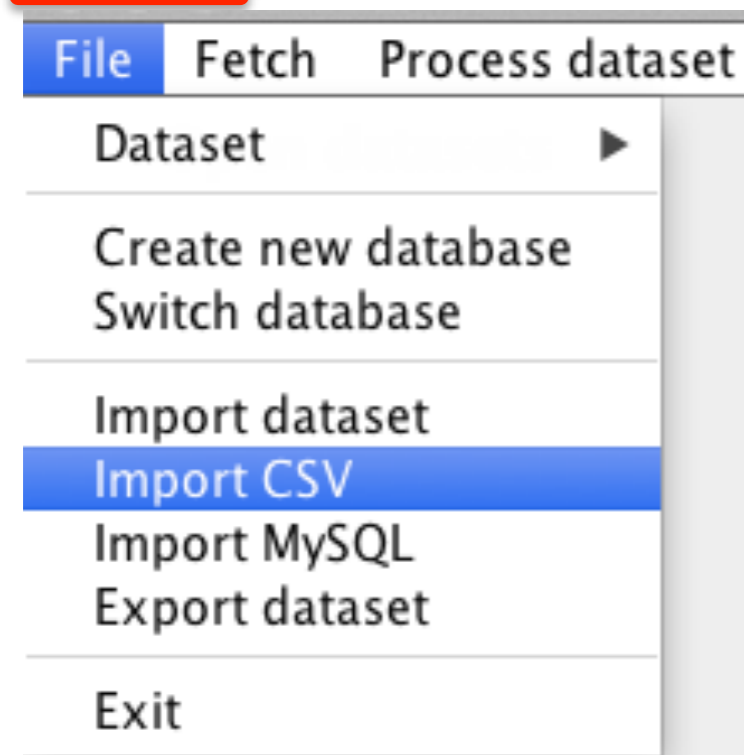
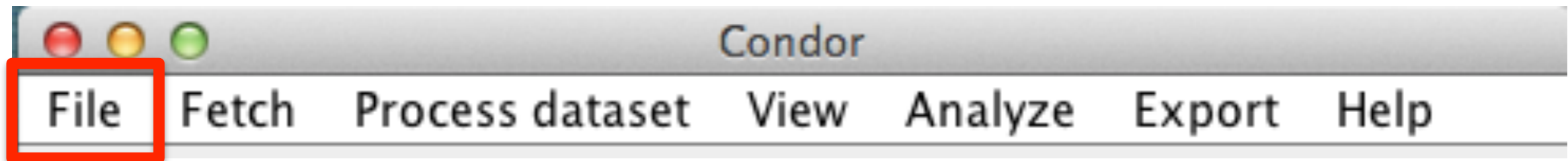


Note: The File menu import/export dataset uses only the Condor Data Format (.cdf) to transfer files to other computers or to share with other Condor users.

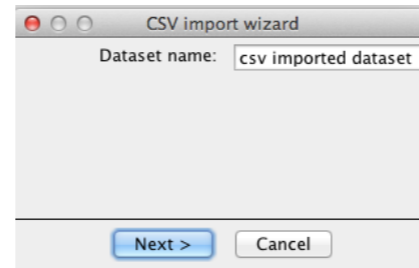
File menu  
2nd Level



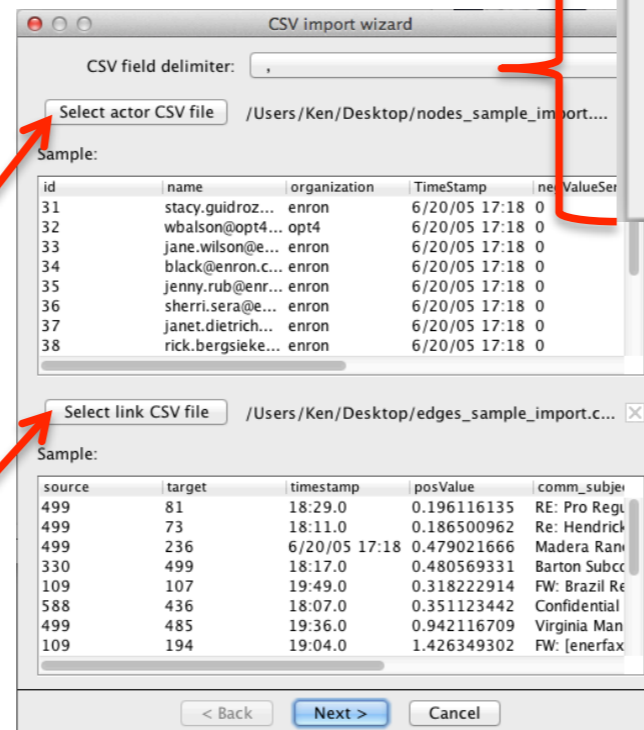
Note: Import CSV requires two files: a node file and an edge file.



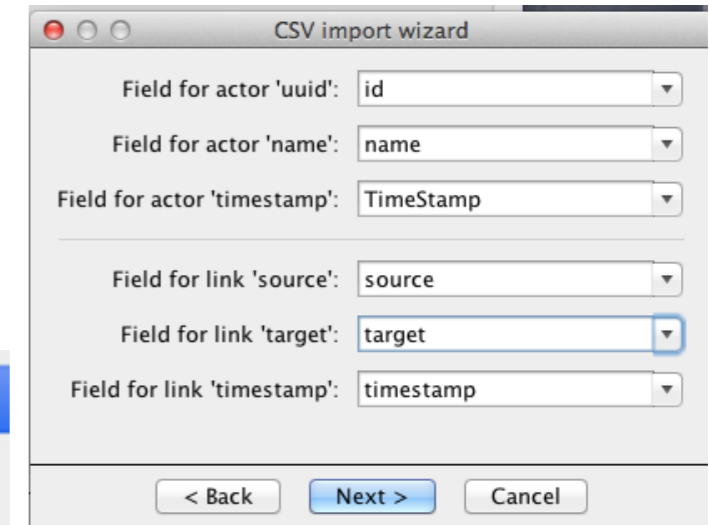
### 1. Dataset



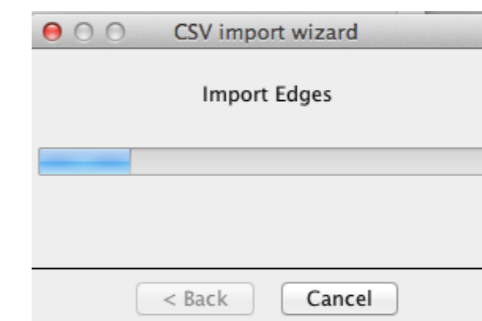
### 2. Parameters



### 3. Pick Required Fields



### 4. Import CSV Node & Edge Messages

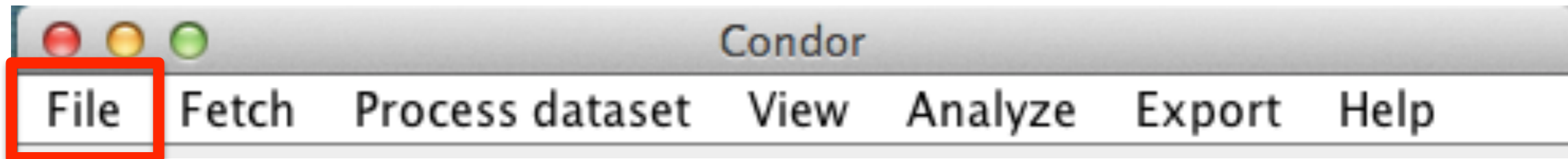


### File menu 1<sup>st</sup> Level

Note: Import CSV requires two files:

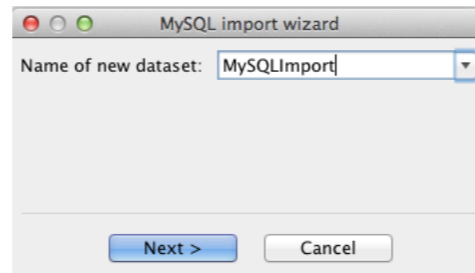
1. A node file
2. An edge file

**Note:** Condor 3.2.0 enables the import of numeric fields in addition to string variables with .CSV files. See Chapter 10 for updates.

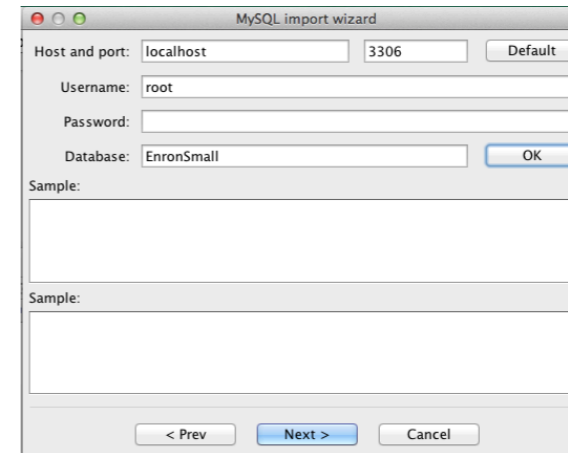


- File
- Fetch
- Process dataset
- Dataset
- Create new database
- Switch database
- Import dataset
- Import CSV
- Import MySQL

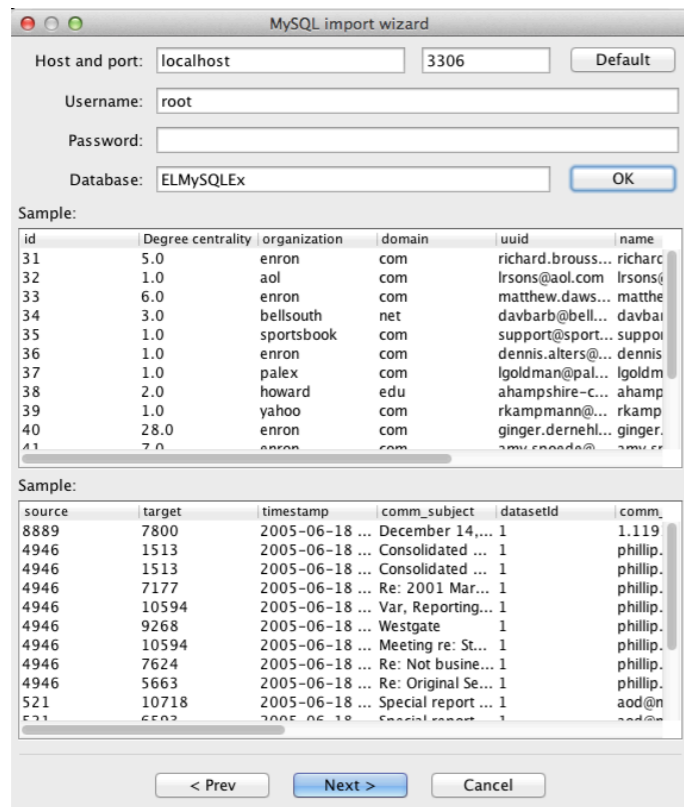
1.



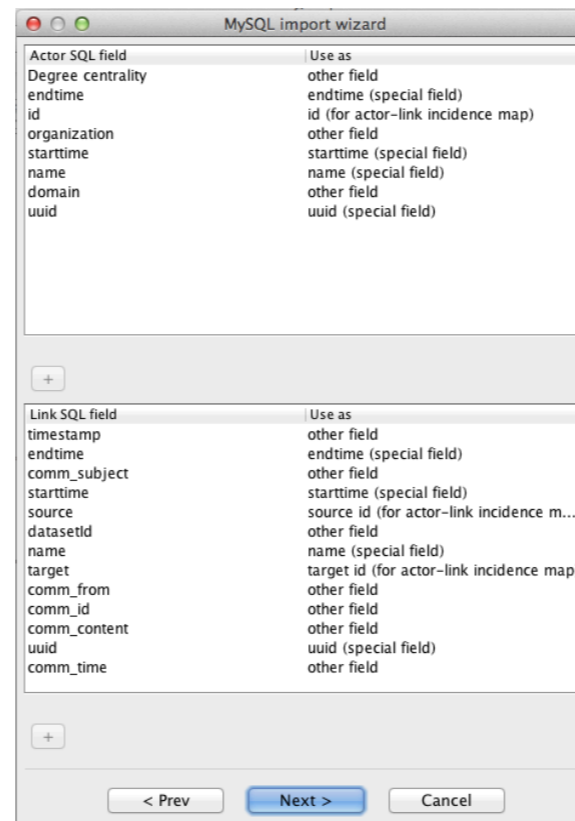
2.



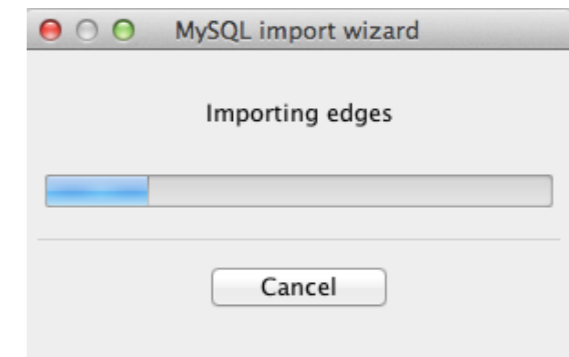
3.



4.



5.

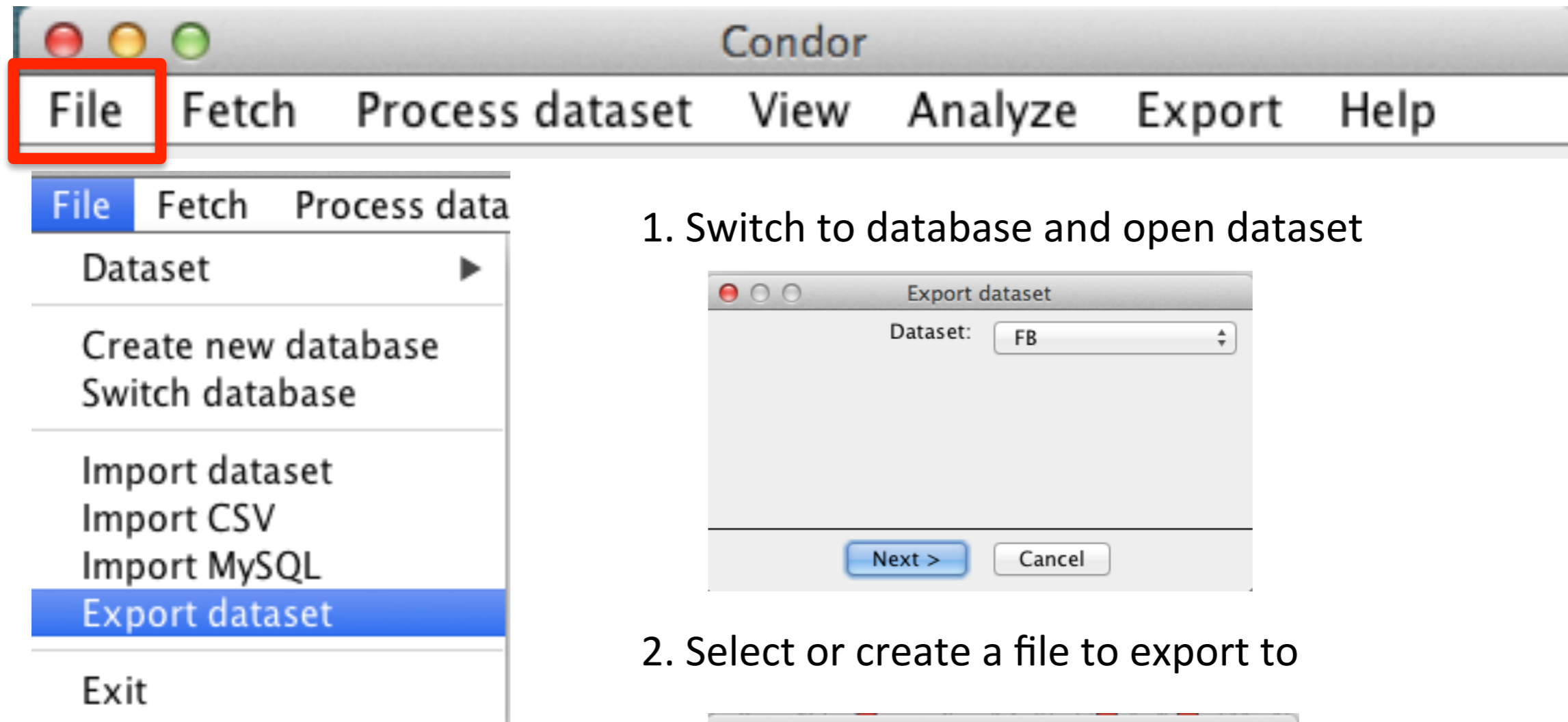


## **NEW File > Import MySQL**

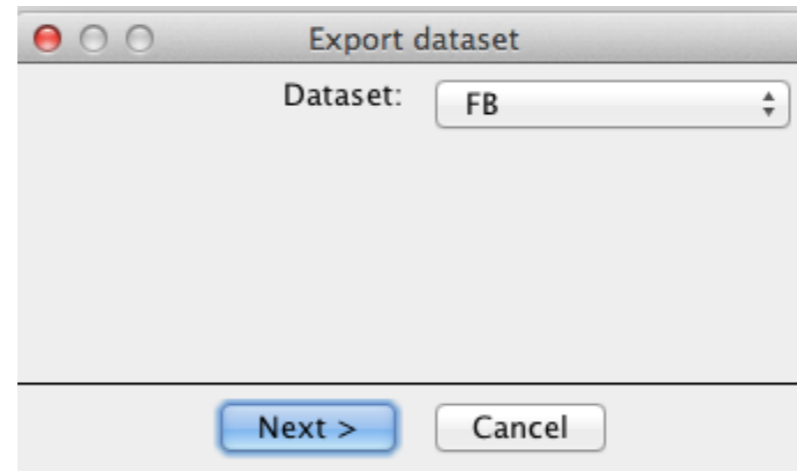
Tip: Open an existing Condor 3 Database/Dataset and Export it using the Export > Export MySQL Dump and then use the File > Import MySQL.

### Suggested Steps:

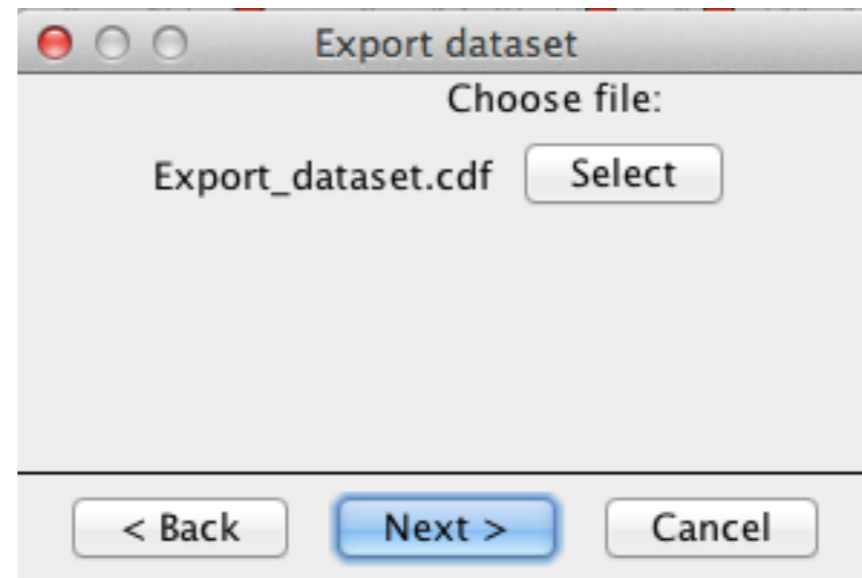
1. Use MySQL Workbench to identify the existing Condor 3 Database “characterset” and “collation,” such as, latin1 and latin1\_swedish\_ci
2. Start Condor 3 and open the existing Database/dataset and Export using the Export > Export MySQL to a “name.sql” file
3. Use MySQL Workbench to create a new Database and import the “name.sql” file and set the “characterset” and “collation” with the previous values
4. Use Condor 3 to create a new database and then import the MySQL file created in step 3 with the File > Import MySQL menu and follow the prompts.



1. Switch to database and open dataset



2. Select or create a file to export to

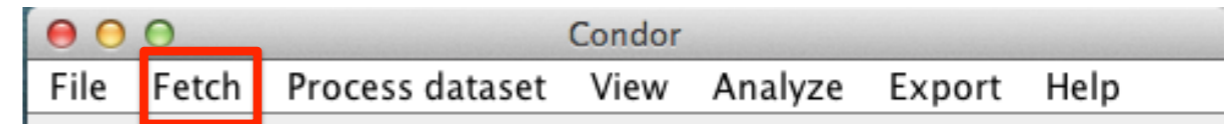


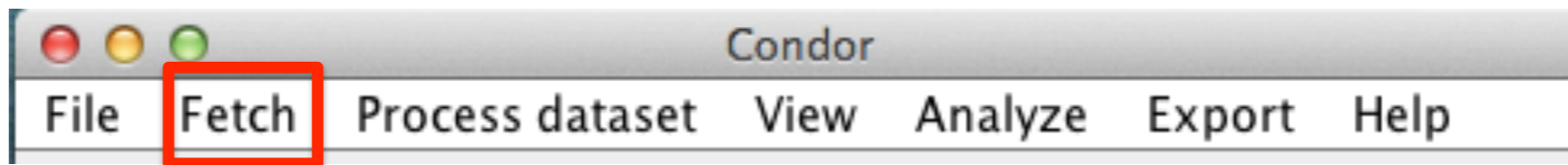
Note:  
The .cdf file extension is added  
(Condor data format)

# Fetch Menu

## FETCH MENU OVERVIEW

**The Fetch Menu** enables the user to collect Email, Outlook Exchange Calendar and email, Facebook, Web, Twitter, Twitter Accounts, Wiki Evolution, and Wikipedia categories





**The Fetch Menu** enables the user to collect Email, Outlook Exchange Calendar and email, Facebook, Web, Twitter, Twitter Accounts, Wiki Evolution, and Wikipedia categories.

**Fetch Mailbox** can use Pop, IMAP or Exchange Web Service (EWS) protocols, Secure Sockets Layer (SSL), and ability to select Start/Stop time frames, individual folders with or without content. Collecting content does take more time.

**Fetch Facebook profile** menu has options to collect Groups and Likes. Collecting Groups and Likes does take more time, especially if a Group has a large number of users. It is recommended to uncheck these two options on the first Fetch.

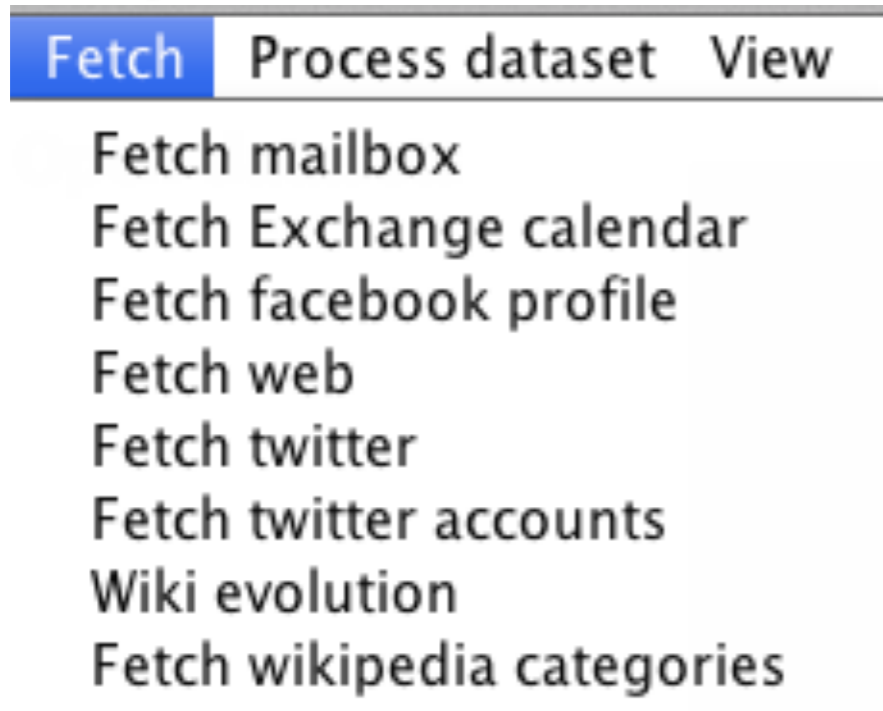
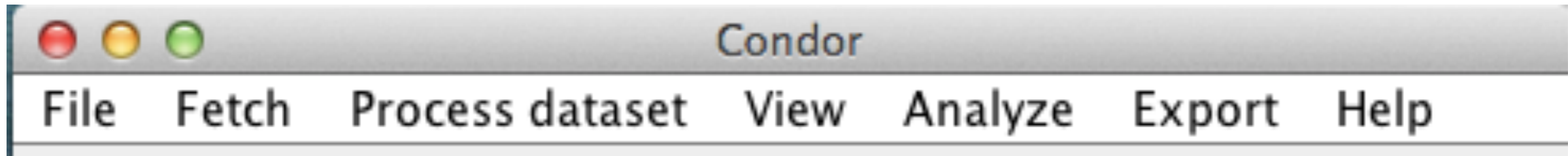
**Fetch Web**, menu offers a search choice of Google AJAX or Google's Custom Search Engine (CSE). The Google CSE adds the capability to restrict websites, which have been crawled in a previous time unit of days, weeks, months or years. A web query can be limited to a domain level. The Google CSE requires users to obtain a free Google CSE API Key.

**Fetch Twitter** menu has the option of doing repetitive searching with a user defined delay in minutes or hours. Query filtering options include: the number of results, and geolocation using latitude and longitude coordinates with a user defined search radius in miles or kilometers. The Twitter Fetcher requires the user to obtain 4 free Twitter API Keys. To obtain geolocations see: <http://www.gpsvisualizer.com/geocoder/>. In addition, tweets from specified Twitter Accounts can be collected.

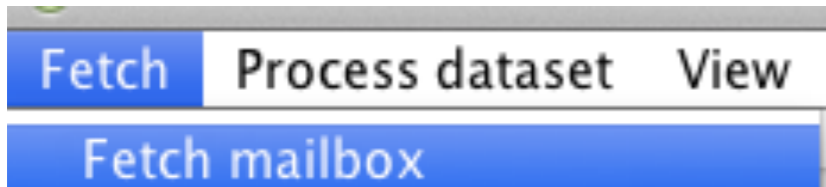
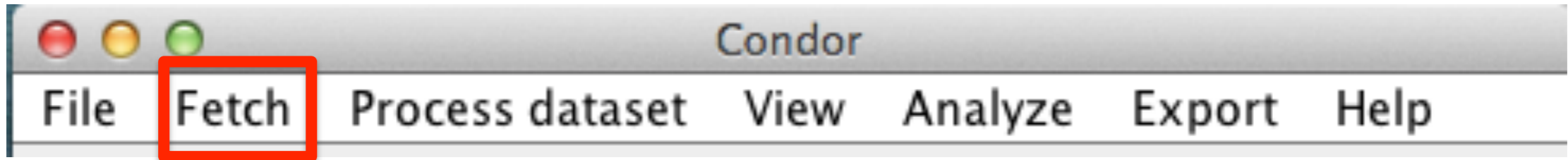
**Fetch Wiki Evolution** menu collects articles that have been linked to one another based upon a user-defined query. Because articles and links are time stamped, the evolution of a topic can be recreated. Query options include: language, choice of seed articles, static fetcher, dynamic fetcher, both static and dynamic fetcher, bidirectional links, no content, full content, or a snippet.

**Fetch Wikipedia Categories** collects a category tree, which help users to find information, even if they don't know what exists or what it's called. Query options include: Language, Category, and Depth. For example, see the category: Emotion. <http://en.wikipedia.org/wiki/Category:Emotion>





## Fetch Menu 1<sup>st</sup> Level

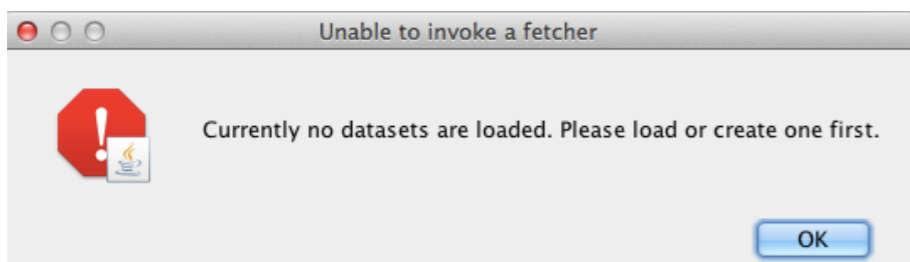


There is a sequence of 4 windows.

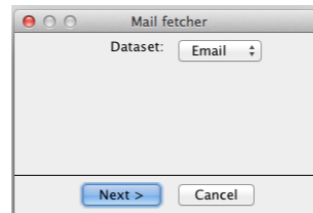
**Note:**

To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset.

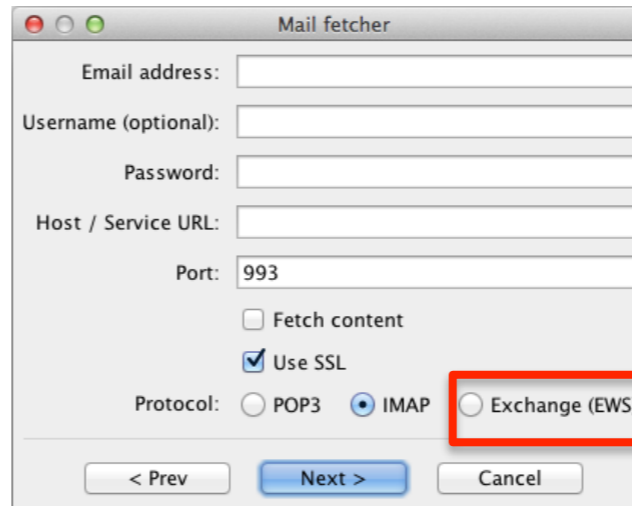
Otherwise, users will get this error message.



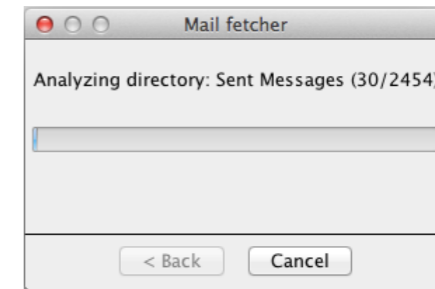
1. Dataset Name



2. Email Parameters

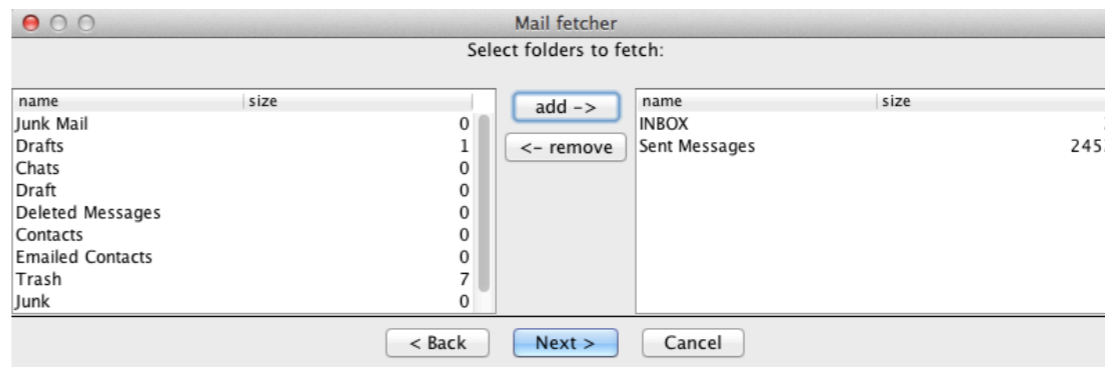


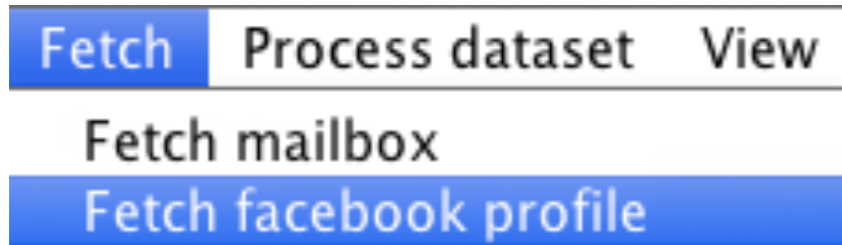
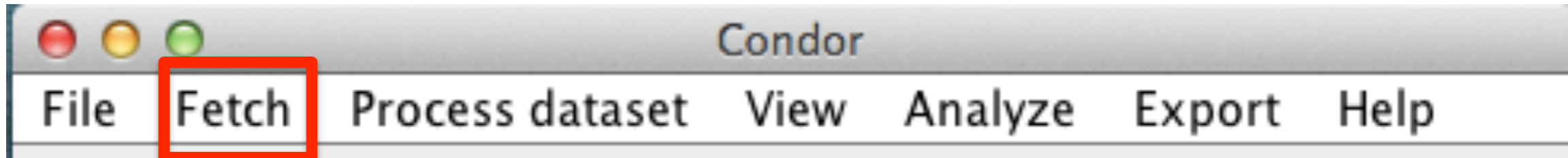
4. Processing Message



Use for Outlook Exchange Email, Includes Start/End Date restrictions

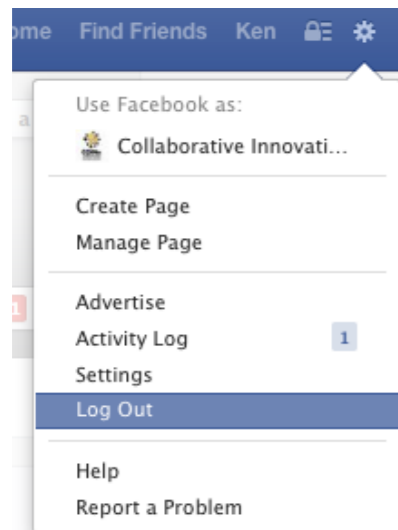
3. Select Email Folders



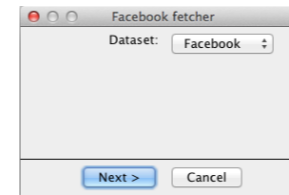


Note:  
To use the Fetch Menu,  
first use the File Menu to create or switch  
to a Database and create or open a  
dataset

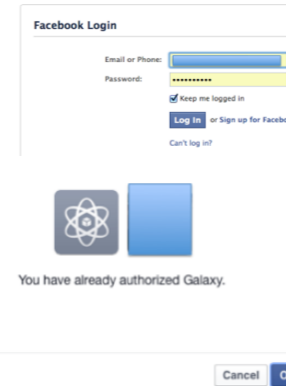
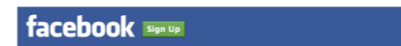
**Important**, first  
Logout of Facebook.



### 1. Dataset



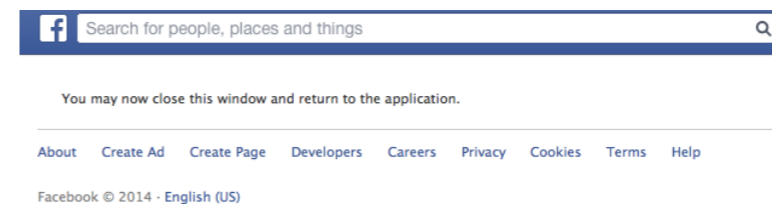
### 2. Login to Facebook



### 3. Authorize Galaxy

Or, if have. Okay

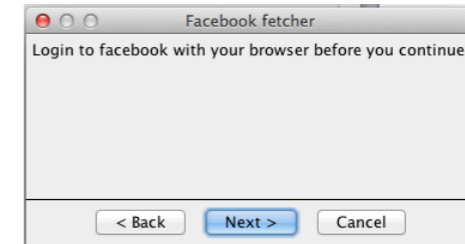
### 4. Logout of Facebook



### 5. Click Next



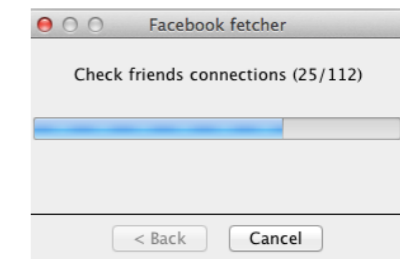
### 6. Login to Facebook

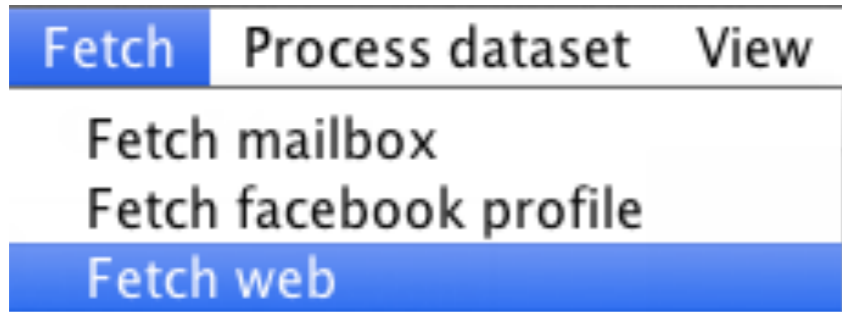
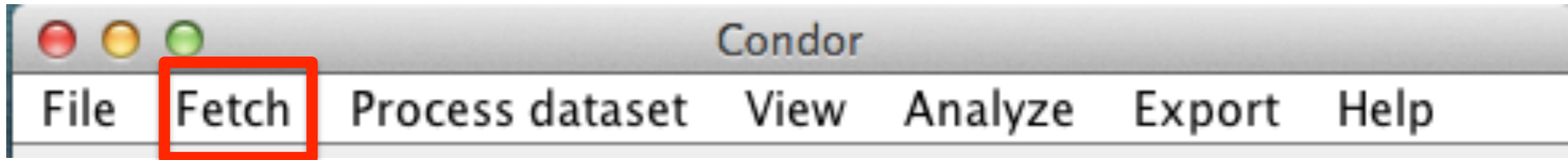


### 7. Options



### 7. Process Status





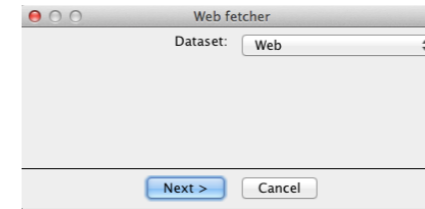
Note:

To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset

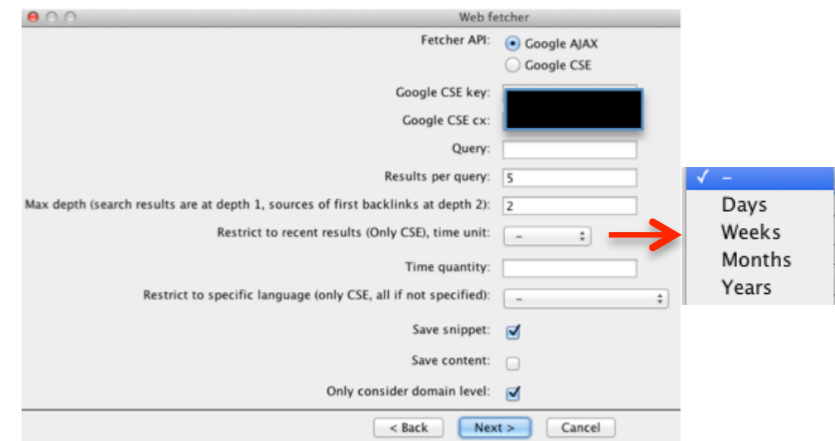
Note:

Google CSE requires an API Key.

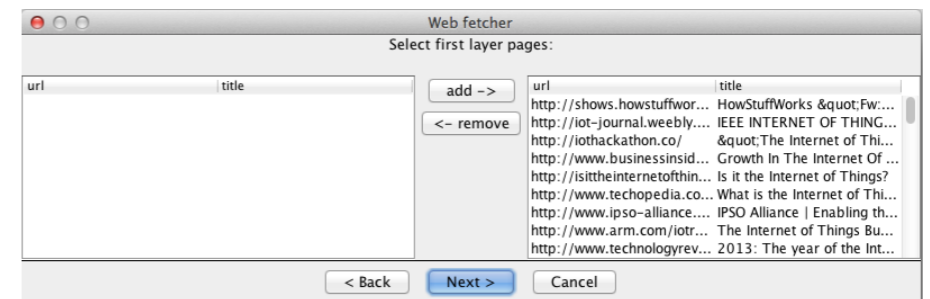
## 1. Dataset



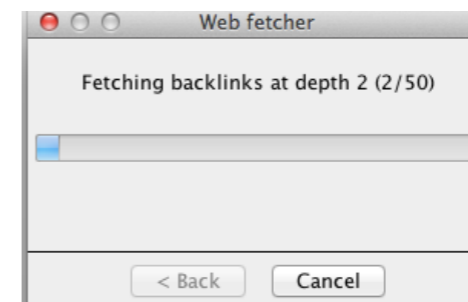
## 2. Parameters

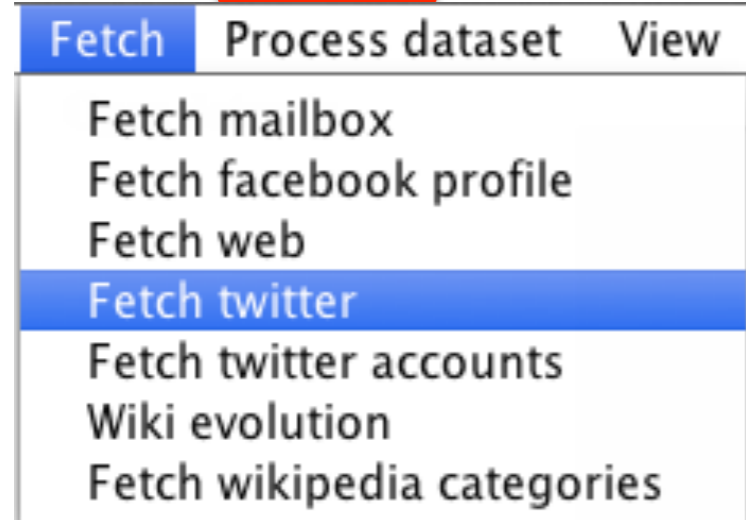
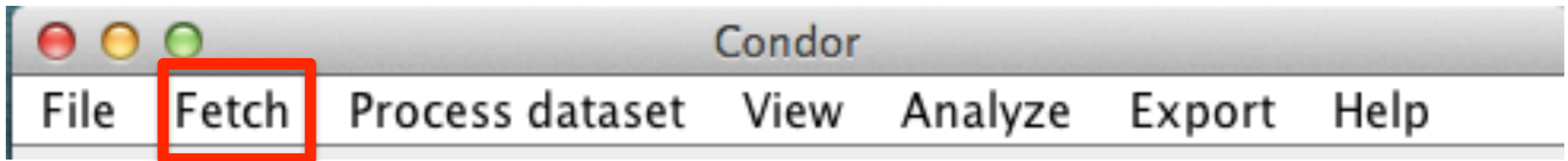


## 3. Select First Layer



## 4. Process Message

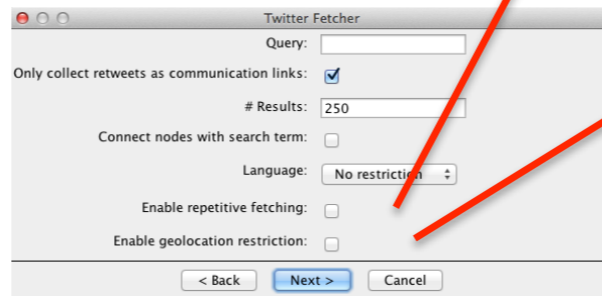
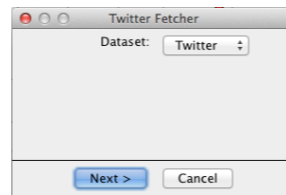




Note:  
To use the Fetch Menu,  
first use the File Menu to create or  
switch to a Database and create or  
open a dataset

Note:  
Twitter requires  
4 Twitter API Keys.

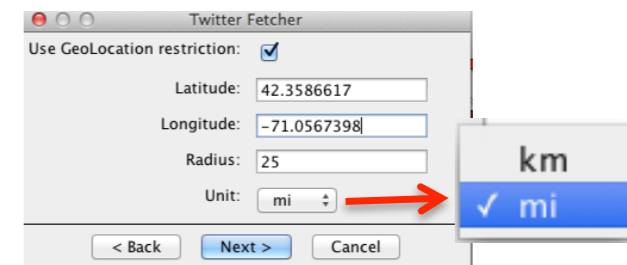
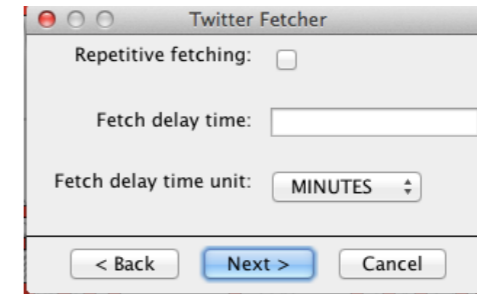
### 1. Dataset



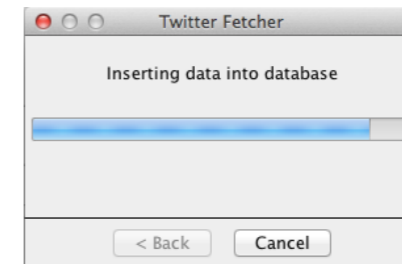
### 3. Twitter 4 Keys



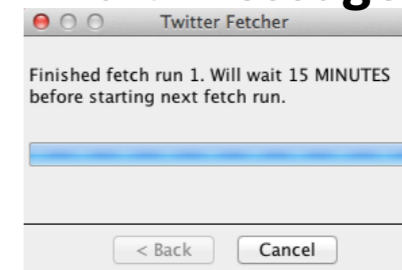
### 4. Repetitive Options

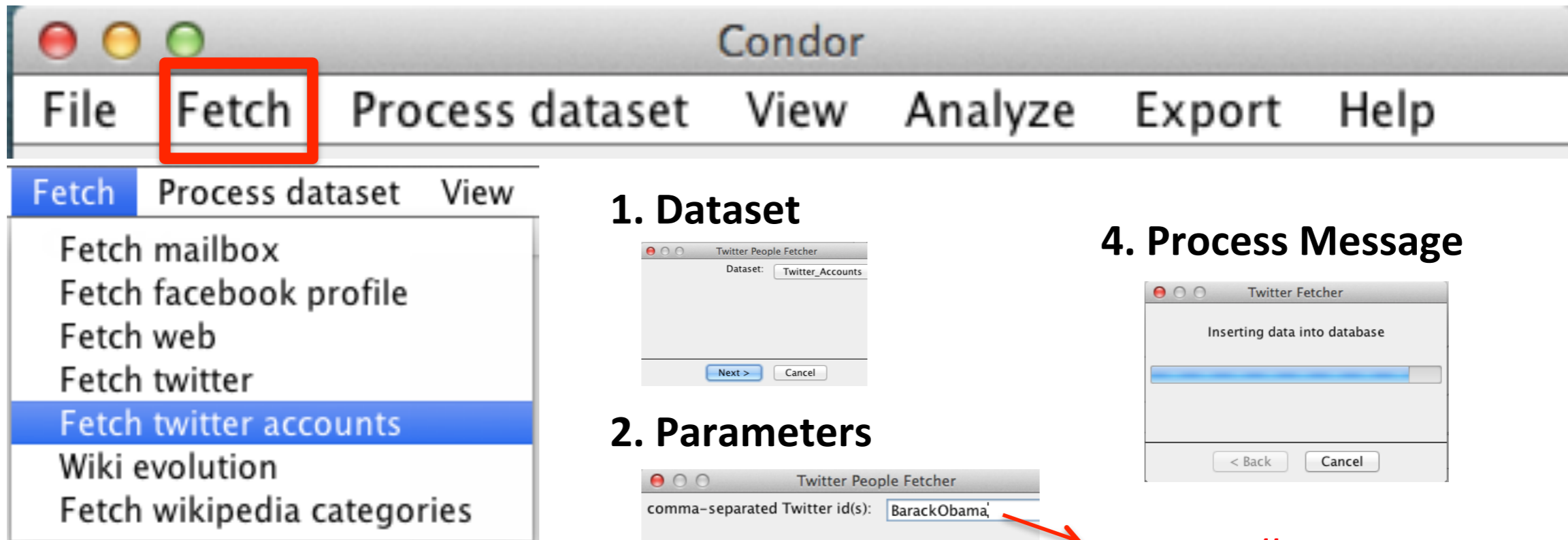


### 6. Process Message



### 7. Wait Message





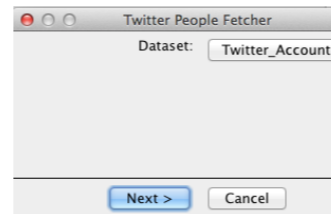
Note:

To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset

Note:

Twitter Accounts requires 4 Twitter API Keys:

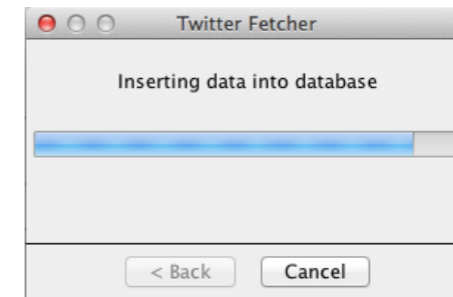
### 1. Dataset



### 2. Parameters



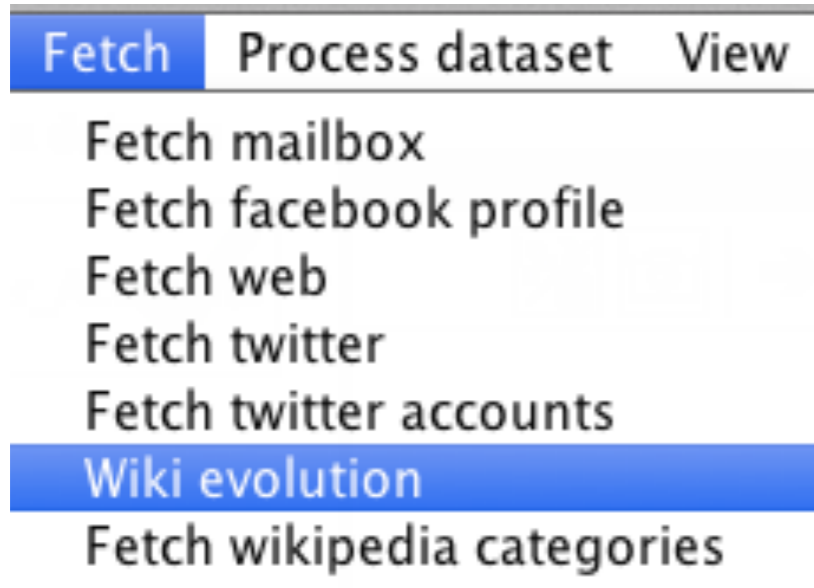
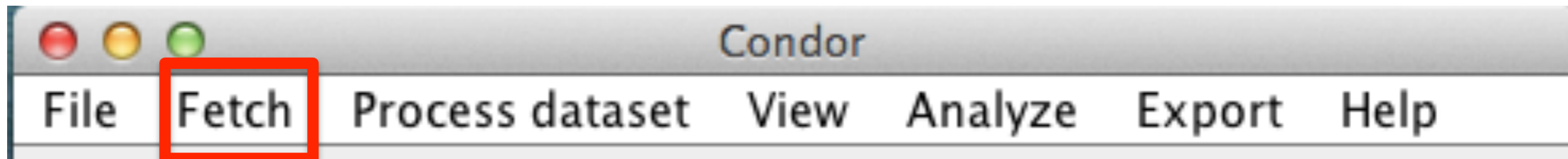
### 4. Process Message



*Note: Collect one or more Twitter Accounts with a single query by separating Id(s) with a comma “,”*

### 3. Twitter 4 Keys

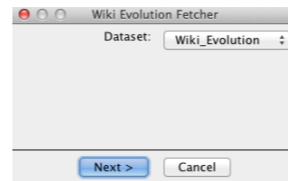




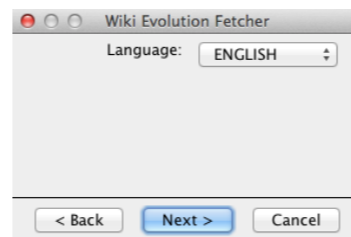
Note:

To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset

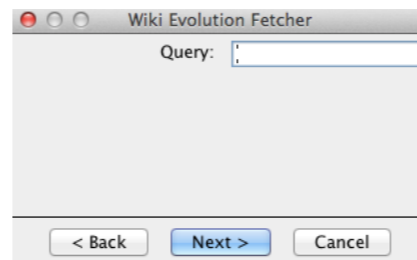
### 1. Dataset



### 2. Language



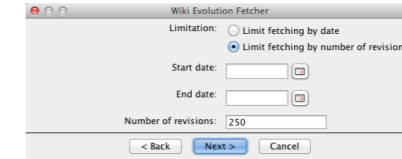
### 3. Query



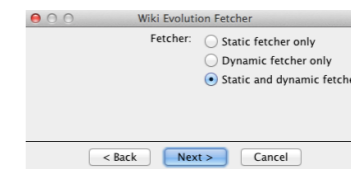
### 4. Article Selection



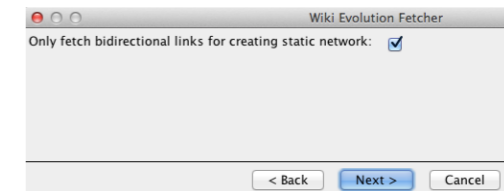
### 5. Limitation Options



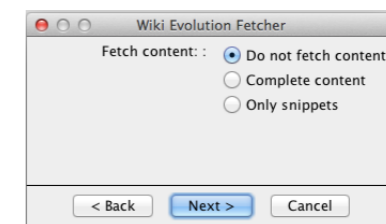
### 6. Static/Dynamic



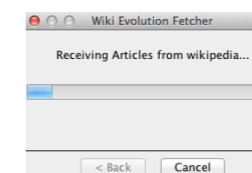
### 7. Bidirectional

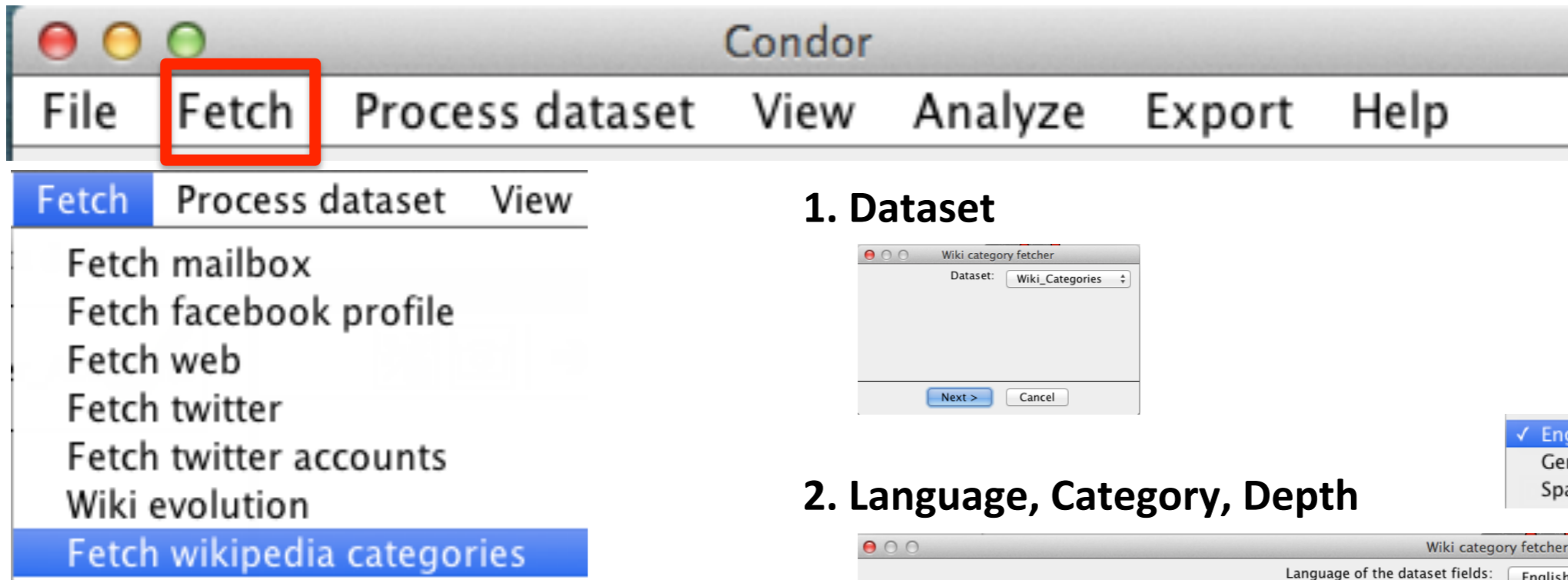


### 8. Content Options



### 9. Process Message





Note:

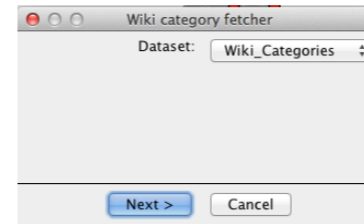
To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset

Note:

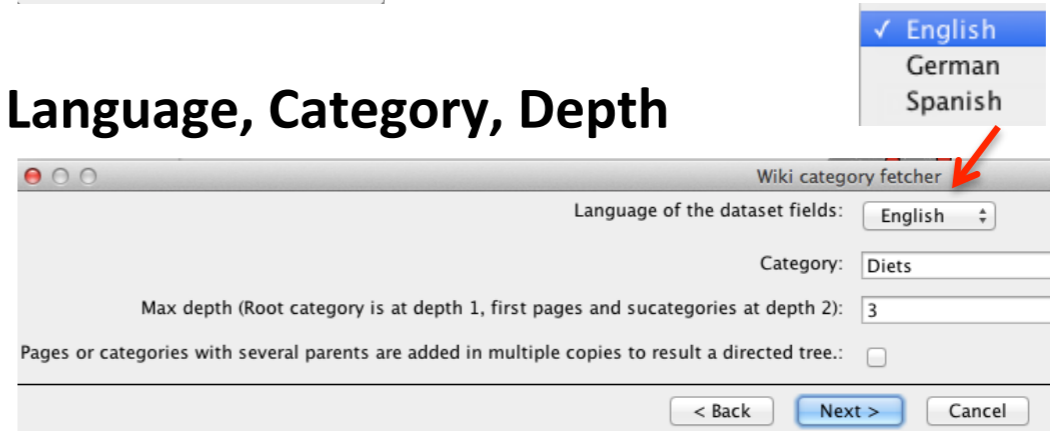
For details on Wikipedia Categories:  
See:

<http://en.wikipedia.org/wiki/Portal:Contents/Categories>

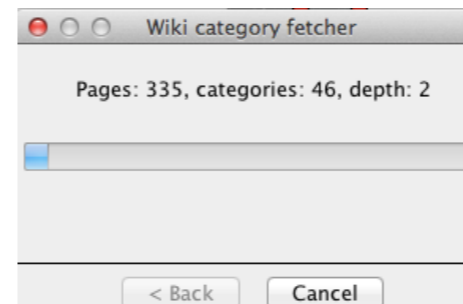
## 1. Dataset



## 2. Language, Category, Depth



## 3. Process Message

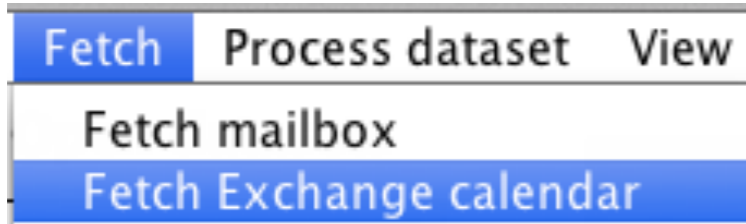




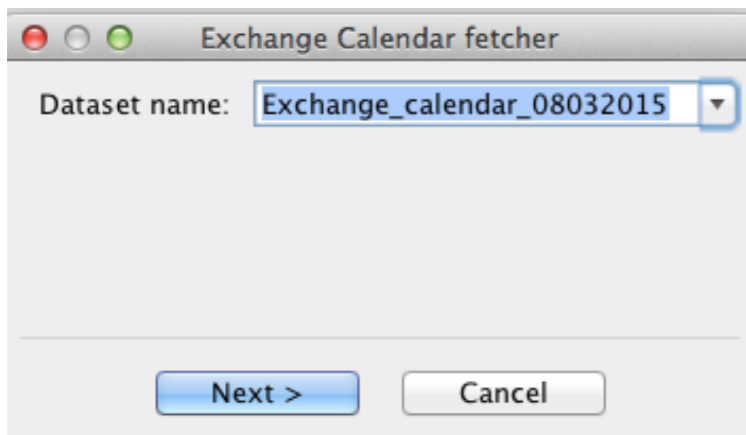
# Microsoft Outlook Exchange Calendar import



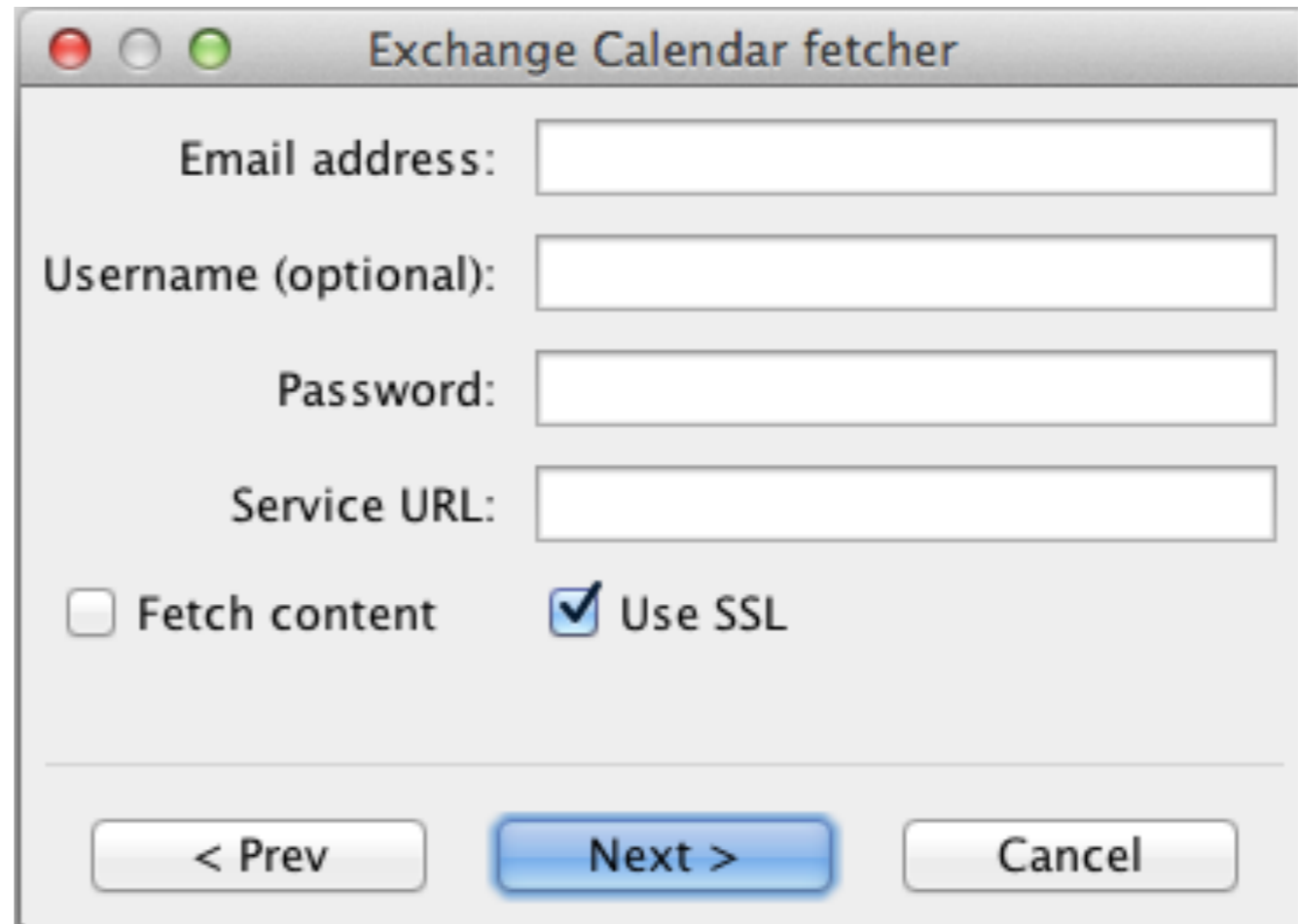
a. Fetch > Exchange calendar



b. Select Dataset (New/Open)



c. Complete Exchange Calendar form

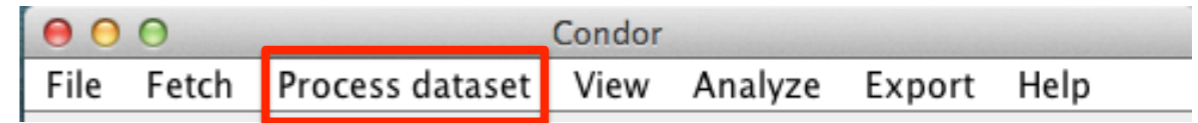


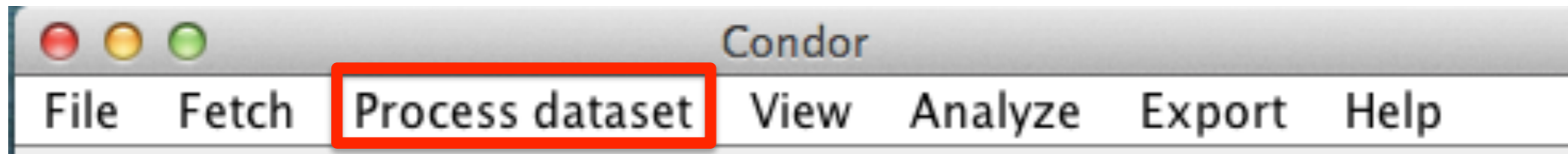
# Process Dataset Menu

## PROCESS DATASET MENU

Use the Process dataset menu to:

- a. Prune, merge, remove, sample and filter a dataset by node or link properties
- b. Calculate centralities, oscillations, contribution index, Average Weighted Value Contribution Index (AWCI), turn-taking, graph density, sentiment and influence measures
- c. Annotate a field by language or location and remove all HTML.




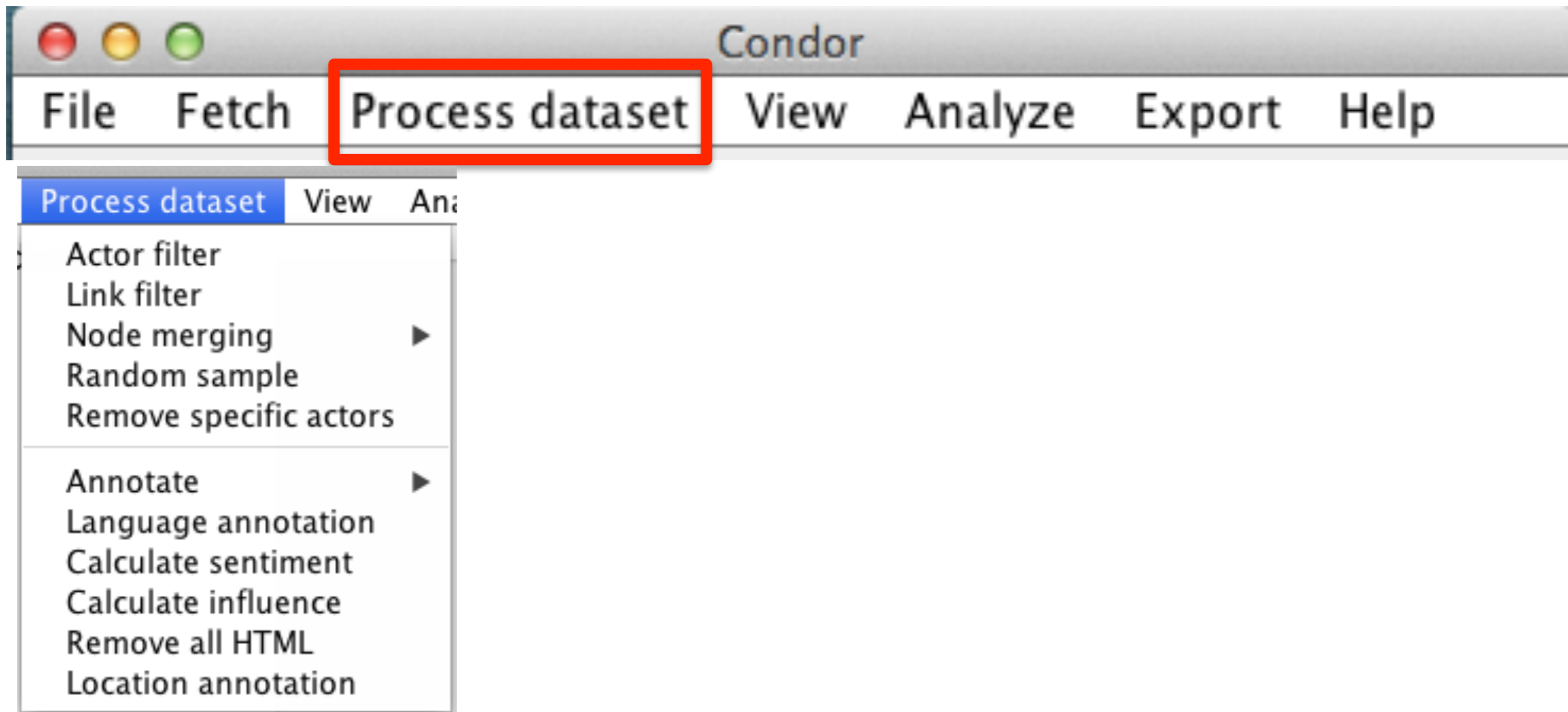


The Process dataset menu enables users to filter or subset a network by graph pruning using node or link properties, removing specific nodes, sampling, and node merging either manually or automatically. The Process dataset menu items can be executed before and/or after visualizing a dataset(s). This Process dataset filtering and subsetting are powerful capabilities, especially when working with very large networks.

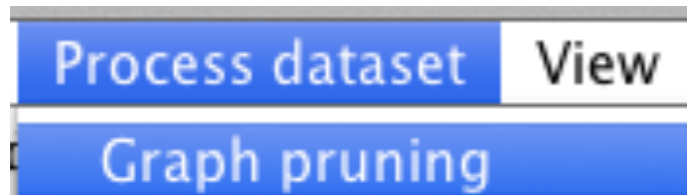
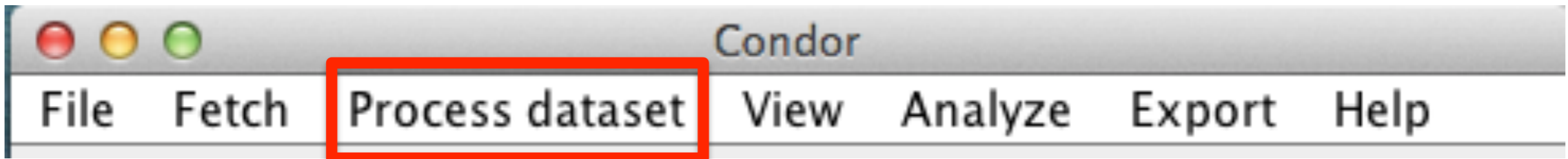
In addition, the Process dataset menu can annotate the dataset's nodes and edges with over 34 calculations, which include: centralities, oscillations, the contribution index, turn-taking, AWWCI, sentiment and influence measures. It can also perform a language annotation, which identifies the language of node or edge data fields. All these values can be used to prune or filter the network and used in graphing to change a node's size, labels and edge labels. Also, there is an option to remove all HTML.

The Process dataset menu is optional, but it is often used in an iterative way with the View menu. For example, by using the File Menu to select a database and dataset(s) with the robust 2 stage filter options, users can go directly to the View menu and map a dataset(s). Then, users may wish to apply more filters to the network and/or annotate with one or more of the 34 available measures by using the Process dataset Graph Pruning sub menu options.

Last, after a dataset is filtered or modified, a blue icon  will appear in the upper left corner of the selected dataset. Users may wish to save this modified dataset for re-use.

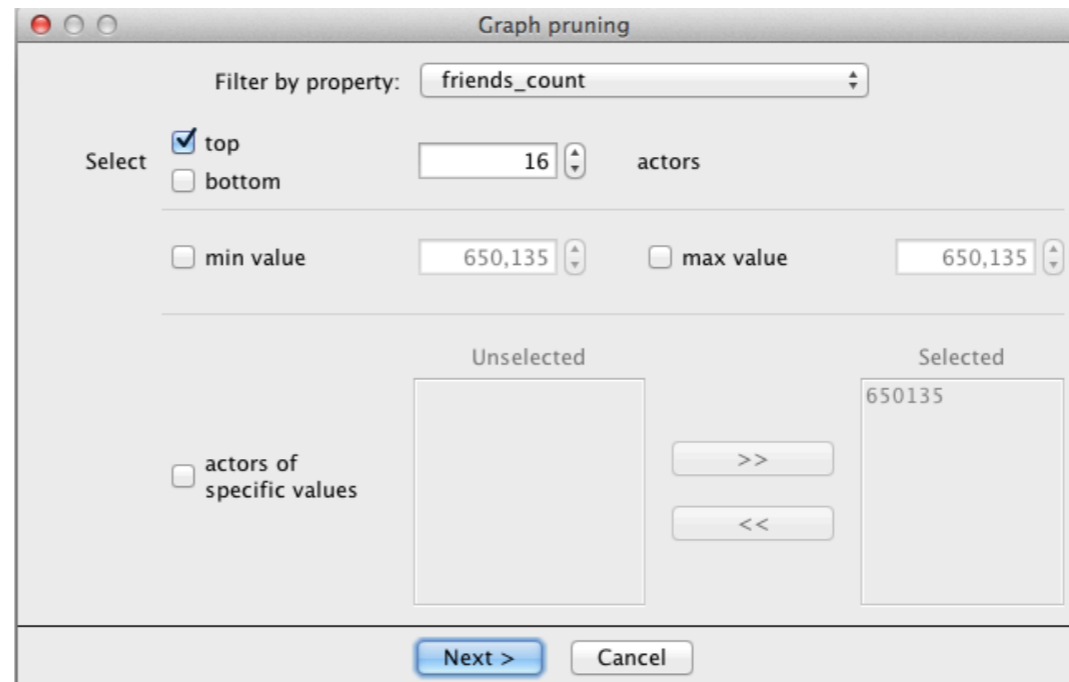


**Process dataset menu 1<sup>st</sup> Level**

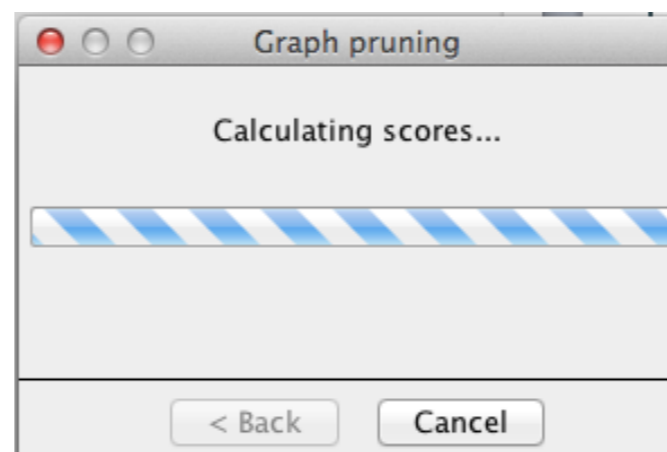


**Note: Graph Pruning options can be increased by Using the Process dataset > Annotate to calculate Centrality, Oscillation, Turn Taking, and Contribution Index measures.**

## 1. Graph Pruning Filter Options



## 2. Processing Message Appears



# Process Dataset Summary of 34+ Annotations

## Available to vary a Graph's Node, Size and Labeling Measures

### **Annotate Node Measures**

#### **A. Centrality annotations:**

1. Betweenness Centrality
2. Betweenness Centrality [Weighted]  
Note: (same name, only one value saved)
3. Closeness Centrality
4. Degree Centrality
5. Degree Centrality [Weighted]  
Note: (same name, only one value saved)

#### **B. Oscillation annotations**

1. Betweenness oscillation
2. Contribution Index oscillation

#### **C. Contribution Index Annotations**

1. Contribution Index value (-1 to +1)
2. Messages Total count
3. Messages received count
4. Messages sent count

#### **D. Turn Taking Annotations**

1. Avg. Nudges until responses
2. Avg. ART [h]

#### **E. Graph Density Annotation**

1. Graph Density  
Note: only a single graph value, not available for pruning, or graphing.

### **Sentiment Measures**

#### **F. Sentiment Node Annotations**

1. Avg. complexity
2. Avg. emotionality
3. Avg. sentiment

#### **G. Sentiment Edge Annotations**

1. Sentiment Words [list of top 4 words and values]
2. Keywords [top 8 words and values]
3. Emotionality score
4. Language Annotation, such as, "en"
5. Complexity score
6. Sentiment score

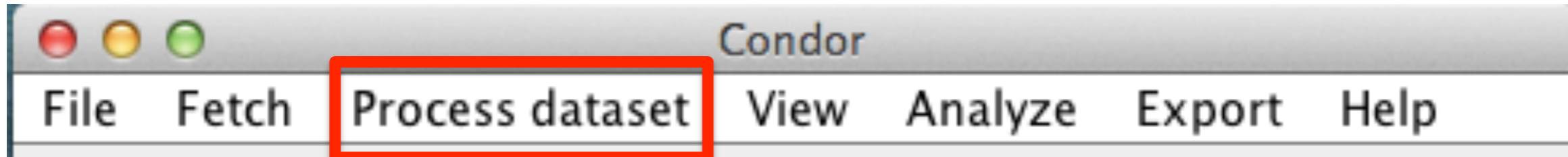
### **Influence Measures**

#### **H. Influence Node annotations**

1. most influential words
2. average influence per message
3. messages sent
4. avg. Sentiment
5. total Influence
6. most common word

#### **I. Influence Edge annotations**

1. influence other direction
2. influence
3. language
4. sentiment
5. sentiment words
6. keywords



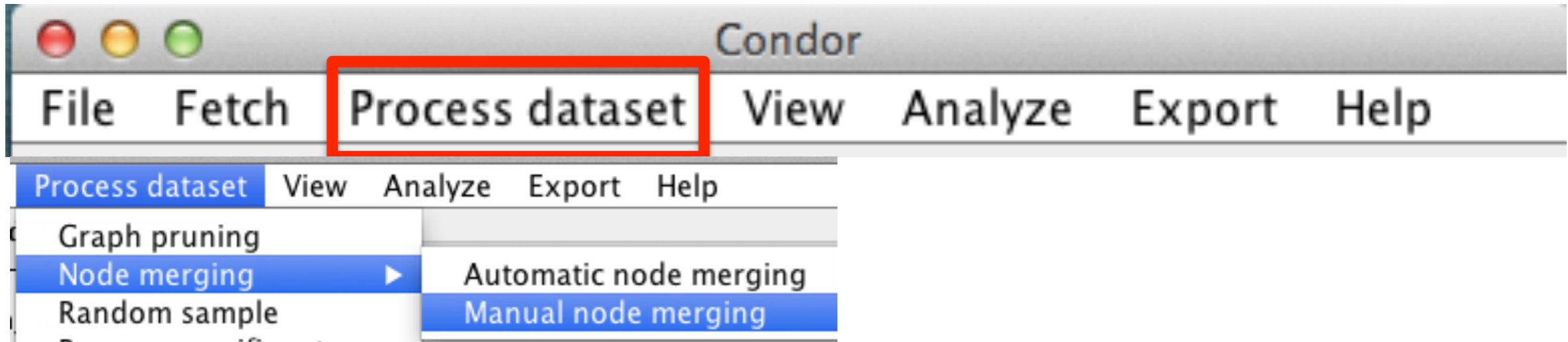
**Process dataset menu 2nd Level**

Process dataset	View	An
Graph pruning		
Node merging	▶	→
Sample		
Remove specific actors		
<hr/>		
Annotate	▶	→
Language annotation		
Calculate sentiment		
Calculate influence		

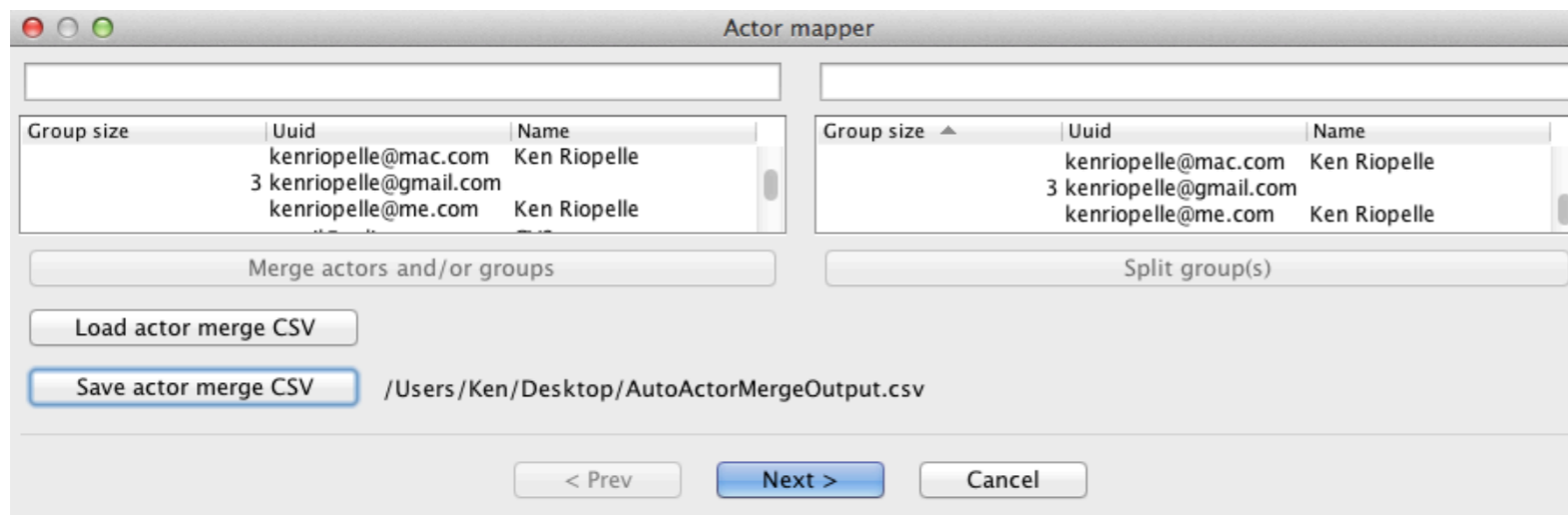
The 'Node merging' and 'Annotate' items from the 'Process dataset' menu are expanded into sub-menus. The 'Node merging' sub-menu contains 'Automatic node merging' and 'Manual node merging'. The 'Annotate' sub-menu contains 'Centrality annotations', 'Oscillation annotations', 'Contribution index annotations', 'AWVCI annotation', 'TurnTaking annotations', and 'Graph density annotation'. Red arrows and brackets indicate the mapping from the main menu items to their respective sub-menus.

**Note:**

- 1. After a node annotation is computed, use the Process dataset menu > Graph Pruning submenu to continue and prune a dataset, and /or**
- 2. Use the annotation values to vary the node size and node labels in the graph.**



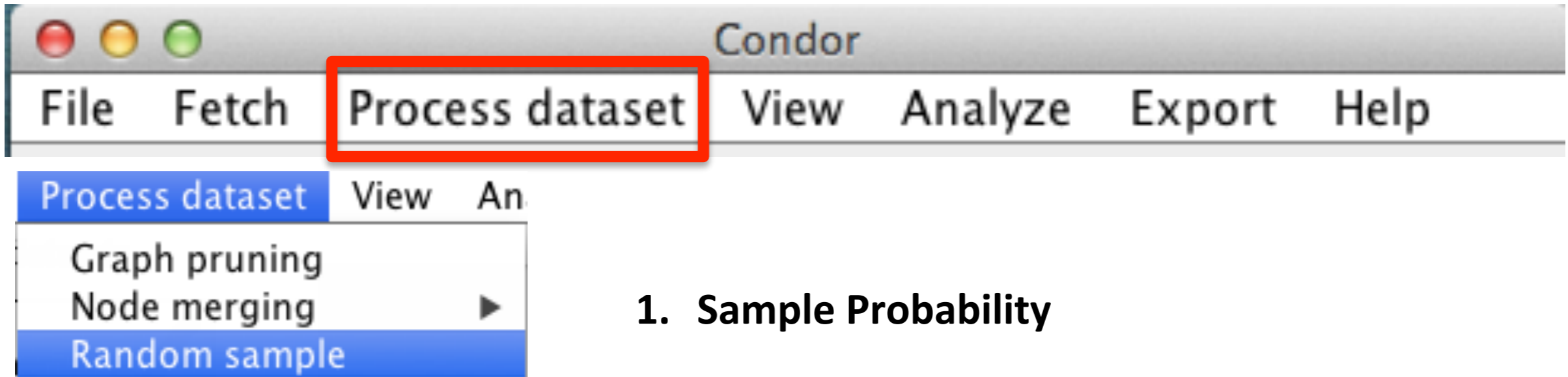
## 1. Manual Node merging Actor Mapper



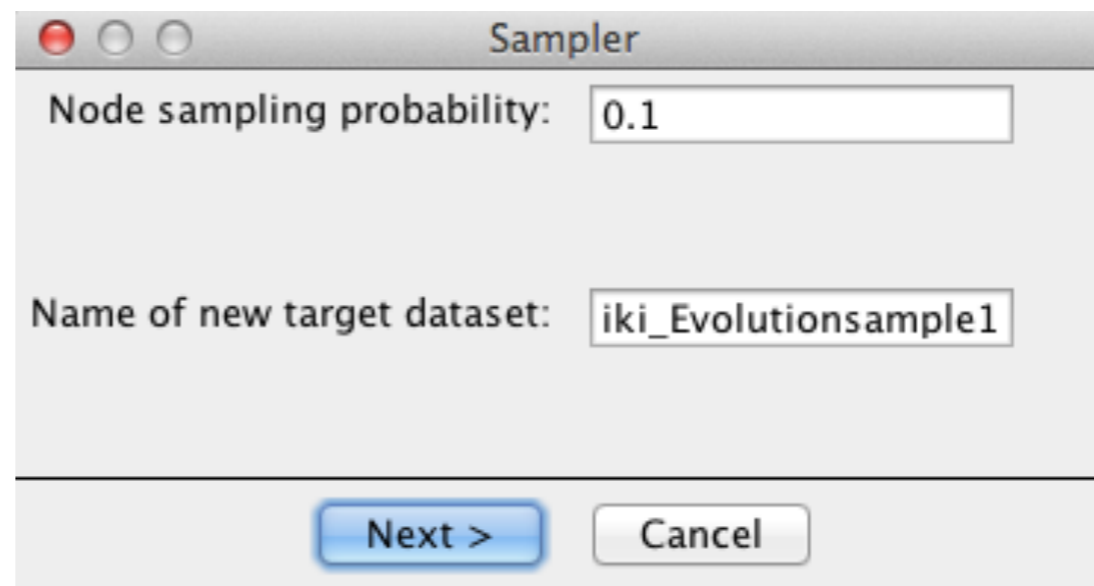
## 2. Sample Actor Mapper File Output

A	B	C	D
kenriopelle@mac.com	Ken Riopelle	kenriopelle@gmail.com	
kenriopelle@mac.com	Ken Riopelle	kenriopelle@me.com	Ken Riopelle

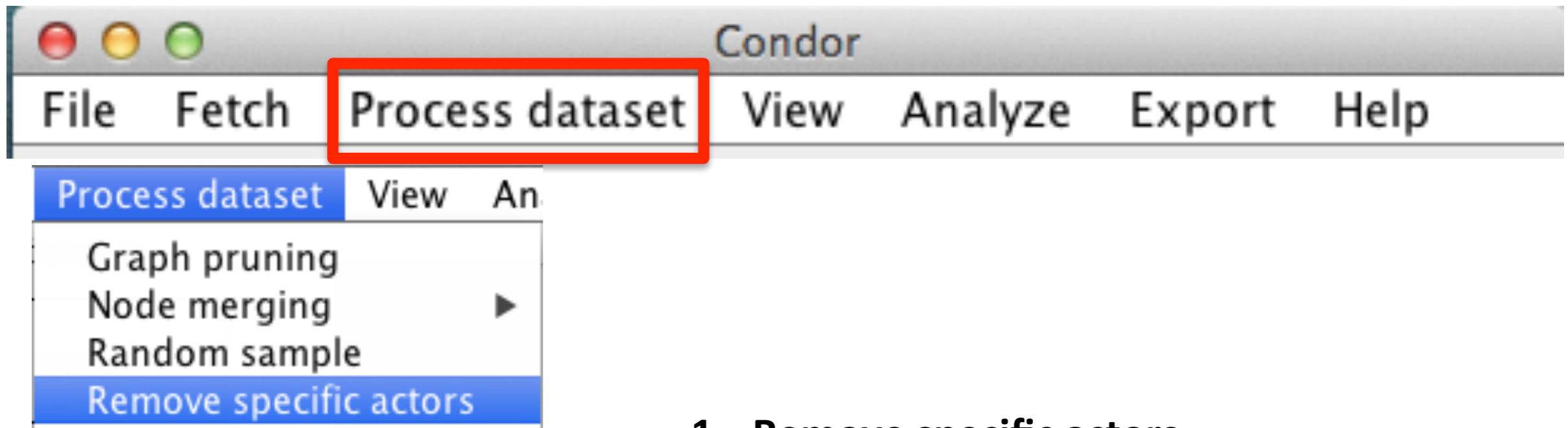




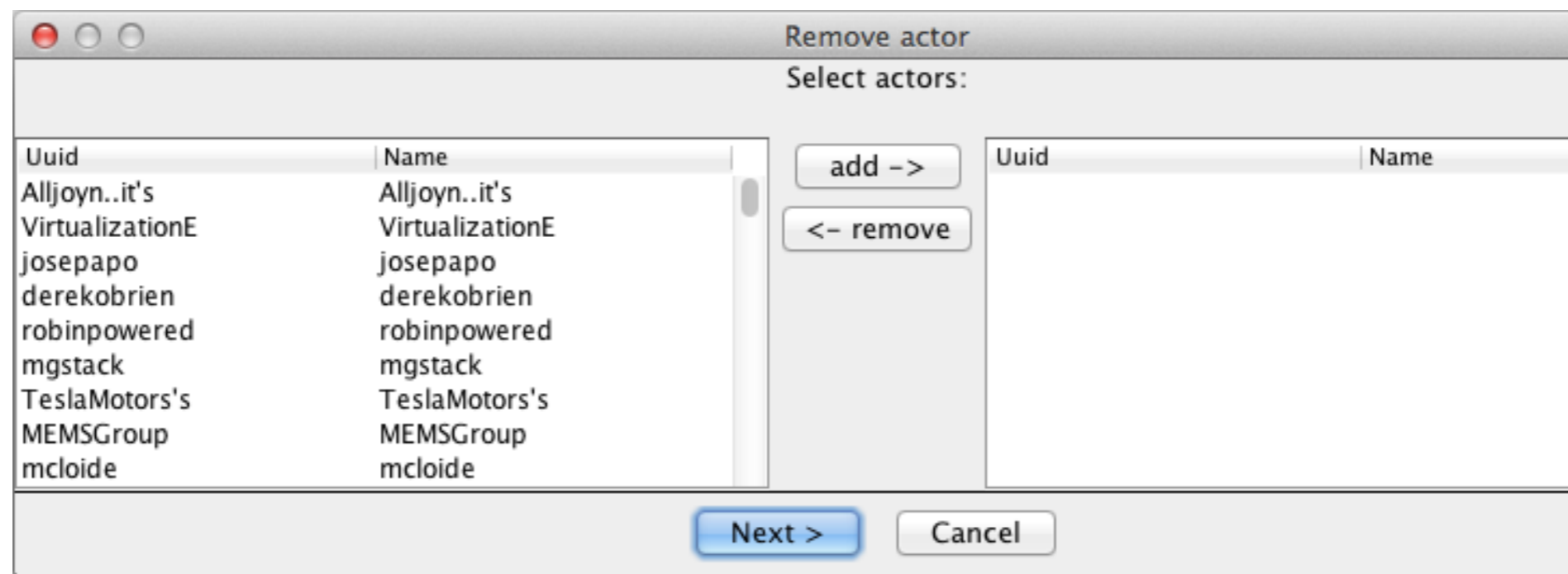
## 1. Sample Probability

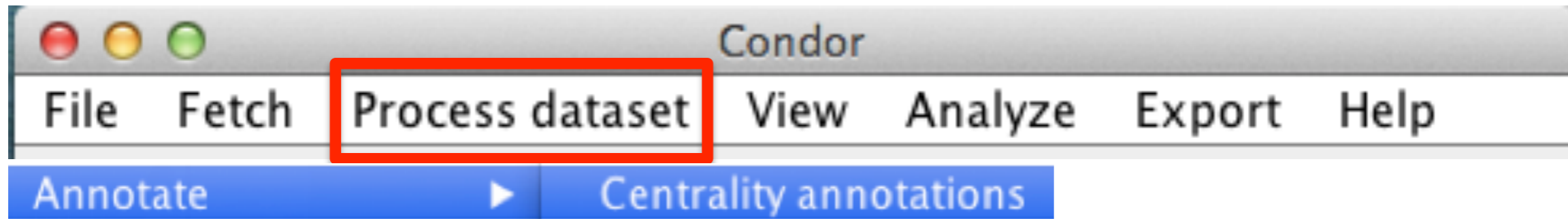


Note: Automatically creates a new dataset name, which users may change.



## 1. Remove specific actors





### A. Centrality annotations:

1. Betweenness Centrality
2. Betweenness Centrality [Weighted] Note: (same name, only one value saved)
3. Closeness Centrality  
Note: Does not show up in Node Size right away
4. Degree Centrality
5. Degree Centrality [Weighted]  
Note: (same name, only one value saved)

### B. Oscillation annotations

1. Betweenness oscillation
2. Contribution Index oscillation

### C. Contribution Index Annotations

1. Contribution Index value (-1 to +1)
2. Messages Total count
3. Messages received count
4. Messages sent count

### D. Turn Taking Annotations

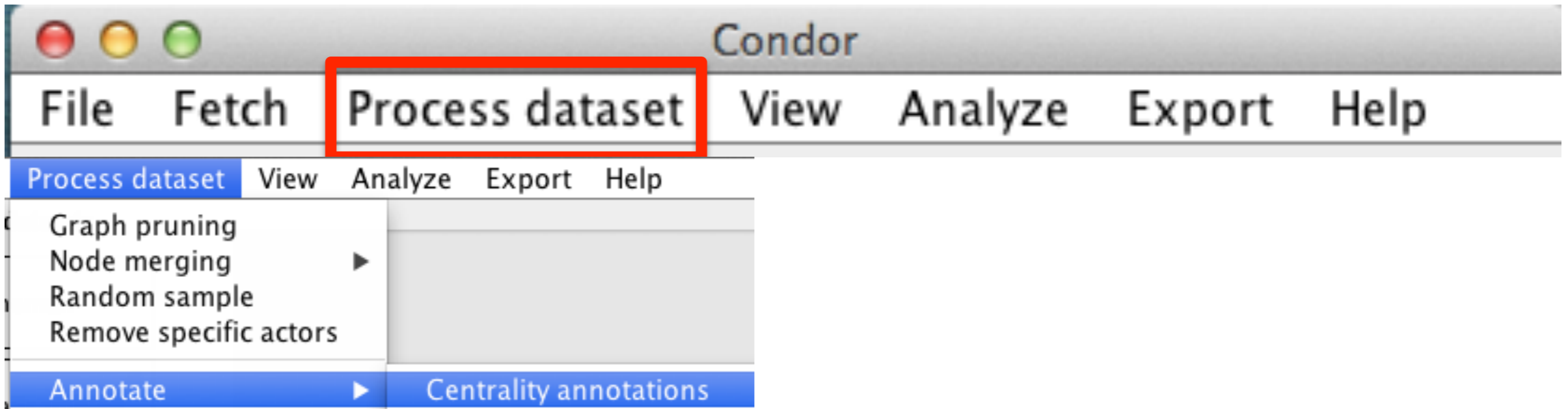
1. Avg. Nudges until responses
2. Avg. ART [h]

### E. Graph Density Annotation

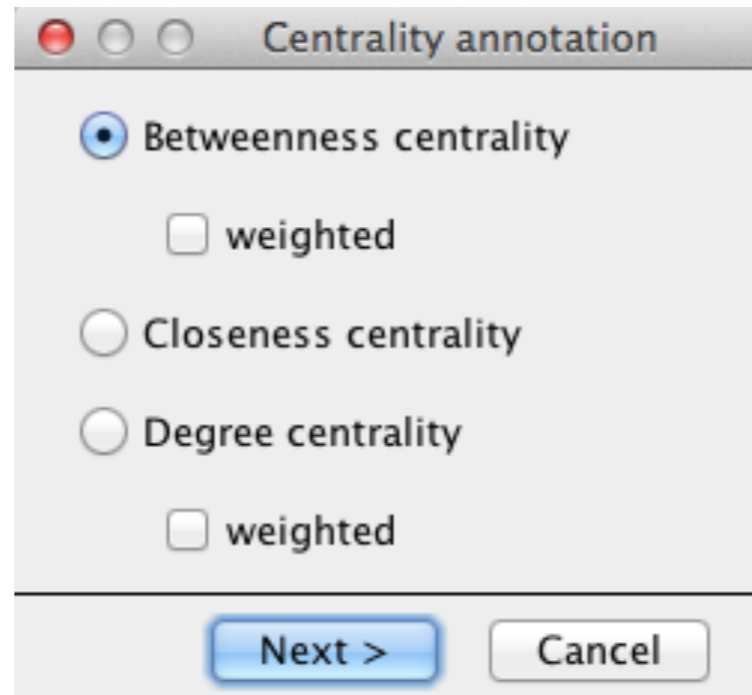
1. Graph Density  
Note: only a single graph value, not available for pruning, or graphing.

**Note:**

1. After a node annotation is computed, use the Process dataset menu > Graph Pruning to continue and prune a dataset, and /or
2. Use the annotation values to vary the node size and node labels in the graph.

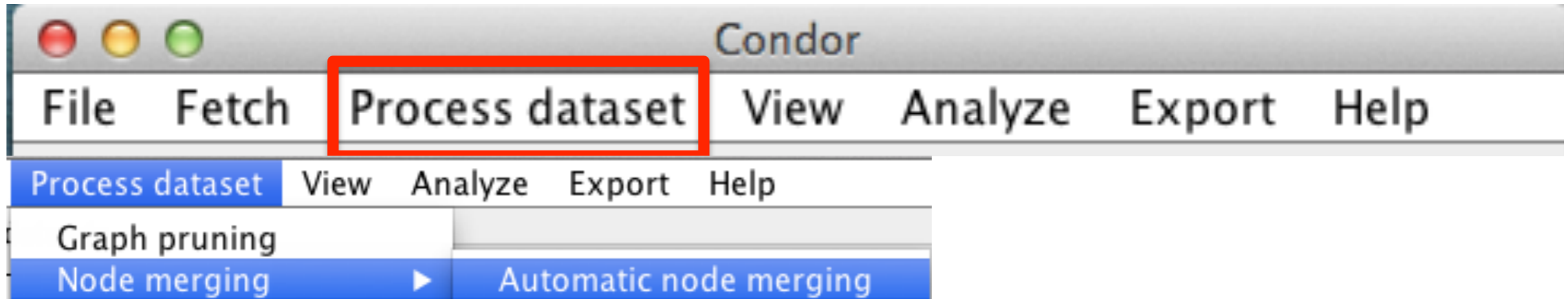


## 1. Select Centrality Measure

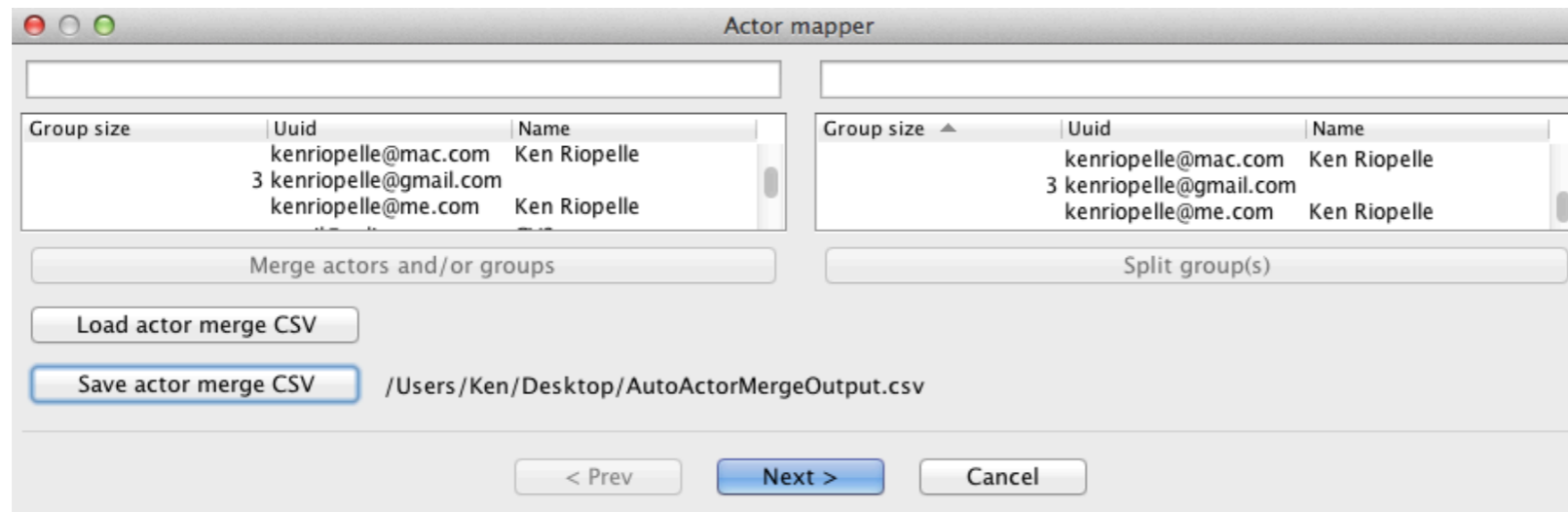


Note:  
Closeness centrality is not supported at this time.

## 2. Processing Message Appears

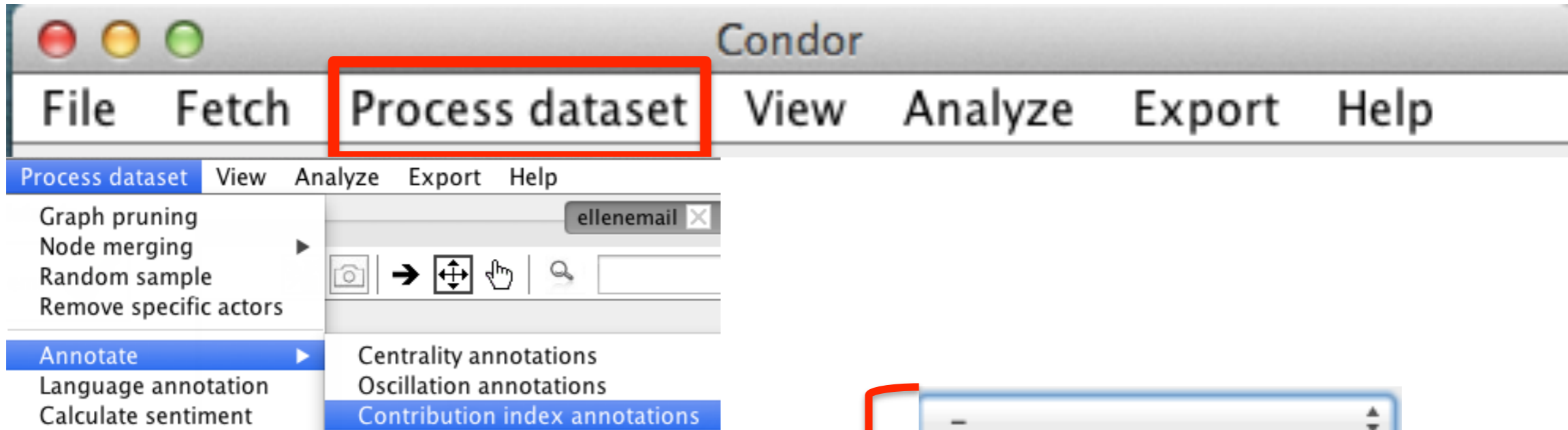


# 1. Automatic Node merging Actor Mapper

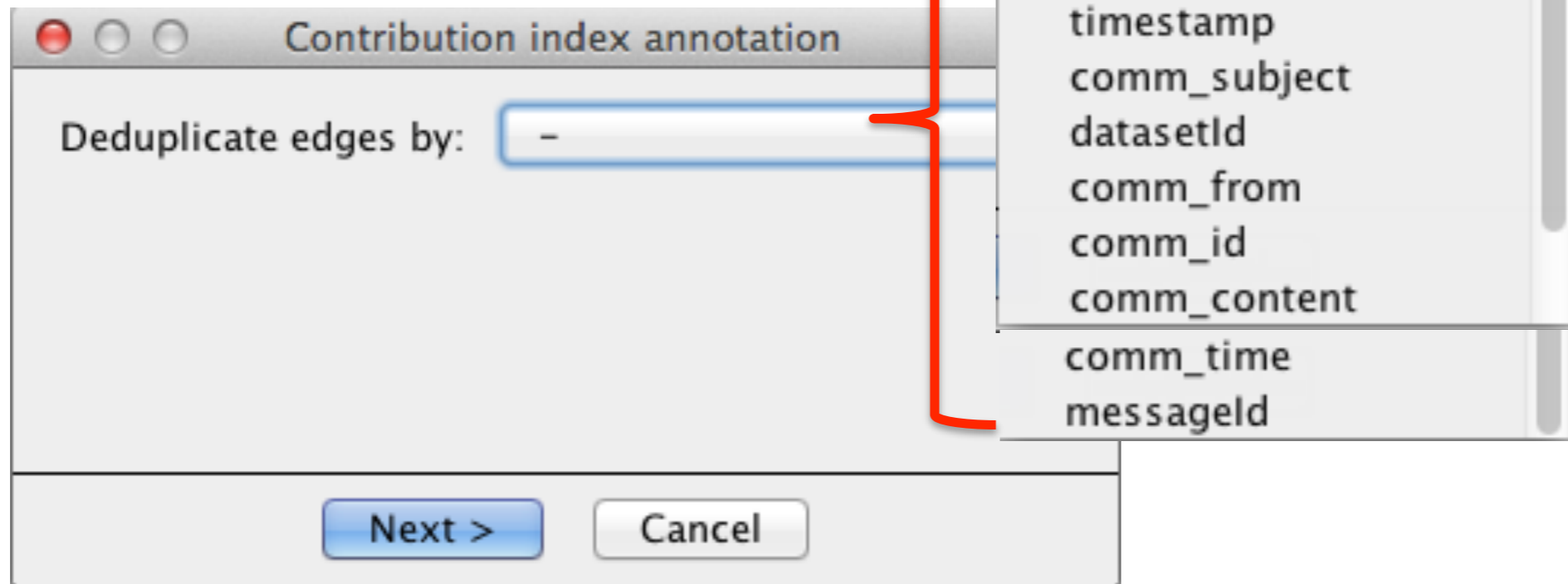


- 2. Sample Actor Mapper Output

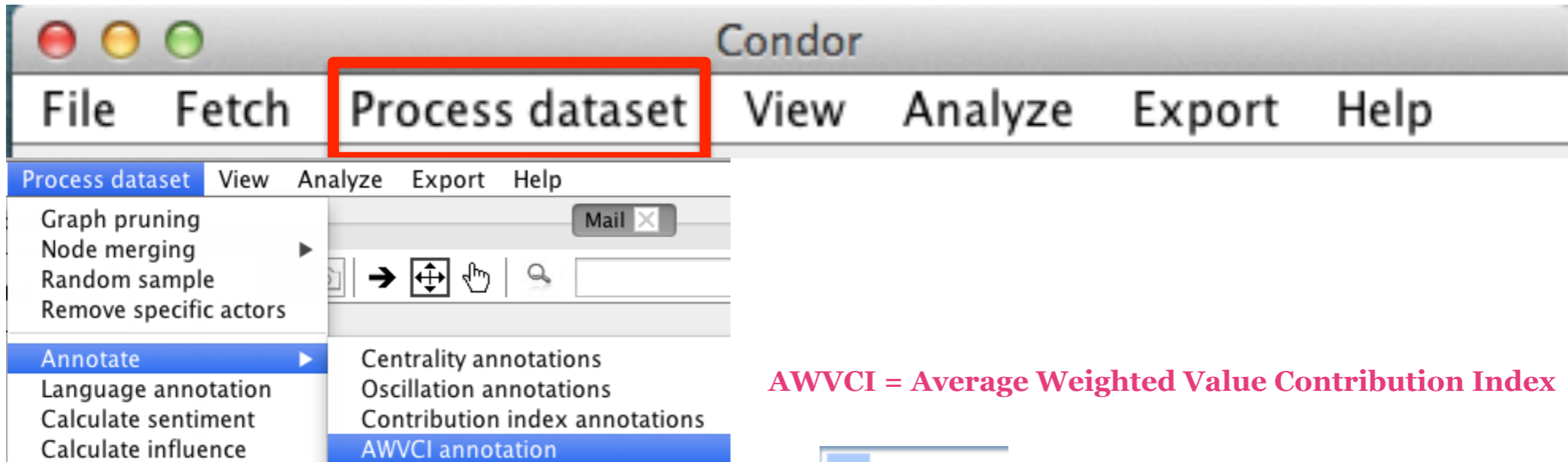
A	B	C	D
kenriopelle@mac.com	Ken Riopelle	kenriopelle@gmail.com	
kenriopelle@mac.com	Ken Riopelle	kenriopelle@me.com	Ken Riopelle



### 1. Pick Deduplicate edge option

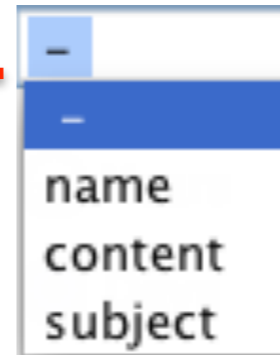
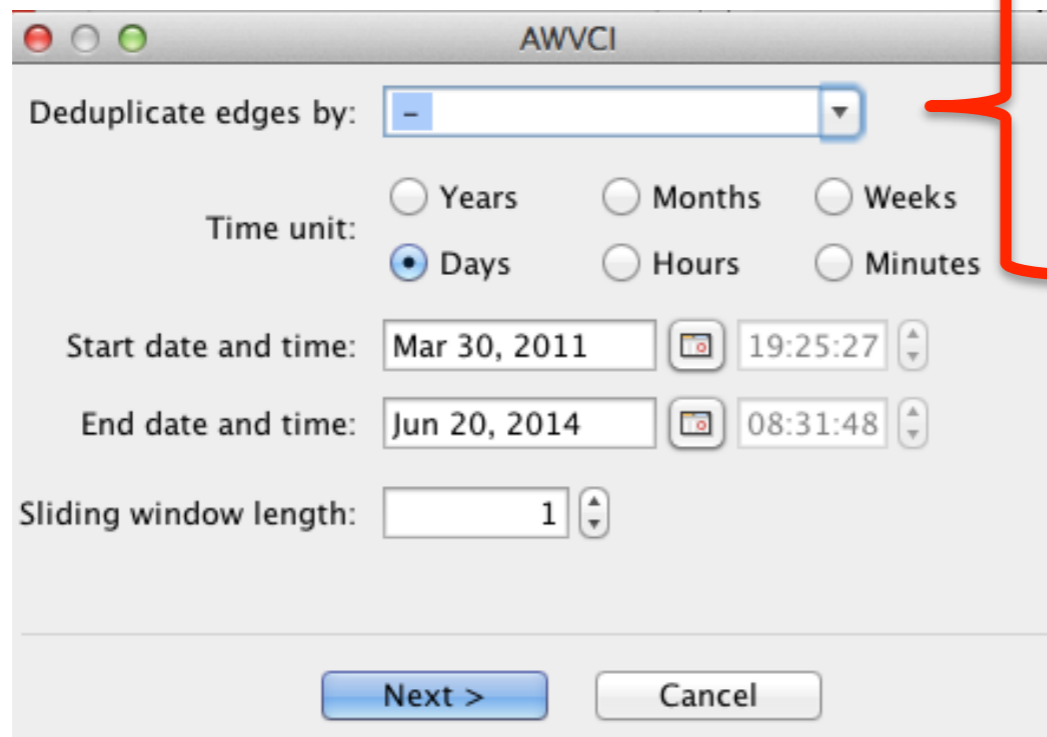


**Note: Use Process dataset menu > Graph Pruning to use Contribution Index values**



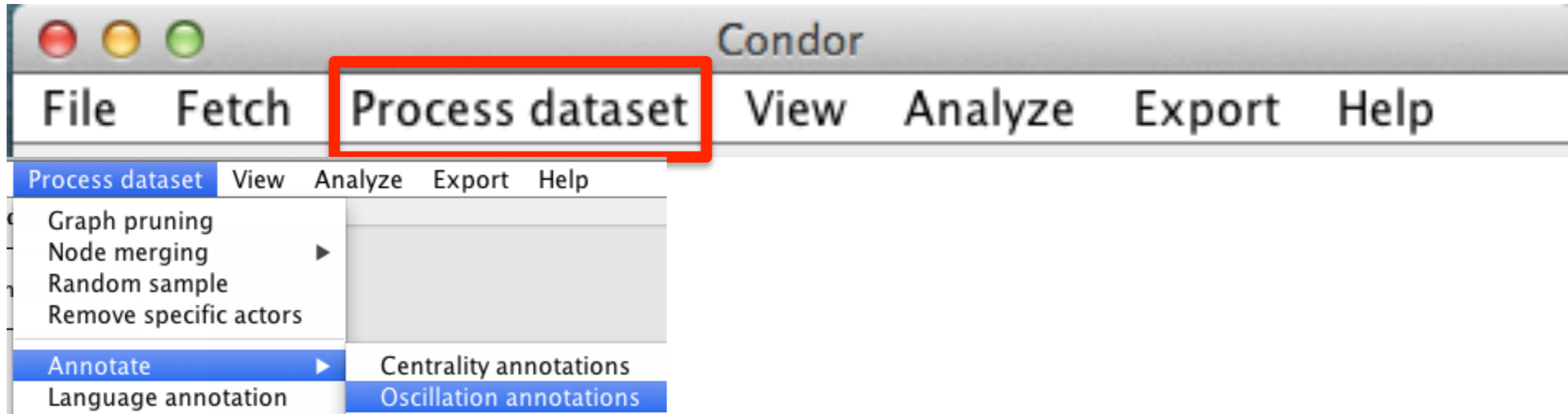
**AWVCI = Average Weighted Value Contribution Index**

## 1. AWVCI annotations options

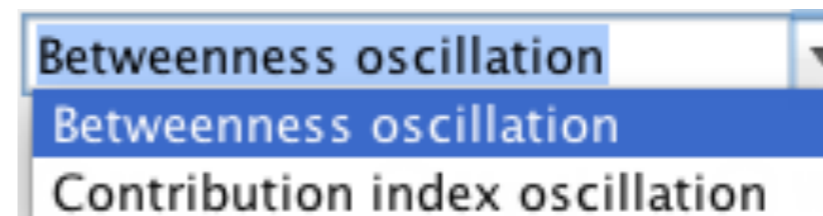
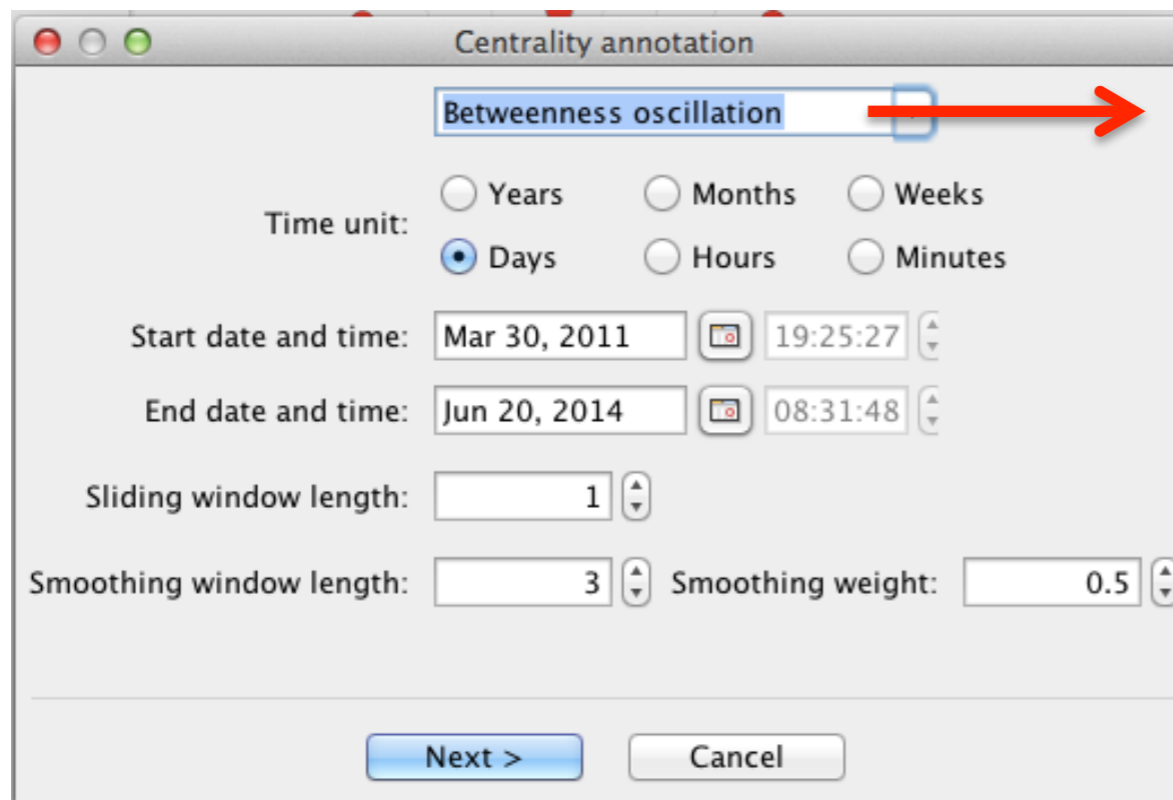


Note:  
Deduplicate edges by  
options varies by  
dataset type

**Note: Use Process dataset menu > Graph Pruning to use Contribution Index values**

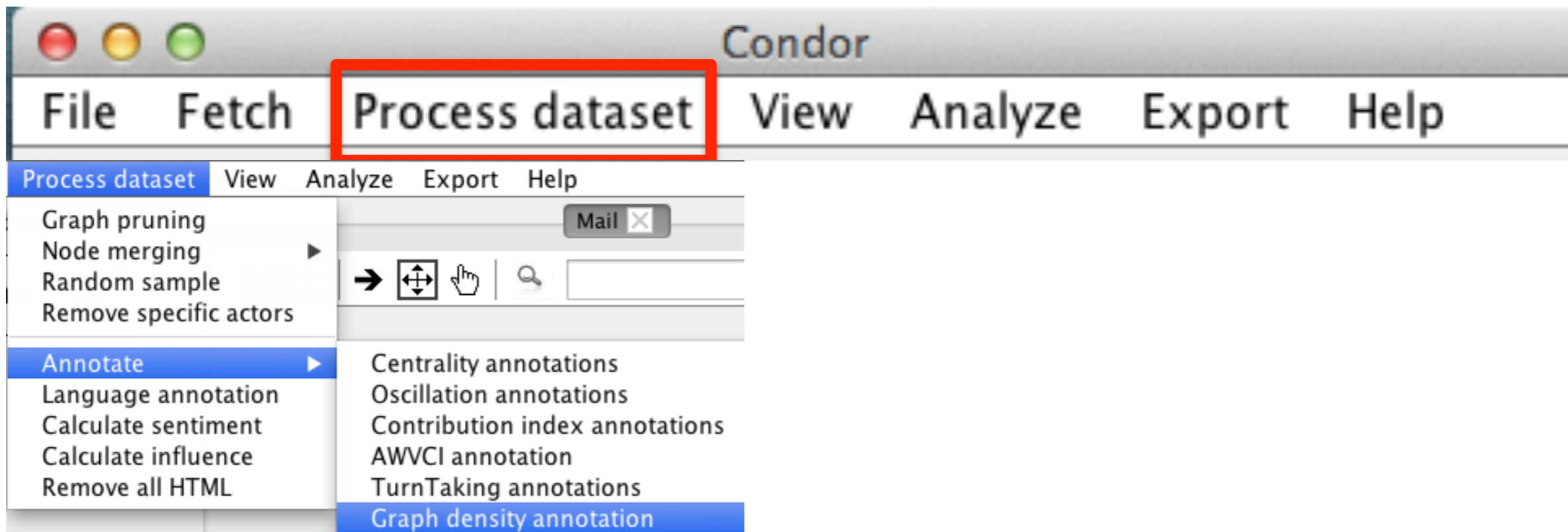


## 1. Set Oscillation Parameters



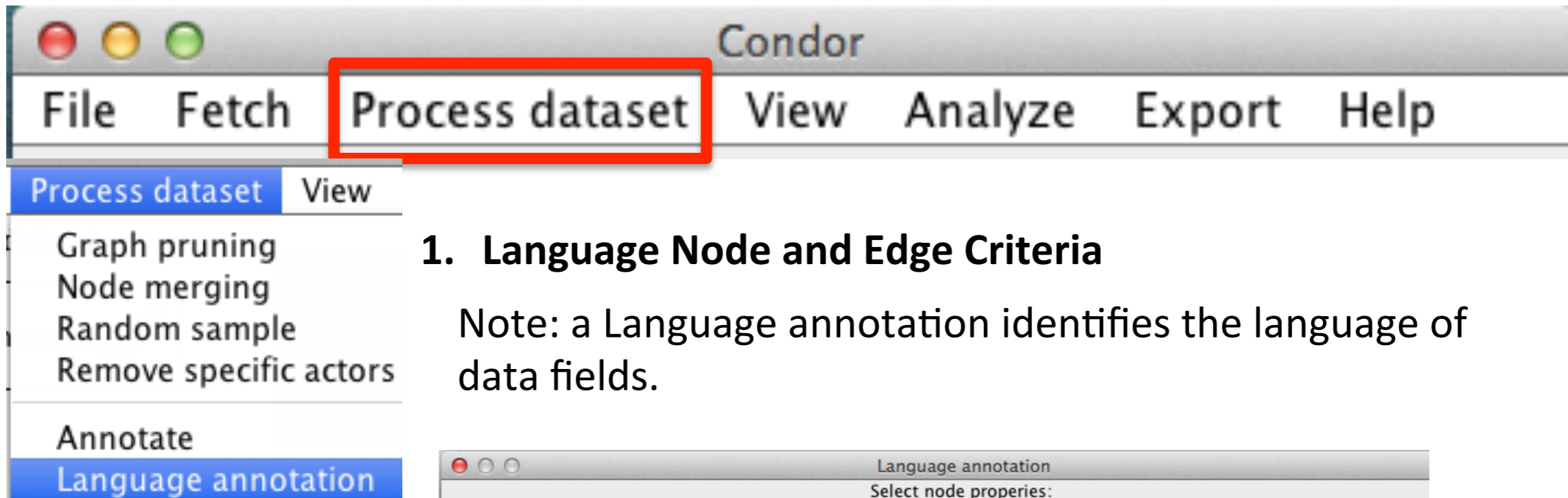
**Note: Use Process dataset menu > Graph Pruning to use Oscillation values**





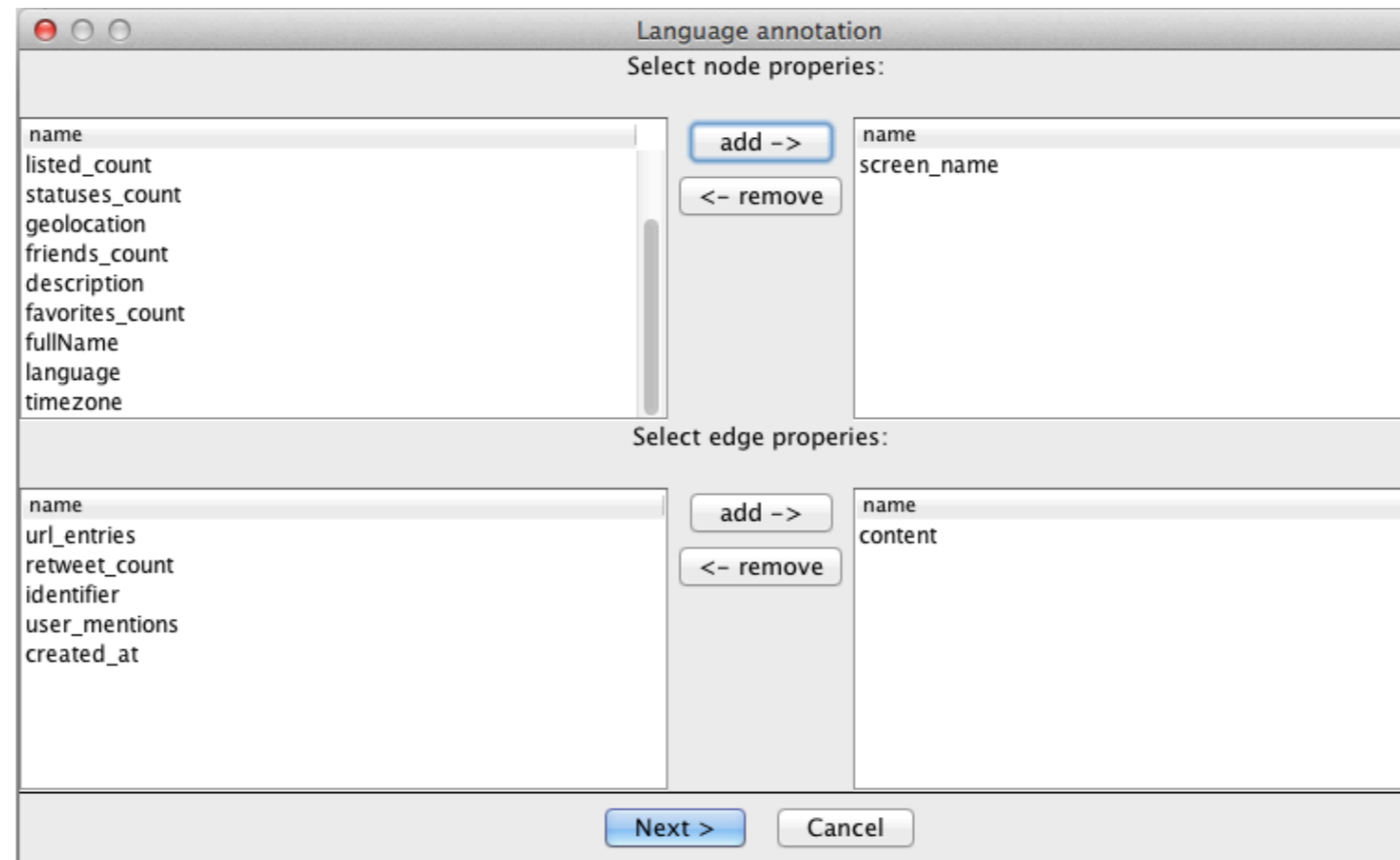
**Note: Graph density is a single value and not available for pruning, or graphing. Use Export > Export Dataset properties to view the graph density value. Here is a sample output.**

	A	B
1	Metric	Value
2	Group Degree Centrality	0.4175
3	Average Group ART [h]	21.2778
4	Group ART Variance [h]	836.3301
5	Average Group Nudges until responses [h]	1.3611
6	Groupd Nudges Variance until responses [h]	0.5825
7	Graph density	0.0045
8	Group Betweenness Centrality	0.5995

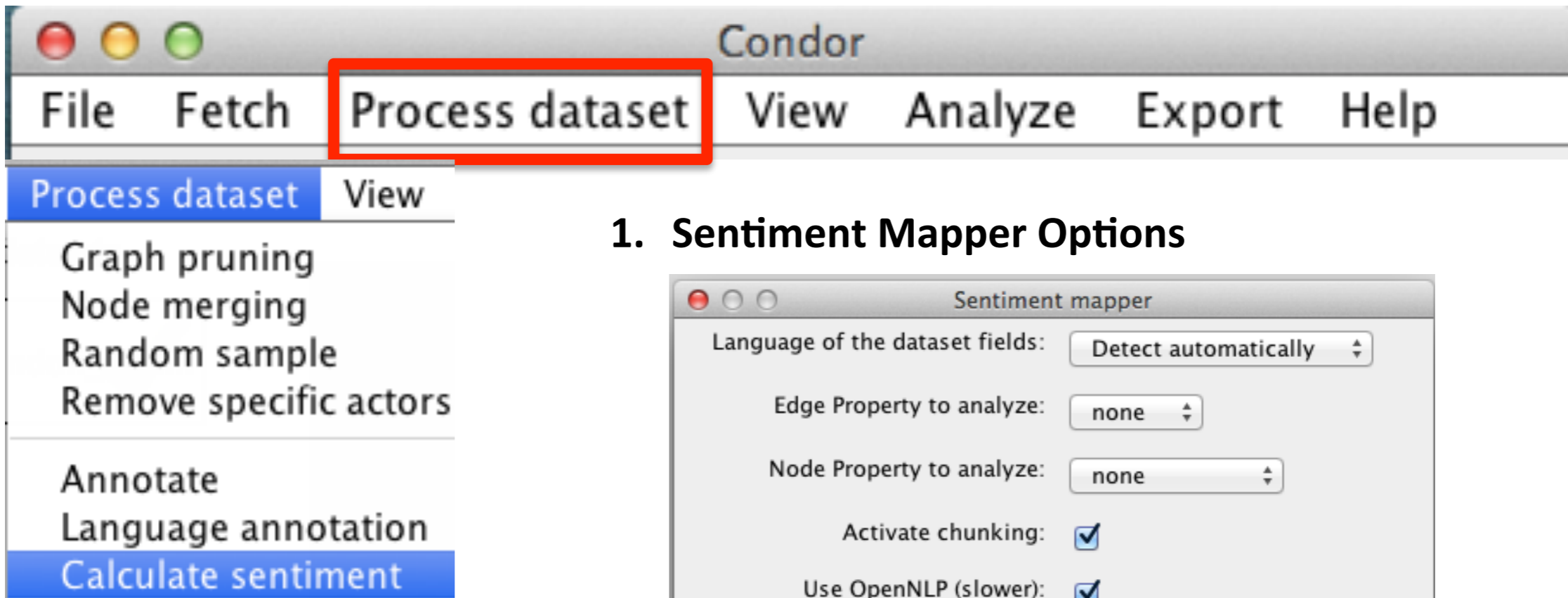


## 1. Language Node and Edge Criteria

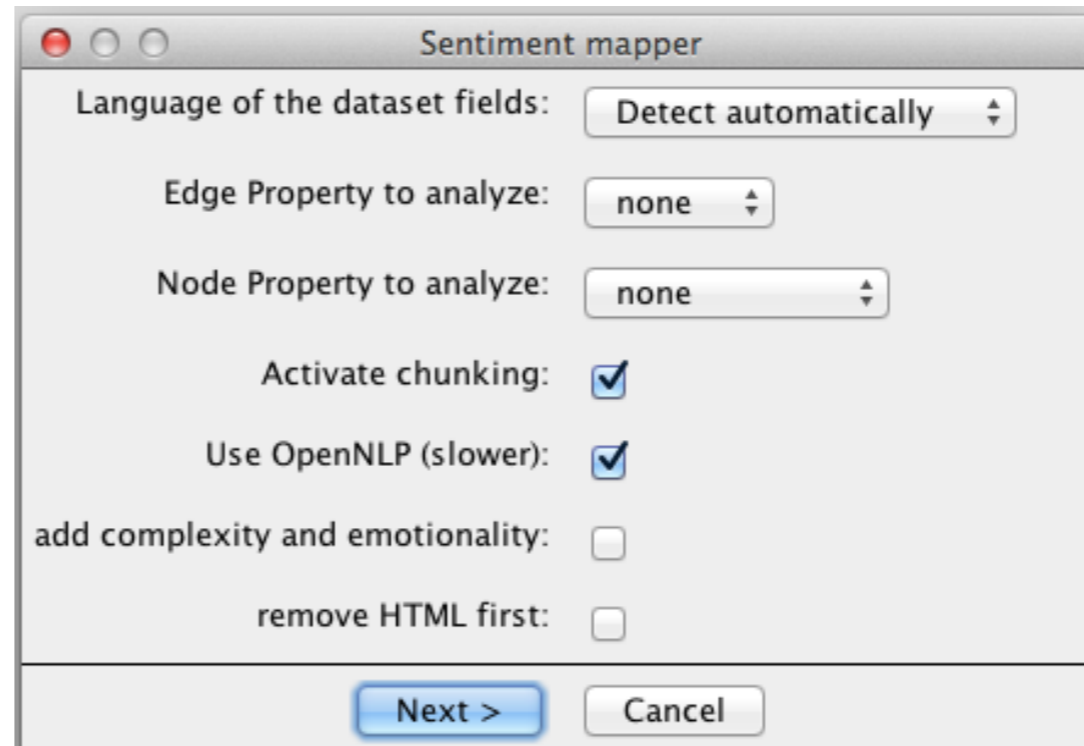
Note: a Language annotation identifies the language of data fields.



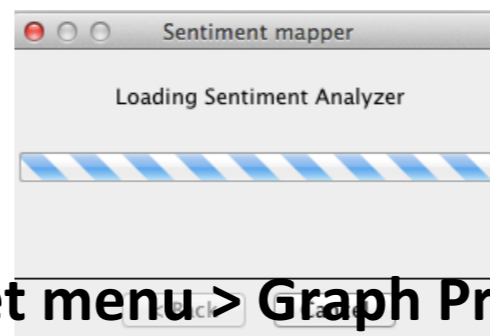
**Note: Use Process dataset menu > Graph Pruning to use Language values**



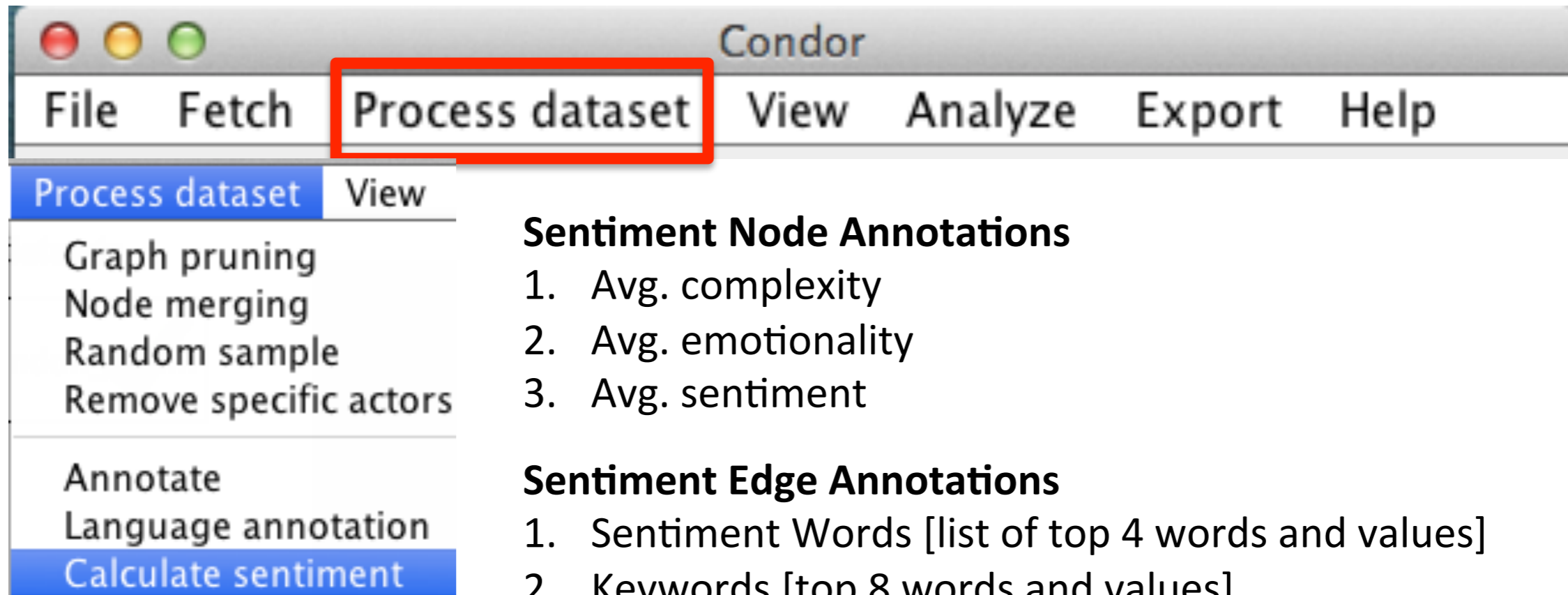
## 1. Sentiment Mapper Options



## 2. Process Messages Appear



**Note: Use Process dataset menu > Graph Pruning to use Sentiment values**



### **Sentiment Node Annotations**

1. Avg. complexity
2. Avg. emotionality
3. Avg. sentiment

### **Sentiment Edge Annotations**

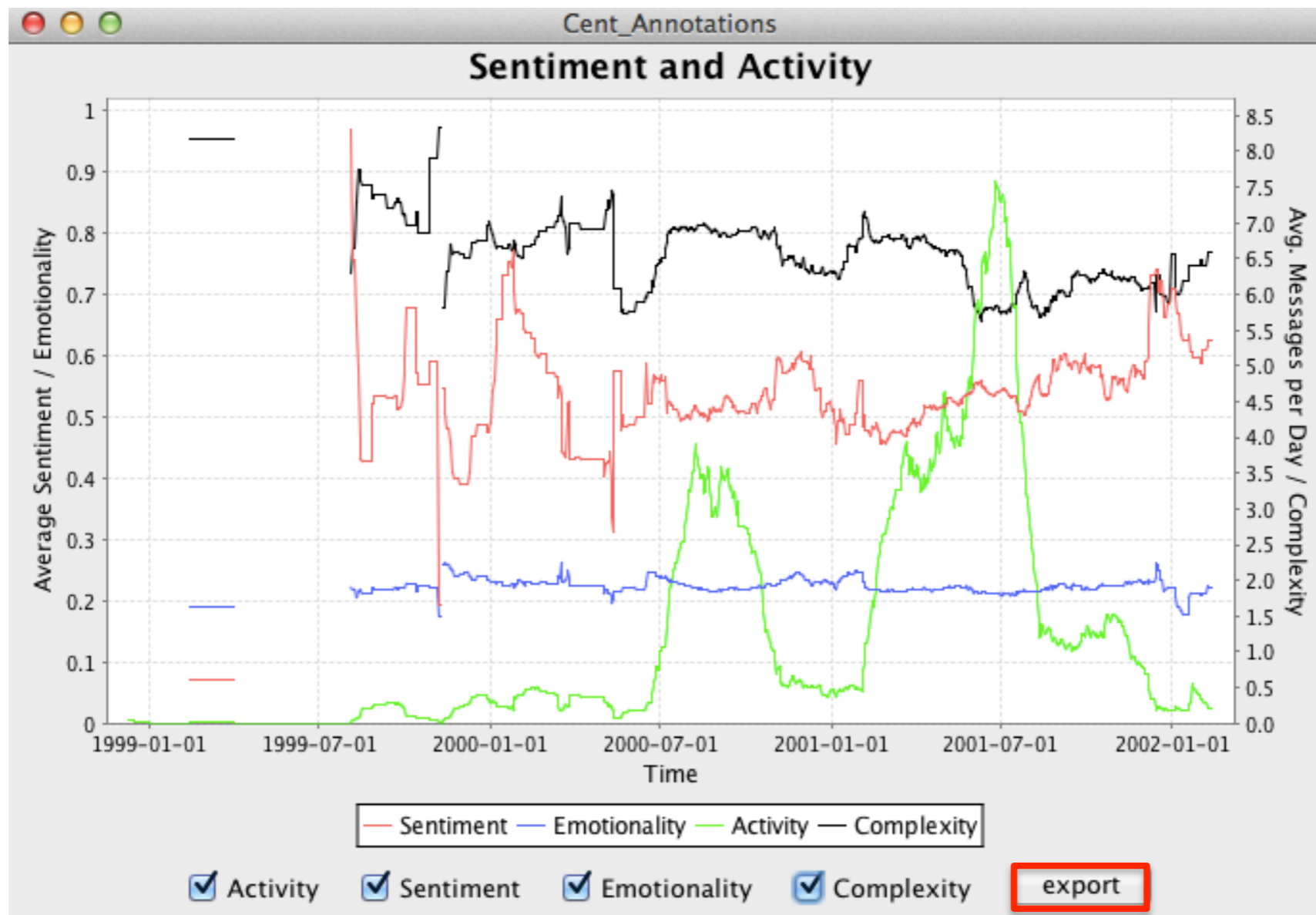
1. Sentiment Words [list of top 4 words and values]
2. Keywords [top 8 words and values]
3. Emotionality score
4. Language Annotation, such as, "en"
5. Complexity score
6. Sentiment score

*Note: After the Sentiment annotations are calculated do one or more of the following:*

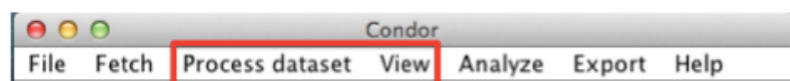
- 1. Use the Process dataset menu > Graph Pruning to continue and prune a dataset's nodes*
- 2. Use the Node Sentiment annotation values to vary the node size and node labels in the graph*
- 3. Use the Edge Sentiment values for edge labels in the graph*
- 4. Use the View menu > Sentiment Over time to graph the Activity, Sentiment, Emotionality, Complexity, and optionally export the results to a .CSV file.*



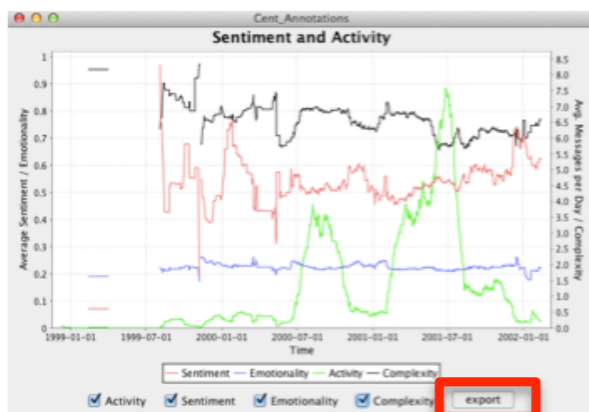
After Process dataset > Calculate Sentiment, use View menu > Sentiment Over time to graph the Activity, Sentiment, Emotionality, and Complexity



# Export Sentiment Activity results to a .CSV file

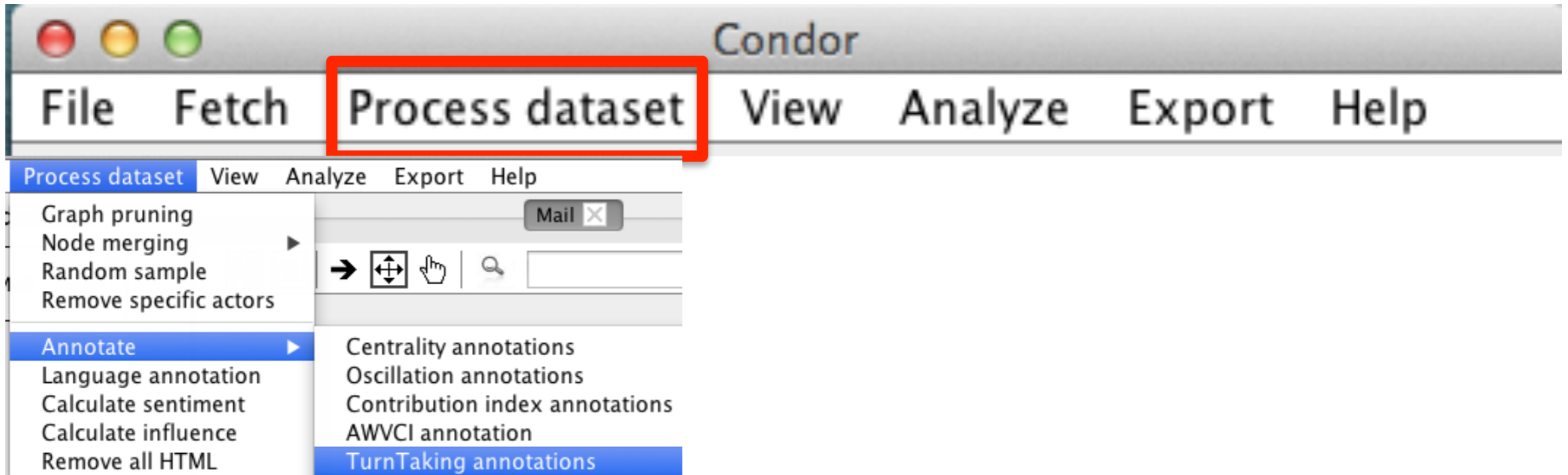


After Process dataset > Calculate Sentiment, use View menu > Sentiment Over time to graph the Activity, Sentiment, Emotionality, and Complexity

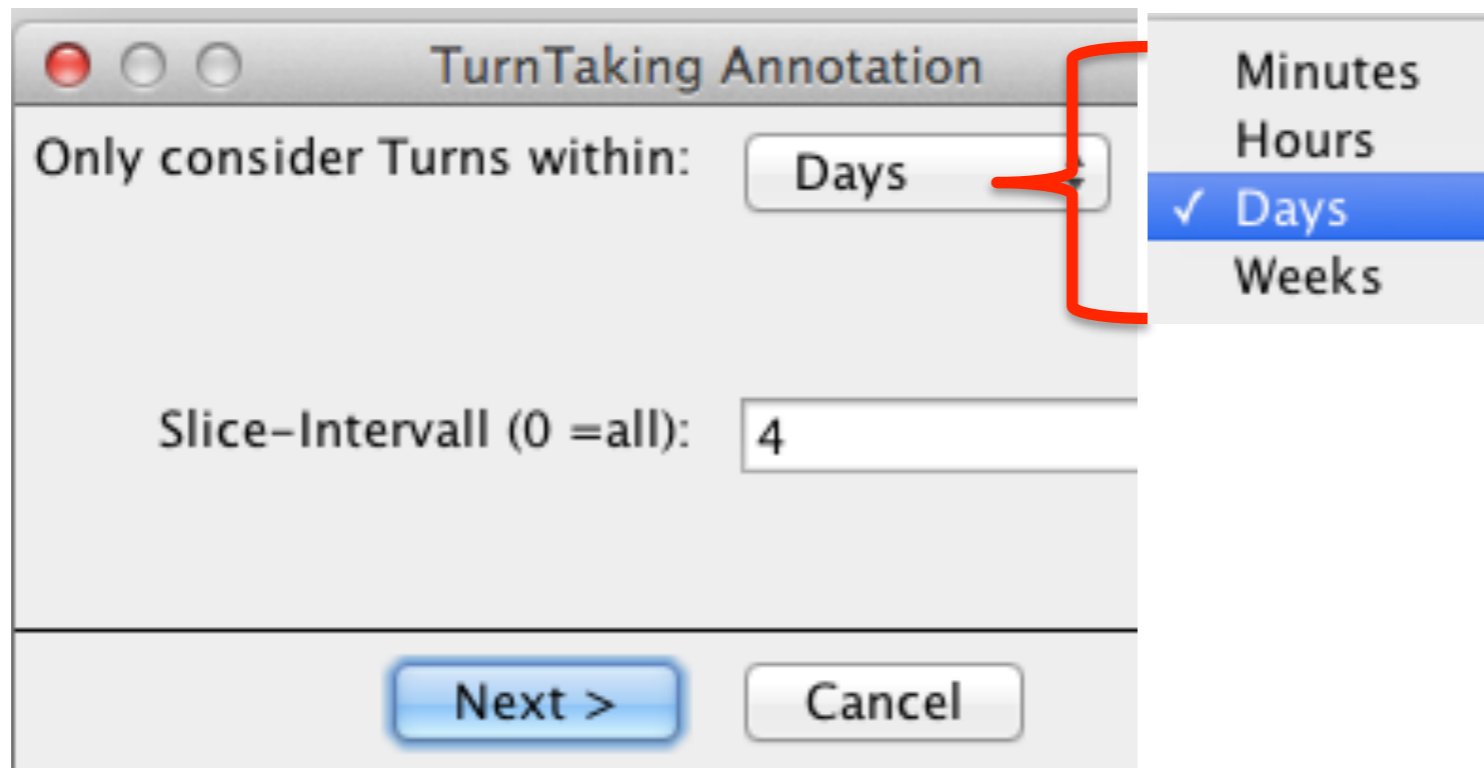


## Sample output

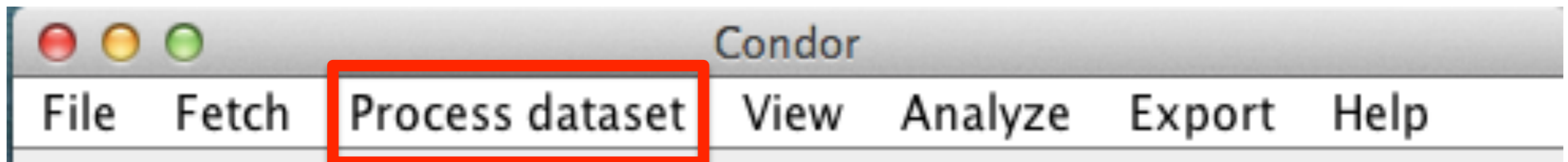
	A	B	C	D	E
1	Time	Messages / day	Sentiment	Emotionality	Complexity
113	Tue Mar 30 00:00:00 PST 1999	0.0213	0.0710	0.1904	8.1860
114	Wed Mar 31 00:00:00 PST 1999	0.0213	0.0710	0.1904	8.1860
115	Thu Apr 01 00:00:00 PST 1999	0.0213	0.0710	0.1904	8.1860
116	Fri Apr 02 00:00:00 PST 1999	0.0000	NaN	NaN	NaN
117	Sat Apr 03 00:00:00 PST 1999	0.0000	NaN	NaN	NaN
118	Sun Apr 04 00:00:00 PST 1999	0.0000	NaN	NaN	NaN



### 1. Set Turn taking parameters



**Note: Use Process dataset menu > Graph Pruning to use Turn Taking values**



### **Influence *Node* annotations**

1. most influential words
2. average influence per message
3. messages sent
4. avg. Sentiment
5. total Influence
6. most common word

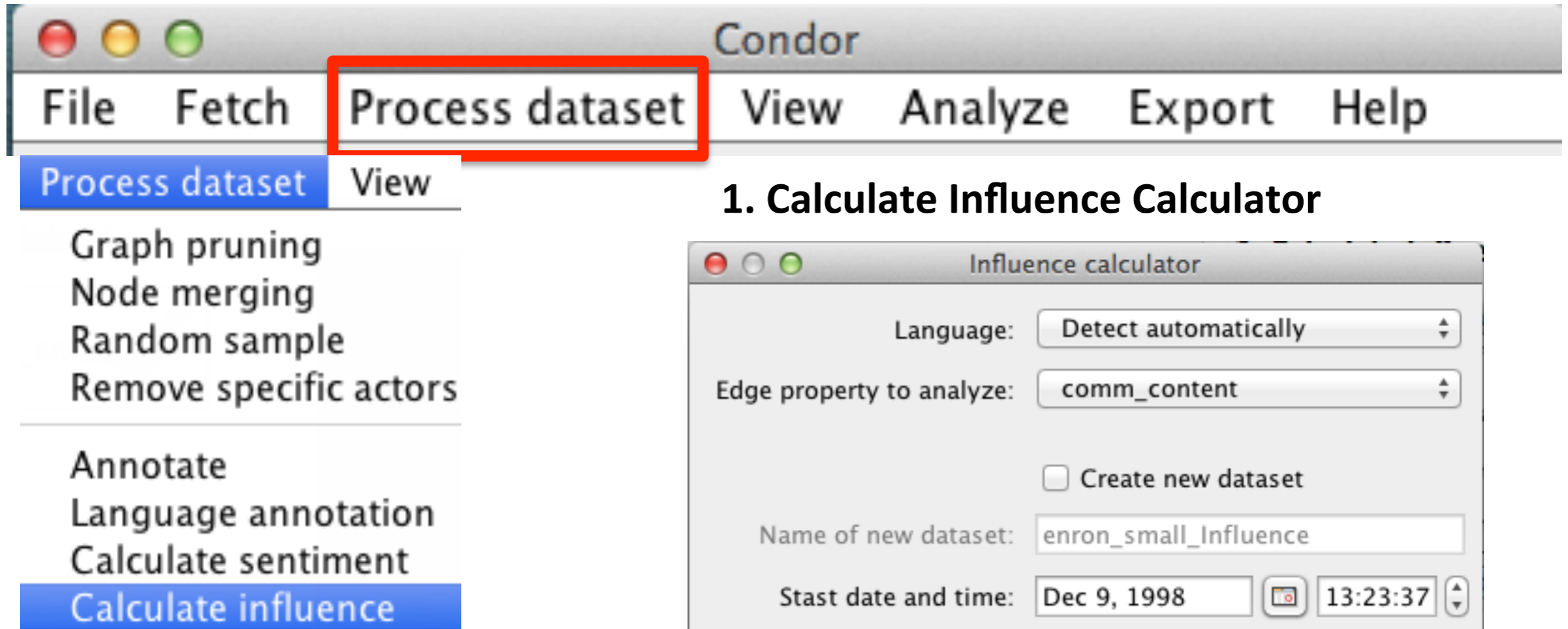
### **Influence *Edge* annotations**

1. influence other direction
2. influence
3. language
4. sentiment
5. sentiment words
6. keywords

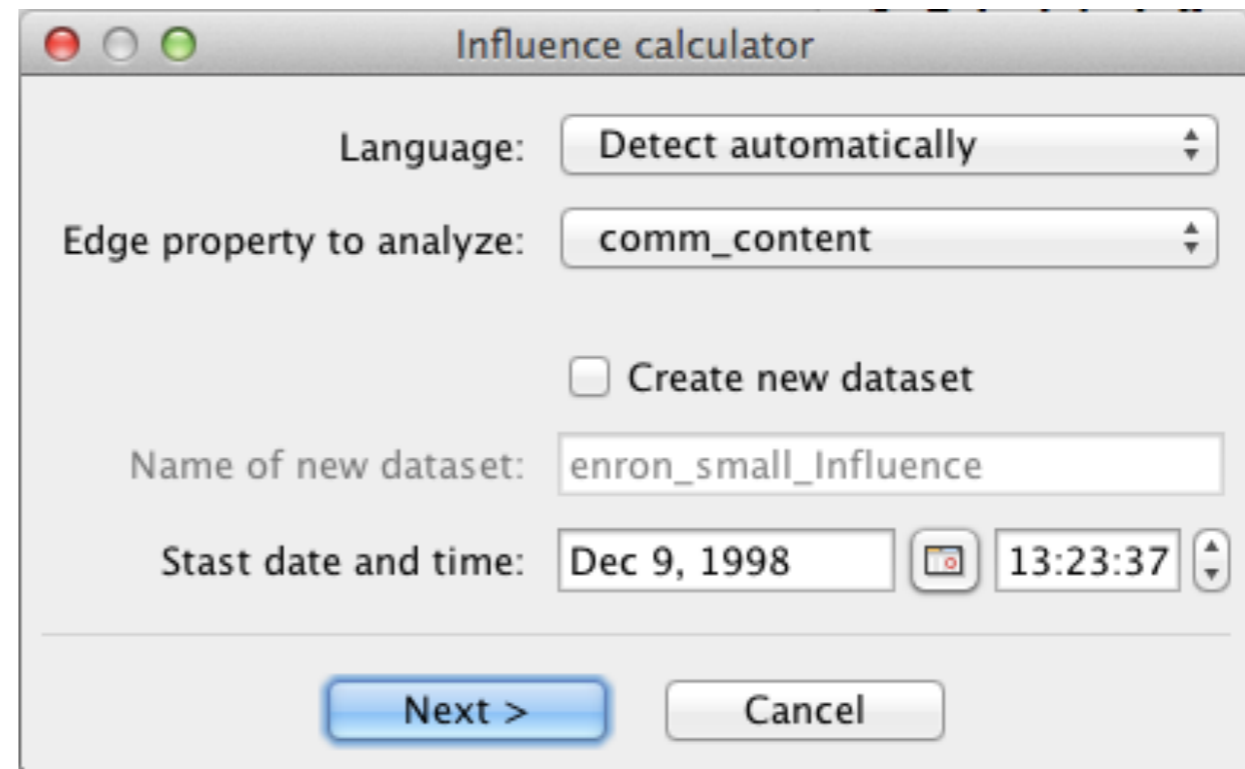
*Note: After the Influence annotations are calculated do one or more of the following:*

- 1. Use the Process dataset menu > Graph Pruning to continue and prune a dataset's nodes*
- 2. Use the Node Influence annotation values to vary the node size and node labels in the graph*
- 3. Use the Edge Influence values for edge labels in the graph*





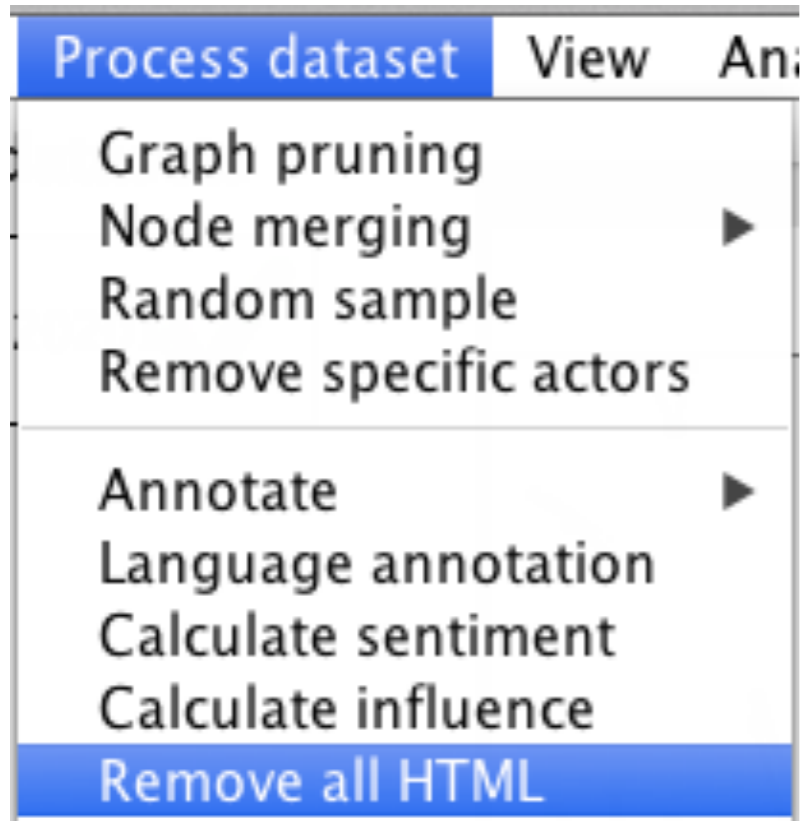
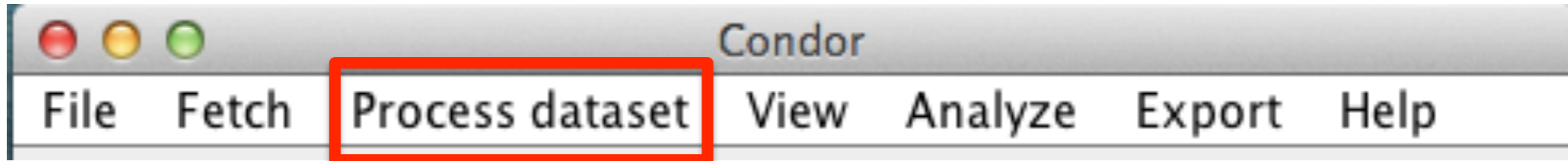
## 1. Calculate Influence Calculator



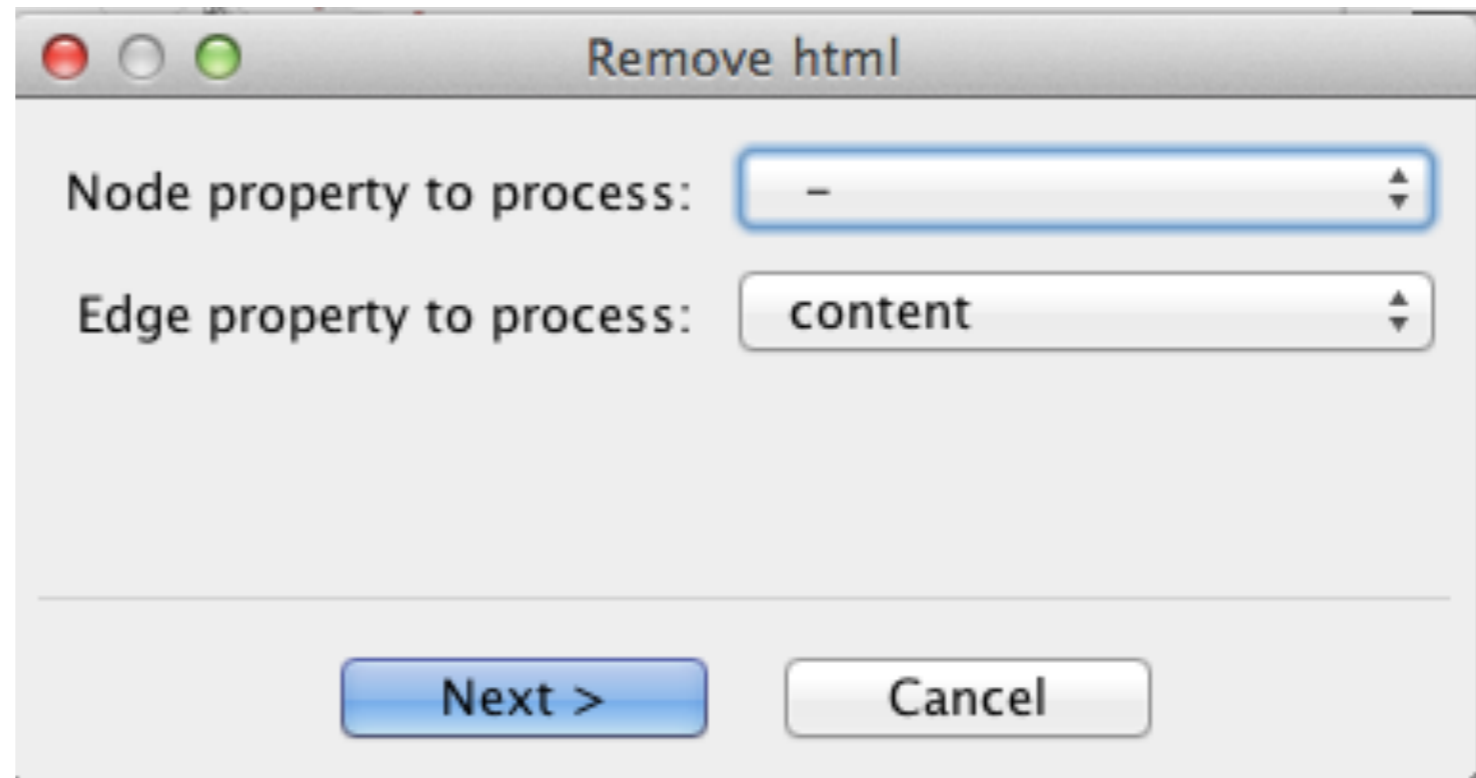
## 2. Process Message Appears

***Note: Influence is a diffusion measure of the usage of new words by message recipients, and how rapidly they used these words once exposed to them.***

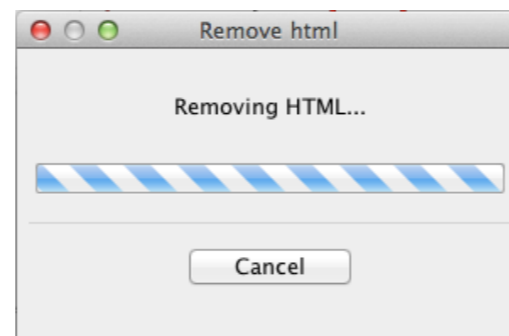
**Note: Use Process dataset menu > Graph Pruning to use Influence values**

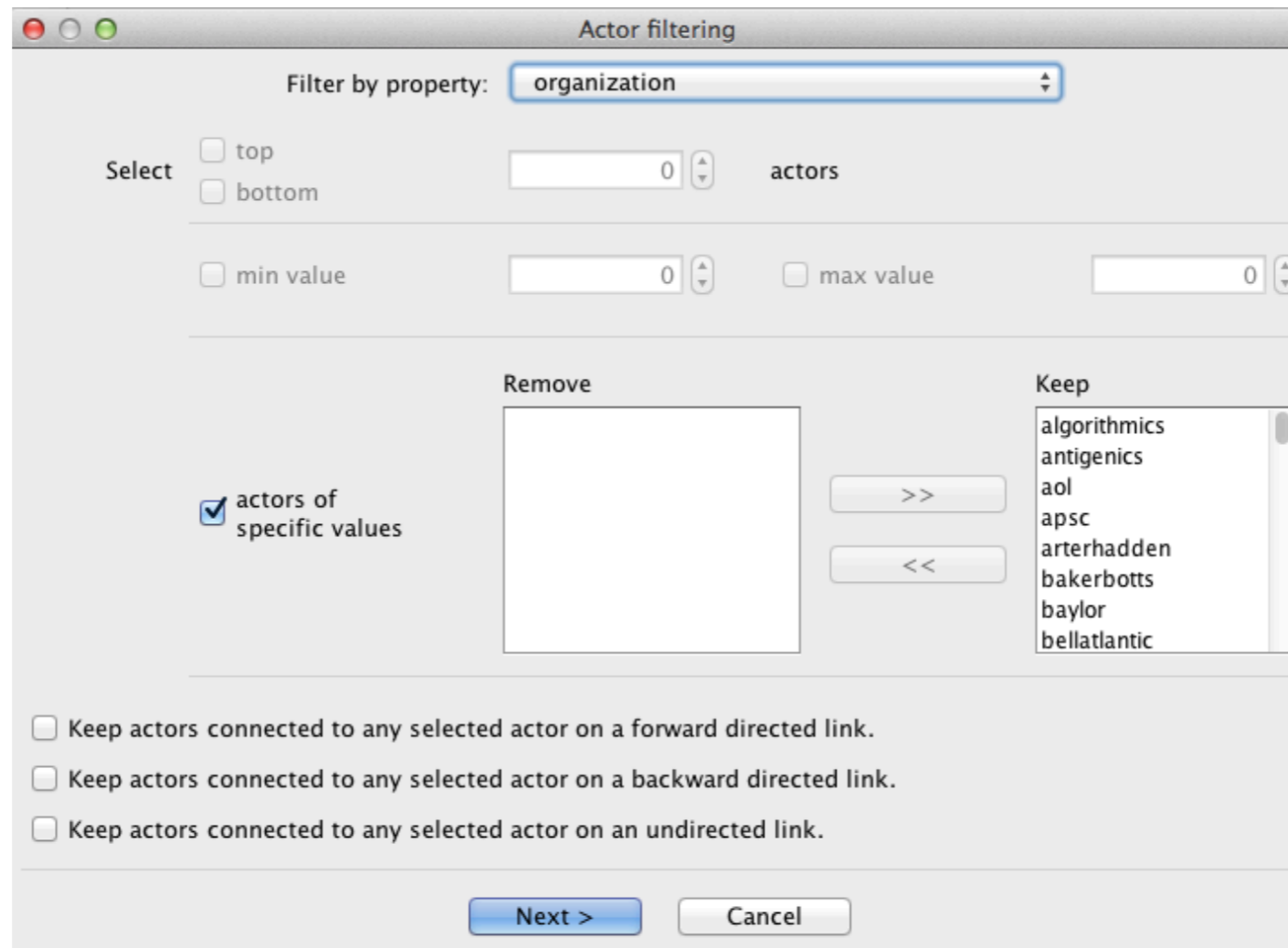
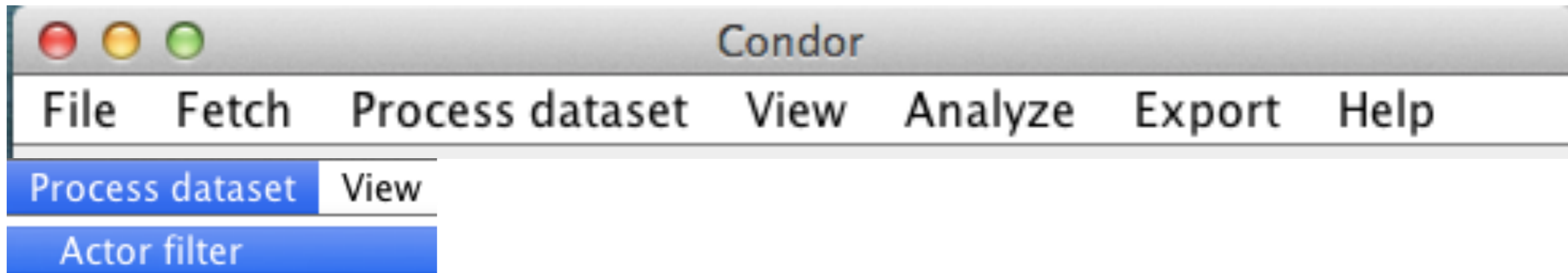


## 1. Remove html options



## 2. Process message





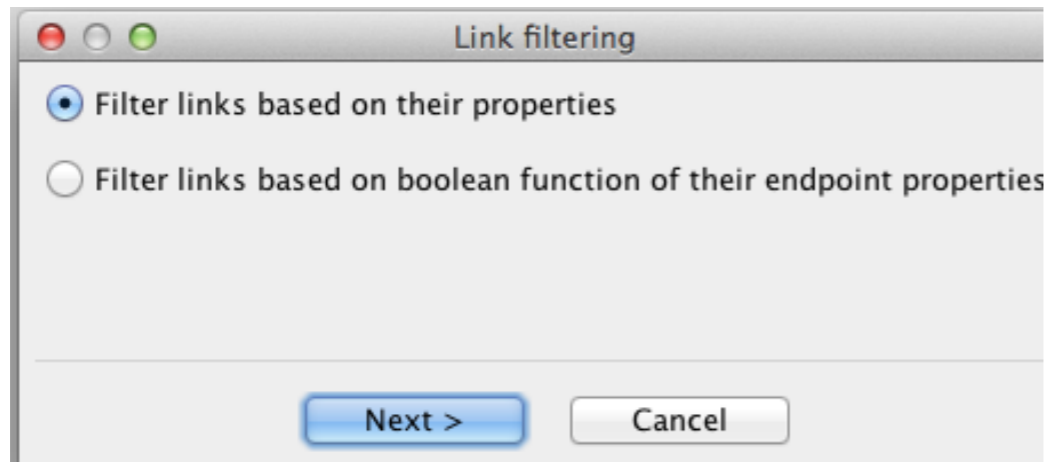
# [Process dataset] Endpoint based edge filters (*Link Properties Option*)



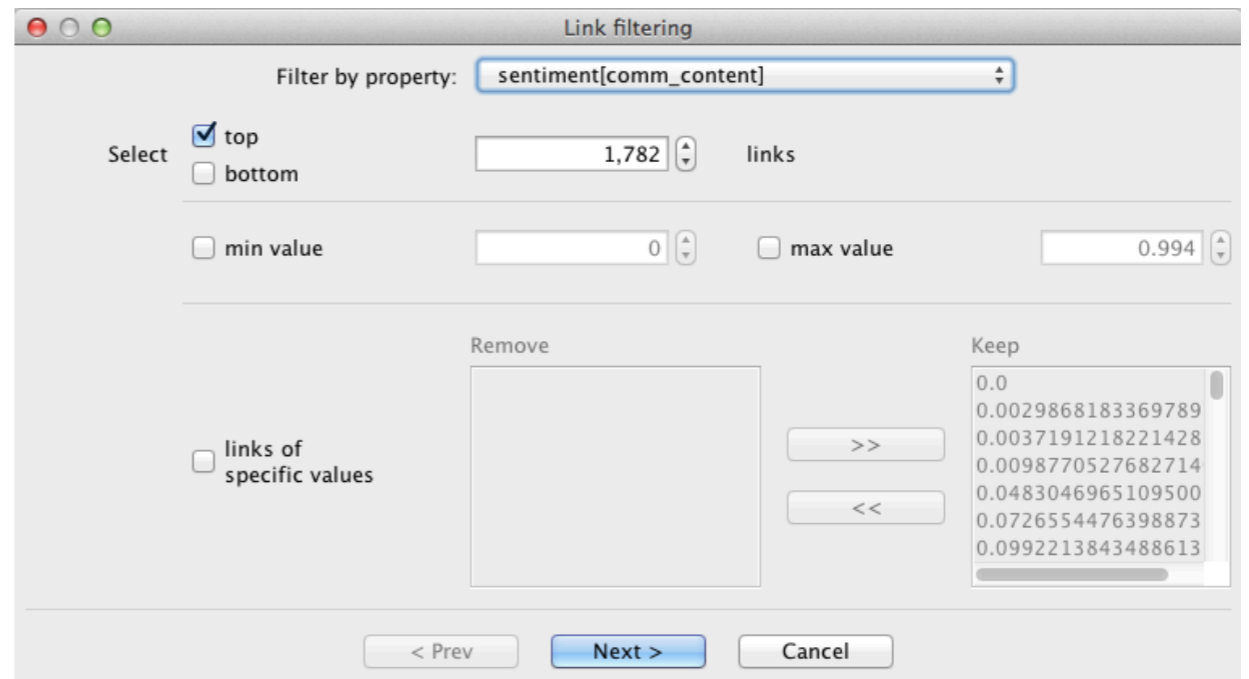
a. Process dataset > Link filter



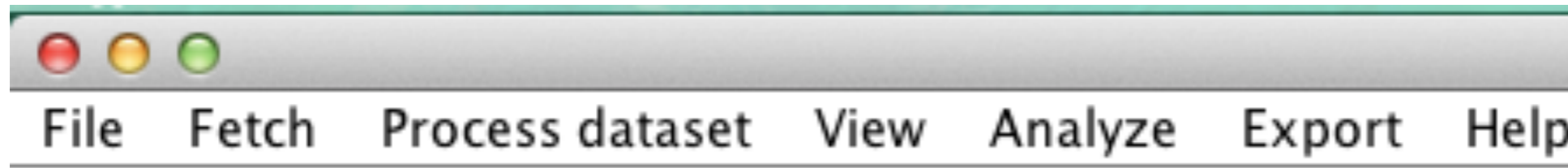
b. Select Link Filter option:



c. Select Link Properties



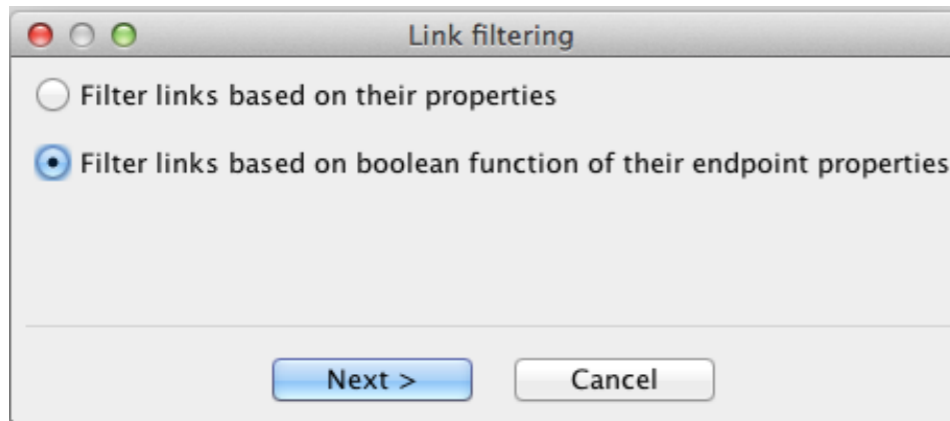
# [Process dataset] Endpoint based edge filters (*Boolean Option*)



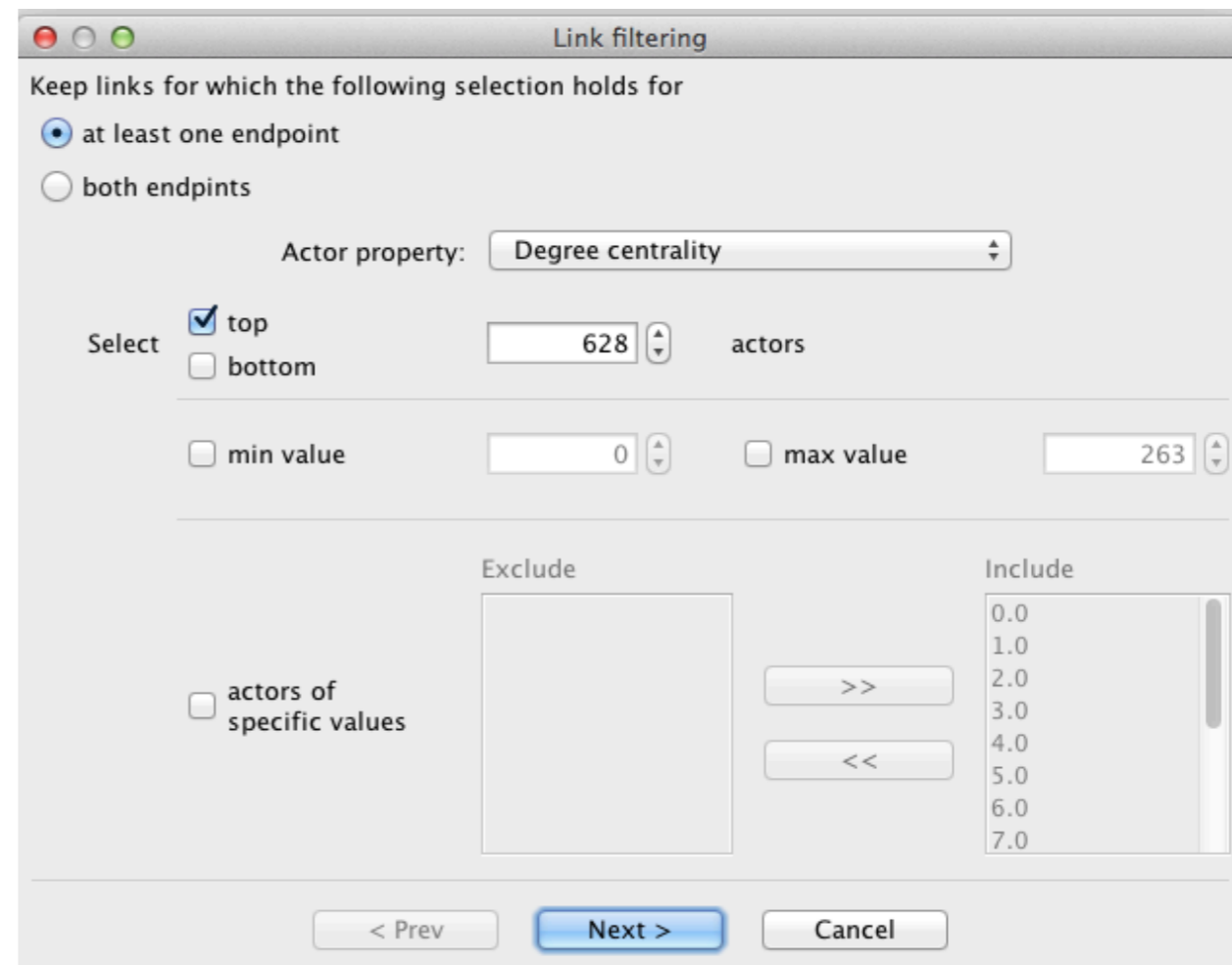
a. Process dataset > Link filter

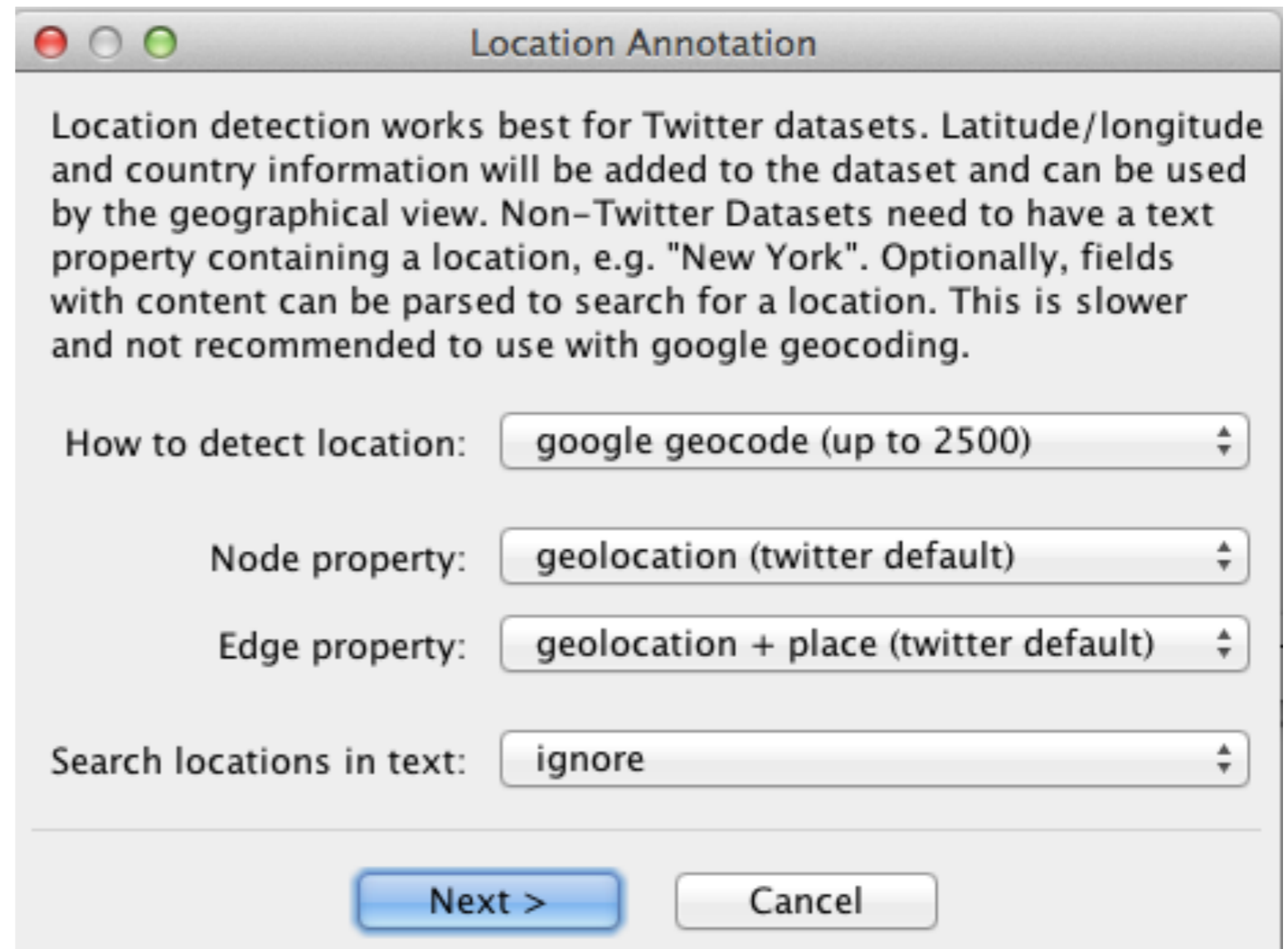
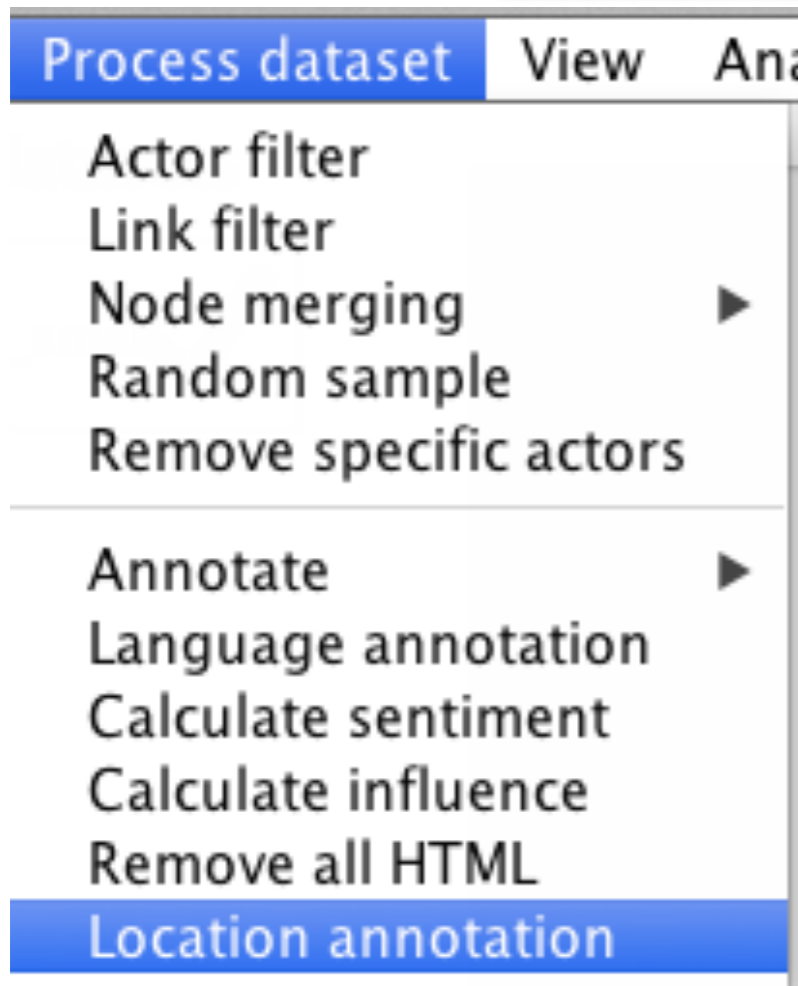
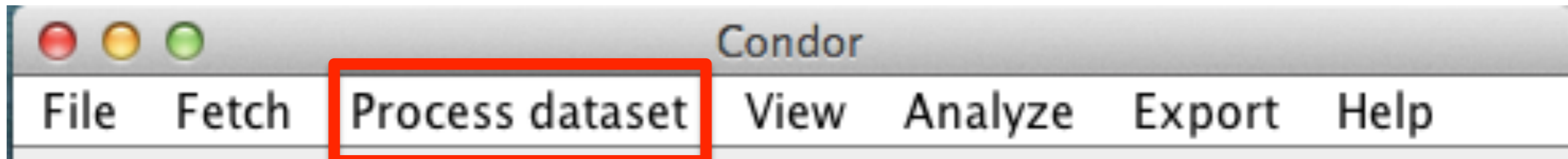


b. Select Link Filter option:



c. Select Link Properties





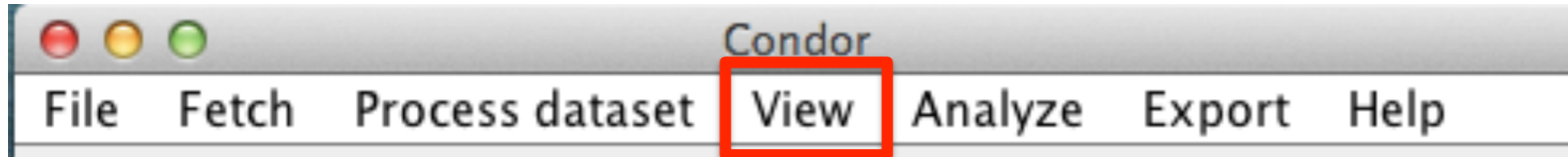
# View Menu

## VIEW MENU OVERVIEW

Use the View Menu to:

- a. Create static, dynamic, or geographic visualizations and word clouds
- b. Plot: Actor Scatter Plot, Adjacency Matrix Plot, Contribution index, Group Centrality Measures (degree betweenness, density), and
- c. Graph: Activity, Sentiment, Emotionality, Complexity, Word Usage over time, and a temporal social surface view.

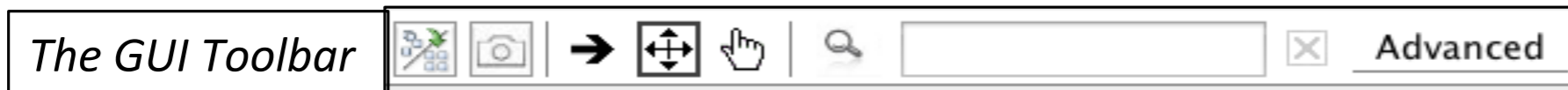




The View menu is where users create a static, dynamic or geographic visualizations, or word clouds, depending upon the data type. Using this menu assumes that users have used the File menu to select a database and have opened one or more datasets. If users wish, they can use the Process dataset menu to filter or subset a dataset before and/or after a visualization with one or more of the 34+ annotations available.

The View menu has selections to create an Actor Scatter plot, Adjacency Matrix, and calculate three Group Centrality measures: Degree Centrality, Betweenness Centrality and Density for time units of minutes, hours, days, weeks, months or years for a user defined data range with or without history; the selections also include: graph of a network's Activity, Sentiment and Word usage of selected 4 words over time. It also has a selection to create a 3D temporal social surface view

The View menu is complemented with a set of three tools to explore and change the appearance of visualizations. They are: a graphical user interface (GUI) Toolbar of seven tools, a side panel of pick menus to change node and edge attributes for the entire graph, and the ability to right click on a single node or edge for additional details, labeling options, coloring, and measures of the contribution index, activity, sentiment or influence over time.

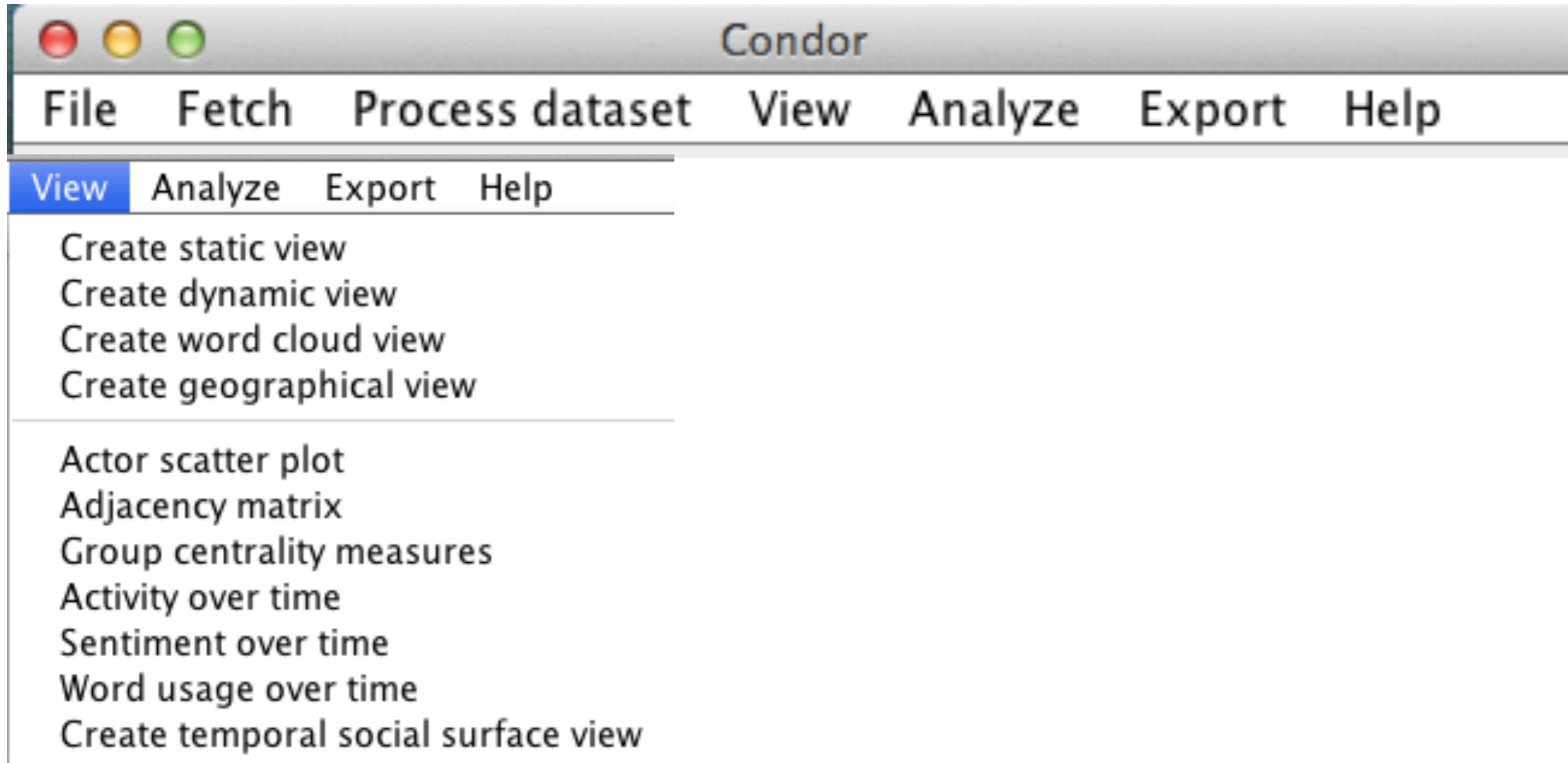


The GUI Toolbar enables users to re-layout (refresh or redraw) a graph, take a snapshot and send it to the clipboard, show or hide directed edge arrows, zoom in and out using keypad gestures, select and move the whole graph, or pick a single node and reposition it. The search tool will highlight nodes based on a key word or phrase, and an advanced option enables users to selectively color nodes using a CSV node list file.

The side bar pick menus enable the entire graph node and edge attributes to be modified by color, size, shape and labels. Nodes can be collapsed by properties, such as, content, title, query, domain and snippet. Depending upon the menu option selection, a legend will be automatically generated.

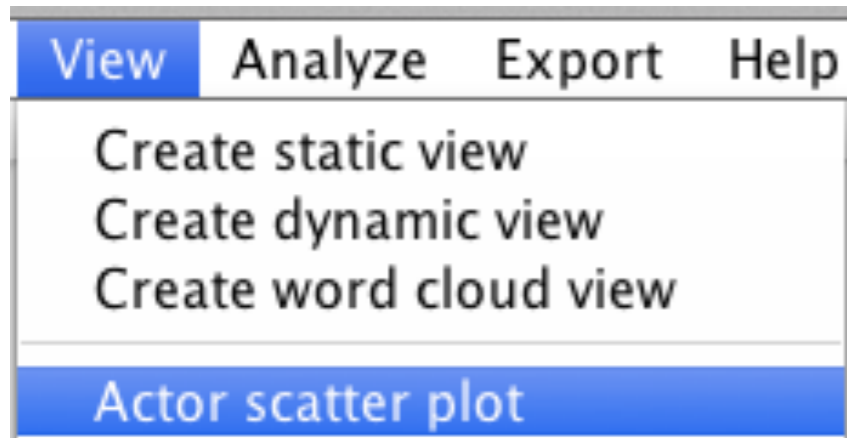
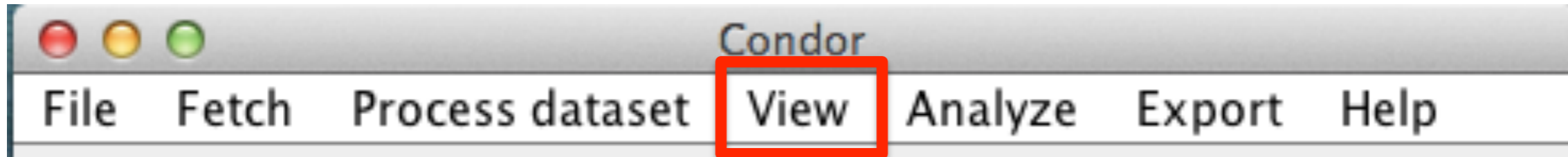
Datasets which have been filtered or modified are flagged with a blue info icon in the upper left corner of the active dataset and can be saved for later re-use.



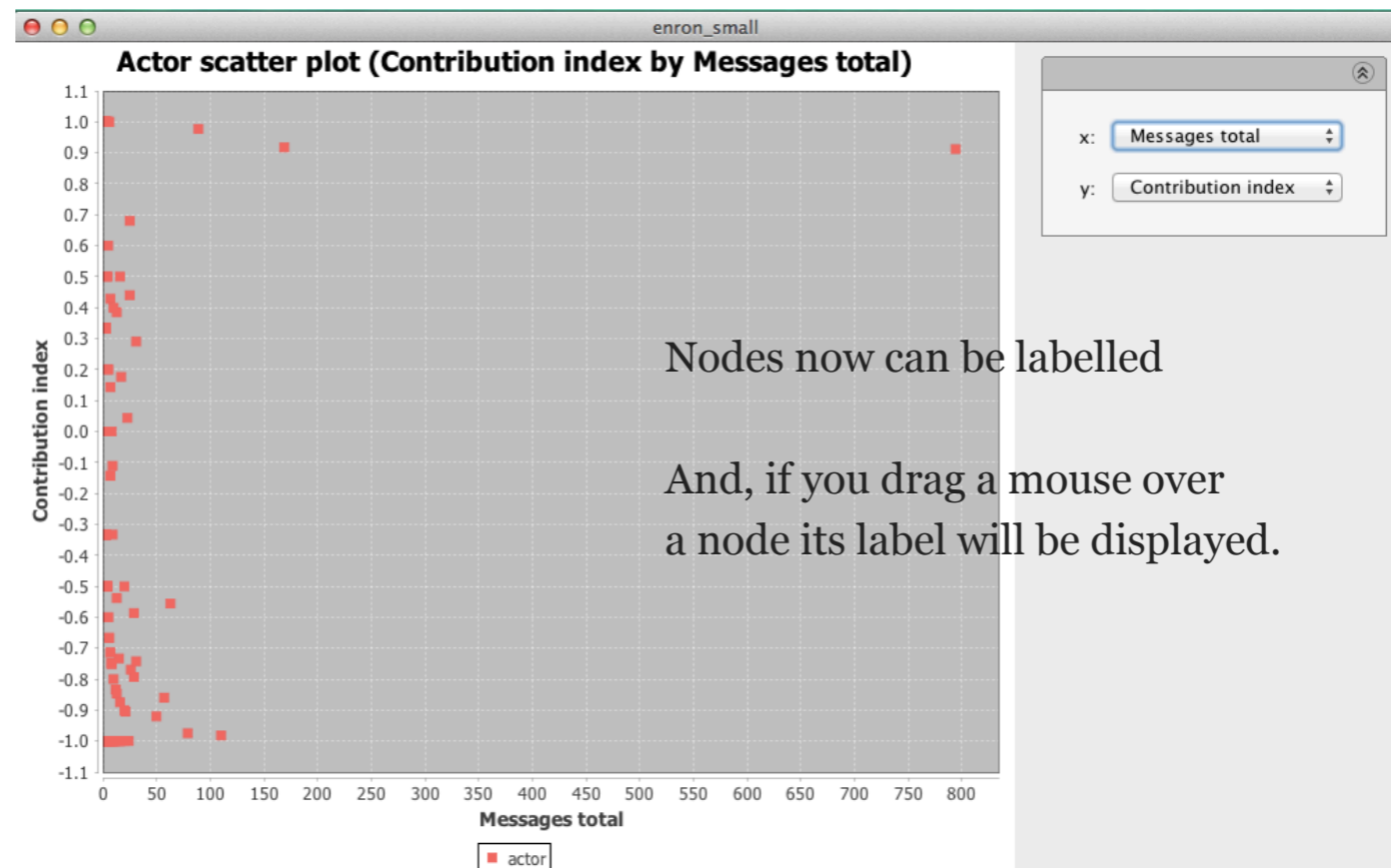


## View menu 1<sup>st</sup> Level

Note: Using this menu assumes that users have used the File menu to select a database and opened one or more datasets.



## 1. Sample Actor Scatter Plot: Contribution Index

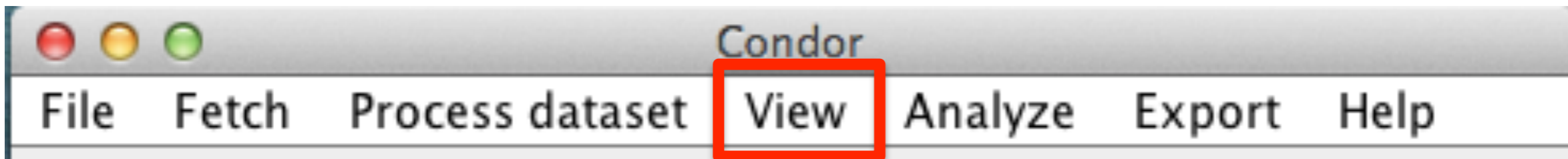


Nodes now can be labelled

And, if you drag a mouse over a node its label will be displayed.

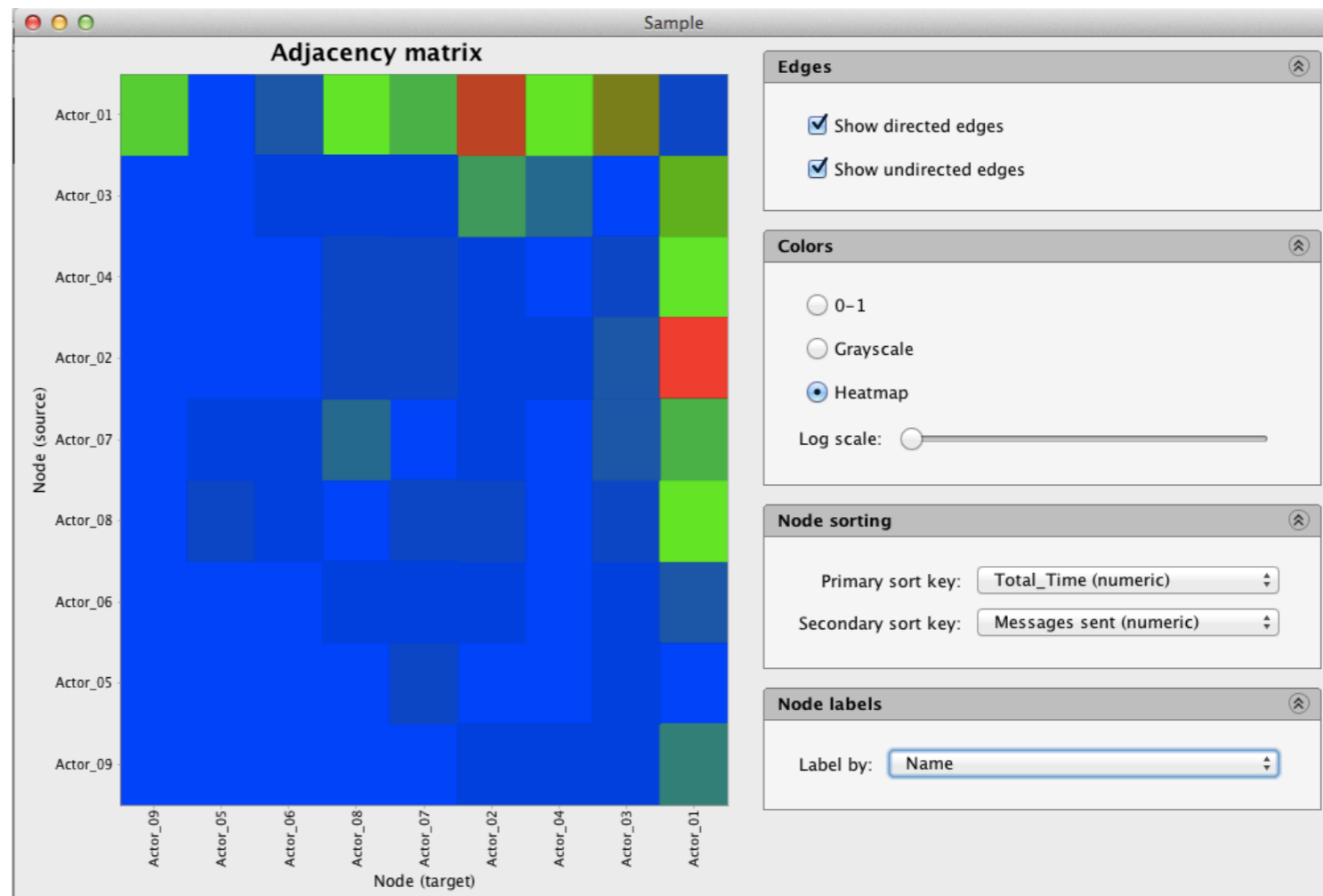
Note: Using this menu assumes that users have used the File menu to select a database and opened one or more datasets.

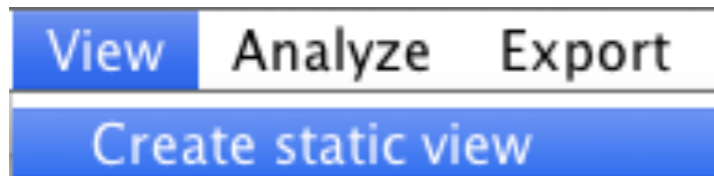
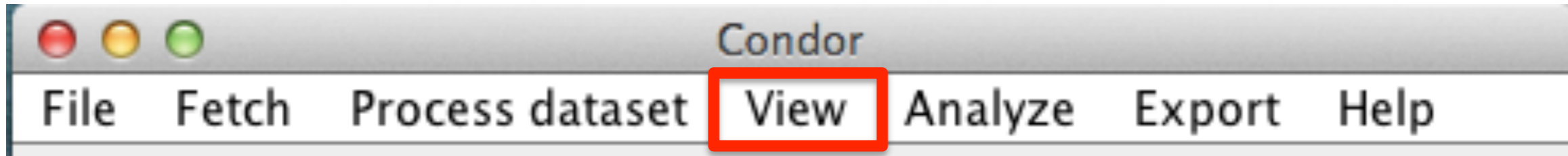
Note: The Contribution Index (CI) measures the degree to which a person sends or receives messages. CI is graphed on the y-axis and ranges from +1 at the top, where someone only sends messages; to -1 at the bottom, where someone only receives messages. A value of 0, in the middle of the y-axis, means there is an equal balance of sending and receiving. The X-axis is the number of messages. If the cursor is hovered over a node, the name will be displayed. The CI graph can be saved as a Portable Network Graphics or .png file.



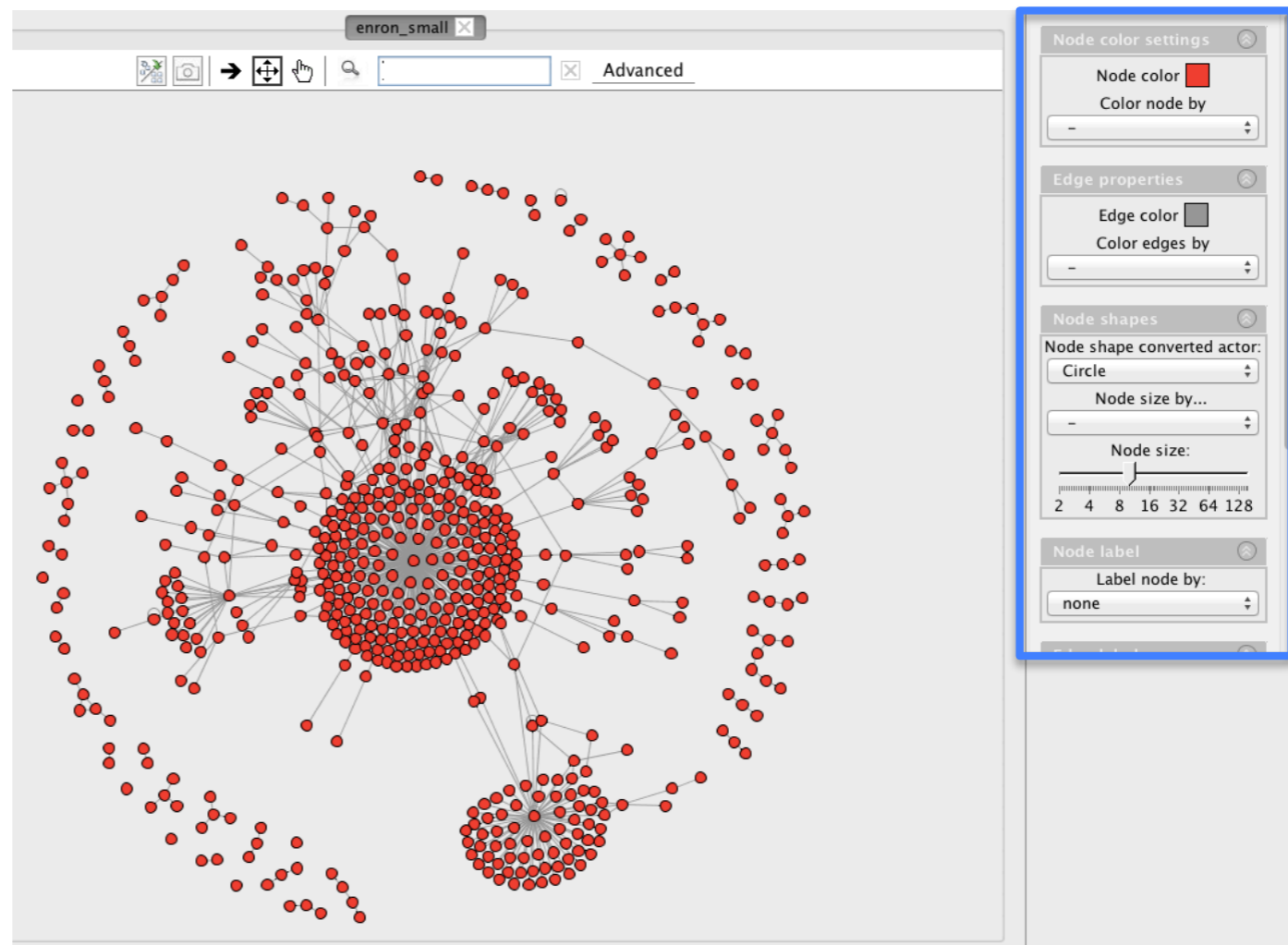
New Heatmap option and Node Labels,  
Drag mouse over nodes to display labels

Note: Using this menu assumes that users have used the File menu to select a database and opened one or more datasets.



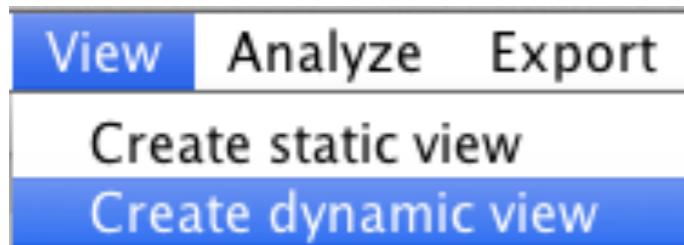
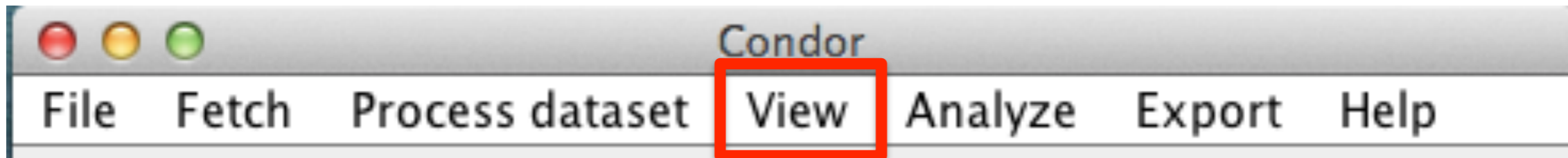


## Sample Enron Email Static View

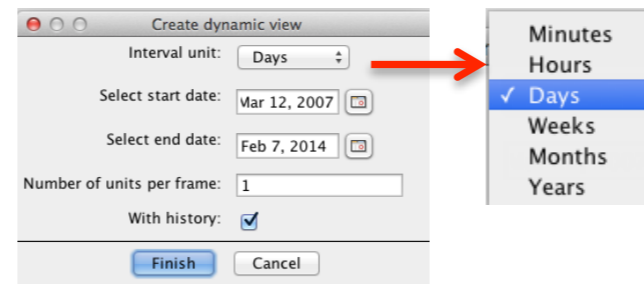


Note: Using this menu assumes that users have used the File menu to select a database and opened one or more datasets.

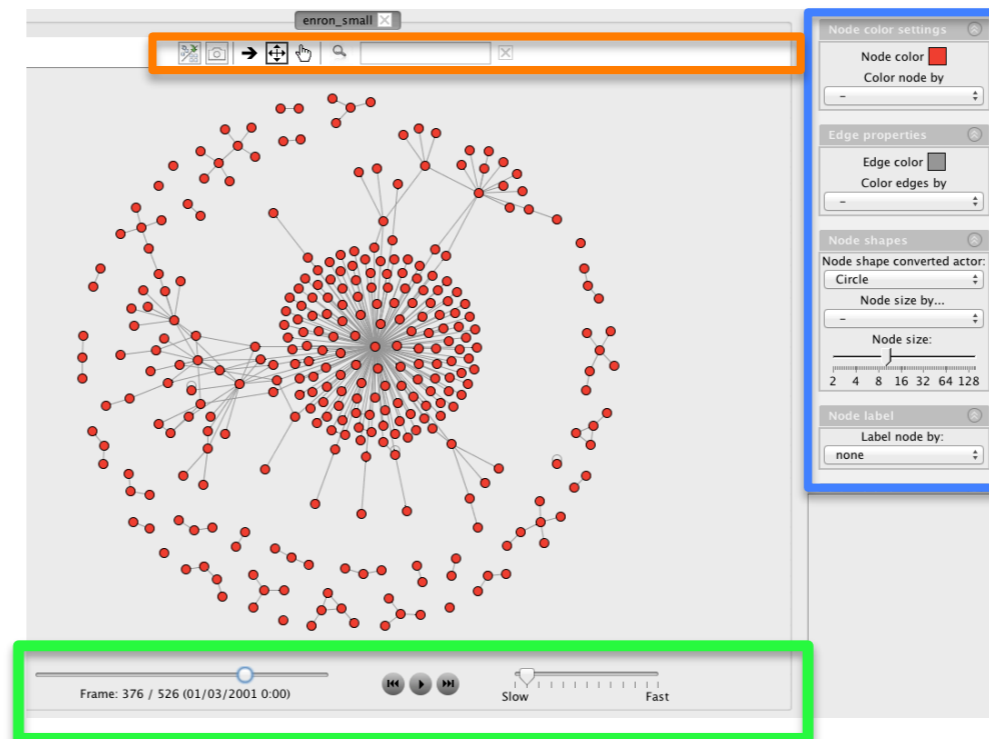
Explore and change the visualization's appearance using the GUI Toolbar, the side panel node and edge menus, and/or right click on a node and edge.



### 1. Select Dynamic Date Range, Time Unit, and History Options



### 2. Sample Enron Email Dynamic View

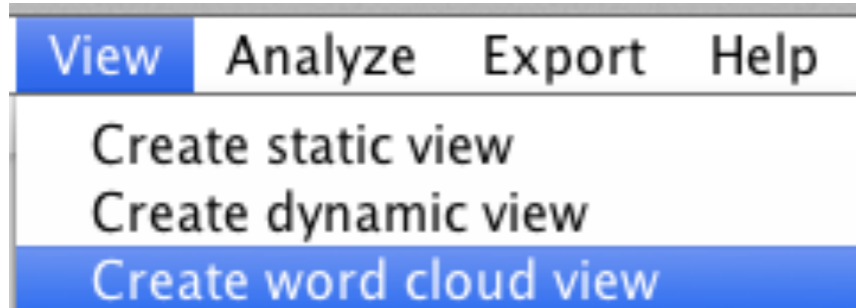
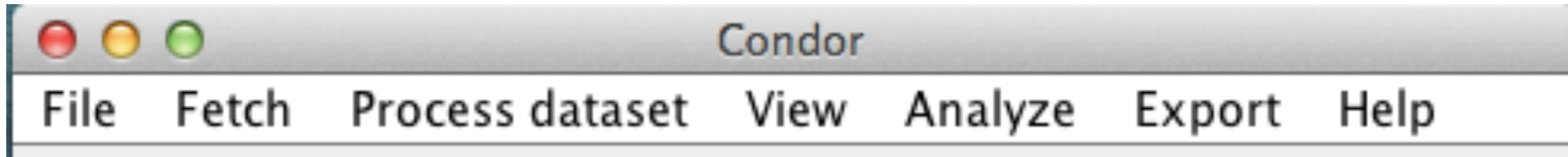


Note: Use Dynamic controls at bottom of the visualization to locate a date/time period, play/stop, slow down, or speed up the animation.

Note: Using this menu assumes that users have used the File menu to select a database and opened one or more datasets.

Explore and change the visualization's appearance using the GUI toolbar, the side panel node and edge menus, and/or right click on a node and edge.

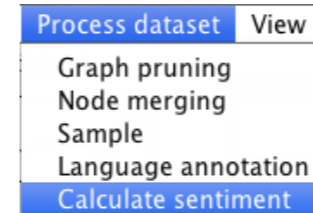
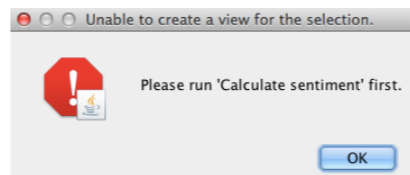
Or, filter the network using the Process dataset menu.



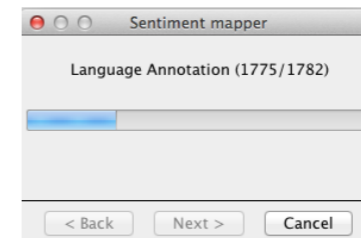
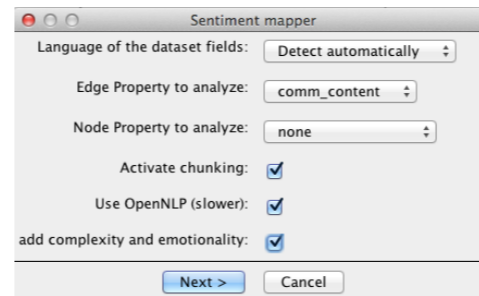
Note: Using this menu assumes that users have used the File menu to select a database and opened one or more datasets.

Tip: First, use the Process dataset menu to Calculate sentiment.

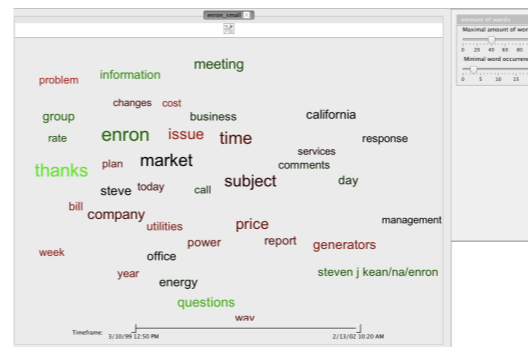
1. Note, advisory message that instructs users to first use the Process data menu and Calculate Sentiment

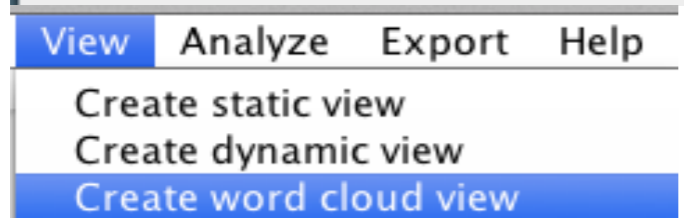
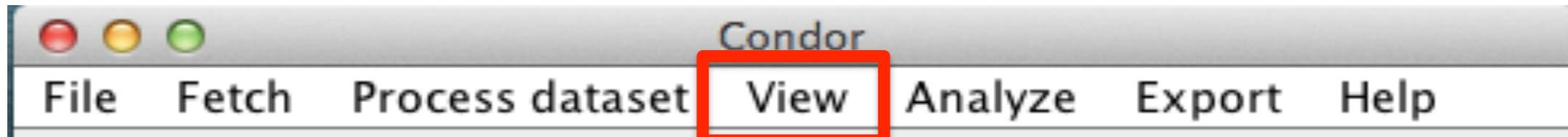


2. Set Sentiment Mapper Options; then Process message appears

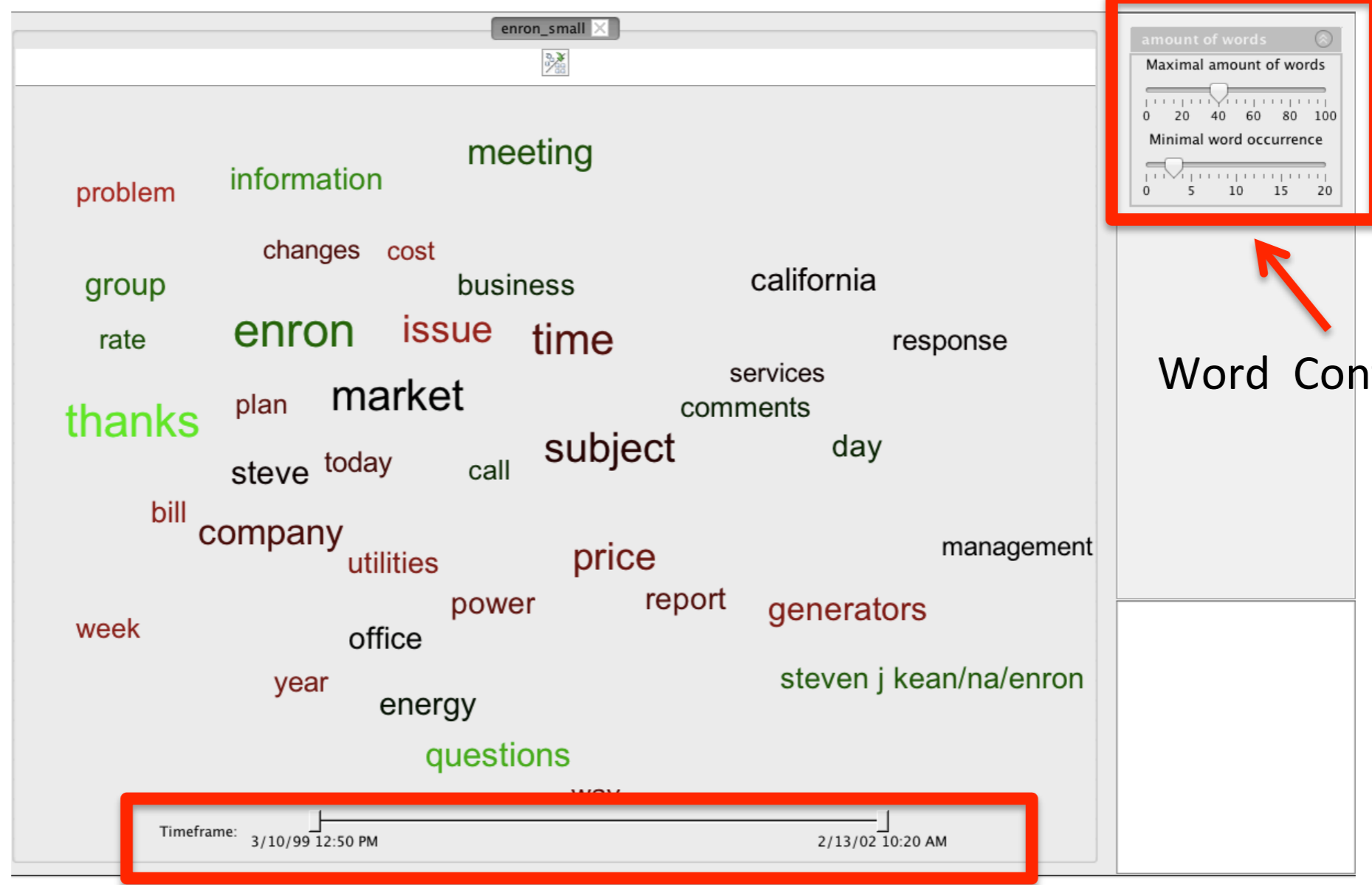


3. Sample Word Cloud with Date Slider at bottom, and Word controls at upper right to set the maximum number of words to display and the minimum word frequency threshold.



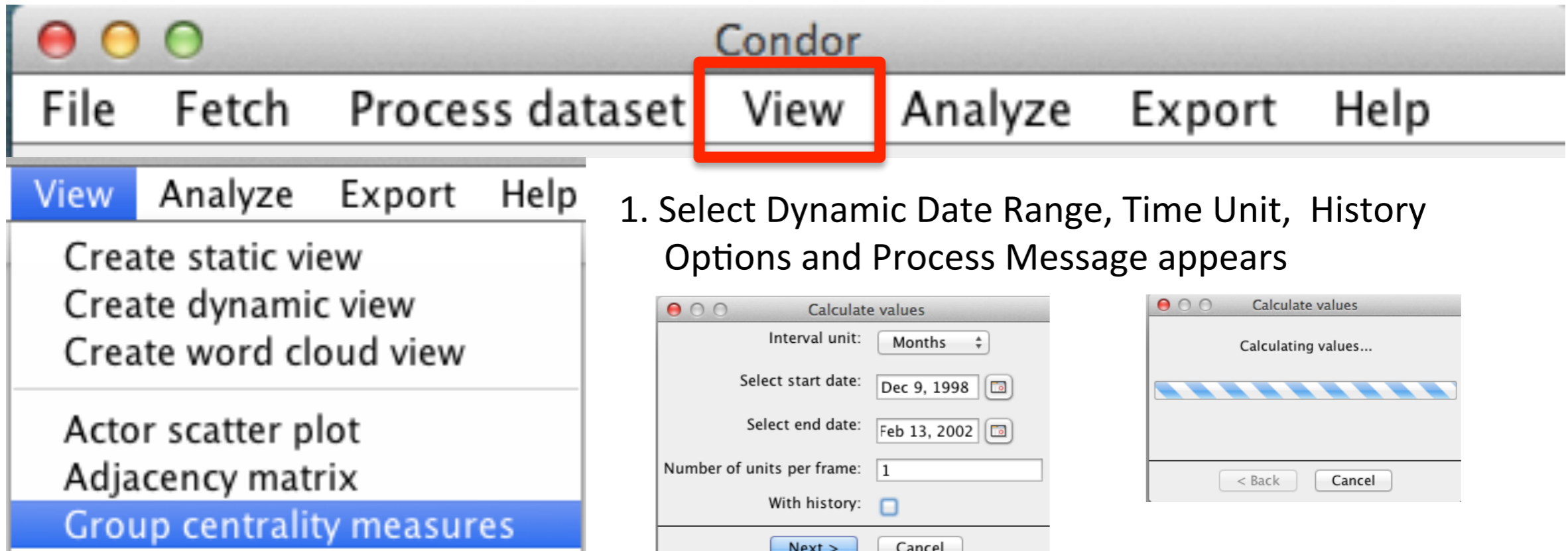


3. Sample Word Cloud with Date Slider at bottom, and Word controls at upper right to set the maximum number of words to display and the minimum word frequency threshold.

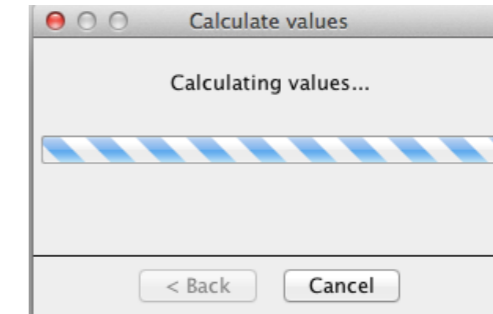
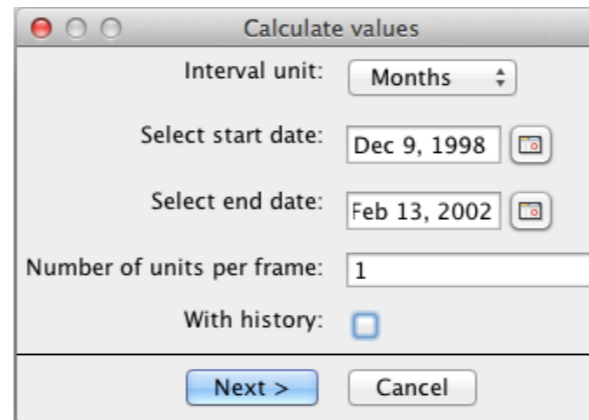


Date Slider

Word Controller

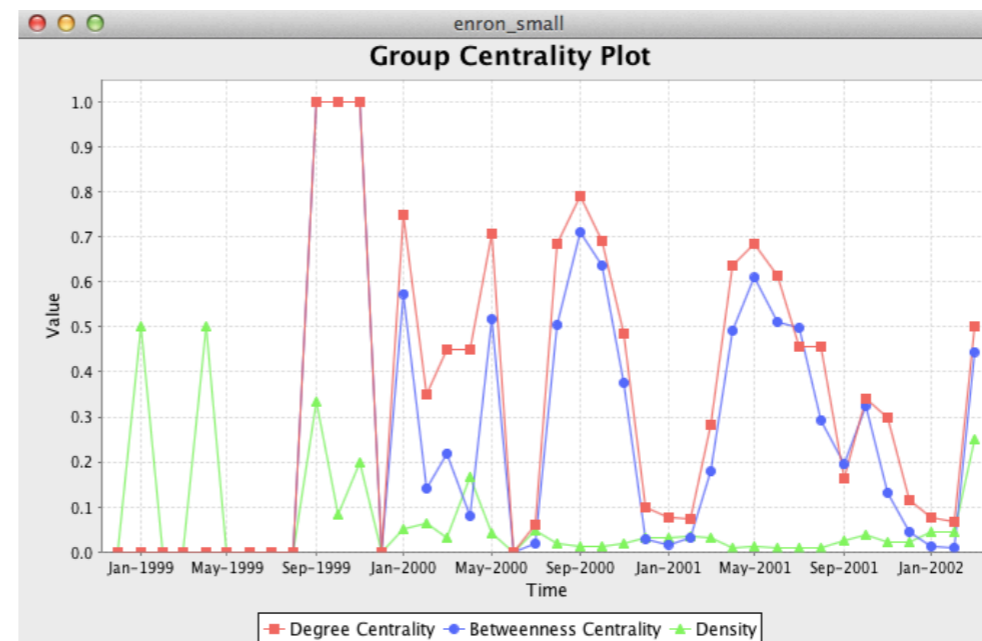


1. Select Dynamic Date Range, Time Unit, History Options and Process Message appears

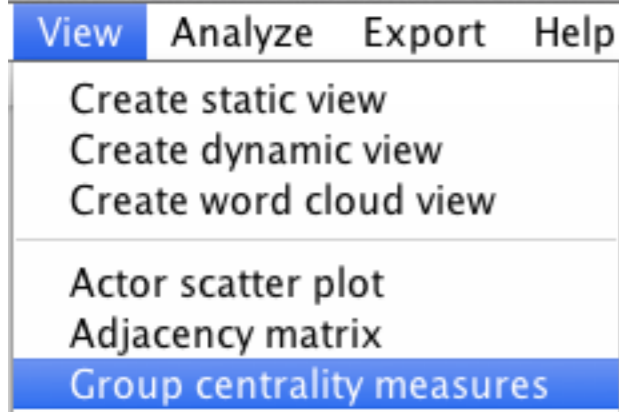
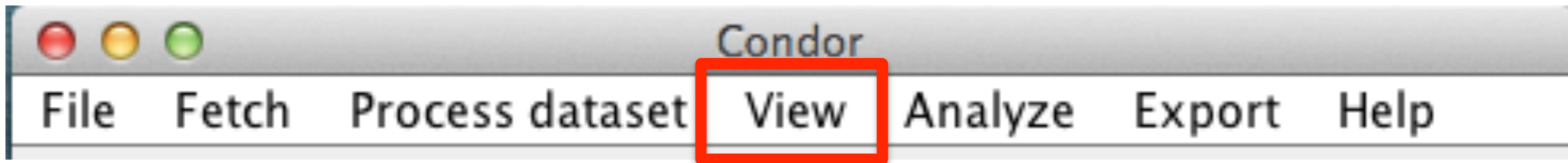


Note: Using this menu assumes that users have used the File menu to select a database and opened one or more datasets.

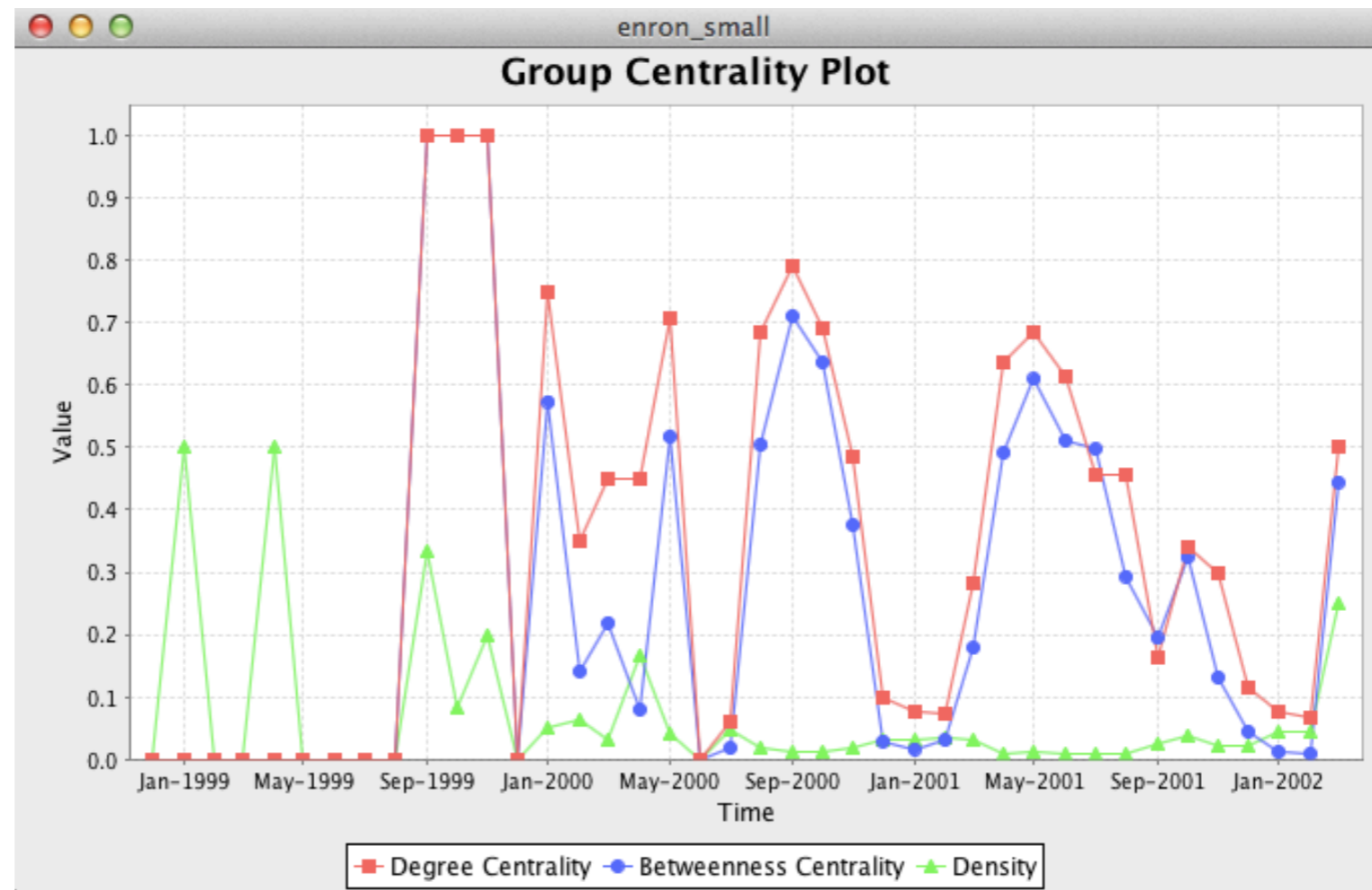
2. Sample Group Centrality Plot with three centrality measures: Degree, Betweenness and Density by Time.



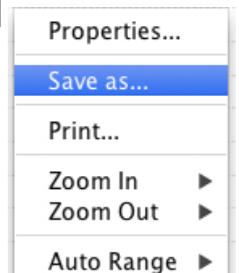


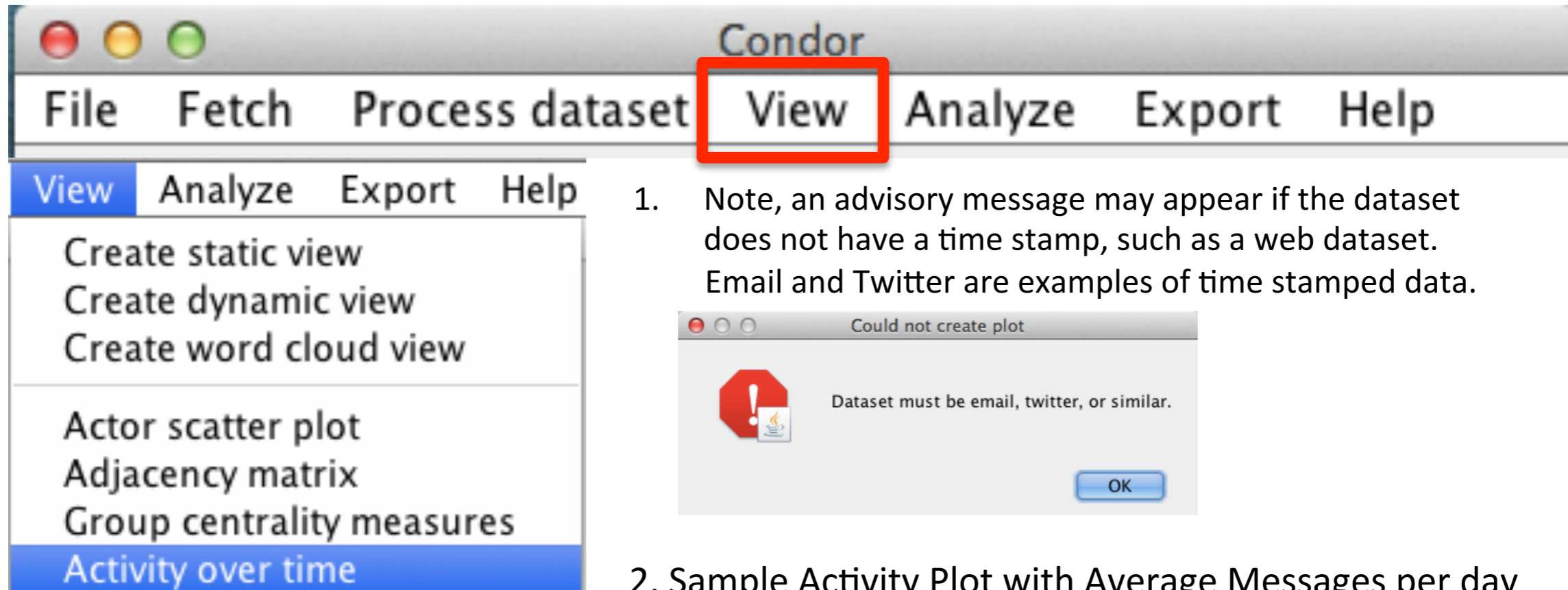


2. Sample Centrality Plot with three centrality measures: Degree, Betweenness and Density by Time.

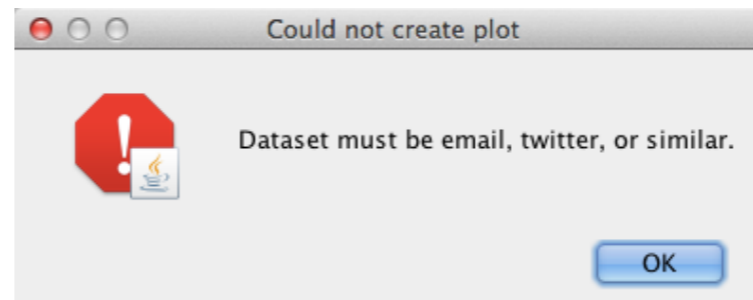


The Group Centrality Plot can be saved as a Portable Network Graphics or .png file by right clicking on graph and select "Save as".

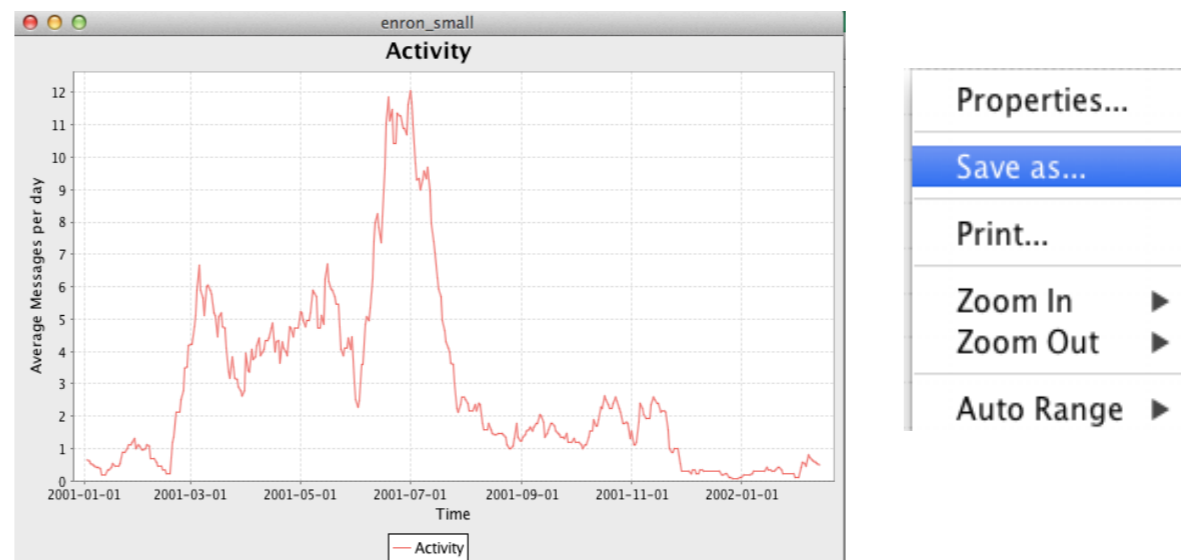




1. Note, an advisory message may appear if the dataset does not have a time stamp, such as a web dataset. Email and Twitter are examples of time stamped data.



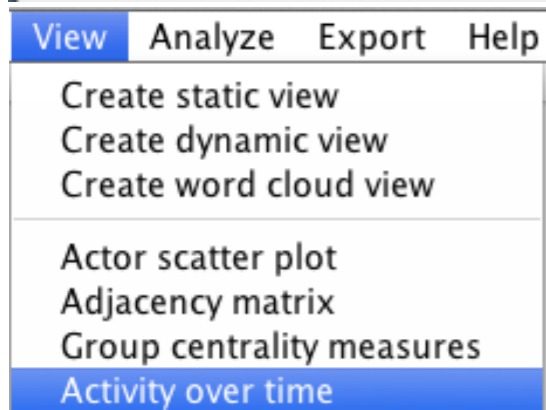
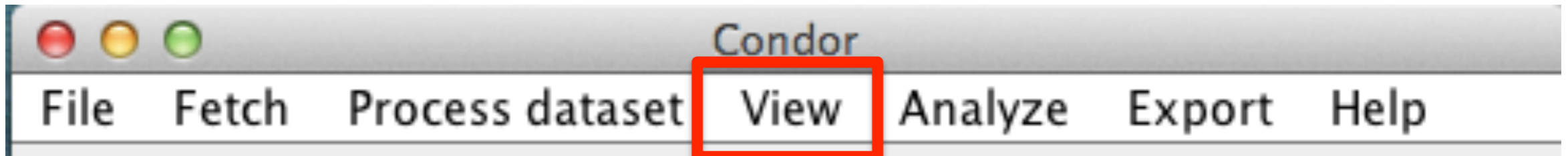
2. Sample Activity Plot with Average Messages per day on the Y-Axis and Time along the X-Axis.



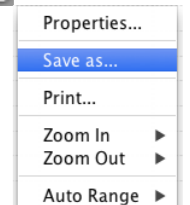
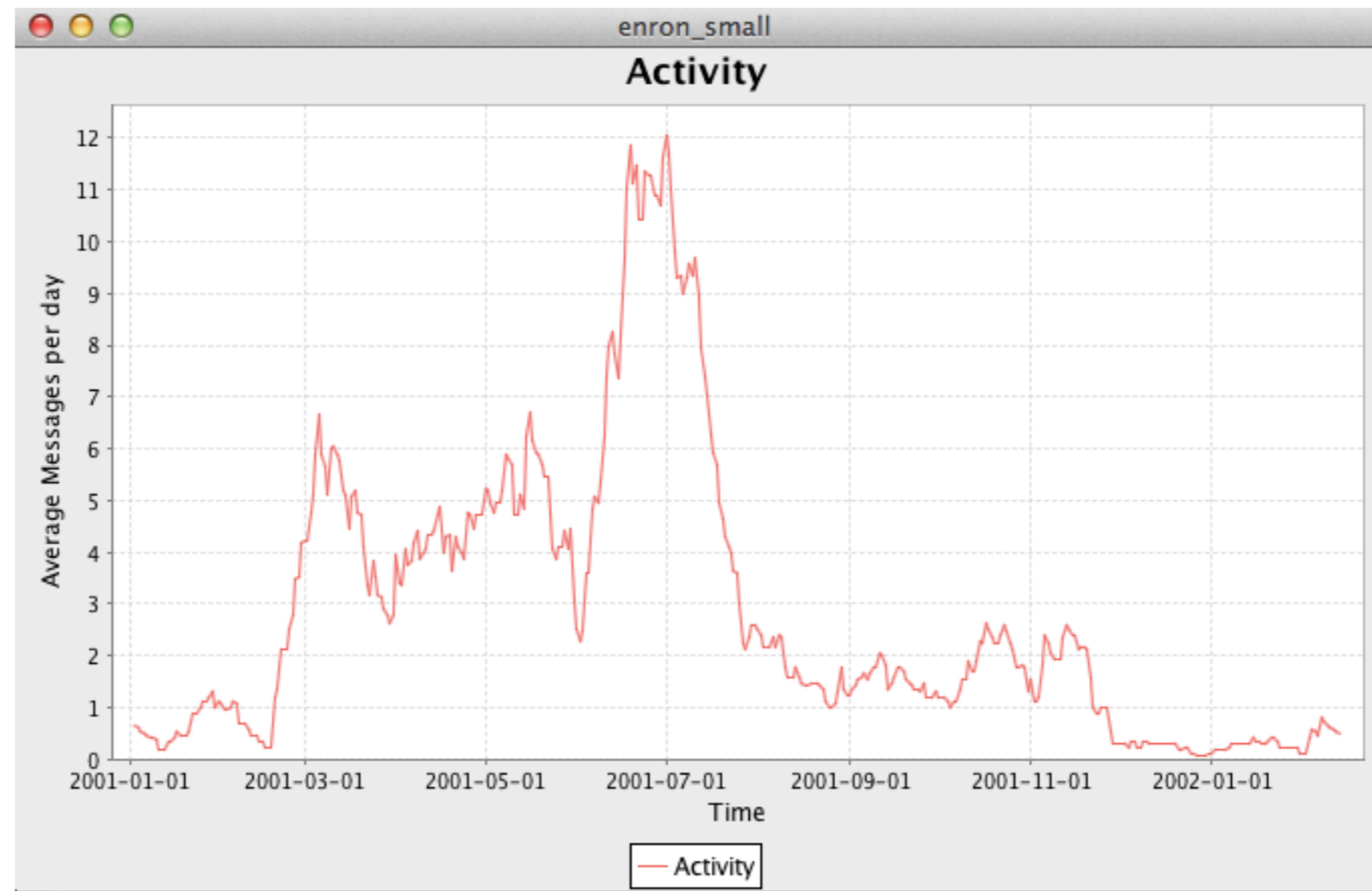
Note: Using this menu assumes that users have used the File menu to select a database and opened one or more datasets.

Tip: Users can set the Start and End dates of the Activity Plot when opening the dataset.

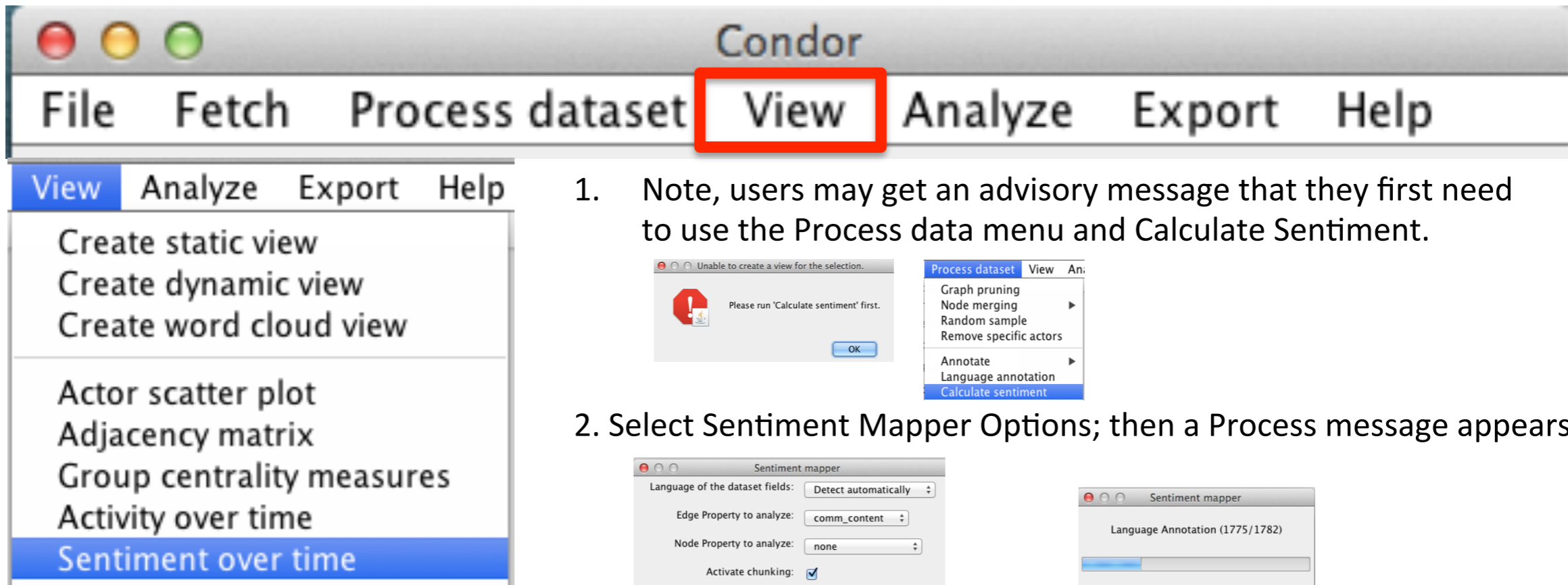
The Activity over time Plot can be saved as a Portable Network Graphics or .png file by right clicking on graph and select "Save as".



2. Sample Activity Plot with Average Messages per day on the Y-Axis and Time along the X-Axis.



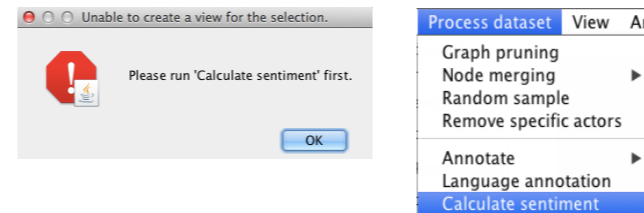
The Activity over time Plot can be saved as a Portable Network Graphics or .png file by right clicking on graph and select "Save as".



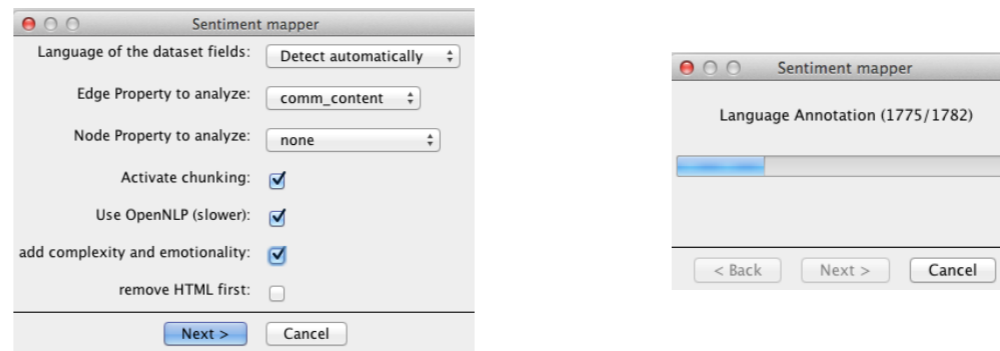
Note: Using this menu assumes that users have used the File menu to select a database and opened one or more datasets.

Tip: First, use the Process dataset menu to Calculate sentiment.

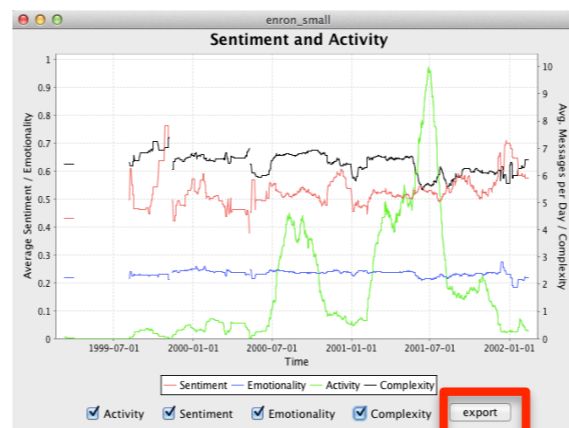
1. Note, users may get an advisory message that they first need to use the Process data menu and Calculate Sentiment.



2. Select Sentiment Mapper Options; then a Process message appears



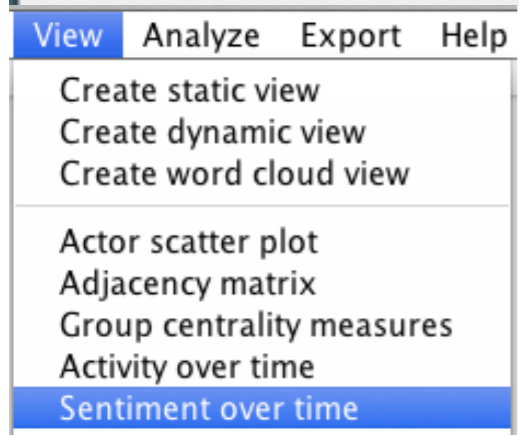
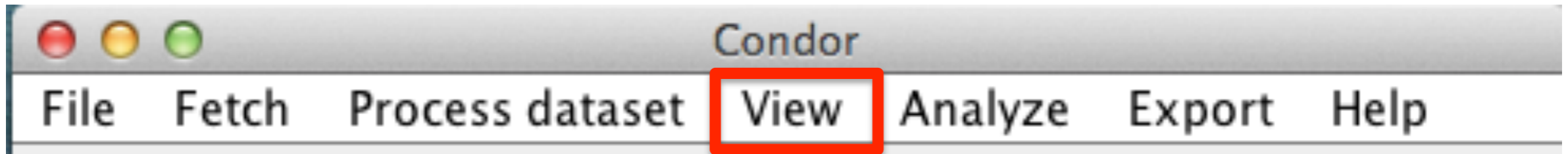
3. Sample Sentiment and Activity Plot with Average Messages per day on the Y-Axis and Time along the X-Axis.



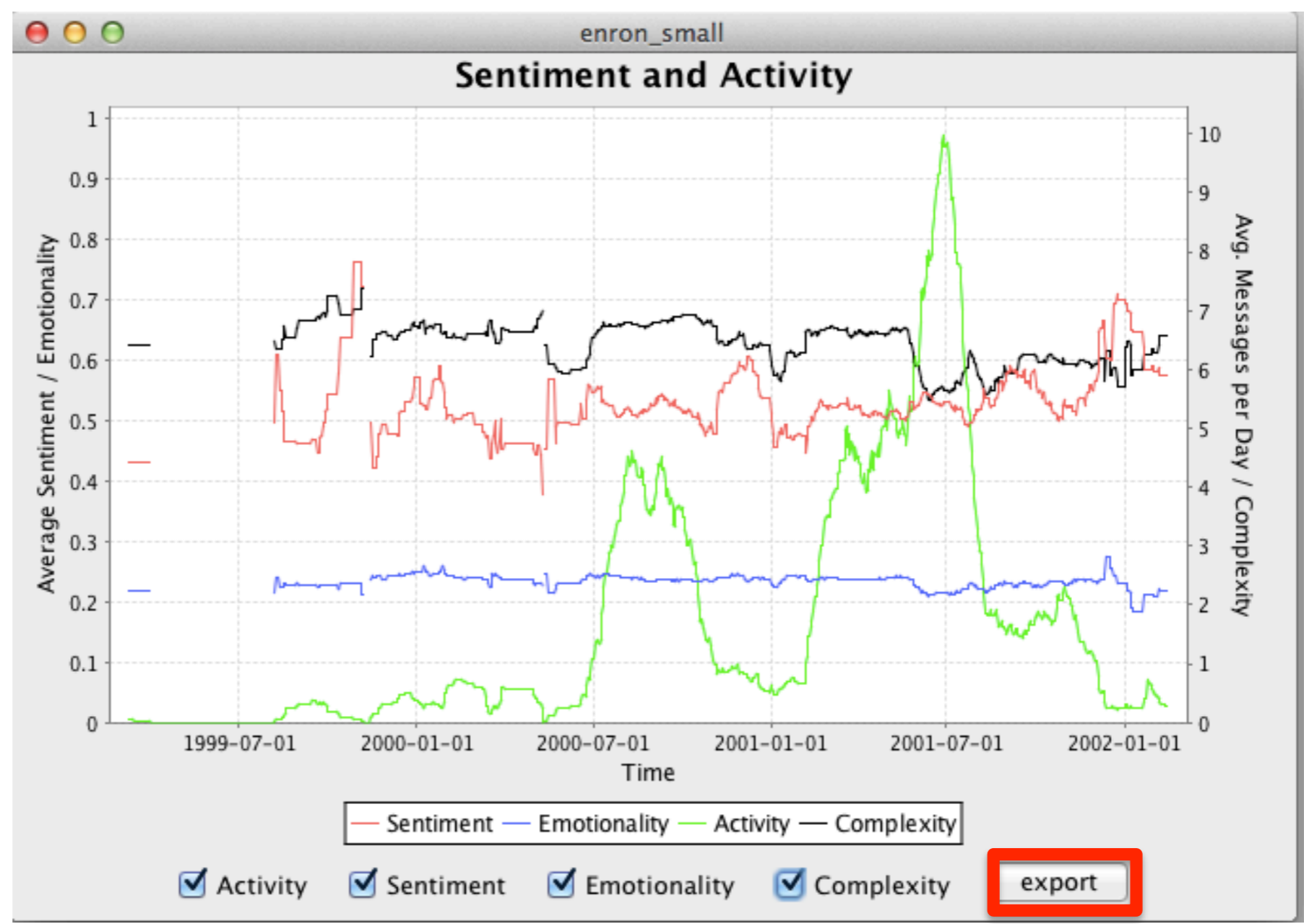
Note: Four measures are optionally plotted: Activity, Sentiment, Emotionality, and Complexity (if selected in Sentiment Mapper)

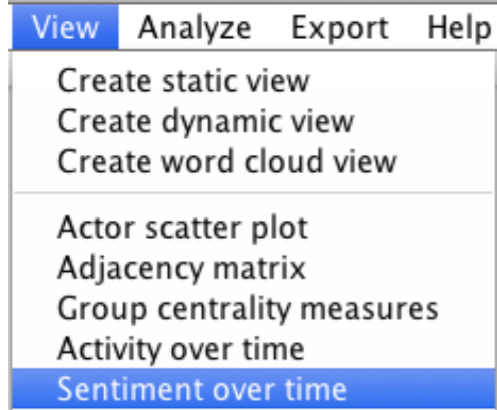
Note: There is an Export option to save all the Values in a .csv file

The Sentiment Plot can be saved as a Portable Network Graphics or .png file by right clicking on graph and select "Save as". The data can be exported as a CSV file too.

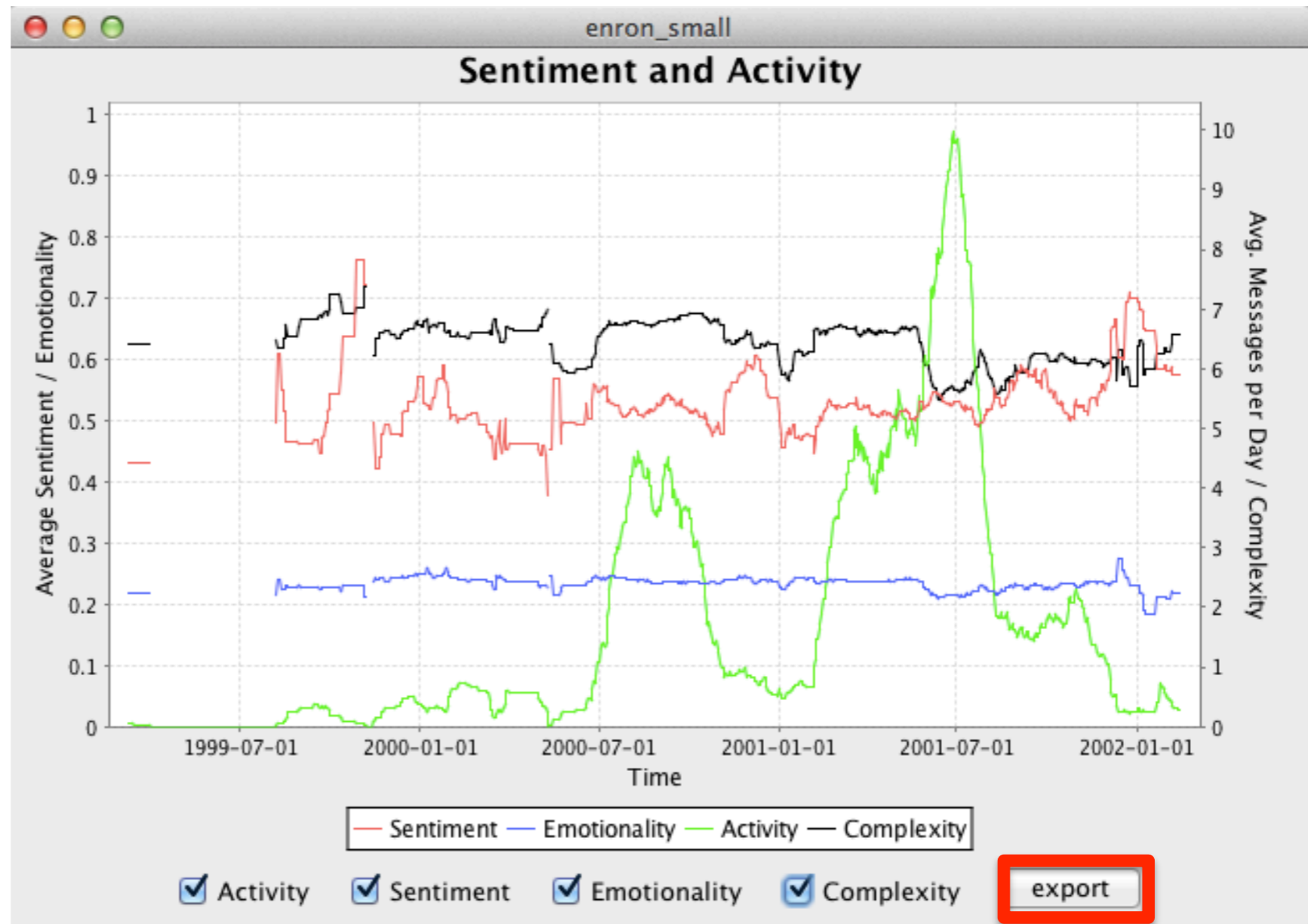


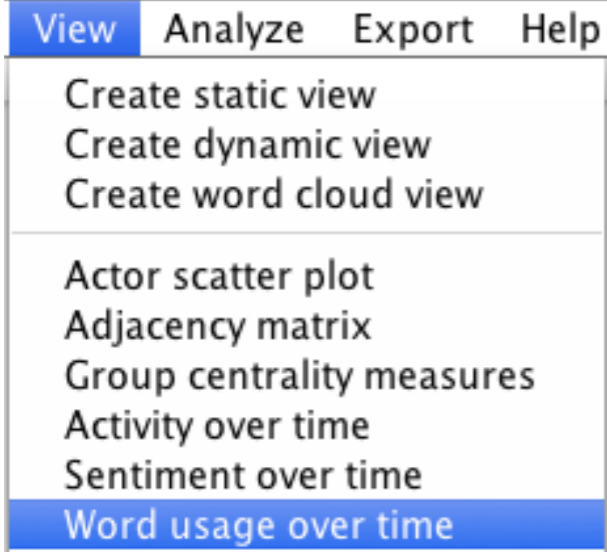
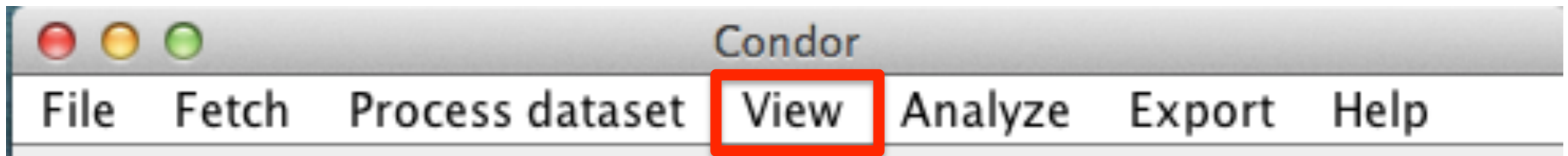
3. Sample Sentiment and Activity Plot with Average Messages per day on the Y-Axis and Time along the X-Axis.





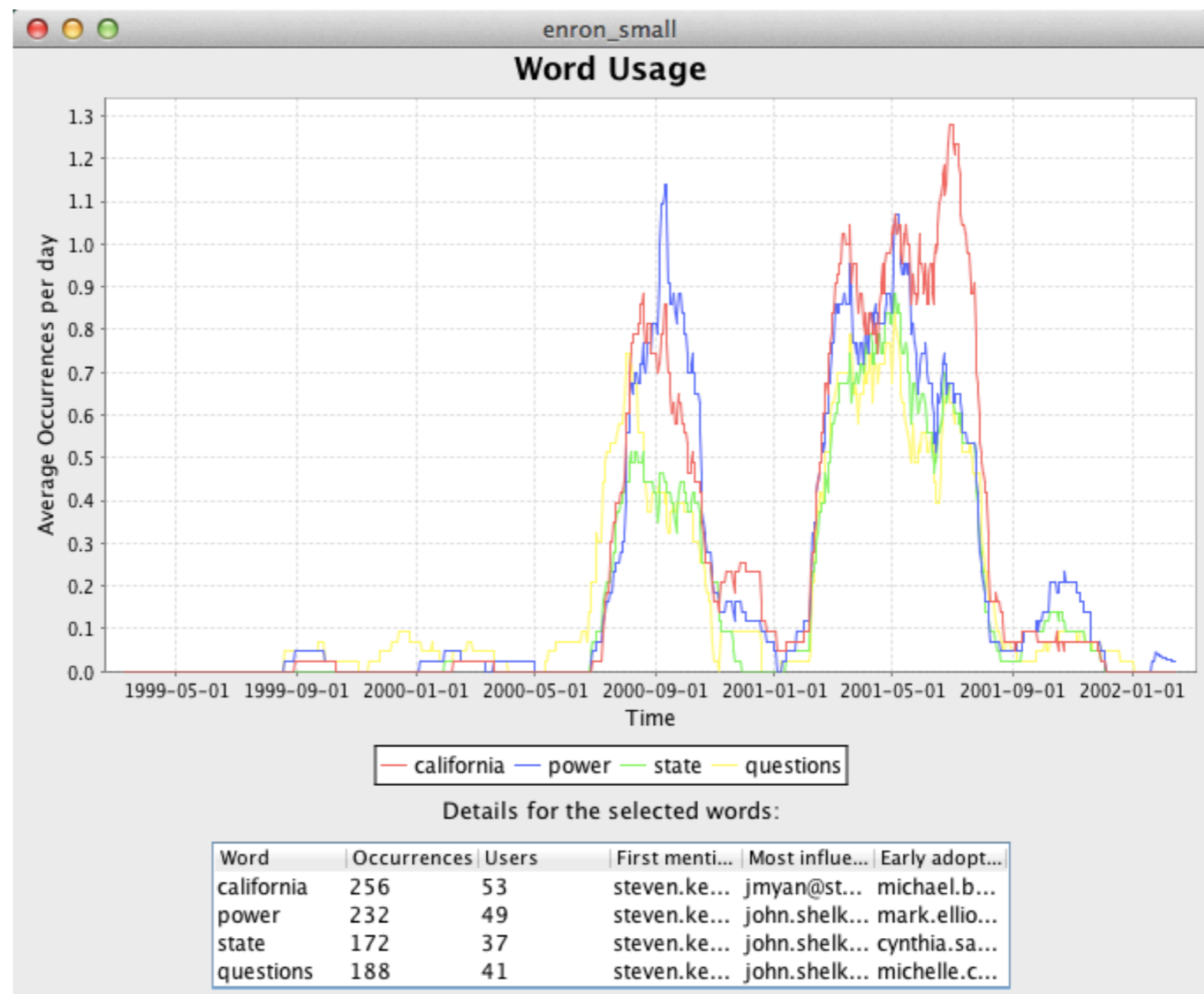
3. Sample Sentiment and Activity Plot with Average Messages per day on the Y-Axis and Time along the X-Axis.

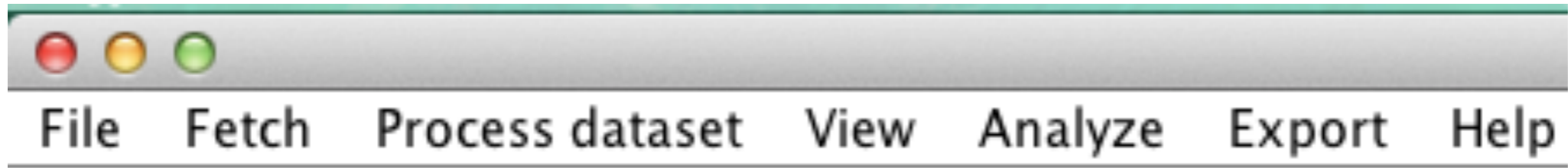




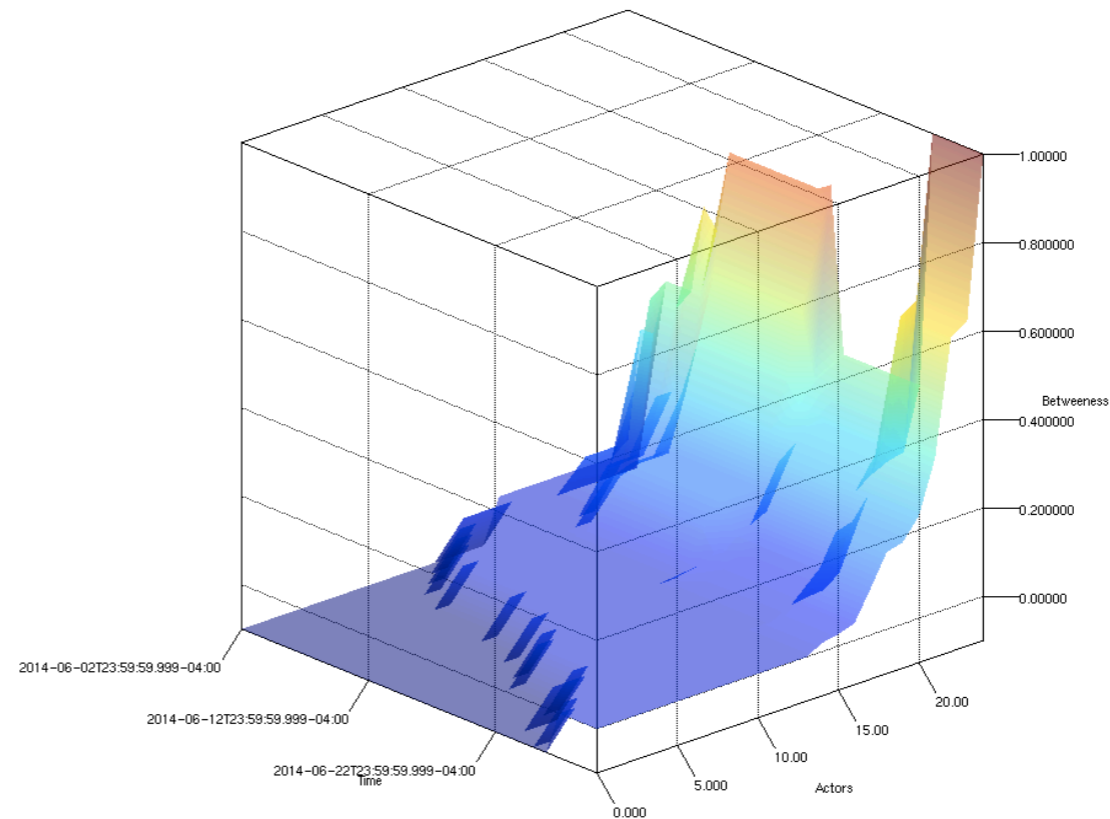
Note:  
 Details for 4 selected words are given including:  
 No. of Occurrences,  
 No. of Users  
 Who First Mentioned  
 Who Most Influential, and  
 Who was the Early Adopter  
 for each of the four words.

3. Sample Word Usage Plot with Average Occurrences per day on the Y-Axis and Time along the X-Axis.





- View
  - Analyze
  - Export
  - Help
- 
- Create static view
  - Create dynamic view
  - Create word cloud view
  - Create geographical view
- 
- Actor scatter plot
  - Adjacency matrix
  - Group centrality measures
  - Activity over time
  - Sentiment over time
  - Word usage over time
  - Create temporal social surface view



See: Kidane, Y. Gloor, P. Correlating temporal communication patterns of the Eclipse open source community with performance and creativity, Computational & Mathematical Organization Theory. Volume 13, Issue 1 (March 2007), ISSN:1381-298X, 17 - 27, 2007

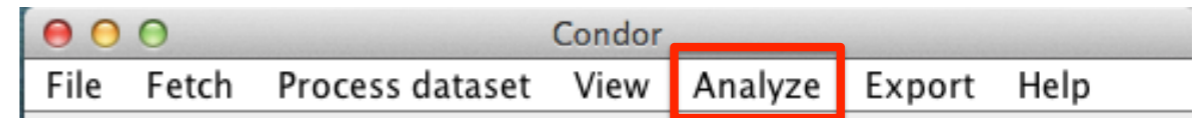


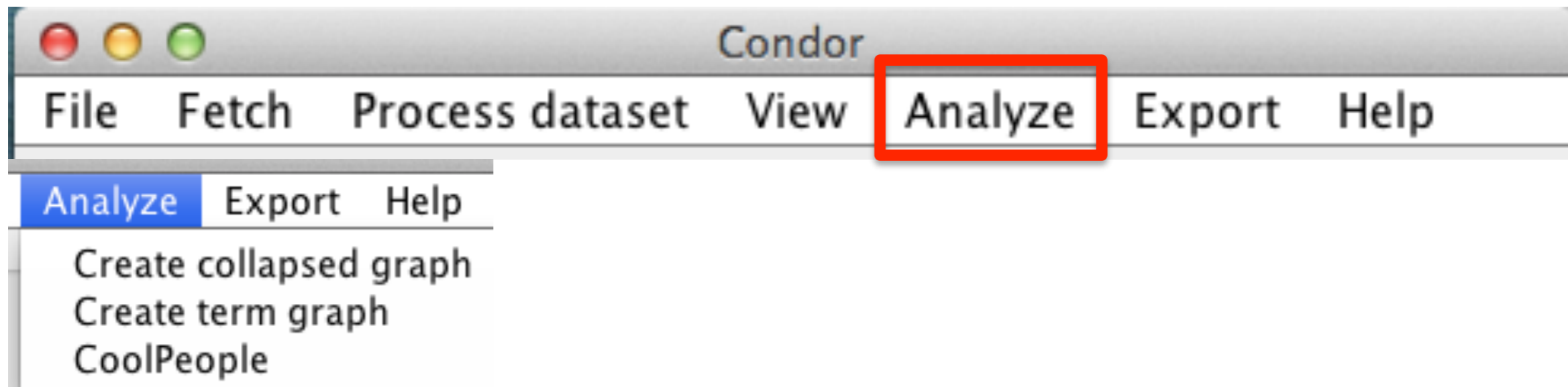
# Analyze Menu

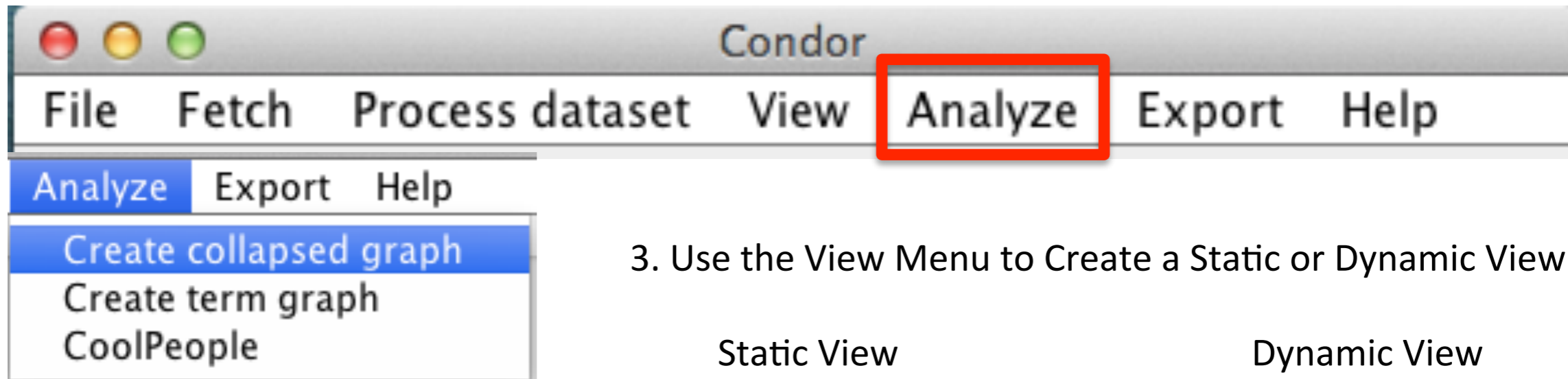
## ANALYZE MENU

Use the Analyze Menu to:

Create a collapse graph, term graph; CoolPeople

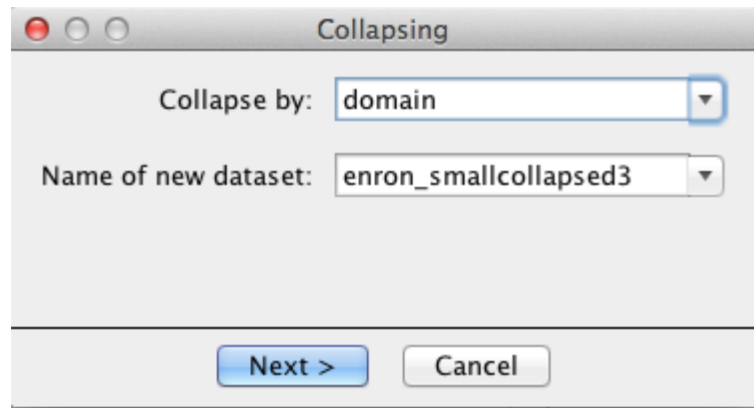






3. Use the View Menu to Create a Static or Dynamic View

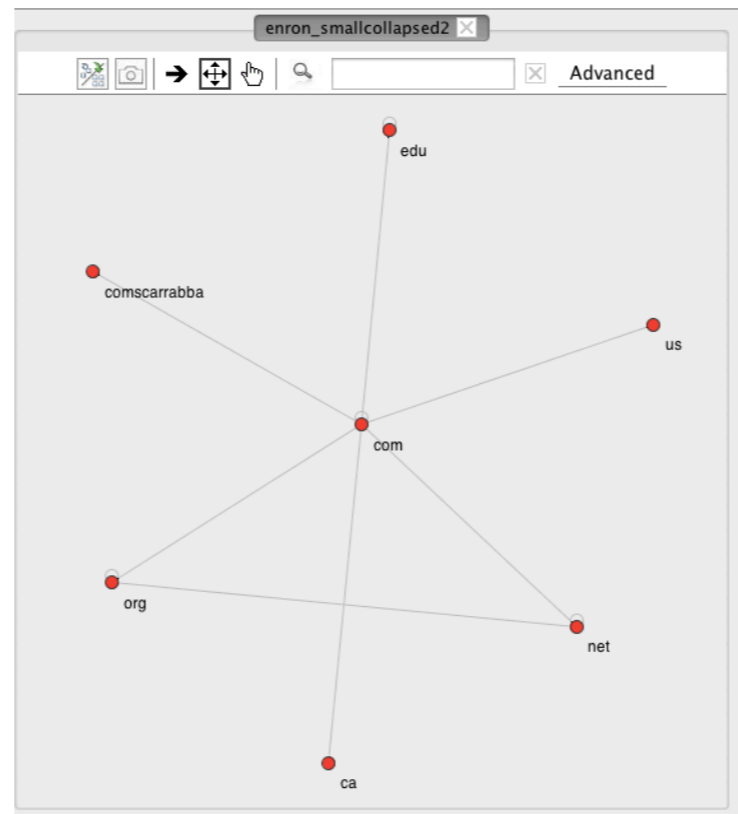
1. Select Collapse Field, and name of resulting dataset



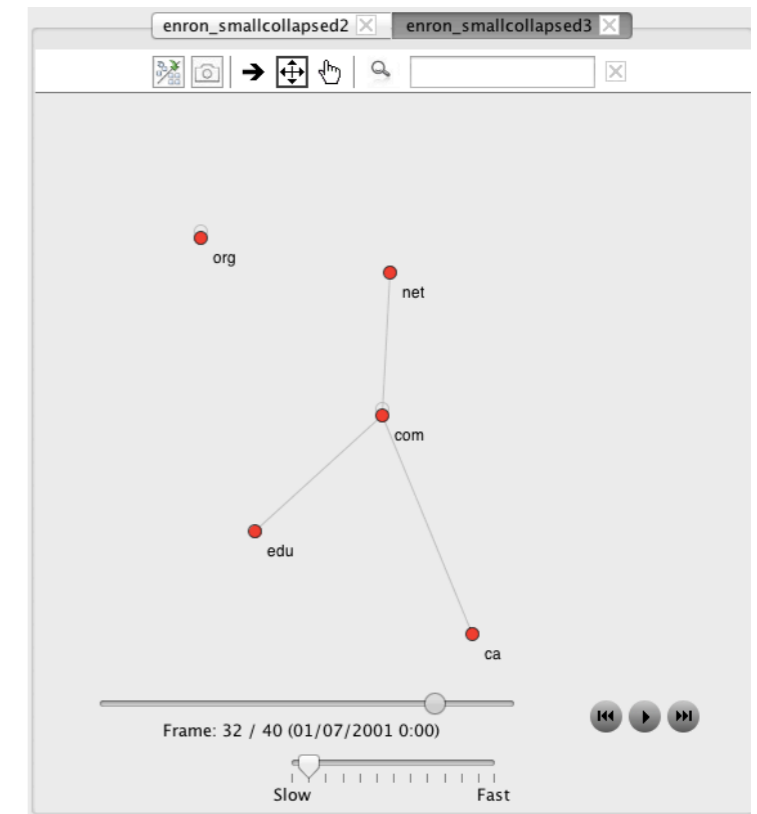
2. New dataset is created and made active

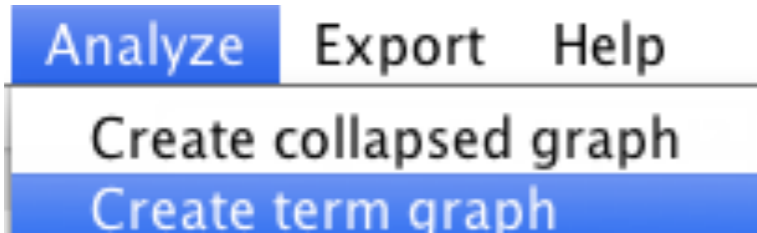
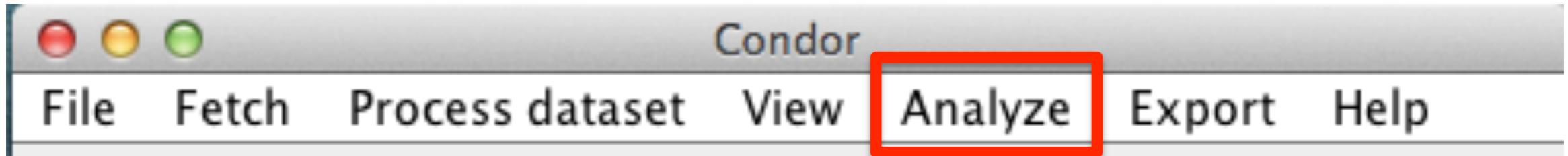


Static View

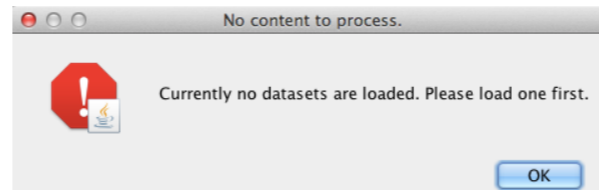


Dynamic View

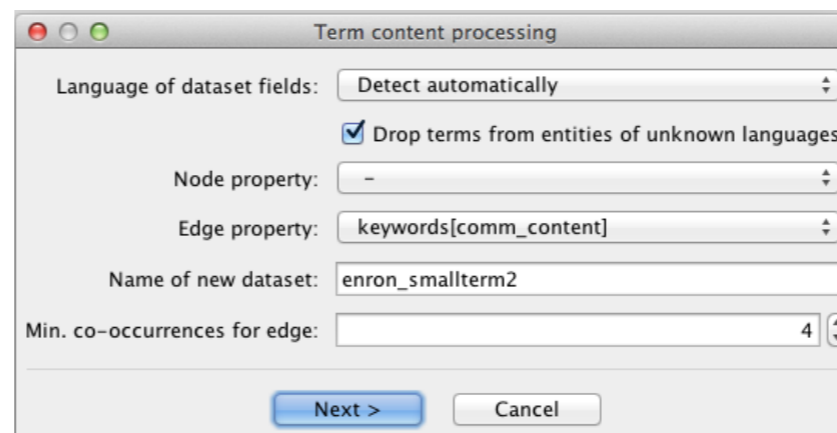




1. Note, users may get an advisory message that a dataset first needs to be loaded.

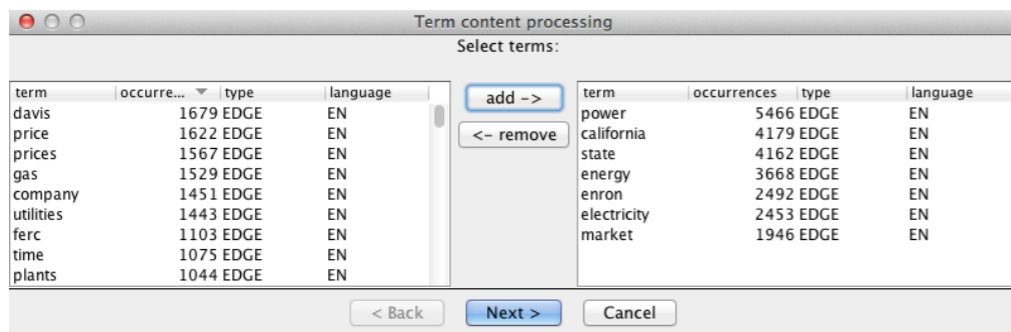


2. Set Term processing options: Language, Node and Edge property Name of Target Dataset, Minimum no. of co-occurrences for edge

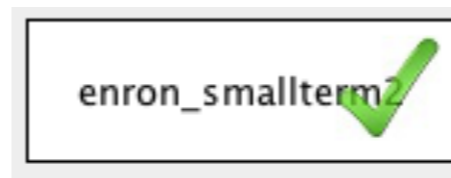


Note: Using this menu assumes that users have used the File menu to select a database and opened one or more datasets.

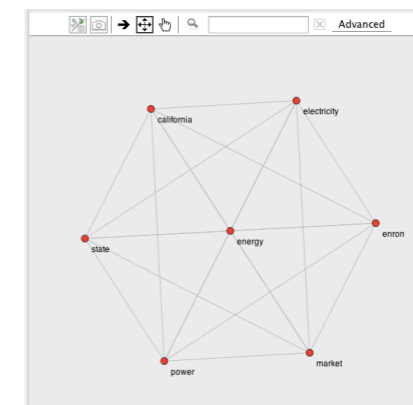
### 3. Select terms

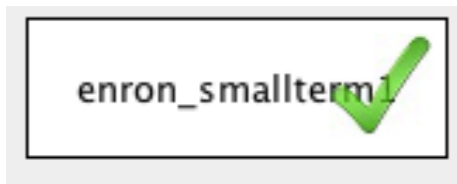
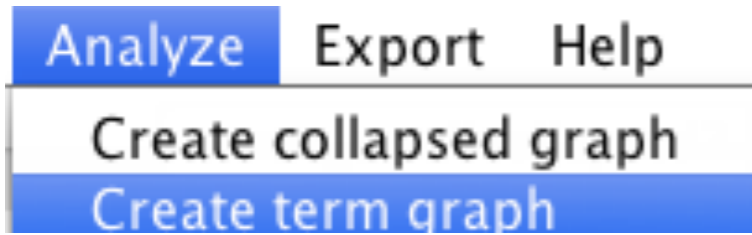
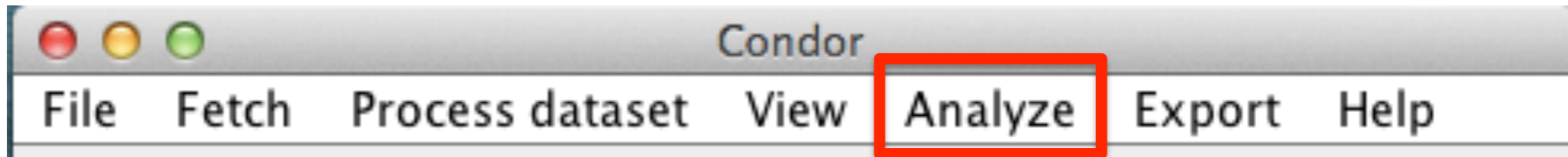


4. Target Dataset is open and made active

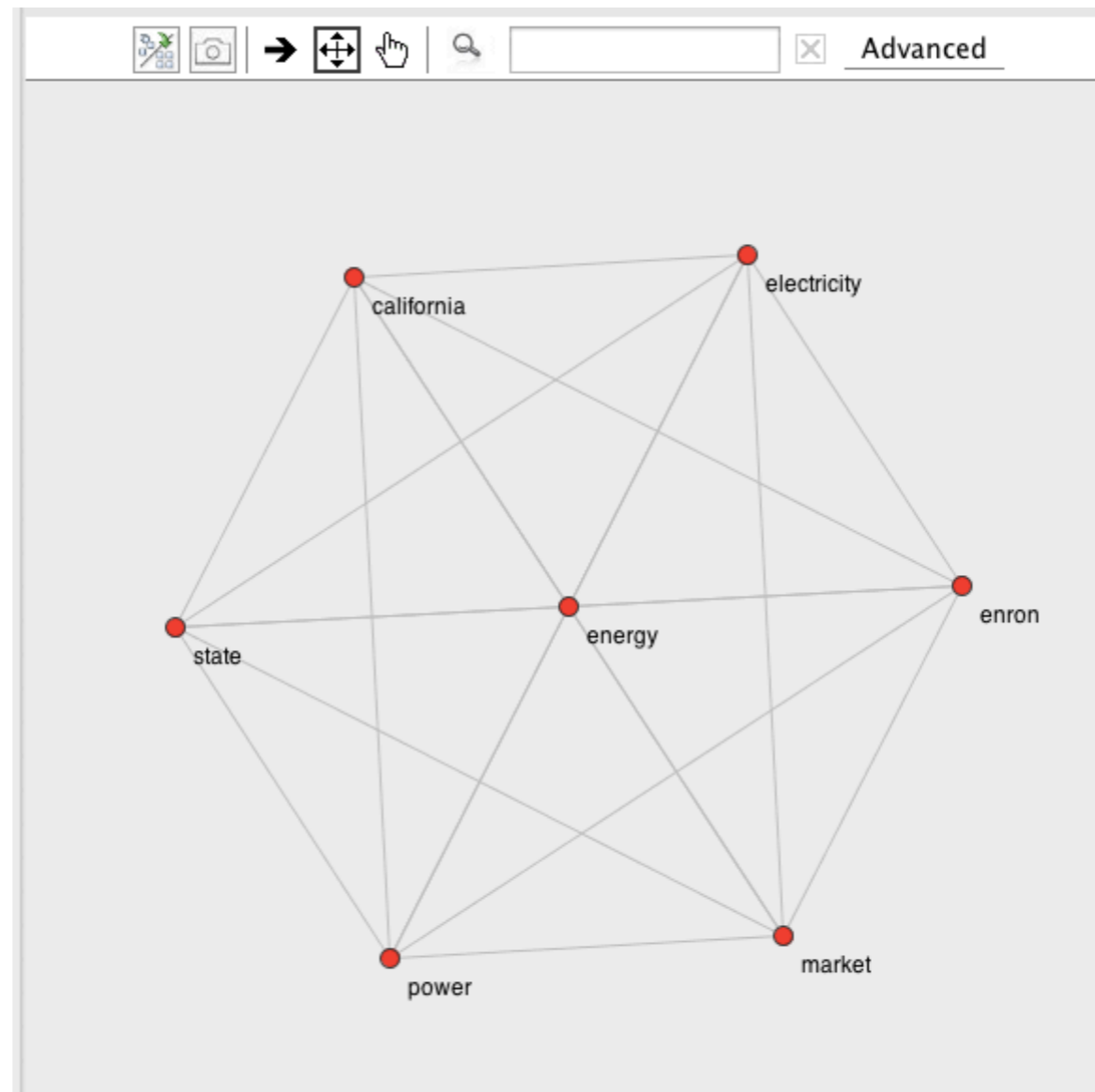


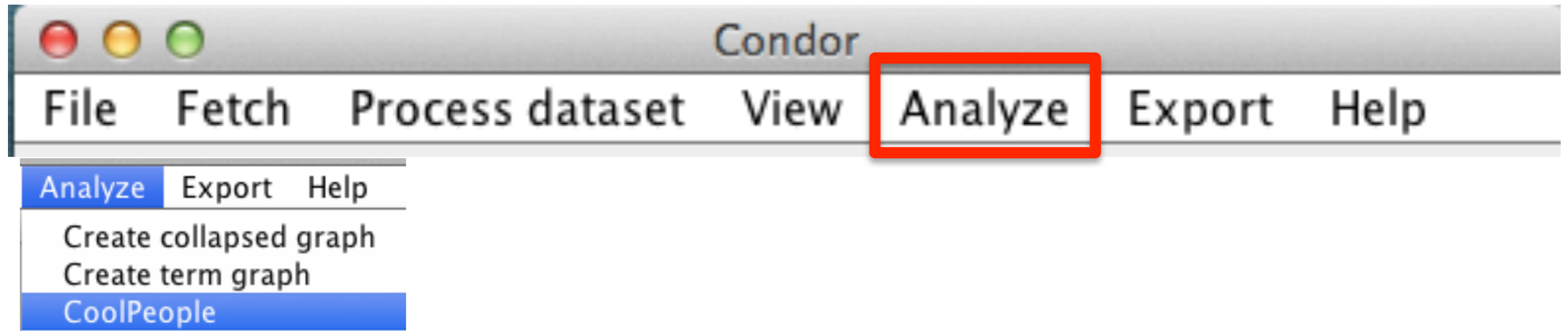
5. Use the View Menu to Create a Static View





3. Use the View Menu to Create a Static View





CoolPeople is still under development

working on it...

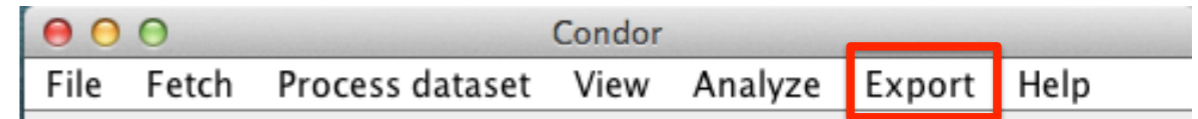


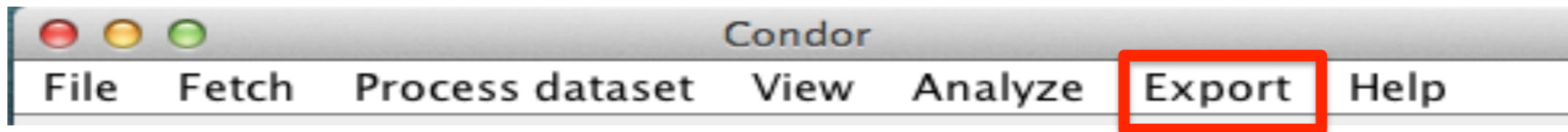
# Export Menu

## EXPORT MENU

Use the Export Menu to:

Export: Data as CSV files, time series, MySQL dump, turn-taking, and dataset properties

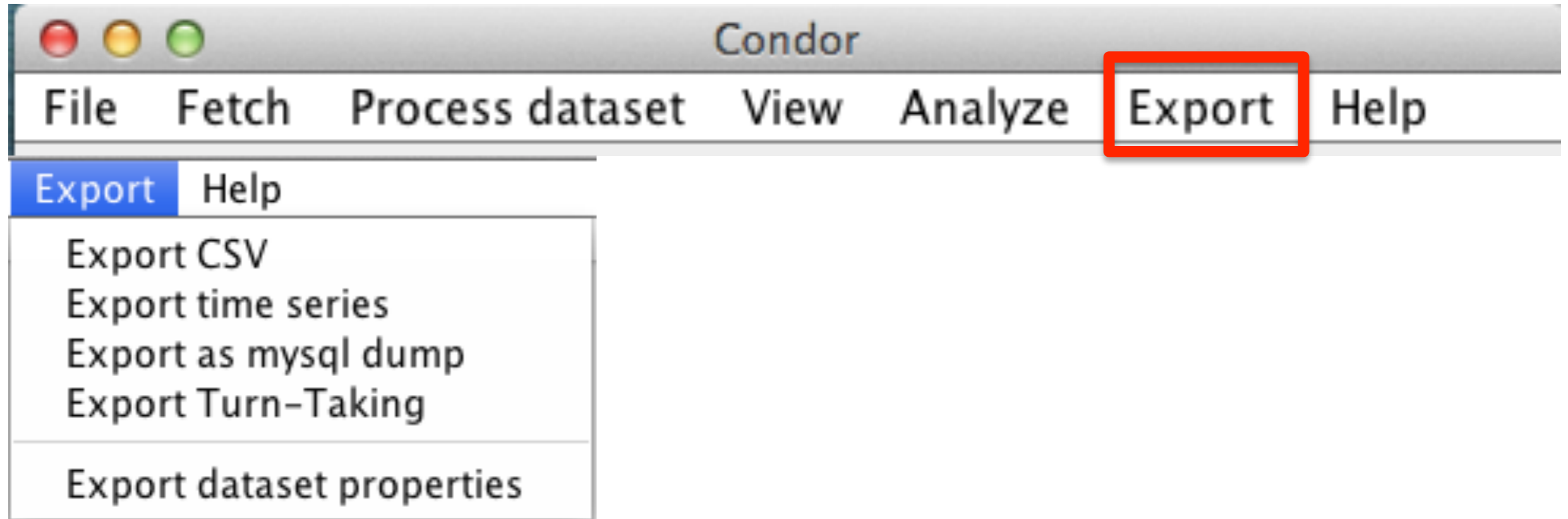


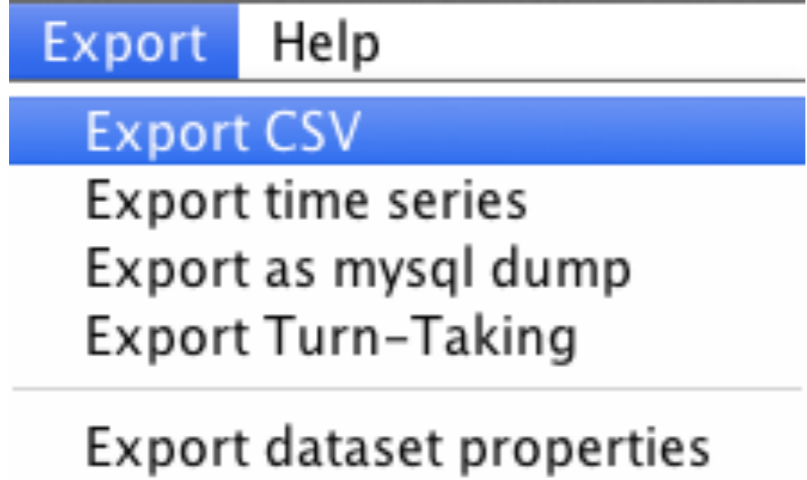
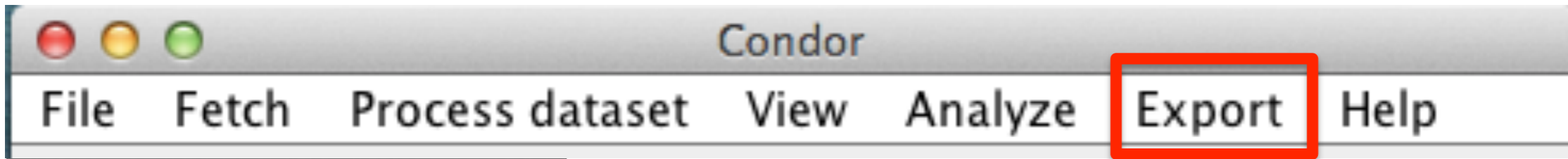


The Export menu offers 5 options to create an output file of selected network measures and node and edge data.

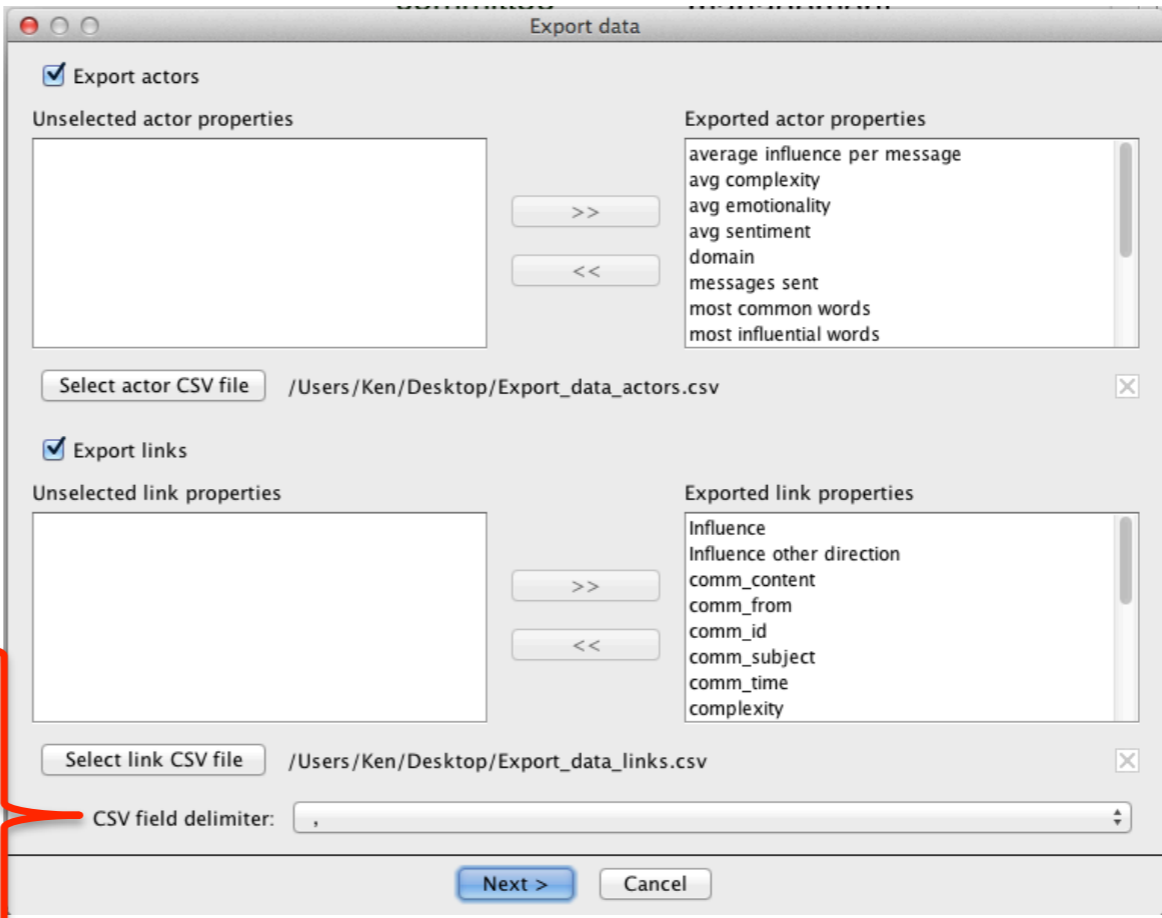
1. **Export CSV** enables users to export a dataset's nodes and edges along with their selected properties into separate .csv files.
2. **Export time series** offers the choice to export these measures: contribution index, AWVCI, betweenness centrality, betweenness oscillation, graph density, turn taking, degree centrality, activity, sentiment, emotionality and complexity into a .csv file, which must be designated. The user defines export parameters of a Time Unit (minutes, hours, days, weeks, months or years), Date Range, with or without History and Length of time units . The dataset must be time stamped, such as in email or Twitter.
3. **Export as mysql dump** is an export of a dataset's node and edge fields saved as a .sql file.
4. **Export Turn-Taking** is an export of a selection of an individual actor's turn-taking statistics, which are saved as their "name.csv" into a designated folder. The turn-taking fields are: Source-UUID, Source-Name, Target-UUID, Target-Name, Pings Sender, Mean Frame Time Sender, Pings Receiver, Mean Frame Time Receiver, Num Messages, and Num Frames. The dataset must be time stamped, such as in email or Twitter.
5. **Export Dataset Properties** is an export of a dataset's properties, but they first need to be individually calculated using the Process dataset menu options: Annotate > Centrality Annotations ( Betweenness [weighted], Degree [weighted] ); ; Annotate > AWVCI; Annotate > Turn Taking Annotations, and/or Annotate > Graph Density Annotation. Process dataset > Calculate Sentiment







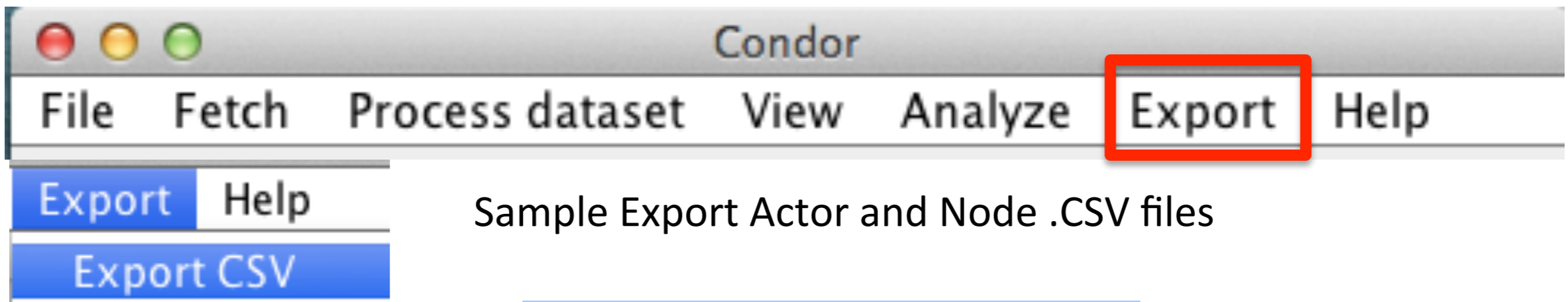
Select Actors and/or Links to be exported to designated .CSV files, along with selected Properties to be excluded




Choose your Field delimiter




2. Process message appears. Data exported to .csv file(s).

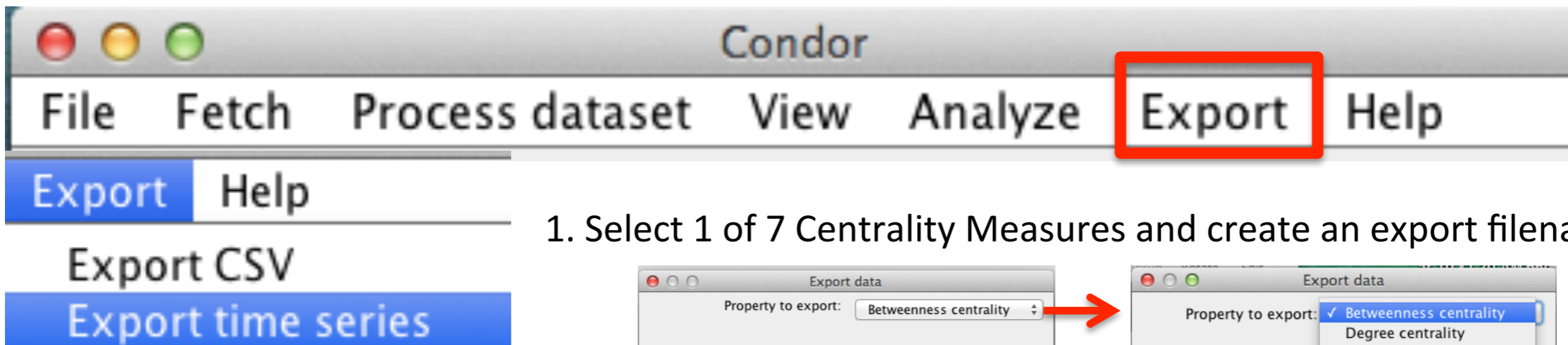


 Export\_data\_actors.csv

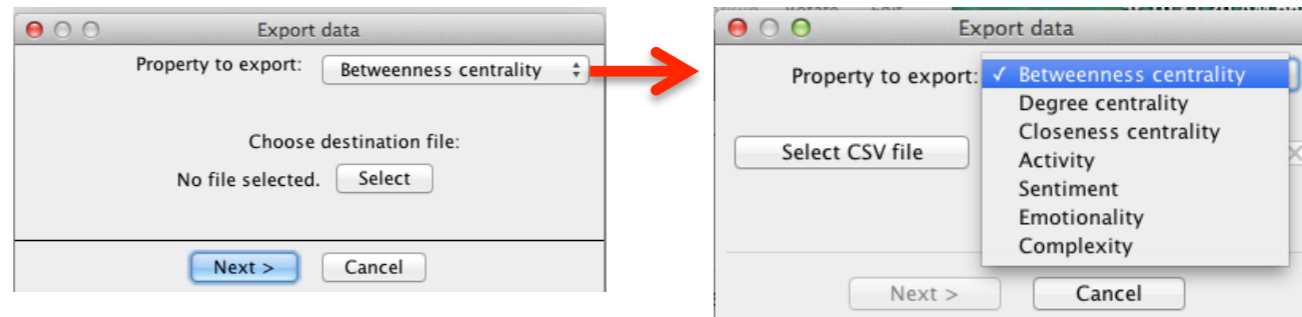
	A	B	C	D	E
1	Uuid	Name	average influence per message	avg complexity	avg emotionality
2	-748866761	stacy.guidroz@enron.com		0	0.5
3	2046809112	wbalson@opt4.com		0	0.5
4	1638490387	jane.wilson@enron.com		0	0.5

 Export\_data\_links.csv

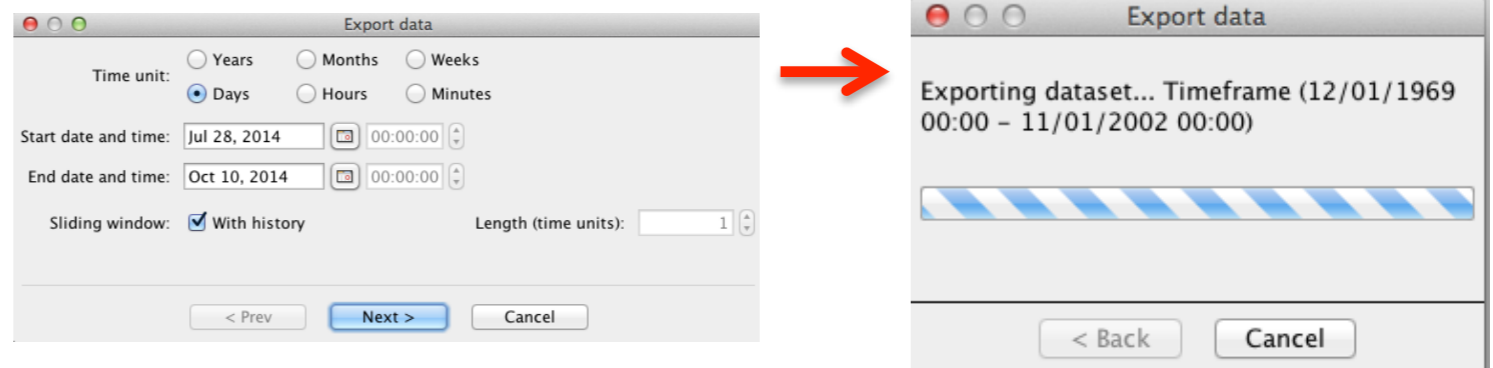
	A	B	C	D	E	F	G	H	I	J	K
1	Uuid	Name	sourceUuid	targetUuid	Influence	Influence other c	comm_content	comm_from	comm_id	comm_subject	comm_time
2	8cfa14b1-1969-4	unknown	1550918503	962894534			-----Original Me	john.shelk@enro	162	FW: DOE on Relia	27:23.0
3	0a6ea24b-8341-4	unknown	2121871092	1684205340			Martin, Lance	v.j.kaminski@enro	721	FW:	34:52.0
4	919a06c1-4ec4-4	unknown	-1519806454	1162382456			Since several of	shirley.crenshaw	1304	Re: Telephone In	28:00.0



1. Select 1 of 7 Centrality Measures and create an export filename



2. Select Date Range, Time Unit and History. Then Process Message



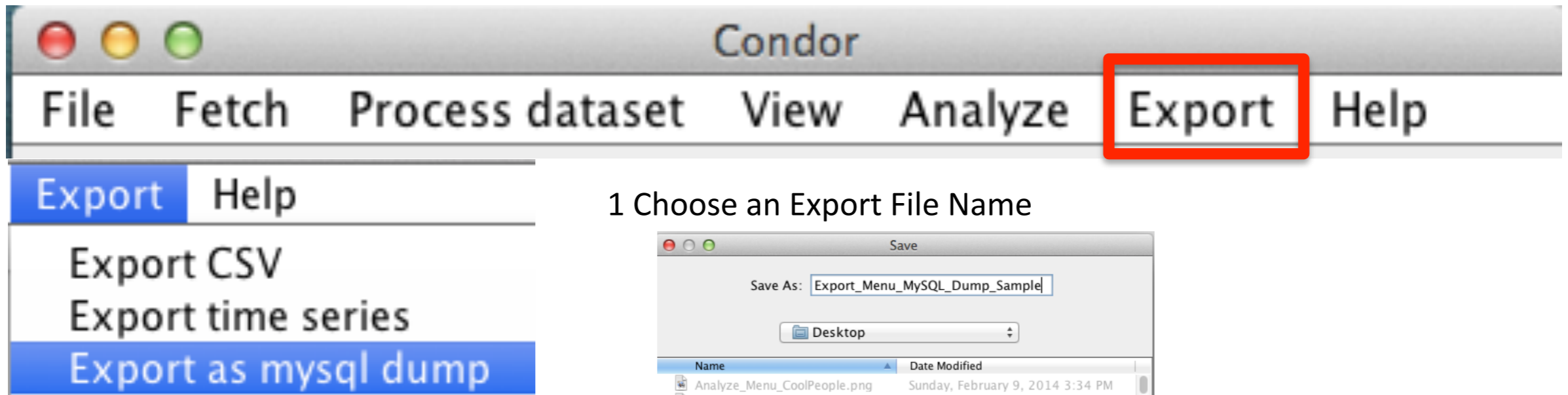
Note: Using this menu assumes that users have used the File menu to select a database and opened one or more datasets.

Dataset should have timestamps, such as Email or Twitter.

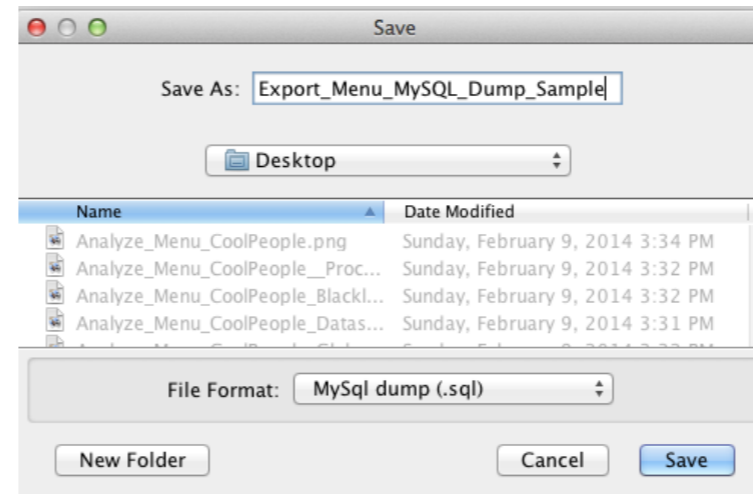
Tip: An Export file name must be given. The extension ".csv" is automatically appended to the file name.

3. Sample Export Time Series Output

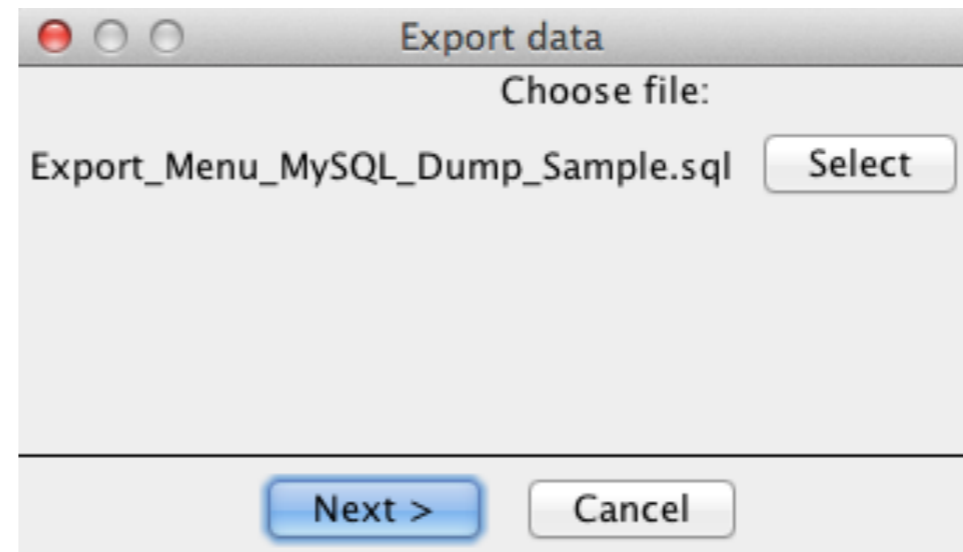
	1	2	371	372	373	374	375	376	377	378
1	Node uuid	Node name	BC on 01/08,	BC on 01/09,	BC on 01/10,	BC on 01/11,	BC on 01/12,	BC on 01/01,	BC on 01/02,	BC on 01/03,
2	2144651173	a.hueter@enron.com								
3	2121871092	j.kaminski@enron.com								
4	2116864919	jbennett@gmssr.com								
5	2115397972	carol.brown@enron.com								
6	2102898057	douglas.clifford@enron.com								
7	2101134203	davidtaylor@aol.com								
8	2096854050	andrew.lewis@enron.com	0	0	0	0	0	0	0	0
9	2090647728	eric.thode@enron.com		0	0	0	0	0	0	0
10	2088910142	greg.piper@enron.com								
11	2080627626	james.noles@enron.com	0	0	0	0	0	0	0	0
12	2073484112	erin.rice@enron.com			0	0	0	0	0	0
13	2067450687	droark@velaw.com	1.16E-04	1.14E-04	8.01E-05	6.86E-05	5.85E-05	5.16E-05	4.61E-05	4.20E-05
14	2065656006	mike.mcconnell@enron.com				0	0	0	0.00539606	0.00529568
15	2056739638	ine.narks@enron.com								



### 1 Choose an Export File Name

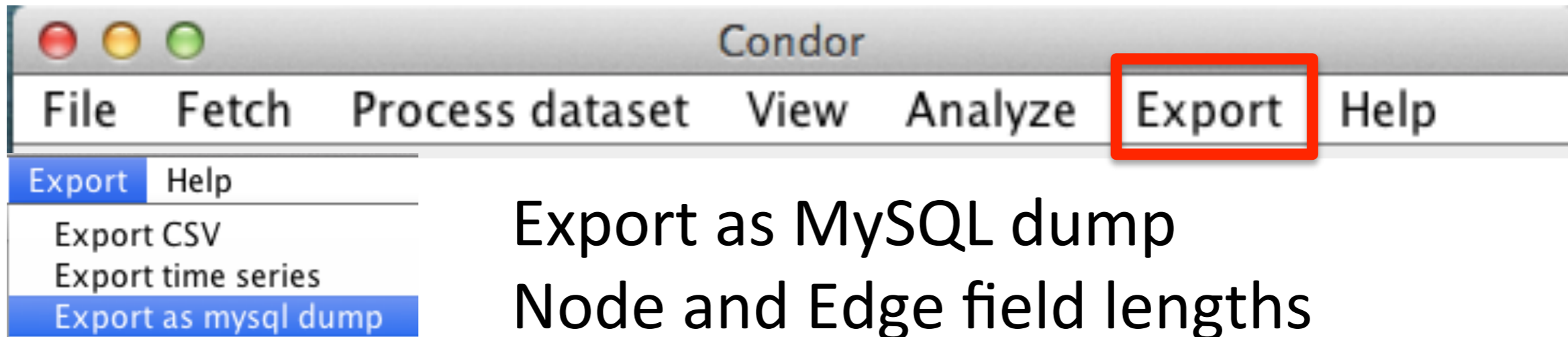


### 2. Click Next to Export to designated file



Note: Using this menu assumes that users have used the File menu to select a database and opened one or more datasets.

Tip: An Export file name must be given. The extension ".sql" is automatically appended to the file name.



## Export as MySQL dump

### Node and Edge field lengths

#### Node field lengths

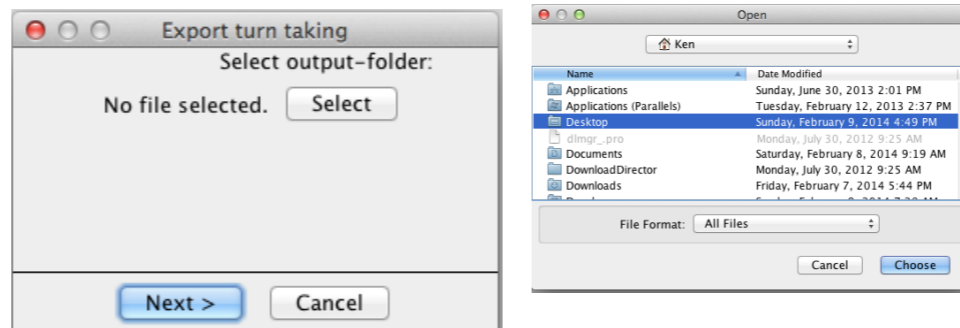
<u>id</u>	int(11)
uuid	varchar(255)
name	varchar(255)
organization	varchar(4096)
negValueSent	varchar(4096)
domain	varchar(4096)
posValueSent	varchar(4096)
negValueReceived	varchar(4096)
posValueReceived	varchar(4096)

#### Edge field lengths

<u>id</u>	int(11)
source	int(11)
target	int(11)
uuid	varchar(255)
name	varchar(255)
timestamp	varchar(4096)
posValue	varchar(4096)
comm_subject	varchar(4096)
negValue	varchar(4096)
datasetId	varchar(4096)
comm_from	varchar(4096)
comm_id	varchar(4096)
comm_content	varchar(4096)
comm_time	varchar(4096)
termpro	varchar(4096)



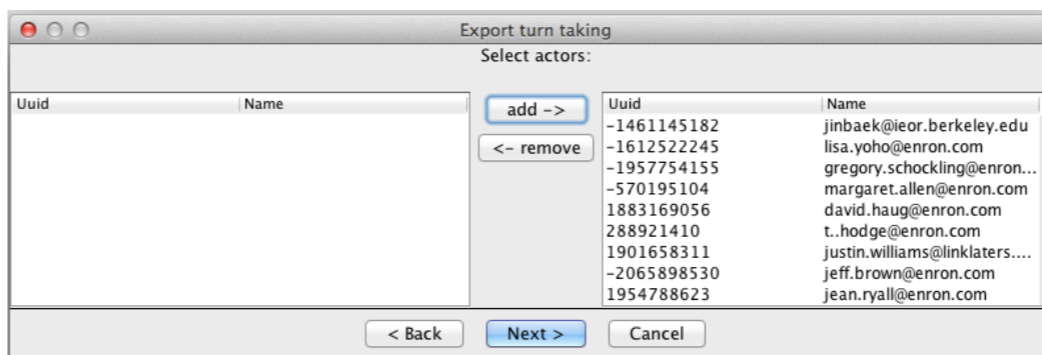
1 Choose an Export Folder.



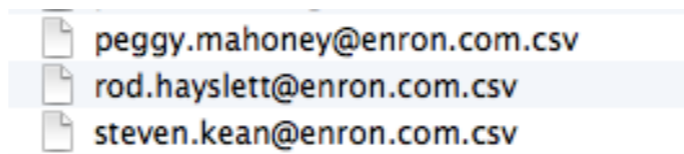
Note: Using this menu assumes that users have used the File menu to select a database and opened one or more datasets.

Tip: An Export FOLDER name must be given. Actors selected will have an individual file created for them.

2. Select Actors to Export individual results saved as their "name.csv" into the previous designated folder

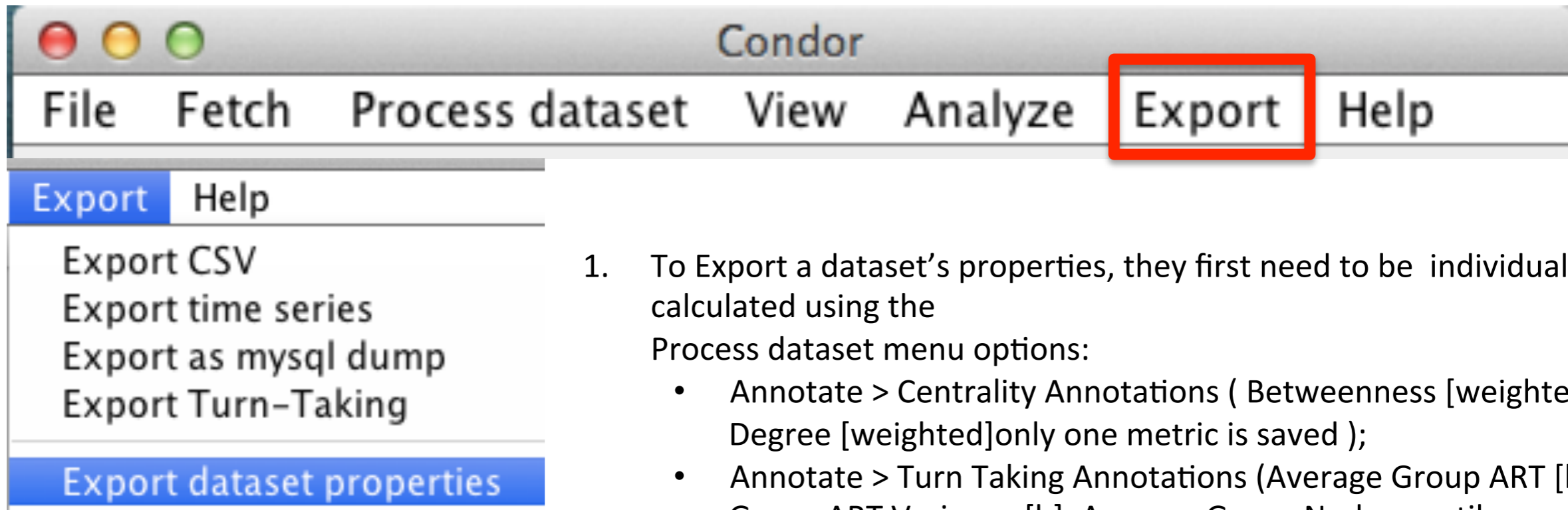


3. Sample Export Turn Taking File output for selected actors..



4. Sample Turn Taking Output

1	2	3	4	5	6	7	8	9	10
Source-UUID	Source-Name	Target-UUID	Target-Name	Pings Sender	Mean Frame Time Sender	Pings Receiver	Mean Frame Time Receiver	Num Messages	Num Frames
785168501	steven.kean@enron.com	1541913113	miyung.buster@enron.com	2	7384	1	2808	4	1

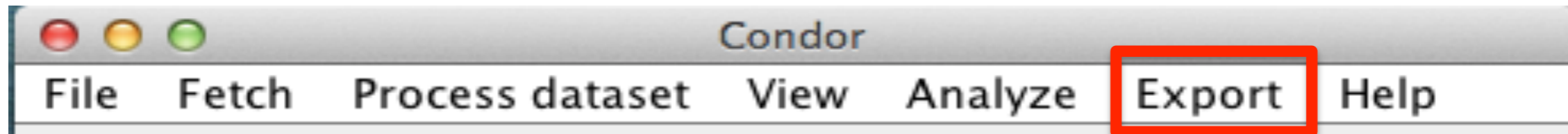


1. To Export a dataset's properties, they first need to be individually calculated using the Process dataset menu options:
  - Annotate > Centrality Annotations ( Betweenness [weighted], Degree [weighted]only one metric is saved );
  - Annotate > Turn Taking Annotations (Average Group ART [h], Group ART Variance [h], Average Group Nudges until responses [h], Group Nudges Variance until responses [h]and
  - Annotate > Graph Density Annotation
  - Annotate > AWCVI annotations
  - Calculate Sentiment

Sample Export dataset properties.csv file

	A	B
1	Metric	Value
2	Average Group ART [h]	81.6818182
3	Average Group Nudges until responses [h]	1.34090909
4	Average Sentiment	0.52618061
5	AWVCI	0.54549594
6	Graph density	0.00185902
7	Group ART Variance [h]	21072.0124
8	Group Betweennes Centrality	0.59945335
9	Group Degree Centrality	0.41746029
10	Groupd Nudges Variance until responses [h]	0.46332645






In addition to the Export menu, Condor has 2 other export options:

1. **File menu > Export dataset** as a .cdf (Condor data format) for transfer to other computers or to share with other Condor users, and
2. **View menu > Sentiment over time** can export the data to a .csv file which includes: Activity, Sentiment, Emotionality, and Complexity (if selected in the Sentiment Mapper)

Condor can also save images, graphs and plots as follows:

1. The GUI Toolbar enables users to save a View menu static image to the clipboard by clicking on the camera icon 
2. The View menu > Actor Scatter Plot, Contribution Index, Group Centrality Measures, Activity over time, Sentiment over time, and Word usage over time, all can be “Saved As” as a Portable Network Graphics or .png file by right clicking on the image.

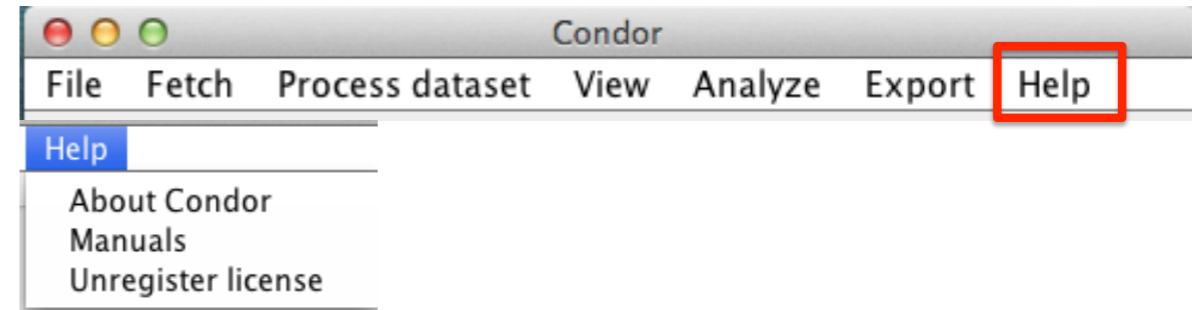
Note: To export a View Dynamic movie, users need to use a third party screen capture tool, such as, Snapz Pro.

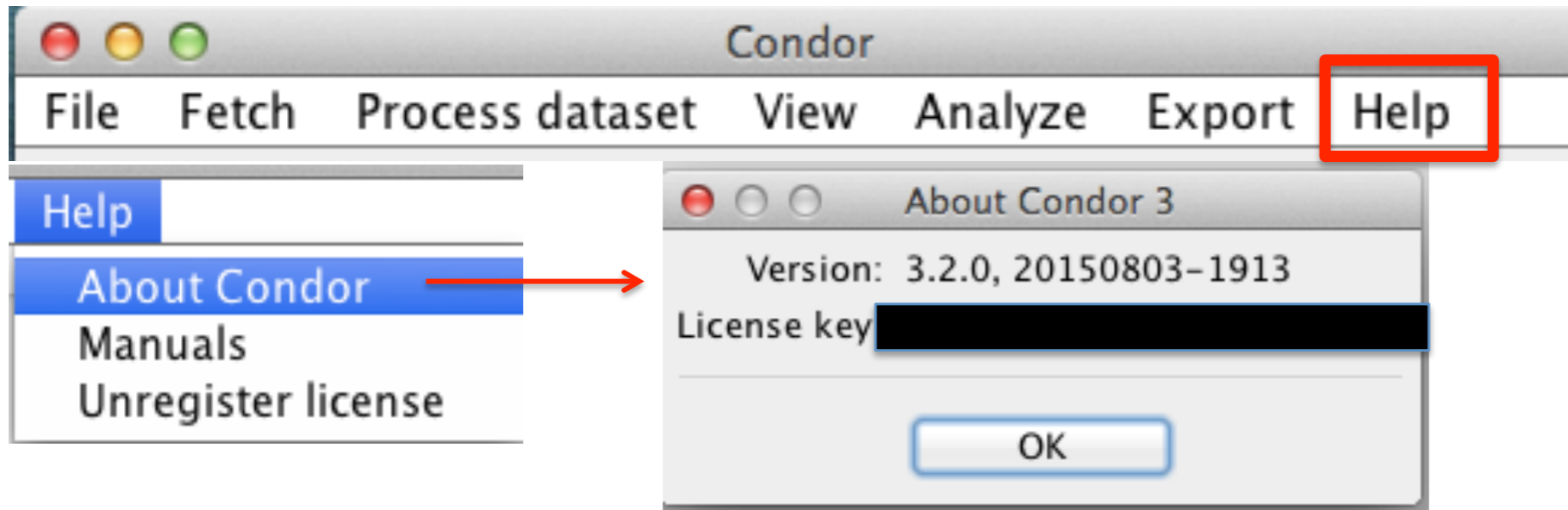
# Help Menu

## HELP MENU

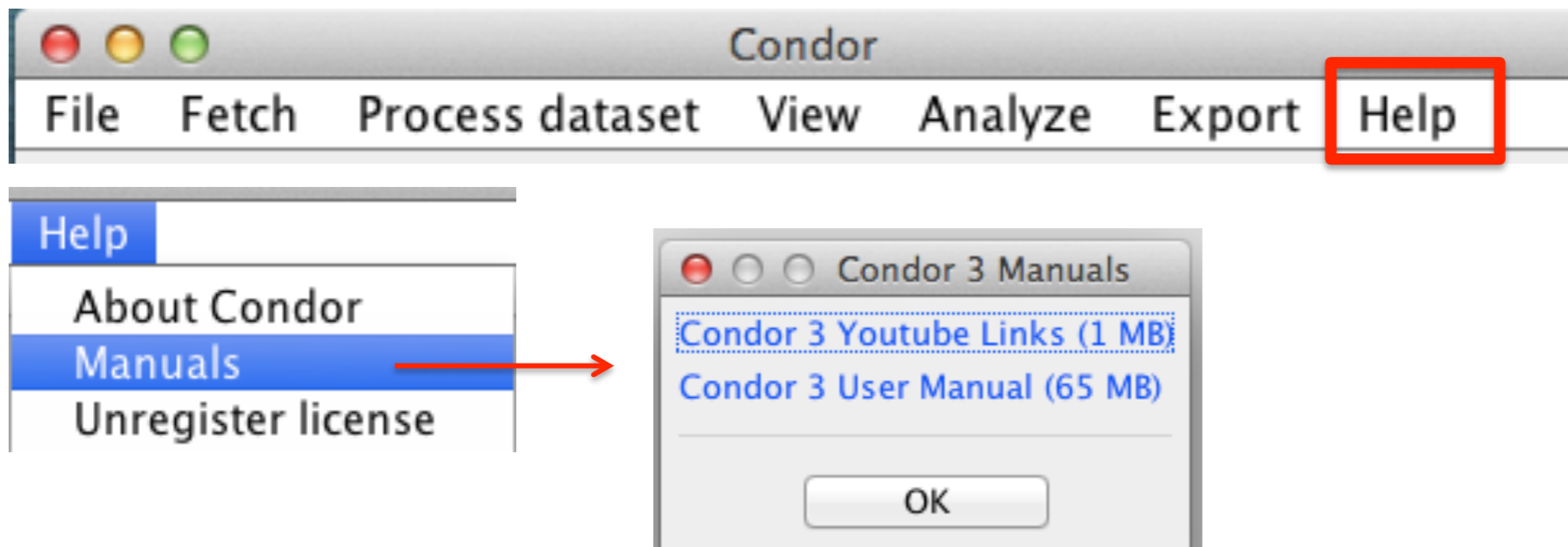
The Help menu has two selections:

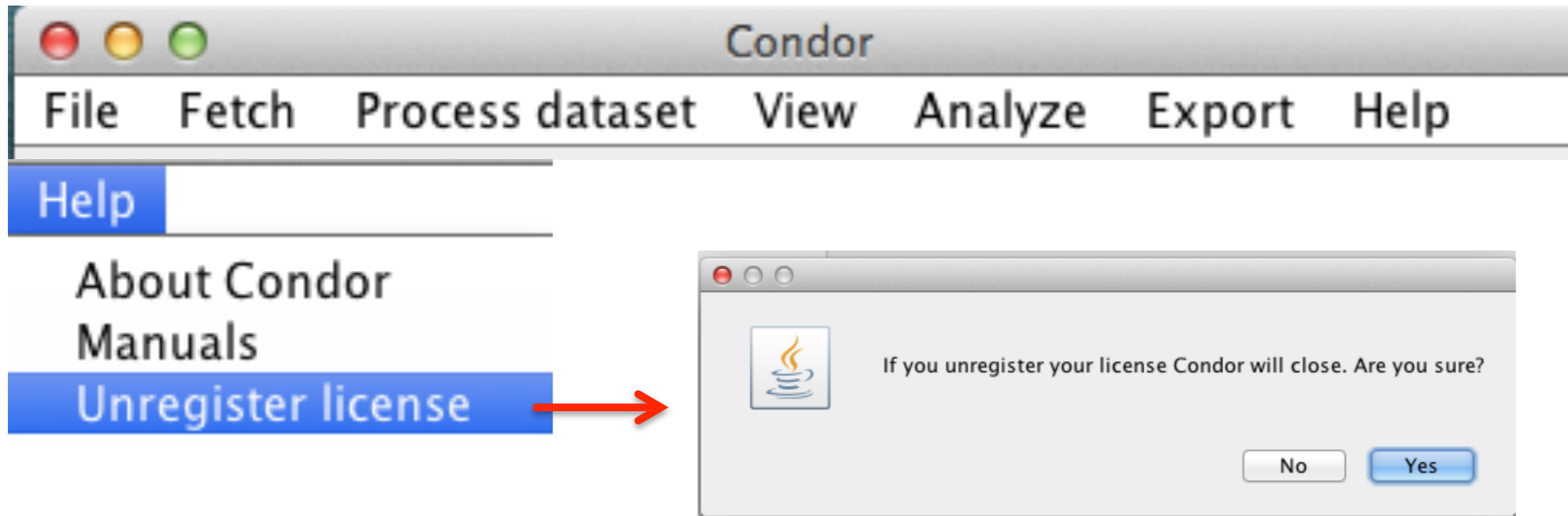
1. About defines Condor 3's version name, release date, build number, and displays the user's License Key
2. Manuals includes two download links for a Condor 3 YouTube instructional videos links file and a Condor 3 PDF User manual file.
3. Unregister computer enables the user to transfer their License key to another computer.





Help > About Condor - defines Condor 3's version number, release date, build number, and display's the user's License key.








Unregister license enables users to move their license to another computer.

# Graphical User Interface

Condor 3 has three Graphical User Interface (GUI) controls:

1. Graph Toolbar
2. Node and Edge Menus
3. Keypad Gestures

## Condor 3 Graphical User Interface Controls

1. Graph Toolbar 
2. Node and Edge Menus → 
3. Keypad Gestures 

## Condor 3 Graphical User Interface Controls:

1. The Graph Toolbar
2. Node and Edge menus
3. Keypad Gestures

2. Node and Edge Color, Shape, & Label Menus

1. Graph Toolbar

Graph Area

3. Keypad gestures

Relayout, Take Snapshot, Show Arrows, Select & Move entire graph, Pick a single node or edge, Search text & highlight nodes, Advanced colors nodes with list

- Zoom in & out.
- Right Click on a single node or edge to display details and label a node
- Hover cursor over node to display Info in lower right corner window

Node color settings

Node color ■

Color node by

Node type

Edge properties

Edge color ■

Color edges by

Node shapes

Node shape sending / receiving twitter ...

Circle

Node shape Web page:

Rectangle

Node shape Wikipedia article:

Star

Node shape Query:

Triangle

Node size hv

Node Info Display

Ready

# Graph Toolbar

## GRAPH TOOLBAR OVERVIEW

The Graph Toolbar enables the user to:

1. Relayout the graph
2. Take a Snapshot
3. Show Arrows
4. Select & Move the entire graph
5. Pick a single node or edge
6. Search text to highlight nodes that have a match, and
7. Advanced coloring option to color nodes from a list.

**Graph Toolbar: Click an icon to activate or toggle on/off**



# Graph Toolbar: Click an icon to activate or toggle on/off



The Graph toolbar enables users to:

1. Re-layout (refresh or redraw) a graph



2. Take a snapshot and send it to the clipboard



3. Show or hide directed edge arrows



4. Select and move the whole graph



5. Pick a single node or edge, and reposition it



6. The search tool will highlight nodes based on a key word or phrase using Boolean logic

Advanced

7. Advanced option enables users to selectively color nodes using a node list



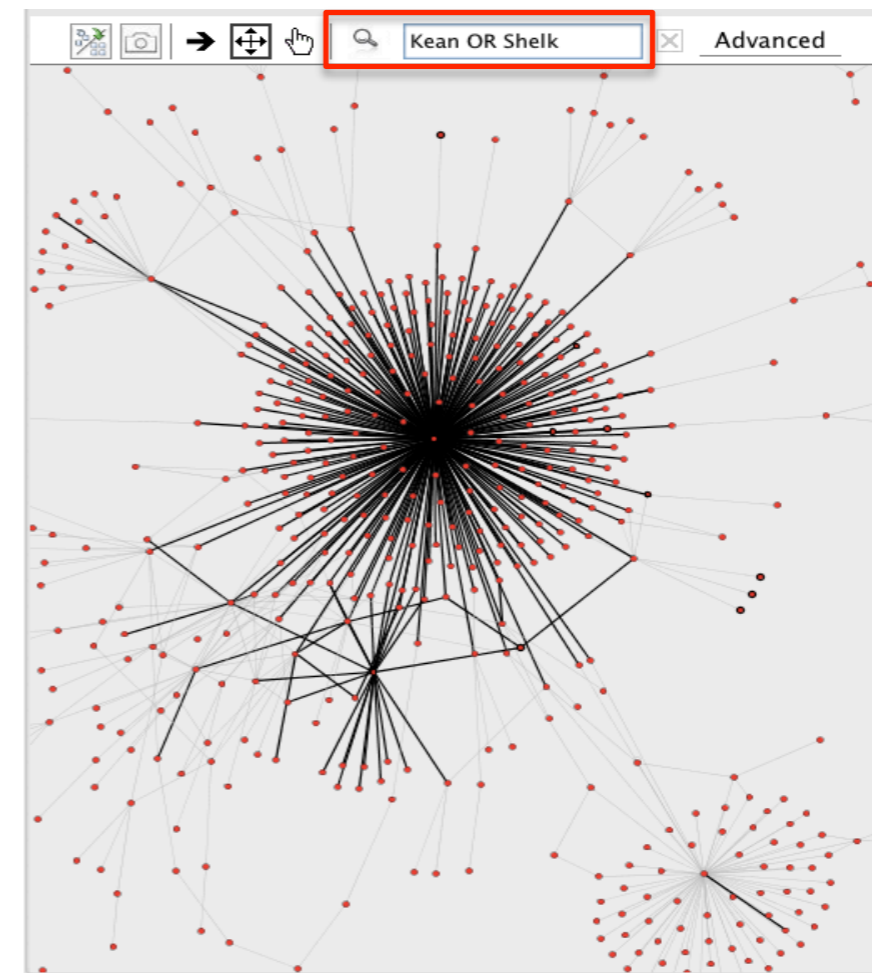
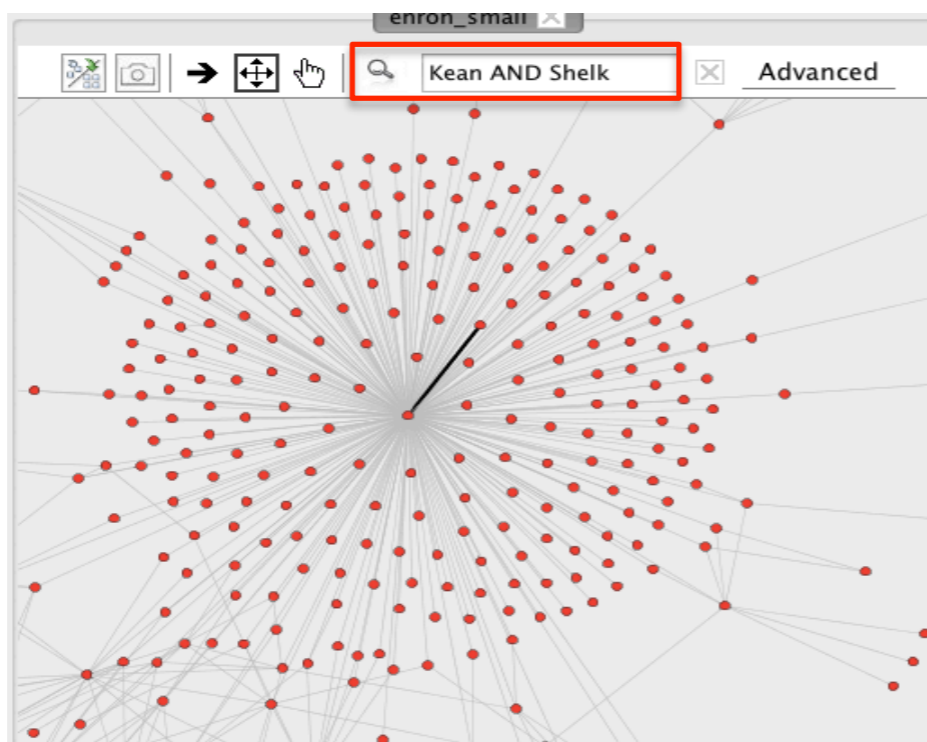
8. Zoom in and out with keypad gestures; right click to display node & edge info



# Graph Toolbar: Click an icon to activate or toggle on/off



The search tool will highlight nodes and links based on a key word or phrase using Boolean logic



# Sample Visualization of Web, Wikipedia, and Twitter Datasets

Based on Query: Sochi 2014 on February 19, 2014

Node Color:  
Original Dataset  
will display in Legend

**Open datasets**

- Sochi2014\_Web\_CSE\_...
- Sochi2014\_Web\_Ajax...
- Twitter\_San\_Francisc...
- Twitter\_Vancouver\_B...
- Sochi\_Wiki\_02192014
- Sochi\_All\_02192014 ✓

**Dataset Graphs**

**Node color settings**

- Node color ■
- Color node by: Original dataset

**Edge properties**


- Edge color ■
- Color edges by: -

**Node shapes**

- Node shape Query: Circle
- Node shape Wikipedia article: Rectangle
- Node shape sending / receiving twitter ...: Triangle
- Node shape Web page: Star

**Node Info Display**

Node colors	
Sochi_Wiki_02192014	<span style="color: red;">■</span>
014_Web_Ajax_02192014	<span style="color: yellow;">■</span>
San_Francisco_02192014	<span style="color: green;">■</span>
.Vancouver_BC_02192014	<span style="color: blue;">■</span>
:014_Web_CSE_02192014	<span style="color: red;">■</span>

- List of open datasets.
- Green check  indicates active dataset.
- Switch to another dataset by clicking on it

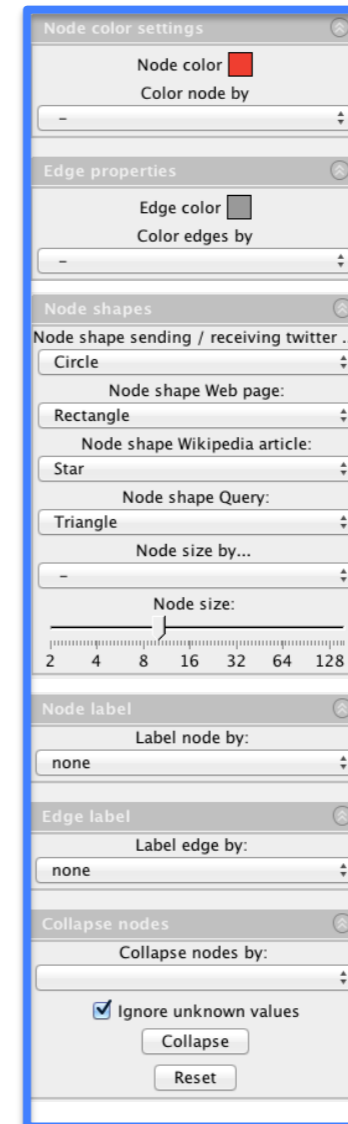
# Node and Edge Menus

## CONDOR 3 NODE AND EDGE MENUS

The Condor 3 Node and Edge menus effect the entire graph. Users can change a graphs:

1. Node and Edge Color
2. Node and Edge Legend
3. Node Shape
4. Node Size by fields

## Node and Edge Menus

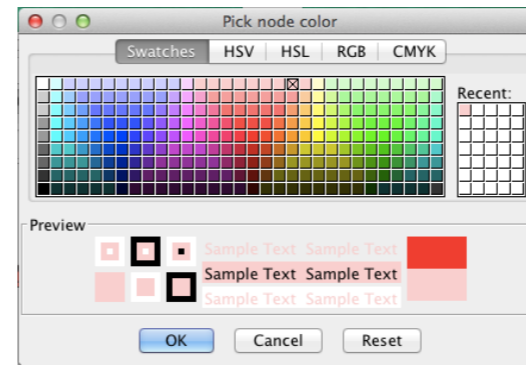


# Node and Edge: Color, Shape & Label Menus & Sub-menus

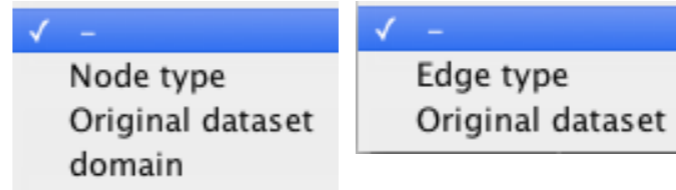


Note:  
Menus  
affect the entire  
graph.

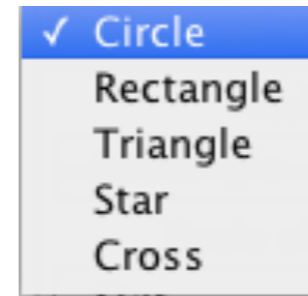
Node and Edge:  
*Color Picker*



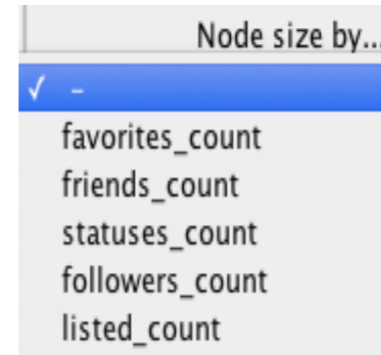
Node and Edge:  
*Legend Options*



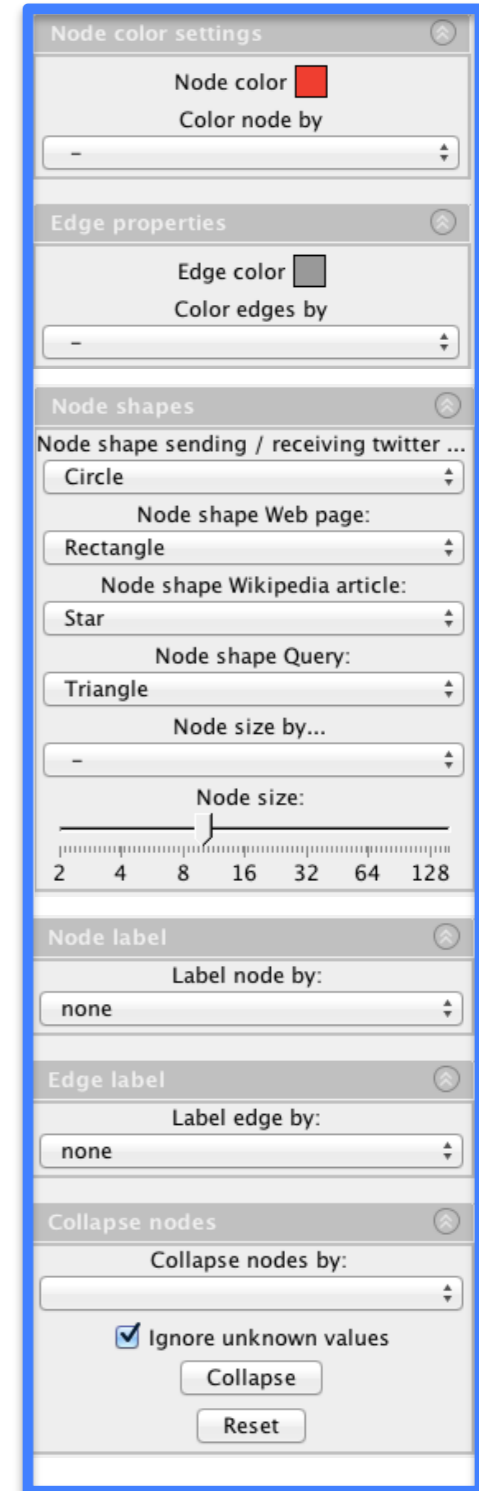
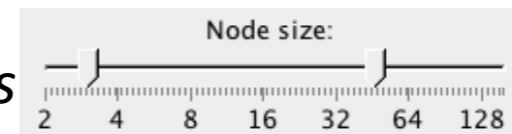
Node: *Shape Display Options*



Node: Size by fields  
varies by data type



Node: *Size*  
*min and max adjusters*



# Node and Edge Label Options, Plus Node Collapse Options

## Node Label Options

Label node by:

- none
- name
- uuid
- query
- description.urls
- snippet
- statuses\_count
- url
- creation\_date
- favorites\_count
- title
- timezone
- geolocation
- description
- friends\_count
- domain
- screen\_name
- fullName
- language
- followers\_count
- listed\_count

## Edge Label Options

**Note:**  
Node and Edge options are based on a dataset's properties.

Options will change based on a dataset's type (email, web, Twitter, Facebook, etc.) and if any metrics have been computed.

## Node Collapse Options

Collapse nodes by:

- query
- description.urls
- snippet
- statuses\_count
- url
- content
- creation\_date
- favorites\_count
- title
- timezone
- geolocation
- description
- friends\_count
- domain
- screen\_name
- fullName
- language
- followers\_count
- listed\_count

Node shape Query: Triangle

Node size by... followers\_count

Node size: 2 4 8 16 32 64 128

Node label: none

Edge label: none

Collapse nodes: Collapse nodes by: [dropdown]

Ignore unknown values

Collapse Reset

# Keypad Gestures

## 3. Keypad gestures



### CONDOR 3 KEYPAD GESTURES

1. Zoom in & out.
2. Right Click on a single node or edge to display details and label a node
3. Hover cursor over node to display Info in lower right corner window

3. Keypad gestures

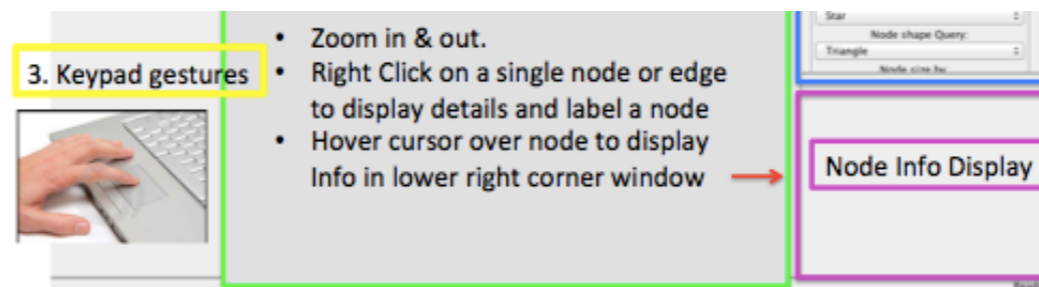
- Zoom in & out.
- Right Click on a single node or edge to display details and label a node
- Hover cursor over node to display Info in lower right corner window

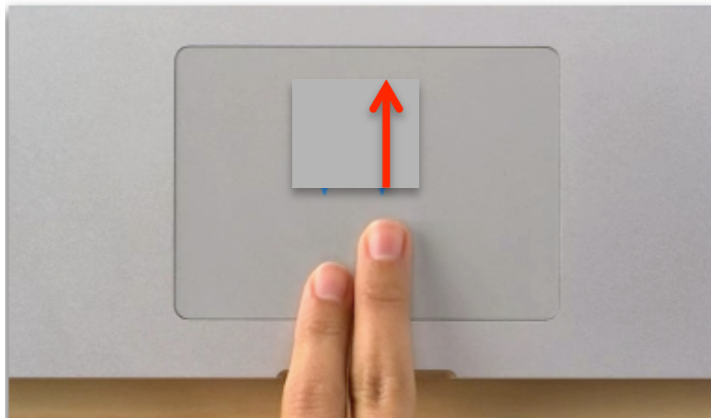
Node Info Display



# Keypad Gestures

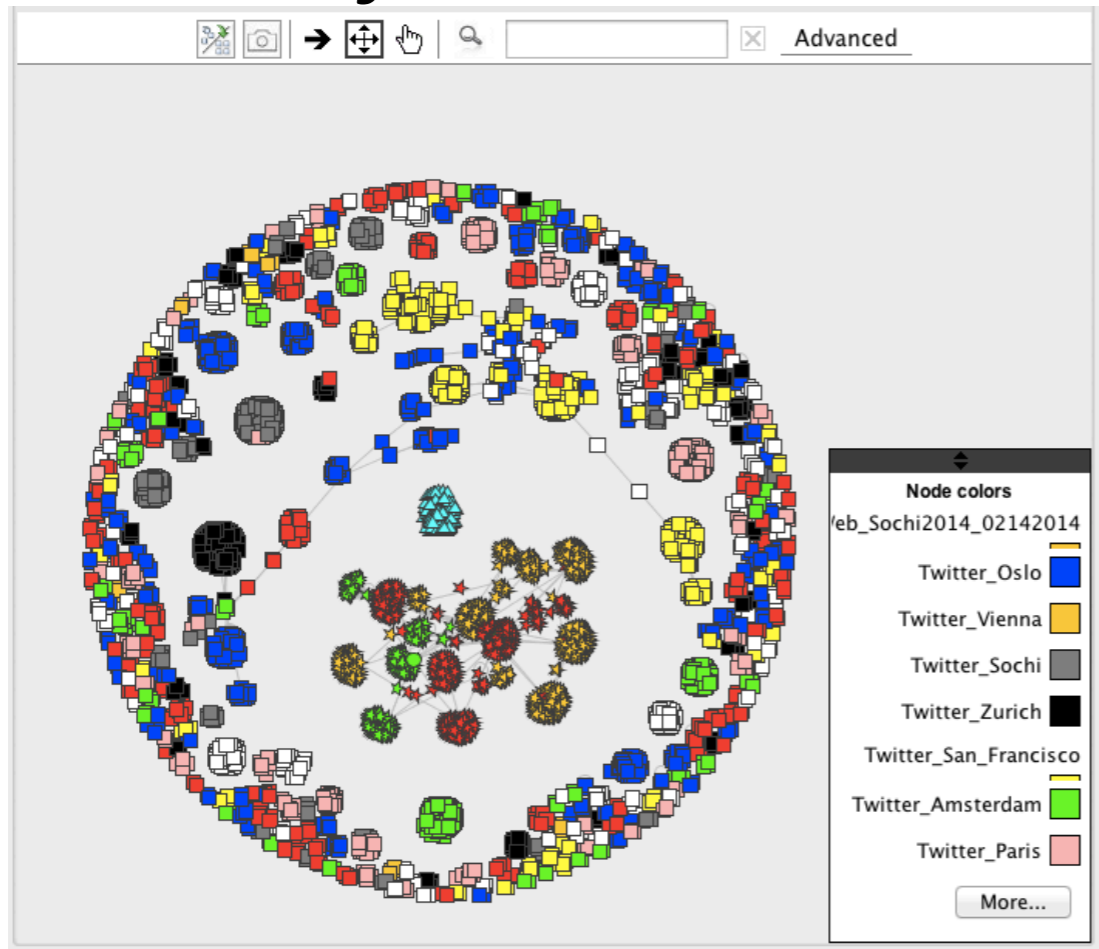
- Two finger *swipe up* to *Zoom-in* a graph
- Two finger *swipe down* to *Zoom-out* a graph
- One finger *Tap and Hold* a node to move the entire graph
- *Right Click a Single Node* to Label, Change Color, Show Node Details, Show Contribution Index over time, or Show Activity and Sentiment Over Time
- *Right Click a Single Edge* to Show Edge Details which depends upon the data type.
- *Hover cursor* over a node to display node details in lower right window



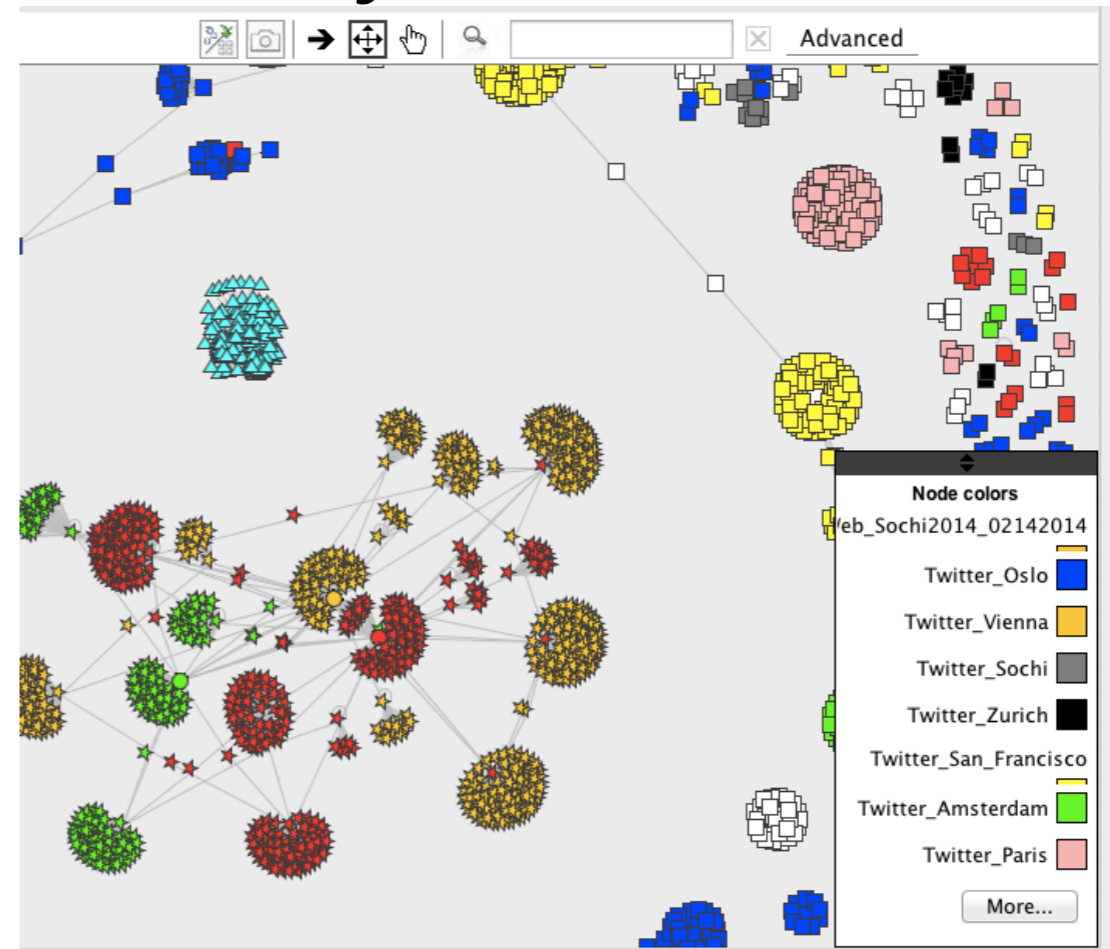


Two finger *swipe up* to *Zoom-in* a graph

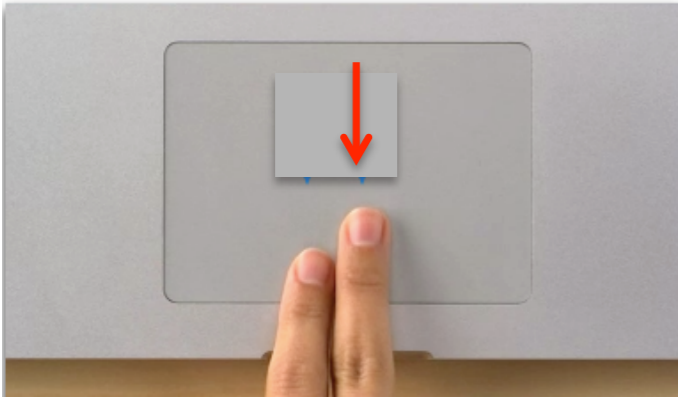
**Before** Zoom-in



**After** Zoom-in

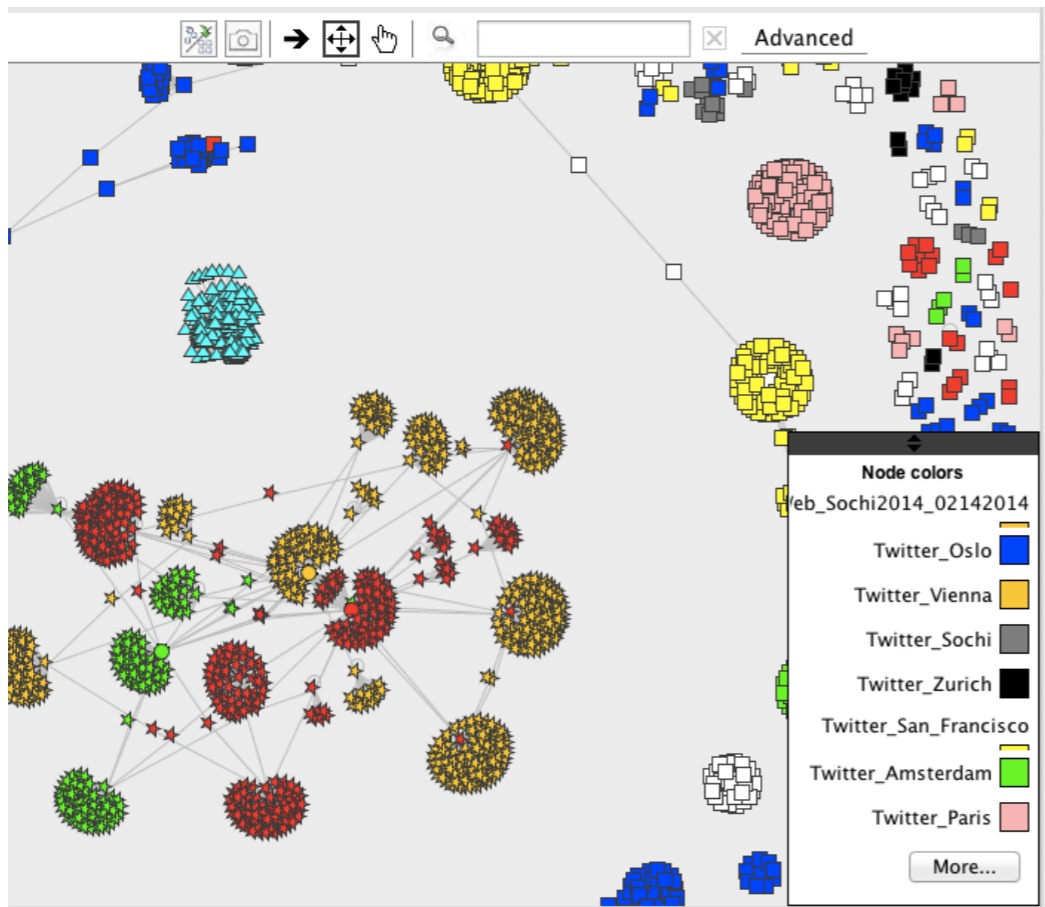




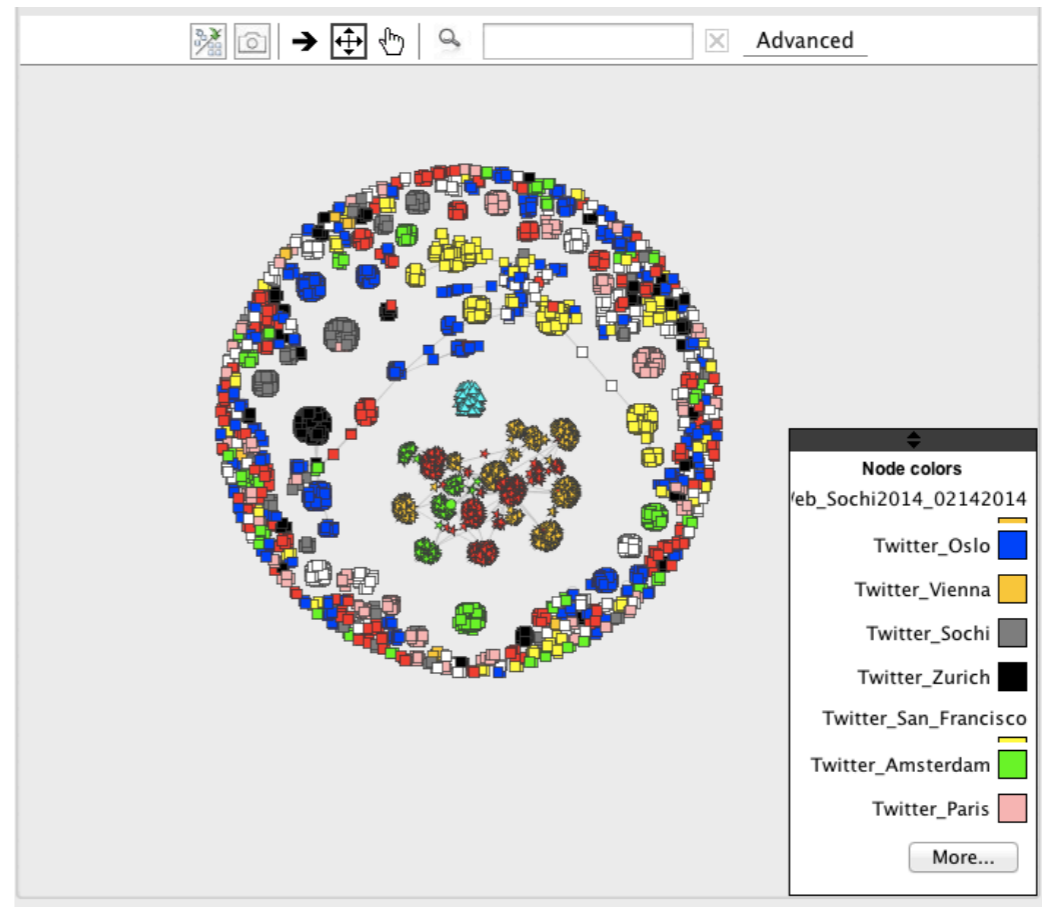


Two finger *swipe down* to *Zoom-out* a graph

**Before** Zoom-out



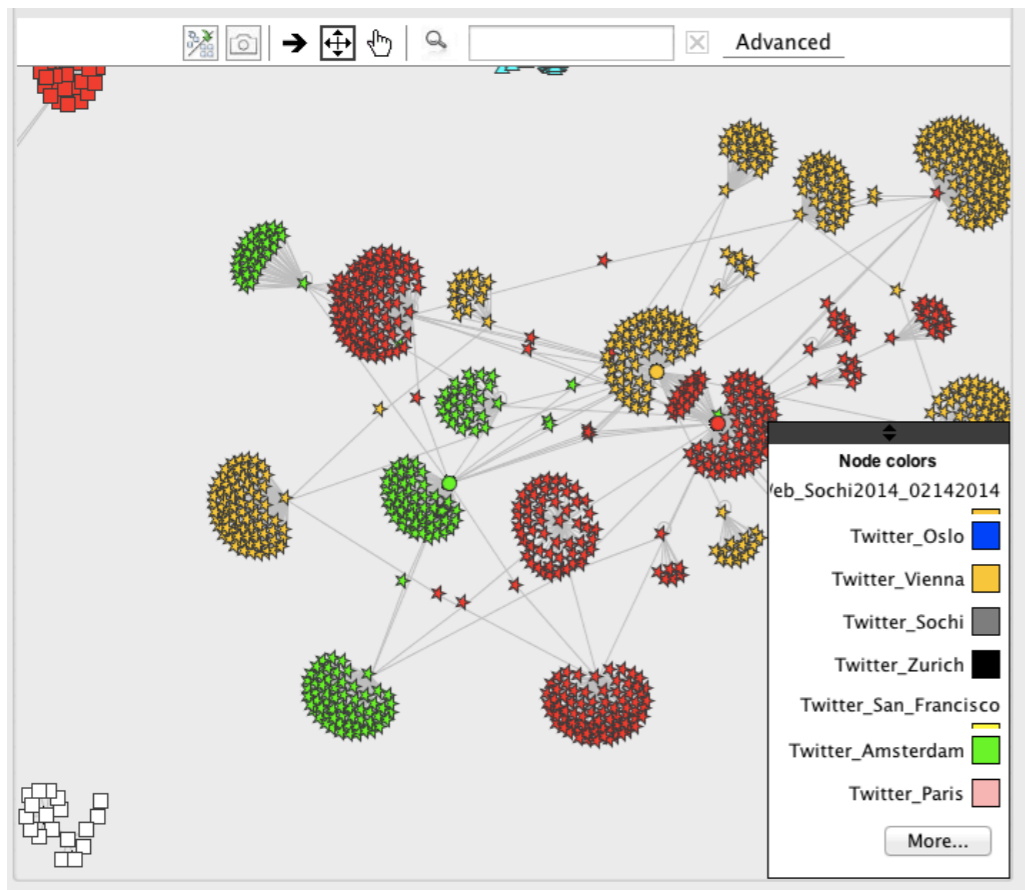
**After** Zoom-out



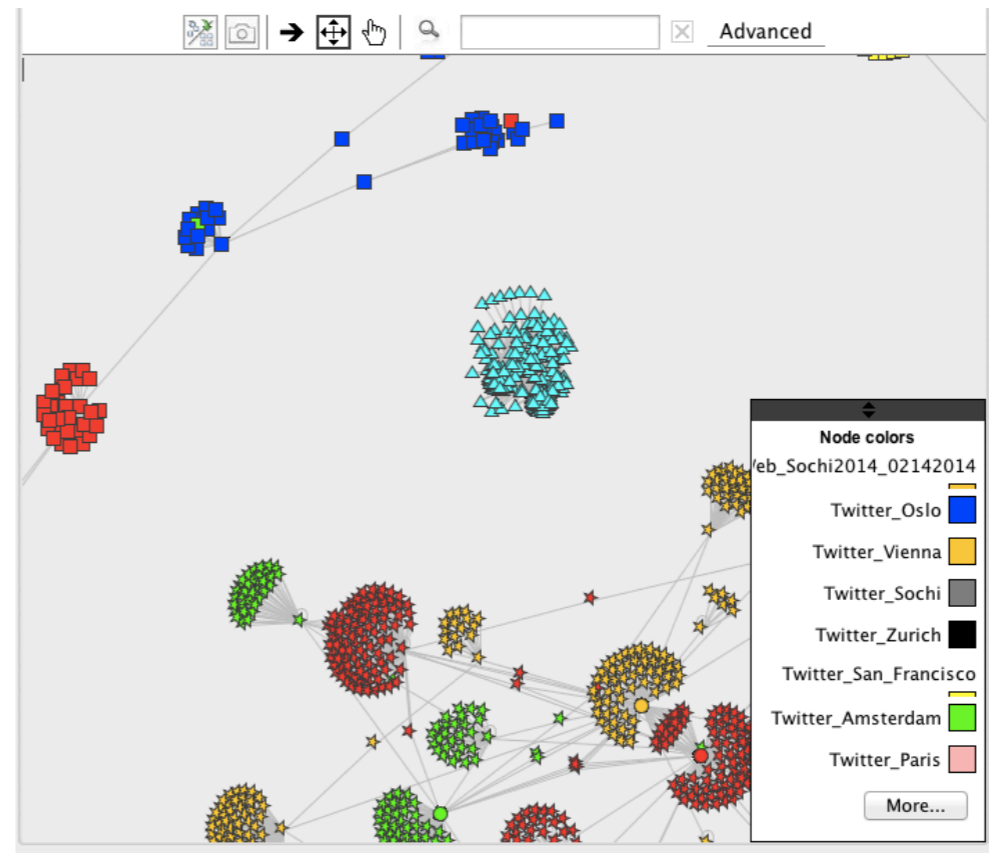


One finger *Tap and Hold* a node to move the entire graph

## Before Graph Move



## After Graph Move



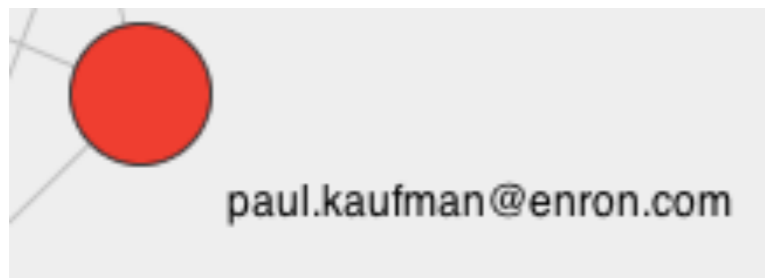
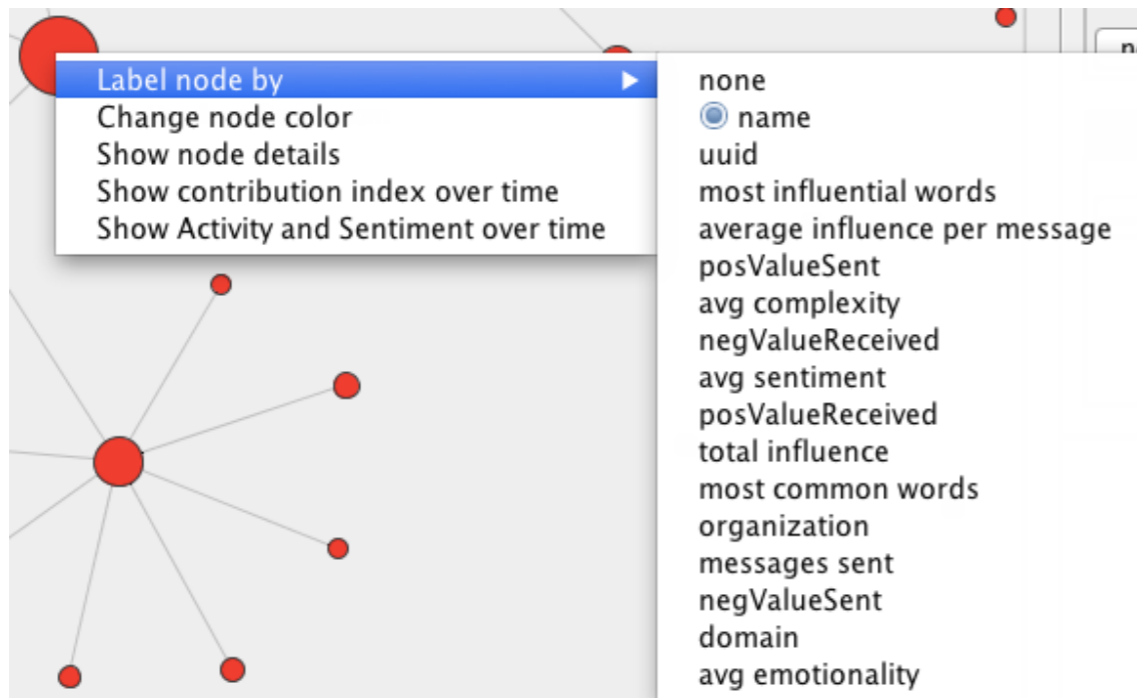


## Right Clicking on a Single Node or Edge

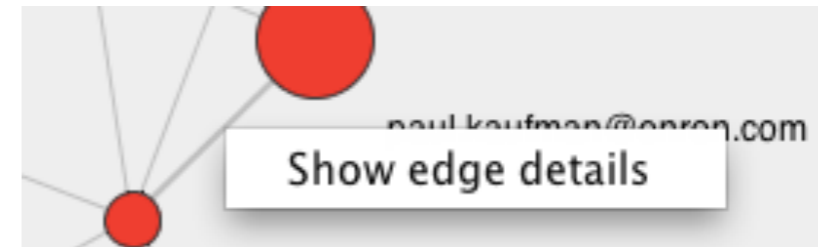
Display & Label Options

Email Example

**Single Node**, Right Click for Display and Label Options



**Single Edge**, Right Click to show details



Edge details	
From: paul.kaufman@enron.com (-889147256)	
To: jeff.dasovich@enron.com (-1608487777)	
Property	Value
id	c5a8fb6b-3ea9-4ff2-8b6f-eaf05bd6a49f
name	
Influence other direction	0
Influence	1.12

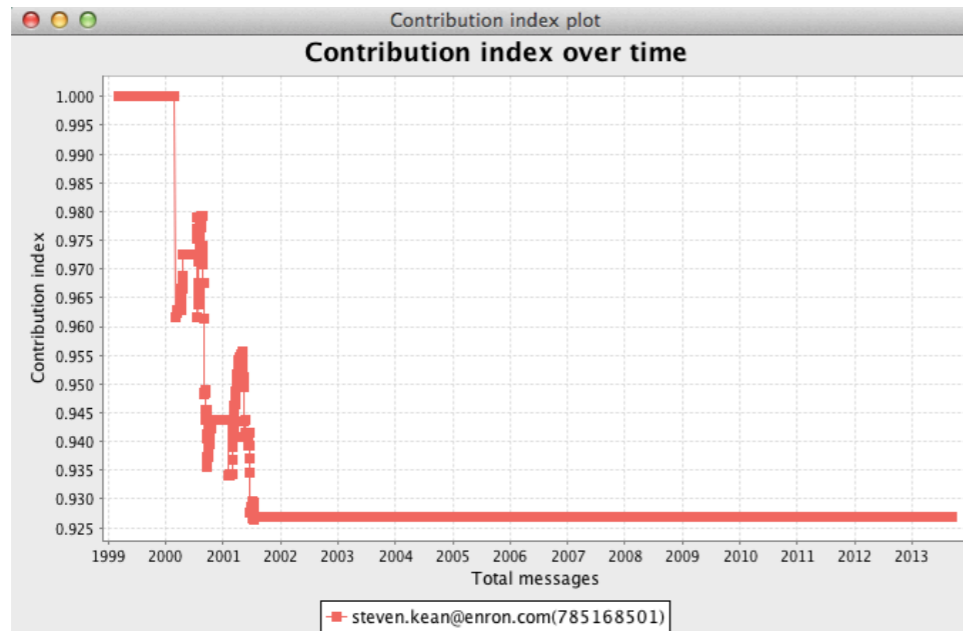
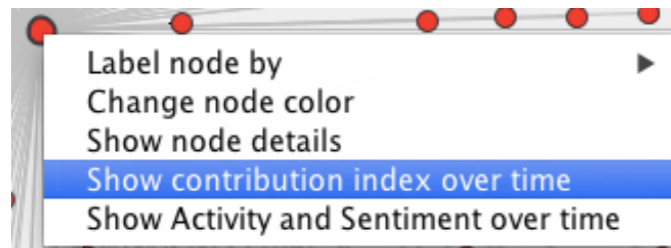
**Note:**  
**Node and Edge display and label options are based on a dataset's properties.**

**Options will change with dataset's a type (email, web, Twitter, Facebook, etc.), and if any metrics have been computed., such as, Sentiment and Influence**

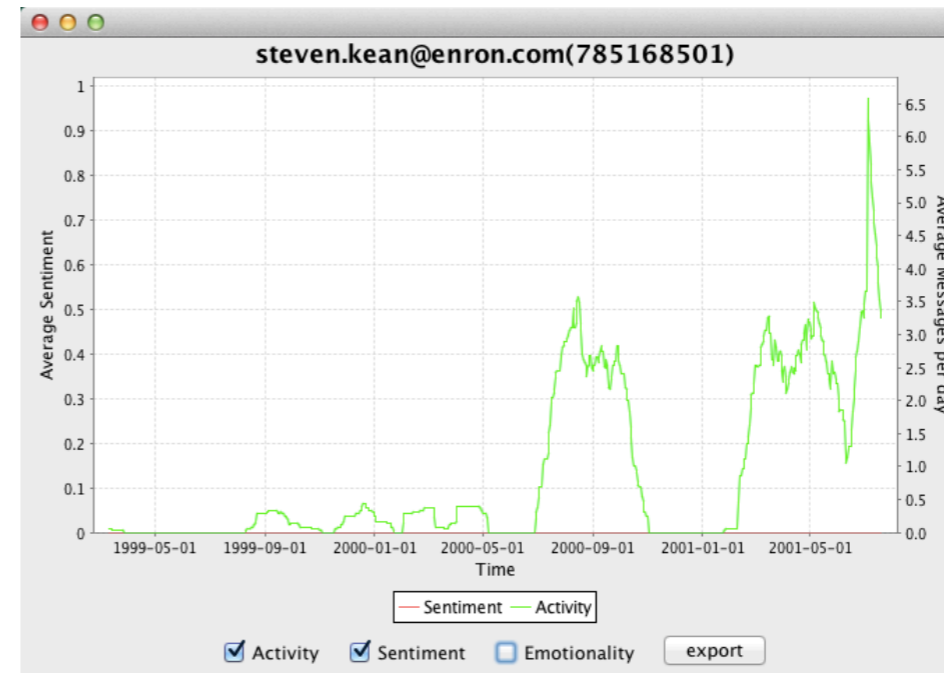
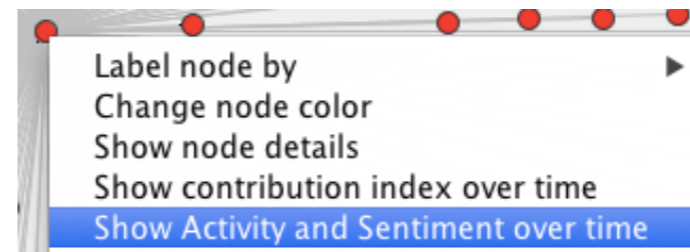


## Right Clicking on a Single Node to Show Contribution Index Over Time , or Show Activity and Sentiment Over Time

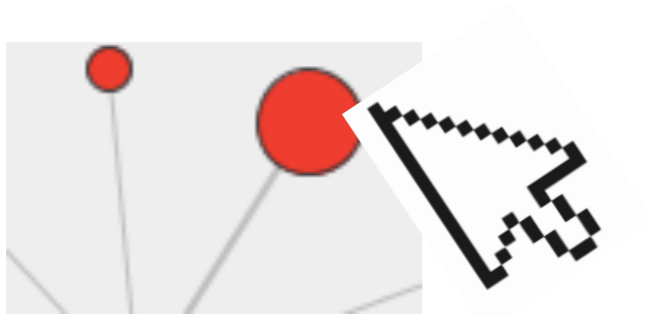
Single Node,  
Right Click **Show Contribution Index**



Single Node,  
Right Click **Show Activity and Sentiment Over Time**



## Hover cursor over node to display details in lower right window



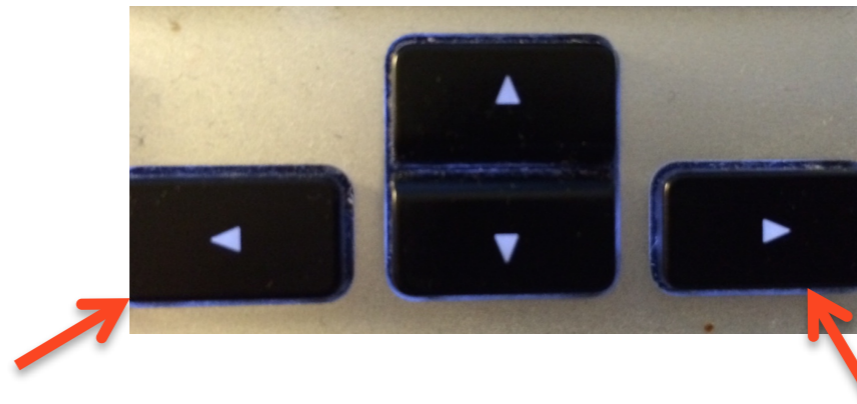
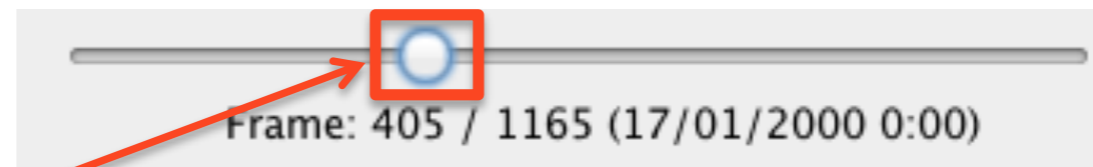
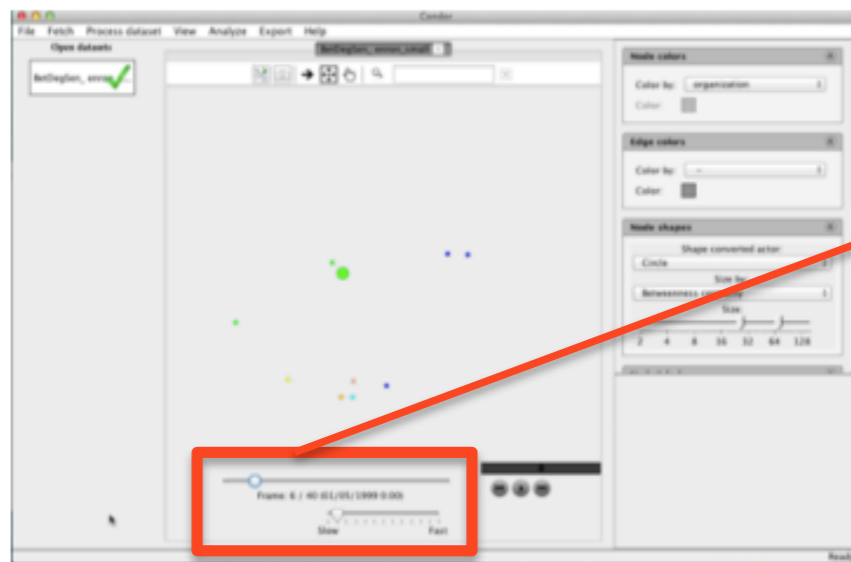
Note: details vary by dataset type.

### Hovered node details:

id	1550918503
name	john.shelk@enron.c...
most influential words	filed; report; energ...
organization	enron
average influence p...	0.01
negValueSent	-0.21
messages sent	121
posValueSent	0.58
domain	com
negValueReceived	0
posValueReceived	0
avg sentiment	0.49
total influence	1.64
most common words	committee; energy:...

# TIP: Dynamic View - Keypad Right/Left Arrow Keys Moves View One Frame at-a-time

Use the date slider to explore a network view. If you click on the position dot you can move forward/back the view one frame at a time by clicking on your keyboard right/left arrow keys



Use Left Arrow to  
Move Back A Frame

Use Right Arrow to  
Move Forward A Frame

# Examples

The following are Condor 3 network examples which include:

Email, Facebook, Web, Twitter, Twitter Accounts , Wiki Evolution, and Wikipedia categories.

# Mail Example

## MAIL EXAMPLE

Fetch your email using the Fetch menu.

Note: In preparation, you must know your email host IMAP server name.

For example:

Google's gmail: `imap.gmail.com`

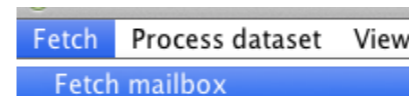
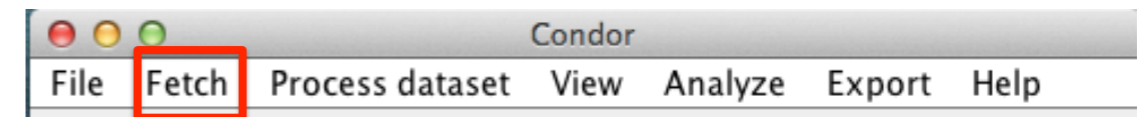
Apple iCloud: `imap.mail.me.com`

Tip: to find your IMAP server name try a search at Google.com for: "XXXX imap server name"

where XXXX is the name of your email.

Or, contact your email support.

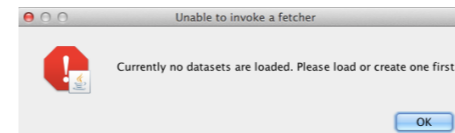
Tip: If your email has over 10,000 mails, it may take several hours to process.



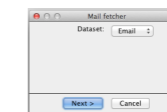
There is a sequence of 4 windows.

**Note:**  
To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset.

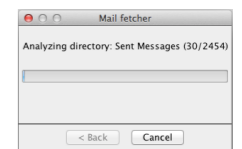
Otherwise, users will get this error message.



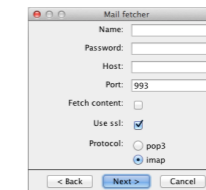
### 1. Dataset Name



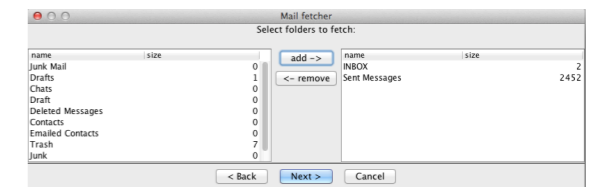
### 4. Processing Message



### 2. Email Parameters



### 3. Select Email Folders



The next example uses the Enron small email dataset.



# Email four part example

Part 1: Static View Initial Look

Part 2: Add Annotations & Export Nodes

Part 3: Dynamic View

Part 4: Add Influence Measures

## Part 1: Condor 3 Mail Example Analysis - Static View Initial Look

1. Start MySQL and Condor 3
2. Use File menu to create a Mail database and dataset
3. Use Fetch > Fetch mailbox ... to import your email (Note: Collecting content takes longer)
4. Use Process dataset > Node merging > Auto and/or Manual mode

Note: This will merge actors who have more than one email address.

Save the merge list to a .CSV file to check for accuracy/editing and later reuse

Tip: Click on the Name Up/Down Arrow to sort ascending/descending which makes it easier to scroll through the lists and find actors with more than one email address



5. Use View > Create Static View ... and use Condor 3's GUI controls to examine the graph  
Note: This will give you an overall view of the structure of the entire network  
Tip: use the two finger zoom-in/out, hover over a node to review the details, and right click on node to selectively label with their name or other attribute
6. Enter a term into the search textbox and review its distribution in the network
7. Use Node/Edge pick menus to color nodes by domain or other attribute

Email Network – Static View with Nodes Colored by Domain, Search for “California”, Node Size Increased, and Hover Cursor over Node to see Details

The screenshot shows the Condor application window displaying an email network graph. The search bar at the top contains the text "california". The graph shows nodes of various colors and sizes connected by edges. A red box highlights a node, and a red arrow points to it from the text "Hover cursor over Node To See Details". Another red arrow points to the search bar with the text "Enter a search term". A third red arrow points to the "Node colors" dropdown menu, which is set to "domain", with the text "Select a Node field to Color". A fourth red arrow points to the "Size" slider in the "Node shapes" panel, which is set to 32, with the text "Vary the nodes size". A legend for node colors is visible at the bottom left, and a "Hovered node details" panel is open at the bottom right, showing details for a node with ID 785168501.

Enter a search term

Select a Node field to Color

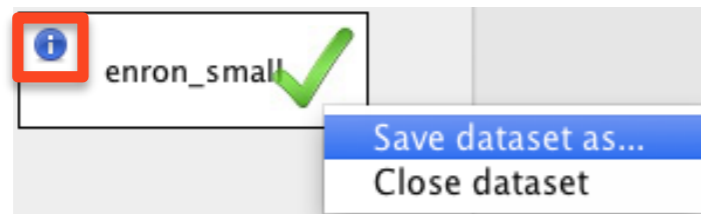
Vary the nodes size

Hover cursor over Node To See Details

Hovered node details:	
id	785168501
name	steven.kean@enron.com
posValueSent	0.45
negValueReceived	0
posValueReceived	0.26
negValueSent	-0.16

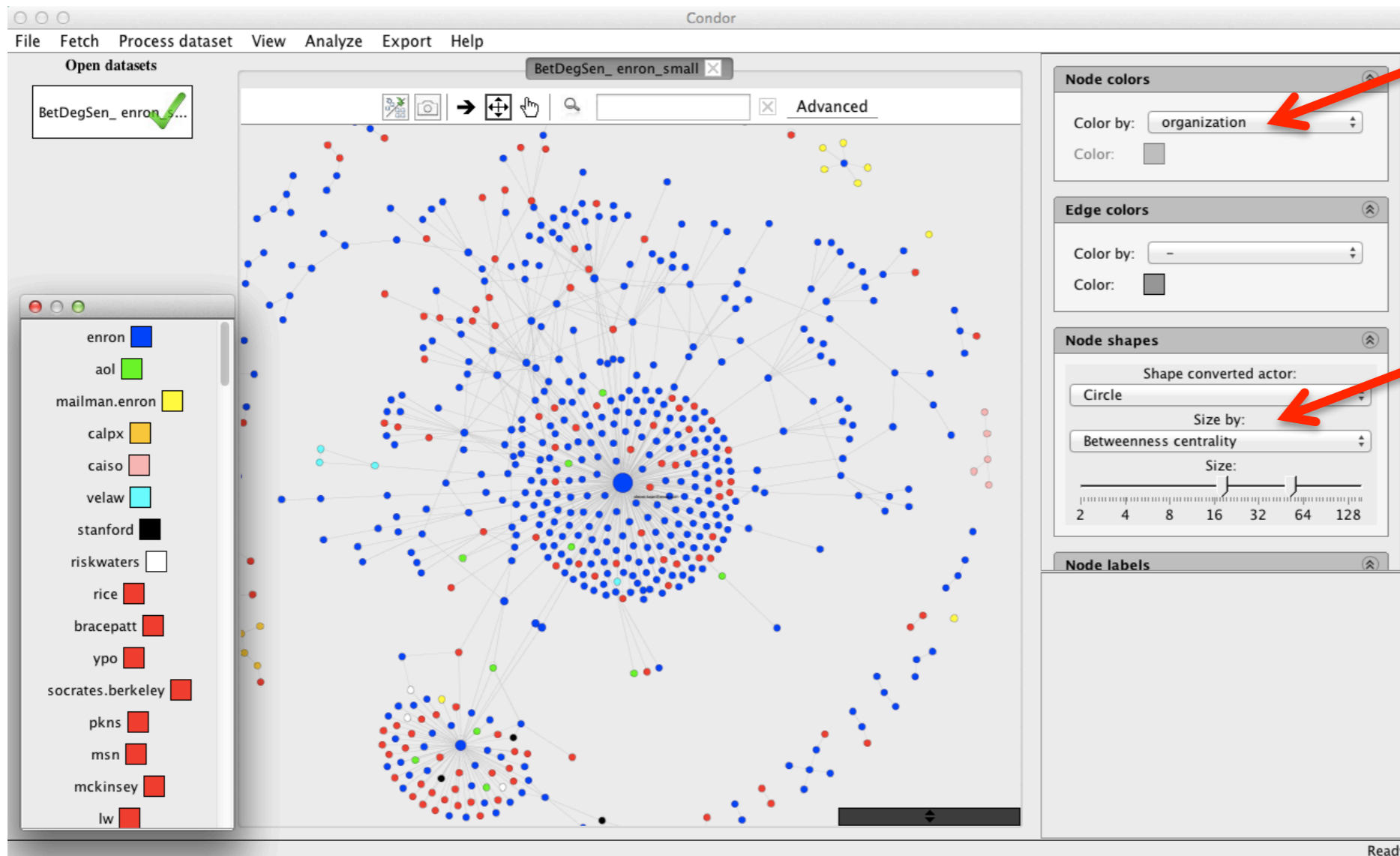
## Part 2: Condor 3 Mail Example Analysis – Add Annotations & Export Nodes

1. Use Process dataset > Annotate > Centrality annotations > Betweenness
2. Use Process dataset > Annotate > Centrality annotations > Degree
3. Use Process dataset > Calculate > Sentiment  
Tip: Use the “comm\_content” field for the Edge Property to analyze, and set Language = Detect automatically, Node property to analyze = none, check add complexity & emotionality, Check remove html first
4. Right click on Active file with a “Blue Dot” to “Save dataset as” with all the annotations for reuse.



5. Use File > Open the saved dataset
6. Use Export > data > ... and export nodes and use a spreadsheet program to sort/review actors by Centrality/Sentiment measures
7. Use View > Create Static View ... and use Condor 3's GUI controls to examine the graph
8. Use Node/Edge pick menus to color nodes by organization, Node Size by Betweenness, etc.

# Email Network with Nodes Colored by Organization, And Node Size by Betweenness Centrality



Select a Node field to Color

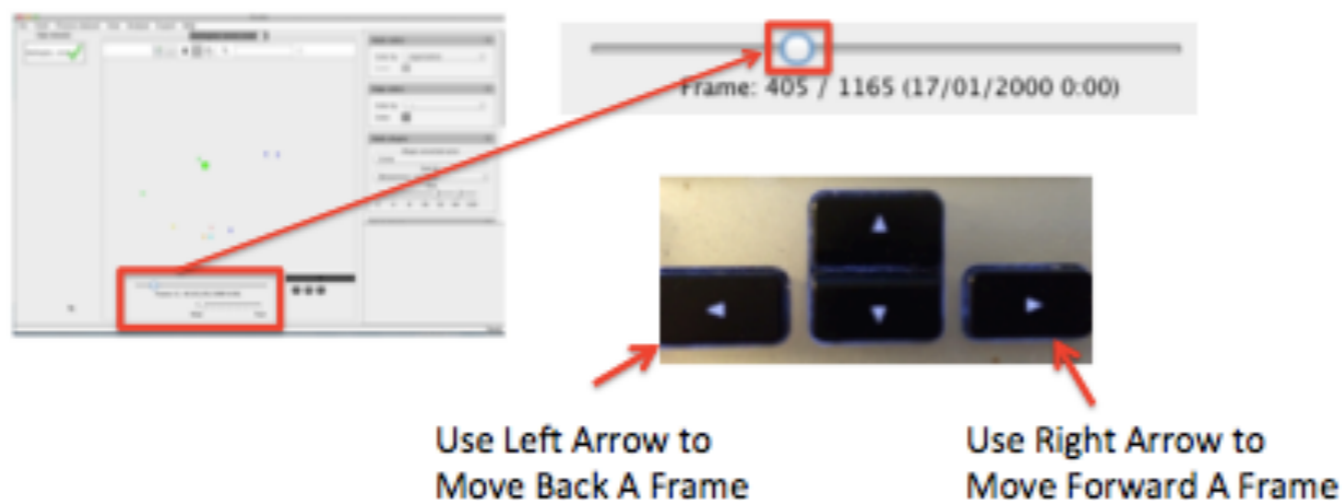
Select a Node field to Size

## Part 3: Condor 3 Mail Example Analysis – Dynamic View

### 1. Use View > Create Dynamic View ...

Note: Reset Start Date and End Dates to match your dataset's dates, because Condor resets the Start Date to Dec 31, 1969 and the End Date to Sep 10, 2013, which is most likely incorrect.

TiP: use the date slider to explore the network view. If you click on the position dot you can move the view forward/back one frame at-a-time by clicking on your keyboard right/left arrow keys



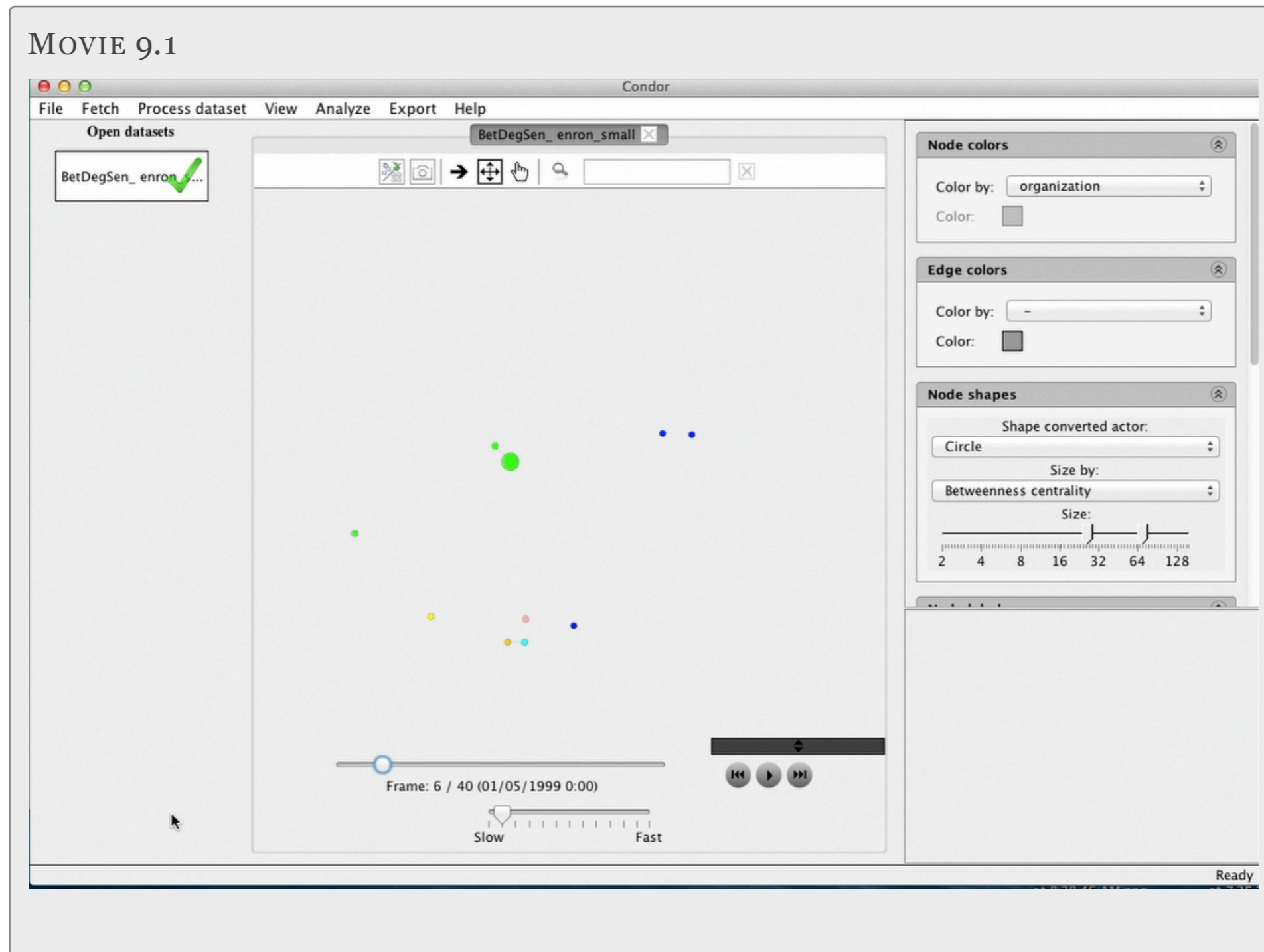
### 2. Use Node color pick menu and explore

### 3. Use Node Size pick menu to examine Betweenness, Degree, Complexity, Emotionality, Sentiment

### 4. Continue to explore the email network using the File > Open dataset and the 2 stage filtering of the nodes and links and/or prune using the Process dataset menu.

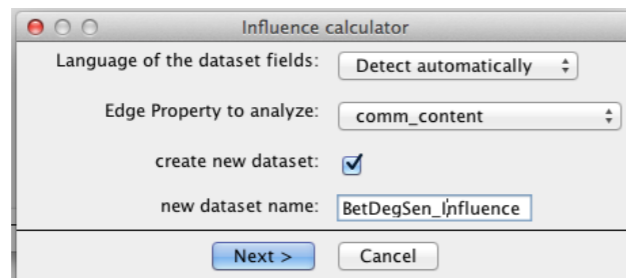
# Part 3: Condor 3 Mail Example Analysis – Dynamic View

## Sample Video with Node Size by Betweenness Centrality

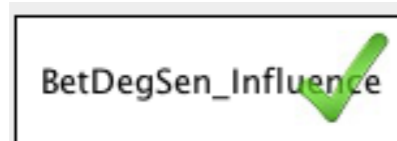


## Part 4: Condor 3 Mail Example Analysis – Add Influence Measures

1. Use File menu to Open your saved dataset with your Annotations from Part 2
2. Use Process dataset > Calculate > Influence
3. Tip: Set Language ... = Detect Automatically; Edge Property ... = comm\_content; Check “create new dataset”; and edit new dataset name, click Next



Note: After the Influence measures, the saved dataset will open as the active dataset as indicated with the green checkmark next to its name.

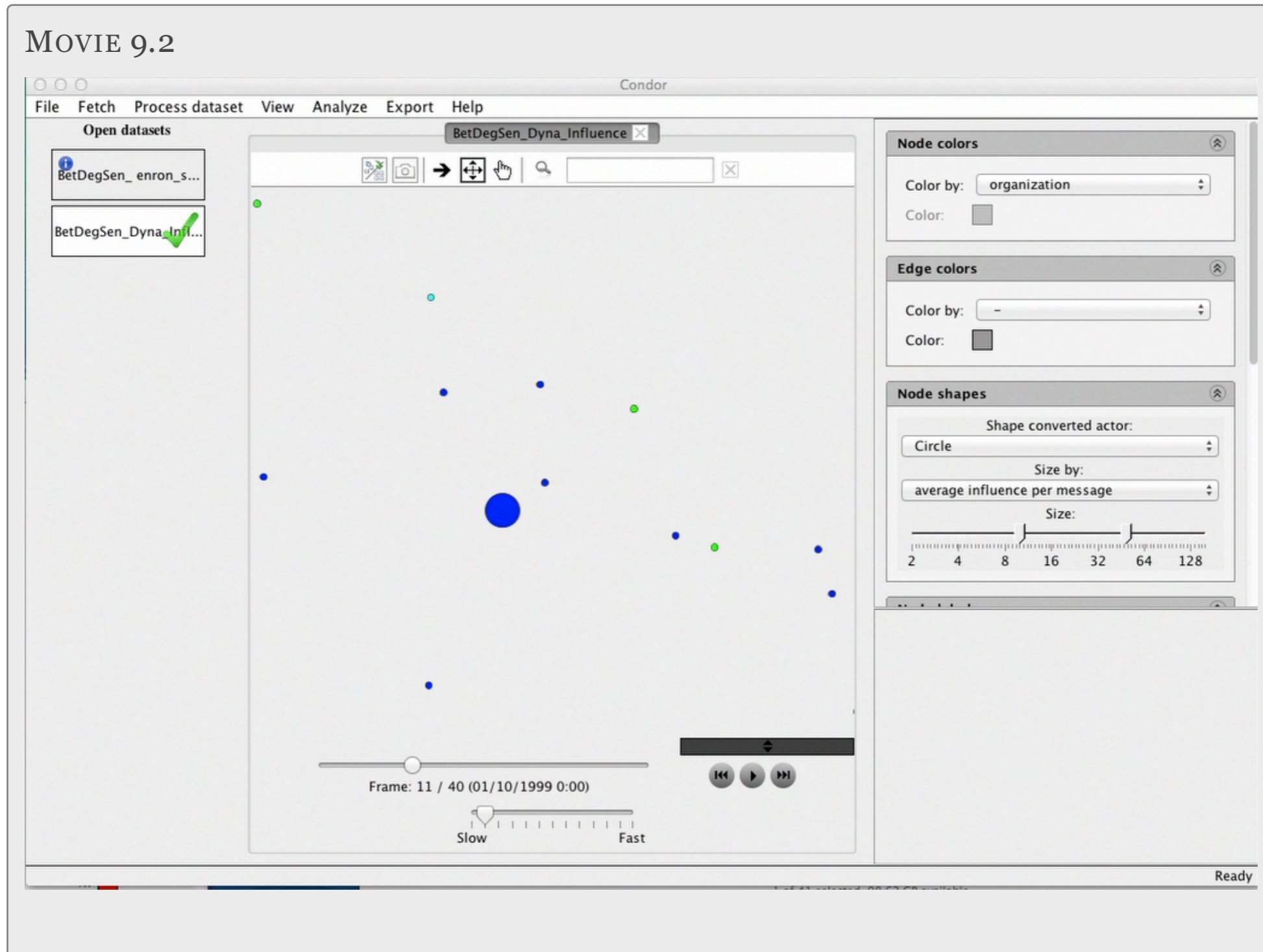


5. Use View > Create Static View ... and use Condor 3's GUI controls to examine the graph  
Note: The Influence annotation will create a revised set of edge/link connections.  
Tip: use the two finger zoom-in/out, hover over a node to review the details, and right click on node to selectively label with their name or other attribute
4. Use Node color pick menu and explore
5. Use Node Size pick menu to examine Total Influence, average influence per message, etc.
6. Continue to explore the email network using the File > Open dataset and the 2 stage filtering of the nodes and links and/or prune using the Process dataset menu.



# Part 4: Condor 3 Mail Example Analysis – Dynamic View

## Sample Video with Node Size by Average Influence Per Message

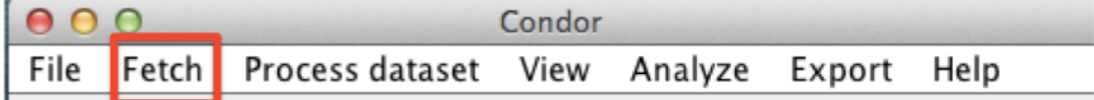


# Facebook Example

## FACEBOOK EXAMPLE

Follow these suggested steps to Fetch and Visualize your Facebook Network.

See page 57 for Fetch Steps.



Condor



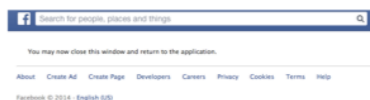




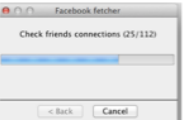
File **Fetch** Process dataset View Analyze Export Help

Fetch Process dataset View

Fetch mailbox  
Fetch facebook profile

**Note:**  
To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset

**Important, first Logout of Facebook.**

- 1. Dataset**  

- 2. Login to Facebook**  

- 3. Authorize Galaxy Or, if have. Okay**  

- 4. Logout of Facebook**  

- 5. Click Next**  

- 6. Login to Facebook**  

- 7. Options**  

- 7. Process Status**  


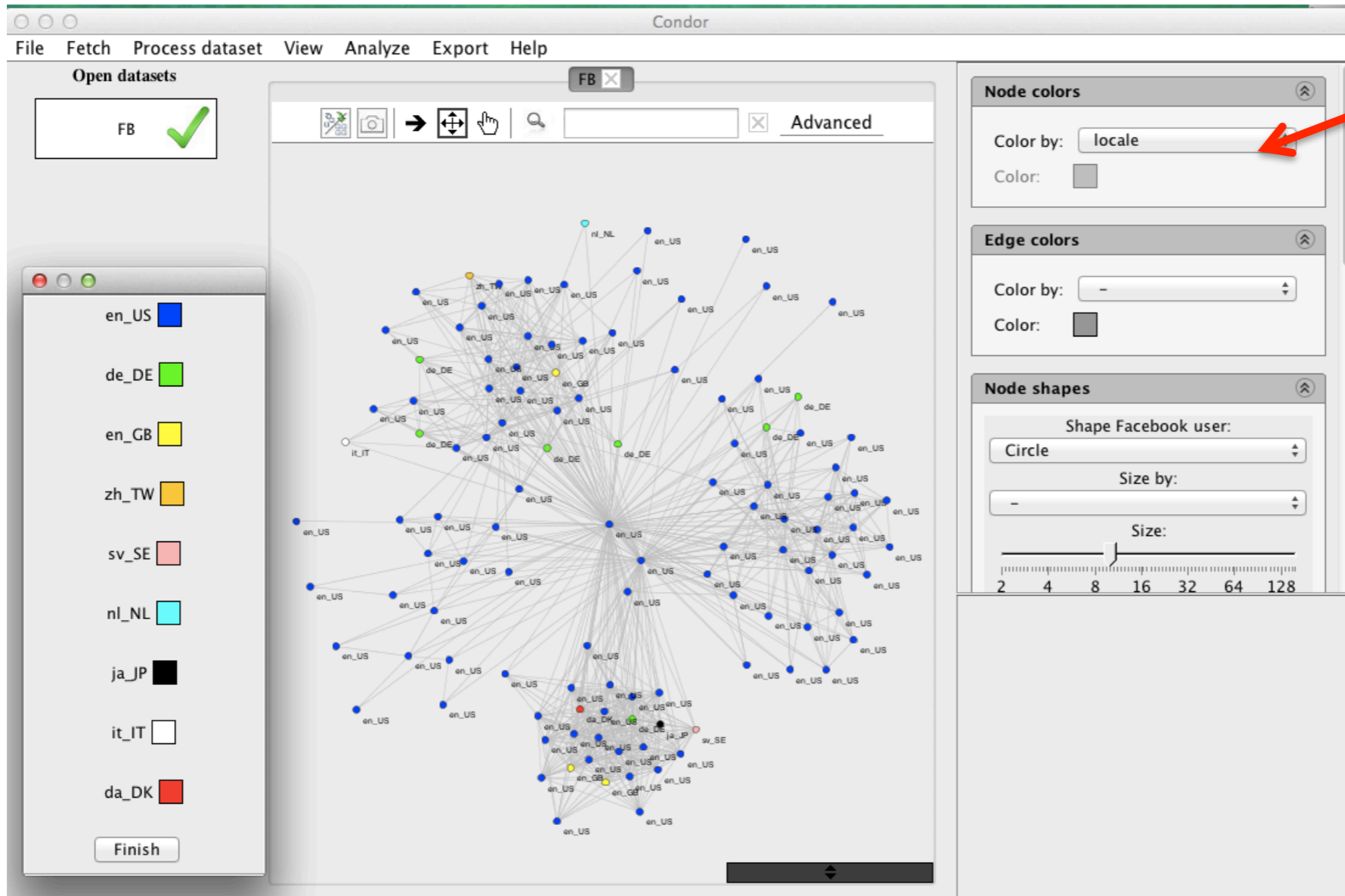
## Condor 3 Facebook Profile Example Analysis

### Suggested Steps:

1. Start MySQL and Condor 3
2. Use File menu to create a Facebook database and dataset
3. Use Fetch > Fetch Facebook profile (suggest to uncheck Groups and Likes for your first fetch because it may take a very long time depending upon the size of that extended network)
4. Use Process dataset > Node merging > Manual node to merge possible duplicate user profiles and save merging to a .CSV file for later reuse if needed
5. Use View > Create Static View and use Condor 3 GUI controls to examine the graph
6. Use Process dataset > Annotate > Centrality annotations > Betweenness
7. Use Process dataset > Annotate > Centrality annotations > Degree
8. Use Process dataset > Calculate > Sentiment and use the “aboutMe” field for the Node Property to analyze (check complexity & emotionality option) Note: Influence cannot be calculated because there is no over time data.
9. Right click on Active file with a “Blue Dot” to save with all the annotations for reuse.
10. Use Export > data > and export nodes and sort/review actors by Centrality/Sentiment measures
11. Use View > Create Static View and again use Condor 3 GUI controls to examine the graph:
12. Use Node color and explore: gender and locale
13. Use Node Menu Size to examine Betweenness, Degree, Complexity, Emotionality, Sentiment
14. Use Process dataset > Remove specific actors and remove yourself to examine how connected the members of your network are without you.
15. Use View > Create Static View and again use Condor 3 GUI controls to examine the graph
16. Repeat steps 3-12, but collect Groups and Likes this time
17. Continue to explore your Facebook network using the File > Open dataset and the 2 stage filtering of the nodes and links and/or prune using the Process dataset menu.

The next pages provide some sample visualizations.

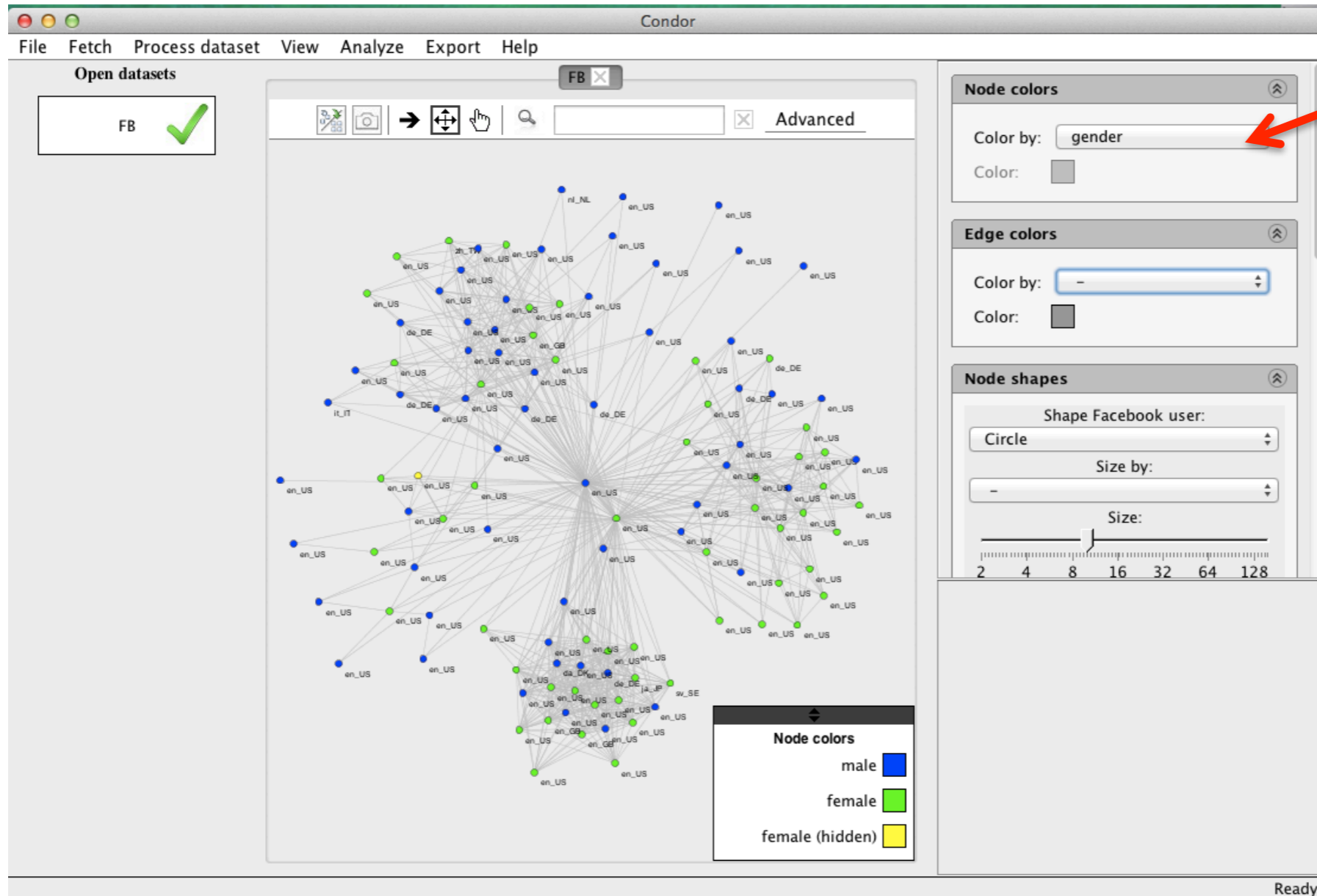
# Facebook Network with Nodes Colored by Locale



Select a Node field to Color

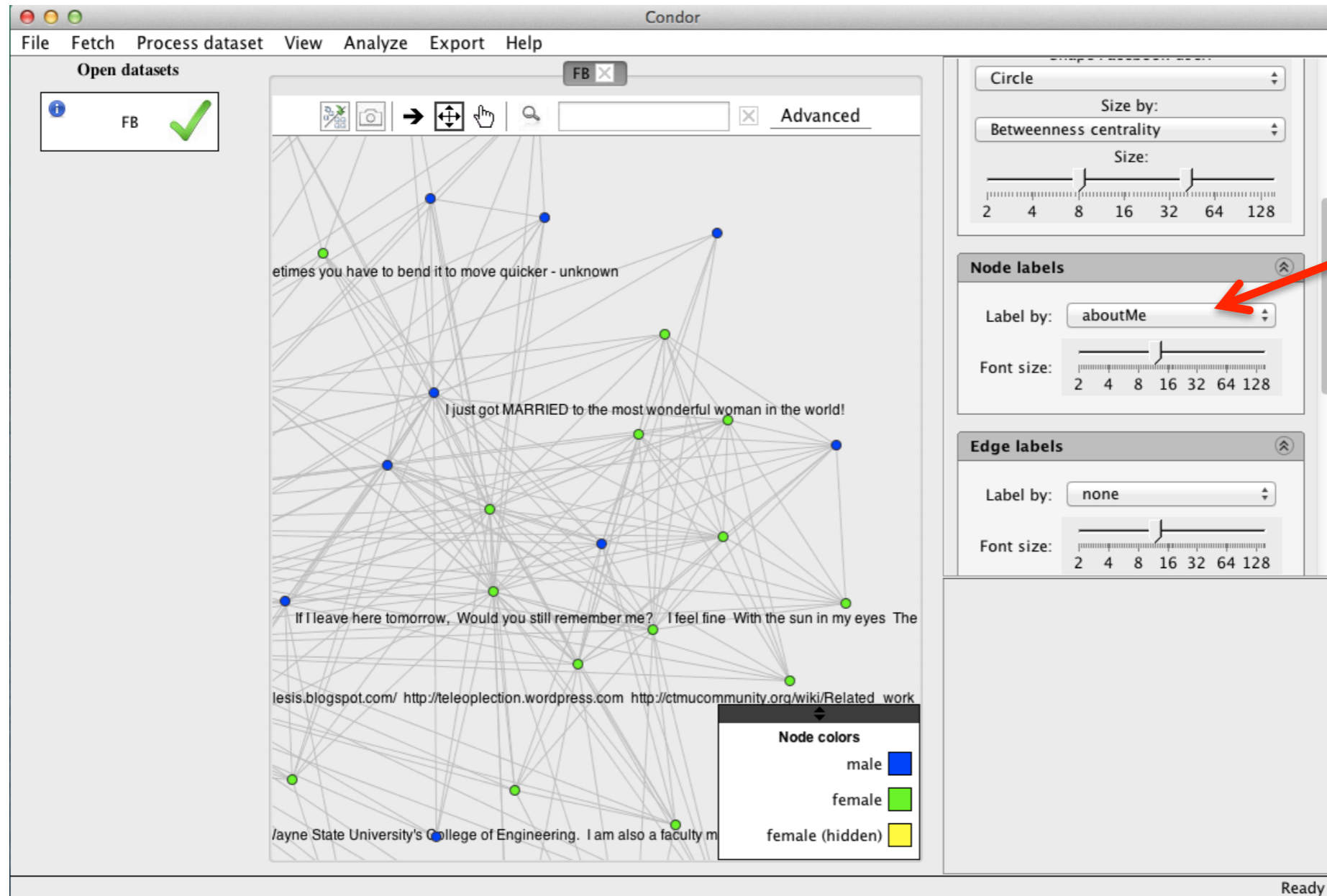
For 2-digit country locale key see: <http://www.worldatlas.com/aatlas/ctycodes.htm>

# Facebook Network with Nodes Colored by Gender



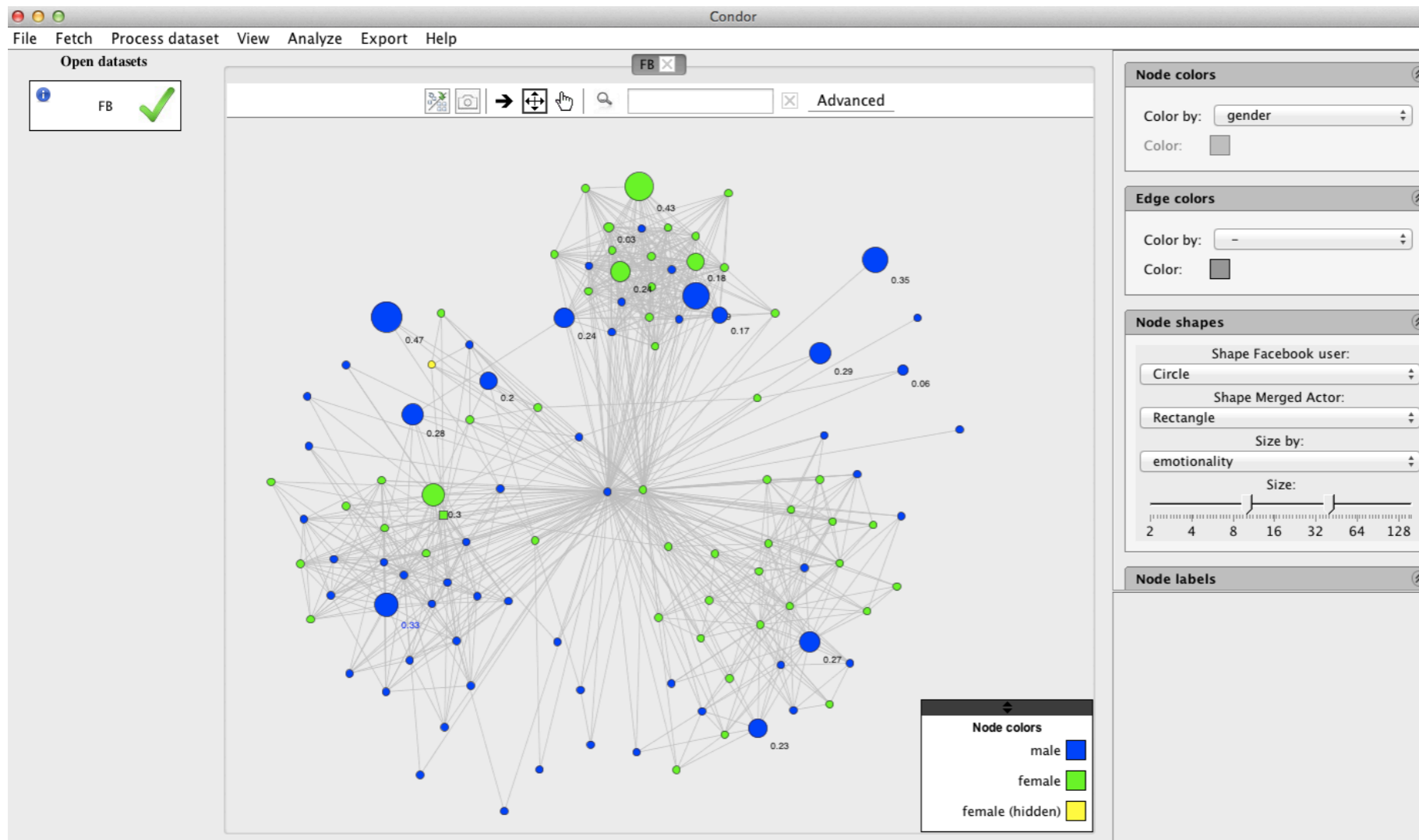
Select a Node field to Color

# Facebook Network with Node Labels using “aboutMe”



Select a Node field to Label

# Facebook Network with Nodes Colored by Gender, Node Size by Emotionality and Label with Emotionality Score



Use  
Node and  
Edge  
Pick menus  
to augment  
graph

# Web Example

## WEB EXAMPLES

Follow these suggested steps to Fetch and Visualize a Web Query using the Google Ajax and/or Google CSE.

Note: To use the Google CSE option you must have a Google CSE Key. See page 22.

The screenshot shows the Condor application window with the following components:

- Menu Bar:** File, **Fetch** (highlighted with a red box), Process dataset, View, Analyze, Export, Help.
- Fetch Sub-menu:** Fetch mailbox, Fetch facebook profile, **Fetch web** (highlighted).
- 1. Dataset:** A dialog box titled "Web Fetcher" with "Dataset: Web" and "Next" and "Cancel" buttons.
- 2. Parameters:** A dialog box titled "Web Fetcher" with fields for "Google CSE key", "Google CSE id", "Query", "Results per query", "Time quantity", and "Restrict to recent results (Only CSE, time unit)". A dropdown menu is open showing "Days", "Weeks", "Months", and "Years".
- 3. Select First Layer:** A dialog box titled "Web Fetcher" with a table of URLs and a "Next" button.
- 4. Process Message:** A dialog box titled "Web fetcher" showing "Fetching backlinks at depth 2 (2/50)".

**1. Dataset**

**2. Parameters**

**3. Select First Layer**

**4. Process Message**

Note:  
To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset

Note:  
Google CSE requires an API Key.



# Condor 3 Web Example Analysis

## Suggested Steps:

1. Start MySQL and Condor 3
2. Use File menu to create a Web database and dataset
3. Use Fetch > Fetch Web (Select Google AJAX for your 1<sup>st</sup> search, Note: you need a Google CSE Key to use the Google CSE option. Enter Query, such as, "IOT" for "Internet of Things." Set the following: Results per query = 100, Max depth ... = 2, Check: Save snippet, Uncheck: Save content, Uncheck: Only consider domain level, and leave other options blank.  
Note: Unchecking: "Only consider domain level" will result in capturing the full URL of the web page from the Query search, which you can copy and paste into your browser and read the full text.
4. Use View > Create Static View and use Condor 3 GUI controls to examine the graph
5. Use File menu to create another dataset (Same database)
6. Repeat Fetch > Fetch Web (Select Google CSE, Enter the same Query again with these settings: Results per query = 100, Max depth ... = 2, Restrict to recent results (Only CSE) time unit: = Months, Time quantity: =6, Restrict to specific language ...= English or other choice; Restrict to specific country = Blank or choose a country; Check Save snippet, Uncheck Save content, Uncheck: Only consider domain level, and leave other options blank.
7. Use View > Create Static View and again use Condor 3 GUI controls to examine the graph:
8. Use File > Dataset > Merge datasets ( Pick two or more datasets to merge)
9. Use View > Create Static View and use Condor 3 GUI controls to examine the merged datasets graph and assess the difference between the two Google search engine results.
10. Continue to explore the Google CSE options and repeat the same Query and determine what new web nodes and edges are being updated or added over time.

# Fetch > Fetch Web using Google Ajax Options Selections

Web fetcher

Fetcher API:  Google AJAX  
 Google CSE

Google CSE key:

Google CSE cx:

Query:

Results per query:

Max depth (search results are at depth 1, sources of first backlinks at depth 2):

Restrict to recent results (Only CSE), time unit:

Time quantity:

Restrict to specific language (only CSE, all if not specified):

Restrict to specific country (only CSE, all if not specified):

Save snippet:

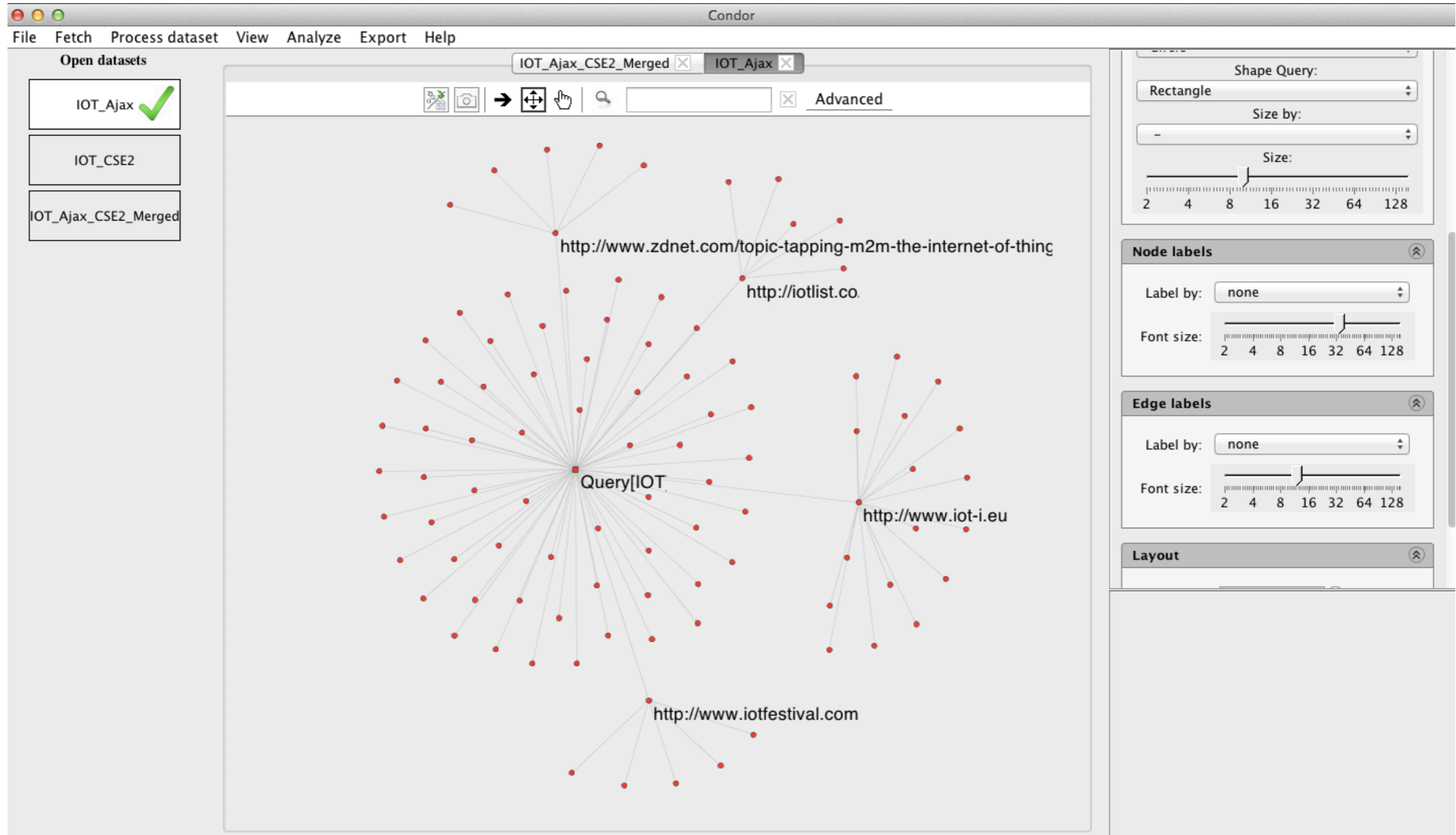
Save content:

Only consider domain level:

< Prev   Next >   Cancel

Note:  
Unchecking:  
“Only consider domain level” will result in capturing the full URL of the web page from the Query search, which is then available in the Node details to copy and paste into your browser and read the full text.

# View > Static View using Google Ajax Query: IOT on July 10, 2014



# Fetch > Fetch Web using Google CSE Options Selections

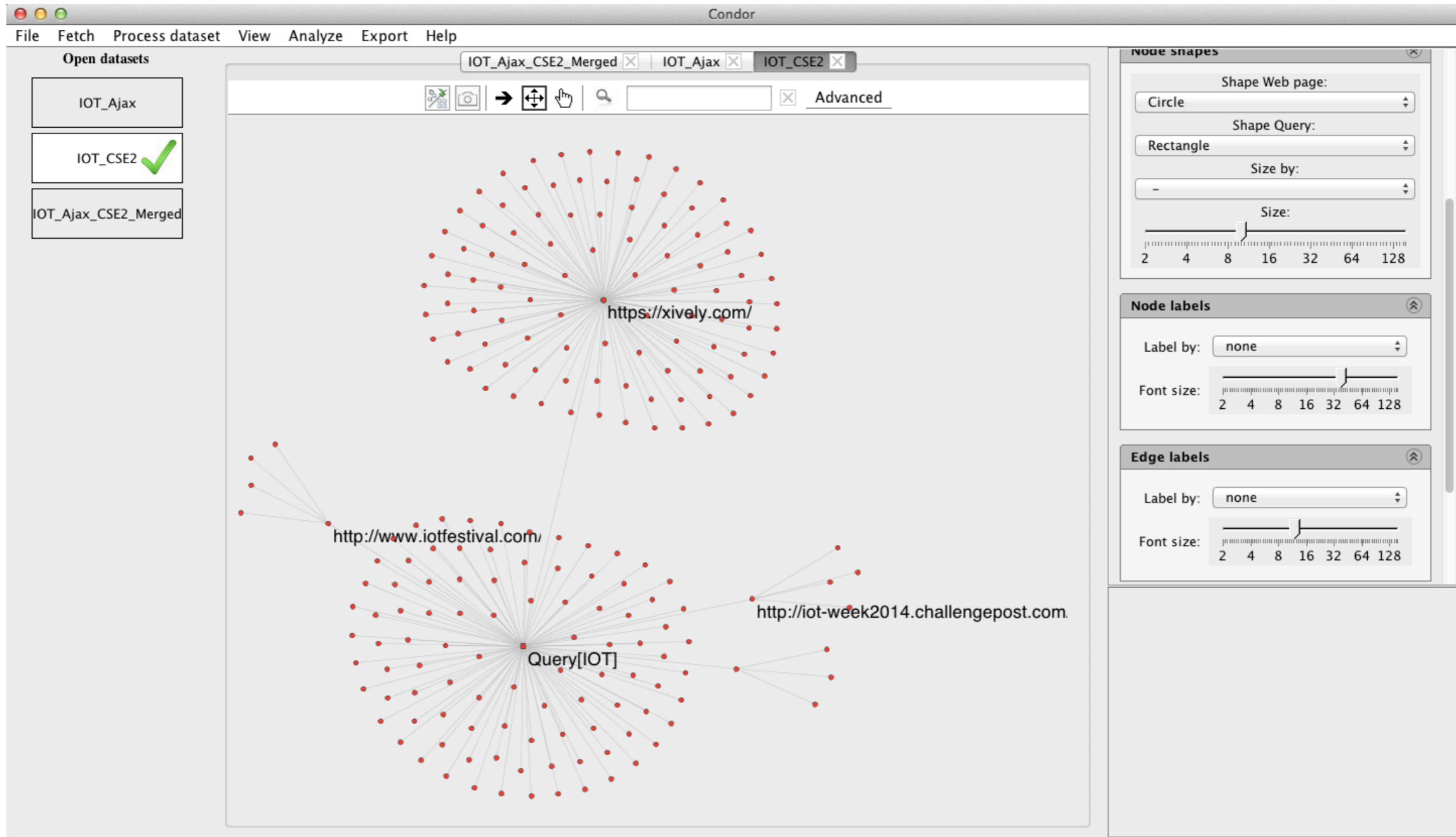
The screenshot shows a 'Web fetcher' dialog box with the following settings:

- Fetcher API:  Google AJAX,  Google CSE
- Google CSE key: [Redacted]
- Google CSE cx: [Redacted]
- Query: IOT
- Results per query: 100
- Max depth (search results are at depth 1, sources of first backlinks at depth 2): 2
- Restrict to recent results (Only CSE), time unit: Months
- Time quantity: 6
- Restrict to specific language (only CSE, all if not specified): -
- Restrict to specific country (only CSE, all if not specified): -
- Save snippet:
- Save content:
- Only consider domain level:

Navigation buttons at the bottom: < Prev, Next >, Cancel

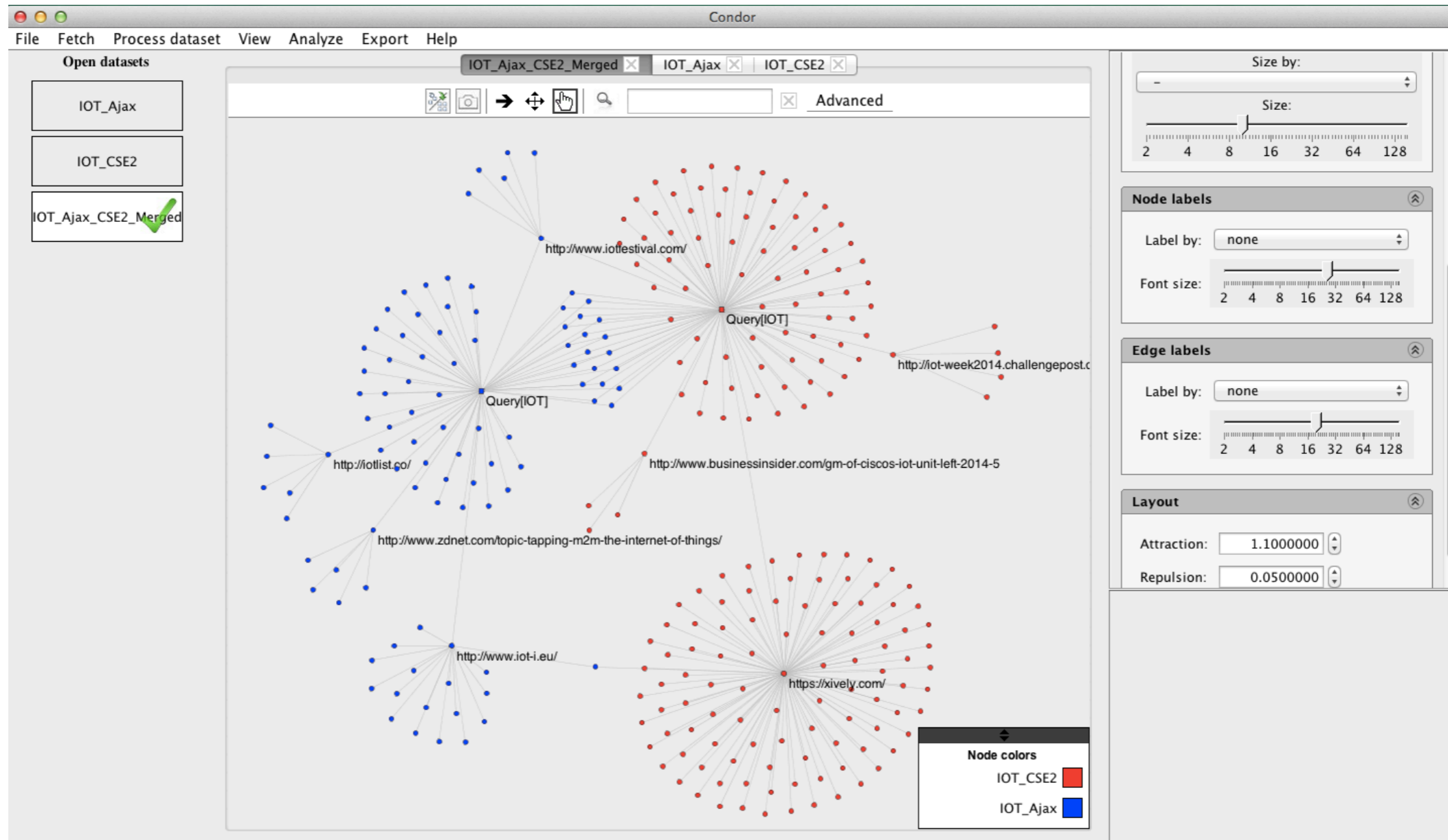
# View > Static View using Google CSE

## Query: IOT on July 10, 2014



# View > Static View of Merged Google Ajax and CSE datasets

## Query: IOT on July 10, 2014



Tip: Right Click on a Node, Select Node Details and copy and paste URL into your Browser to read the full article.

Property	Value
id	<a href="http://www.forbes.com/sites/brucerogers/2014/07/08/apple-and-google-dominate-internet-of-things-influence-with-home-automation-efforts/">http://www.forbes.com/sites/brucerogers/2014/07/08/apple-and-google-dominate-internet-of-things-influence-with-home-automation-efforts/</a>
name	<a href="http://www.forbes.com/sites/brucerogers/2014/07/08/apple-and-google-dominate-internet-of-things-influence-with-home-automation-efforts/">http://www.forbes.com/sites/brucerogers/2014/07/08/apple-and-google-dominate-internet-of-things-influence-with-home-automation-efforts/</a>
domain	www.forbes.com
content	-
title	Apple and Google Dominate &#39;Internet of Things&#39; Influence with Home ...
snippet	2 days ago ... It's early days for the Internet of Things, but the largest technology players are moving quickly to stake out the territory. In just the past month, ...

The screenshot shows a web browser window with the URL [www.forbes.com/sites/brucerogers/2014/07/08/apple-and-google-dominate-internet-of-things-influence-with-home-automation-efforts/](http://www.forbes.com/sites/brucerogers/2014/07/08/apple-and-google-dominate-internet-of-things-influence-with-home-automation-efforts/). The page features the Forbes logo, a navigation bar with various links, and a search box. The main content area displays the article title "Apple and Google Dominate 'Internet of Things' Influence with Home Automation Efforts" by Bruce Rogers, a Forbes Staff member. The article text begins with "It's early days for the *Internet of Things*, but the largest technology players are moving quickly to stake out the territory. In just the past month, [Apple](#) AAPL -1.02% announced a new 'smart home' platform, and [Google](#) GOOGL -0.41% made a similar announcement for Android and purchased Nest for \$3.2 billion – moves that pushed both companies quickly to the head of the 'Top 10 Most Influential Companies' in a new Influence Study focusing on the Internet of Things, released today by Appinions." The page also includes a "Share" button, social media icons, and an Adobe Marketing Cloud advertisement with the text "DO YOU KNOW WHAT YOUR MARKETING IS DOING? WE CAN HELP. Expand to learn how".

# Twitter Example

## TWITTER EXAMPLE

Follow these suggested steps to Fetch and Visualize a Twitter Query in a Static or Dynamic View.

The Twitter Fetch has options for repetitive fetching with a designated time delay and a geolocation restriction with a radius setting.

Note: To use the Fetch > Twitter option you must have installed the four Twitter API Keys.

See page 34.

The screenshot shows the Condor application window with the 'Fetch' menu highlighted in red. The menu items are: Fetch mailbox, Fetch facebook profile, Fetch web, Fetch twitter (highlighted), Fetch twitter accounts, Wiki evolution, and Fetch wikipedia categories.

The following steps are illustrated with dialog boxes:

- 1. Dataset**: A dialog box where the 'Dataset' is set to 'Twitter'.
- 3. Twitter 4 Keys**: A dialog box for entering OAuth credentials: OAuth access token, OAuth access token secret, OAuth consumer key, and OAuth consumer secret.
- 4. Repetitive Options**: A dialog box for setting 'Repetitive fetching' (unchecked), 'Fetch delay time', and 'Fetch delay time unit' (MINUTES).
- 4. Geolocation restriction**: A dialog box for 'Use Geolocation restriction' (checked), with fields for Latitude (42.3586617), Longitude (-71.0567398), Radius (25), and Unit (mi). A small tooltip shows 'km' and 'mi' options.
- 6. Process Message**: A dialog box showing 'Inserting data into database' with a progress bar.
- 7. Wait Message**: A dialog box showing 'Finished fetch run 1. Will wait 15 MINUTES before starting next fetch run.'

Note: To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset

Note: Twitter requires 4 Twitter API Keys.



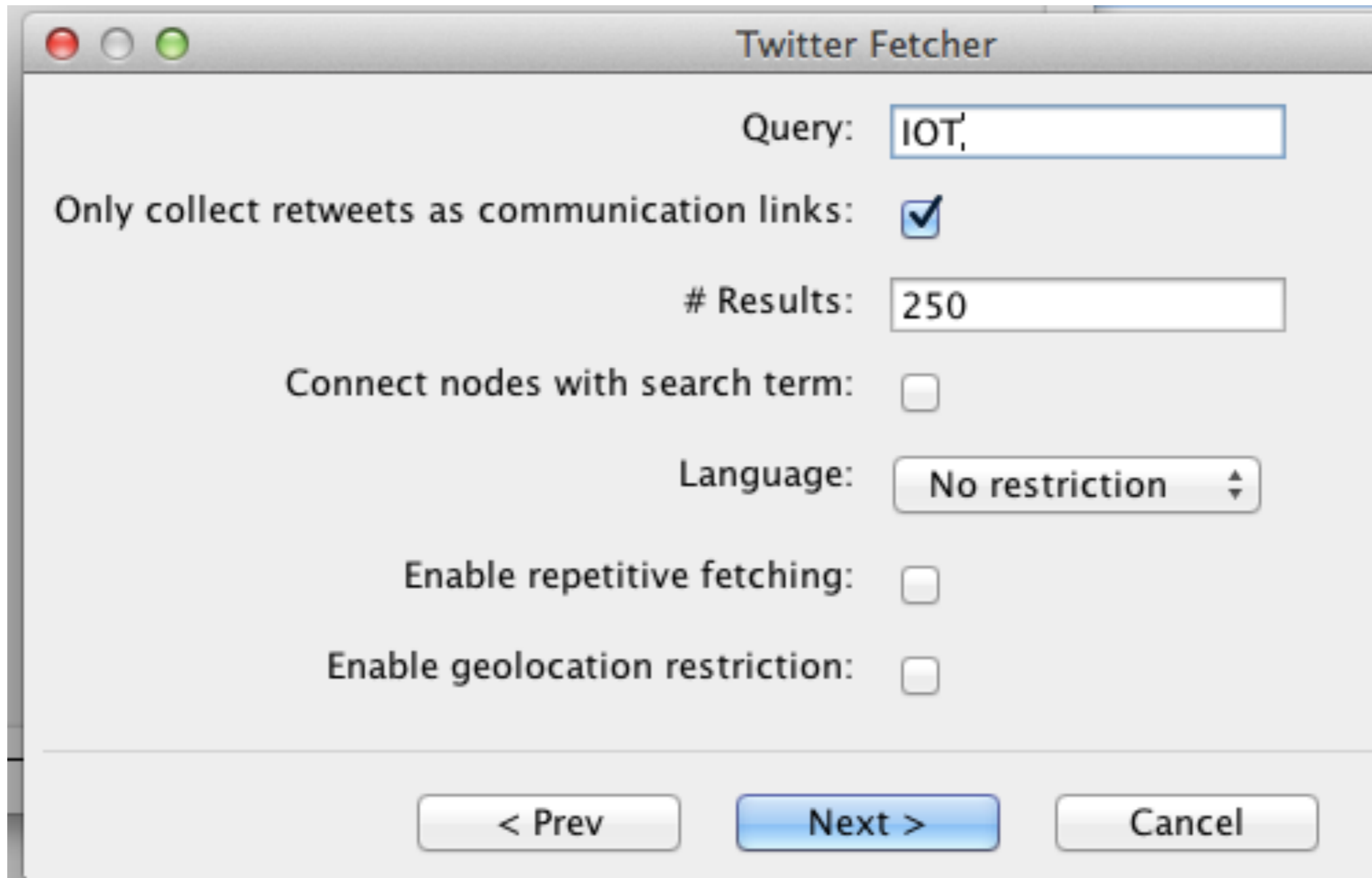
# Condor 3 Twitter Example Analysis

## Suggested Steps:

1. Start MySQL and Condor 3
2. Use File menu to create a Twitter database and dataset
3. Use Fetch > Fetch Twitter (Note: you need 4 Twitter API Keys to use this option).
4. Enter a Query, such as, "IOT" for Internet of Things. Set the following: Check: Only collect retweets as communication links, #Results: 250, Uncheck all other options.
4. Use View > Create Static View and use Condor 3 GUI controls to examine the graph
5. Use Process dataset > Annotate > Centrality Annotations > Betweenness Centrality
7. Right click on file with the Blue Dot and SAVE AS, edit filename or accept default name, for reuse
8. Use View > Create Dynamic View. Select Time Unit = Minutes, Set Start and End Dates and Times.  
TIP: Use Export > Export data for Links to .CSV file. Open file and select column field "created\_at".  
Then Format > Cells > Time format as " 7/11/2014 9:29:52 AM," which makes it a readable date and sort oldest to newest and note start/end dates and times to use with Dynamic View form settings.
7. Use Condor 3 GUI Dynamic controls to examine the graph by minute and change Node Colors by location and Node Size by Betweenness or other desired data measures.
8. Use File menu to create another dataset within the same Twitter database
9. Repeat Fetch > Fetch Twitter and use repetitive fetching and/ or geolocation restriction to add to your inquiry.
10. Then use File menu > Merge datasets to combine two or more datasets and continue to explore graph.
11. Use Process dataset to add Annotations, Sentiment and Influence Measures and explore graph
12. Export > Export data for nodes and links to examine annotations and other measures with additional software.

# Fetch > Fetch Twitter

## Example Settings for Query “IOT” or Internet of Things



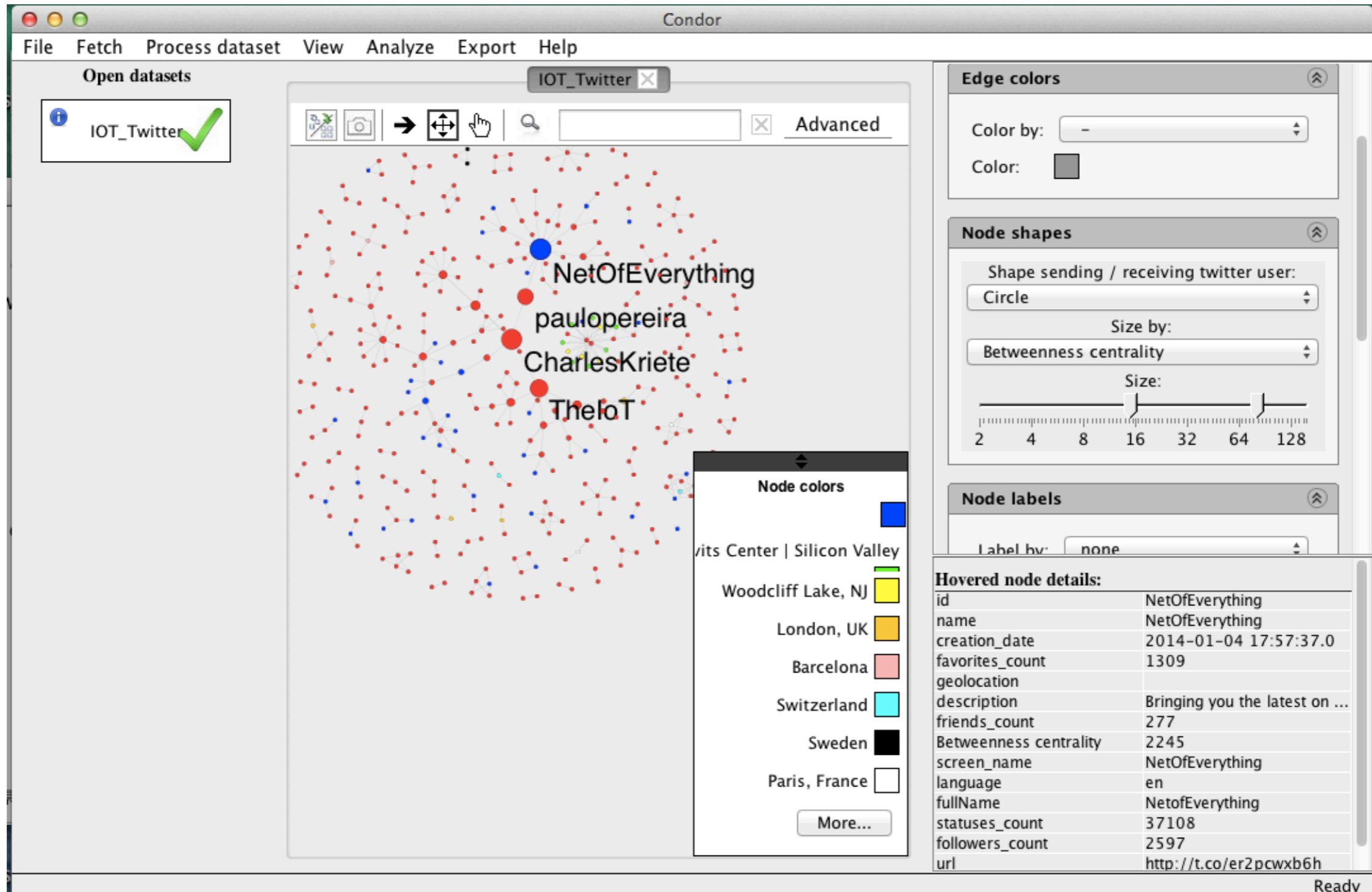
The screenshot shows a window titled "Twitter Fetcher" with the following settings:

- Query: IOT,
- Only collect retweets as communication links:
- # Results: 250
- Connect nodes with search term:
- Language: No restriction
- Enable repetitive fetching:
- Enable geolocation restriction:

At the bottom of the window are three buttons: "< Prev", "Next >" (highlighted in blue), and "Cancel".

# Static View - "IOT" or Internet of Things Tweets

## Node Colors by Geolocation, Node Size by Betweenness Centrality



# View > Dynamic View Settings

## Query: IOT on July 11, 2014

Create dynamic view

Time unit:  Years  Months  Weeks  
 Days  Hours  Minutes

Start date and time: Jul 11, 2014 09:25:00

End date and time: Jul 11, 2014 11:40:00

Sliding window:  With history Length (time units): 1

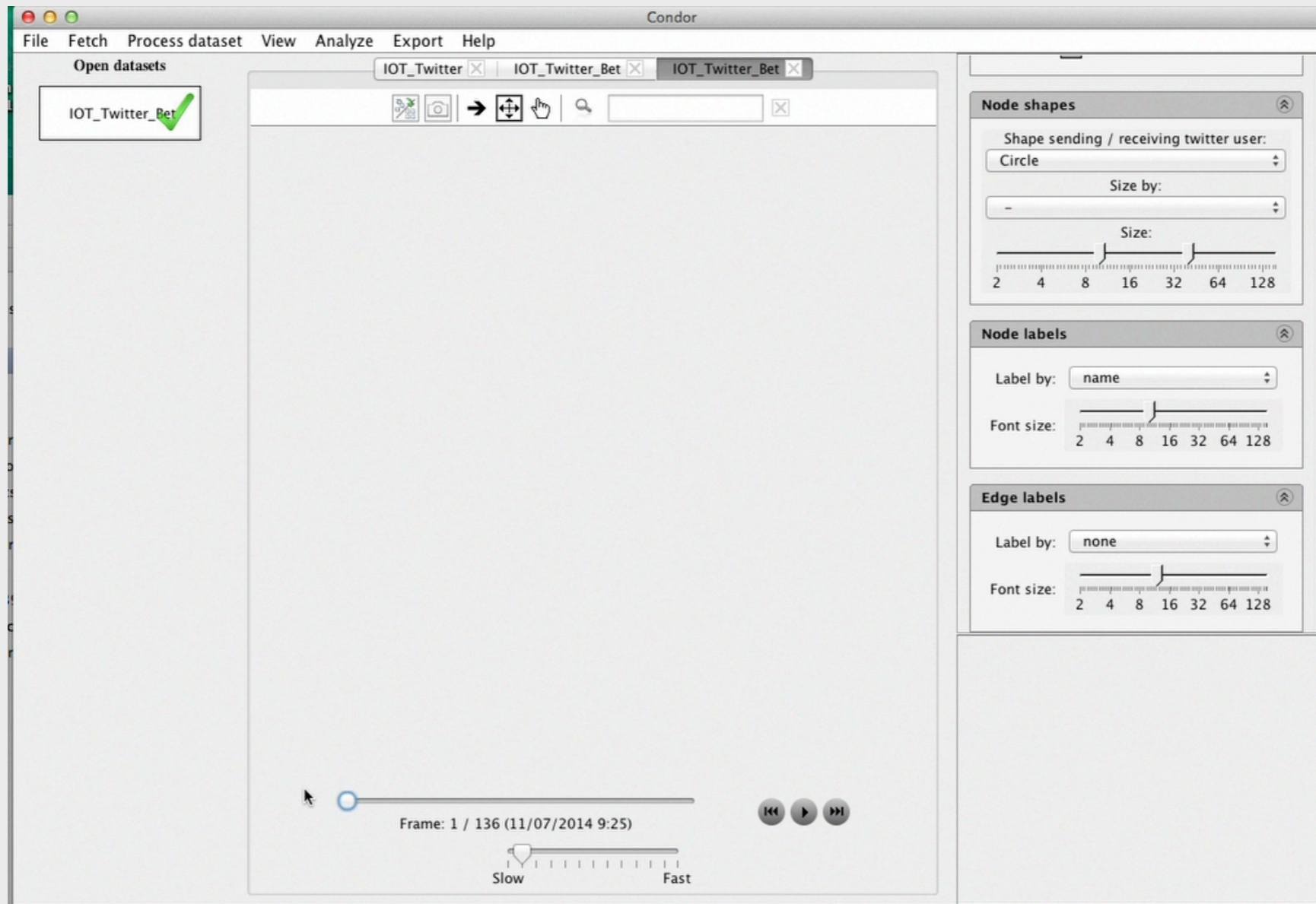
Finish Cancel

Tip: Use Export > Export data for Links to .CSV file. Open file and select column field “created\_at”. Then Format > Cells > Time format as “7/11/2014 9:29:52 AM,” which makes it a readable date/time and sort from oldest to newest and note the start/end dates/times to use with Dynamic View form settings.

# View > Dynamic View By Minute

## Query: IOT on July 11, 2014

MOVIE 9.3 Twitter Dynamic view



Sample IOT Link.csv file with field “created\_at” reformatted Time.

From → To

F	F
created_at	created_at
42:26.0	7/11/14 9:29
00:43.0	7/11/14 9:29
18:31.0	7/11/14 9:29
48:11.0	7/11/14 9:30
54:09.0	7/11/14 9:30
	7/11/14 9:30
	7/11/14 9:31
	7/11/14 9:31

	A	B	C	D	E	F	G	H	I	J	K
1	Uuid	Name	sourceUuid	targetUuid	content	created_at	hashtags	identifier	retweet_count	url_entries	user_mentions
2	3.90382E+23	unknown	GerryWieder	ShortList)	RT @brouardbenoit01:	7/11/14 9:29	wearables, quantifiedself	4.8759E+17	2		489636440, 35432131, 20670871,
3	3.90381E+23	unknown	GerryWieder	Withings	RT @brouardbenoit01:	7/11/14 9:29	wearables, quantifiedself	4.8759E+17	2		489636440, 35432131, 20670871,
4	3.9038E+23	unknown	GerryWieder	brouardbenoit01	RT @brouardbenoit01:	7/11/14 9:29	wearables, quantifiedself	4.8759E+17	2		489636440, 35432131, 20670871,
5	3.89352E+23	unknown	Charlesknight	jwgoerlich	RT @jwgoerlich: As an a	7/11/14 9:30	IoT,	4.8759E+17	3		35797450, 18988466,
6	3.89353E+23	unknown	Charlesknight	jnazario	RT @jwgoerlich: As an a	7/11/14 9:30	IoT,	4.8759E+17	3		35797450, 18988466,
7	3.87388E+23	unknown	scottmalkie	MongoDB	RT @MongoDB: Join ou	7/11/14 9:30	IoT,	4.8759E+17	7	http://t.co/QkW30dmpd2,	18080585,
8	3.44295E+22	unknown	Podsystem	m2mnow	RT @M2Mnow Taking c	7/11/14 9:31	M2M, IoT,	4.8759E+17	0	http://t.co/ZhVuCt5tgW,	226137180,
9	3.42295E+22	unknown	PodsystemM2M	m2mnow	RT @M2Mnow Taking c	7/11/14 9:31	M2M, IoT,	4.8759E+17	0	http://t.co/KiKA2IUUiH,	226137180,

Tip: Use Export > Export data for Links to .CSV file. Open file and select column field “created\_at”. Then Format > Cells > Time format as “7/11/2014 9:29:52 AM,” which makes it a readable date/time and sort from oldest to newest and note the start/end dates/times to use with Dynamic View form settings.

# Twitter Accounts

## TWITTER ACCOUNTS EXAMPLE

Follow these suggested steps to Fetch and Visualize a Twitter Accounts Query in a Static or Dynamic View.

The Twitter Accounts Fetch has options to include multiple Twitter names/Ids at one time and set the number of results desired per person.

Notes:

This example uses the previous Twitter Example as a starting point.

To use the Fetch > Twitter Accounts option you must have install the four Twitter API Keys. See page 26

The screenshot shows the Condor application window with the 'Fetch' menu highlighted in red. The 'Fetch' menu is open, showing options like 'Fetch twitter accounts' which is selected. To the right, four numbered steps are shown:

- 1. Dataset**: A dialog box titled 'Twitter People Fetcher' with 'Dataset: Twitter\_Accounts' and 'Next >' and 'Cancel' buttons.
- 2. Parameters**: A dialog box titled 'Twitter People Fetcher' with 'comma-separated Twitter id(s): BarackObama', '# results per person: 100', and '< Back', 'Next >', and 'Cancel' buttons. A red arrow points to the input field with the note: *Note: Collect one or more Twitter Accounts with a single query by separating Id(s) with a comma “,”*
- 3. Twitter 4 Keys**: A dialog box titled 'Twitter Fetcher' with fields for 'OAuth access token', 'OAuth access token secret', 'OAuth consumer key', and 'OAuth consumer secret', each with a blacked-out value, and '< Back', 'Next >', and 'Cancel' buttons.
- 4. Process Message**: A dialog box titled 'Twitter Fetcher' with 'Inserting data into database' and a progress bar, and '< Back' and 'Cancel' buttons.

Note:

To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset

Note:

Twitter Accounts requires 4 Twitter API Keys:

# Condor 3 Twitter Accounts Example Analysis

## Suggested Steps:

Note: This Example starts by using the Twitter Actor.csv export file from the previous Twitter Example. If you have not completed a Twitter Query search, then you need to have at least one Twitter user name/Id to proceed with this example.

1. Start MySQL and Condor 3
2. Use File menu and switch to your Twitter database and open the dataset used in the previous Twitter Example  
Note: If you do not have a previous Twitter database, then create one and a new dataset
3. Use Export > Export data, select Actors to export, create a .csv filename and export.
4. Open the Actors.csv file and sort on Betweenness Centrality from largest to smallest.
5. Note the Twitter account Name(s)/Id(s) you wish to collect
6. Use Fetch > Fetch Twitter Accounts (Note: you need 4 Twitter API Keys to use this option).
7. Enter the Twitter Account Name(s)/ID(s) separated by a comma “,”.
8. Enter the number of desired results per person, such as, 100.
9. Enter your 4 Twitter keys, if blank, otherwise Click Next and a process message will appear.
10. Use View > Create Static View and use Condor 3 GUI controls to examine the graph
11. Use Process dataset > Annotate > Centrality Annotations > Betweenness Centrality
12. Right click on file with the Blue Dot and SAVE AS, edit filename or accept default name, for reuse
13. Use View > Create Dynamic View. Select Time Unit = Minutes, Set Start and End Dates and Times.  
TIP: Use Export > Export data for Links to .CSV file. Open file and select column field “created\_at”. Then Format > Cells > Time format as “ 7/11/2014 9:29:52 AM,” which makes it a readable date and sort oldest to newest and note start/end dates and times to use with Dynamic View form settings.
14. Use Condor 3 GUI Dynamic controls to examine the graph by minute and change Node Colors by location and Node Size by Betweenness or other desired data measures.
15. Use File menu to create another dataset within the same Twitter Accounts database
16. Repeat Fetch > Fetch Twitter accounts
17. Then use File menu > Merge datasets to combine two or more datasets and continue to explore graph.
18. Use Process dataset to add Annotations, Sentiment and Influence Measures and explore graph
19. Export > Export data for nodes and links to examine annotations and other measures with additional software.



# Identifying Twitter Name(s)/Id(s) to be used in Fetch > Twitter Accounts from a previous Twitter search

Exported Twitter dataset Actors.csv file sorted by Betweenness Centrality

	A	B	C
1	Uuid	Name	Betweenness centrality
2	CharlesKriete	CharlesKriete	2456.00
3	NetOfEverything	NetOfEverything	2245.00
4	TheloT	TheloT	2075.00
5	paulopereira	paulopereira	1768.00
6	tadajewski	tadajewski	844.00
7	IOTATOI1	IOTATOI1	742.33
8	beSoLoMo	beSoLoMo	652.00
9	Phil_Comtek	Phil_Comtek	646.50
10	nikitaljohnson	nikitaljohnson	539.00
11	Industry40	Industry40	450.00

Enter the Twitter Name(s)/Ids into Twitter Accounts fetch form separating the Names/Ids with a comma “,”.

For example from the above file: CharlesKriete, NetOfEverything, TheloT

Twitter People Fetcher

comma-separated Twitter id(s): CharlesKriete, NetOfE

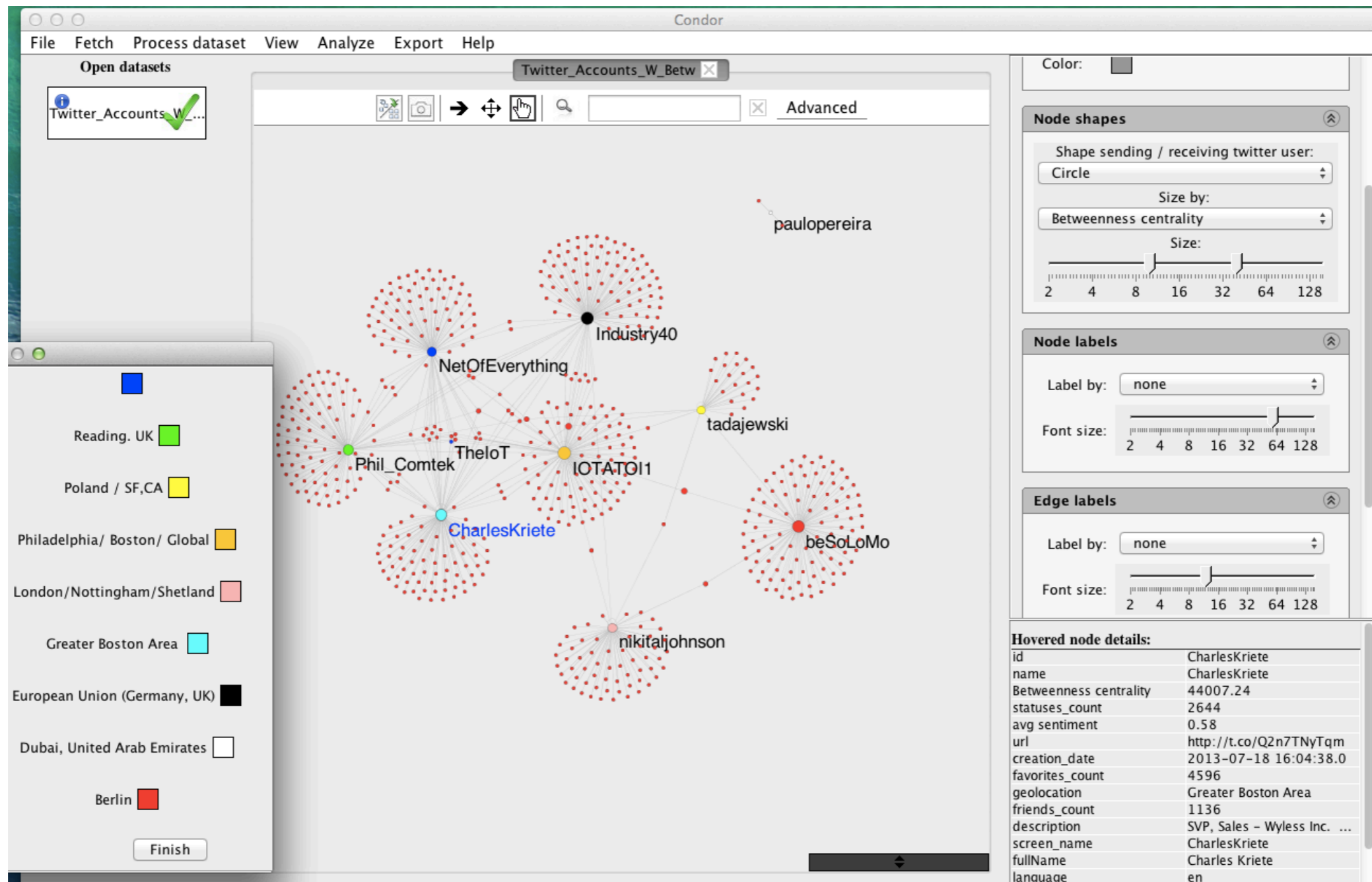
# results per person: 100

< Prev Next > Cancel

# Static View – Twitter Accounts from “IOT” Internet of Things

## Previous Twitter Query

### Node Colors by Geolocation



Sample Link.csv file with field “created\_at” reformatted Time.

From → To

F	
created_at	
	0:34
	3:46
	4:19
	4:04

F	
created_at	
	5/29/14 0:34
	5/29/14 3:46
	5/29/14 4:19
	5/30/14 4:04

F2	A	B	C	D	E	F
	Uuid	Name	sourceUuid	targetUuid	content	created_at
2	5.386E+23	unknown	Industry40	AnitaBunk	RT @AnitaBunk	5/29/14 0:34
3	5.386E+23	unknown	Industry40	SteveJennis	RT @SteveJenni	5/29/14 3:46
4	5.386E+23	unknown	Industry40	Cisco_Germa	RT @Cisco_Gerr	5/29/14 4:19
5	5.383E+22	unknown	Industry40	dianakupfer	RT @dianakupfe	5/30/14 4:04

Tip: Use Export > Export data for Links to .CSV file. Open file and select column field “created\_at”. Then Format > Cells > Time format as “7/11/2014 9:29:52 AM,” which makes it a readable date/time and sort from oldest to newest and note the start/end dates/times to use with Dynamic View form settings.

# View > Dynamic View Settings

## Query: From May 29, 2014 to July 12, 2014

The screenshot shows the 'Create dynamic view' dialog box. The 'Time unit' is set to 'Weeks'. The 'Start date and time' is 'May 29, 2014' and the 'End date and time' is 'Jul 12, 2014'. The 'Sliding window' is checked with 'With history'. The 'Length (time units)' is set to 1. In the background, a table is visible with columns 'sourceUuid', 'targetUuid', 'content', and 'created\_at'. The 'created\_at' column is highlighted with a red box. The first row of data is 'Industry40 AnitaBunk RT @AnitaBunk 5/29/14 0:34'. The last two rows of data are 'Phil\_Comtek GigaomRese: RT @CloudExpo 7/12/14 19:00' and 'Phil\_Comtek CloudExpo RT @CloudExpo 7/12/14 19:00'. Red arrows point from the 'created\_at' column header to the 'Start date and time' field and from the last row of data to the 'End date and time' field.

sourceUuid	targetUuid	content	created_at
Industry40	AnitaBunk	RT @AnitaBunk	5/29/14 0:34
Phil_Comtek	GigaomRese:	RT @CloudExpo	7/12/14 19:00
Phil_Comtek	CloudExpo	RT @CloudExpo	7/12/14 19:00

Tip: Use Export > Export data for Links to .CSV file. Open file and select column field "created\_at". Then Format > Cells > Time format as "7/11/2014 9:29:52 AM," which makes it a readable date/time and sort from oldest to newest and note the start/end dates/times to use with Dynamic View form settings.

# View > Dynamic View By Weeks

## Query: Twitter Accounts from May 29, 2014 to July 12, 2014 C

MOVIE 9.4 Twitter Accounts Dynamic View

Condor

File Fetch Process dataset View Analyze Export Help

Open datasets

Twitter\_Accounts ✓

Twitter\_Accounts X Twitter\_Accounts X

netofeverthing X

nikitaljohnson

beSoLoMo

IOTATO1 tadajewski NetOfEverything

CharlesKriete

paulopereira

Phil\_Comtek

Industry40

Frame: 1 / 7 (01/06/2014 23:59)

Slow Fast

# Wiki Evolution Example

## WIKI EVOLUTION EXAMPLE

Wiki Evolution is one of Condor 3's most unique and sophisticated fetch options.

Wiki Evolution creates a network graph based on how articles have been internally linked over time.

Follow these suggested steps to Fetch and Visualize a Wiki Evolution Query in a Static or Dynamic View.

Wiki Evolution uses the Condor 3 Wizard to step the user through a sequence of seven form options to refine the resulting network.

The image shows a screenshot of the Condor 3 Wizard interface. The main menu includes File, Fetch, Process dataset, View, Analyze, Export, and Help. The Fetch menu is highlighted, showing options like Fetch mailbox, Fetch facebook profile, Fetch web, Fetch twitter, Fetch twitter accounts, Wiki evolution (highlighted), and Fetch wikipedia categories.

**Note:**  
To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset

The wizard consists of seven steps:

- 1. Dataset:** A dialog box for selecting a dataset, with 'Wiki\_Evolution...' selected.
- 2. Language:** A dialog box for selecting a language, with 'ENGLISH' selected.
- 3. Query:** A dialog box for entering a query.
- 4. Article Selection:** A dialog box for selecting Wikipedia articles to include, with 'Internet\_of\_Things' selected.
- 5. Limitation Options:** A dialog box for setting limitations, with 'Limit fetching by date' selected.
- 6. Static/Dynamic:** A dialog box for selecting fetch type, with 'Static fetcher only' selected.
- 7. Bidirectional:** A dialog box for selecting fetch type, with 'Only fetch bidirectional links for creating static network' selected.

Additional steps shown include:

- 8. Content Options:** A dialog box for selecting content, with 'Do not fetch content' selected.
- 9. Process Message:** A dialog box for receiving articles from Wikipedia.

Wiki Evolution is one of Condor 3's most unique and sophisticated fetch options.

First, Wikipedia is an encyclopedia of articles (<http://en.wikipedia.org/> ) in many different languages.

Wiki Evolution uses an article's edit history to construct a Wikipedia article internal link network of references over time. This enables a user to visualize the historical evolution for a single article or set of articles in Wikipedia. The result is an article link network movie or "Wiki-Evolution." The network consists of only Wikipedia article internal links and not an article's text edits. No external Web URL links are included because they lack timestamps for when they were added.

Wiki Evolution uses the Condor 3 Wizard to step the user through a sequence of seven form options to refine the resulting network. The seven forms include: 1. a choice of eight different languages; 2. the use of Wikipedia's Query search engine for searching a topic; 3. an article selection picker to add or remove articles from the initial query search results; 4. an option to limit the final results by date or number of article revisions; 5. a Static/Dynamic format selection; 6. a choice to only use bidirectional links for a static view; and, 7. three content selection choices.

# Wiki Evolution seven form options include:

- 1. Language:** eight choices are available: English, German, Spanish, Italian, Russian, Korean, Indonesia, and Vietnamese.
- 2. Query:** Condor 3 uses Wikipedia's sophisticated query search engine for very precise searching of articles and its contents using:
  - Boolean logic (AND, OR);
  - Phrases in double quotes;
  - Exclusion to exclude terms;
  - Wildcard for characters to take the place of other characters; and
  - Fuzzy to match words with similar spellings.

In addition, searches can take advantage of Wikipedia's "intitle," or "category," or "prefix" parameters to refine a search.

The Wikipedia default search uses stemming, which can be turned off in some cases with double quotes around the term for an exact match. For more information on searching see: <http://en.wikipedia.org/wiki/Help:Searching>



# Wiki Evolution Seven Form Options (continued)

**3. Limitations:** A user has two time frame options to construct the internal link network:

- a. History by date: From X Start date To Y End date; or
- b. History by last number of revisions with the default set to the last 250 revisions.

Note: Wikipedia itself was started in January of 2001 and will not have any dates prior to that date.

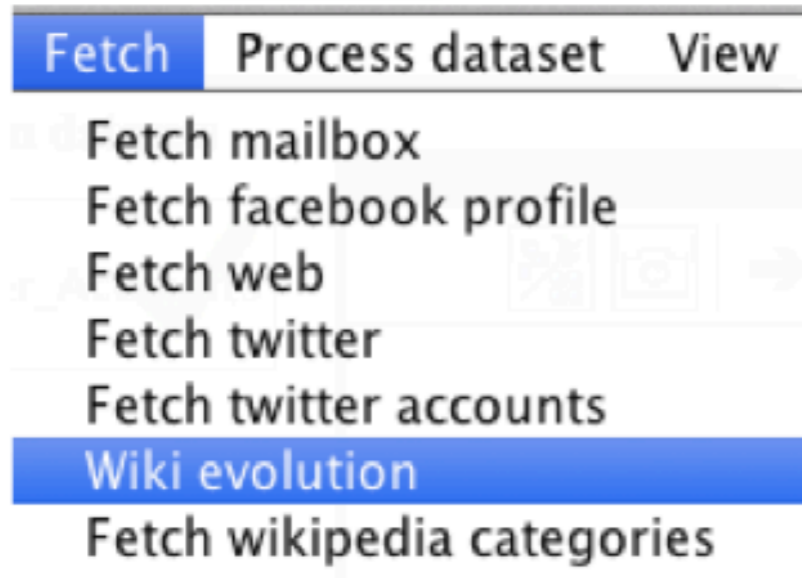
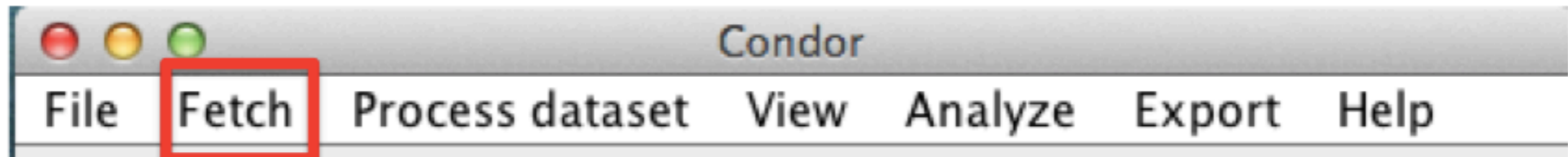
**4. Article Selection:** An article picker enables users to add or remove one or more articles for the network construction

**5. Static/Dynamic:** Three choices are offered: Static only, Dynamic only, or Static and Dynamic

**6. Bidirectional:** Option to only fetch bidirectional links for creating a static network

**Note:** If you uncheck this option to collect non-bidirectional links, the search may take a very, very, long time, even exceeding 24 hours, because some articles, such as for a country, have a very large link network. So, when unchecking this option you may wait a very long time for the search to finish.

**7. Content Options:** Three choices are offered: Do not fetch content; Complete Content; and Only snippets



Note:

To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset

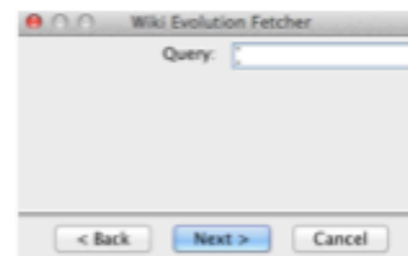
## 1. Dataset



## 2. Language



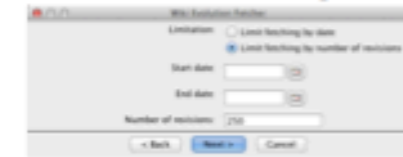
## 3. Query



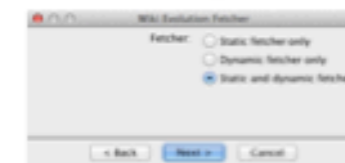
## 4. Article Selection



## 5. Limitation Options



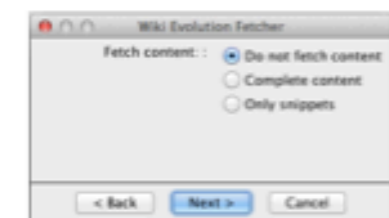
## 6. Static/Dynamic



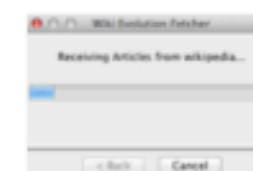
## 7. Bidirectional



## 8. Content Options



## 9. Process Message



# Condor 3 Wiki Evolution Example

## Suggested Steps:

1. Start MySQL and Condor 3
2. Use File menu to create a Wiki Evolution database and dataset
3. Use Fetch > Fetch Wiki evolution. Suggested settings for the 7 form options:
  - a. Language: English
  - b. Query: "Internet of Things" Note: with double quotation marks
  - c. Article Selection: Add only one article: "Internet\_of\_Things"
  - d. Limitations: Start Date: Jul 11, 2014 End Date: Jul 18, 2014
  - e. Static/Dynamic: Static
  - f. Bidirectional: Check
  - g. Content: Snippet

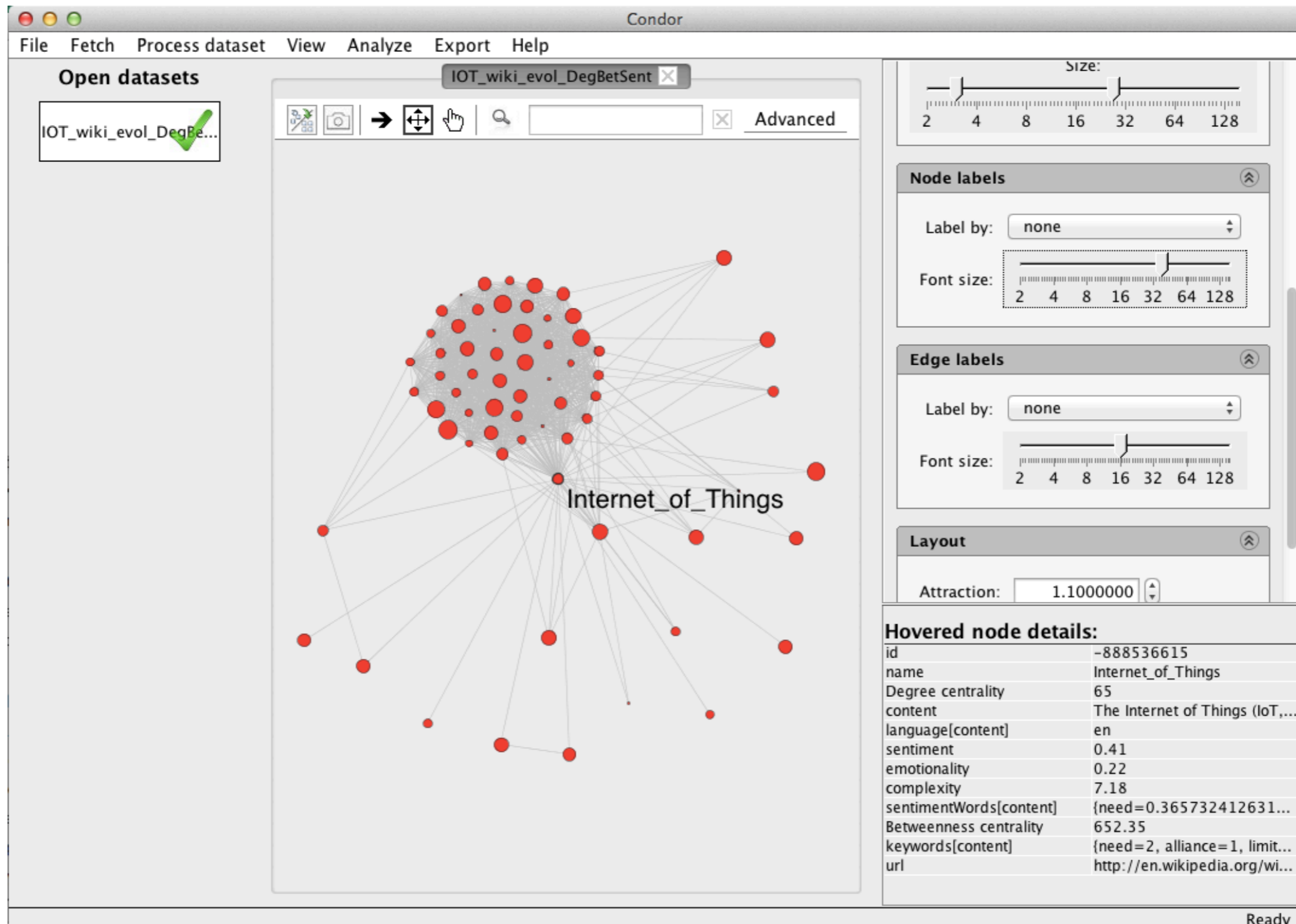
Note: This took a few minutes to run and resulted in 66 article nodes and 1,978 links.

TIP: Wikipedia's API is very slow and a very popular topics will have thousand of article links, thus your search may take many hours to run. It is suggested to start with a short timeframe to obtain a result in a few minutes, then expand your time frame.

4. Use View > Create Static View and use Condor 3 GUI controls to examine the graph
5. Use Process dataset > Annotate > Centrality Annotations > Betweenness Centrality, Degree Centrality and Sentiment
6. Use Condor 3 GUI controls to explore graph by changing Node size, Node Labels, Right click on a Node to show the node details and read an article's snippet, which may be quite long
7. Right click on file with the Blue Dot and SAVE AS, edit filename or accept default name, for reuse
8. Export > Export CSV for actors and edges to examine with additional software.

# Condor 3 Wiki Evolution Example

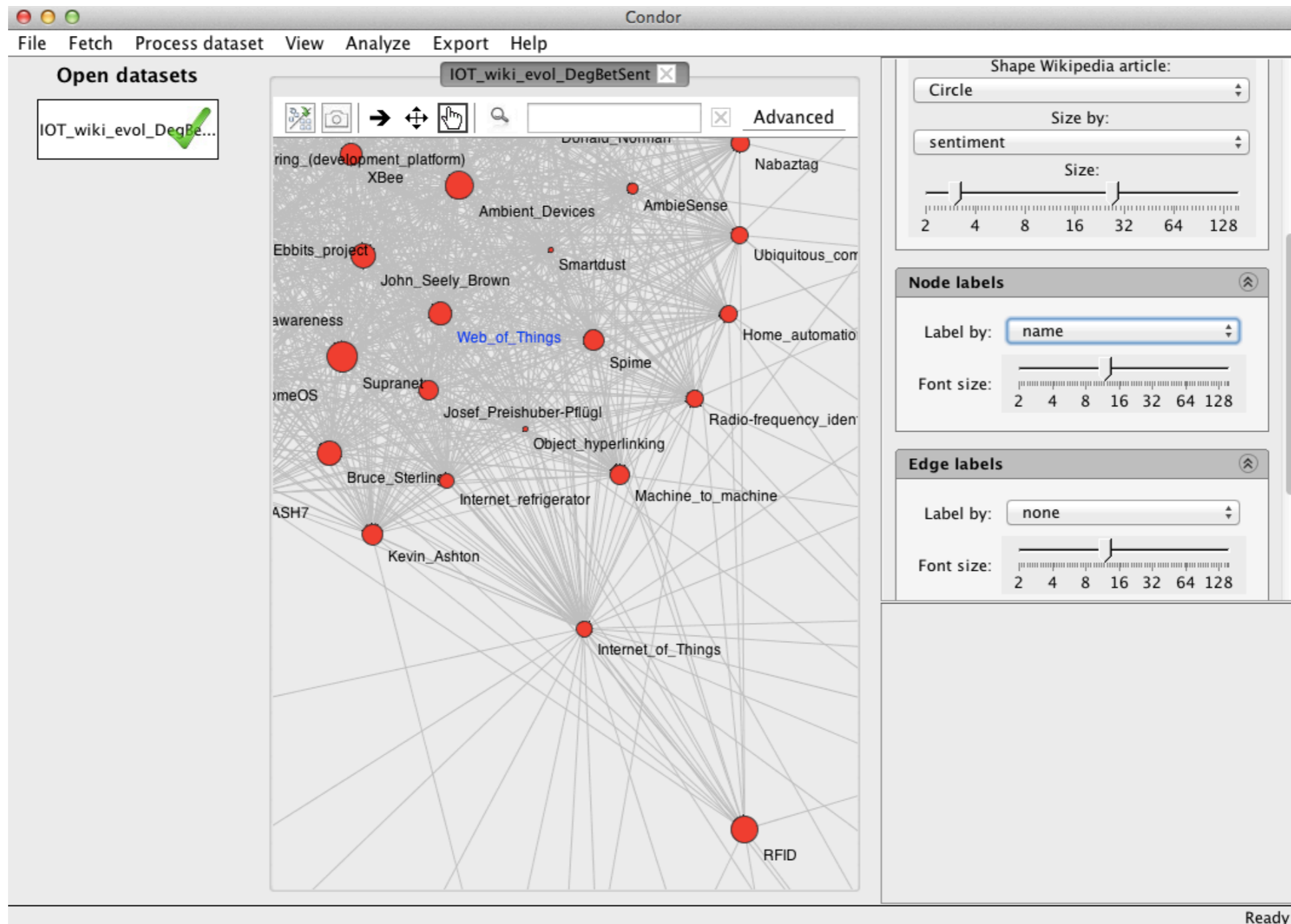
## Internet of Things – July 11 to 18, 2014 with Node Size by Sentiment



# Condor 3 Wiki Evolution Example

## Internet of Things – July 11 to 18, 2014 with Node Size by Sentiment

### Zoomed in view with Node Names



## Condor 3 Wiki Evolution Example

Internet of Things – July 11 to 18, 2014 with Sample Export Actor and Edge Files with Betweenness Centrality, Degree Centrality and Sentiment Measures

### Actor Export CSV file contents

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Uuid	Name	Betweenness centrality	Degree centrality	complexity	content	emotionality	keywords[content]	language[c]	sentiment	sentimentWords [content]	url		
2	-888536615	Internet_of_Things	652.35	65	7.18	The Internet of Things (IoT, also Cloud of Things or CoT) refers to the interconnection	0.22	{need=2, alliance=1,	en	0.41	{need=0.3657324	<a href="http://en.wikipedia.org/wiki/Internet_of_Things">http://en.wikipedia.org/wiki/Internet_of_Things</a>		
3	-566740767	Ubiquitous_computing	55.96	47	7.86	Ubiquitous computing (ubicomputing) is a concept in software engineering and	0.24	{using=1, appear=1,	en	0.42	{using=0.0973990	<a href="http://en.wikipedia.org/wiki/Ubiquitous_computing">http://en.wikipedia.org/wiki/Ubiquitous_computing</a>		
4	-580758011	Machine_to_machine	43.55	45	6.87	Machine to Machine (M2M) refers to technologies that allow both wireless and	0.24	{need=1, pinpoint=1	en	0.51	{need=0.8963707	<a href="http://en.wikipedia.org/wiki/Machine_to_machine">http://en.wikipedia.org/wiki/Machine_to_machine</a>		
5	-1004751155	Radio-frequency_identification	41.92	47	7.51	Radio-frequency identification (RFID) is the wireless non-contact use of radio-frequency	0.23	{need=1, automobil	en	0.42	{need=0.0090461	<a href="http://en.wikipedia.org/wiki/Radio-frequency_identification">http://en.wikipedia.org/wiki/Radio-frequency_identification</a>		
6	1497974829	Home_automation	30.57	45	7.08	Home automation is the residential extension of building automation. It is	0.26	{watering=1, doors=	en	0.43	{watering=0.6164	<a href="http://en.wikipedia.org/wiki/Home_automation">http://en.wikipedia.org/wiki/Home_automation</a>		

### Edge Export CSV file contents

	A	B	C	D
1	Uuid	Name	sourceUuid	targetUuid
2	8e09c42e-4aa2-4	unknown	1330541765	1791286242
3	018705bd-83eb-4	unknown	-148834878	547583380
4	1a8f352d-17ba-4	unknown	-888536615	1081425223
5	115425d4-4f80-4	unknown	-351237360	1819717332
6	959365f3-6b3e-4	unknown	1330541765	-343454551
7	f0f511f2-393b-4f	unknown	1369247661	1791286242

## Condor 3 Wiki Evolution Example (continued)

9. Use File menu to create another Wiki Evolution dataset within the same database
10. Use Fetch > Fetch Wiki evolution. Suggested settings for the 7 form options:
  - a. Language: English
  - b. Query: "Internet of Things" Note: with double quotation marks
  - c. Article Selection: Add only one article: "Internet\_of\_Things"
  - d. Limitations: Start Date: Jul 11, 2014 End Date: Jul 18, 2014
  - e. Static/Dynamic: Static and Dynamic
  - f. Bidirectional: Uncheck
  - g. Content: No Content

Note: This took a few minutes to run and resulted in 235 article nodes and 2,952 links.

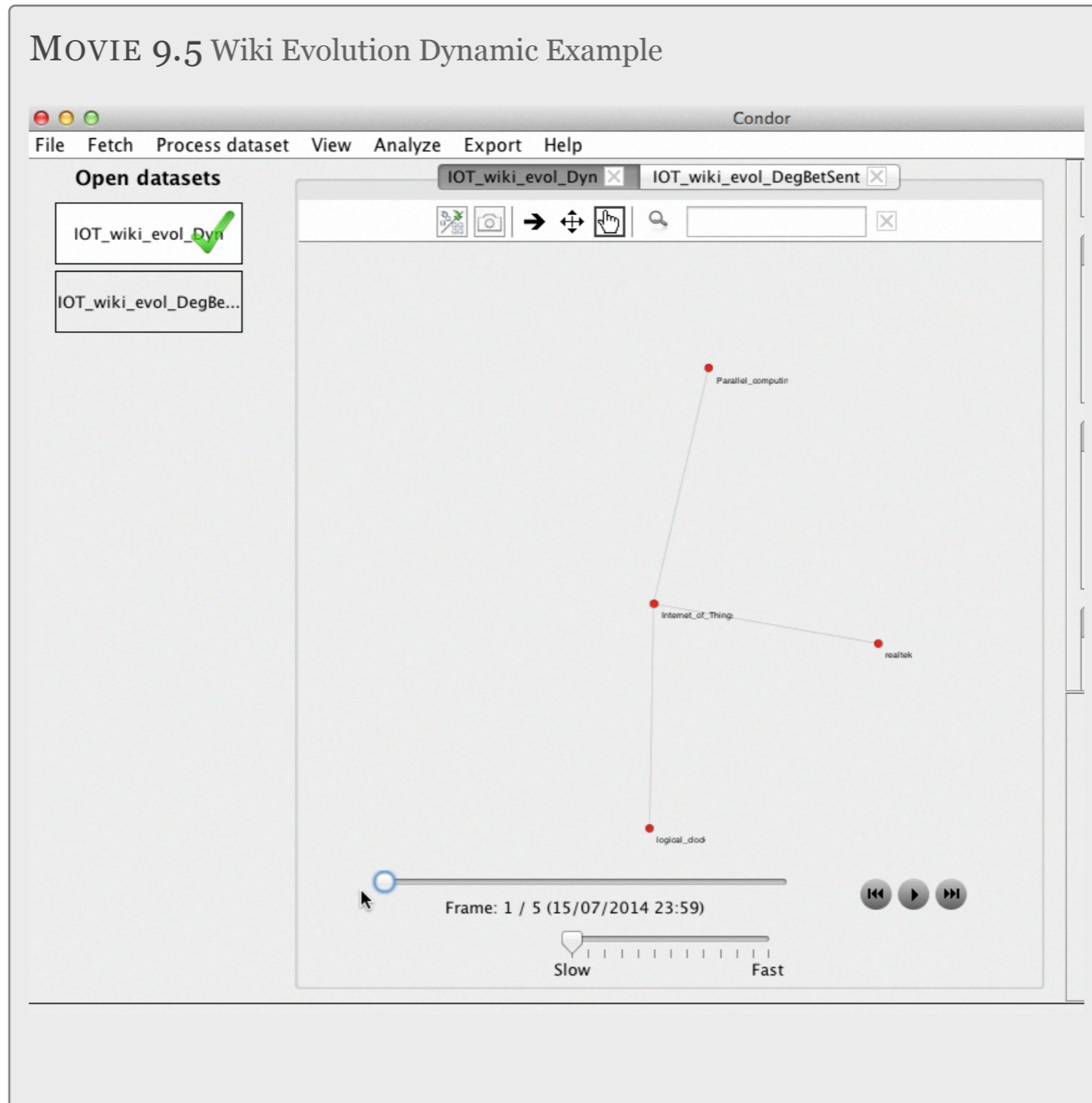
TIP: Wikipedia's API is very slow and a very popular topics will have thousand of article links, thus your search may take many hours to run. It is suggested to start with a short timeframe to obtain a result in a few minutes, then expand your time frame.

4. Use View > Create Dynamic View and use Condor 3 GUI controls to examine the graph
7. Use Condor 3 GUI Dynamic controls to examine the graph by day and view Node Labels by name
8. Export > Export CSV for actors and edges to examine with additional software.

# Condor 3 Wiki Evolution Example

## Internet of Things – July 15 to 19, 2014, Dynamic View

### MOVIE 9.5 Wiki Evolution Dynamic Example





# Wiki Categories Example

## WIKI CATEGORIES

Follow these suggested steps to Fetch and Visualize a Wiki Categories search in a Static View.

Wikipedia Categories (along with other features like cross-references, lists, and infoboxes) help you to find information, even if you don't know what exists or what it's called.

<http://en.wikipedia.org/wiki/Portal:Contents/Categories>

The screenshot shows the Condor application window with the 'Fetch' menu item highlighted in red. The menu options are:

- Fetch mailbox
- Fetch facebook profile
- Fetch web
- Fetch twitter
- Fetch twitter accounts
- Wiki evolution
- Fetch wikipedia categories

Three dialog boxes are shown to the right:

- 1. Dataset**: A dialog box titled 'Wiki category fetcher' with a 'Dataset' dropdown menu set to 'Wiki\_Categories' and 'Next >' and 'Cancel' buttons.
- 2. Language, Category, Depth**: A dialog box titled 'Wiki category fetcher' with 'Language of the dataset fields:' set to 'English', 'Category:' set to 'Diets', and 'Max depth (Root category is at depth 1, first pages and subcategories at depth 2):' set to '3'. It also has a checkbox for 'Pages or categories with several parents are added in multiple copies to result a directed tree:' and '< Back', 'Next >', and 'Cancel' buttons.
- 3. Process Message**: A dialog box titled 'Wiki category fetcher' showing 'Pages: 335, categories: 46, depth: 2' and '< Back' and 'Cancel' buttons.

**Note:**  
To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset

**Note:**  
For details on Wikipedia Categories:  
See:

<http://en.wikipedia.org/wiki/Portal:Contents/Categories>

# What are Wiki Categories?

First, Wikipedia is an encyclopedia of articles (<http://en.wikipedia.org/>) in many different languages.

Wikipedia Categories (along with other features like cross-references, lists, and infoboxes) help you to find information, even if you don't know what exists or what it's called. The following is a list of the 12 main categories of Wikipedia's coverage.

[edit](#) [watch](#)

## Wikipedia's contents: Categories

 <b>General reference</b>	 <b>History and events</b>	 <b>Philosophy and thinking</b>
 <b>Culture and the arts</b>	 <b>Mathematics and logic</b>	 <b>Religion and belief systems</b>
 <b>Geography and places</b>	 <b>Natural and physical sciences</b>	 <b>Society and social sciences</b>
 <b>Health and fitness</b>	 <b>People and self</b>	 <b>Technology and applied sciences</b>

See: <http://en.wikipedia.org/wiki/Portal:Contents/Categories>

# 12 Main Content Categories

<http://en.wikipedia.org/wiki/Portal:Contents/Categories>

***Society and social sciences*** is one of the 12 main content categories

[http://en.wikipedia.org/wiki/Portal:Contents/Categories#Society\\_and\\_social\\_sciences](http://en.wikipedia.org/wiki/Portal:Contents/Categories#Society_and_social_sciences)

***Linguistics*** is a subcategory of *Society and social sciences* and has 71 subcategories

<http://en.wikipedia.org/wiki/Category:Linguistics>

***Quantitative linguistics*** is a subcategory of *Linguistics* and has 21 pages

[http://en.wikipedia.org/wiki/Category:Quantitative\\_linguistics](http://en.wikipedia.org/wiki/Category:Quantitative_linguistics)

**Wikipedia's contents: Categories** edit watch

- General reference
- Culture and the arts
- Geography and places
- Health and fitness
- History and events
- Mathematics and logic
- Natural and physical sciences
- People and self
- Philosophy and thinking
- Religion and belief systems
- Society and social sciences**
- Technology and applied sciences

**Society and social sciences** (see in all page types) edit watch

Main categories: *Society and Social sciences*

**Society** · Activism · Business · Communication · Crime · Education · Ethnic groups · Family · Finance · Globalization · Government · Health · Home · Industries · Infrastructure · Labor · Law · Mass media · Military · Money · Organizations · Peace · Politics · Real estate · Rights · War

**Social sciences** · Anthropology · Archaeology · Cultural studies · Demographics · Economics · Information science · International relations · **Linguistics** · Media studies · Political science · Psychology · Public administration · Sexology · Social scientists · Sociology · Social work · Systems theory

## Category:Linguistics

From Wikipedia, the free encyclopedia

The main article for this category is *Linguistics*.

Wikimedia Commons has media related to *Linguistics*.

Library cataloging and classification  
Universal Decimal 8

### Subcategories

This category has the following 71 subcategories, out of 71 total.

- Linguistics lists (14 C, 39 P)
- Linguistics terminology (1 C, 17 P)

#### A

- Anthropological linguistics (4 P)
- Applied linguistics (7 C, 111 P)

#### L cont.

- Lexicography (5 C, 63 P)
- Lexicology (8 C, 22 P)
- Lexis (linguistics) (5 C, 25 P)
- Linguistic controversies (9 C, 25 P)
- Linguistic error (4 C, 11 P)
- Linguistic history (1 C, 3 P)

#### P cont.

- Pragmatics (1 C, 66 P)
- Psycholinguistics (6 C, 62 P)

#### Q

- Quantitative linguistics (21 P)**



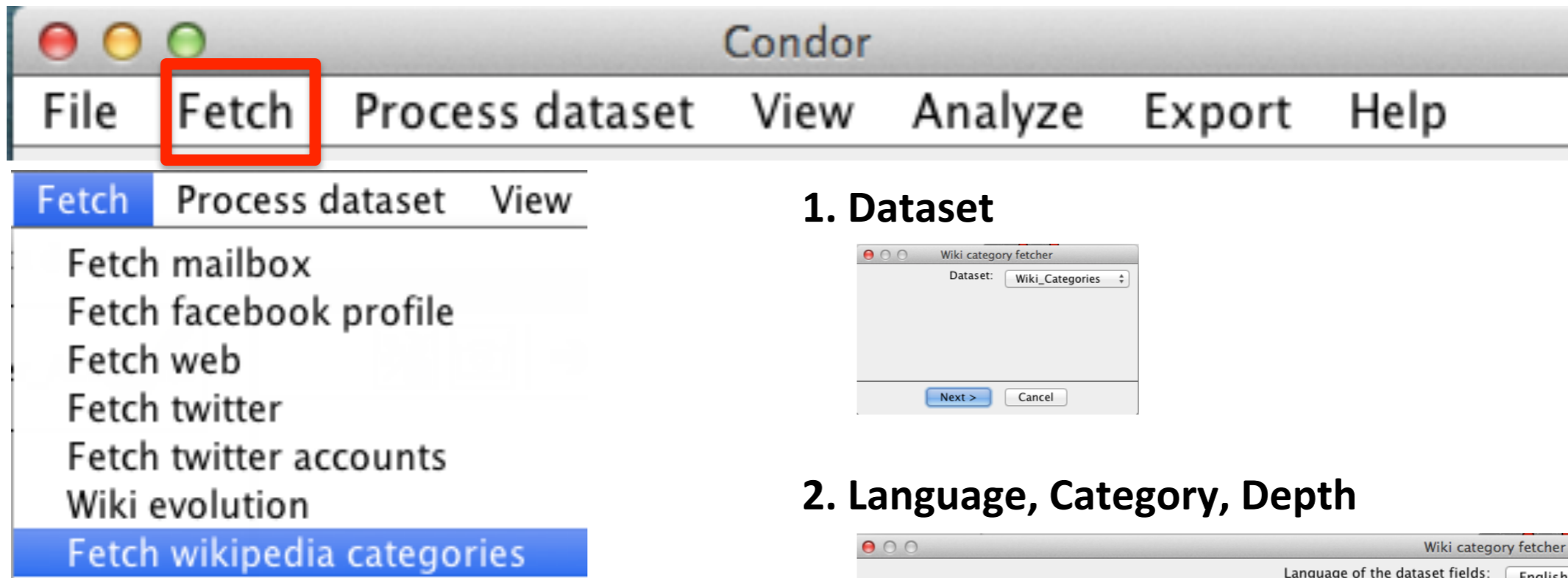
# Wiki Categories Fetch options include:

1. **Language:** three choices are available: English, German, Spanish
2. **Category: See:** <http://en.wikipedia.org/wiki/Portal:Contents/Categories>
3. **Depth:** The maximum number of steps from a category. The root category is at depth 1, first pages and subcategories are at depth 2.
4. **Directed Tree:** Check, if wish to have pages with several parents or multiple copies result in a directed tree.

TIP: Other helpful Wikipedia links are:

Category Tree: <http://en.wikipedia.org/wiki/Special:CategoryTree>

Searching: <http://en.wikipedia.org/wiki/Help:Searching>



Note:

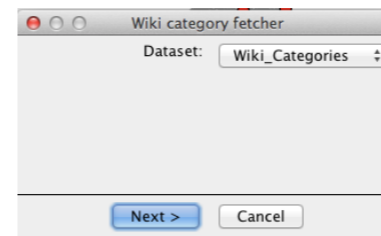
To use the Fetch Menu, first use the File Menu to create or switch to a Database and create or open a dataset

Note:

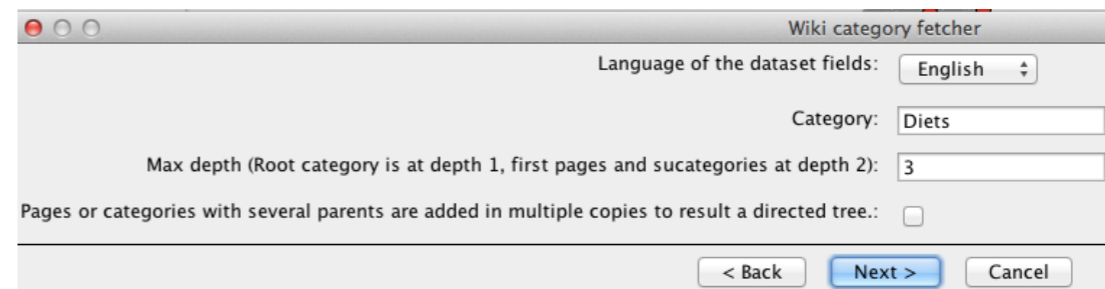
For details on Wikipedia Categories:  
See:

<http://en.wikipedia.org/wiki/Portal:Contents/Categories>

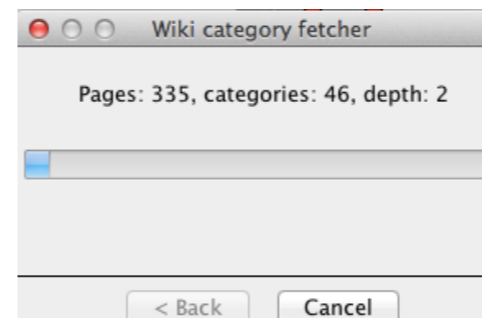
## 1. Dataset



## 2. Language, Category, Depth



## 3. Process Message



# Condor 3 Wiki Evolution Example

## Suggested Steps:

1. Start MySQL and Condor 3
2. Use File menu to create a Wiki Categories database and dataset
3. Use Fetch > Fetch Wiki evolution. Suggested settings for the 7 form options:
  - a. Language: English
  - b. Category: Linguistics
  - c. Depth: 3
  - d. Tree Structure: Check

Note: This took a few minutes to run and resulted in 23,322 nodes and 23,321 links

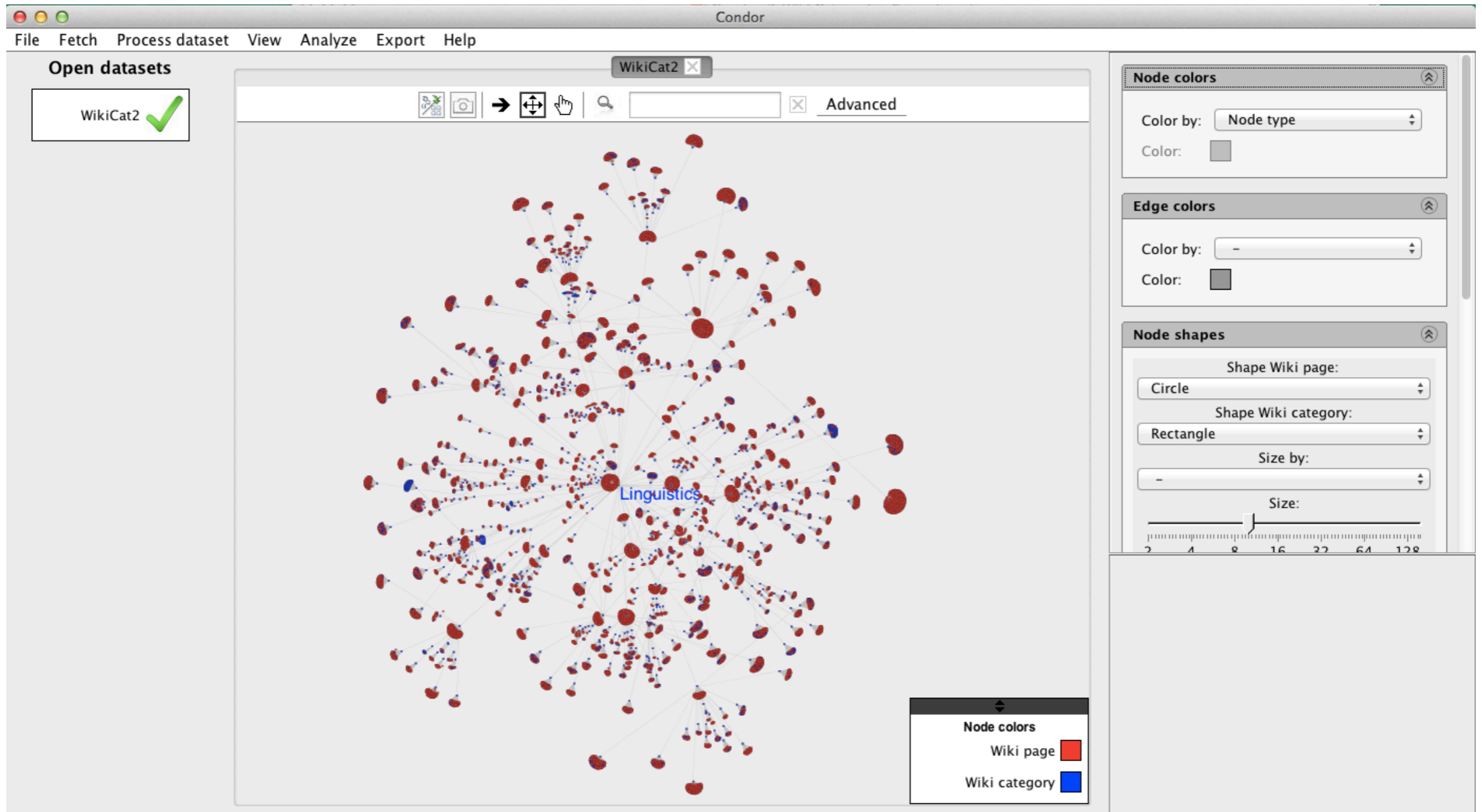
TIP: Review the Wikipedia Category structure to help determine starting category.

4. Use View > Create Static View and use Condor 3 GUI controls to examine the graph:

Note: There is no dynamic view because the links are not timestamped.
8. Export > Export CSV for actors and edges to examine with additional software.

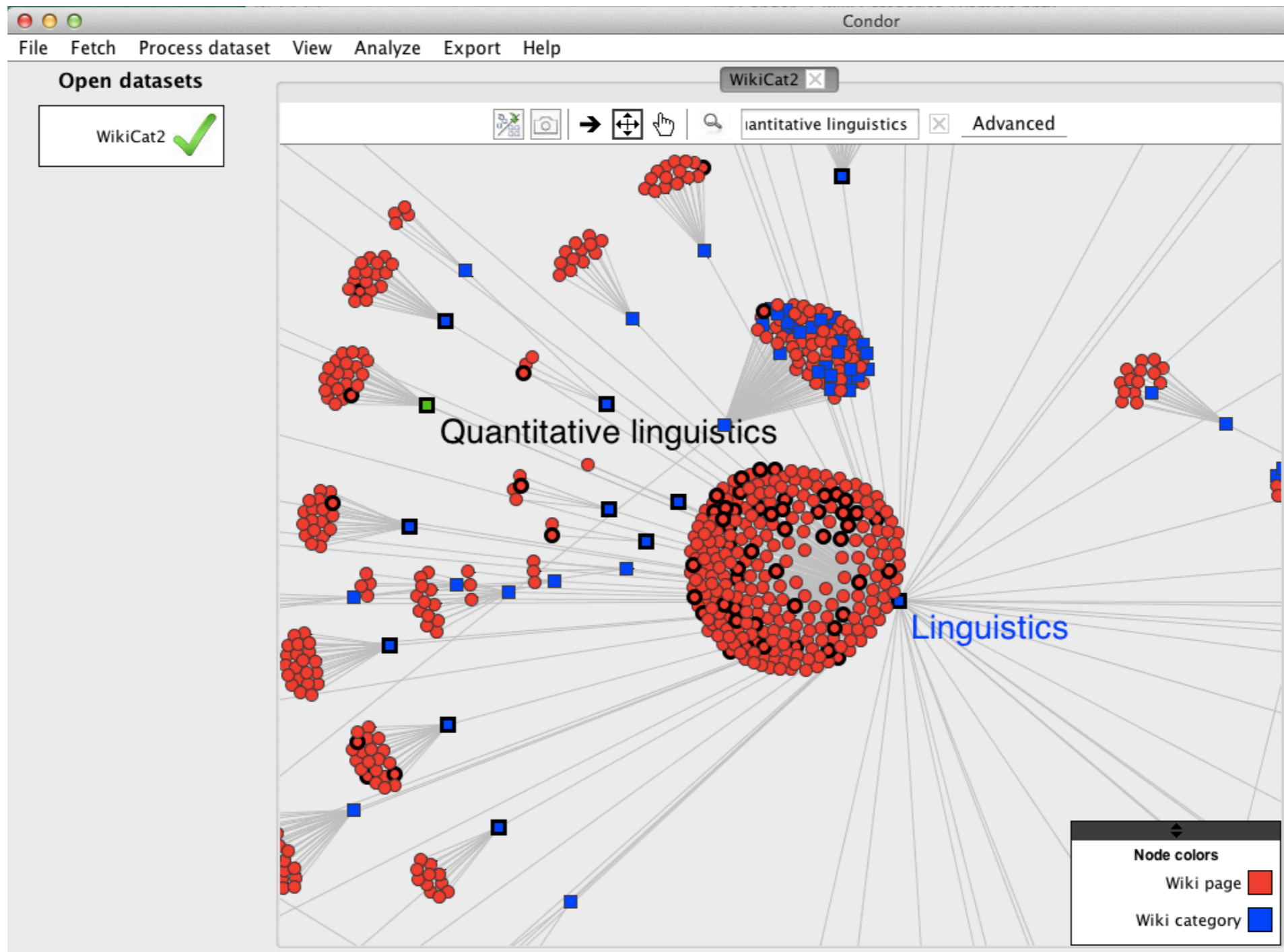
# Condor 3 Wiki Categories

## Example Category: Linguistics;



# Condor 3 Wiki Categories

## Example Category: Linguistics





# Condor 3 Wiki Categories

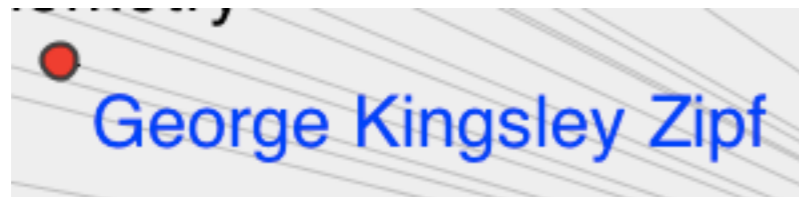
Example Category: Linguistics > Quantitative Linguistics, Pages Zoom-in

The screenshot displays the Condor 3 application window with the following components:

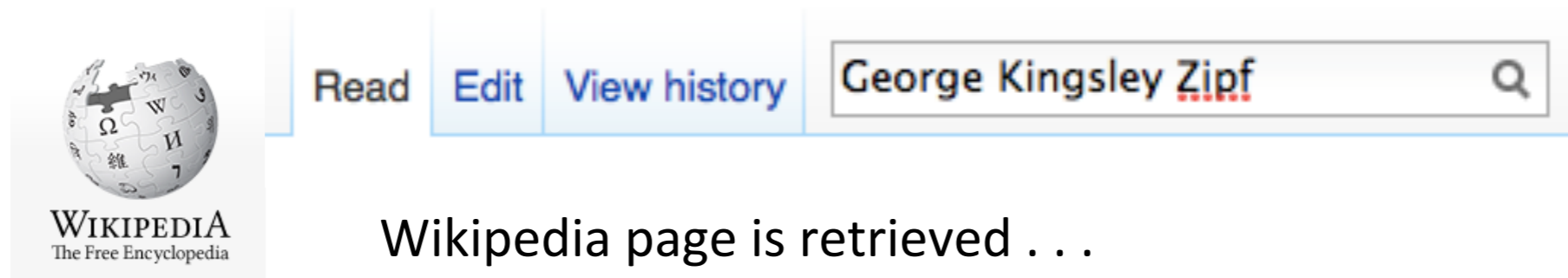
- Menu Bar:** File, Fetch, Process dataset, View, Analyze, Export, Help
- Open datasets:** WikiCat2 (checked)
- Search Bar:** Quantitative linguistics
- Network Graph:** A network of nodes and edges. The node "George Kingsley Zipf" is highlighted in blue. Other nodes include "Word lists by frequency", "Swadesh list", "Arabic Letter Frequency", "Frequency analysis", "General Service List", "Behaghel's laws", "William Palin Elderton", "Linguistic distance", "Augustus De Morgan", "Menzerath's law", "Zipf-Mandelbrot law", "Letter frequency Stylometry", "Lexicostatistics", "Glottochronology", "Zipf's law", "Quantitative linguistics", "Levenshtein distance", and "Semantic compression".
- Right-hand Sidebar:**
  - Shape Wiki category:** Rectangle, Size by: -, Size: 2 4 8 16 32 64 128
  - Node labels:** Label by: name, Font size: 2 4 8 16 32 64 128
  - Edge labels:** Label by: none, Font size: 2 4 8 16 32 64 128
  - Hovered node details:**

id	d29faee8-3849-36a0-8e...
name	George Kingsley Zipf
title	George Kingsley Zipf
language	en
pageid	768770
- Legend:** Node colors: Wiki page (red square), Wiki category (blue square)

TIP: To retrieve a Wikipedia Category/Sub-category or Page  
 In Condor, click on a node, then double click the name or title in the node display in the lower right corner. Next, Copy and Paste the node's Title into the Wikipedia Search Box and press enter and the page will be retrieved.



Hovered node details:	
id	d29faee8-3849-36a0-8
name	George Kingsley Zipf
title	<b>George Kingsley Zipf</b>
language	en
pageid	768770



Wikipedia page is retrieved . . .

**George Kingsley Zipf** (/ˈzɪf/;<sup>[1]</sup> 1902–1950), was an American linguist and philologist who studied statistical occurrences in different languages.<sup>[2]</sup> Zipf earned his bachelors, masters, and doctoral degrees from Harvard University, although he also studied at the University of Bonn and the University of Berlin.<sup>[2]</sup> He was Chairman of the German Department and University Lecturer (meaning he could teach any subject he chose) at Harvard University.<sup>[2]</sup> He worked with Chinese languages and demographics, and much of his effort can explain properties of the Internet, distribution of income within nations, and many other collections of data.<sup>[3]</sup>

**Contents** [hide]

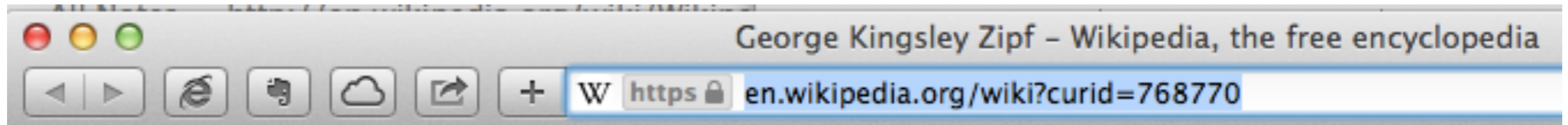
- Zipf's law
- See also
- Bibliography
- References

[http://en.wikipedia.org/wiki/George\\_Kingsley\\_Zipf](http://en.wikipedia.org/wiki/George_Kingsley_Zipf)

TIP: Or, use a node's "pageid" to retrieve a single page, by using this URL prefix and append the pageID. <https://en.wikipedia.org/wiki?curid=768770>



Hovered node details:	
id	d29faee8-3849-36a0-8
name	George Kingsley Zipf
title	George Kingsley Zipf
language	en
pageid	768770



Wikipedia page is retrieved . . .

The screenshot shows the Wikipedia article for George Kingsley Zipf. The page title is "George Kingsley Zipf" and the subtitle is "From Wikipedia, the free encyclopedia". The article text begins with "George Kingsley Zipf (/ˈzɪf/; 1902–1950), was an American linguist and philologist who studied statistical occurrences in different languages." A portrait of George Kingsley Zipf is shown, with a caption: "1917 photograph from the 1919 Annual of the Freeport High School, Freeport, Illinois". The page also includes a sidebar with navigation links and a table of contents.

[http://en.wikipedia.org/wiki/George\\_Kingsley\\_Zipf](http://en.wikipedia.org/wiki/George_Kingsley_Zipf)

# Condor 3 Wiki Categories

## Example Category: Linguistics

### Sample Actor and Edge Export .CSV files

#### Actor Export CSV file contents

A	B	C	D	E	F	G	H
Uuid	Name	language	pageid	title			
6d0b098c-c	16th-century linguists	en	28977475	16th-century linguists			
bd67bc47-4	16th-century philologists	en	28809404	16th-century philologists			
2e7975eb-7	17th-century linguists	en	28977477	17th-century linguists			
49fb8c44-0	17th-century philologists	en	21490321	17th-century philologists			
a5a5f59c-1	18th-century lexicographers	en	32733213	18th-century lexicographers			
a5a5f59c-1	18th-century lexicographers	en	32733213	18th-century lexicographers			
837617fc-1	18th-century linguists	en	28942425	18th-century linguists			
76cb4bff-6	18th-century philologists	en	32732245	18th-century philologists			
8b9493ea-1	1934 Turkish Resettlement Law	en	38607604	1934 Turkish Resettlement Law			
b730fbc0-4	1994 Anti-Urdu riots	en	36699953	1994 Anti-Urdu riots			
c51c90e2-f	19th-century linguists	en	28942426	19th-century linguists			
2c256da9-7	19th-century philologists	en	28942432	19th-century philologists			
3aab7b7d-1	1v1	en	4453989	1v1			
5296f8fa-4	2013 Anti-Cyrillic protests in Croatia	en	40891686	2013 Anti-Cyrillic protests in Croatia			
12245dd6-1	20th-century linguists	en	31383038	20th-century linguists			
11ba60df-5	20th-century Mesoamericanists	en	21152901	20th-century Mesoamericanists			
7775f12f-fc	20th-century philologists	en	31383037	20th-century philologists			
7775f12f-fc	20th-century philologists	en	31383037	20th-century philologists			
092bf3be-4	21st-century linguists	en	41152811	21st-century linguists			

#### Edge Export CSV file contents

	A	B	C	D
1	Uuid	Name	sourceUuid	targetUuid
2	4040d9ae-594d	unknown	7e5289c2-d3e2-3778-9f61-107a03a7cccb:0	a100ead5-c39a-3a08-9a41-c6077957ff03:0
3	5e59ddbba-aa47	unknown	259091db-8f04-3694-a957-ae54f8d013de:0	5f70b0e2-c2b9-38c8-ab27-e923a8a7861e:0
4	90b80185-c867	unknown	e9d9d998-2372-33be-98d7-40f2d8f6f08f:0	50d18fcc-721c-3937-9138-475328a713bb:0
5	0fb9c029-5cf3-4	unknown	7e5289c2-d3e2-3778-9f61-107a03a7cccb:0	4fe00e46-7f9e-3dc4-bd04-02c7a117c549:0
6	414aec6c-72d3-	unknown	cb8be761-45c8-398f-bcd3-b7c96c3b14e9:1	df9e1da7-6183-3f51-83b6-1f392dffa015:1
7	ee63496c-3356-	unknown	0db99d85-8452-3f03-b436-1188e4235721:0	733f36a2-0a9d-3229-b0d2-59e40dc7ebc6:0

TIP: Edit the Actors Category .csv file and create a Wiki\_Category\_page\_URL column by inserting a Wikipedia URL prefix (https://en.wikipedia.org/wiki?curid= ) column and merging it with the pageid, then copy and paste this Wiki\_Category\_page\_URL into your browser to retrieve any page from the file.

1. Insert two columns: URLprefix and Wiki\_Category\_page\_URL
2. Copy the URLprefix (https://en.wikipedia.org/wiki?curid= ) down the entire column
3. Insert a merge cell formula: D2&E2 into the Wiki\_Category\_page\_URL column and paste it down the entire column

	A	B	C	D	E	F	G
1	Uuid	Name	language	URLprefix	pageid	Wiki_Category_page_URL	title
2	fdcdee5c-9e:	't	en	https://en.wikipedia.org/wiki?curid=	33693469	=D2&E2	't
3	1bc3348d-47	't kofschip	en	https://en.wikipedia.org/wiki?curid=	2897823		't kofschip
4	1bc3348d-47	't kofschip	en	https://en.wikipedia.org/wiki?curid=	2897823		't kofschip

4. Next, select the entire Wiki\_Category\_page\_URL column and Edit > Copy and PASTE SPECIAL > paste VALUES to replace the merge cell formula with the actual value. Save the file.

The 'Paste Special' dialog box shows 'Values' selected. The spreadsheet shows the following data in column F:

	A	B	C	D	E	F	G
1	Uuid	Name	language	URLprefix	pageid	Wiki_Category_page_URL	title
2	fdcdee5c-9e:	't	en	https://en.wikipedia.org/wiki?curid=	33693469	https://en.wikipedia.org/wiki?curid=33693469	't
3	1bc3348d-47	't kofschip	en	https://en.wikipedia.org/wiki?curid=	2897823	https://en.wikipedia.org/wiki?curid=2897823	't kofschip
4	1bc3348d-47	't kofschip	en	https://en.wikipedia.org/wiki?curid=	2897823	https://en.wikipedia.org/wiki?curid=2897823	't kofschip

5. Copy the desired Wiki\_Category\_page\_URL and paste into your browser to retrieve the Wiki page

The browser shows the Wikipedia page for 'Category:16th-century linguists'. The URL in the address bar is https://en.wikipedia.org/wiki?curid=2897475. The page content includes the Wikipedia logo, navigation links (Main page, Contents), and the category title 'Category:16th-century linguists'.

Tip: Use Wikipedia's Special Page: **Category Tree** to become familiar with an area

<http://en.wikipedia.org/wiki/Special:CategoryTree>

Special page  Search

Create account Log in

**WIKIPEDIA**  
The Free Encyclopedia

Main page  
Contents  
Featured content  
Current events  
Random article  
Donate to Wikipedia  
Wikimedia Shop

Interaction  
Help  
About Wikipedia  
Community portal  
Recent changes  
Contact page

Tools  
Upload file  
Special pages  
Printable version

Languages

## Category tree

Enter a category name to see its contents as a tree structure. Note that this requires advanced [JavaScript](#) functionality known as [Ajax](#). If you have a very old browser, or have JavaScript disabled, it will not work. The number of pages displayed per category is limited to 200.

Discuss this special page at [Wikipedia talk:Special:CategoryTree](#). See also [mw:Extension:CategoryTree](#) and [mw:Extension talk:CategoryTree](#).

Show category tree

Category:  **Enter a Category**

Mode:

Namespace:

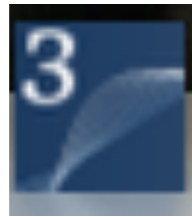
**Click Show Tree**

*Parents: [Anthropology](#) | [Commons category with local link same as on Wikidata](#) | [Humanities](#) | [Language](#) | [Social sciences](#)*

▼ **Linguistics (71 C, 260 P)**

- ▶ [Linguistics lists \(14 C, 39 P\)](#)
- ▶ [Linguistics terminology \(1 C, 17 P\)](#)
- ▶ [Anthropological linguistics \(4 P\)](#)
- ▶ [Applied linguistics \(7 C, 111 P\)](#)

# Condor 3 Updates



The purpose of this Chapter is to document recent updates. Updates are in chronological order.

**Users may Login to the  
Condor License Manager at:**

<http://guardian.galaxyadvisors.com/guardian/>

A Welcome Messages appears.

Enter your Login Username and Password  
and Click Sign in.

## Login

**Username**

**Password**

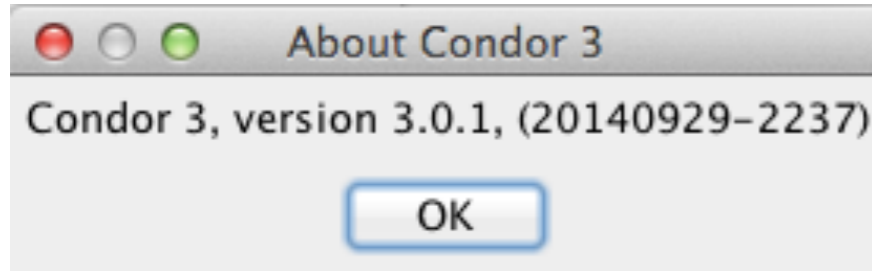
[Sign up](#)

[Reset password](#)

**Condor-3.0.1.jar release dated: 9/29/2014 Build 2237**

was an early version.

The Help menu About option did not display your license key and did not have an “Unregister computer” menu option.



Note: Users who are using the early Condor-3.0.1.jar dated 9/29/2014 will need to download the later version dated 10/19/2014 in order to install the new release of Condor-3.0.2.jar dated 12/19/2014. Use this link to download the 10/19/2014 Condor-3.0.1.jar to replace your earlier 9/29/2014 release.

<http://91.250.82.108:8080/condor/Condor-3.0.1.jar>

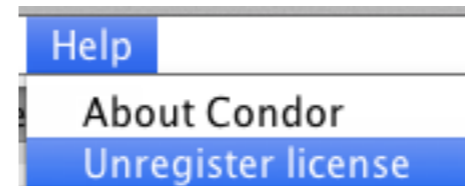
Otherwise when starting the Condor-3.0.2.jar it will give a message that your license key is already in use. By replacing the Condor-3.0.1.jar with the later release dated 10/19/2014 it will resolve this error.

To check what Condor version you are running, click on the Help menu then About to see the version date and build number.

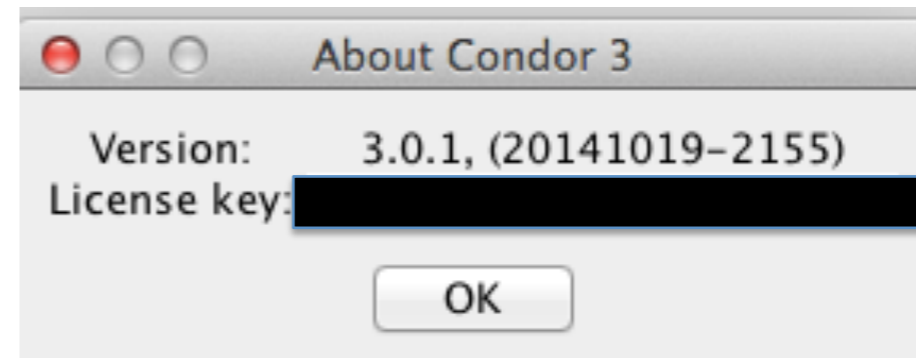
If you are running Condor-3.0.1.jar dated 10/19/2014 you should be able to start the Condor-3.0.2.jar without any problem.

**Condor-3.0.1.jar release dated: 10/19/2014 Build 2155**

does display your License Key and does have the “Unregister license” menu option under the Help menu.



The “Unregister license” option enables users to move their Condor License Key to another computer.





**Condor 3.0.2.jar release dated: 12/19/2014 Build 1111 had 6 notable changes as follows:**

1. NEW File > MySQL Import: experimental import from MySQL databases with node and edge tables
2. NEW network visualization coloring for nodes and edges – Color by Top Value Properties
3. IMPROVED Export > Export CSV: now includes the fields: Starttime and Endtime
4. IMPROVED File > Import CSV: adds more flexibility in field selection and configuration
5. IMPROVED text wrapping for easy reading of content when right clicking on a node or edge to show details
6. IMPROVED social network analysis algorithms and visualization performance using more parallelism

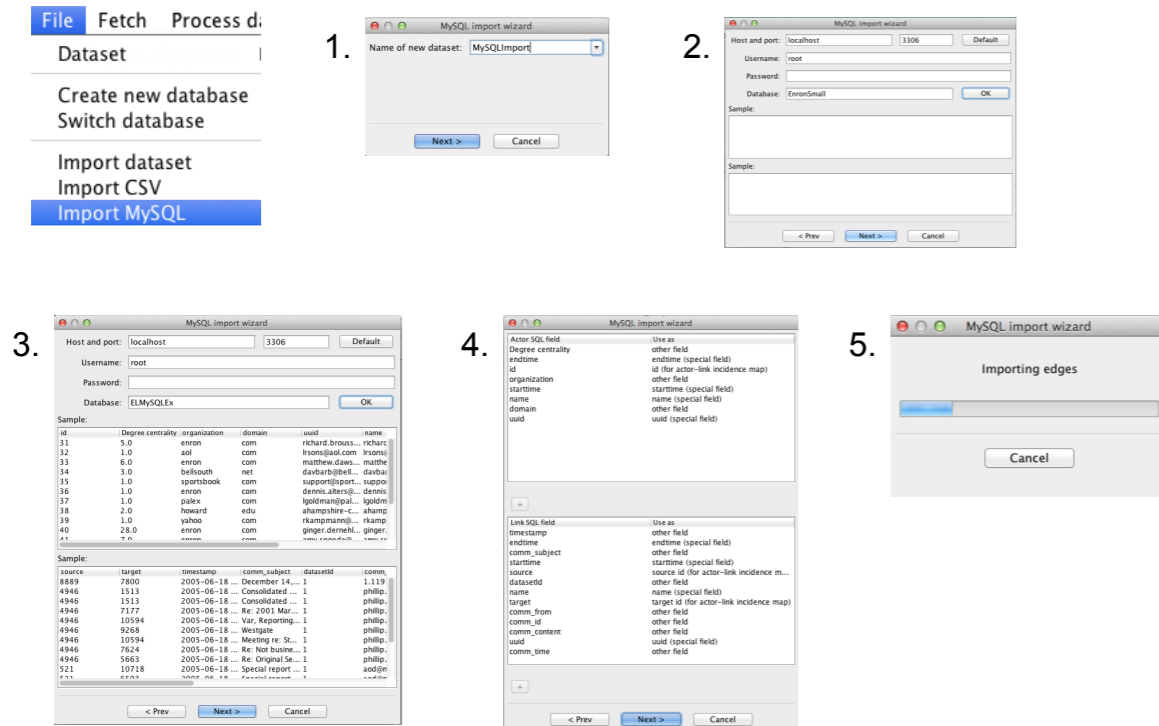
**NEW File > Import MySQL**

Tip: Open an existing Condor 3 Database/Dataset and Export it using the Export > Export MySQL Dump and then use the File > Import MySQL.

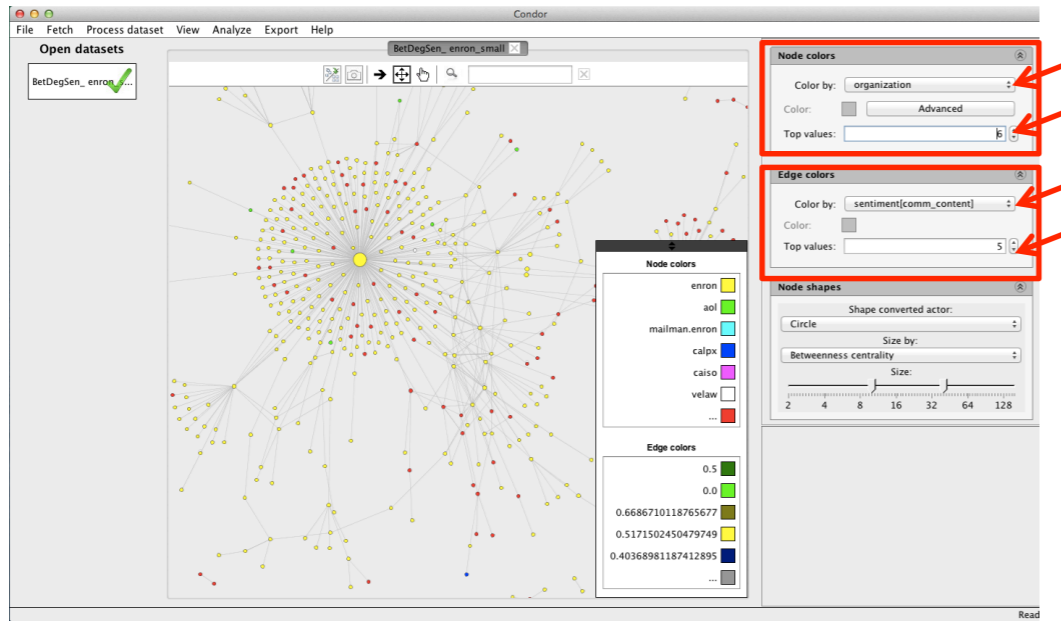
**Suggested Steps:**

1. Use MySQL Workbench to identify the existing Condor 3 Database “characterset” and “collation,” such as, latin1 and latin1\_swedish\_ci
2. Start Condor 3 and open the existing Database/dataset and Export using the Export > Export MySQL to a “name.sql” file
3. Use MySQL Workbench to create a new Database and import the “name.sql” file and set the “characterset” and “collation” with the previous values  
**Note: Use this database/dataset tables to access node or edge fields, because they are no longer in the default blob format.**
4. Use Condor 3 to create a new database and then import the MySQL file created in step 3 with the File > Import MySQL menu and follow the prompts.

**NEW File > Import MySQL**



## NEW network visualization coloring for nodes and edges Color by Top Value Properties



## IMPROVED Export > Export CSV Now includes the Actor and Link fields: Starttime and Endtime



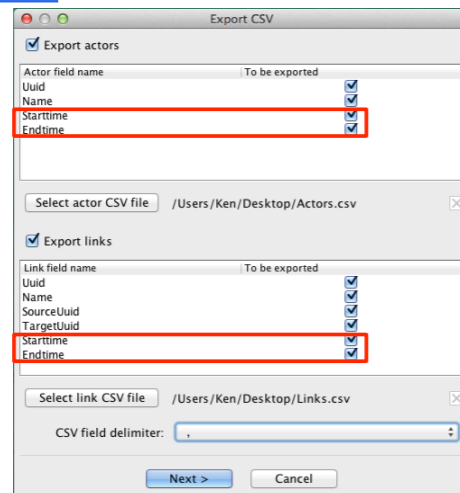
### Sample Actors.csv output with Starttime and Endtime fields

	A	B	C	D
1	Uuid	Name	Starttime	Endtime
2	101	Star_01	2014-10-10T00:00:00.000-07:00	2014-10-10T00:00:00.000-07:00
3	102	Star_02	2014-10-10T00:00:00.000-07:00	2014-10-10T00:00:00.000-07:00
4	103	Star_03	2014-10-10T00:00:00.000-07:00	2014-10-10T00:00:00.000-07:00
5	104	Star_04	2014-10-10T00:00:00.000-07:00	2014-10-10T00:00:00.000-07:00
6	105	Star_05	2014-10-10T00:00:00.000-07:00	2014-10-10T00:00:00.000-07:00
7	106	Star_06	2014-10-10T00:00:00.000-07:00	2014-10-10T00:00:00.000-07:00
8	107	Star_07	2014-10-10T00:00:00.000-07:00	2014-10-10T00:00:00.000-07:00

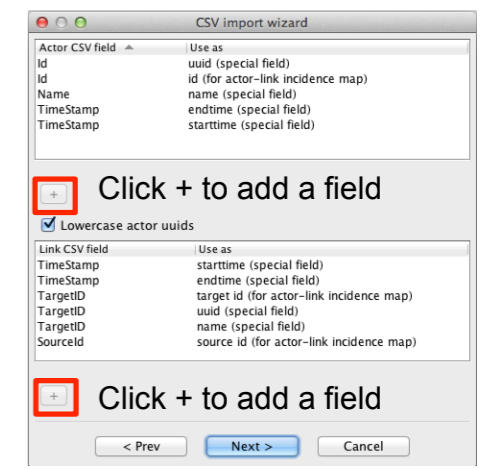
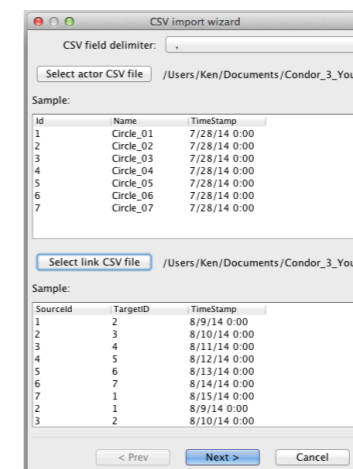
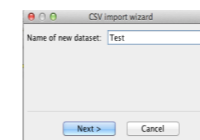
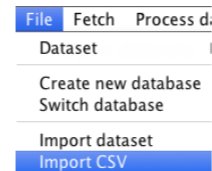
### Sample Links.csv output with Starttime and Endtime fields

	A	B	C	D	E	F
1	Uuid	Name	SourceUuid	TargetUuid	Starttime	Endtime
2	04b6cf4f-47ff-48bc-961f-125bff49e88a	unknown	101	107	2014-10-10T00:00:00.000-07:00	2014-10-10T00:00:00.000-07:00
3	077c9132-0705-4328-9403-a209e128ec79	unknown	101	104	2014-10-10T00:00:00.000-07:00	2014-10-10T00:00:00.000-07:00
4	244d2ead-db3f-4dc2-868b-3c668f898a7c	unknown	101	105	2014-10-10T00:00:00.000-07:00	2014-10-10T00:00:00.000-07:00
5	33b7d13f-16c4-4c37-964d-d66e0c7b1bea	unknown	101	102	2014-10-10T00:00:00.000-07:00	2014-10-10T00:00:00.000-07:00
6	50a7dd97-3765-4365-a367-47b6f4ab6fc3	unknown	101	106	2014-10-10T00:00:00.000-07:00	2014-10-10T00:00:00.000-07:00
7	ddb3d2b3-ed8f-47fa-8c69-96601618adde	unknown	101	103	2014-10-10T00:00:00.000-07:00	2014-10-10T00:00:00.000-07:00

## IMPROVED Export > Export CSV Now includes the Actor and Link fields: Starttime and Endtime



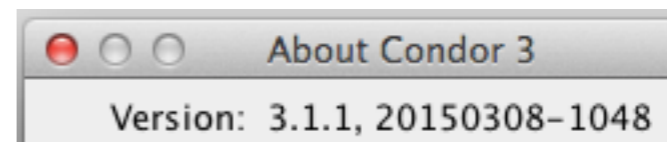
## IMPROVED File > Import CSV: adds more flexibility in field selection and configuration



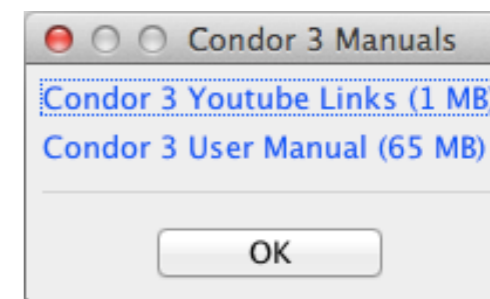
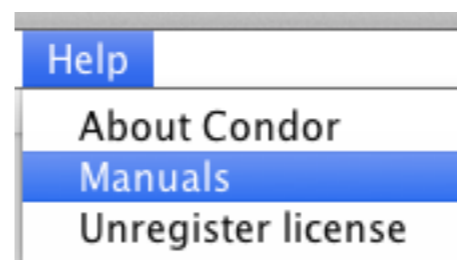
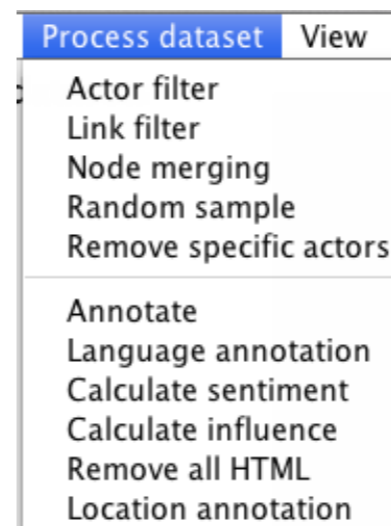
**IMPROVED social network analysis algorithms and visualization performance using more parallelism**

- Annotations calculate faster
- Graphical user interface visualizations have improved performance

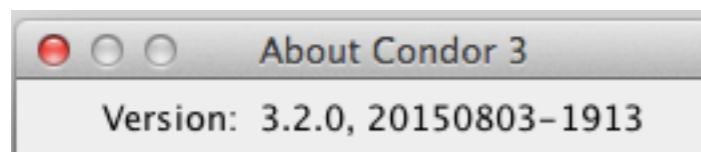
**Condor 3.1.1.jar released date 03/08/2015 Build 1048 had three notable updates as follows:**



1. NEW Process dataset Actor and Link filtering options
2. NEW Process dataset Location annotation
3. NEW Help Manuals download links



## Condor 3.2.0 .jar released date 08/03/2015 Build 1913 had these notable updates as follows:



### Nine New Features or Options include:

1. [Fetch] Microsoft Outlook Exchange Email import with Exchange Web Services (EWS) option
2. [Fetch] Microsoft Outlook Exchange Calendar import
3. [Process dataset] Endpoint based edge filters
4. [File] Imports numbers from CSV
5. [File] Optional random uuid generation for CSV import
6. [View] Temporal social surface view
7. [Export] Export time series for: Contribution index, AWVCI, betweenness centrality, betweenness oscillation, graph density, and turn taking
8. [Process dataset] Sentiment analysis for Italian and Portuguese
9. [Analyze] Collapse by original dataset

### Four Improvements include:

1. [View] Better adjacency matrix with heat map and labeling options
2. [View] Labels in scatter plot
3. Faster graph layouts
4. Better UTF-8 support for Simplified Chinese

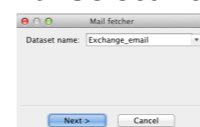
## 1. [Fetch] Microsoft Outlook Exchange Email import with EWS option



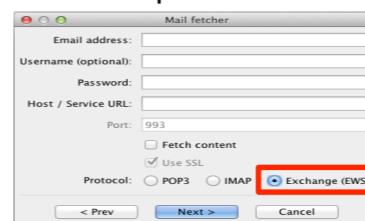
a. Fetch > Fetch mailbox



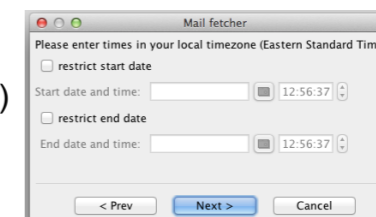
b. Select Dataset (New/Open)



c. Select Exchange (EWS) And complete form



d. Select Start/End Date Restrictions



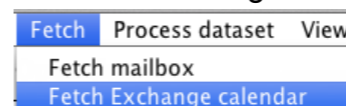
e. Select desired folders



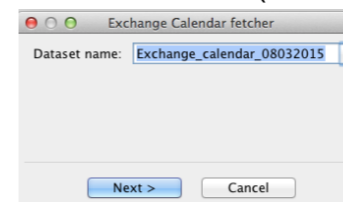
## 2. [Fetch] Microsoft Outlook Exchange Calendar import



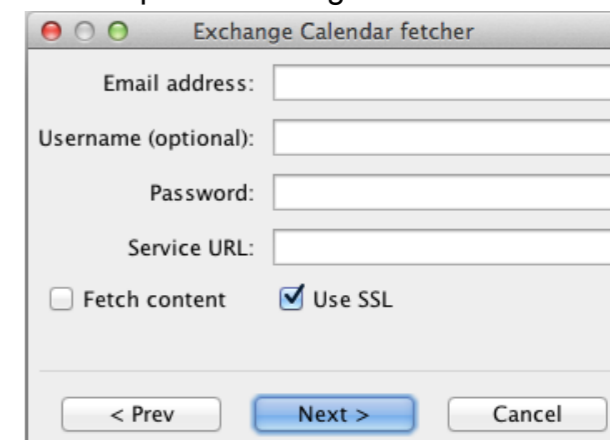
a. Fetch > Exchange calendar



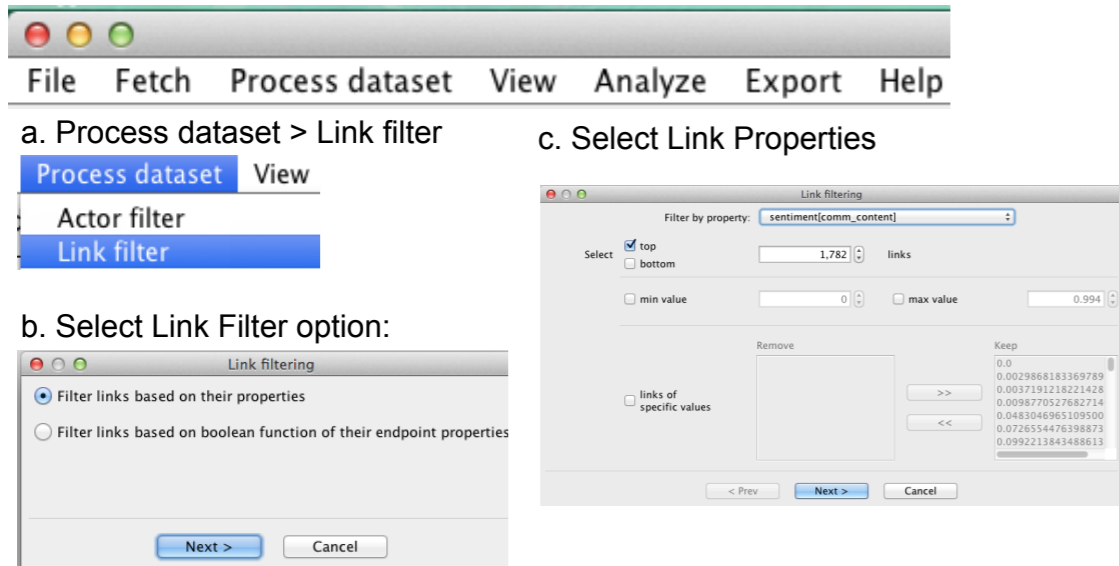
b. Select Dataset (New/Open)



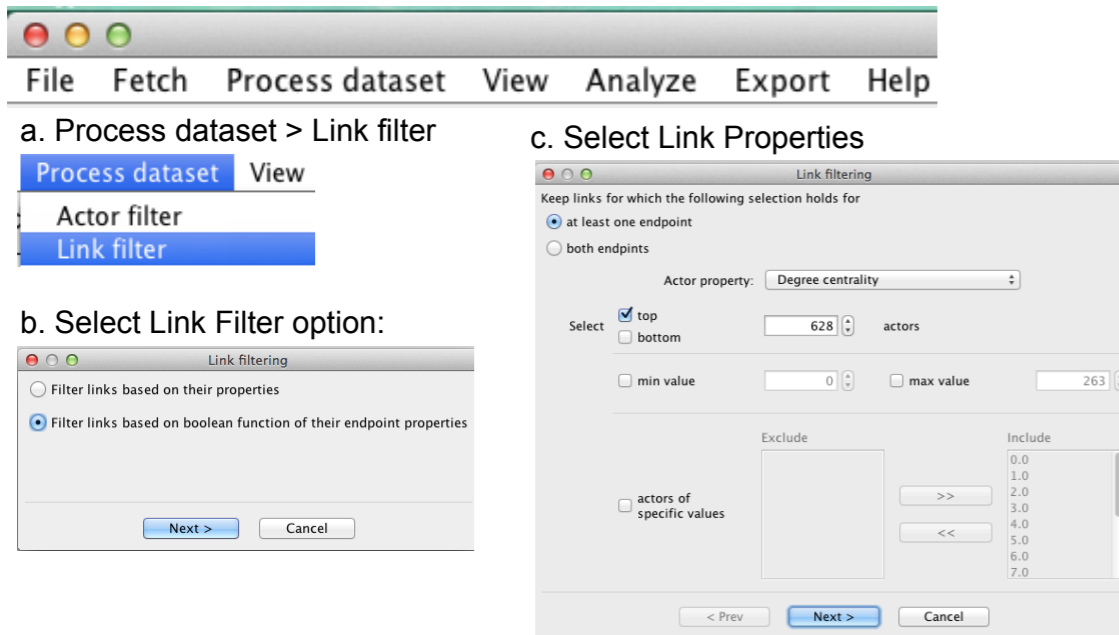
c. Complete Exchange Calendar form



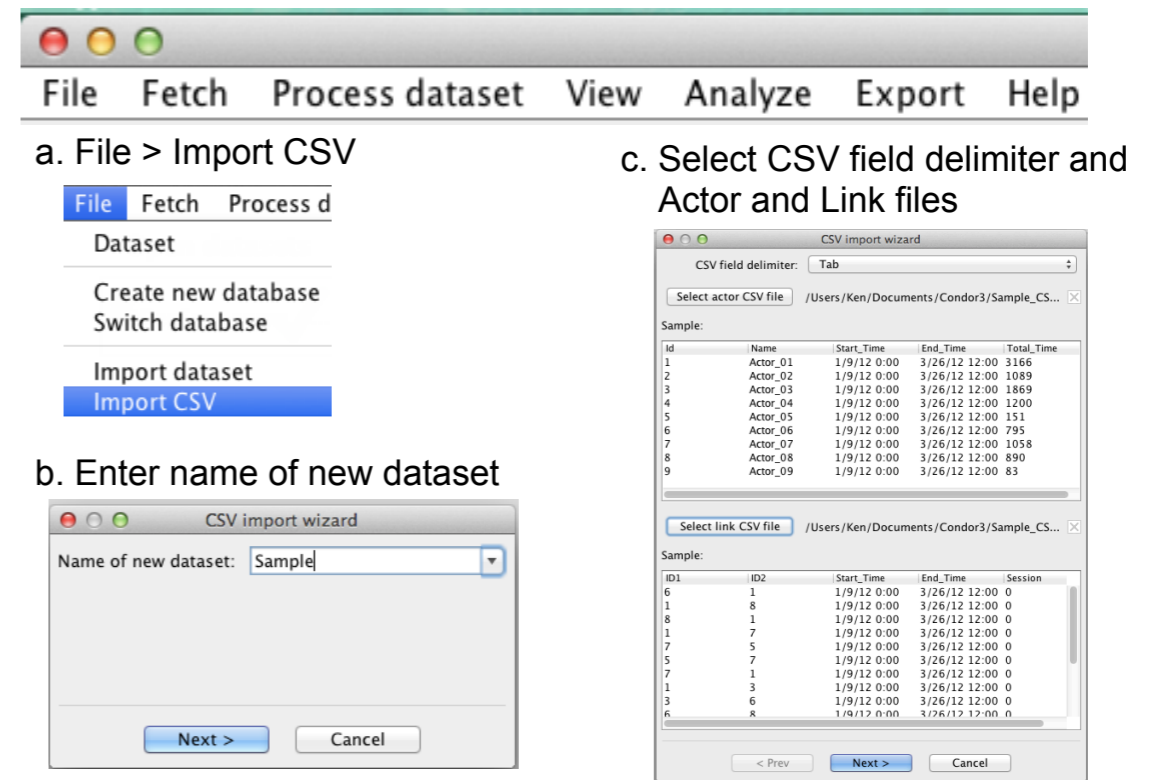
### 3. [Process dataset] Endpoint based edge filters (*Link Properties Option*)



### 3. [Process dataset] Endpoint based edge filters (*Boolean Option*)

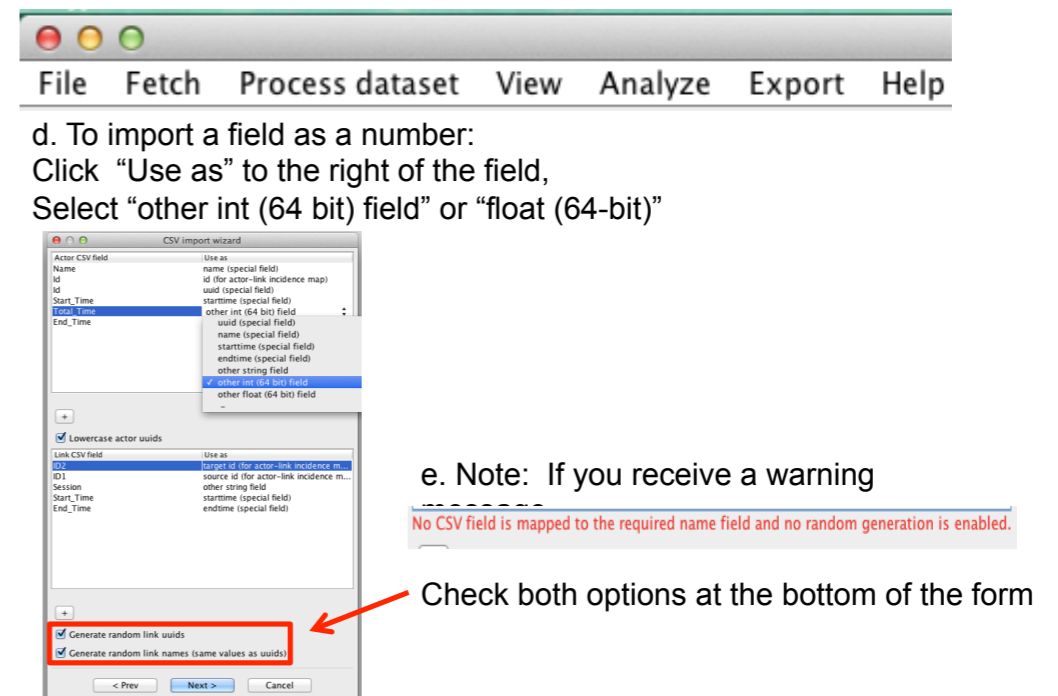


### 4. [File] Imports numbers from CSV



### 4. [File] Imports numbers from CSV (continued)

### 5. [File] Optional random uuid generation for CSV import

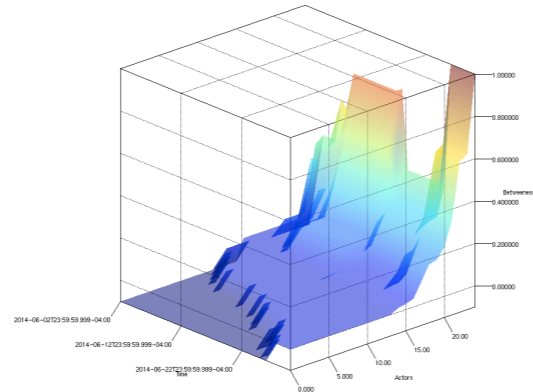


## 6. [View] Temporal social surface view



### a. View > Create temporal social surface

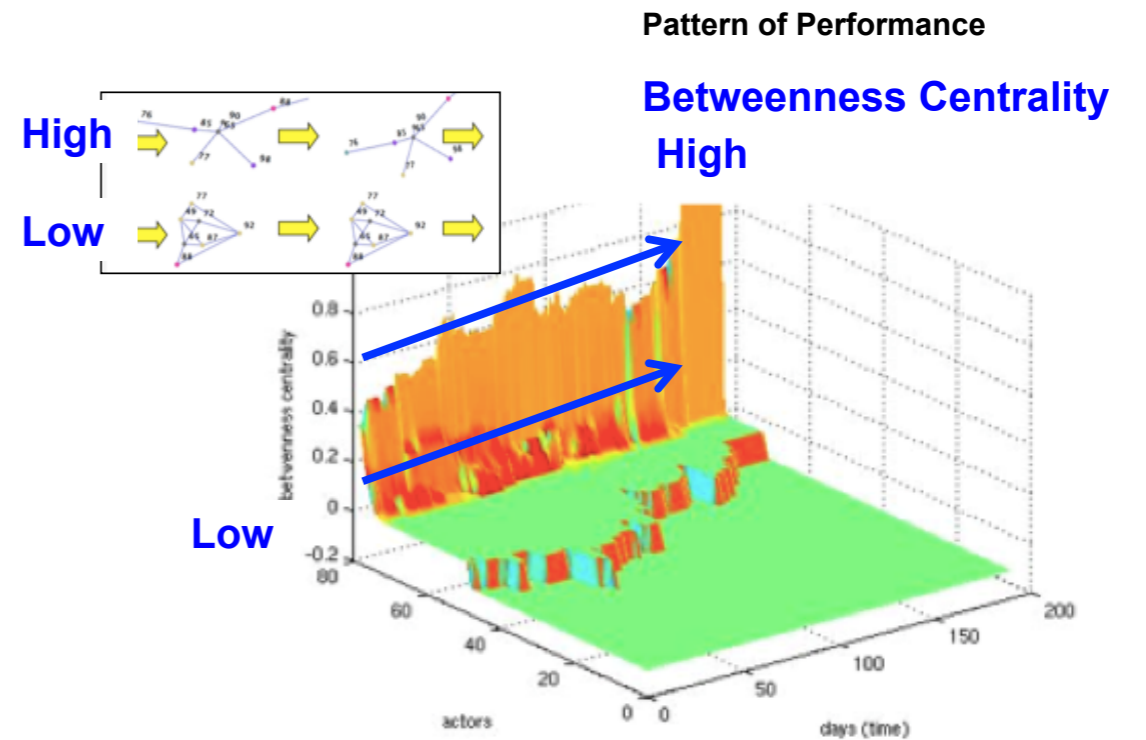
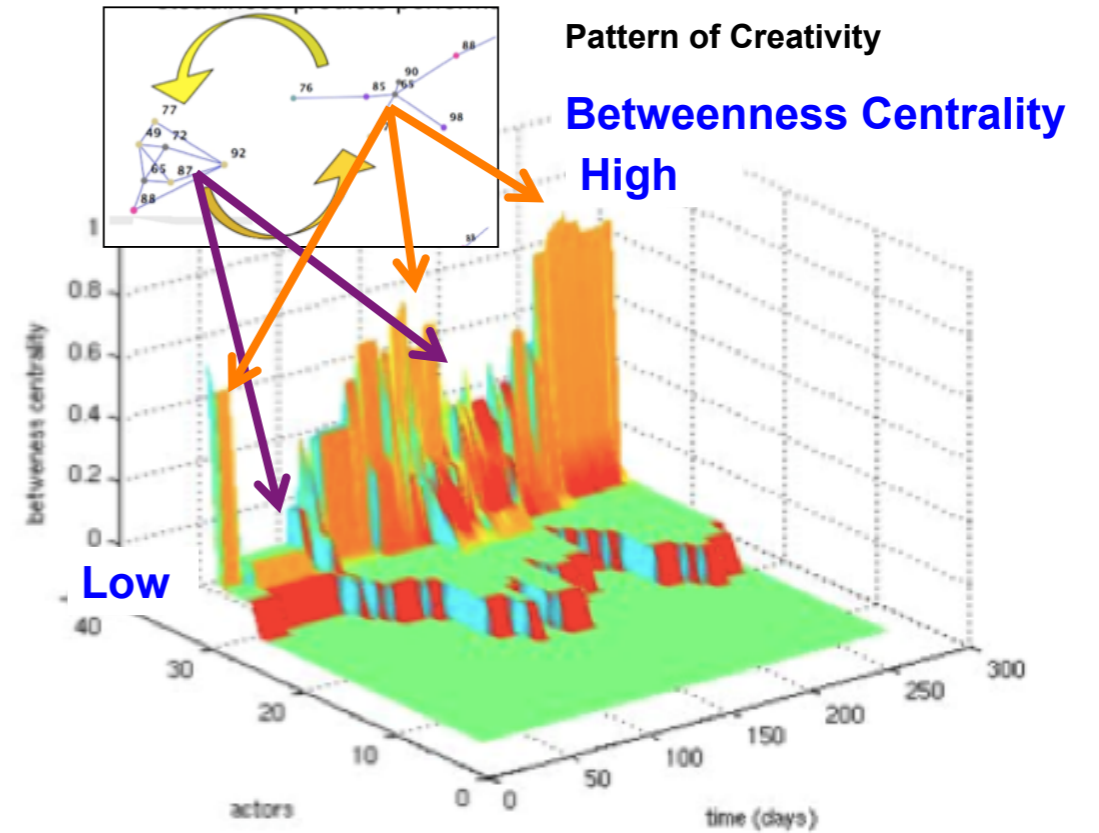
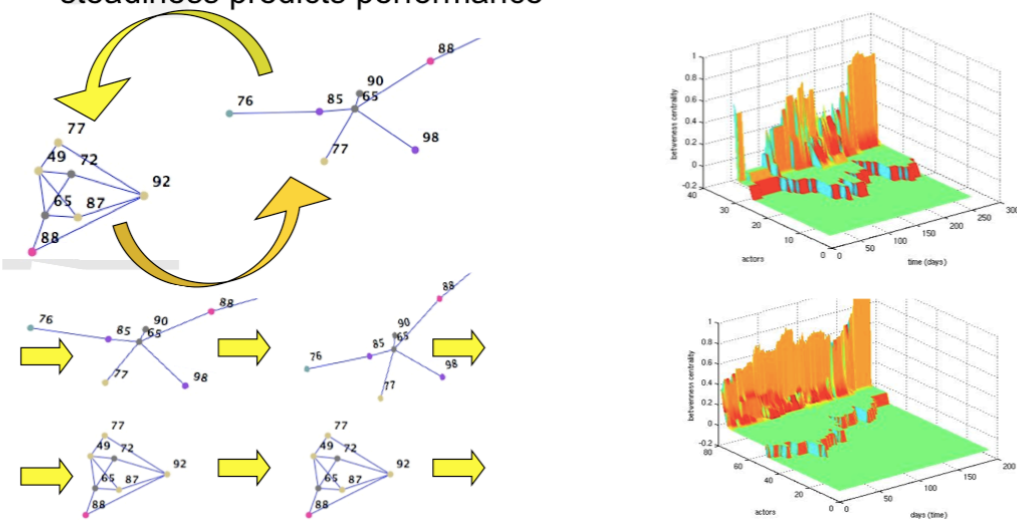
- View Analyze Export Help
- Create static view
- Create dynamic view
- Create word cloud view
- Create geographical view
- Actor scatter plot
- Adjacency matrix
- Group centrality measures
- Activity over time
- Sentiment over time
- Word usage over time
- Create temporal social surface view



See: Kidane, Y. Gloor, P. Correlating temporal communication patterns of the Eclipse open source community with performance and creativity, Computational & Mathematical Organization Theory. Volume 13, Issue 1 (March 2007), ISSN:1381-298X, 17 - 27, 2007

## Communication structure predicts creativity and performance of programmers

- 34 Eclipse opensource programmer teams
- Bugs and features as proxy for performance and creativity
- Oscillation in temporal communication pattern predicts creativity, steadiness predicts performance

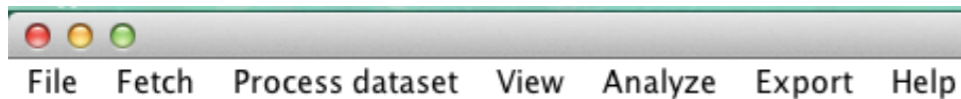


## How can you identify the actors in the 3D Temporal Social Surface View?

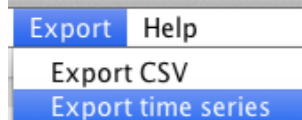
1. Process dataset > Annotate > Centrality > Betweenness Centrality
  2. Export > Time series > Betweenness Centrality
  3. Select CSV file (create a name)
  4. Export data (Select Time Unit, Start/End dates, With or Without History)
  5. Open saved.CSV file
  6. Create a row sum variable for the Betweenness Centrality for each actor
  7. Sort the row sum variable from largest to smallest
- Result is listing of actors ranked by Betweenness Centrality

	A	B	C	D	E	AF
1	Uuid	Name	BC on 02/06/2014 23:59	BC on 03/06/2014 23:59	BC on 04/06/2014 23:59	BC_Row_Sum
2	96055341	actor_08	0.04	0.18	0.15	3.76
3	-265474510	actor_13				2.43
4	-114123238	actor_21	0.00	0.00	0.00	1.72
5	-2107329093	actor_04	0.00	0.00	0.00	1.47
6	-674382948	actor_17	0.00	0.00	0.00	1.06
7	1158195386	actor_23		0.00	0.00	0.99
8	134844707	actor_11				0.79

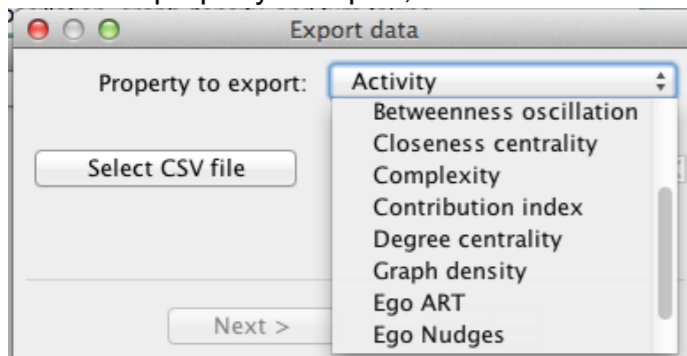
7. [Export] Export time series for: Contribution index, AWVCI, betweenness centrality, betweenness oscillation, graph density, and turn taking



- a. Export > time series

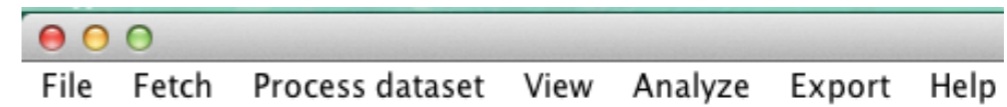


- b. Select property to export, then select CSV file.

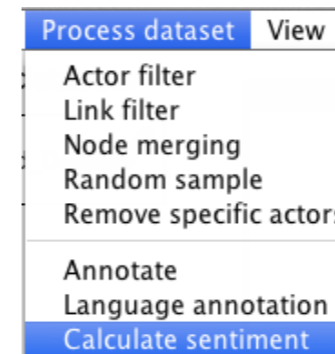


Note:  
First, use Process dataset  
to calculate desired  
measure to export.

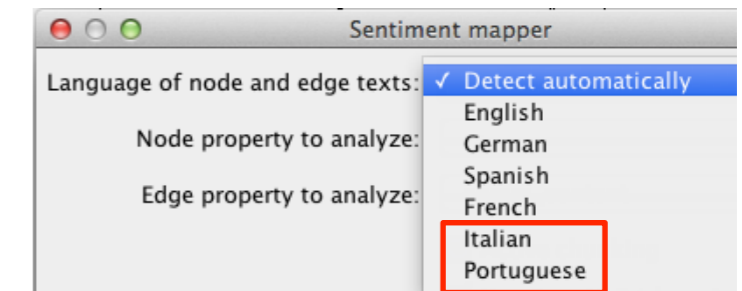
## 8. [Process dataset] Sentiment analysis for Italian and Portuguese



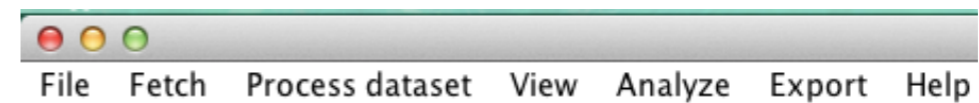
- a. Process dataset > Calculate sentiment



- b. Italian and Portuguese are new selections.



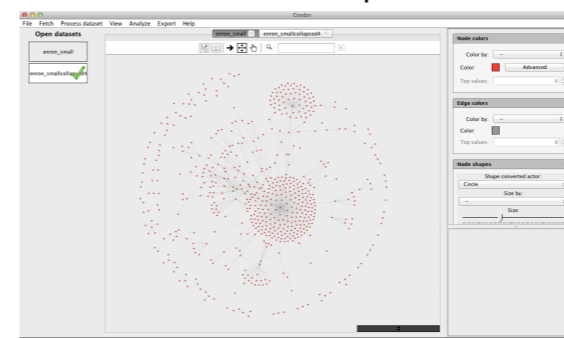
## 9. [Analyze] Collapse by original dataset



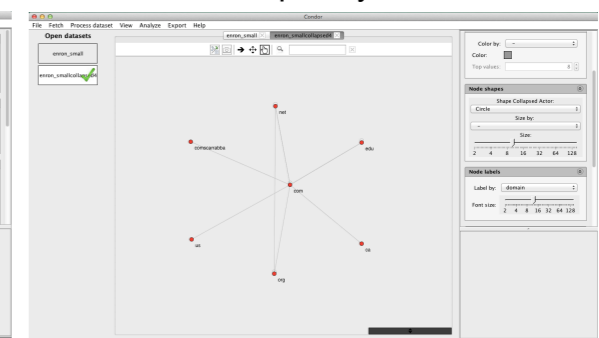
- a. Analyze > Create collapsed graph



Before Collapse



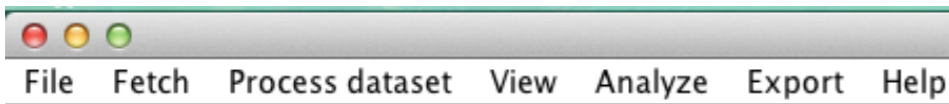
After Collapse by Domain



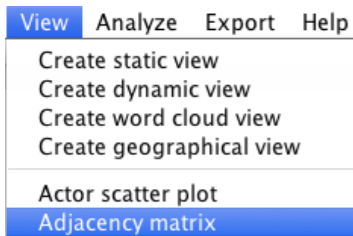
## Four Improvements include:

- 1.[View] Better adjacency matrix with heat map and labeling options
- 2.[View] Labels in scatter plot
- 3.Faster graph layouts
- 4.Better UTF-8 support for Simplified Chinese

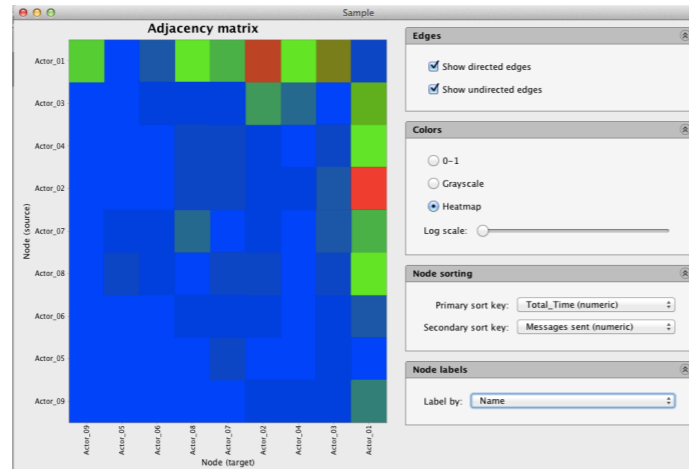
### 1. [View] Better adjacency matrix with heatmap and labeling options



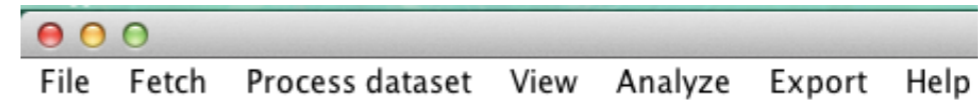
#### a. View > Adjacency matrix



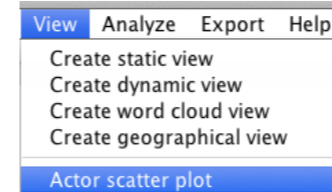
Note: New Heatmap option and Node Labels, Drag mouse over nodes to display labels



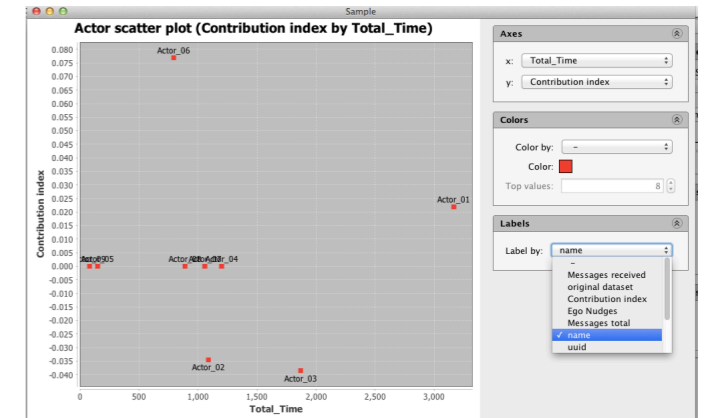
### 2. [View] Labels in scatter plot



#### a. View > Actor scatter plot



Note: New Scatter Plot Label options



### 3. Faster graph layouts



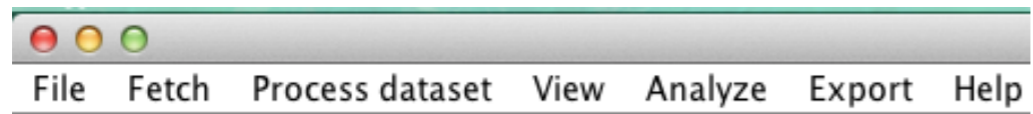
#### View Analyze Export Help

Create static view  
Create dynamic view

Faster Layouts



#### 4. Better UTF-8 support for Simplified Chinese



**UTF-8** means: *Universal Transformation Format—8-bit*.

**UTF-8** is a character encoding capable of encoding all possible characters.

Condor 3 now better supports Simplified Chinese throughout the entire program.

For more information on UTF-8 see:

<https://en.m.wikipedia.org/wiki/UTF-8>

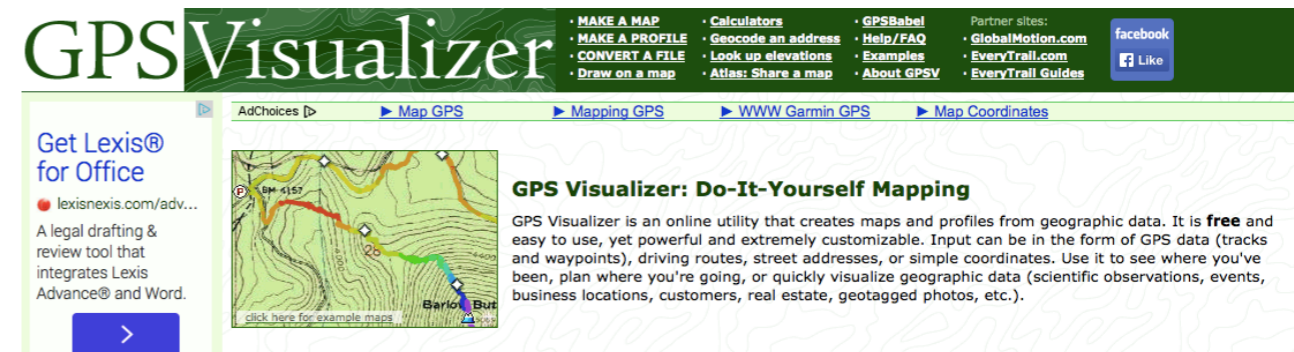
# Geocoding with Twitter Fetch

Condor 3's Fetch > Fetch Twitter option enables the user to fetch tweets restricted to a given geolocation.

This chapter explains how to use the website:

<http://www.gpsvisualizer.com/geocoder/>

to find a city's geocodes, map it and draw a range ring around it to have a sense of the geographic coverage of your Twitter Fetch. It also explains how to obtain a free Bing Map key to obtain 5 or more city geocodes at one time.

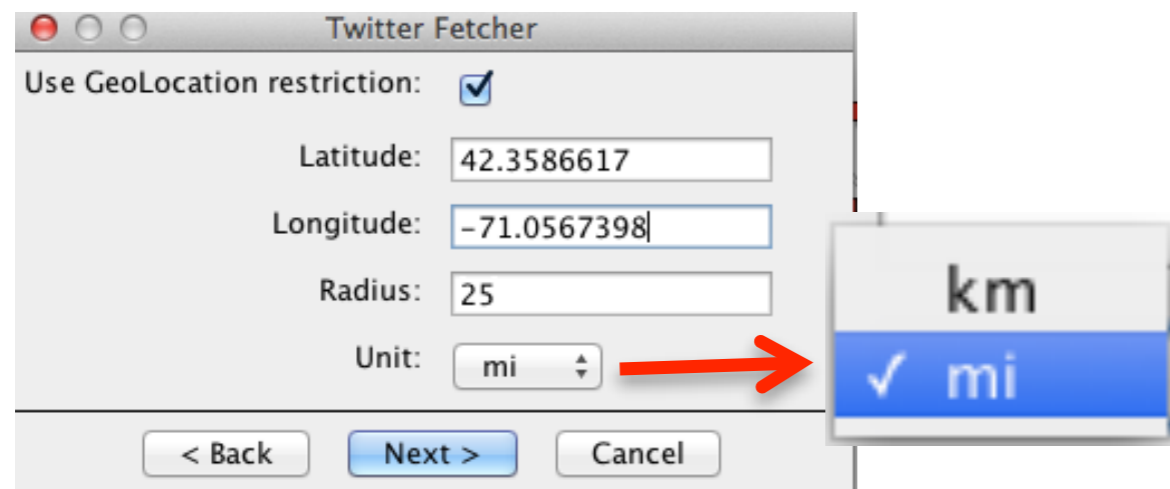


Condor 3's Twitter Fetch option enables the user to restrict the collection of tweets around a specified geolocation using a city's geocodes of latitude and longitude. Thus, how do you find a city's geocodes? One solution is to use the free website: <http://www.gpsvisualizer.com> which enables users to obtain a city's geocodes of latitude and longitude by entering in their names at: <http://www.gpsvisualizer.com/geocoder/>. It also can map the location of the cities with a pin marker and save the map for later reuse, as well as, draw a range ring around a city given a radius in miles or kilometers at: <http://www.gpsvisualizer.com/calculators>.

If you wish to geocode 5 or more locations at time, you will need a free Bing Map Key.

This chapter includes three sections:

Section 1 explains how to obtain a city's geocodes of latitude and longitude when using Condor 3's menu: Fetch > Fetch Twitter ... Enable geolocation restriction.



Section 2 explains how to draw a map with a range ring around a city.

Section 3 explains the steps to obtain a Bing Map Key, which enables users to geocode 5 or more cities at a time.

Note: **Geocoding** is the process of finding associated [geographic coordinates](http://en.wikipedia.org/wiki/Geocoding) (often expressed as [latitude](#) and [longitude](#)) from other geographic data, such as [street addresses](#), or [ZIP codes](#) ([postal codes](#)). With geographic coordinates the features can be mapped. (<http://en.wikipedia.org/wiki/Geocoding>)

# How to obtain a city's geocodes

## HOW TO OBTAIN A CITY'S GEOCODES?

First, What is geocoding?

**Geocoding** is the process of finding associated [geographic coordinates](#) (often expressed as [latitude](#) and [longitude](#)) from other geographic data, such as [street addresses](#), or [ZIP codes](#) ([postal codes](#)). With geographic coordinates the features can be mapped. (<http://en.wikipedia.org/wiki/Geocoding>)

We will use the website: <http://www.gpsvisualizer.com/geocoder/>

to find a city's geocodes and map it.

The next section will explain how to draw a range ring around it to have a sense of the geographic coverage of a Twitter Fetch.

## Convert City Names or addresses to [latitude](#) and [longitude](#) coordinates to use with Twitter Fetch

The screenshot shows the website 'GPS Visualizer's Easy Batch Geocoder: Convert addresses to coordinates'. The page has a green header with the site name and navigation links like 'MAKE A MAP', 'MAKE A PROFILE', 'CONVERT A FILE', 'Draw on a map', 'Calculators', 'Geocode an address', 'Look up elevations', 'Atlas: Share a map', 'GPSbabel', 'Help/FAQ', 'Examples', 'About GPSV', and 'Partner sites'. Below the header is a navigation bar with 'Google Map GPS', 'Geocode Addresses', 'GPS Coordinates', and 'GPS Geocode'. The main content area is titled 'GPS Visualizer's Address Locator' and 'Convert multiple addresses to GPS coordinates'. A note states: 'NOTE: You'll need to get your own free API key to process a large number of addresses using this page. (Get a key: Bing, MapQuest, Google)'. The 'Input' section has a large text area for addresses, a 'Type of data' dropdown set to 'raw list, 1 address per line', a 'Source' dropdown set to 'Bing Maps', and a 'Start geocoding' button. Below this are options for 'Field separator in output' (comma), 'Add a color', and a checkbox for 'Include source+precision info in output'. There is also a field for 'Your Bing Maps API key (why?)' with a '[Get a key]' link. The 'Results as text' section has a large text area and buttons for 'Draw a map', 'output format' (Google Maps), 'Labels on map', '[more map options]', and 'Create a GPX file'. A 'clear results box and map' button is at the bottom. On the right side, there is explanatory text: 'To use this free utility, simply enter addresses in the box to the left, one per line, and click "Start geocoding" to find their latitude and longitude. If your data is in a tabular format with a descriptive header at the top of each column, choose "tabular" for type of data (and make sure the headers make sense!). If you have a raw jumble of address data, that's okay too; choose "raw list mode," but be aware that everything should at least look like an address, and any non-address data such as names, descriptions, or other fields might confuse things. You can choose from three different sources of coordinates: Bing Maps, MapQuest Open, or Google. Each has their pros and cons, but none of them is guaranteed to be 100% correct -- use them at your own risk! Also note that if you try to geocode thousands of addresses, you will probably end up with blank results after a while, because the provider will decide that you're trying to process too many addresses in a short time. If that happens, it's a sign that you should be looking into commercial geocoding services. (Or at least break your data into smaller batches.)'

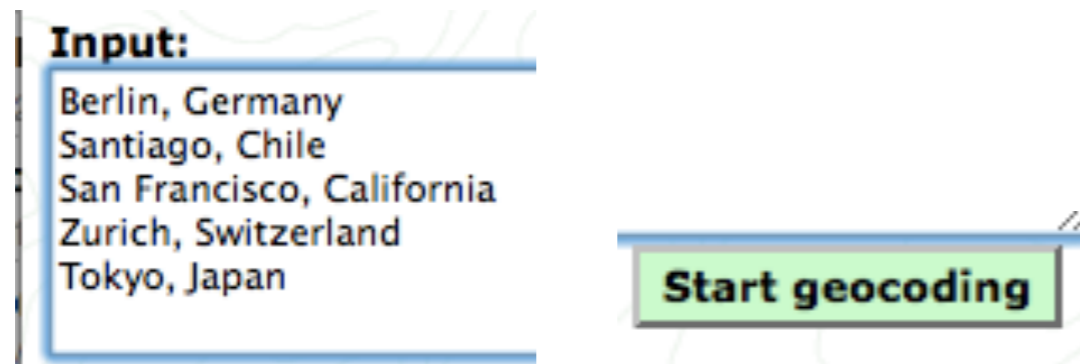
<http://www.gpsvisualizer.com/geocoder/>

# Condor 3 How to obtain a City's Geocodes

Suggested Steps:

1. Go to GPS Visualizer's website at: <http://www.gpsvisualizer.com/geocoder/>
2. In the Input: box enter the name of a city or an address, one per line, up to five names or addresses. If more than 5, then you need a Bing Map Key

For example:



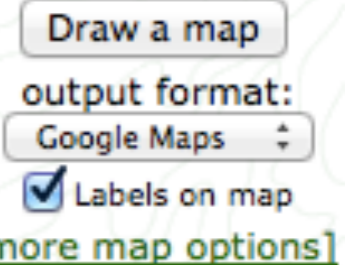
**Input:**  
Berlin, Germany  
Santiago, Chile  
San Francisco, California  
Zurich, Switzerland  
Tokyo, Japan

**Start geocoding**

3. Click "Start geocoding" to find their latitude and longitude, which will be displayed in the Results as text:

**Results as text:** (5 of 5 lines processed)

```
latitude,longitude,name,desc,color,source,precision
52.5014076,13.4023285,"Berlin, Germany",Berlin,,Bing Maps,state/province
-33.6039085,-70.6270294,"Santiago, Chile",Santiago Metropolitan,,Bing Maps,state/province
37.7771187,-122.4196396,"San Francisco, California","San Francisco, CA",,Bing Maps,city/town
47.3656006,8.50595,"Zurich, Switzerland","Zurich, Switzerland",,Bing Maps,city/town
35.6832085,139.8089447,"Tokyo, Japan","Tokyo, Japan",,Bing Maps,city/town
```



**Draw a map**

output format:  
Google Maps

Labels on map

[\[more map options\]](#)

4. Click, Draw map and check Labels on map to visualize geolocations
5. When using Fetch > Twitter with geolocation option, enter latitude and longitude

# Sample Geocoding of 5 City Names

<http://www.gpsvisualizer.com/geocoder/>

## GPS Visualizer's Address Locator

Convert multiple addresses to GPS coordinates

**NOTE:** You'll need to get your own free API key to process a large number of addresses using this page. (Get a key:

### Input:

Berlin, Germany  
Santiago, Chile  
San Francisco, California  
Zurich, Switzerland  
Tokyo, Japan

1.

Enter a city name or address, one per line

2.

Start geocoding

Type of data: raw list, 1 address per line

Source: Bing Maps

Field separator in output: comma (,)

Add a color:

Include source+precision info in output

Your Bing Maps API key (why?):  [Get]

3. Geocodes

4. Map

Results as text: (5 of 5 lines processed)

```
latitude,longitude,name,desc,color,source,precision
52.5014076,13.4023285,"Berlin, Germany",Berlin,,Bing Maps,state/province
-33.6039085,-70.6270294,"Santiago, Chile",Santiago Metropolitan,,Bing Maps,state/province
37.7771187,-122.4196396,"San Francisco, California","San Francisco, CA",,Bing Maps,city/town
47.3656006,8.50595,"Zurich, Switzerland","Zurich, Switzerland",,Bing Maps,city/town
35.6832085,139.8089447,"Tokyo, Japan","Tokyo, Japan",,Bing Maps,city/town
```

Draw a map

output format:

Google Maps

Labels on map

[more map options]

# Google Maps output

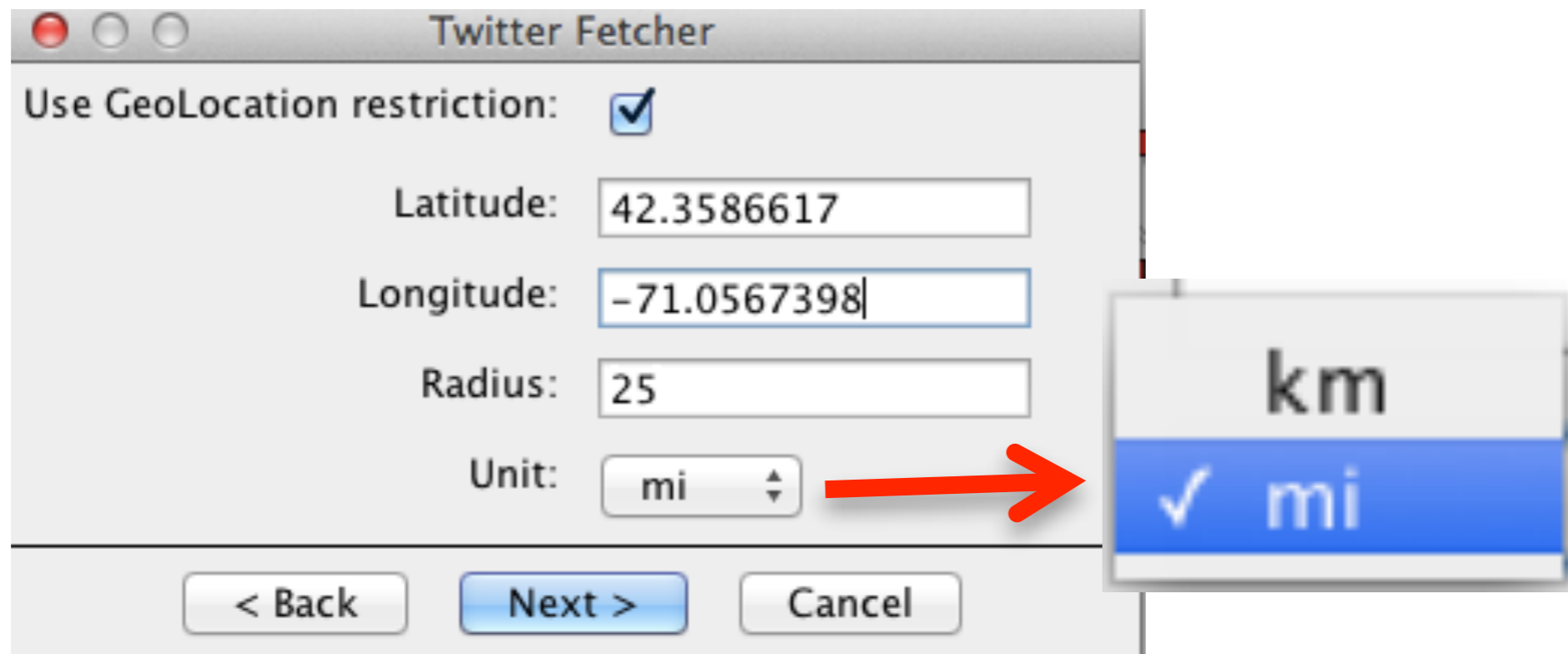


Note: The map is **temporarily** available to [view or download from GPSVisualizer.com](http://GPSVisualizer.com).

For example: file:///Users/Ken/Downloads/20140716084117-25141-map.html

**When using Fetch >Twitter with geolocation option,  
Enter Latitude and Longitude results obtained from GPS Visualizer geo-  
coding**

**Enter a radius and choose unit of miles (mi) or kilometers (km)**





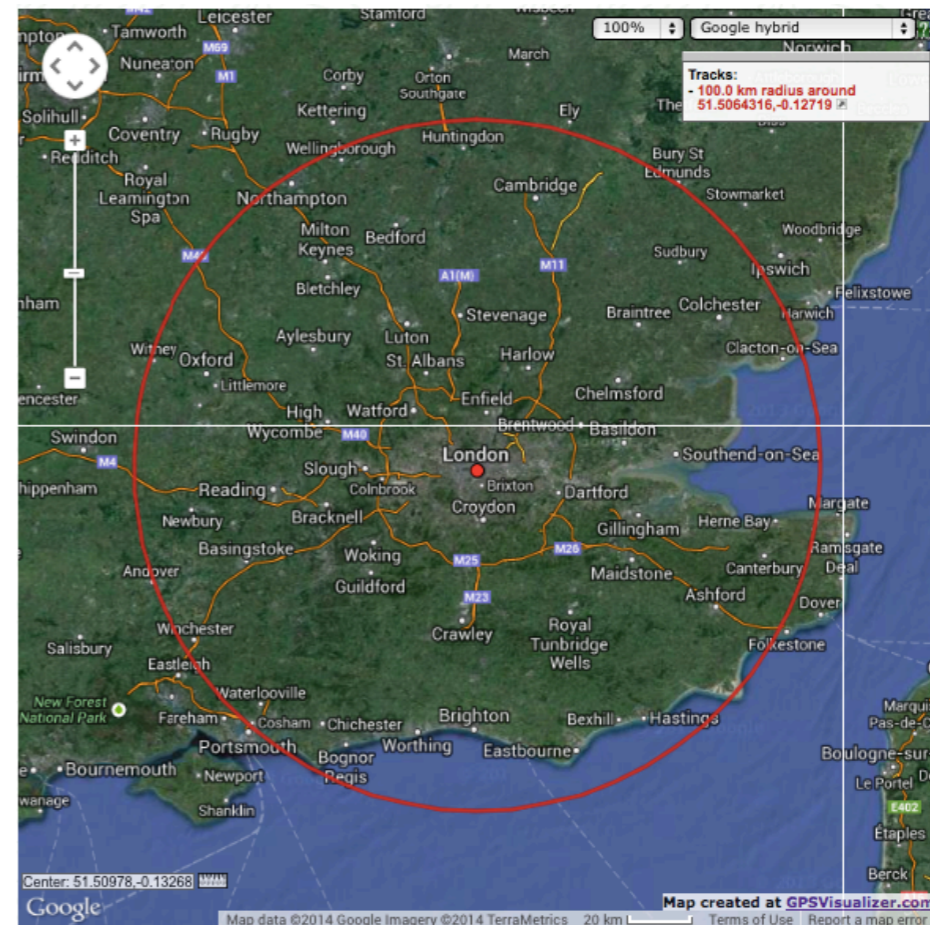
# How to draw a range ring around a city

## HOW TO DRAW A RANGE RING AROUND A CITY

Follow these suggested steps to draw a range ring around a city to approximate the geographic coverage of your Twitter Fetch using the radius option.

Use GPS Visualizer Calculators to Draw a Range Ring Around a City

<http://www.gpsvisualizer.com/calculators>



# Condor 3 How to draw a range ring around a city

## Suggested Steps:

1. Go to GPS Visualizer's Calculators page at: <http://www.gpsvisualizer.com/calculators>
2. Scroll down to the section: Draw a range rings around a point  
Enter the latitude and longitude for your desired city.  
For example, London England the Lat.,Lon is: 51.5064316,-0.12719
3. Enter a radius, such as 100Km
4. Click Draw a Map

### Draw range rings around a point

This "circle generator" will plot a point on a map -- given a set of coordinates or other location (an airport code, ZIP code, city/state pair, street address, or coordinate pair) -- and draw a circle, or circles, around that point. To create multiple rings, separate the values in the "radius" box with commas: e.g., "10mi,50mi,100mi." (If you need to create rings around multiple points simultaneously, you can submit data to the normal map form with a "circle\_radius" field added; see the page on [triangulation and range rings](#) for more info.)

Lat., Lon.  or Location

Radius

output format:

If you need to put range rings around multiple points on a single map, you can supply your data in the form of a text file or spreadsheet and include a "circle\_radius" field; see the [example page](#) for more information.

## Use GPS Visualizer Calculators to Draw a Range Ring Around a City

<http://www.gpsvisualizer.com/calculators>

### Draw range rings around a point

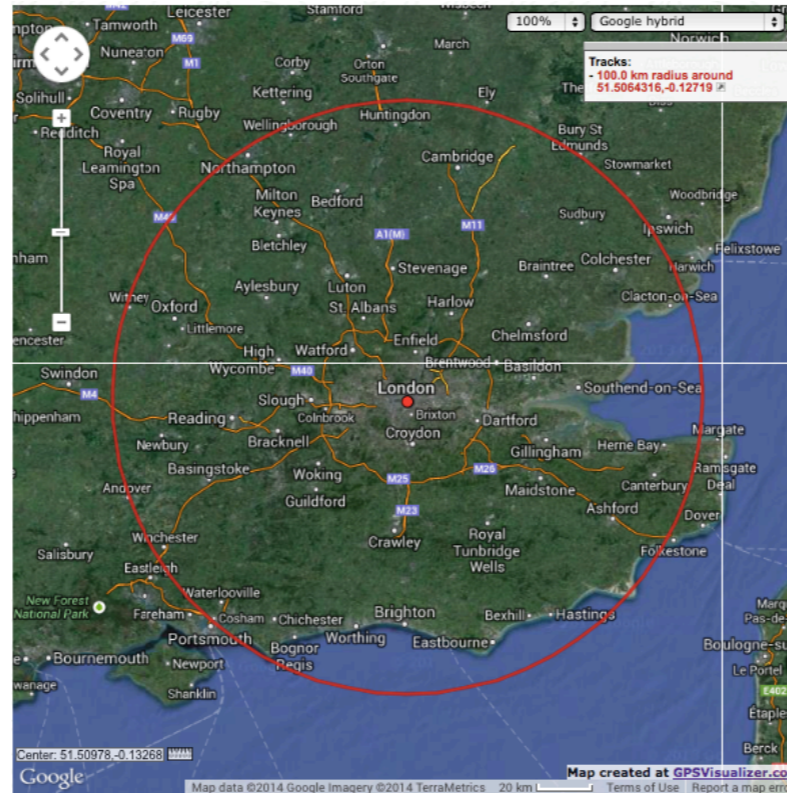
This "circle generator" will plot a point on a map -- given a set of coordinates or other location (an airport code, ZIP code, city/state pair, street address, or coordinate pair) -- and draw a circle, or circles, around that point. To create multiple rings, separate the values in the "radius" box with commas: e.g., "10mi,50mi,100mi." (If you need to create rings around multiple points simultaneously, you can submit data to the normal map form with a "circle\_radius" field added; see the page on [triangulation and range rings](#) for more info.)

Lat., Lon.  or Location  Radius  output format:

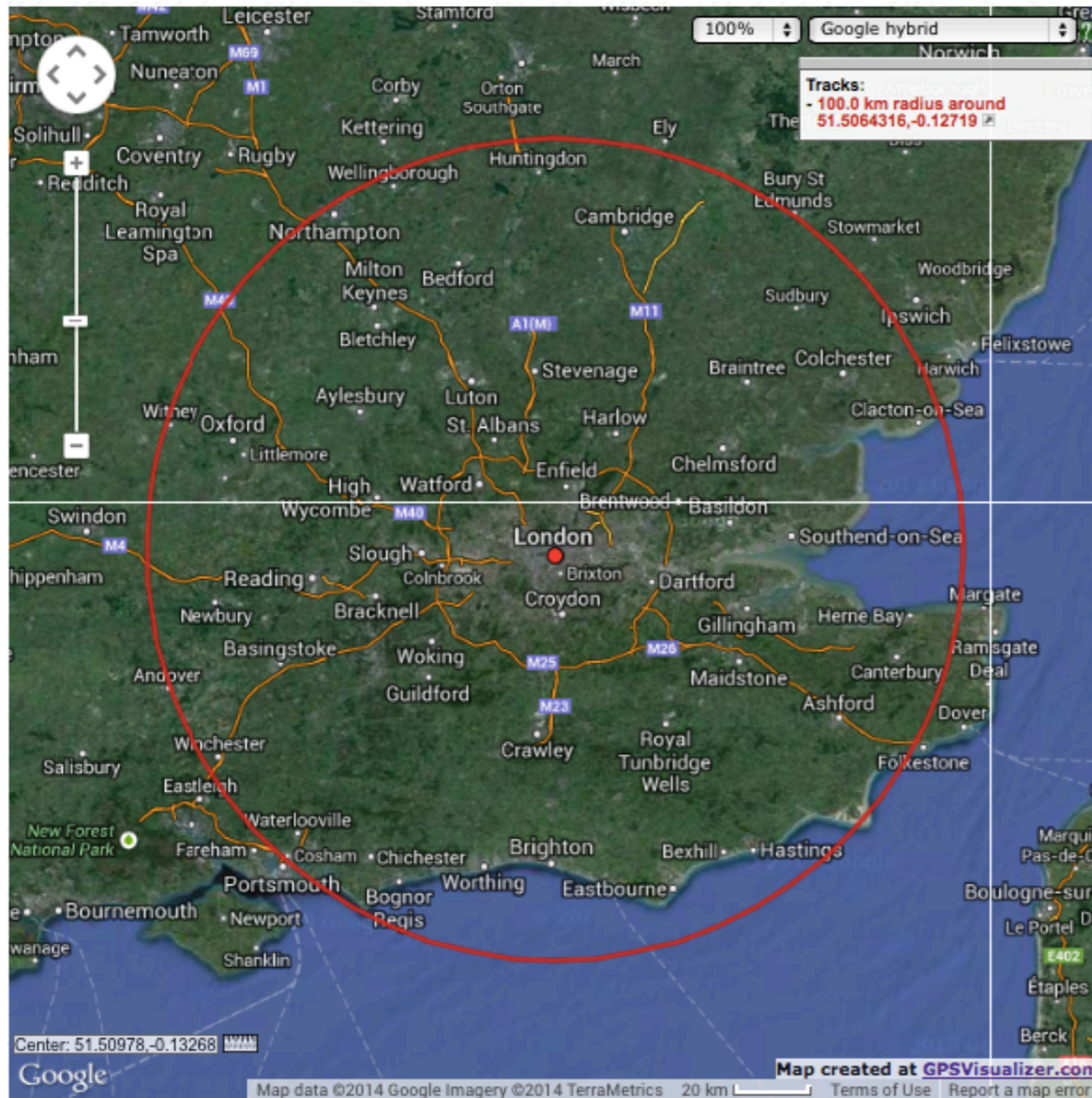
If you need to put range rings around multiple points on a single map, you can supply your data in the form of a text file or spreadsheet and include a "circle\_radius" field; see the [example page](#) for more information.

1. Enter Lat. Lon
2. Enter Radius
3. Draw Map

## Sample Range Ring of 100km around London



# Google Maps output



Sample Range Ring of 100km  
around London

Note: The map is **temporarily** available to [view or download from GPSVisualizer.com](http://GPSVisualizer.com).

# How to obtain a Bing Map Key

## HOW TO OBTAIN A BING MAY KEY

---

Follow these suggested steps to obtain a Bing Map Key to use with the GPS Visualizer website to geocode more than 5 cities or addresses at one time.

Note:

These instructions are for getting a BING key, however, a MapQuest or Google key will work too.

How to get a BING Map Key for

<http://www.gpsvisualizer.com/geocoder/>

Overview: If you wish to obtain 5 or more geocodes at one time, you will need to get a map key for: Bing, MapQuest, or Google .

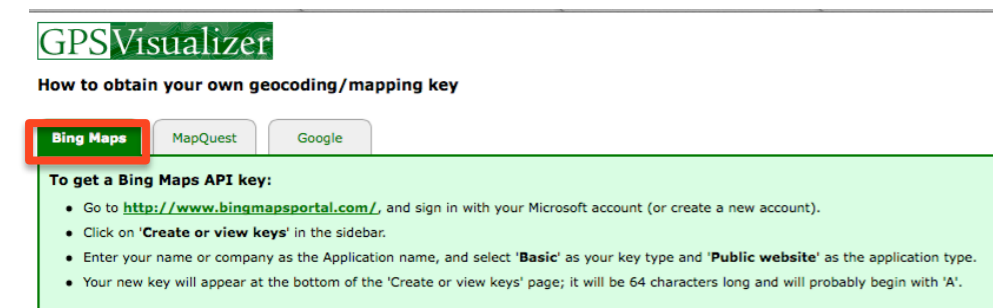
These instructions are for getting a BING Map Key:

1. Go to <http://www.gpsvisualizer.com/geocoder/>



2. Click on the GET BING option:

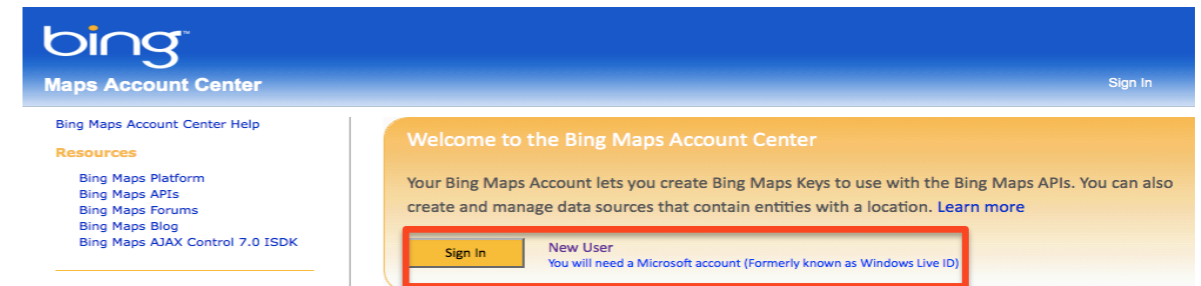
<http://www.gpsvisualizer.com/geocoder/key.html#bing>



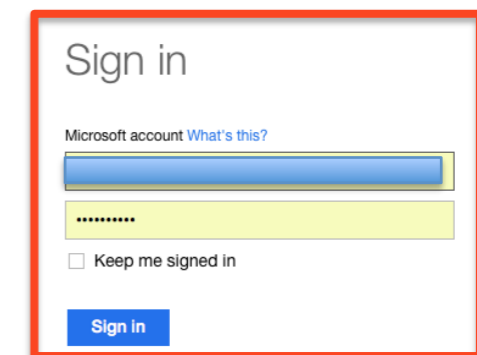
3. Click on the link: <http://www.bingmapsportal.com>

Which will take you to the Bing Maps Account Center.

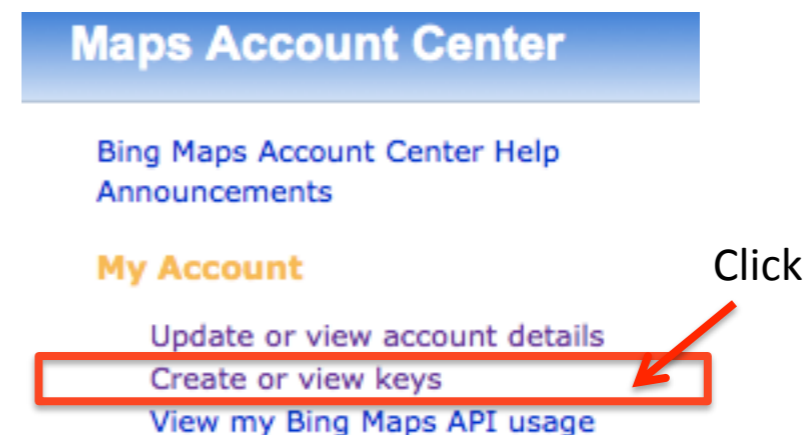
4. Sign in with your Microsoft account (formerly Windows Live account) or click on “New User” to create an account.



5. After clicking on the previous Sign in, a new Sign In window opens. Sign in here.



6. In the left hand side panel, click on, “Create or view keys”



7. A Create key application window opens



8. Enter an application name, such as, GeocodingWithBing

You may skip the Application URL, or enter, <http://www.gpsvisualizer.com/geocoder/>

9. Under “ \* Key type,” select “Basic.”

10. Under “ \* Application type,” select “Public website.”

11. Type in the “new image” code.

12. Click “Submit.”

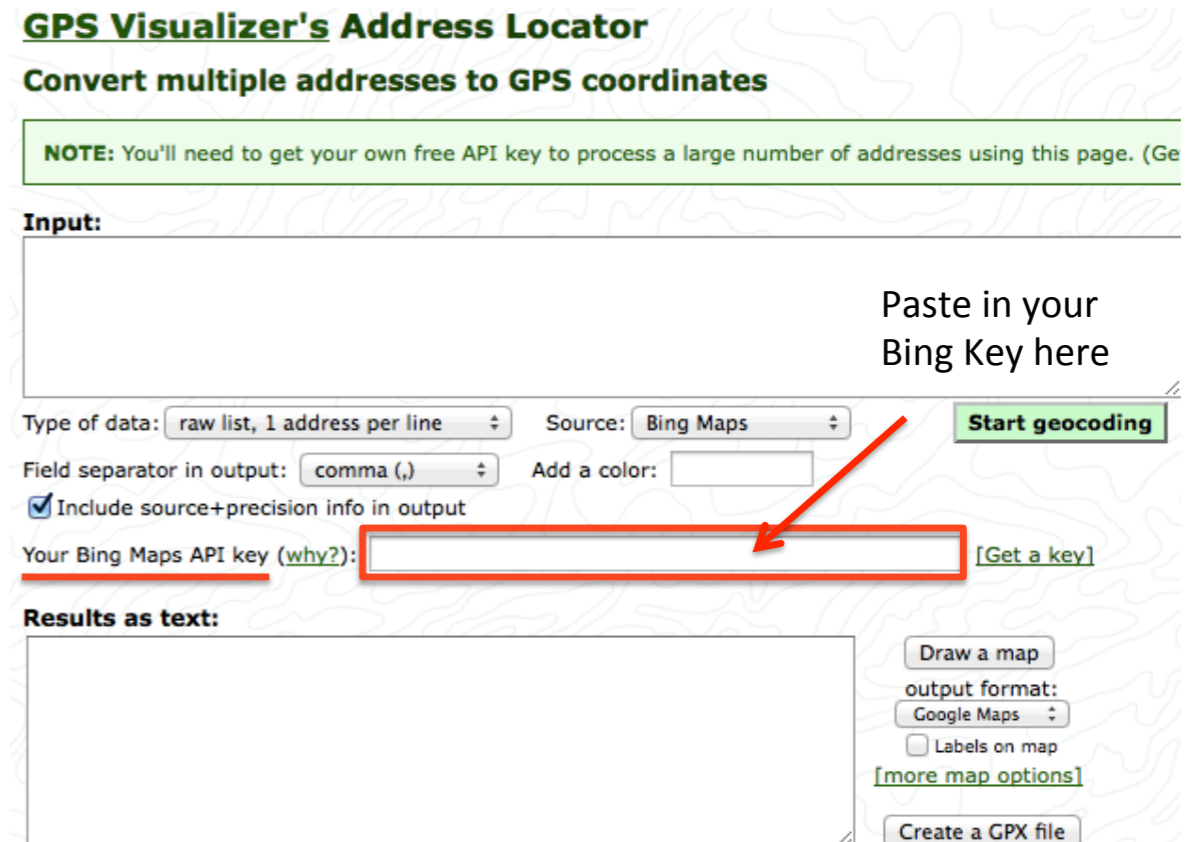
13. Your Bing Map Key will then appear at the bottom under the Create Key form.

Application name	Key details
App Name	<i>A very long Bing Map Key will be here. Copy it</i> uGK- <a href="http://www.gpsvisualizer.com/geocoder/">http://www.gpsvisualizer.com/geocoder/</a> Basic / Public website Created Date: 02/13/2014 Expiration Date: None

14. Copy the Bing Maps API Key and go to

<http://www.gpsvisualizer.com/geocoder>

15. Paste your key into the Bing Maps API Key box:



16. In the Input box:

Enter your City names to geocode, one per line, such as:

**Input:**

Sochi, Russia	Sochi, Russia
Berlin, Germany	Berlin, Germany
Santiago, Chile	Santiago, Chile
San Francisco, California	San Francisco, California
New York, New York	New York, New York
Chicago, IL	Chicago, IL
	Tokyo, Japan
	London, England
	Amsterdam, Netherlands
	Sydney, Australia
	Buenos Aires, Argentina
	Vancouver, British Columbia
	Montreal, Quebec
	Seoul, Korea
	Oslo, Norway
	Vienna, Austria
	Zurich, Switzerland
	Paris, France

17. Click, Start Geocoding

**GPS Visualizer's Address Locator**  
Convert multiple addresses to GPS coordinates

**NOTE:** You'll need to get your own free API key to process a large number of addresses using this page. (Get a key)

**Input:**  
Sochi, Russia  
Berlin, Germany  
Santiago, Chile  
San Francisco, California  
New York, New York  
Chicago, IL

Type of data: raw list, 1 address per line Source: Bing Maps **Start geocoding**

Field separator in output: comma (,) Add a color:

Include source+precision info in output

Your Bing Maps API key (why?):  [Get a key]

**Results as text:**

Results will appear here

Draw a map  
output format: Google Maps  
 Labels on map  
[more map options]  
Create a GPX file

18. See results in text box:

**GPS Visualizer's Address Locator**  
Convert multiple addresses to GPS coordinates

**NOTE:** You'll need to get your own free API key to process a large number of addresses using this page. (Get a key)

**Input:**  
Sochi, Russia  
Berlin, Germany  
Santiago, Chile  
San Francisco, California  
New York, New York  
Chicago, IL

Type of data: raw list, 1 address per line Source: Bing Maps **Start geocoding**

Field separator in output: comma (,) Add a color:

Include source+precision info in output

Your Bing Maps API key (why?): AjM2TVWd3ip5lw3sZsfvIgyawDgcL9\_4o9BZVbiH0PeZv... [Get a key]

**Results as text:** (18 of 18 lines processed)

```
latitude,longitude,name,desc,color,source,precision
43.5946007,39.7207985,"Sochi, Russia","Sochi, Russia",,Bing Maps,city/town
52.5014076,13.4023285,"Berlin, Germany",Berlin,,Bing Maps,state/province
-33.6039085,-70.6270294,"Santiago, Chile",Santiago Metropolitan,,Bing Maps,city/town
37.7771187,-122.4196396,"San Francisco, California",San Francisco, CA,,Bing Maps,city/town
40.7820015,-73.8317032,"New York, New York",New York, NY,,Bing Maps,city/town
41.8842506,-87.6324463,"Chicago, IL",Chicago, IL,,Bing Maps,city/town
35.6832085,139.8089447,"Tokyo, Japan",Tokyo, Japan,,Bing Maps,city/town
```

Draw a map  
output format: Google Maps  
 Labels on map  
[more map options]  
Create a GPX file



## 19. Full view of Sample Results

```
latitude,longitude,name,desc,color,source,precision
43.5946007,39.721199,"Sochi, Russia","Sochi, Russia",,Bing Maps,city/town
52.5160713,13.3769798,"Berlin, Germany","Berlin, BE, Germany",,Bing Maps,city/town
-33.4706001,-70.6728973,"Santiago, Chile","Santiago, Chile",,Bing Maps,city/town
37.7771187,-122.4196396,"San Francisco, California","San Francisco, CA",,Bing Maps,city/town
40.7820015,-73.8327026,"New York, New York","New York, NY",,Bing Maps,city/town
41.8842506,-87.6324463,"Chicago, IL","Chicago, IL",,Bing Maps,city/town
35.6832085,139.8089447,"Tokyo, Japan","Tokyo, Japan",,Bing Maps,city/town
51.5064316,-0.12719,"London, England","London, London, United Kingdom",,Bing Maps,city/town
52.3306999,4.8643398,"Amsterdam, Netherlands","Amsterdam, Netherlands",,Bing Maps,city/town
-33.8740005,151.2030029,"Sydney, Australia","Sydney, Australia",,Bing Maps,city/town
-34.6085091,-58.3734894,"Buenos Aires, Argentina","Buenos Aires, Argentina",,Bing Maps,city/town
49.2811012,-123.0439987,"Vancouver, British Columbia","Vancouver, BC",,Bing Maps,city/town
45.5172005,-73.5498962,"Montreal, Quebec","Montreal, QC",,Bing Maps,city/town
37.5150185,127.0164719,"Seoul, Korea","Seoul, South Korea",,Bing Maps,city/town
59.912281,10.74998,"Oslo, Norway","Oslo, Norway",,Bing Maps,city/town
48.2084389,16.3768559,"Vienna, Austria","Vienna",,Bing Maps,state/province
47.3656006,8.50595,"Zurich, Switzerland","Zurich, Switzerland",,Bing Maps,city/town
48.8569298,2.3412001,"Paris, France","Paris, Paris, France",,Bing Maps,city/town
```

## 20. Check Labels on Map, Click Draw Map

Results as text: (18 of 18 lines processed)

```
latitude,longitude,name,desc,color,source,precision
43.5946007,39.7207985,"Sochi, Russia","Sochi, Russia",,Bing Maps,city/town
52.5014076,13.4023285,"Berlin, Germany","Berlin",,Bing Maps,state/province
-33.6039085,-70.6270294,"Santiago, Chile","Santiago Metropolitan",,Bing Maps,sta
37.7771187,-122.4196396,"San Francisco, California","San Francisco, CA",,Bing M
40.7820015,-73.8317032,"New York, New York","New York, NY",,Bing Maps,city/
41.8842506,-87.6324463,"Chicago, IL","Chicago, IL",,Bing Maps,city/town
35.6832085,139.8089447,"Tokyo, Japan","Tokyo, Japan",,Bing Maps,city/town
```

Draw a map

output format:  
Google Maps

Labels on map

[more map options](#)

Create a GPX file

## 21. Map will be drawn with Labels




## 22. You can download the Google Map by clicking on the download button:

Click to download map .html file

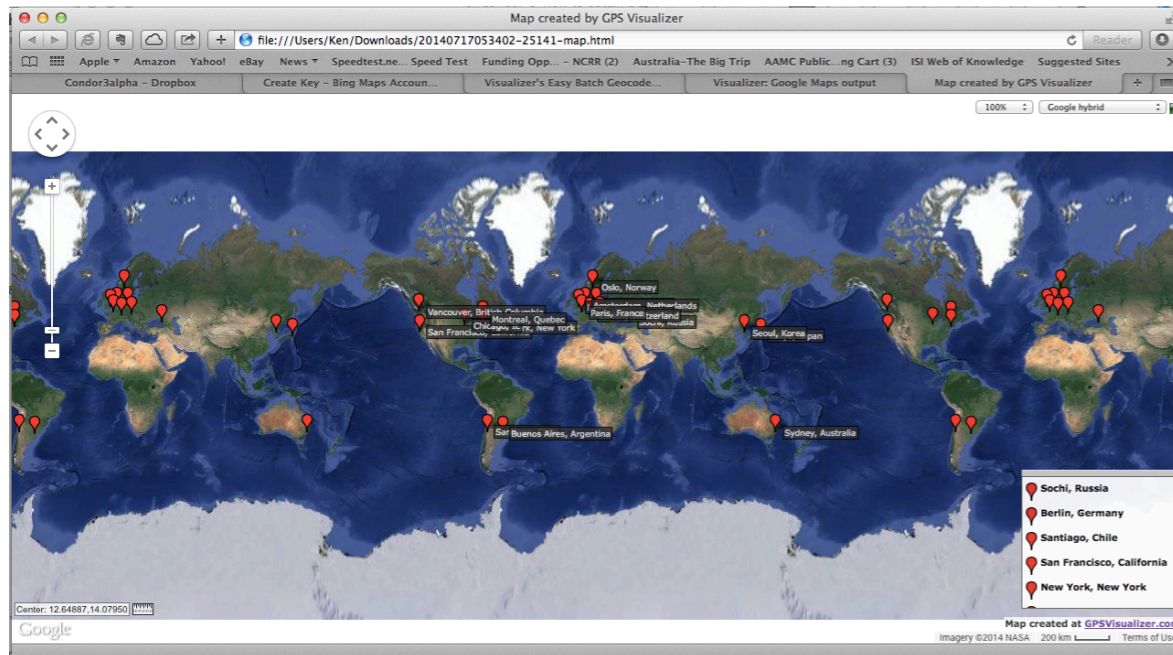
**Google Maps output**  
Your GPS data has been processed. Your Google Map should be displayed below, and it's also temporarily available to [view](#) or [download](#) from GPSVisualizer.com.

## 23. A "XXXX ~ -map.html" file will be downloaded and saved into your downloads folder.

 20140717053402-25141-map.html

## 24. Sample saved map.html in browser

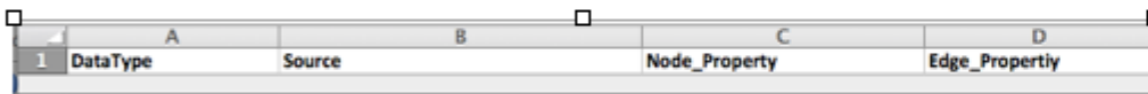
Hover cursor over map pins to see labels, Zoom – in/out



# Node and Edge Properties

Node and Edge Properties for Condor 3 Data Fetch Options:

1. Email
2. Web\_Ajax\_or\_CSE
3. Twitter
4. Twitter Accounts
5. Facebook
6. Wiki\_Evolution
7. Wikipedia\_Categories



	A	B	C	D
1	DataType	Source	Node_Property	Edge_Property

## Email Node and Edge Properties

1	DataType	Source	Node_Property	Edge_Property
2	email	Fetch_mailbox	domain	
3	email	Fetch_mailbox	name	
4	email	Fetch_mailbox	org	
5	email	Fetch_mailbox		comm_from
6	email	Fetch_mailbox		comm_subject
7	email	Fetch_mailbox		comm_time
8	email	Fetch_mailbox		name
9	email	Fetch_mailbox		termpro
10	email	Fetch_mailbox_Assigned	id	
11	email	Fetch_mailbox_Assigned	uuid	
12	email	Fetch_mailbox_Assigned		comm_id
13	email	Fetch_mailbox_Assigned		datasetId
14	email	Fetch_mailbox_Assigned		id
15	email	Fetch_mailbox_Assigned		timestamp
16	email	Fetch_mailbox_Optional		comm_content
17	email	Process_dataset_Calculate_Influence	average influence per message	
18	email	Process_dataset_Calculate_Influence	avg emotionality	
19	email	Process_dataset_Calculate_Influence	messages sent	
20	email	Process_dataset_Calculate_Influence	most common words	
21	email	Process_dataset_Calculate_Influence	most influential words	
22	email	Process_dataset_Calculate_Influence	total influence	
23	email	Process_dataset_Calculate_Influence		Influence
24	email	Process_dataset_Calculate_Influence		Influence other direction
25	email	Process_dataset_Calculate_Influence		sentimentWords[content]
26	email	Process_dataset_Calculate_Sentiment	avg complexity	
27	email	Process_dataset_Calculate_Sentiment	avg emotionality	
28	email	Process_dataset_Calculate_Sentiment	avg sentiment	
29	email	Process_dataset_Calculate_Sentiment		complexity
30	email	Process_dataset_Calculate_Sentiment		emotionality
31	email	Process_dataset_Calculate_Sentiment		keywords[content]
32	email	Process_dataset_Calculate_Sentiment		language[content]
33	email	Process_dataset_Calculate_Sentiment		sentiment[content]
34	email	Process_dataset_Calculate_Sentiment		sentimentWords[content]
35	email	Process_dataset_Centrality_Annotations	Betweenness_Centrality	
36	email	Process_dataset_Centrality_Annotations	Closeness_Centrality	
37	email	Process_dataset_Centrality_Annotations	Degree_Centrality	

## Facebook Node and Edge Properties

	A	B	C	D
1	DataType	Source	Node_Property	Edge_Property
40	Facebook	Fetch_Facebook_Profile	aboutMe	
41	Facebook	Fetch_Facebook_Profile	birthday	
42	Facebook	Fetch_Facebook_Profile	category	
43	Facebook	Fetch_Facebook_Profile	fetched	
44	Facebook	Fetch_Facebook_Profile	firstName	
45	Facebook	Fetch_Facebook_Profile	gender	
46	Facebook	Fetch_Facebook_Profile	interests	
47	Facebook	Fetch_Facebook_Profile	lastName	
48	Facebook	Fetch_Facebook_Profile	locale	
49	Facebook	Fetch_Facebook_Profile	name	
50	Facebook	Fetch_Facebook_Profile	rank	
51	Facebook	Fetch_Facebook_Profile	site	
52	Facebook	Fetch_Facebook_Profile	title	
53	Facebook	Fetch_Facebook_Profile	url	
54	Facebook	Fetch_Facebook_Profile	userId	
55	Facebook	Fetch_Facebook_Profile		comm_id
56	Facebook	Fetch_Facebook_Profile		f_rank
57	Facebook	Fetch_Facebook_Profile		level
58	Facebook	Fetch_Facebook_Profile		link_time
59	Facebook	Fetch_Facebook_Profile		name
60	Facebook	Fetch_Facebook_Profile		perma
61	Facebook	Fetch_Facebook_Profile		source
62	Facebook	Fetch_Facebook_Profile		t_rank
63	Facebook	Fetch_Facebook_Profile		target
64	Facebook	Fetch_Facebook_Profile		weight
65	Facebook	Fetch_Facebook_Profile_Assigned	id	
66	Facebook	Fetch_Facebook_Profile_Assigned	uuid	
67	Facebook	Fetch_Facebook_Profile_Assigned		id
68	Facebook	Fetch_Facebook_Profile_Assigned		uuid
69	Facebook	Process_dataset_Calculate_Influence	N/A	N/A
70	Facebook	Process_dataset_Calculate_Sentiment	N/A	N/A

## Twitter Node and Edge Properties

	A	B	C	D
1	Data Type	Source	Node_Property	Edge_Property
71	Twitter	Fetch_Twitter	creation_date	
72	Twitter	Fetch_Twitter	description	
73	Twitter	Fetch_Twitter	description.urls	
74	Twitter	Fetch_Twitter	favorites_count	
75	Twitter	Fetch_Twitter	followers_count	
76	Twitter	Fetch_Twitter	friends_count	
77	Twitter	Fetch_Twitter	fullName	
78	Twitter	Fetch_Twitter	geolocation	
79	Twitter	Fetch_Twitter	language	
80	Twitter	Fetch_Twitter	listed_count	
81	Twitter	Fetch_Twitter	name	
82	Twitter	Fetch_Twitter	screen_name	
83	Twitter	Fetch_Twitter	statuses_count	
84	Twitter	Fetch_Twitter	timezone	
85	Twitter	Fetch_Twitter	url	
86	Twitter	Fetch_Twitter		content
87	Twitter	Fetch_Twitter		created_at
88	Twitter	Fetch_Twitter		hashtags
89	Twitter	Fetch_Twitter		identifier
90	Twitter	Fetch_Twitter		in_reply_to_status_id
91	Twitter	Fetch_Twitter		in_reply_to_user_id
92	Twitter	Fetch_Twitter		name
93	Twitter	Fetch_Twitter		retweet_count
94	Twitter	Fetch_Twitter		source
95	Twitter	Fetch_Twitter		target
96	Twitter	Fetch_Twitter		url_entries
97	Twitter	Fetch_Twitter		user_mentions
98	Twitter	Fetch_Twitter_Assigned	id	
99	Twitter	Fetch_Twitter_Assigned	uuid	
100	Twitter	Fetch_Twitter_Assigned		id
101	Twitter	Fetch_Twitter_Assigned		uuid
102	Twitter	Process_dataset_Calculate_Influence	average influence per message	
103	Twitter	Process_dataset_Calculate_Influence	avg emotionality	
104	Twitter	Process_dataset_Calculate_Influence	messages sent	
105	Twitter	Process_dataset_Calculate_Influence	most common words	
106	Twitter	Process_dataset_Calculate_Influence	most influential words	
107	Twitter	Process_dataset_Calculate_Influence	total influence	
108	Twitter	Process_dataset_Calculate_Influence		Influence
109	Twitter	Process_dataset_Calculate_Influence		Influence other direction
110	Twitter	Process_dataset_Calculate_Influence		sentimentWords[content]

## Twitter Node and Edge Properties (continued)

	A	B	C	D
1	DataType	Source	Node_Property	Edge_Property
111	Twitter	Process_dataset_Calculate_Sentiment	avg complexity	
112	Twitter	Process_dataset_Calculate_Sentiment	avg emotionality	
113	Twitter	Process_dataset_Calculate_Sentiment	avg sentiment	
114	Twitter	Process_dataset_Calculate_Sentiment		complexity
115	Twitter	Process_dataset_Calculate_Sentiment		emotionality
116	Twitter	Process_dataset_Calculate_Sentiment		keywords[content]
117	Twitter	Process_dataset_Calculate_Sentiment		language[content]
118	Twitter	Process_dataset_Calculate_Sentiment		sentiment[content]
119	Twitter	Process_dataset_Calculate_Sentiment		sentimentWords[content]
120	Twitter	Process_dataset_Centrality_Annotations	Betweenness_Centrality	
121	Twitter	Process_dataset_Centrality_Annotations	Closeness_Centrality	
122	Twitter	Process_dataset_Centrality_Annotations	Degree_Centrality	

## Twitter Accounts Node and Edge Properties

	A	B	C	D
1	DataType	Source	Node_Property	Edge_Property
123	Twitter_Accounts	Fetch_Twitter_Accounts	creation_date	
124	Twitter_Accounts	Fetch_Twitter_Accounts	description	
125	Twitter_Accounts	Fetch_Twitter_Accounts	description.urls	
126	Twitter_Accounts	Fetch_Twitter_Accounts	favorites_count	
127	Twitter_Accounts	Fetch_Twitter_Accounts	followers_count	
128	Twitter_Accounts	Fetch_Twitter_Accounts	friends_count	
129	Twitter_Accounts	Fetch_Twitter_Accounts	fullName	
130	Twitter_Accounts	Fetch_Twitter_Accounts	geolocation	
131	Twitter_Accounts	Fetch_Twitter_Accounts	language	
132	Twitter_Accounts	Fetch_Twitter_Accounts	listed_count	
133	Twitter_Accounts	Fetch_Twitter_Accounts	name	
134	Twitter_Accounts	Fetch_Twitter_Accounts	screen_name	
135	Twitter_Accounts	Fetch_Twitter_Accounts	statuses_count	
136	Twitter_Accounts	Fetch_Twitter_Accounts	timezone	
137	Twitter_Accounts	Fetch_Twitter_Accounts	url	
138	Twitter_Accounts	Fetch_Twitter_Accounts		content
139	Twitter_Accounts	Fetch_Twitter_Accounts		created_at
140	Twitter_Accounts	Fetch_Twitter_Accounts		hashtags
141	Twitter_Accounts	Fetch_Twitter_Accounts		identifier
142	Twitter_Accounts	Fetch_Twitter_Accounts		in_reply_to_status_id
143	Twitter_Accounts	Fetch_Twitter_Accounts		in_reply_to_user_id
144	Twitter_Accounts	Fetch_Twitter_Accounts		name
145	Twitter_Accounts	Fetch_Twitter_Accounts		retweet_count
146	Twitter_Accounts	Fetch_Twitter_Accounts		source
147	Twitter_Accounts	Fetch_Twitter_Accounts		target
148	Twitter_Accounts	Fetch_Twitter_Accounts		url_entries
149	Twitter_Accounts	Fetch_Twitter_Accounts		user_mentions
150	Twitter_Accounts	Fetch_Twitter_Accounts_Assigned	id	
151	Twitter_Accounts	Fetch_Twitter_Accounts_Assigned	uuid	
152	Twitter_Accounts	Fetch_Twitter_Accounts_Assigned		id
153	Twitter_Accounts	Fetch_Twitter_Accounts_Assigned		uuid
154	Twitter_Accounts	Process_dataset_Calculate_Influence	average influence per message	
155	Twitter_Accounts	Process_dataset_Calculate_Influence	avg emotionality	
156	Twitter_Accounts	Process_dataset_Calculate_Influence	messages sent	
157	Twitter_Accounts	Process_dataset_Calculate_Influence	most common words	
158	Twitter_Accounts	Process_dataset_Calculate_Influence	most influential words	
159	Twitter_Accounts	Process_dataset_Calculate_Influence	total influence	
160	Twitter_Accounts	Process_dataset_Calculate_Influence		Influence



## Twitter Accounts Node and Edge Properties

	A	B	C	D
1	Data Type	Source	Node_Property	Edge_Property
161	Twitter_Accounts	Process_dataset_Calculate_Influence		Influence other direction
162	Twitter_Accounts	Process_dataset_Calculate_Influence		sentimentWords[content]
163	Twitter_Accounts	Process_dataset_Calculate_Sentiment	avg complexity	
164	Twitter_Accounts	Process_dataset_Calculate_Sentiment	avg emotionality	
165	Twitter_Accounts	Process_dataset_Calculate_Sentiment	avg sentiment	
166	Twitter_Accounts	Process_dataset_Calculate_Sentiment		complexity
167	Twitter_Accounts	Process_dataset_Calculate_Sentiment		emotionality
168	Twitter_Accounts	Process_dataset_Calculate_Sentiment		keywords[content]
169	Twitter_Accounts	Process_dataset_Calculate_Sentiment		language[content]
170	Twitter_Accounts	Process_dataset_Calculate_Sentiment		sentiment[content]
171	Twitter_Accounts	Process_dataset_Calculate_Sentiment		sentimentWords[content]
172	Twitter_Accounts	Process_dataset_Centrality_Annotations	Betweenness_Centrality	
173	Twitter_Accounts	Process_dataset_Centrality_Annotations	Closeness_Centrality	
174	Twitter_Accounts	Process_dataset_Centrality_Annotations	Degree_Centrality	

## Web Ajax or CSE Node and Edge Properties

	A	B	C	D
1	DataType	Source	Node_Property	Edge_Property
175	Web	Fetch_Web_CSE_or_Ajax	content	
176	Web	Fetch_Web_CSE_or_Ajax	domain	
177	Web	Fetch_Web_CSE_or_Ajax	name	
178	Web	Fetch_Web_CSE_or_Ajax	query	
179	Web	Fetch_Web_CSE_or_Ajax	snippet	
180	Web	Fetch_Web_CSE_or_Ajax	title	
181	Web	Fetch_Web_CSE_or_Ajax		name
182	Web	Fetch_Web_CSE_or_Ajax		source
183	Web	Fetch_Web_CSE_or_Ajax		target
184	Web	Fetch_Web_CSE_or_Ajax_Assigned	id	
185	Web	Fetch_Web_CSE_or_Ajax_Assigned	uuid	
186	Web	Fetch_Web_CSE_or_Ajax_Assigned		id
187	Web	Fetch_Web_CSE_or_Ajax_Assigned		uuid
188	Web	Process_dataset_Calculate_Influence	N/A	N/A
189	Web	Process_dataset_Calculate_Sentiment	complexity	
190	Web	Process_dataset_Calculate_Sentiment	emotionality	
191	Web	Process_dataset_Calculate_Sentiment	keywords[snippet]	
192	Web	Process_dataset_Calculate_Sentiment	language[snippet]	
193	Web	Process_dataset_Calculate_Sentiment	sentiment[snippet]	
194	Web	Process_dataset_Calculate_Sentiment	sentimentWords[snippet]	
195	Web	Process_dataset_Calculate_Sentiment		N/A
196	Web	Process_dataset_Centrality_Annotations	Betweenness_Centrality	
197	Web	Process_dataset_Centrality_Annotations	Closeness_Centrality	
198	Web	Process_dataset_Centrality_Annotations	Degree_Centrality	

## Wiki Evolution Node and Edge Properties

	A	B	C	D
1	Data Type	Source	Node_Property	Edge_Property
199	Wiki_Evolution	Fetch_Wiki_Evolution	content	
200	Wiki_Evolution	Fetch_Wiki_Evolution	name	
201	Wiki_Evolution	Fetch_Wiki_Evolution	url	
202	Wiki_Evolution	Fetch_Wiki_Evolution		name
203	Wiki_Evolution	Fetch_Wiki_Evolution		source
204	Wiki_Evolution	Fetch_Wiki_Evolution		target
205	Wiki_Evolution	Fetch_Wiki_Evolution_Assigned	id	
206	Wiki_Evolution	Fetch_Wiki_Evolution_Assigned	uuid	
207	Wiki_Evolution	Fetch_Wiki_Evolution_Assigned		id
208	Wiki_Evolution	Fetch_Wiki_Evolution_Assigned		uuid
209	Wiki_Evolution	Process_dataset_Calculate_Influence	N/A	N/A
210	Wiki_Evolution	Process_dataset_Calculate_Sentiment	complexity	
211	Wiki_Evolution	Process_dataset_Calculate_Sentiment	emotionality	
212	Wiki_Evolution	Process_dataset_Calculate_Sentiment	keywords[content]	
213	Wiki_Evolution	Process_dataset_Calculate_Sentiment	language[content]	
214	Wiki_Evolution	Process_dataset_Calculate_Sentiment	sentiment[content]	
215	Wiki_Evolution	Process_dataset_Calculate_Sentiment	sentimentWords[content]	
216	Wiki_Evolution	Process_dataset_Calculate_Sentiment		N/A
217	Wiki_Evolution	Process_dataset_Centrality_Annotations	Betweenness_Centrality	
218	Wiki_Evolution	Process_dataset_Centrality_Annotations	Closeness_Centrality	
219	Wiki_Evolution	Process_dataset_Centrality_Annotations	Degree_Centrality	

## Wiki Categories Node and Edge Properties

	A	B	C	D
1	DataType	Source	Node_Property	Edge_Property
220	Wikipedia_Categories	Fetch_Wikipedia_Categories	language	
221	Wikipedia_Categories	Fetch_Wikipedia_Categories	name	
222	Wikipedia_Categories	Fetch_Wikipedia_Categories	pageid	
223	Wikipedia_Categories	Fetch_Wikipedia_Categories	title	
224	Wikipedia_Categories	Fetch_Wikipedia_Categories		id
225	Wikipedia_Categories	Fetch_Wikipedia_Categories		name
226	Wikipedia_Categories	Fetch_Wikipedia_Categories		source
227	Wikipedia_Categories	Fetch_Wikipedia_Categories		target
228	Wikipedia_Categories	Fetch_Wikipedia_Categories_Assigned	id	
229	Wikipedia_Categories	Fetch_Wikipedia_Categories_Assigned	uuid	
230	Wikipedia_Categories	Fetch_Wikipedia_Categories_Assigned		uuid
231	Wikipedia_Categories	Process_dataset_Calculate_Influence	N/A	N/A
232	Wikipedia_Categories	Process_dataset_Calculate_Sentiment	complexity	
233	Wikipedia_Categories	Process_dataset_Calculate_Sentiment	emotionality	
234	Wikipedia_Categories	Process_dataset_Calculate_Sentiment	keywords[title]	
235	Wikipedia_Categories	Process_dataset_Calculate_Sentiment	language[title]	
236	Wikipedia_Categories	Process_dataset_Calculate_Sentiment	sentiment[title]	
237	Wikipedia_Categories	Process_dataset_Calculate_Sentiment	sentimentWords[title]	
238	Wikipedia_Categories	Process_dataset_Calculate_Sentiment		N/A
239	Wikipedia_Categories	Process_dataset_Centrality_Annotations	Betweenness_Centrality	
240	Wikipedia_Categories	Process_dataset_Centrality_Annotations	Closeness_Centrality	
241	Wikipedia_Categories	Process_dataset_Centrality_Annotations	Degree_Centrality	

# Structure and Content Measures

The purpose of this chapter is to define the Structure and Content Measures used in analyzing a given network.

Section 1 defines the network structure measures or centralities for individual measures of betweenness, closeness and degree, and the group measures of group betweenness, group degree and density. Section 2 defines the five content measures of activity, sentiment, emotionality complexity, and influence.

Section three articulates the Coolhunting and Coolfarming Collaborative Innovation Networks (COINs) and their analytics as described in the introduction movie by Peter Gloor.

## Condor 3's Structure & Content Measures

*Condor 3 calculates five individual centrality measures:*

1. Betweenness
2. Betweenness Weighted
3. Closeness (Under development)
4. Degree, and
5. Degree Weighted.

*Condor 3 calculates three Group Centrality measures:*

1. Group Betweenness
2. Group Degree, and
3. Density.

*Condor 3 calculates five Content measures:*

1. Activity
2. Sentiment
3. Emotionality
4. Complexity, and
5. Influence

# Structure Measures

## STRUCTURE MEASURES

The purpose of this section is to explain and illustrate the individual and group centralities or structure measures that Condor 3 calculates. Understanding these measures will help the user to interpret the variation in individual and group centrality scores. Centrality measures can be calculated, visualized and exported in Condor 3.

*Condor 3 calculates five individual centrality measures:*

1. Betweenness
2. Betweenness Weighted
3. Closeness (Under development)
4. Degree, and
5. Degree Weighted.

*Condor 3 calculates three Group Centrality measures:*

1. Group Betweenness
2. Group Degree, and
3. Density.

*Note:*

*This section is based on Wasserman, Stanley and Faust, Katherine (1994) **Social Network Analysis Methods and Applications**, Chapter 5, Centrality and Prestige, pp. 169-216. Cambridge: Cambridge University Press.*

*In addition to using the Star, Circle, and Line graphs as examples; two more graphs have been added: Semi-Connected and Connected, each with 7 nodes.*

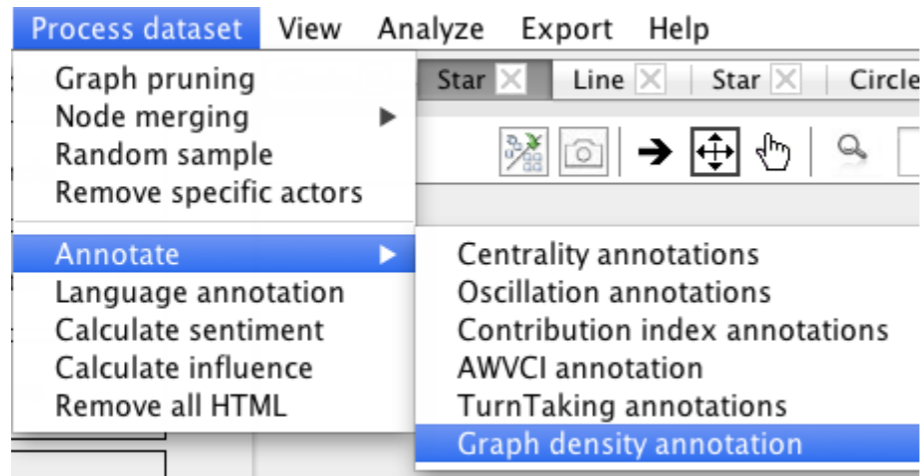
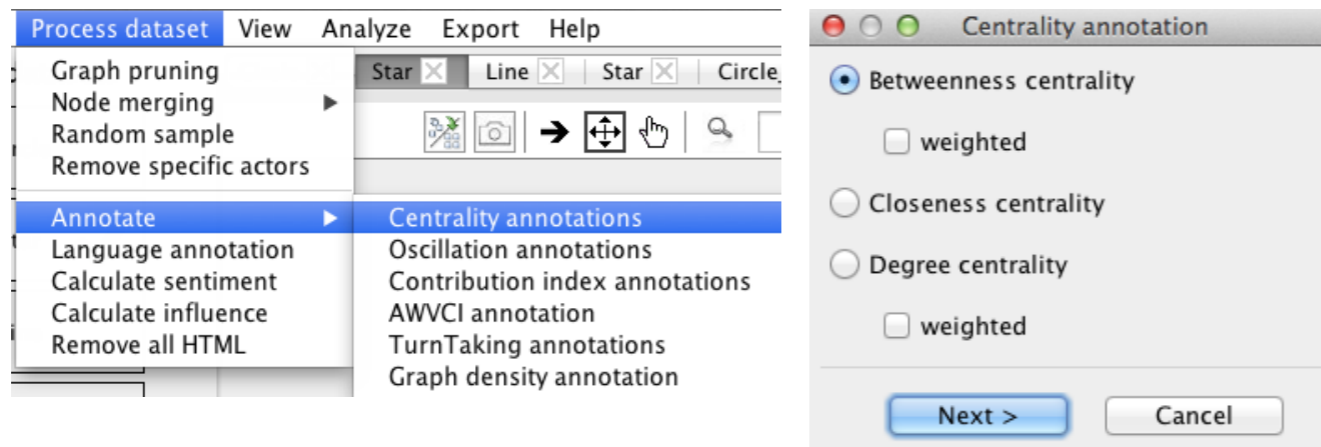
*For additional material on network structures or centralities see: Newman, M.E.J. (2010). **Networks: An Introduction**. Oxford: Oxford University Press.*

*And, the website of Tore Opsahl:*

<http://toreopsahl.com/tnet/weighted-networks/node-centrality/>

# Centrality Calculations

Condor 3's Centrality Measures are calculated from the Process dataset menu  
Process dataset > Annotate > Centrality annotations



# Export of Centrality Measures

Centrality Measures can be Exported

For Individual Measures

Export > Export Actors

Sample Actor Centrality Measures output

	A	B	C	D	E
1	Uuid	Name	Betweenness centrality	Closeness centrality	Degree centrality
2	1	SemiConnected_01	9.00	0.67	4
3	2	SemiConnected_02	8.00	0.60	2
4	3	SemiConnected_03	0.00	0.50	3
5	4	SemiConnected_04	5.00	0.46	1
6	5	SemiConnected_05	0.00	0.50	3
7	6	SemiConnected_06	0.00	0.33	1
8	7	SemiConnected_07	0.00	0.50	3

For Group Measures

Export > Export > Export dataset properties

Sample Group Centrality Measures Output

	A	B	C	D	E	F
1	<b>SemiConnected Group Centrality Measures</b>	<b>Value</b>	<b>Note</b>			
2	Group Degree Centrality	0.37				
3	Graph density	0.38	16 actual links/42 possible, or $n * (n-1)$ , $7 * (7-1) = 42$			
4	Group Betweenness Centrality	0.46				
5						



# Visualize and Label Centrality Measures

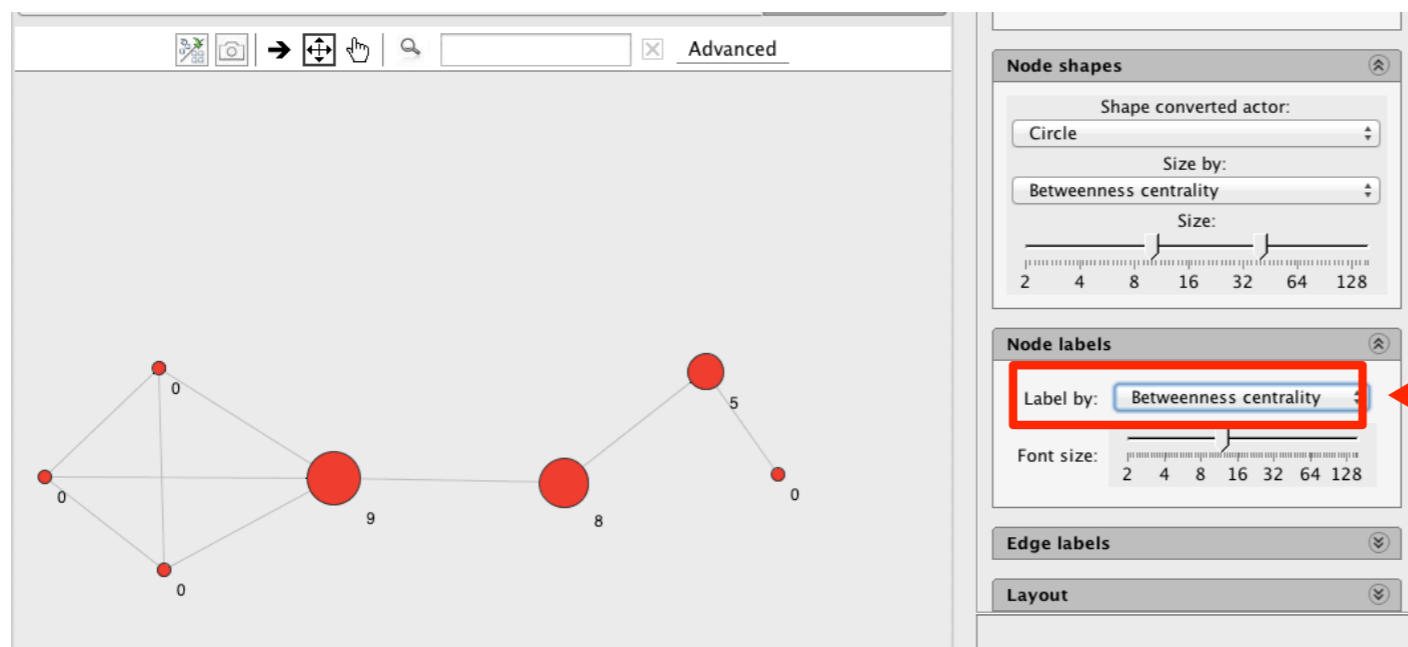
## Visualize by Betweenness with Node Name



**Change Node Size** by Individual centrality Measure:

1. Betweenness
2. Betweenness Weighted
3. Closeness
4. Degree
5. Degree Weighted

## Visualize by Betweenness with Node Value



**Label Node** by Individual centrality Measure:

1. Betweenness
2. Betweenness Weighted
3. Closeness
4. Degree
5. Degree Weighted

# Centrality Definitions

**Individual centrality measures** are used to explain the position of individual actors in the structure of a network.

**Degree centrality** is simply a count of the number of links or connections an individual has to others in the network.

A degree centrality value can range from 0 to  $n$ , where 0 means an actor has no connections to others in the network and is referred to as an isolate, and  $n$  is some positive number.

**Note: A graph is a weighted graph** if a number (weight) is assigned to each edge. See; [http://en.wikipedia.org/wiki/Graph\\_\(mathematics\)](http://en.wikipedia.org/wiki/Graph_(mathematics))

**Degree centrality weighted is ....**

*For a more detailed discussion of centrality and weights see:*

*Tore Opsahl 's website at:*

<http://toreopsahl.com/tnet/weighted-networks/node-centrality/>

# Centrality Definitions (Continued)

**Betweenness centrality** measures the degree to which a person is on the shortest path between all actors in the network. The higher the number, the greater the number of actors who pass through that person to get to others in the network, or the more that person lies between others in the network. A betweenness centrality value can range from 0 to  $n$ , where 0 means an actor is not between anyone on the shortest path between any two actors, such is the case for actors at the end points of a star network, and to  $n$  which is a positive number.

**Betweenness centrality weighted** is the betweenness centrality multiplied or weighted by a node's number of degrees. This helps to distinguish two nodes with the same betweenness scores but vary in the number of degrees or the count of other actors which they are connected.

A betweenness centrality weighted value, likewise can range from 0 to  $n$ .

## Centrality Definitions (Continued)

**Closeness centrality** is a measure of the degree to which an actor is close to other actors in the network. The idea is that an actor can reach another actor without going through many others. A Closeness centrality value ranges from 0 to  $n$ , where 0 means that there is no path to reach another actor, which is the case if a network has more than one group or component and there is no bridges or liaisons connecting the two separate groups.

# Comparison of Individual Centrality Measures And their Value Ranges

Individual Centrality Measures	Value Range	Note:
Degree	0 to n	If 0, then actor is an isolate and has no connections
Degree Weighted	0 to n	If 0, then actor is an isolate and has no connections
Betweenness	0 to n	If 0, then actor is an isolate; Or, the actor is at the end of Star graph; Or an actor is a member of a circle graph; Or the graph is completely connected and every node is connected to every other node
Betweenness Weighted	0 to n	If 0, then actor is an isolate; Or, the actor is at the end of Star graph; Or an actor is a member of a circle graph; Or the graph is completely connected and every node is connected to every other node
Closeness	0 to n	If 0, then node not reachable because it is in a different group or component

# Group Centrality Definitions

**Group centrality measures** characterize the variability or heterogeneity of the network as a whole. In other words, how different are the actors from one another.

**Group Degree Centrality** values range from 0 to 1. When all actors in the network connect to only one central person the degree centrality is at its maximum value of 1, and the network looks like a star. When all actors have the same number of links to others in the network, the network looks like a circle and the group degree centrality is 0.

**Group Betweenness Centrality** values also, range from 0 to 1. A value of 0 indicates that all actors in the network have the same betweenness centrality as all the others in the network, which is the case in a circle graph, and 1 indicates that there is one person who sits between everyone else, as in a star graph. A line graph has a group betweenness centrality of .311.

Note:

At the group level, betweenness and degree are measures to determine the variability of these scores among actors across the whole network.

It might seem that betweenness centrality and degree centrality are the same. However, that is not the case. They are similar, but there is an important distinction. Betweenness measures the *path* between actors in the network or how much actors sit between others in the network, whereas degree measures the *number* of links each actor in the network has, or how well connected the actors are. It is possible to have a high betweenness score with a low degree score. See the SemiConnected graph as an example.

# Group Centrality Definitions (Continued)

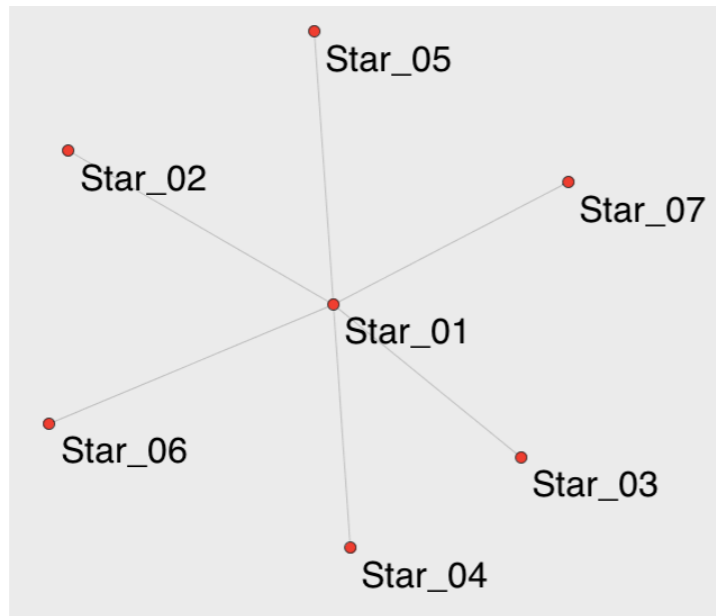
**Density** is a group centrality measure of the connectedness of the whole network. Density is simply the ratio of the actual number of links in the network over the total possible number of links in the network. The total number of links in a network is calculated as  $n*(n-1)$ , where  $n$  is the number of nodes in network. This means that a node's self links are not counted and are excluded in calculating density. In matrix terms this means the diagonal is excluded (links 1 to 1, 2 to 2, etc.)

If everyone is connected to everyone else in the network, the network has the maximum density of one. Density also varies from 0 to 1, where 0 indicates that there are no network connections and everyone is an isolate, and where 1 means that everyone in the network is connected to everyone else.

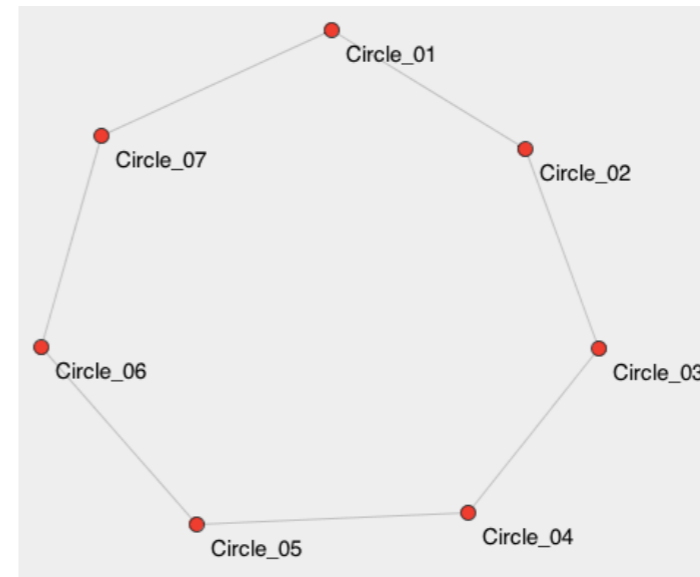


# Five Sample Graphs for comparing Individual and Group Centralities

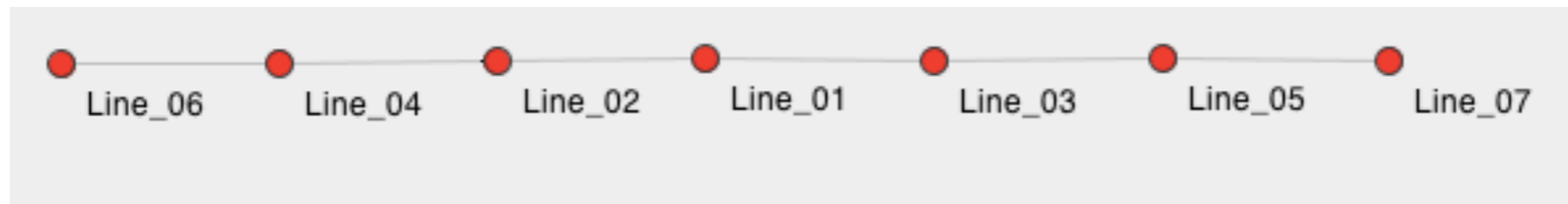
Star



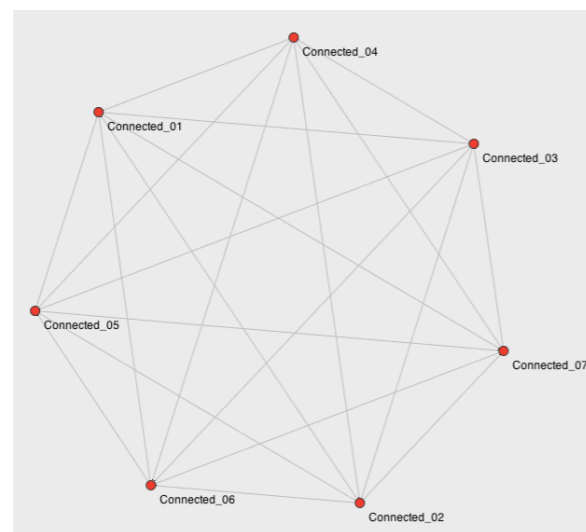
Circle



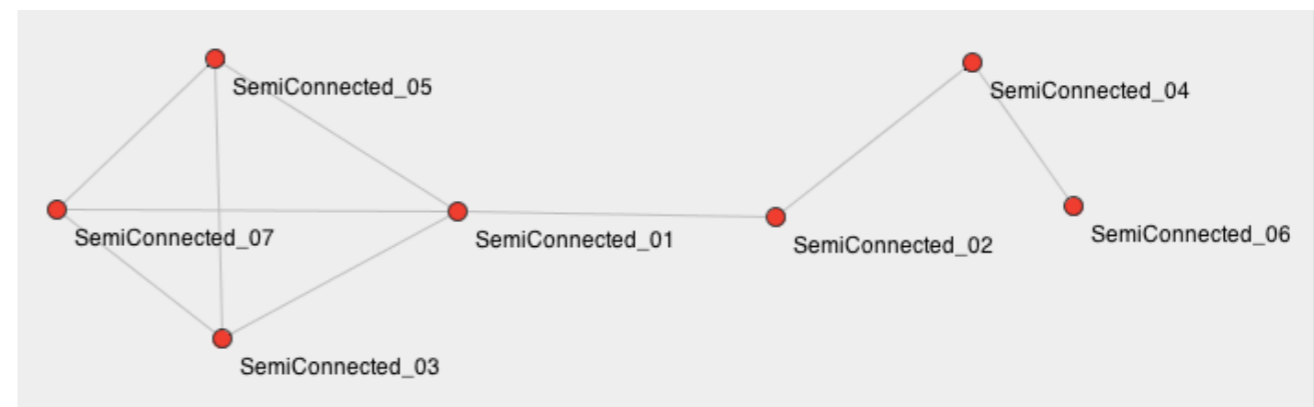
Line



Connected



SemiConnected



## Five Sample Graphs for comparing *Individual* Centralities

### Star

Star Individual Actor Centralities				
Uuid	Name	Betweenness centrality	Closeness centrality	Degree centrality
1	Star_01	15.00	1.00	6
2	Star_02	0.00	0.55	1
3	Star_03	0.00	0.55	1
4	Star_04	0.00	0.55	1
5	Star_05	0.00	0.55	1
6	Star_06	0.00	0.55	1
7	Star_07	0.00	0.55	1

### Circle

Circle Individual Actor Centralities				
Uuid	Name	Betweenness centrality	Closeness centrality	Degree centrality
1	Circle_01	3	0.5	1
2	Circle_02	3	0.5	1
3	Circle_03	3	0.5	1
4	Circle_04	3	0.5	1
5	Circle_05	3	0.5	1
6	Circle_06	3	0.5	1
7	Circle_07	3	0.5	1

### Line

Line Individual Actor Centralities				
Uuid	Name	Betweenness centrality	Closeness centrality	Degree centrality
1	Line_01	9	0.50	1
2	Line_02	8	0.46	1
3	Line_03	8	0.46	1
4	Line_04	5	0.38	1
5	Line_05	5	0.38	1
6	Line_06	0	0.29	1
7	Line_07	0	0.29	1

## Five Sample Graphs for comparing *Individual* Centralities

### SemiConnected

SemiConnected Individual Actor Centralities				
Uuid	Name	Betweenness centrality	Closeness centrality	Degree centrality
1	SemiConnected_01	9	0.67	4
2	SemiConnected_02	8	0.6	2
3	SemiConnected_03	0	0.5	3
4	SemiConnected_04	5	0.46	1
5	SemiConnected_05	0	0.5	3
6	SemiConnected_06	0	0.33	1
7	SemiConnected_07	0	0.5	3

### Connected

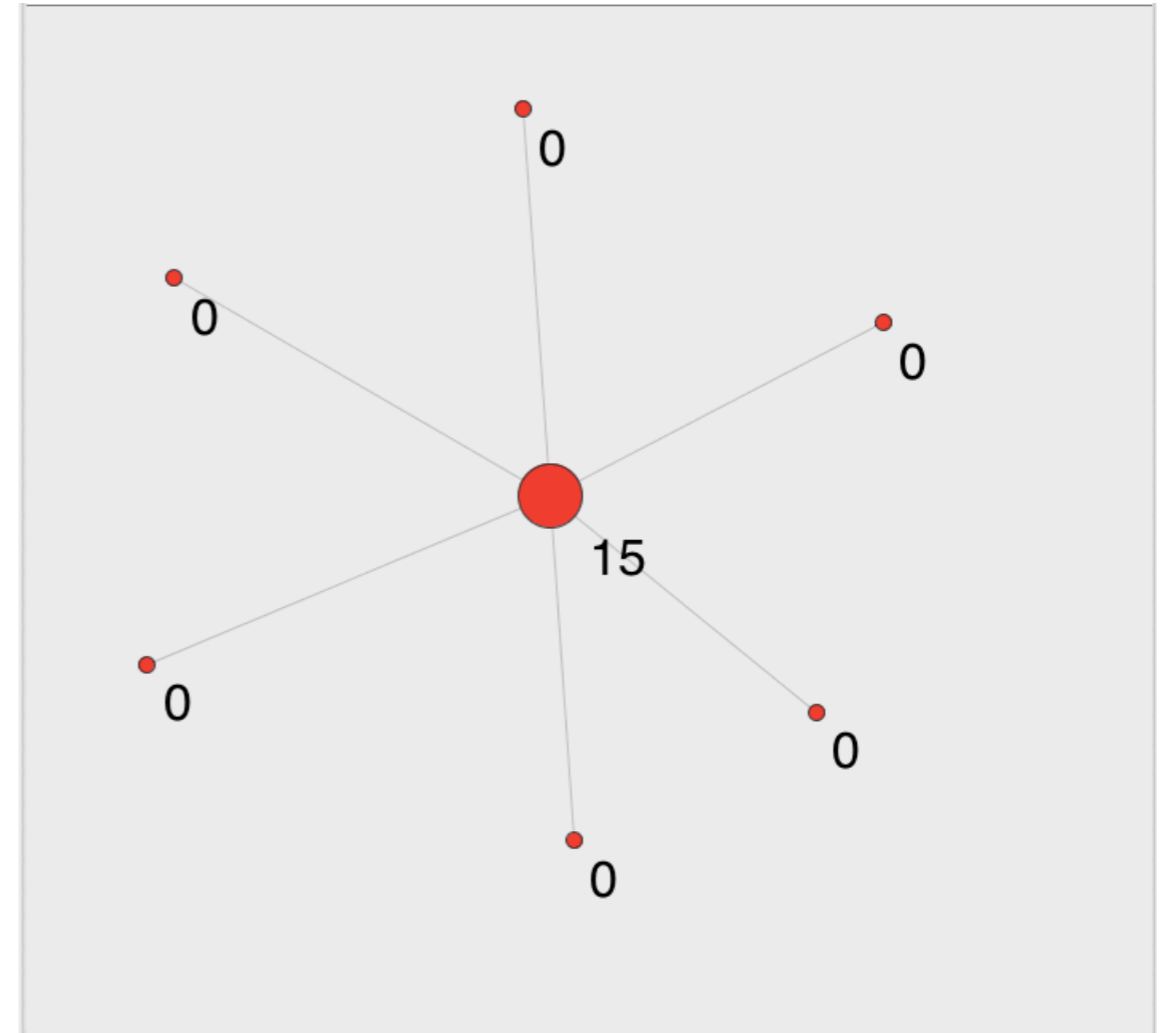
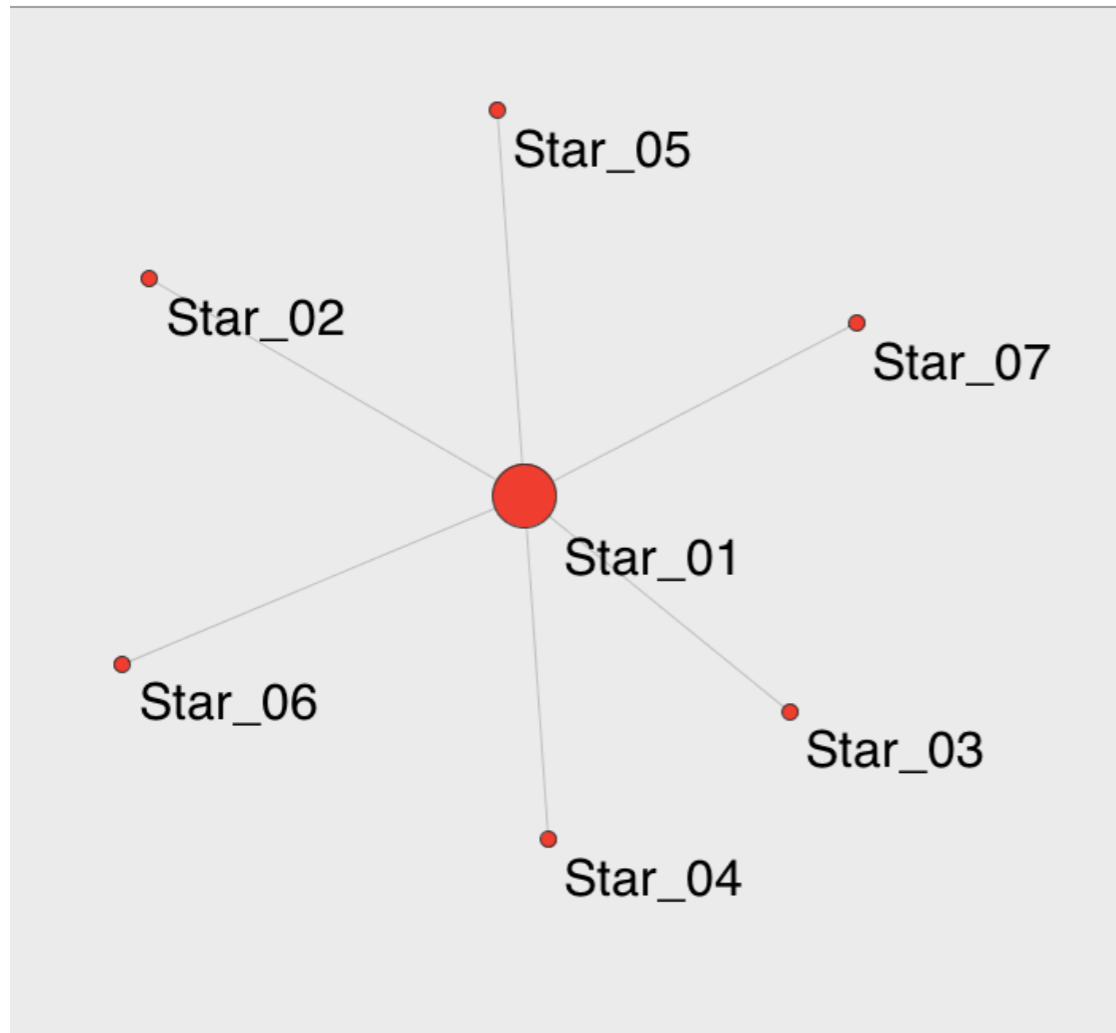
Connected Individual Actor Centralities				
Uuid	Name	Betweenness centrality	Closeness centrality	Degree centrality
1	Connected_01	0	1	6
2	Connected_02	0	1	6
3	Connected_03	0	1	6
4	Connected_04	0	1	6
5	Connected_05	0	1	6
6	Connected_06	0	1	6
7	Connected_07	0	1	6

## Five Sample Graphs for comparing *Group* Centralities

<b>Comparison of Group Centrality Measures, All networks have 7 nodes.</b>			
	<b>Group Degree Centrality</b>	<b>Graph density</b>	<b>Group Betweenness Centrality</b>
<b>Star</b>	<b>1.00</b>	<b>0.14</b>	<b>1.00</b>
<b>Circle</b>	<b>0.00</b>	<b>0.17</b>	<b>0.00</b>
<b>Line</b>	<b>0.00</b>	<b>0.14</b>	<b>0.31</b>
<b>SemiConnected</b>	<b>0.37</b>	<b>0.38</b>	<b>0.46</b>
<b>Connected</b>	<b>0.00</b>	<b>1.00</b>	<b>0.00</b>

# Star Example with *Betweenness Centrality* by Actor Size and Labels

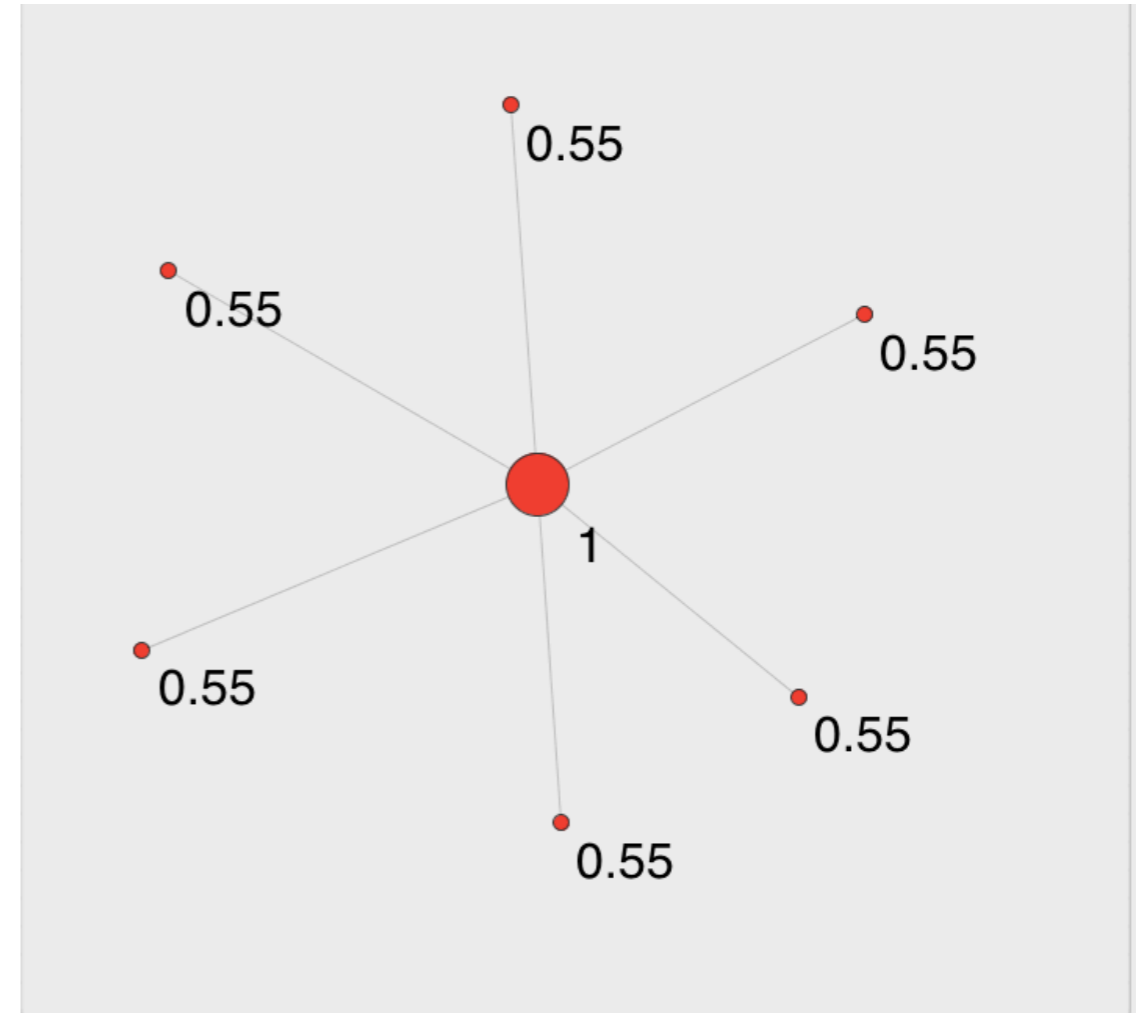
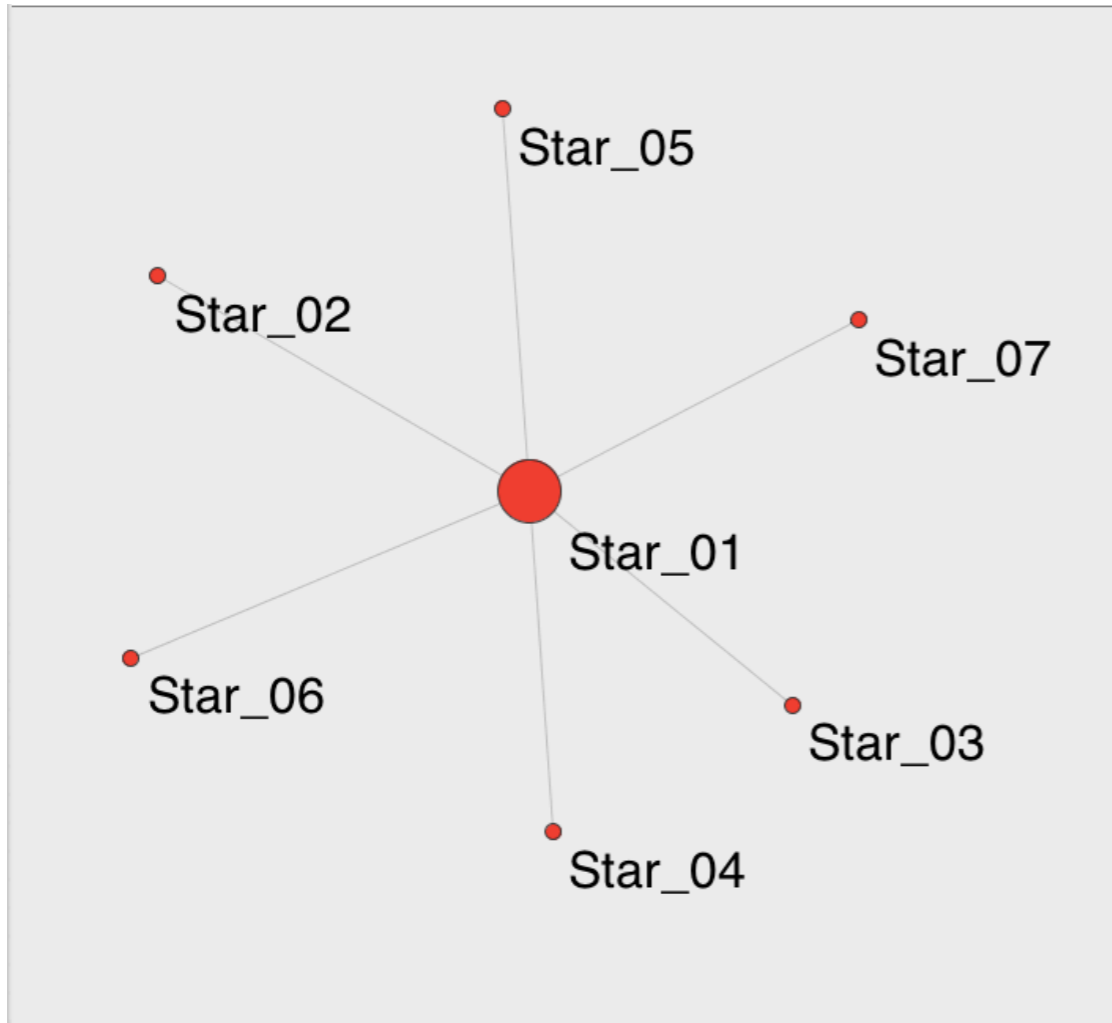
n=7



	Group Degree Centrality	Graph density	Group Betweenness Centrality
Star	1.00	0.14	1.00

# Star Example with **Closeness Centrality** by Actor Size and Labels

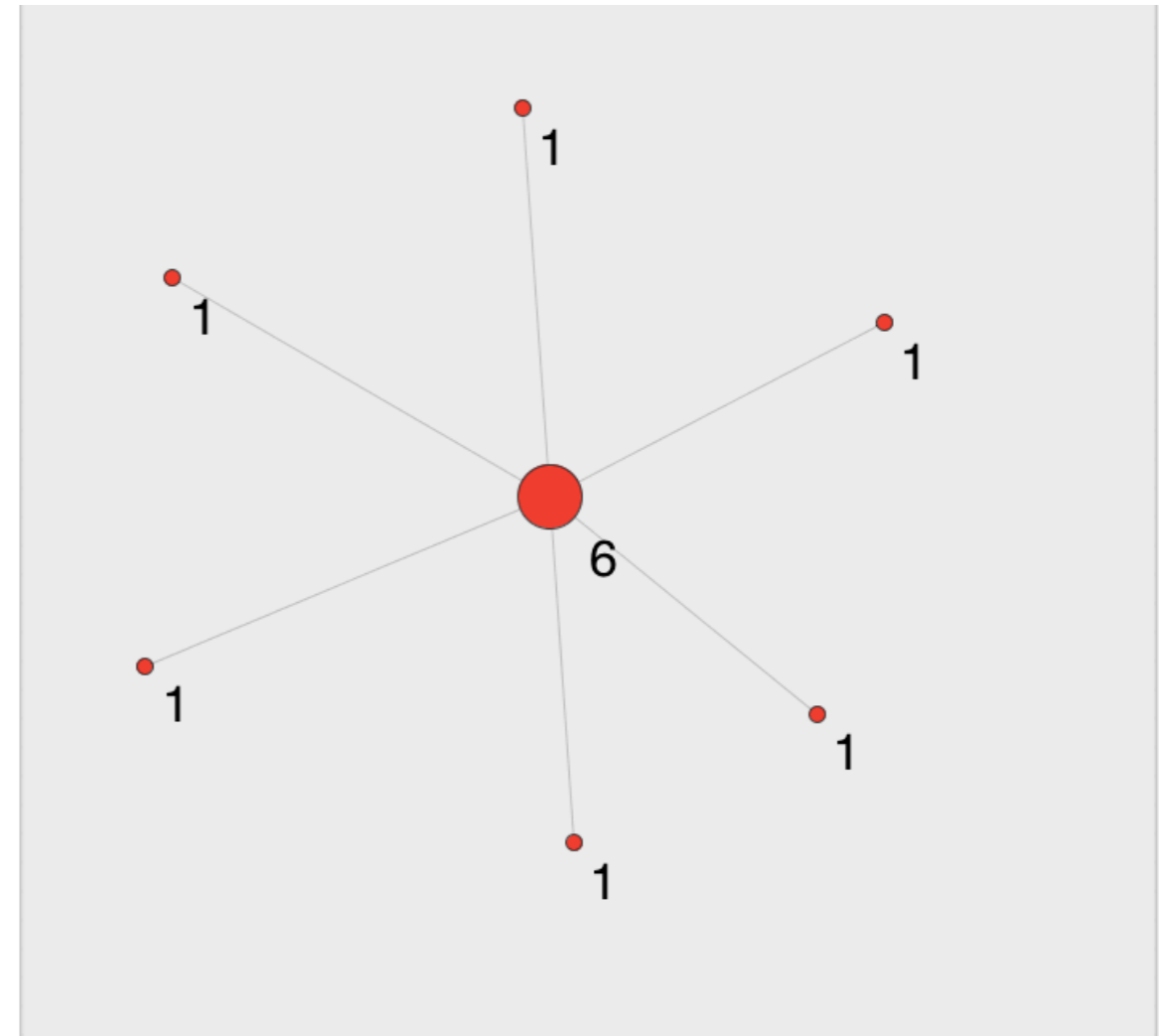
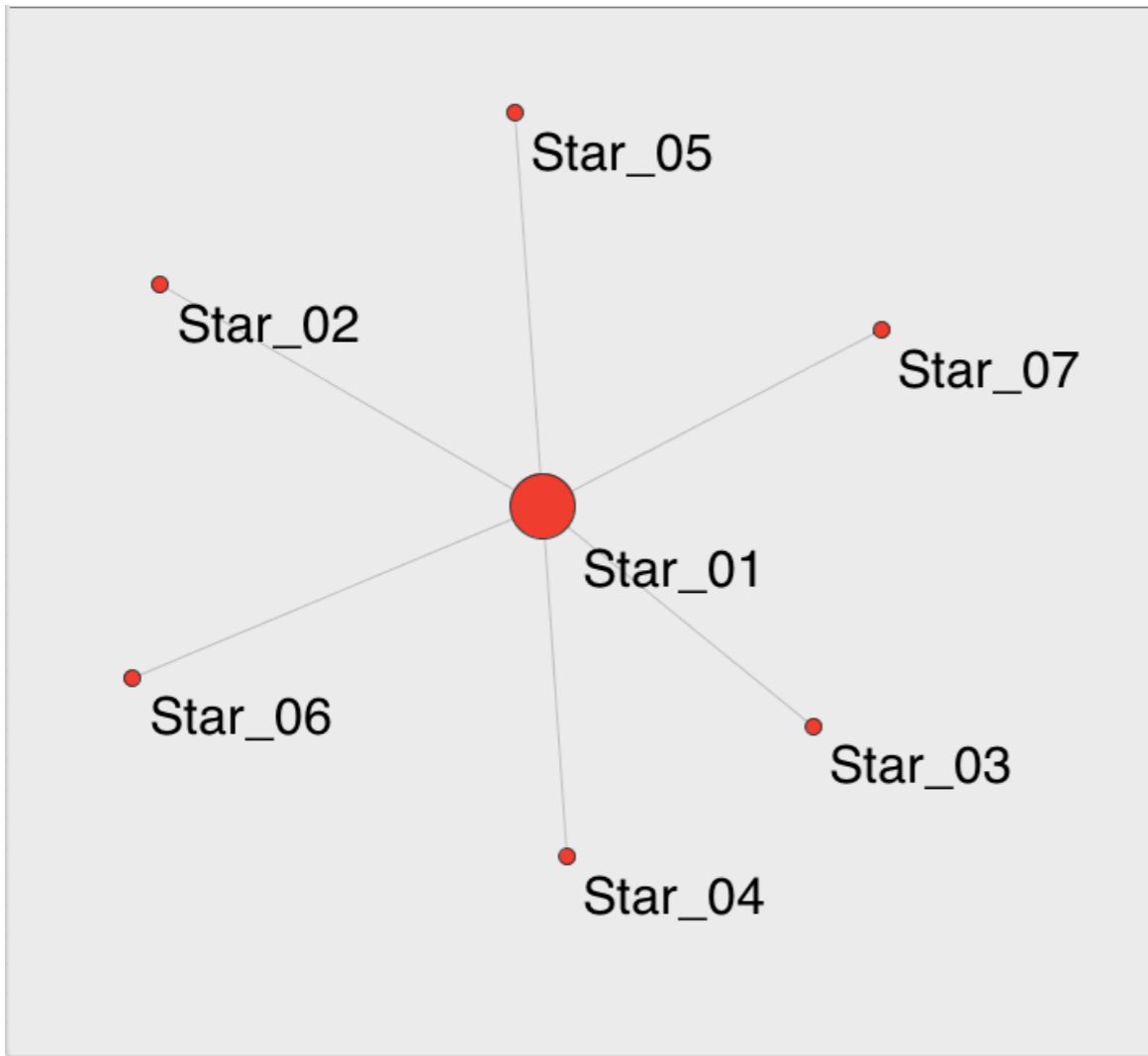
n=7



	Group Degree Centrality	Graph density	Group Betweenness Centrality
Star	1.00	0.14	1.00

# Star Example with *Degree Centrality* by Actor Size and Labels

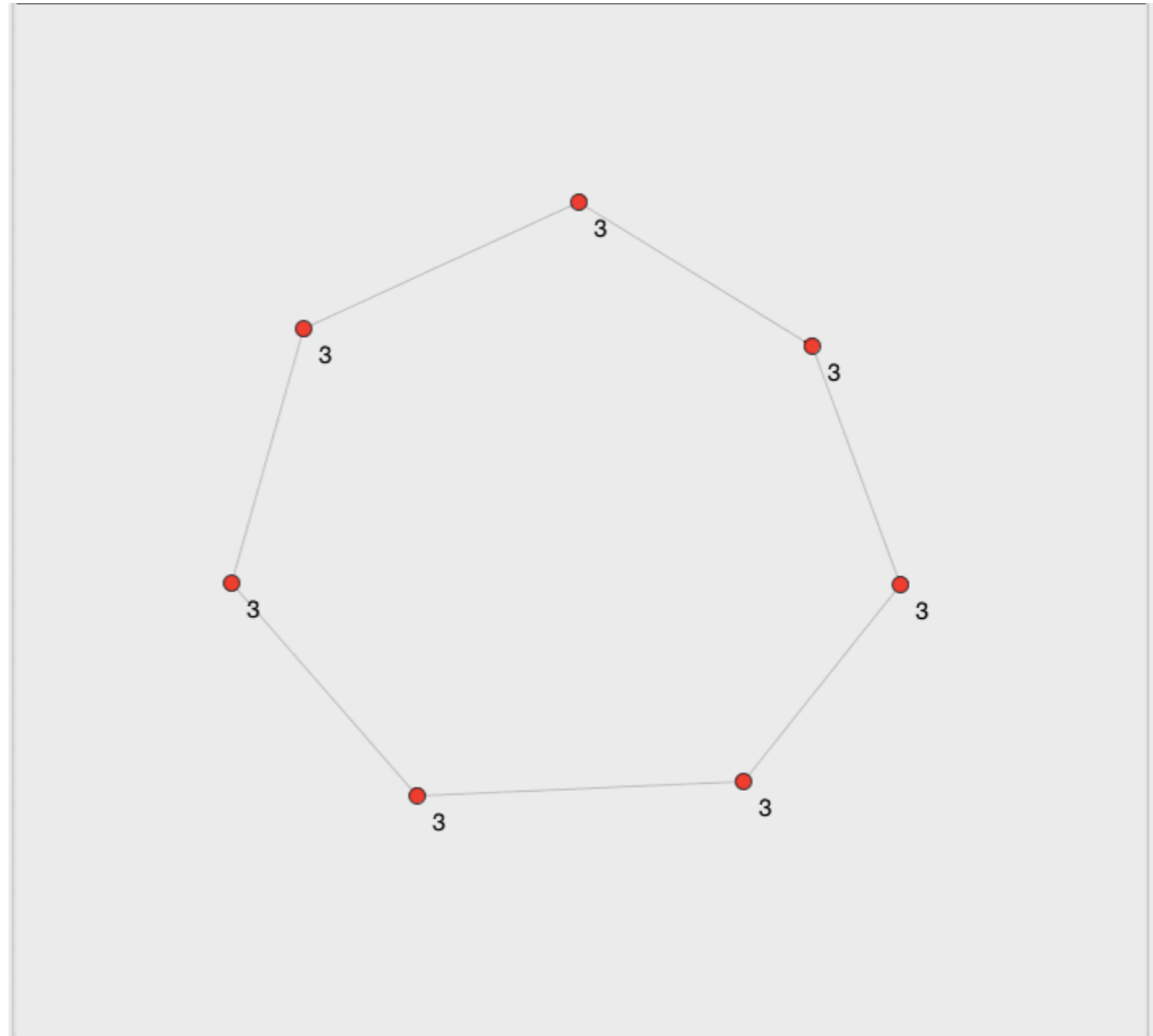
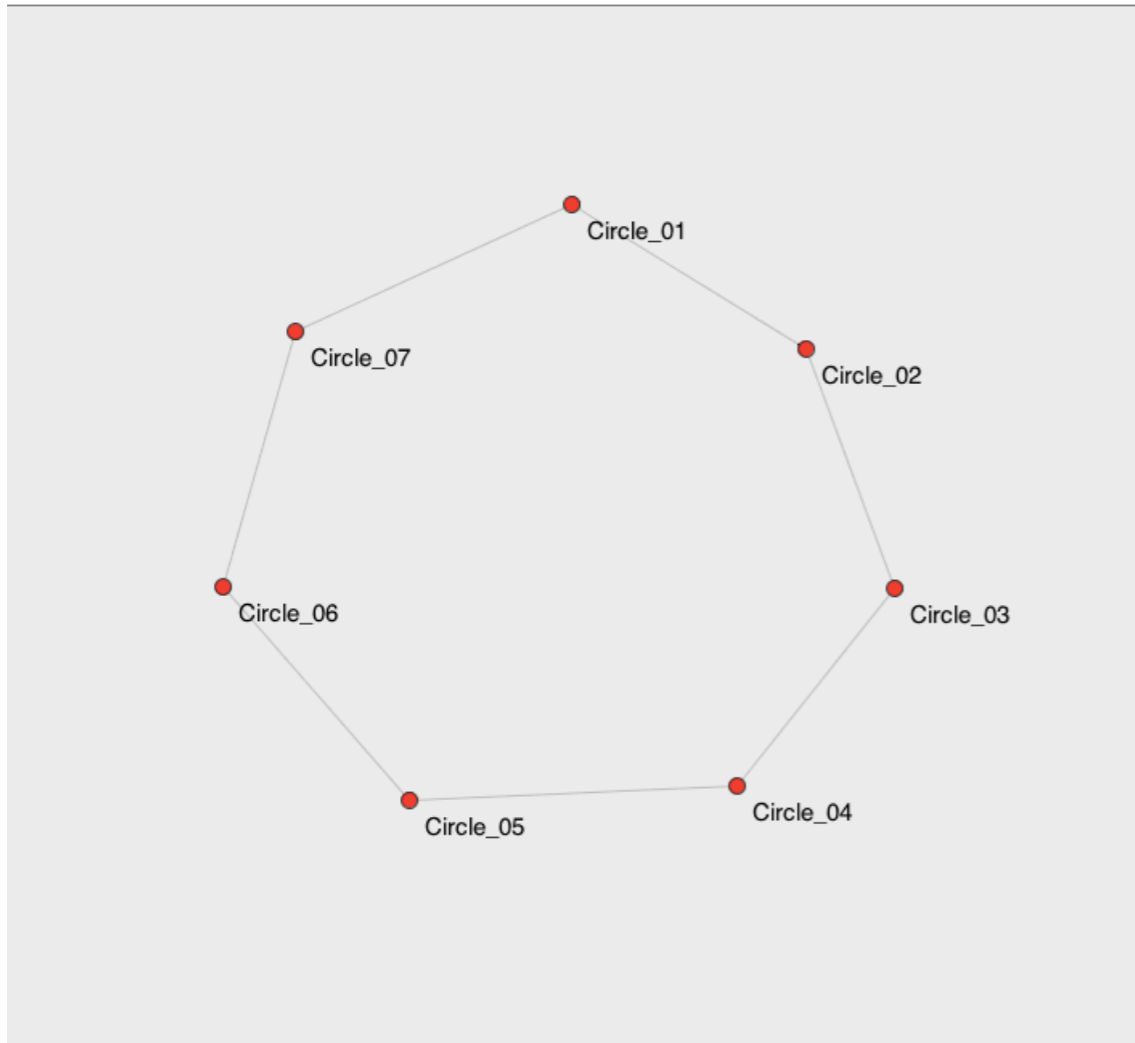
n=7



	Group Degree Centrality	Graph density	Group Betweenness Centrality
Star	1.00	0.14	1.00

# Circle Example with *Betweenness Centrality* by Actor Size and Labels

n=7

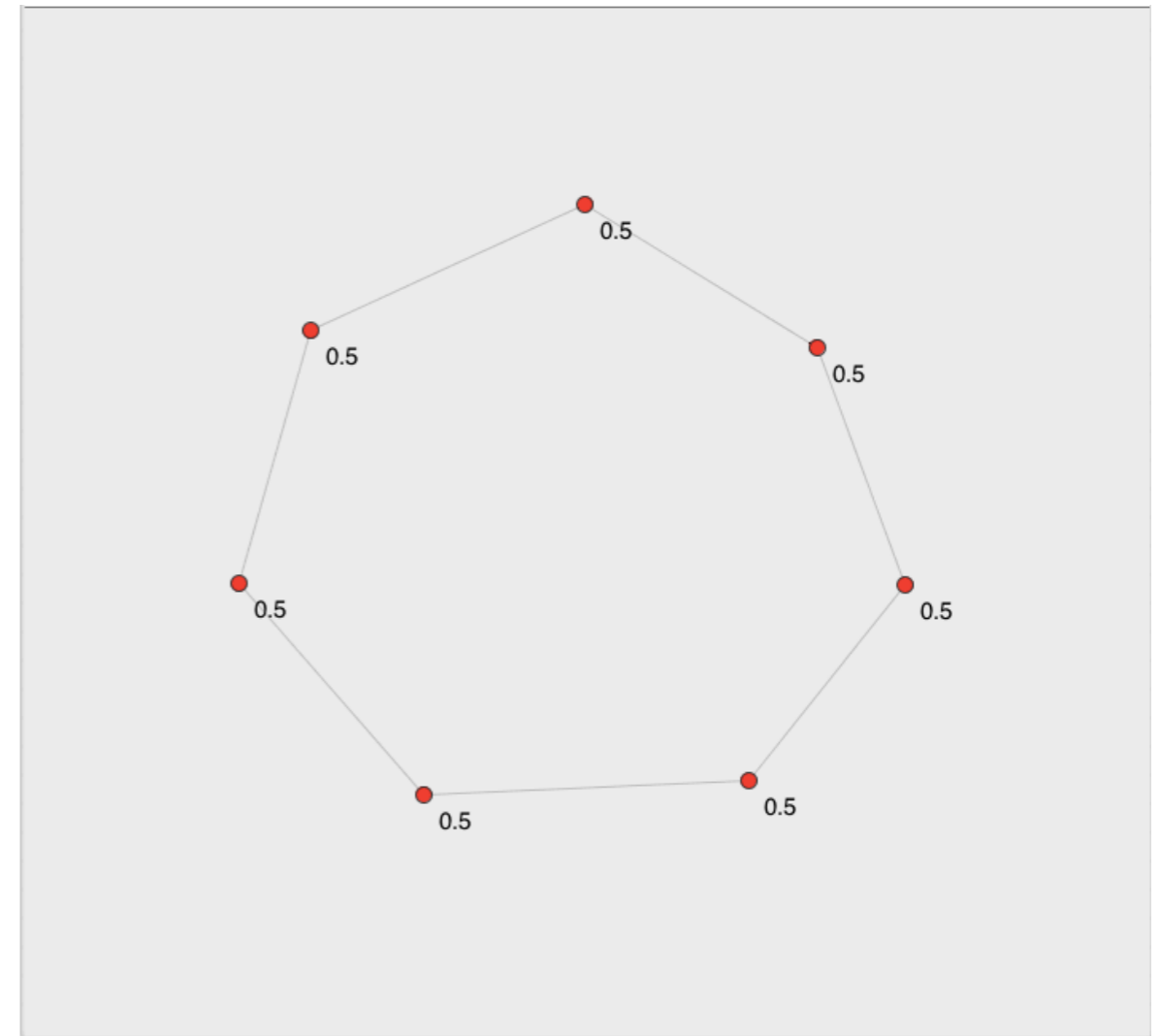
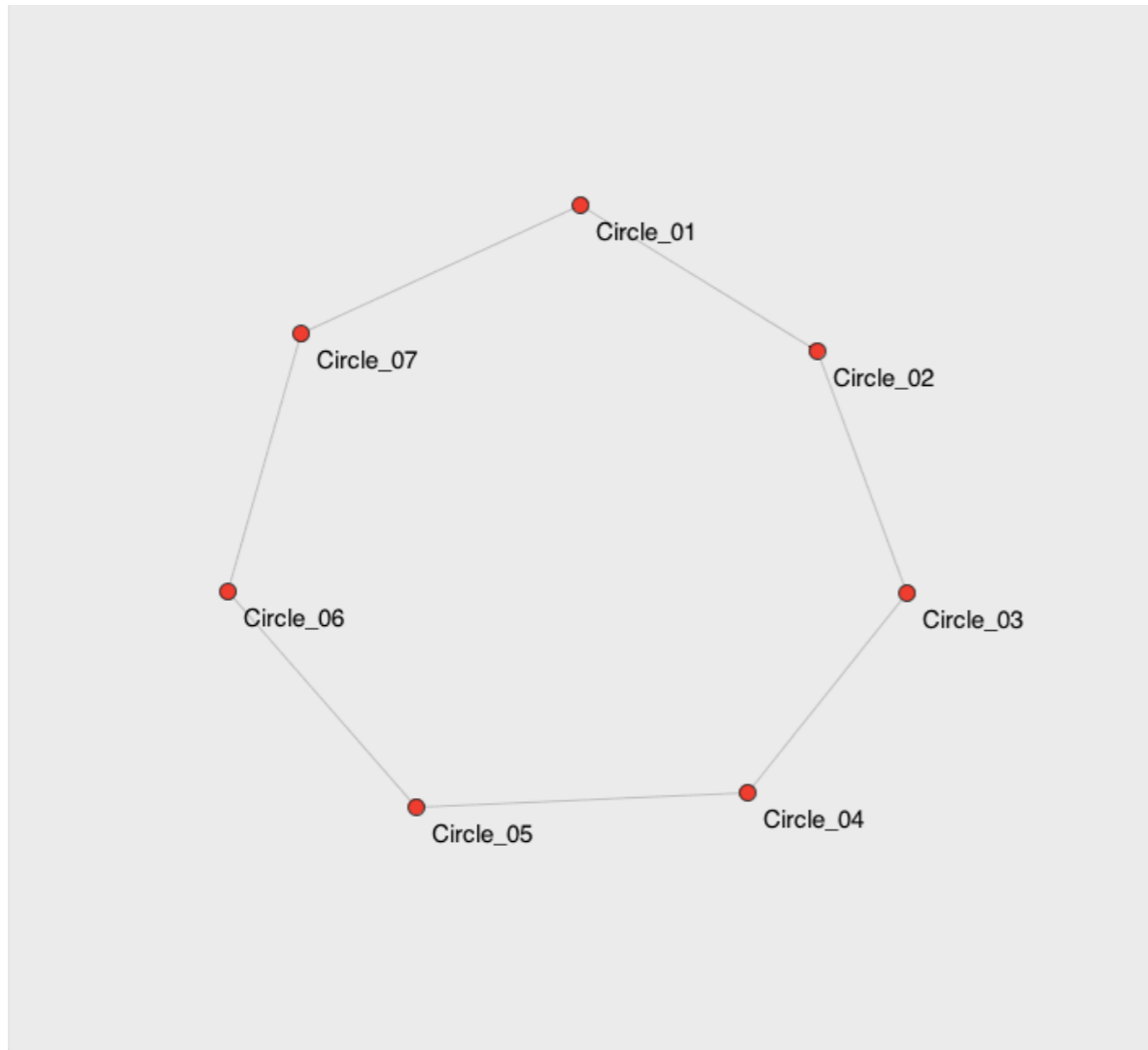


	Group Degree Centrality	Graph density	Group Betweenness Centrality
Circle	0.00	0.17	0.00



# Circle Example with **Closeness Centrality** by Actor Size and Labels

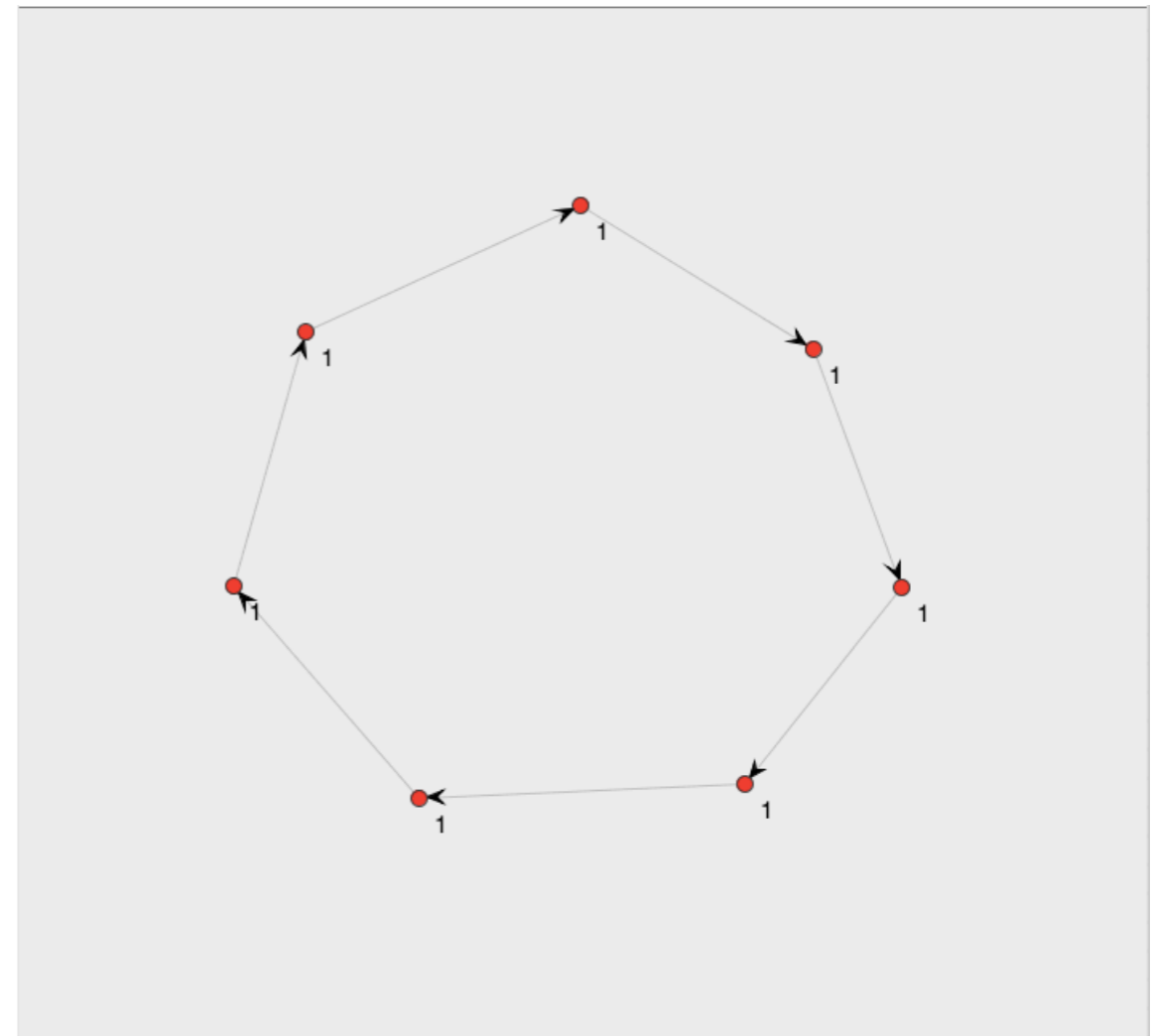
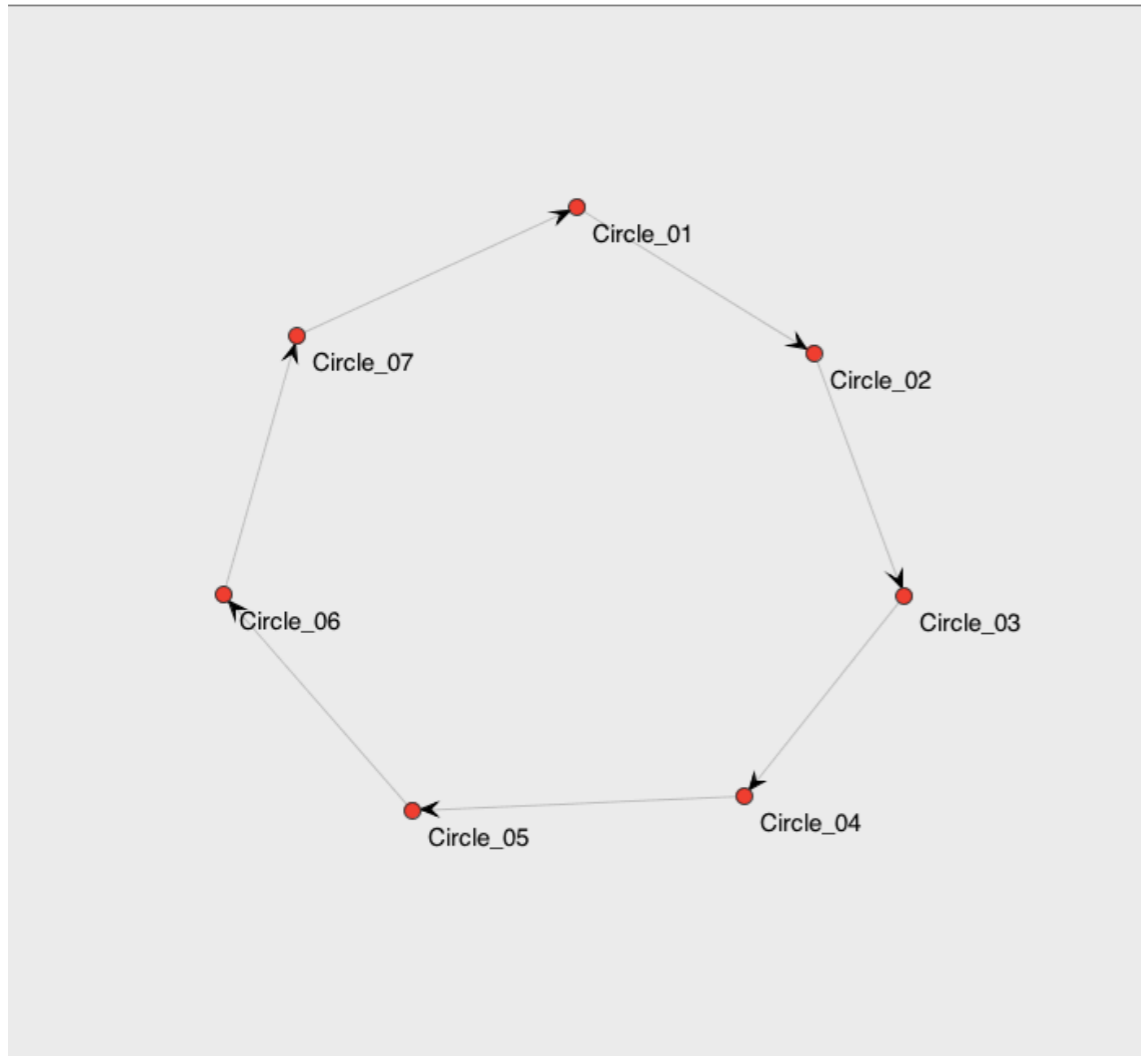
n=7



	Group Degree Centrality	Graph density	Group Betweenness Centrality
Circle	0.00	0.17	0.00

# Circle Example with *Degree Centrality* by Actor Size and Labels

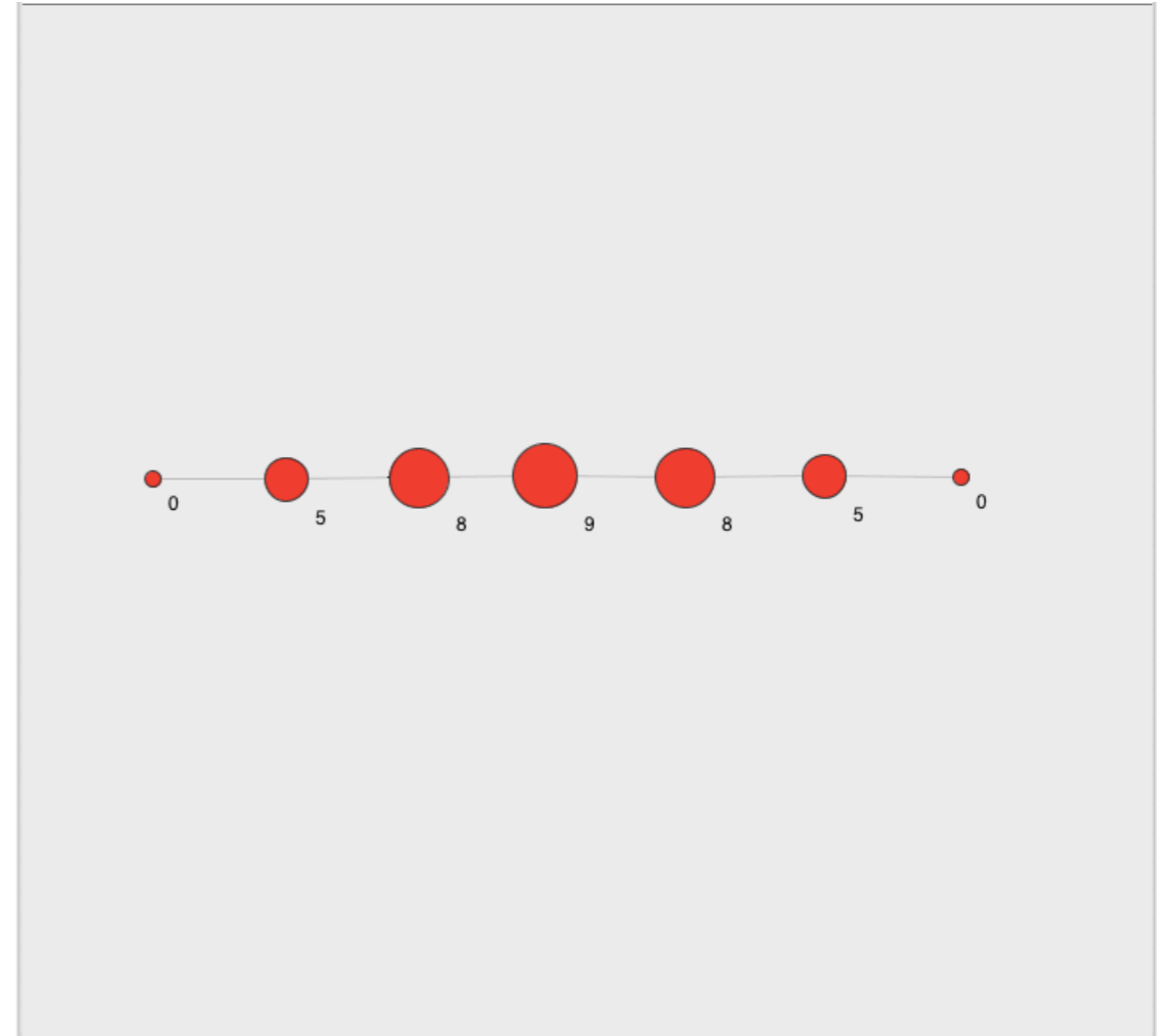
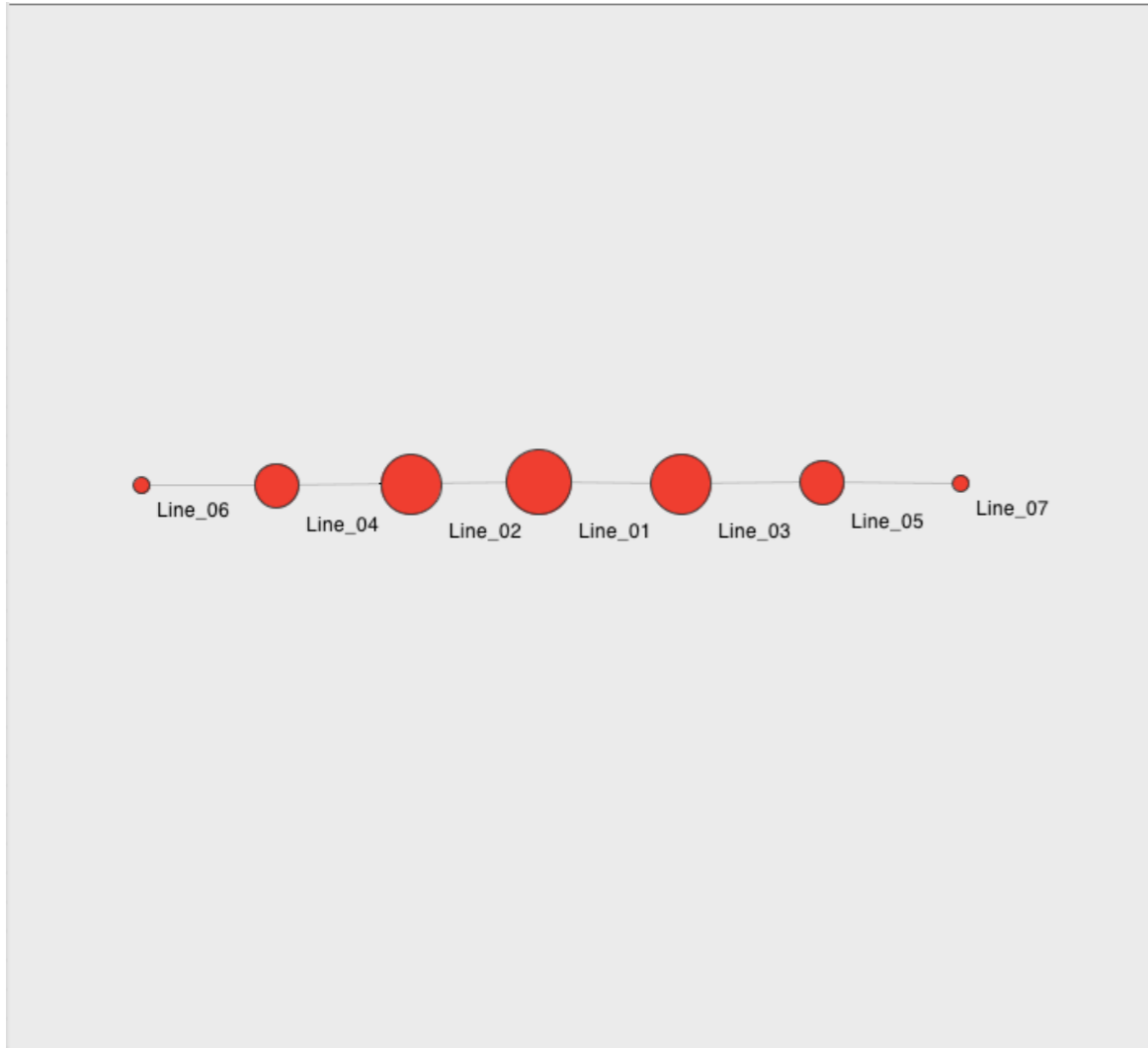
n=7



	Group Degree Centrality	Graph density	Group Betweenness Centrality
Circle	0.00	0.17	0.00

# Line Example with *Betweenness Centrality* by Actor Size and Labels

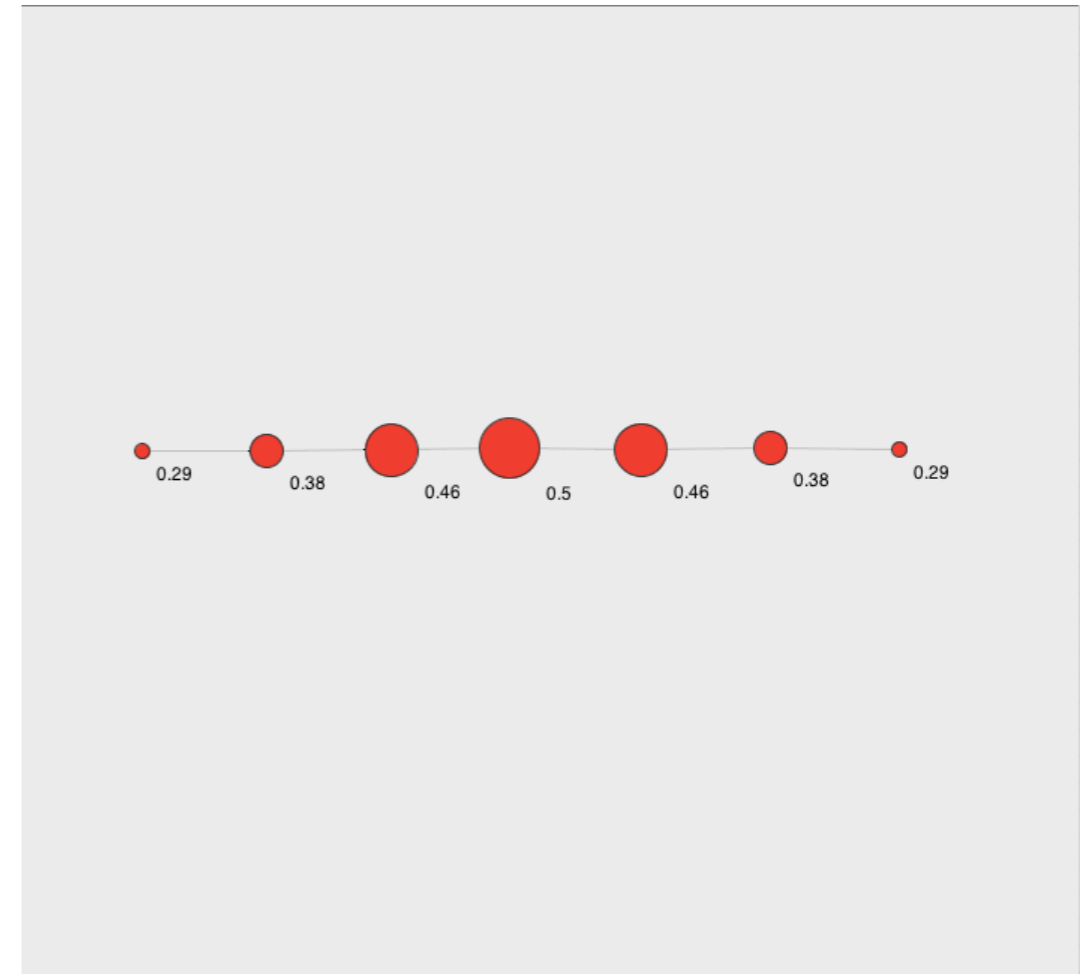
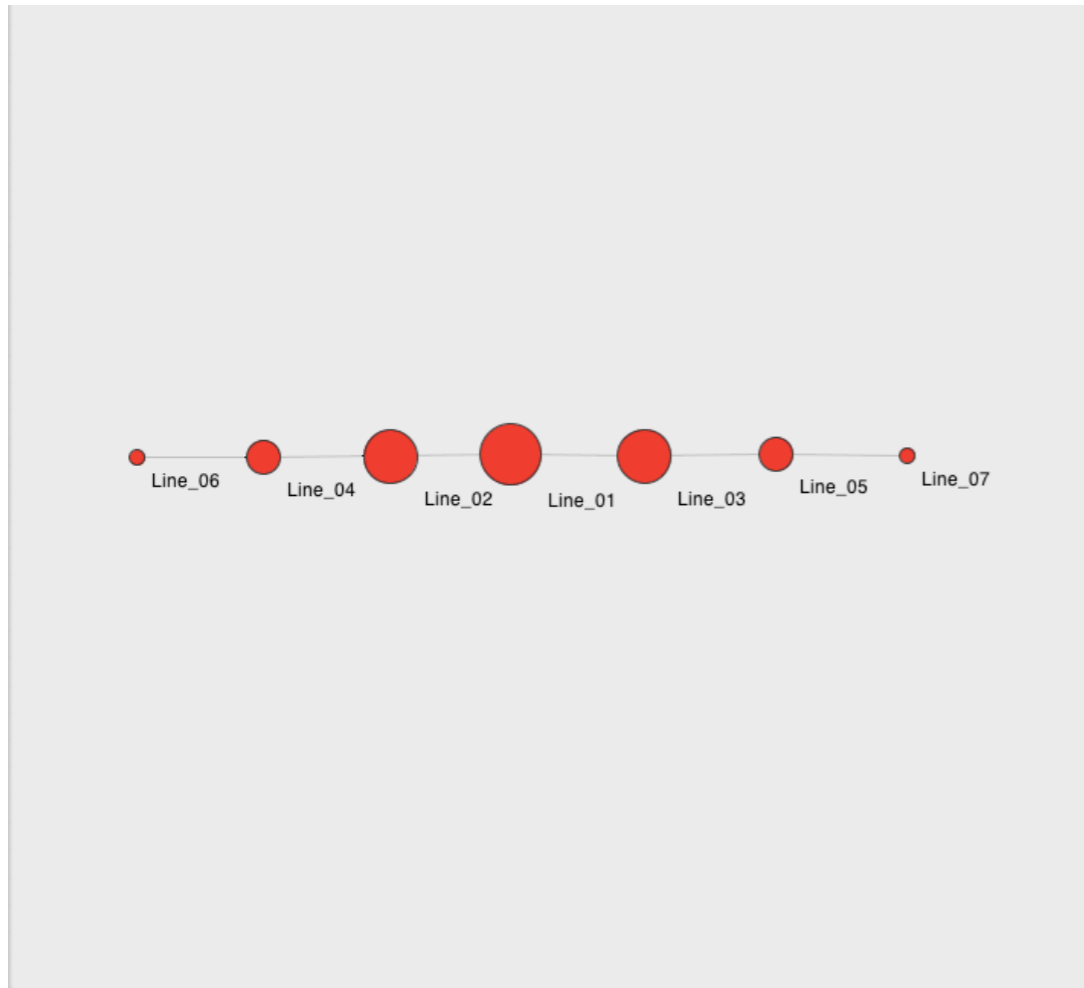
n=7



	Group Degree Centrality	Graph density	Group Betweenness Centrality
Line	0.00	0.14	0.31

# Line Example with *Closeness Centrality* by Actor Size and Labels

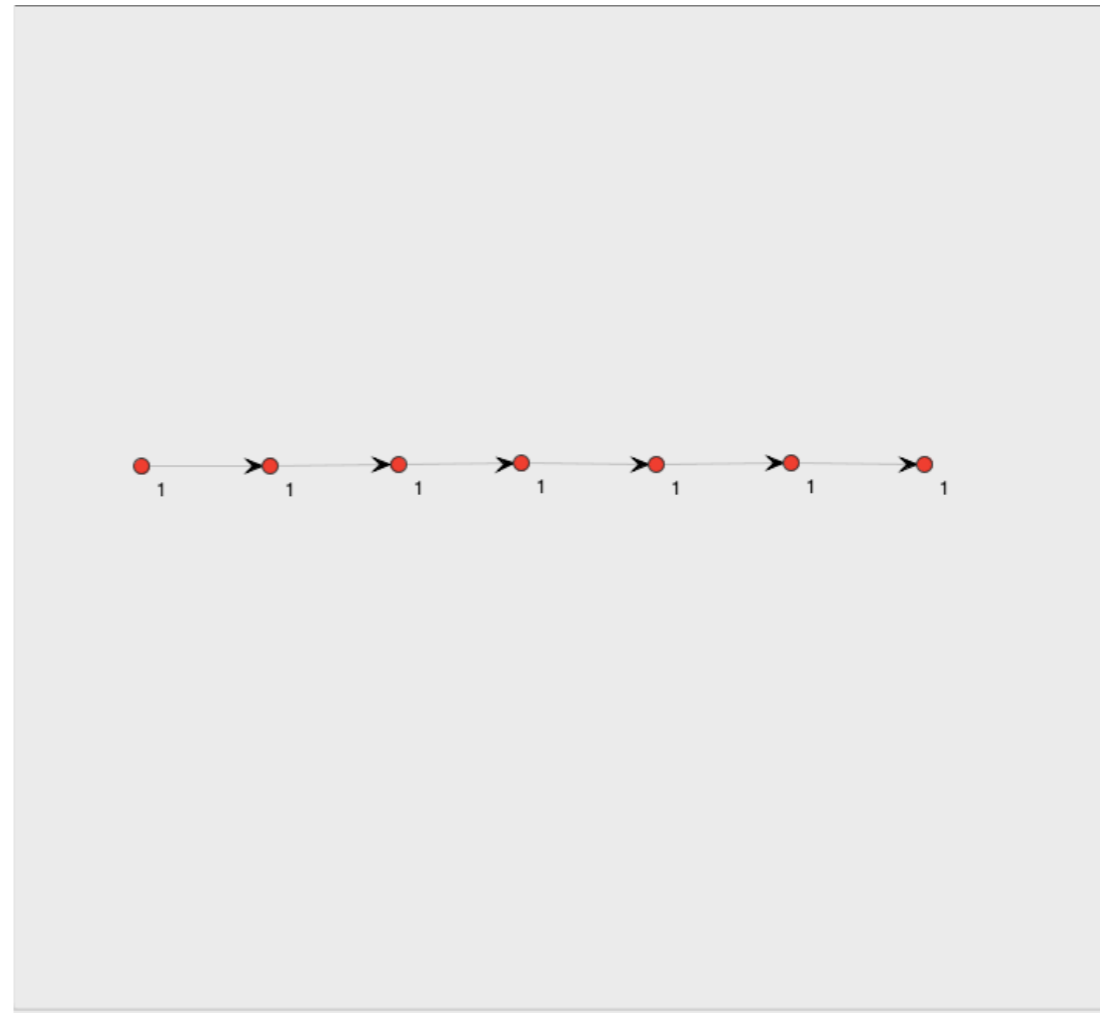
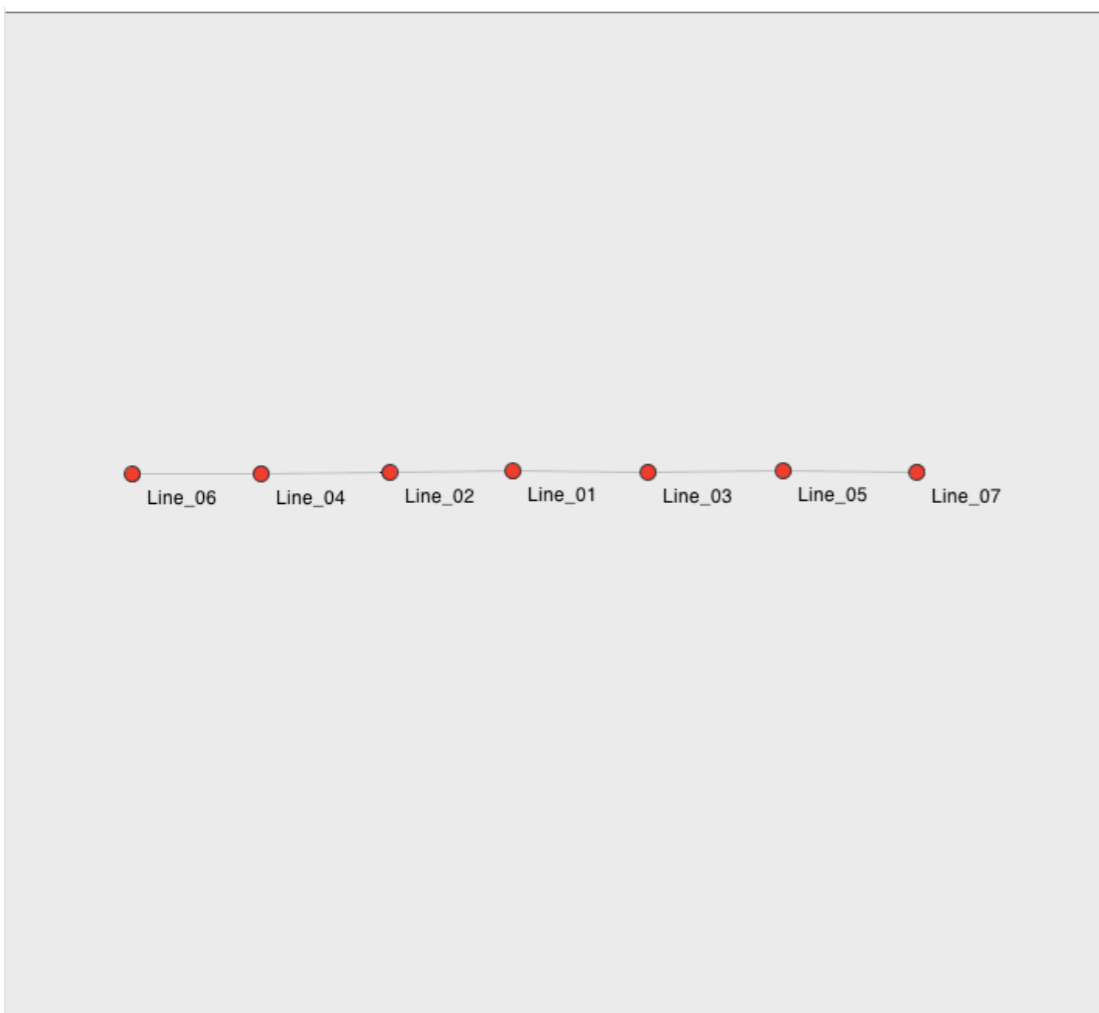
n=7



	Group Degree Centrality	Graph density	Group Betweenness Centrality
Line	0.00	0.14	0.31

# Line Example with *Degree Centrality* by Actor Size and Labels

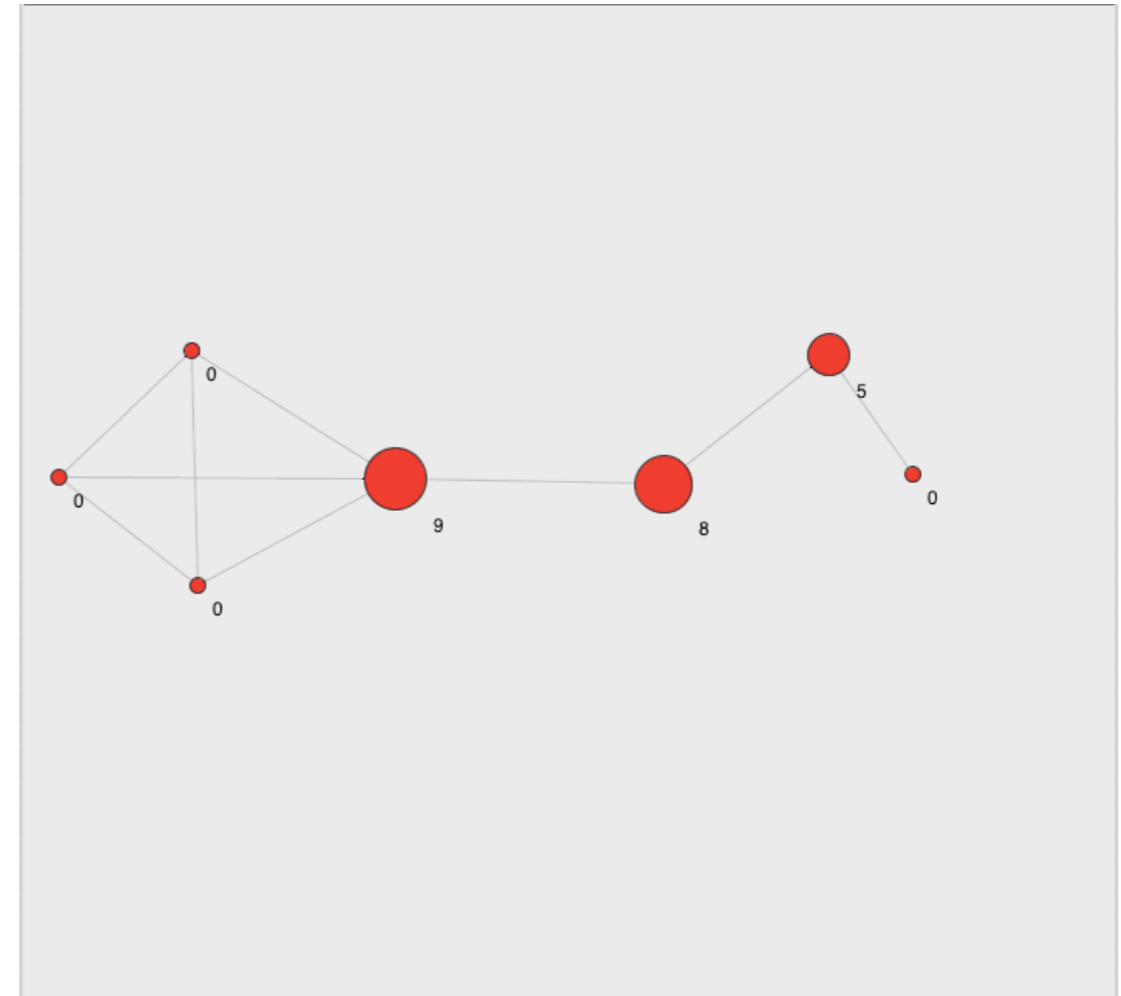
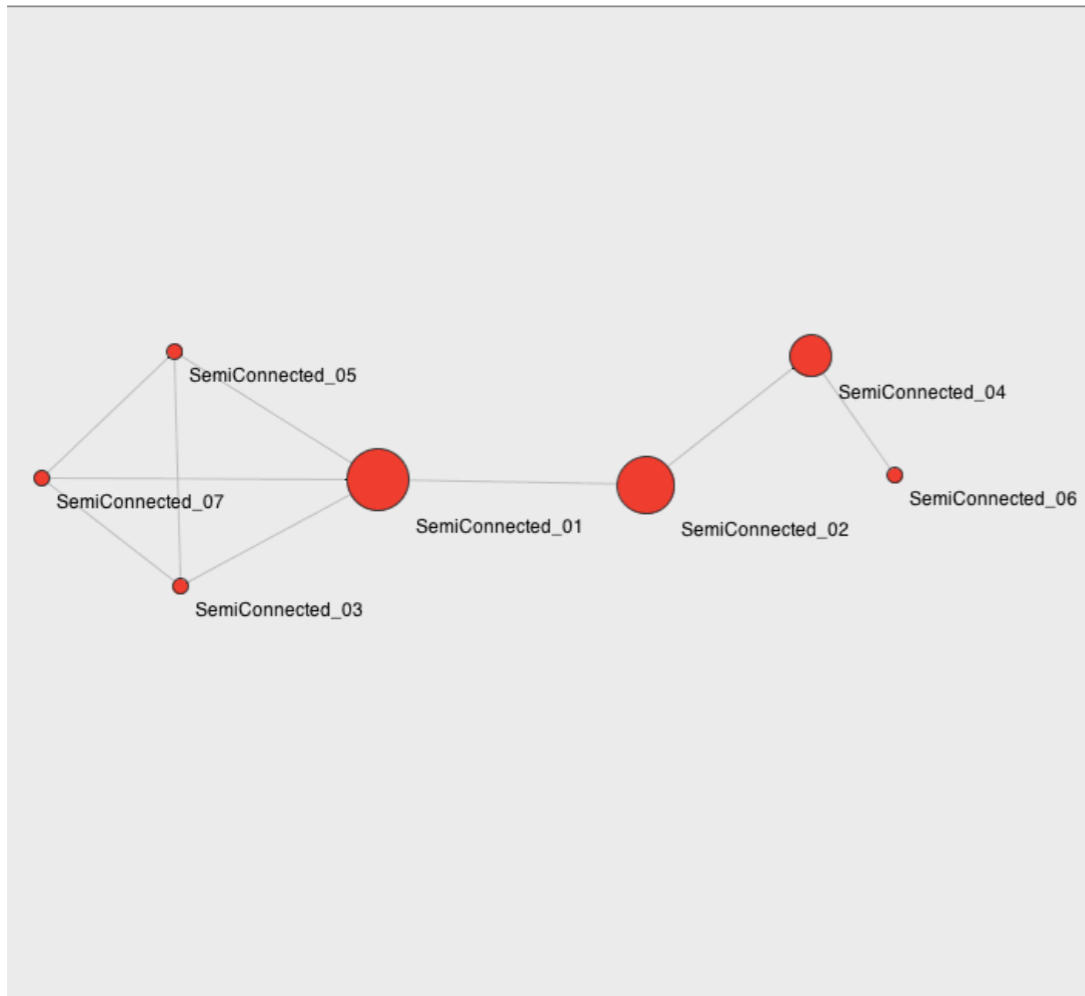
n=7



	Group Degree Centrality	Graph density	Group Betweenness Centrality
Line	0.00	0.14	0.31

# SemiConnected Example with *Betweenness Centrality* by Actor Size and Labels

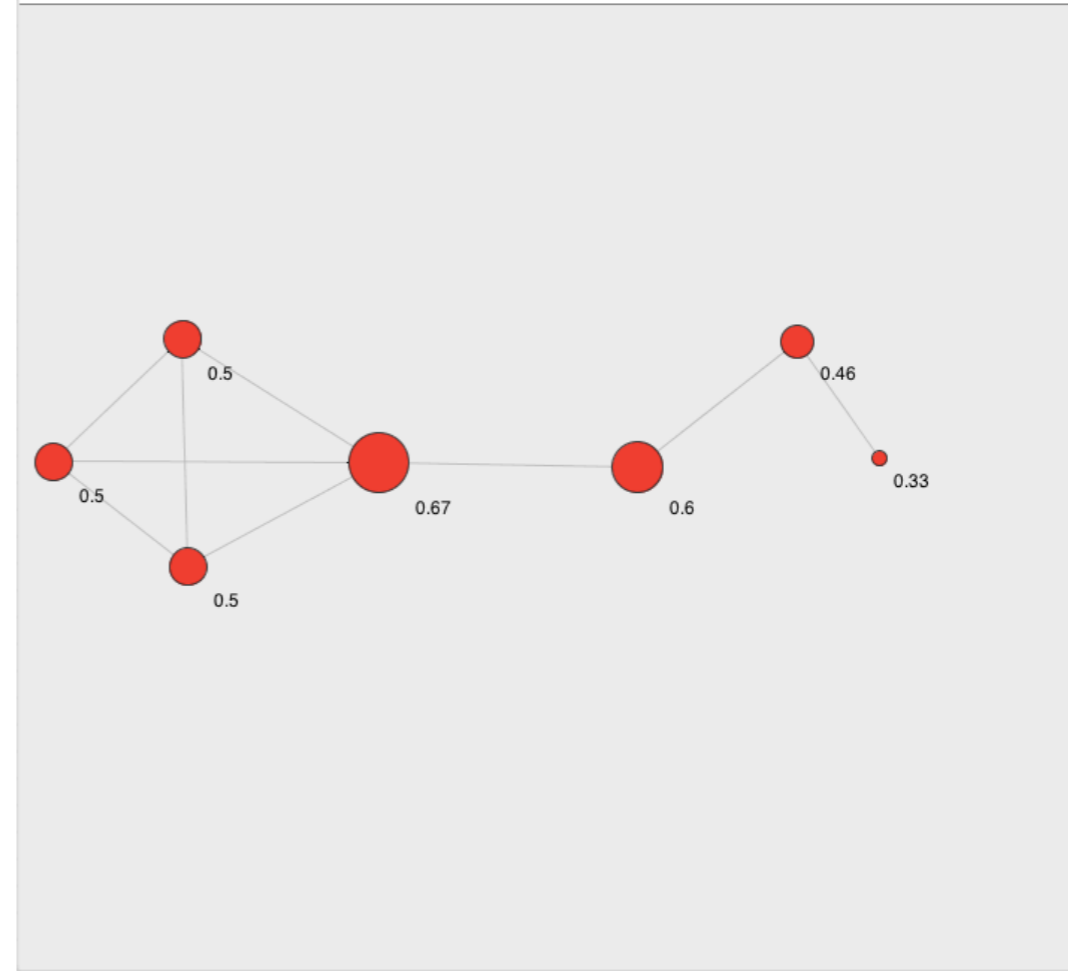
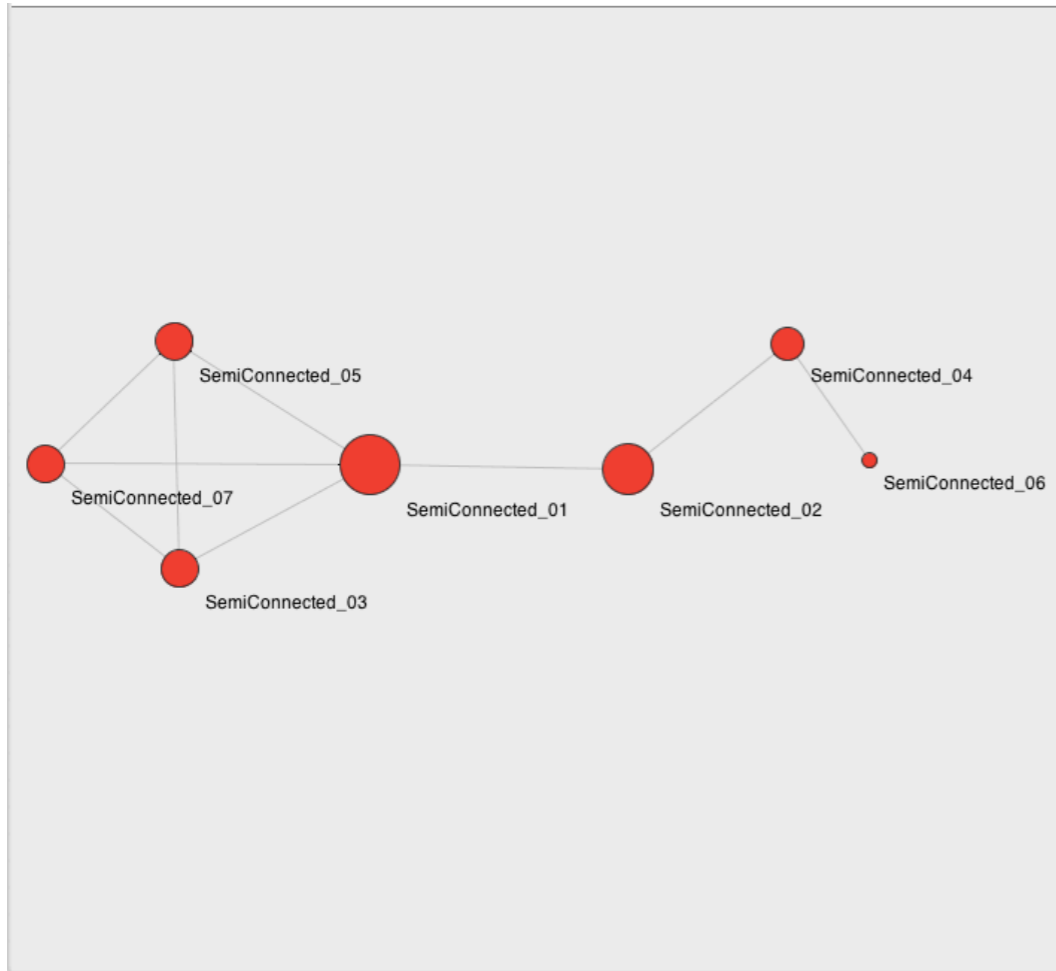
n=7



	Group Degree Centrality	Graph density	Group Betweenness Centrality
SemiConnected	0.37	0.38	0.46

# SemiConnected Example with *Closeness Centrality* by Actor Size and Labels

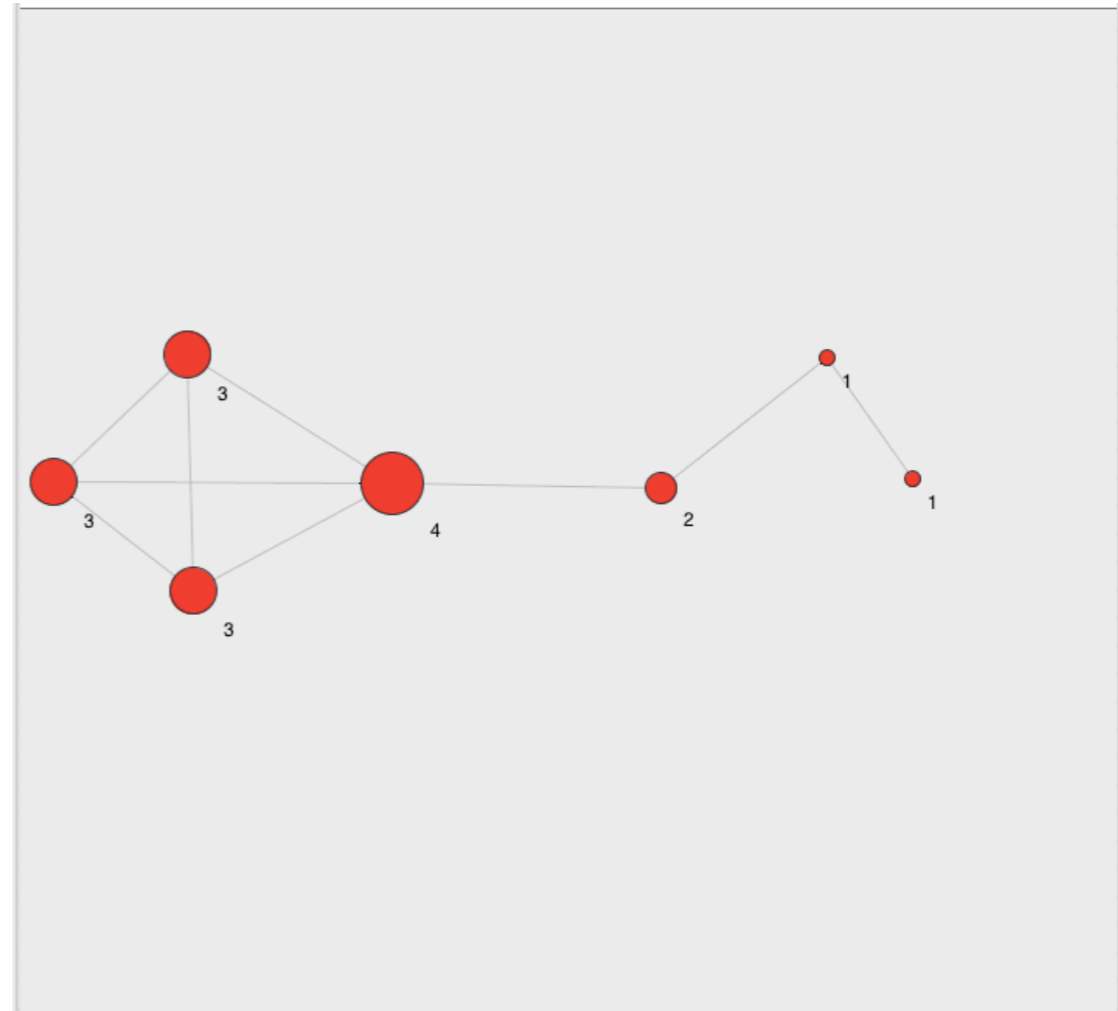
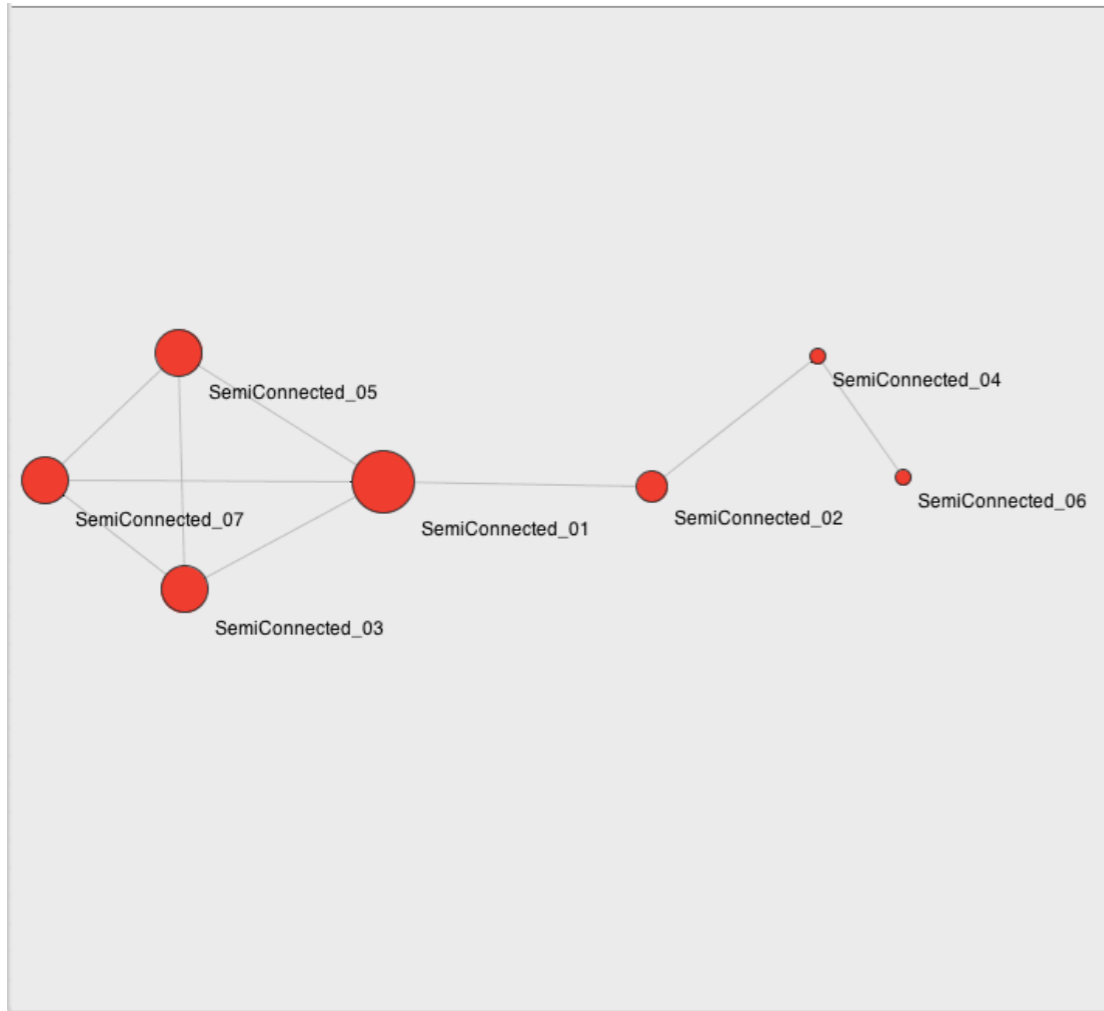
n=7



	Group Degree Centrality	Graph density	Group Betweenness Centrality
SemiConnected	0.37	0.38	0.46

# SemiConnected Example with *Degree Centrality* by Actor Size and Labels

n=7

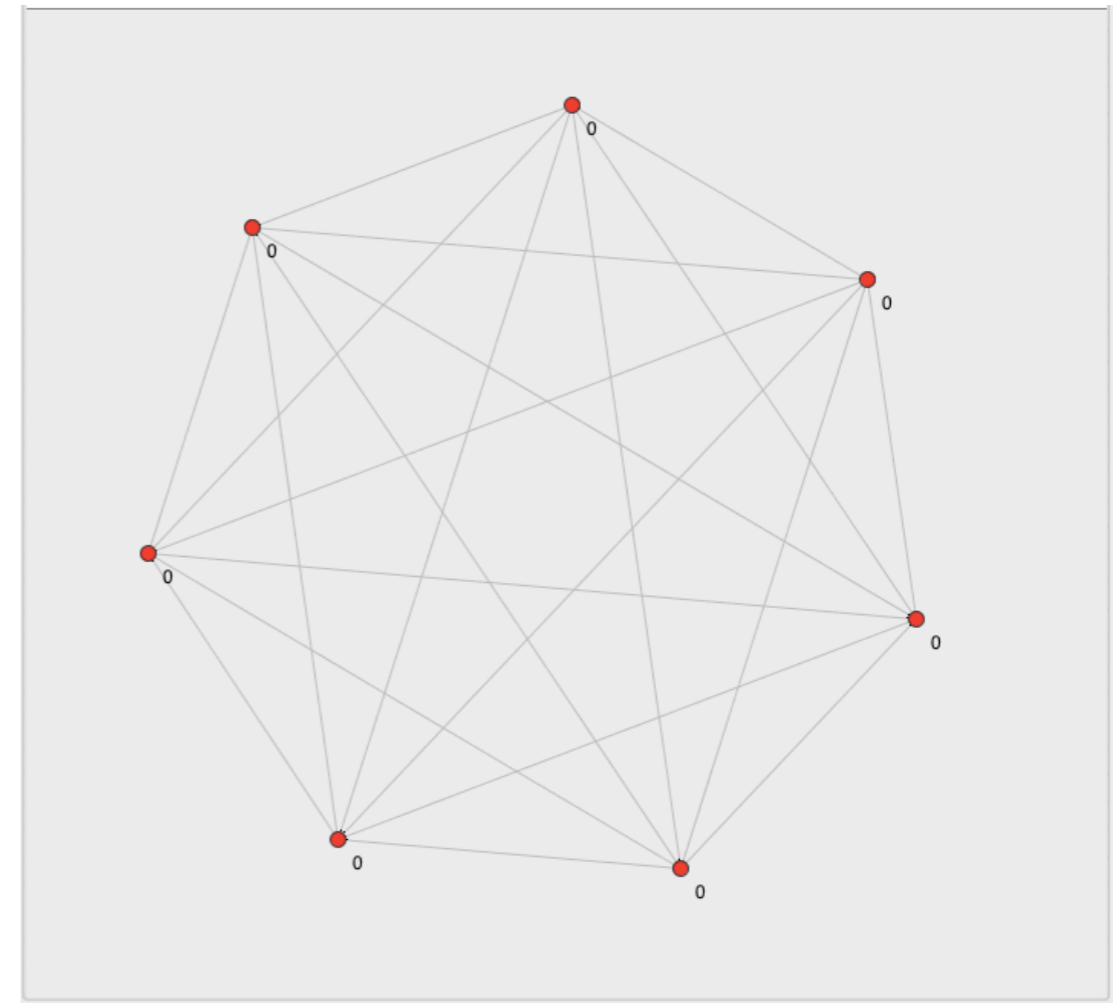
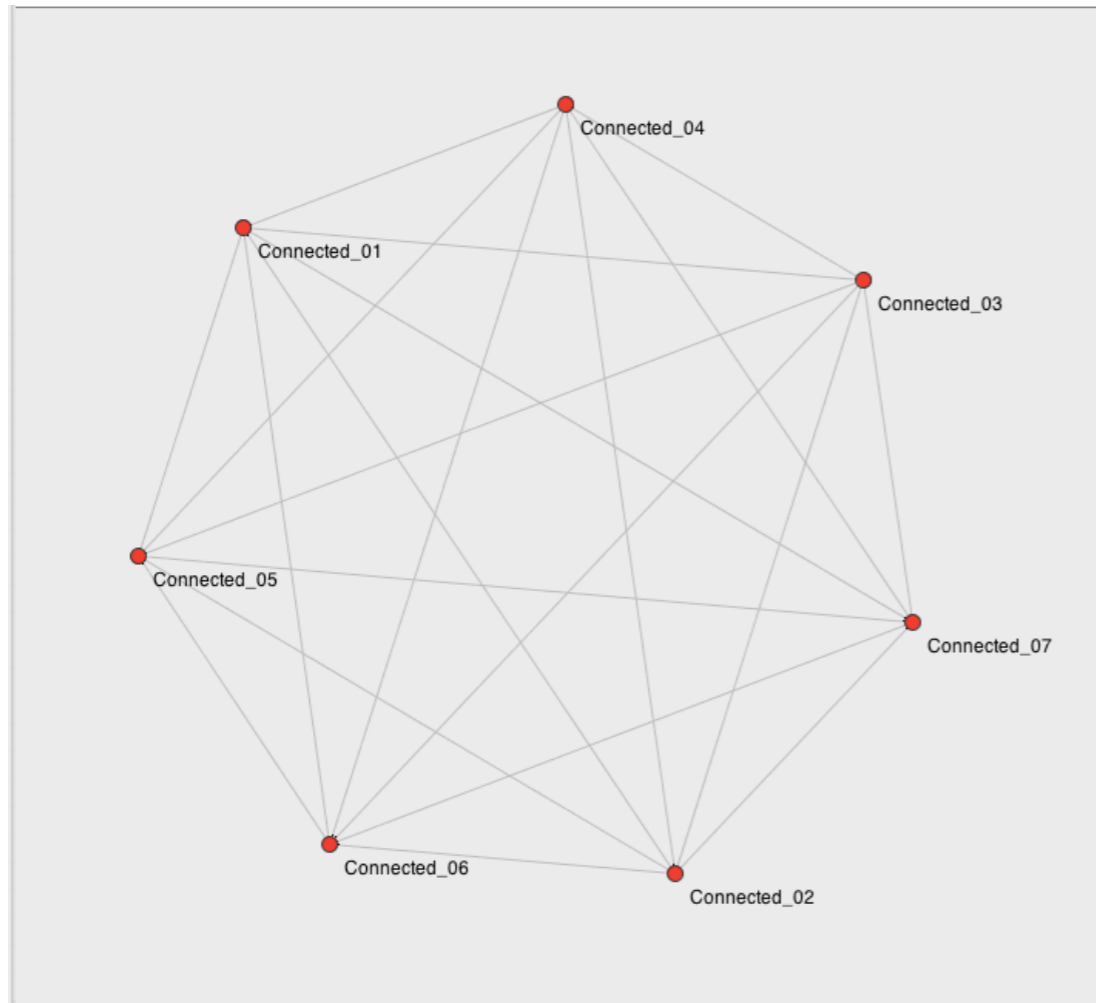


	Group Degree Centrality	Graph density	Group Betweenness Centrality
SemiConnected	0.37	0.38	0.46



# Connected Example with **Betweenness Centrality** by Actor Size and Labels

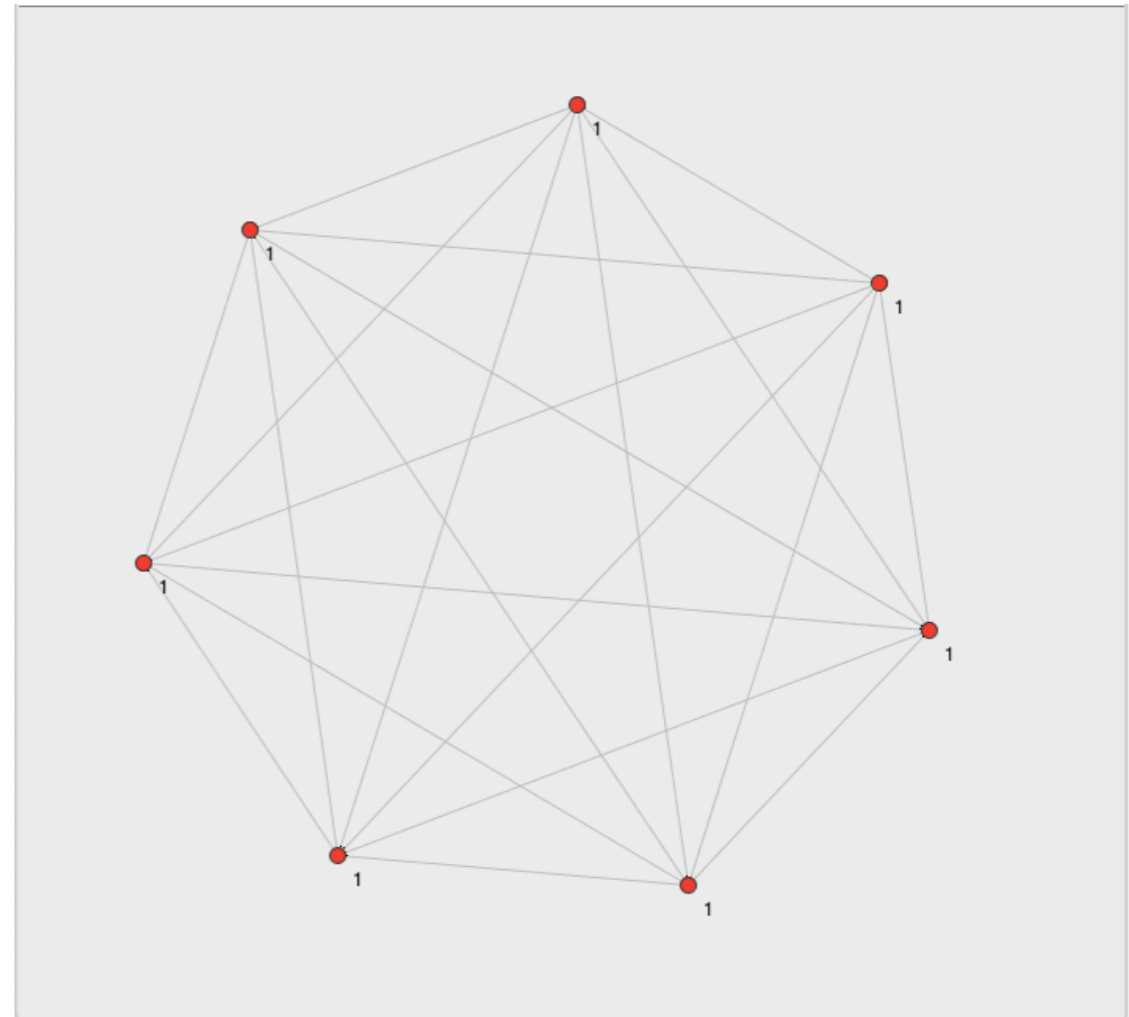
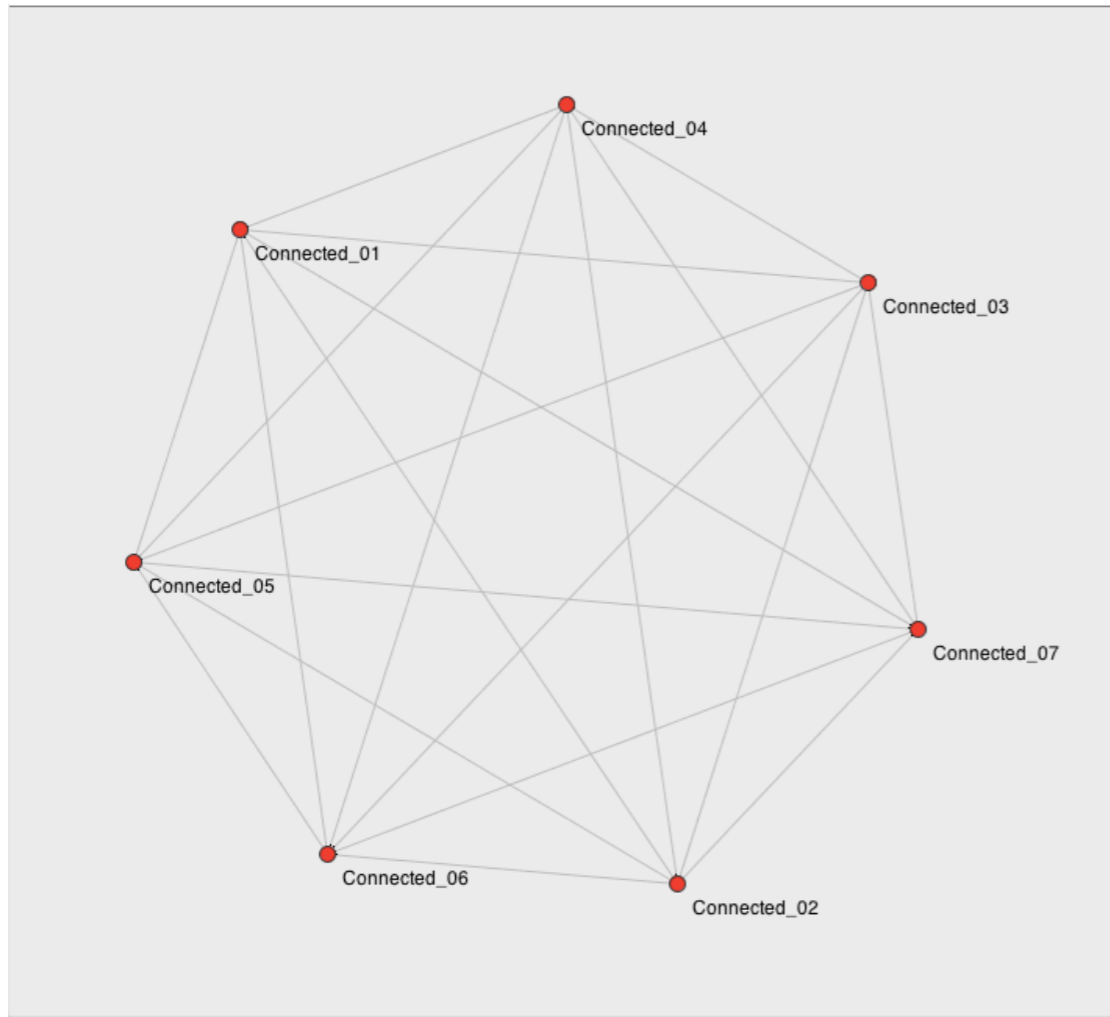
n=7



	Group Degree Centrality	Graph density	Group Betweenness Centrality
Connected	0.00	1.00	0.00

# Connected Example with **Closeness Centrality** by Actor Size and Labels

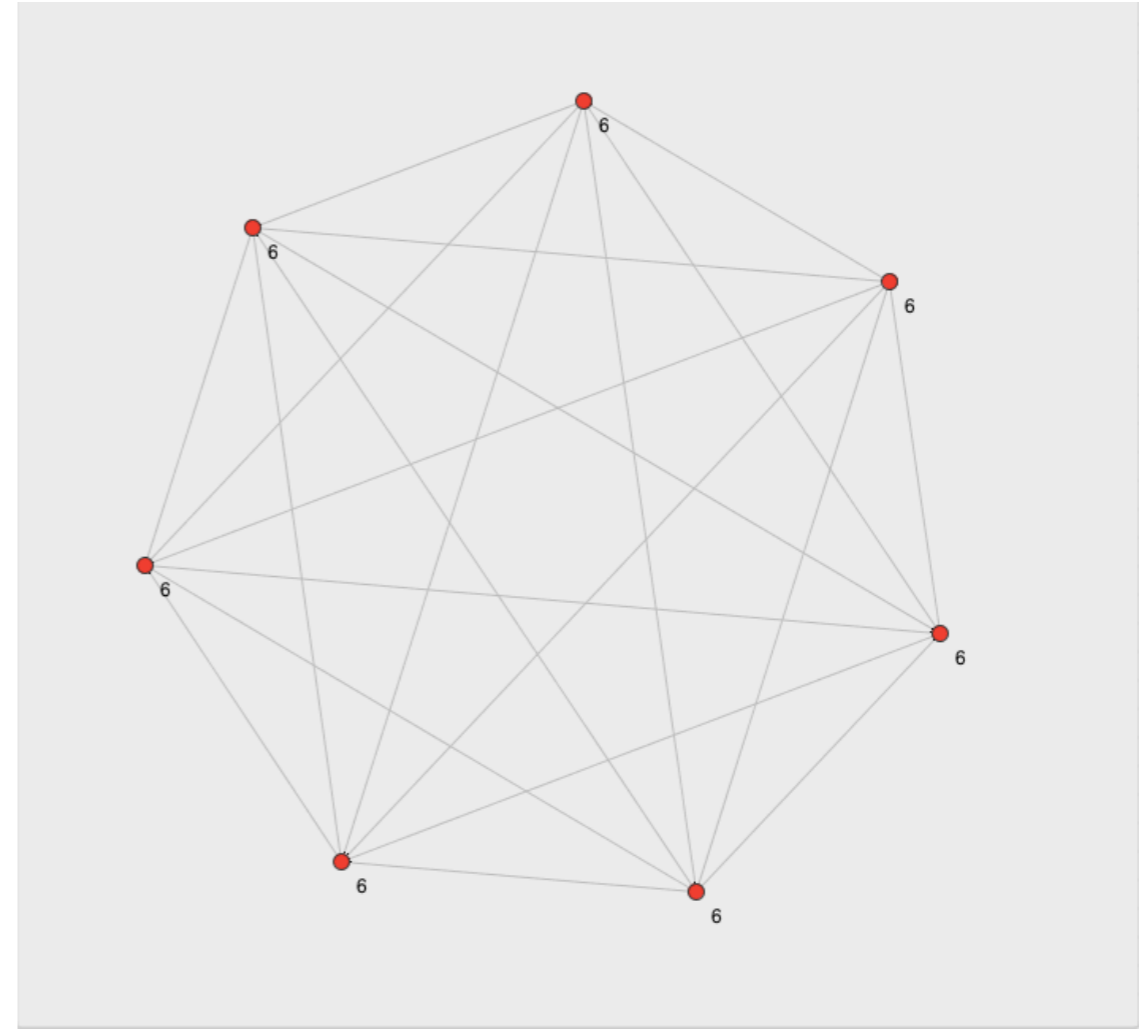
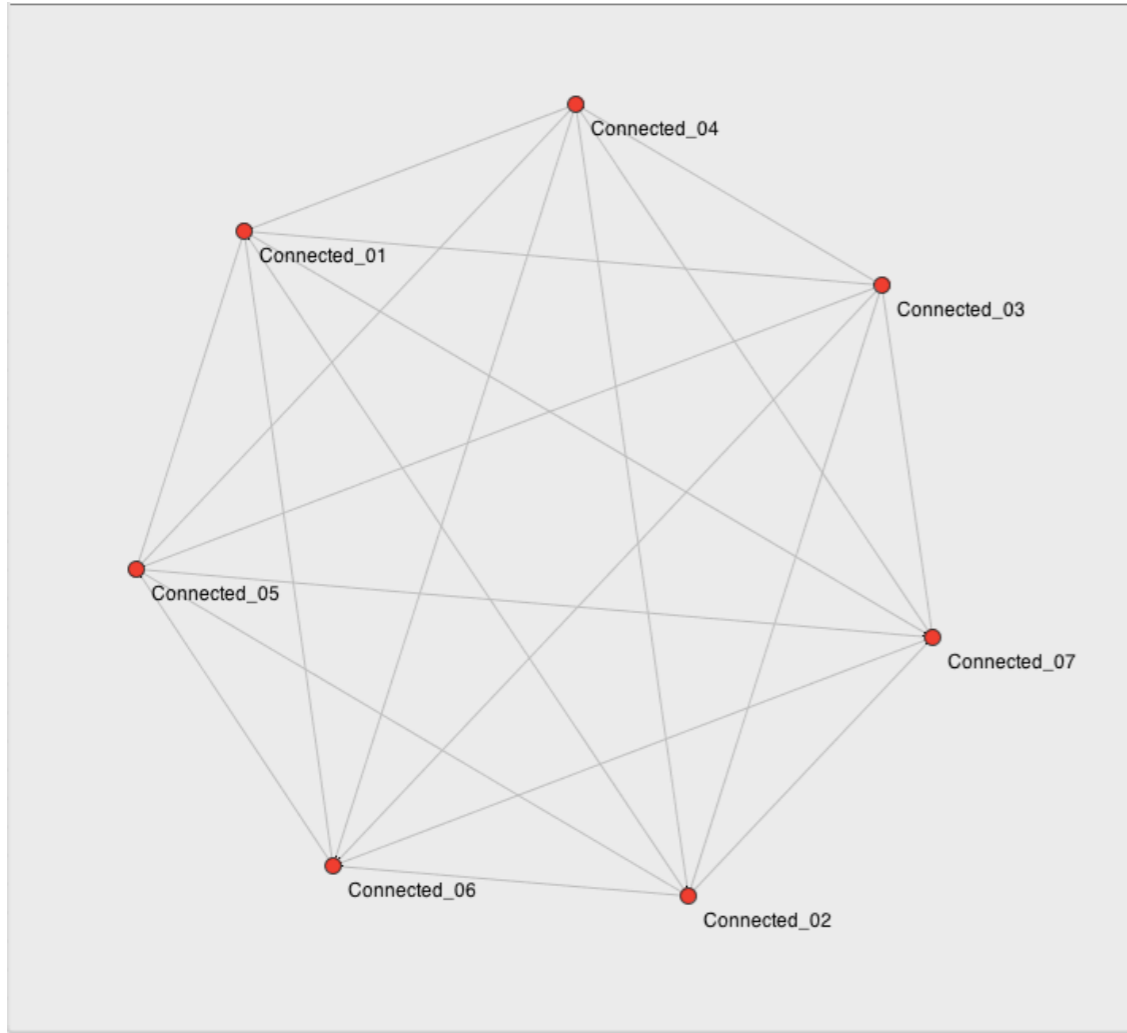
n=7



	Group Degree Centrality	Graph density	Group Betweenness Centrality
Connected	0.00	1.00	0.00

# Connected Example with *Degree Centrality* by Actor Size and Labels

n=7



	Group Degree Centrality	Graph density	Group Betweenness Centrality
Connected	0.00	1.00	0.00

# Content Measures

## CONTENT MEASURES

---

There are five content measures that Condor 3 calculates:

1. Activity,
2. Sentiment,
3. Emotionality
4. Complexity, and
5. Influence.

# Condor 3's Content Measure Definitions

**Activity** is simply the count of the number of messages sent by an actor in the network. Activity per day is the average number of messages sent per day. Note: Condor 3 uses one calculation for uppercase “Messages sent” for the Contribution Index, and a different calculation for lowercase “messages sent” for the Influence measure. Specifically, Influence doesn't count empty messages and counts messages to multiple people as just one, determined by content. In contrast, the Contribution Index lets the user select a field for the deduplication.

**Sentiment** is a measure with a value between 0 and 1, where a 0 indicates that the message is very negative and where a 1 indicates the message is very positive (Brönnimann, Lucas (2013) *Multilanguage – sentiment analysis of Twitter data on the example of Swiss politicians*, p. 2. Windisch.). Sentiment is calculated as the average score for the whole text; in this case the text is email.

See: [http://www.twitterpolitiker.ch/Paper\\_Swiss\\_Politicians\\_On\\_Twitter.pdf](http://www.twitterpolitiker.ch/Paper_Swiss_Politicians_On_Twitter.pdf)

# Condor 3's Content Measure Definitions (continued)

**Emotionality** is calculated on individual text segments and measures the degree of emotion expressed in the segment. It is an important measure that elaborates sentiment. Sentiment can be neutral, because the positive and negative text segments can balance each other out. However, there can still be a high degree of emotionality being expressed in the text.

**Complexity** looks at the probability or rarity of a term or word, or the likelihood that a single word will occur in a corpus of text. The more rare words there are in a text, the higher the complexity score.

# Condor 3's Content Measure Definitions (continued)

**Influence** is the most complex measure.

It is a combination of similarity, importance, and time delay.

Simply, A can be said to influence B when:

1. There is a similarity between a message A sends B, and subsequent messages that B sends anyone, in their use of particular terms
2. B did not use those terms in prior messages, and
3. B sends the new messages within four days of the first message from A.

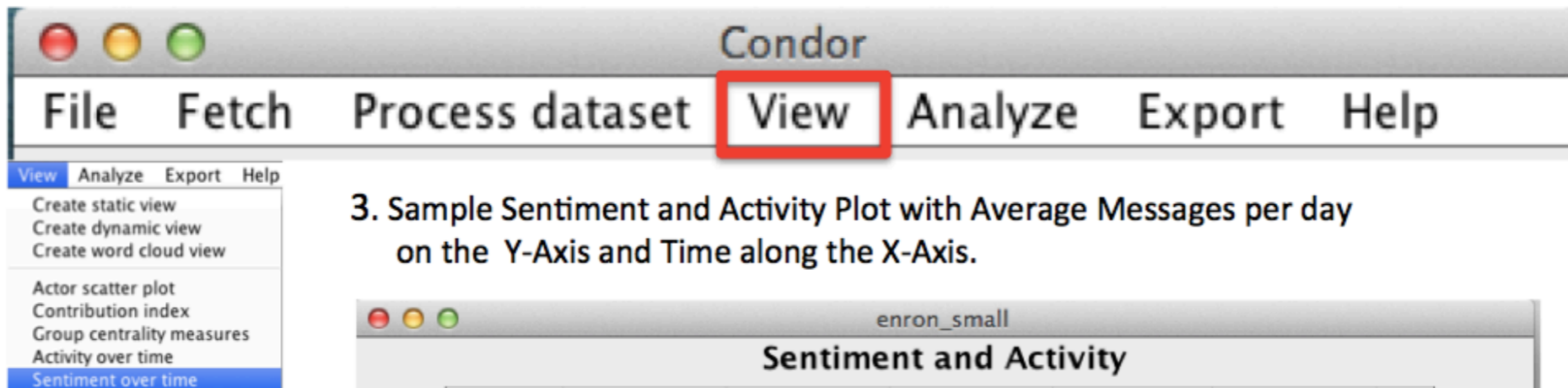
*Similarity* is measured by examining the similarity of the language in a message sent by person A to receiver B, to the language in the subsequent message sent by the receiver B.

*Importance* uses the complexity measure in its calculation, comparing the language or terms in a message to all the previous messages in the network. If the receiver B of a message sent by A has previously often used the terms in the message A sent, then the importance is low. If the receiver B has not previously used the terms in the message sent by A, then the importance is high.

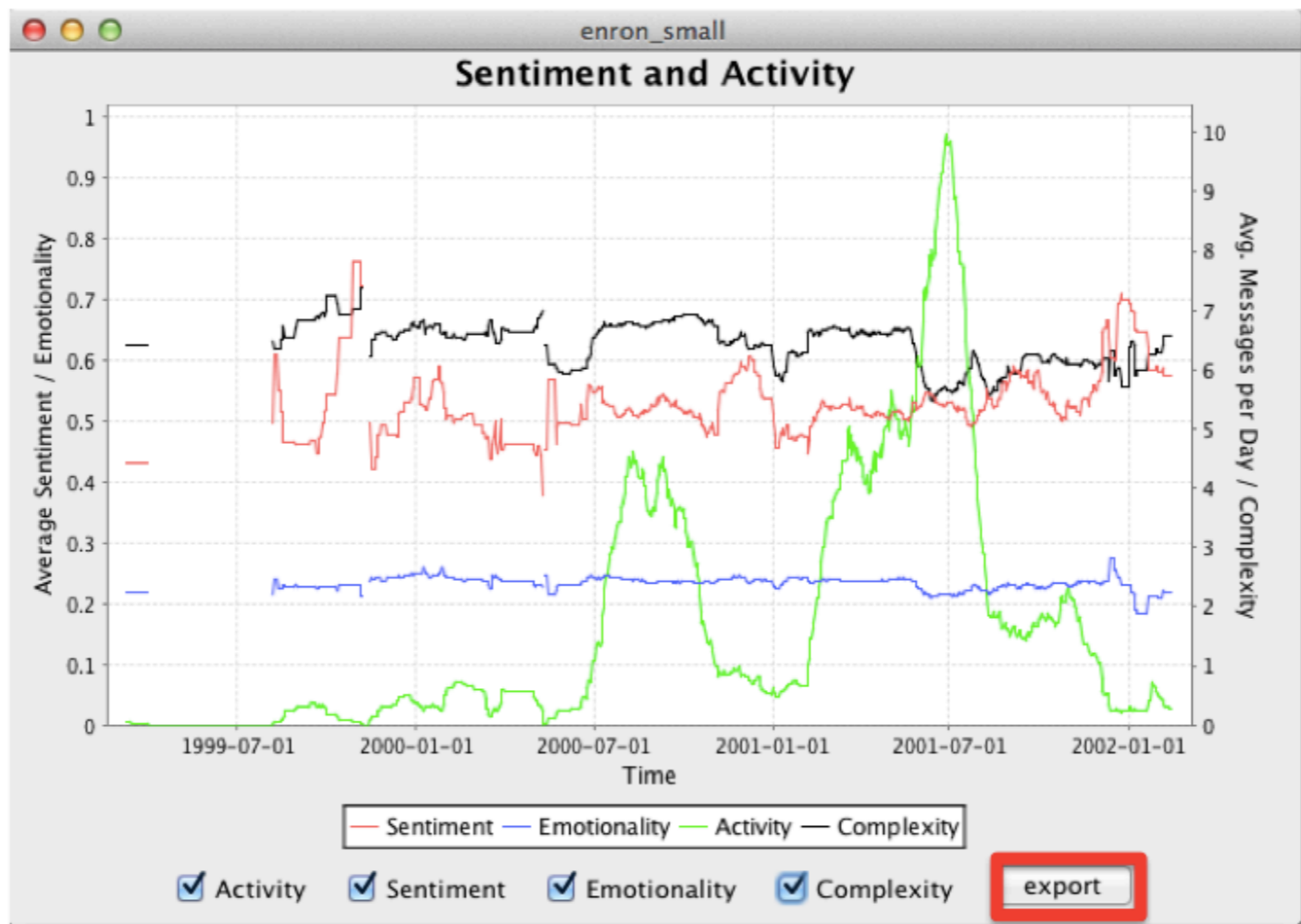
*Time delay* looks at the difference in time between receipt of the message from A and the response by B to others, which is measured in Condor as a period of 4 days, where 1 would be an immediate response from B on receipt of a message from A, and 0 would be no response from B on receipt of a message from A.

For a more detailed description of the influence measure see Lucas Bröniman's masters thesis at: [http://www.twitterpolitiker.ch/Master\\_Thesis\\_Lucas\\_Broennimann.pdf](http://www.twitterpolitiker.ch/Master_Thesis_Lucas_Broennimann.pdf).

Four Content Measures can be plotted in a single graph: Activity, Sentiment, Emotionality, and Complexity, and Exported

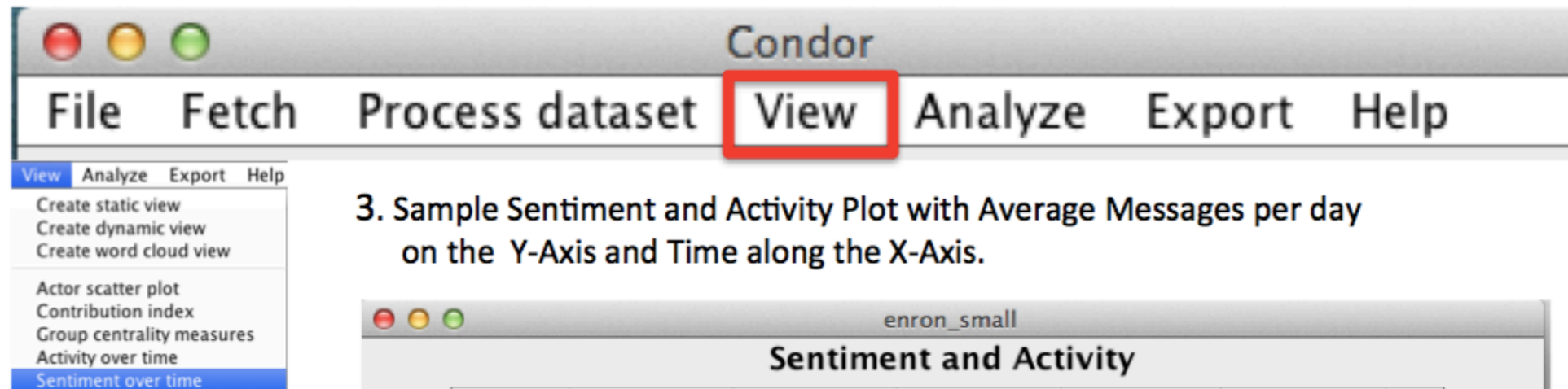


3. Sample Sentiment and Activity Plot with Average Messages per day on the Y-Axis and Time along the X-Axis.

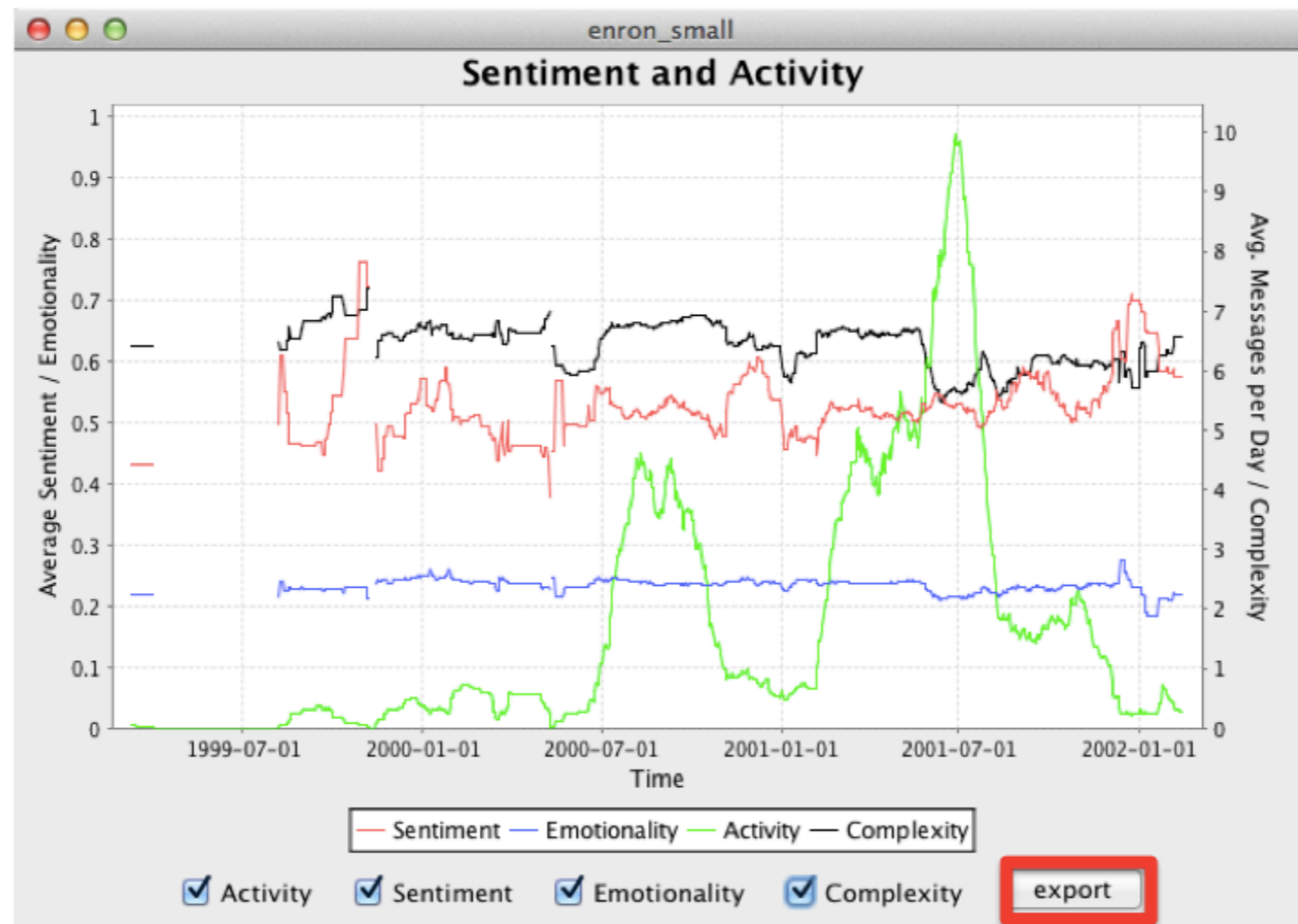




Four Content Measures can be plotted in a single graph: Activity, Sentiment, Emotionality, and Complexity, and Exported

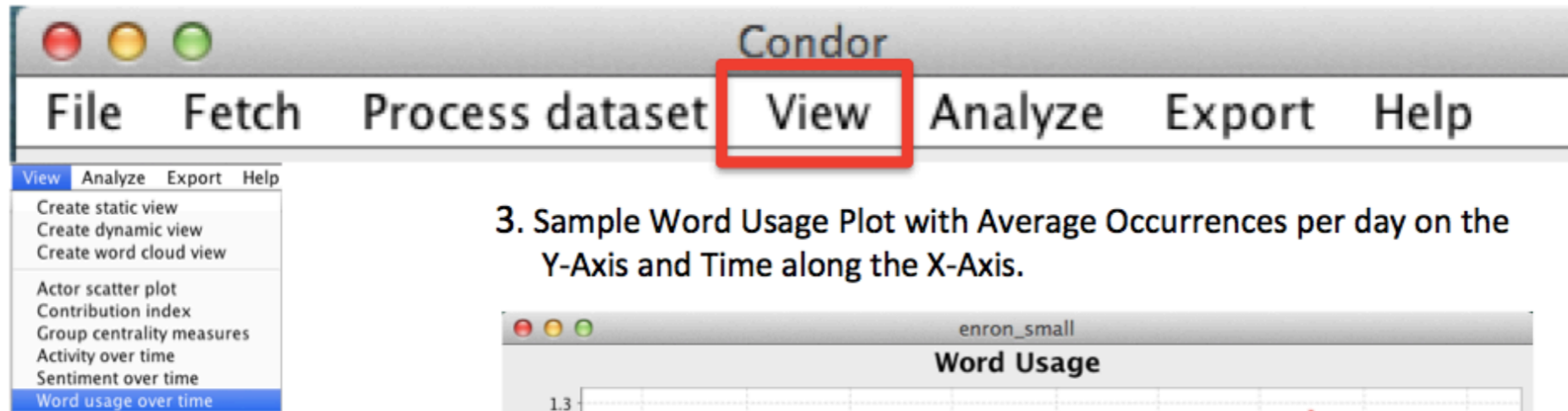


3. Sample Sentiment and Activity Plot with Average Messages per day on the Y-Axis and Time along the X-Axis.



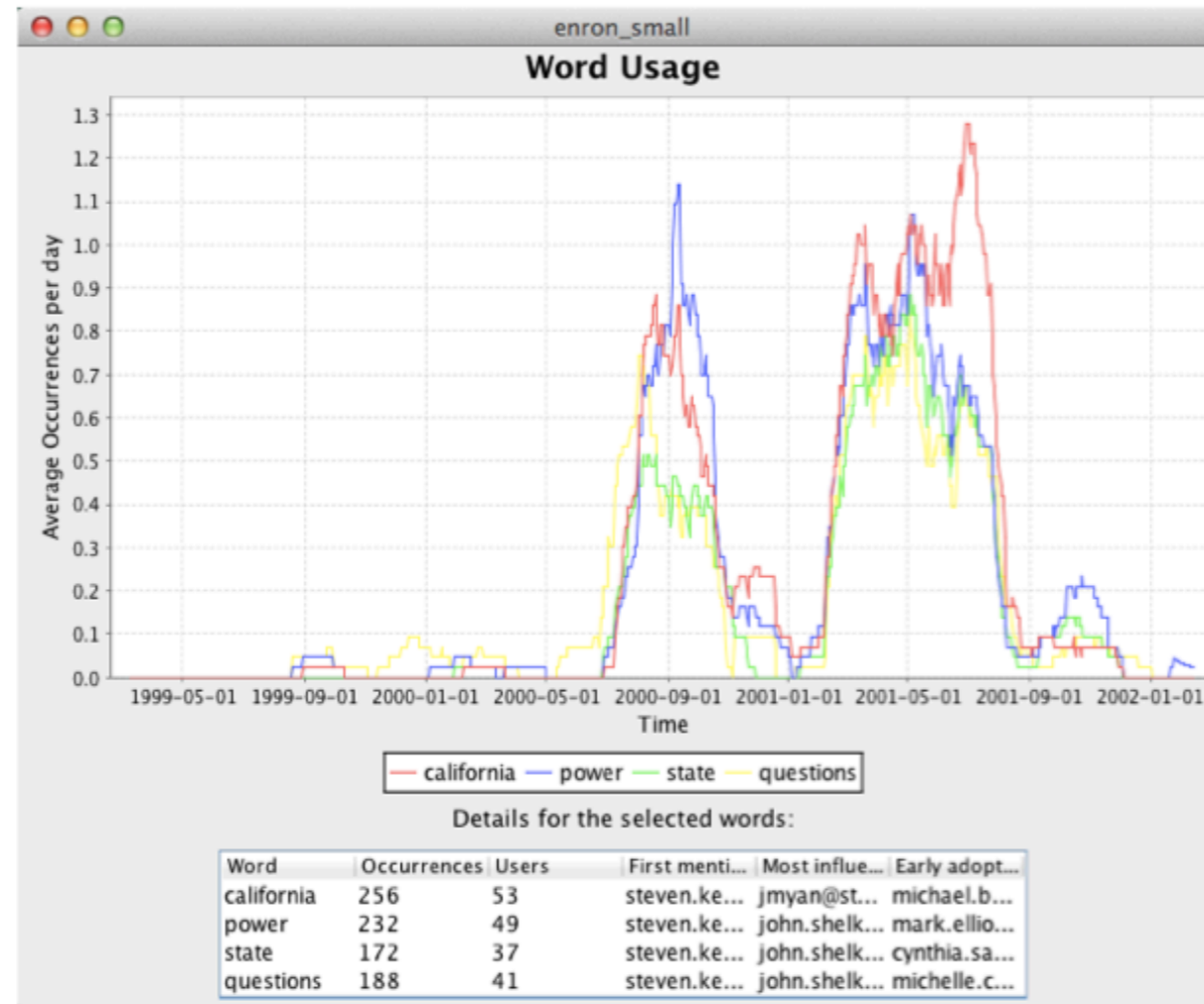
# Influence measures have multiple uses and outputs:

1. Influence measures are displayed in the View > Word Usage over time



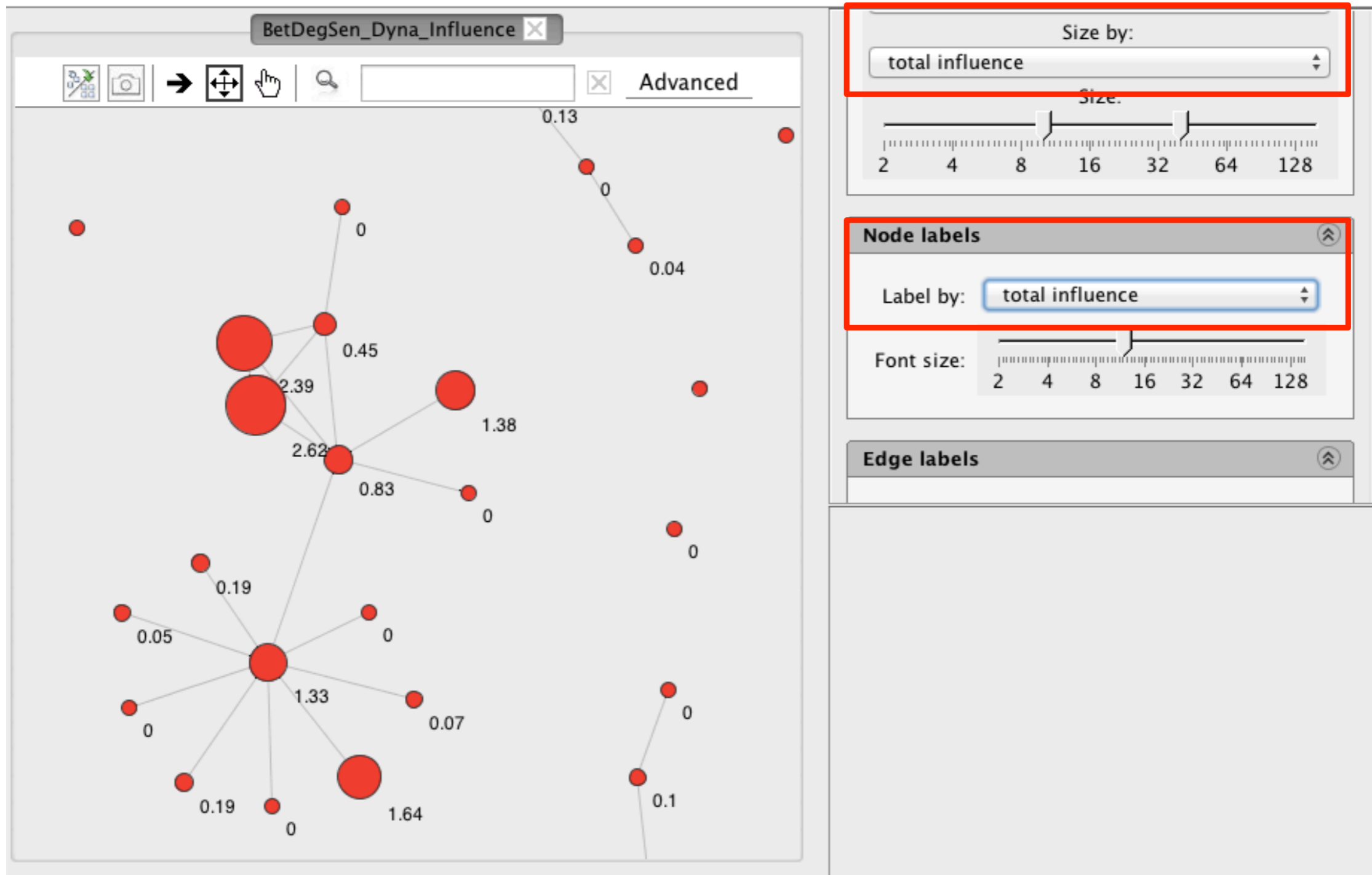
3. Sample Word Usage Plot with Average Occurrences per day on the Y-Axis and Time along the X-Axis.

Note:  
 Details for 4 selected words are given including:  
 No. of Occurrences,  
 No. of Users  
 Who First Mentioned  
 Who Most Influential, and  
 Who was the Early Adopter  
 for each of the four words.



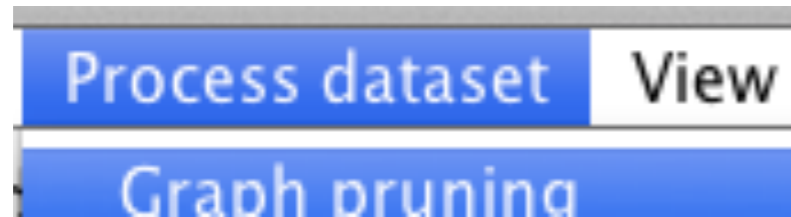
# Influence measures have multiple uses and outputs:

2. In the View menu > Static View to change a Nodes Size or Labels



# Influence measures have multiple uses and outputs:

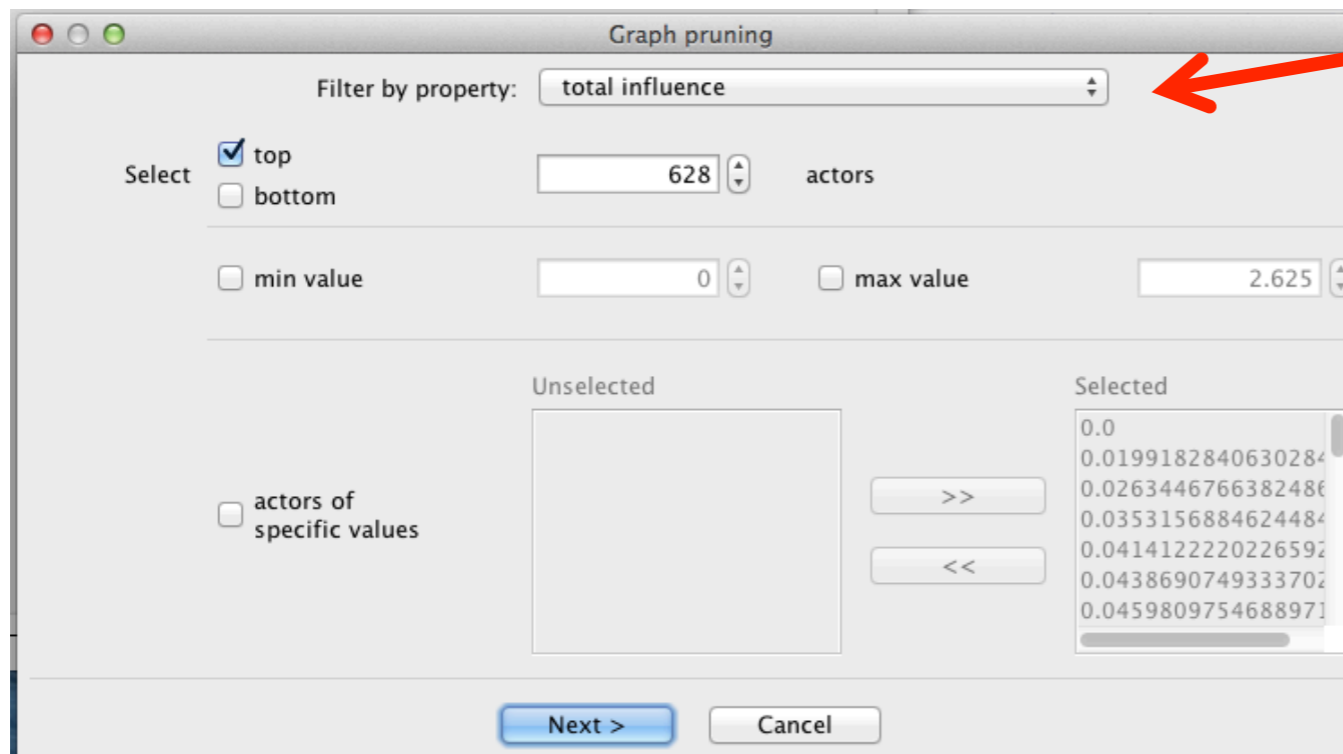
3. In the Process dataset > Graph pruning to prune a network



Prune with:

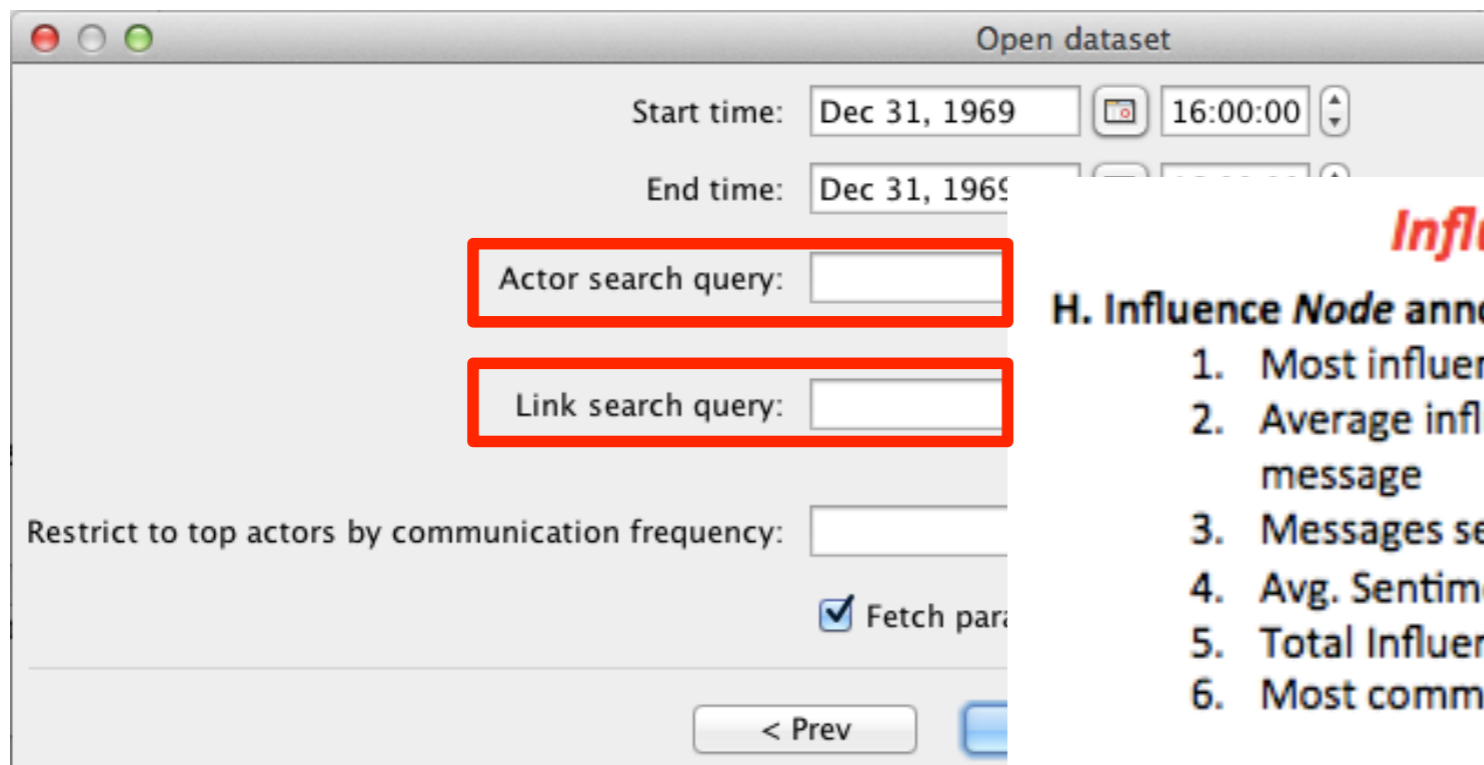
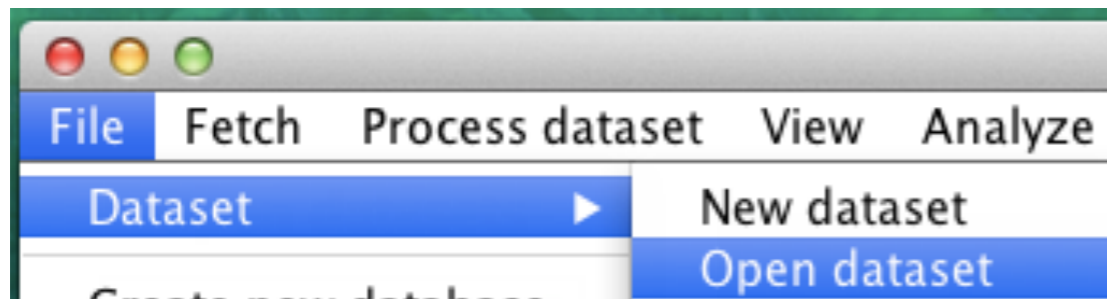
## Influence *Node* annotations

1. Most influential words
2. Average influence per message
3. Messages sent
4. Avg. Sentiment
5. Total Influence
6. Most common word



## Influence measures have multiple uses and outputs:

4. In the File > Open dataset 1<sup>st</sup> stage filtering  
Filter Actors with Influence Measures and/or  
Filter Links with Influence Measures



### *Influence Measures*

#### H. Influence *Node* annotations

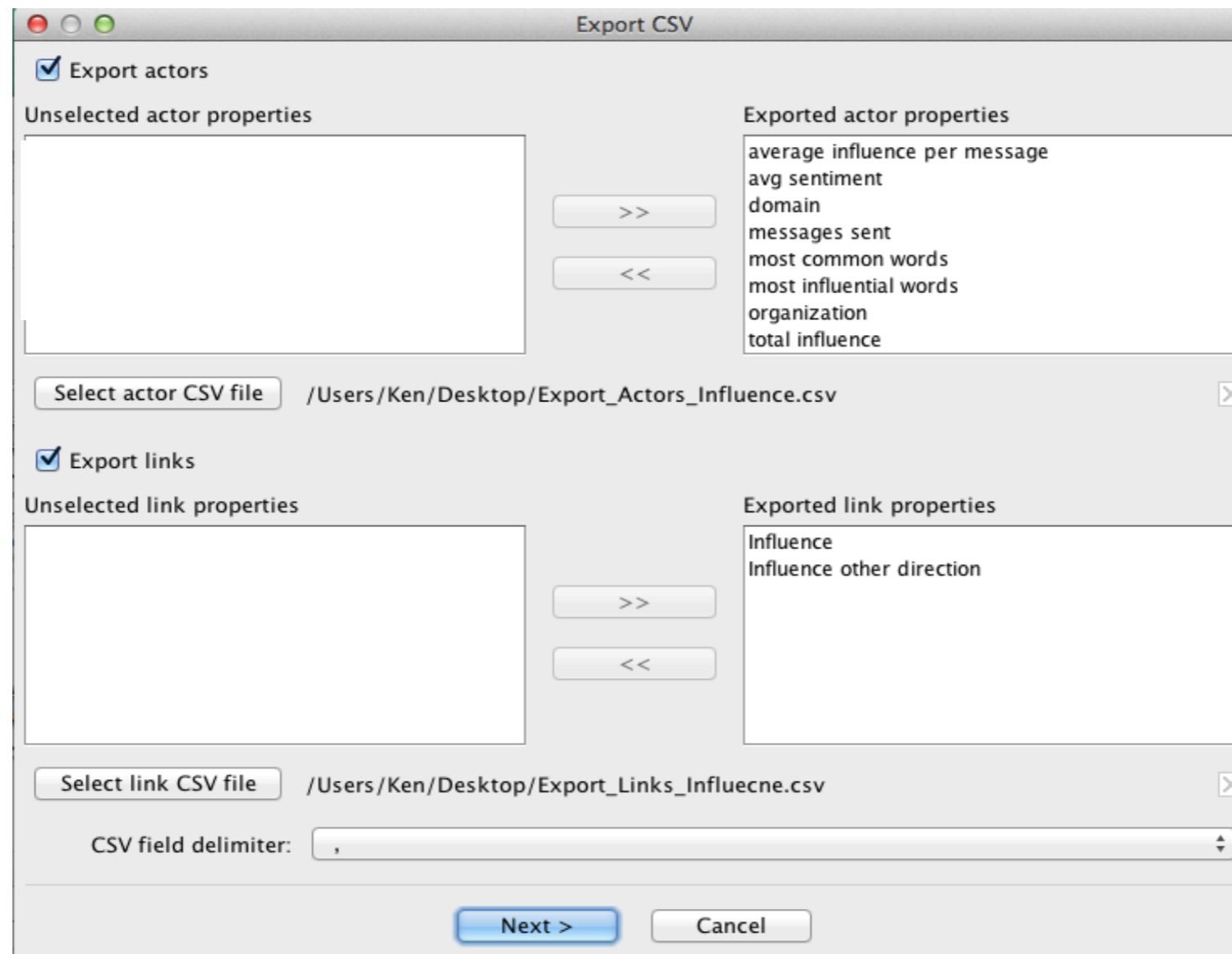
1. Most influential words
2. Average influence per message
3. Messages sent
4. Avg. Sentiment
5. Total Influence
6. Most common word

#### I. Influence *Edge* annotations

1. Influence other direction
2. Influence
3. Language
4. Sentiment
5. Sentiment Words
6. Keywords

# Influence measures have multiple uses and outputs:

5. In the Export > Export .CSV for actors and links



# Coolhunting and Coolfarm- ing COINs

## ANALYTICS

Condor 3 enables researchers the ability to Coolhunt and Coolfarm Collaborative Innovation Networks or COINs at the global, organizational and individual levels using data mining from the Web, Facebook, Twitter, Email, Wikipedia and other data sources along with structure, content and time analytics.

Four steps of knowledge flow optimization are capable, which include the ability to analyze a COIN's:

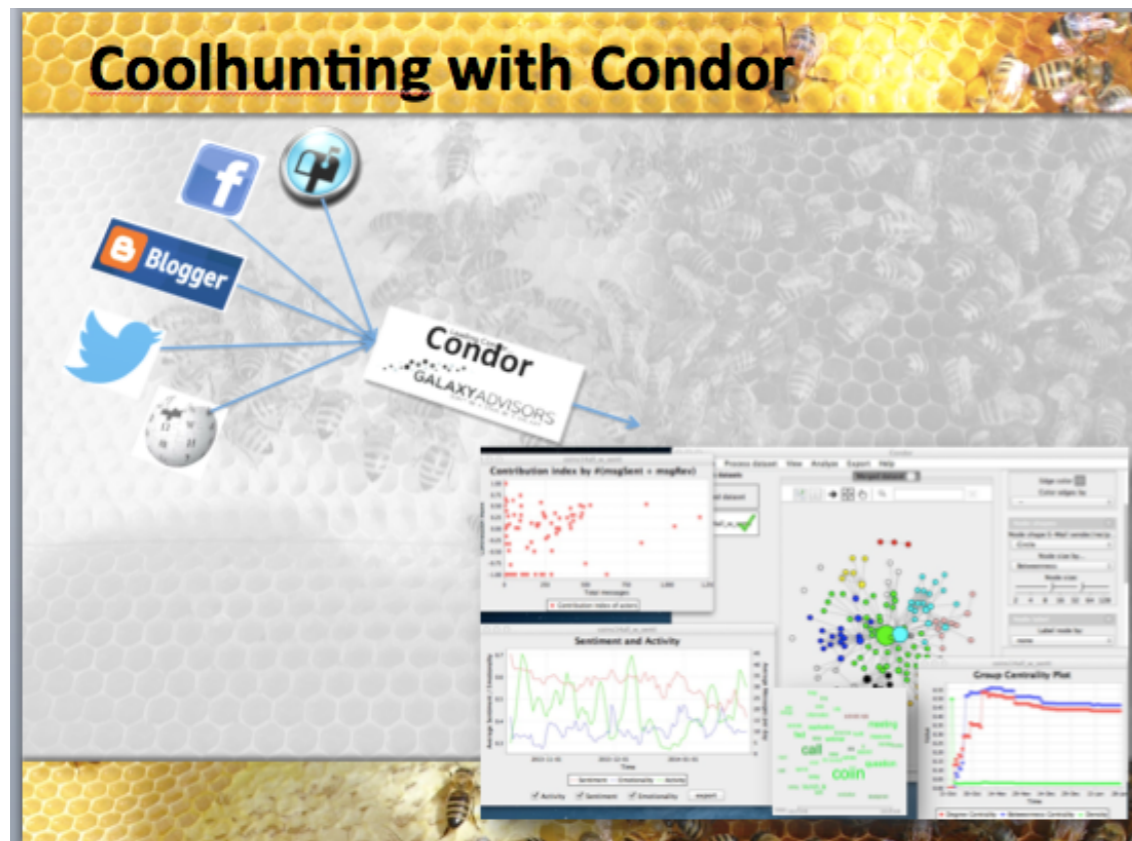
1. **Structure** of communication to identify the most central actors, bridges, bottlenecks or structural holes;
2. **Honest signals** of actors using six metrics to identify: central leaders, degree of contribution, evidence of rotating leadership, speed of response, sentiment and innovative language;
3. **Calibration** with outcomes; and
4. **Interventions** for behavior change.



Condor 3 enables researchers the ability to Coolhunt and Coolfarm Collaborative Innovation Networks or COINs at the global, organizational and individual levels using data mining from the Web, Facebook, Twitter, Email Wikipedia and other data sources, such as, social badges \*.

\*<http://hd.media.mit.edu/badges/>

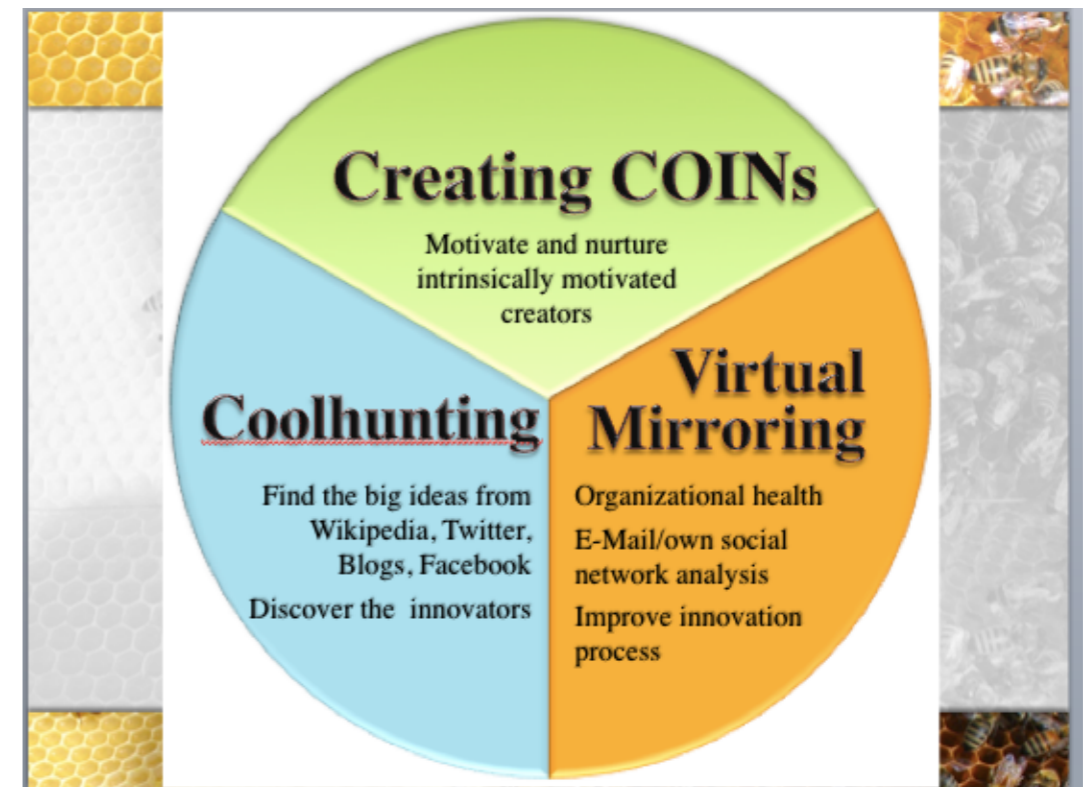
A sociometric badge (commonly known as a "sociometer") is a wearable electronic device capable of automatically measuring the amount of face-to-face interaction, conversational time, physical proximity to other people, and physical activity levels using social signals derived from vocal features, body motion, and relative location.



The results from your Coolhunting can be visualized in a static network map or a dynamic movie using one or more data sources.

Specifically use Condor 3's:

- Fetch menu to acquire Web, Facebook, Twitter, Email and Wikipedia data, and the
- File menu to import your own data using the Import CSV or MySQL options
- Next use the Process dataset menu to annotate with structure and content measures, and then
- Use the View menu to visualize the results, and
- Use the Export menu for additional analysis.



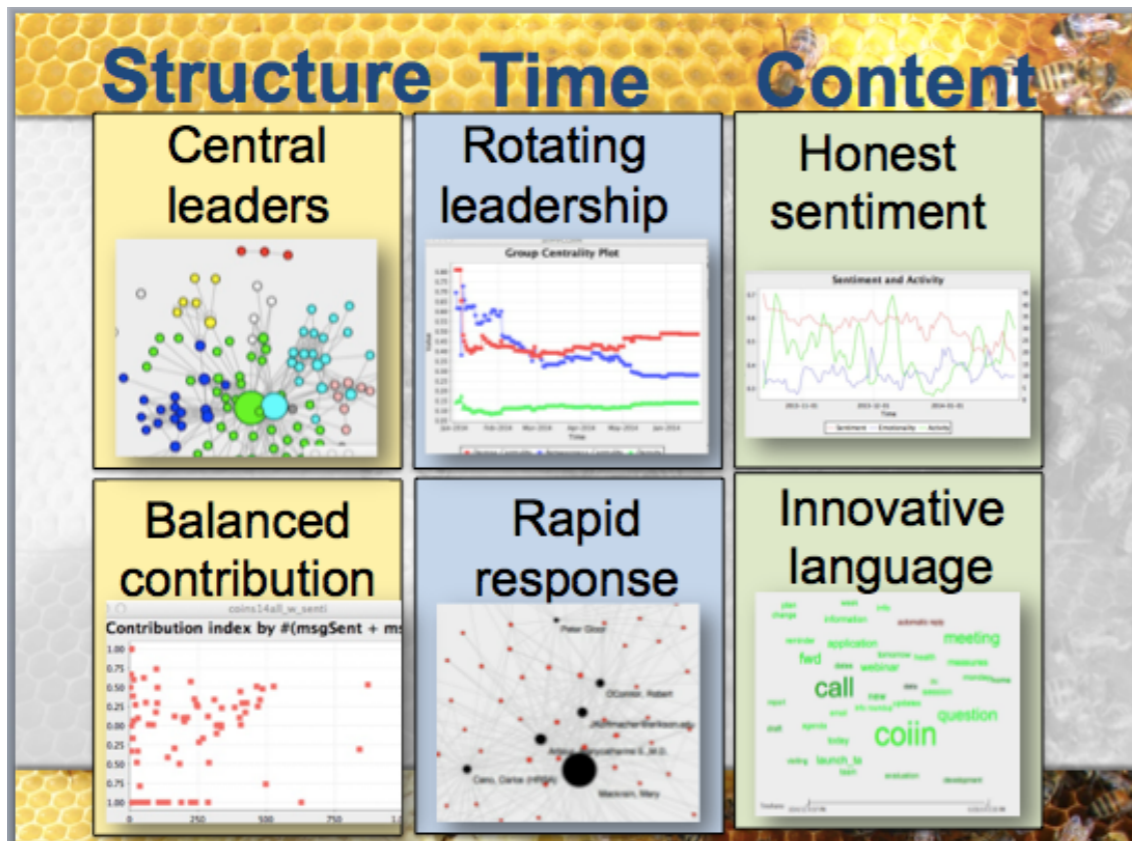
**Creating Collaborative Innovation Networks or COINs** is two step process of:

*Coolhunting* which means hunting email, Wikipedia, Twitter, Facebook, blogs etc, to discover who are members of the collaborative innovation networks or COINs.

And then,

*Coolfarming* or growing and strengthening those COINs by using a Virtual Mirror to feedback to the group their interactions and metrics to improve their performance.





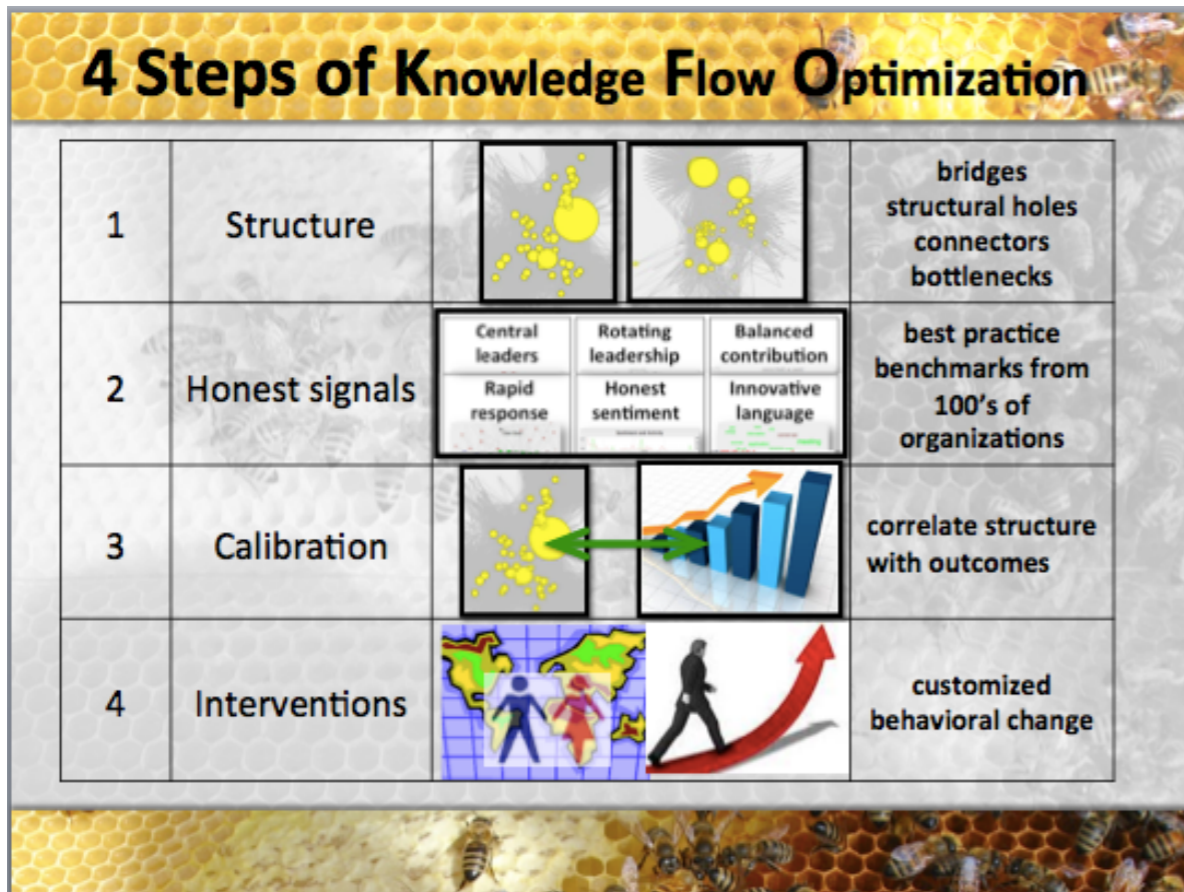
*Condor 3 calculates six Honest Signals:*

1. *The Structure metric of Central Leaders* is calculated from the Process dataset Menu > Annotate> Centrality Annotations> Betweenness Centrality and Degree Centrality
2. *The Structure metric of Balanced Contribution* is calculated from the Process dataset menu > Annotate > Contribution Index Annotations.
3. *The Time metric of Rotating Leadership* is calculated from the Process dataset menu > Annotate > Oscillation Annotations
4. *The Time metric of Rapid Response* is calculated from the Process dataset menu > Annotate > Turn-taking Annotations

5. *The Content metric of Honest Sentiment* is calculated from the Process dataset menu > Calculate Sentiment
6. *The Content metric of Innovative Language* is calculated from the Process dataset menu > Calculate Influence

Then:

Use the View menu to visualize the results, and Use the Export menu for additional analysis.



3. **Calibration** with outcomes can be conducted by exporting metrics and making statistical correlations with key performance indicators, such as, customer satisfaction ratings.
4. **Interventions** for behavior change are conducted and monitored to assess their impact and effectiveness.

Four steps of knowledge flow optimization enable users to assess a COINs:

1. **Structure** of communication to identify the most central actors, bridges, bottlenecks or structural holes;
2. **Honest signals** of actors using six metrics to identify: central leaders, degree of contribution, evidence of rotating leadership, speed of response, sentiment and innovative language;



For additional reading see:

**Swarm Creativity**

[http://www.amazon.com/Swarm-Creativity-Competitive-Collaborative-Innovation/dp/0195304128/ref=sr\\_1\\_1?s=books&ie=UTF8&qid=1347046646&sr=1-1&keywords=swarm+creativity](http://www.amazon.com/Swarm-Creativity-Competitive-Collaborative-Innovation/dp/0195304128/ref=sr_1_1?s=books&ie=UTF8&qid=1347046646&sr=1-1&keywords=swarm+creativity)

**Coolhunting**

[http://www.amazon.com/Coolhunting-Chasing-Down-Next-Thing/dp/0814473865/ref=pd\\_sim\\_b\\_1](http://www.amazon.com/Coolhunting-Chasing-Down-Next-Thing/dp/0814473865/ref=pd_sim_b_1)

**Coolfarming**

[http://www.amazon.com/Coolfarming-Turn-Your-Great-Thing/dp/005DI9X98/ref=pd\\_sim\\_b\\_2](http://www.amazon.com/Coolfarming-Turn-Your-Great-Thing/dp/005DI9X98/ref=pd_sim_b_2)

# YouTube Links

The following is a list of the Condor 3 YouTube links, which includes a welcome message from Peter Gloor and click-by-click instructions to enable users to:

- Install Condor 3 on a Mac, PC or AWS Workspaces
- See examples of how to use the Fetch menu for visualizing, analyzing and measuring email, Facebook, Web, Twitter and Wikipedia data
- Gain an overview of the Condor seven menu functions and the three graphical user interface controls for a quick start on learning how to use the software.
- Understand the basics of social networks
- How to obtain geocodes of cities and addresses to use with the Twitter GeoLocation option
- How to obtain a Bing and/or Google Map Key
- And, how to create a Google Earth file (kml/kmz).



## Welcome to Condor 3 by Peter Gloor (13:51)



<http://youtu.be/vfWfeywCsk>

## Condor 3 YouTube Links

The following is a list of the

Condor 3 YouTube links, which provide click-by-click instructions to enable users to:

- Install Condor 3 on a Mac, PC or AWS Workspaces
- See examples of how to use the Fetch menu for visualizing, analyzing and measuring email, Facebook, Web, Twitter and Wikipedia data
- Gain an overview of the Condor seven menu functions and the three graphical user interface controls for a quick start on learning how to use the software.
- Understand the basics of social networks
- How to obtain geocodes of cities and addresses to use with the Twitter GeoLocation option
- How to obtain a Bing and/or Google Map Key
- And, how to create a Google Earth file.

Below each YouTube video there is a “Show more” text box, which contains all the links used within the videos. Users can then copy and past these links into their browsers for easy access to the information or resources described.

There are two types of YouTube links:

1. *Playlists* are a collection of videos which enable users to use a single link to step through a sequence of videos, or pick and choose a single video from the collection, and
2. *Individual video links* that are standalone.

At the end of each YouTube video title there is a time indicator for the video length in minutes and seconds in the format (XXmins:YYseconds). For example, (10:20) indicates the video is 10 minutes and 20 seconds in length.

This chapter presents the YouTube Playlists first, followed by the individual videos next including the within video links for easy user access.

**The updates to the YouTube videos are as of August 11, 2015.**

## Condor 3 YouTube Playlists

### 1. Condor 3 – How to install on a Mac Playlist (43 minutes)

[https://www.youtube.com/playlist?list=PLKq\\_-djPdTiVJtn76xeV\\_j-tevZoJ7uFn](https://www.youtube.com/playlist?list=PLKq_-djPdTiVJtn76xeV_j-tevZoJ7uFn)

The Condor 3 How to install on a Mac Playlist consists of 6 videos, which walks the user through the click-by-click steps needed to install Condor 3 on a Mac including obtaining a Google CSE API Key and four Twitter API Keys.

They six videos are:

1. Condor 3 Three steps to install on a Mac Updated  
12/27/2014 (8:03)
2. How to install MySQL on a Mac Updated 12/27/2014 (7:28)
3. Condor 3 How to install Condor on a Mac V3 Updated  
12/29/2014 (9:56)

This video updated with instructions on how to obtain a Condor 3 license key.

In addition, it is recommended to install the following:

4. Condor 3 How to install MySQL Workbench on a Mac  
(4:04)
5. Condor 3 How to obtain a Google CSE Key Updated 8/11/  
2015 V 1 (5:48)
6. Condor 3 How to obtain the four Twitter API Keys (8:40)

After completing the six videos Condor 3 will be installed and ready to use including conducting a Google CSE Fetch and a Twitter Fetch.

Playing all 6 videos takes about 43 minutes, however it will most likely take the user 1-3 hours to complete all the installations depending upon their computer skills, Internet speed and previous software installations.

Note: The URLs or links contained in the videos are available in the "Show More" box beneath the videos. Users just need to copy and paste these links into their browser.

## **2. Condor 3 – How to install on a PC Playlist (36 minutes)**

[https://www.youtube.com/playlist?list=PLKq\\_-djPdTiVI9JrPRuUpTRIsuvZO7QEP](https://www.youtube.com/playlist?list=PLKq_-djPdTiVI9JrPRuUpTRIsuvZO7QEP)

The Condor 3 How to install on a PC Playlist consists of 4 videos which walks the user through the click-by-click steps needed to install Condor 3 on a PC including obtaining a Google CSE API Key and four Twitter API Keys.

The 4 videos are:

1. Condor 3 How to install Condor 3 on a PC Part 1 of 2 (7:48)
2. Condor 3 How to install Condor 3 on a PC Part 1 of 2 Updated 12/28/2014 (15:12)

This video has been updated with the Condor 3 license instructions.

Note: MySQL Workbench is installed with the MySQL server on Part 2 of 2.

In addition, it is recommended to install the following

3. Condor 3 How to obtain a Google CSE Key Updated 8/11/2015 V 1 (5:48)
4. Condor 3 How to obtain the four Twitter API Keys (8:40)

After completing the four videos Condor 3 will be installed and ready to use including conducting a Google CSE and a Twitter fetch.

Playing all 4 videos takes about 36 minutes, however it will most likely take the user 1-3 hours to complete all the installations depending upon their computer skills, Internet speed and previous software installations.

Note: The URLs or links contained in the videos are available in the "Show More" box beneath the videos. Users just need to copy and paste these links into their browser.

### **3. Condor 3 – Fetch Examples Playlist (1 hour 38 minutes)**

[https://www.youtube.com/playlist?list=PLKq\\_-djPdTiWxmZw2V2QTyJhSaGVLfCJs](https://www.youtube.com/playlist?list=PLKq_-djPdTiWxmZw2V2QTyJhSaGVLfCJs)

This Condor 3 playlist consists of six videos which demonstrate how to use the Fetch menu for collecting, visualizing, analyzing and measuring networks from: email, Facebook, Web, Twitter and Wikipedia.

1. Condor 3 Fetch Mailbox Menu Example 01 (23:44)
2. Condor 3 Facebook Profile Menu Example 01 (8:21)
3. Condor 3 Web Example 01 (18:56)
4. Condor 3 Twitter Example 01 (19:08)

(Note: the Twitter video covers both the Fetch Twitter and the Fetch Twitter Accounts menus)

5. Condor 3 Wiki Evolution Example 01 (15:36)
6. Condor 3 Wikipedia Categories Example 01 (12:52)

### **4. Condor 3 – Menus and GUI Controls Playlist (48 minutes)**

[https://www.youtube.com/playlist?list=PLKq\\_-djPdTiWAwOzRfIN1sUfNkAI-sfWT](https://www.youtube.com/playlist?list=PLKq_-djPdTiWAwOzRfIN1sUfNkAI-sfWT)

This Condor 3 Playlist consists of two videos, which describes the seven menu functions and the three graphical user interface or GUI controls that users will be using in the software for network analysis.

1. Condor 3's Menus At-A-Glance V1 (37:20)
2. Condor 3 GUI Controls (11:29)



## Condor 3 YouTube Standalone Videos

This videos are listed in order of Installation for a Mac, PC or AWS Workspaces and then the Menus and GUI Controls.

How to install Condor 3 on a Mac (6 videos)

### 1. Condor 3 Three steps to install on a Mac Updated 12/27/2014 (8:03)

<http://youtu.be/WB6ta-NwCfg>

Links within video are:

<http://galaxyadvisors.com>

Java Background:

[http://www.java.com/en/download/faq/whatis\\_java.xml](http://www.java.com/en/download/faq/whatis_java.xml)

[http://www.java.com/en/download/faq/java\\_mac.xml#java6](http://www.java.com/en/download/faq/java_mac.xml#java6)

Java Download Link for the Mac:

<http://java.com/en/download/manual.jsp#ma>

Java Test Link:

<http://java.com/en/download/installed.jsp>

Note: Mac Yosemite users need to install the Java Development Kit (JDK) to run Condor 3 with the Terminal app:

Java JDK Download link:

<http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

## 2. How to install MySQL on a Mac Updated 12/27/2014 (7:28)

<http://youtu.be/CVvPxJXsvrU>

Updated video, which explains how to install MySQL on a Mac.

Note: The MySQL 10.9 and 10.8 dmg files have just one install package and no separate preference pane package.

The one package now installs both MySQL and the Preference Pane in one install. At the Installation Summary page you may get a message that “The Installation Failed.” This is not true.

- Click on the Black Apple in the upper left corner.
- Choose System Preferences.
- Find the MySQL icon and click on it.
- At the MySQL window, Click on “Start MySQL”.
- Enter your Computer’s password.
- The MySQL now says it is running in green.

Links within video are:

<http://galaxyadvisors.com>

MySQL Download Link:

<http://dev.mysql.com/downloads/mysql/>

MySQL PDF manual download link:

<http://downloads.mysql.com/docs/refman-5.6-en.a4.pdf>

For more YouTube videos on MySQL:

- a. Goto: <https://www.youtube.com/>
- b. In the YouTube search box, type in: how to get started with mysql

### **3. Condor 3 How to install Condor on a Mac V3 12/29/2014 (9:55)**

<http://youtu.be/RxbzhvzXqzo>

This video describes how to install Condor 3 on a Mac updated with the license key instructions.

Updated December 29, 2014

- a. Users need to install Java 7 or Java 8. Java 6 is not supported
- b. To start Condor 3 on a Mac with Yosemite using the Terminal app, users need to install the Java Development Kit (JDK).

The Java JDK download link is at:

<http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

The Java Development Kit (JDK) name is like “jdk-8u25-macosx-x64.dmg”. The update version may change.

Click to Accept License Agreement.

Double click on the jdk-8u25-macosx-64.dmg to begin the install and follow the on screen instructions.

Then when you issue the Java command:

```
Java -Xmx2G -Djava.library.path=. -jar Condor-3.2.0.jar
```

in the Terminal window Condor 3 will start.

This video describes how to install Condor 3 on a Mac updated with the license key instructions.

Links within the video are:

<http://galaxyadvisors.com>

Condor 3 Sign up form link to obtain license key:

<http://guardian.galaxyadvisors.com/guardian/>

Sample Condor 3 Terminal Start text:

```
Java -Xmx2G -Djava.library.path=. -jar Condor-3.2.0.jar
```

#### 4. Condor 3 How to install MySQL Workbench on a Mac (4:03)

<http://youtu.be/TlnJrcqpYv8>

Instructions on how to install MySQL Workbench on a Mac.

*Links within the video:*

MySQL Workbench Product

<http://www.mysql.com/products/workbench/>

MySQL Workbench download link:

<http://dev.mysql.com/downloads/workbench/>

MySQL Workbench Tutorial Link:

[https://www.youtube.com/watch?v=X\\_umYKqKaFo](https://www.youtube.com/watch?v=X_umYKqKaFo)

MySQL Workbench Manual link:

<http://downloads.mysql.com/docs/workbench-en.pdf>

Galaxy Advisors

<http://galaxyadvisors.com>

#### 5. Condor 3 How to obtain a Google CSE Key Updated 8/11/2015 V1 (5:48)

<https://youtu.be/zME1-j9yPvI>

The Google Console link

<https://code.google.com/apis/console/> has a new web design and this video has been updated as of 08/11/2015 to reflect these changes.

Instructions on how to obtain a Google CSE Key .

*Links within the video are:*

<http://galaxyadvisors.com>

Create Google Account Link:

<https://accounts.google.com/signup?service=mail>

Google Console Link:

<https://code.google.com/apis/console/>

Google Billing Link:

<https://developers.google.com/console/help/new/#billing>

Condor CX key: 000229616349723713761:mlcaolv1mpw

## 6. Condor 3 How to obtain the four Twitter API Keys (8:39)

<http://youtu.be/6zMW7YEKJzw>

*Links within video are:*

<http://galaxyadvisors.com>

Twitter Login:

<https://twitter.com/login>

Twitter App Page:

<https://apps.twitter.com>

Twitter V1.1. Rate Limits page:

<https://dev.twitter.com/docs/rate-limiting/1.1>

## How to install Condor 3 on a PC or AWS Workspaces (4 Videos). Numbers 7,8,9 and 10 below.

### 7. Condor 3 How to install Condor 3 on a PC Part 1 of 2 (7:47)

[http://youtu.be/zPT1b\\_i9qY](http://youtu.be/zPT1b_i9qY)

Instructions on How to install Condor 3 on a PC part 1 of 2.

*Links within the video are:*

<http://galaxyadvisors.com>

About Windows 7 from Wikipedia:

[http://en.wikipedia.org/wiki/Windows\\_7](http://en.wikipedia.org/wiki/Windows_7)

About Java:

[http://www.java.com/en/download/faq/whatis\\_java.xml](http://www.java.com/en/download/faq/whatis_java.xml)

Java Test:

<http://www.java.com/en/download/testjava.jsp>

Java Download:

<http://www.java.com/en/>

<http://www.java.com/en/download/manual.jsp?locale=en>

## 8. Condor 3 How to install Condor 3 on a PC Part 2 of 2 V2 Updated 12/28/2014 (15:12)

<http://youtu.be/p8ANaPKggtg>

This video has been updated with the Condor 3 license key instructions.

*Links within video are:*

<http://galaxyadvisors.com>

MySQL installation:

<http://dev.mysql.com/downloads/mysql/>

MySQL Download

<http://dev.mysql.com/downloads/windows/installer/5.6.html>

MySQL Manual

<http://downloads.mysql.com/docs/refman-5.6-en.a4.pdf>

Condor 3 Sign up form link to obtain license key:

<http://guardian.galaxyadvisors.com/guardian>

After the 14 day trial period ends, users need to email Peter Gloor at: [pgloor@galaxyadvisors.com](mailto:pgloor@galaxyadvisors.com)

Sample Condor3.bat file:

```
set path=%path%;C:\Program Files (x86)\Java\jre7\bin
```

```
java -Xmx2G -jar Condor-3.2.0.jar
```

## 9. Condor 3 How to obtain a Google CSE Key Updated 8/11/2015 V1 (5:48)

<https://youtu.be/zME1-j9yPvI>

The Google Console link

<https://code.google.com/apis/console/> has a new web design and this video has been updated as of 08/11/2015 to reflect these changes.

Instructions on how to obtain a Google CSE Key.

Links within the video are:

<http://galaxyadvisors.com>

Create Google Account Link:

<https://accounts.google.com/signup?service=mail>

Google Console Link:

<https://code.google.com/apis/console/>

Google Billing Link:

<https://developers.google.com/console/help/new/#billing>

Condor CX key: 000229616349723713761:mlcaolv1mpw

## **10. Condor 3 How to obtain the four Twitter API Keys (8:39)**

<http://youtu.be/6zMW7YEKJzw>

*Links within video are:*

<http://galaxyadvisors.com>

Twitter Login:

<https://twitter.com/login>

Twitter App Page:

<https://apps.twitter.com>

Twitter V1.1. Rate Limits page:

<https://dev.twitter.com/docs/rate-limiting/1.1>

## **Condor 3 Fetch Menu Examples (6 videos)**

**Numbers 11, 12, 13, 14, 15, 16 below.**

### **11. Condor 3 Fetch Mailbox Menu Example 01 (23:43)**

<http://youtu.be/BFo57cz9Jxo>

This video provides an example of how to use the Condor 3 Fetch Menu for email to create a virtual mirror. Condor 3 can analyze email for a single person, a team, a department or an entire company or organization.

### **12. Condor 3 FaceBook Profile Menu Example (8:20)**

<http://youtu.be/jYUVwwBckhg>

This video provides an example of how to use the Condor 3 Fetch Facebook profile menu.

For 2-digit country locale key see:

<http://www.worldatlas.com/aatlas/ctycodes.htm>

### 13. Condor 3 Web Example Vo1 (18:55)

<http://youtu.be/MzPy78UXcVw>

This video provides an example of how to use the Condor 3 Fetch Menu for the Web. Note: there are over 1 billion web-sites in 2014, estimated to double every 18-24 months.

*Links within the video are:*

<http://galaxyadvisors.com>

Website Growth:

<http://www.internetlivestats.com/total-number-of-websites/>

<http://toni.org/2012/05/03/1-billion-web-sites-in-2013/>

<http://www.internetlivestats.com/total-number-of-websites/>

Google APIs:

AJAX

<https://developers.google.com/web-search/docs/reference>

CSE

<https://developers.google.com/custom-search/>

Google CSE 239 Country List:

[https://developers.google.com/custom-search/docs/xml\\_results#countryCollections](https://developers.google.com/custom-search/docs/xml_results#countryCollections)

Google Search Operators:

<https://support.google.com/websearch/answer/136861>

Google Punctuations and Symbols:

<https://support.google.com/websearch/answer/2466433>

Backlinks:

<http://www.backlinkwatch.com>

### 14. Condor 3 Twitter Example 01 (19:07)

<http://youtu.be/imVo9EKQefo>

This video provides an example of how to use the Condor 3 Fetch Menus for Twitter. There are two Twitter Fetch menu options:

1. The Fetch Twitter menu is designed to fetch tweets based upon a user query, which includes three search options:
  - a. Language of 21 selections,
  - b. Repetitive searching with a designated time delay, and
  - c. Geolocation based upon latitude and longitude within a radius of X miles or kilometers.

2. The Fetch Twitter Accounts menu enables a user to fetch a designated user(s) tweets. More than one Twitter user account or name can be collected in a single fetch.

*Links within the video are:*

For the number of Tweets sent today see:

<http://www.internetlivestats.com>

Twitter Reference Links:

<https://twitter.com>

<http://en.m.wikipedia.org/wiki/Twitter>

<http://abcnews.go.com/Business/twitter-ipo-filing-reveals-500-million-tweets-day/story?id=20460493>

Geocoding:

<http://www.gpsvisualizer.com/geocoder/>

GPS Visualizer Calculators can be used to Draw a Range Ring Around a City

<http://www.gpsvisualizer.com/calculators>

Galaxy Advisors

<http://galaxyadvisors.com>

## **15. Condor 3 Wiki Evolution Example 01 (15:35)**

<http://youtu.be/hIC-8OgfdJw>

This video provides an example of how to use the Condor 3 Fetch Wiki Evolution Menu.

*Links within the video are:*

<http://galaxyadvisors.com>

Wikipedia:

<http://en.wikipedia.org/>

Wikipedia Searching:

<http://en.wikipedia.org/wiki/Help:Searching>



## 16. Condor 3 Wiki Categories Example 01 (12:51)

<http://youtu.be/Ehe-2XPRLOA>

This video provides an example of how to use Condor 3's Fetch Wikipedia Categories Menu.

Wiki Categories helps you to understand how your topic or area of interest is classified and fits into a hierarchical tree structure of articles.

*Links within the video are:*

Galaxy Advisors

<http://galaxyadvisors.com>

Wikipedia:

<http://www.wikipedia.org>

Wikipedia's 12 Main Content Categories

<http://en.wikipedia.org/wiki/Portal:Contents/Categories>

Wikipedia Society and Social Sciences Category (1 of the 12 main content categories)

[http://en.wikipedia.org/wiki/Portal:Contents/Categories#Society\\_and\\_social\\_sciences](http://en.wikipedia.org/wiki/Portal:Contents/Categories#Society_and_social_sciences)

Wikipedia Linguistics Sub-Category of Society and Social Sciences

<http://en.wikipedia.org/wiki/Category:Linguistics>

Wikipedia Quantitative Linguistics Sub-Category of Linguistics

[http://en.wikipedia.org/wiki/Category:Quantitative\\_linguistics](http://en.wikipedia.org/wiki/Category:Quantitative_linguistics)

Wikipedia Page for George Kingsley Zipf, which is a page under the Quantitative Linguistics Sub-Category

[http://en.wikipedia.org/wiki/George\\_Kingsley\\_Zipf](http://en.wikipedia.org/wiki/George_Kingsley_Zipf)

Wikipedia Category Tree page

<http://en.wikipedia.org/wiki/Special:CategoryTree>

Wikipedia Help Searching Page:

<http://en.wikipedia.org/wiki/Help:Searching>

## Condor 3's Menus and GUI Controls

Two videos. Numbers 17 and 18 below.

### 17. Condor 3's Menus At-A-Glance V1 (37:19)

<http://youtu.be/QOPuXicKgao>

This video provides:

1. An overview of Condor 3's seven main menu items
2. The three graphical user interface tools, and
3. Basic process steps the user will use to analyze their network datasets.

### 18. Condor 3 GUI Menus (11:28)

<http://youtu.be/7fJ1nZuvQqs>

This video describes Condor 3's three graphical user interface (GUI) controls.

## 19. How to create a Google Earth .kmz file

<http://youtu.be/EUMcPIo19ug>

This video explains how to create a Google Earth .kmz file.

Overall three steps:

1. Obtain a Google Map API Key
2. Enable Google Maps JavaScript API v3, and
3. Use the site: <http://www.gpsvisualizer.com/geocoder>

To geocode an address or city name and create a Google Earth .kmz file for viewing and reuse.

*Links within the video are:*

gpsvisualizer

<http://www.gpsvisualizer.com/geocoder>

Google Console

<https://code.google.com/apis/console>

## Condor 3 YouTube UPDATES as of August 11, 2015

### 1. Condor 3 How to obtain a Google CSE Updated 8/11/2015 V1 Key

<https://youtu.be/zME1-j9yPvI>

The Google Console link

<https://code.google.com/apis/console/> has a new web design and this video has been updated as of 08/11/2015 to reflect these changes.

### 2. How to install MySQL on a Mac UPDATE

<http://youtu.be/REowrvnGoyw>

Two UPDATES when installing Mac OS S 10.9 (x86, 64bit), DMG Archive:

- a. The MySQL download package now has just one package “mysql-5.6.21 –osx10.8-x86\_64.pkg” and no separate preference pane package. The one package now installs both MySQL and the Preference Pane in one install.
- b. At the Installation Summary page you will get a message that “The Installation Failed.” This is not true. Click on the Black Apple in the upper left corner. Choose System Preferences. Find the MySQL icon and click on it. At the MySQL window, Click on “Start MySQL”. Enter your Computer’s password. The MySQL now says it is running in green.

### 3. Condor 3 How to install Condor on a Mac V2

<http://youtu.be/yugwSj4JprU>

Two UPDATES:

- a. Users need to install Java 7 or Java 8. Java 6 is no longer supported.
- b. To start Condor 3 on a Mac with Yosemite (10.10) using the Terminal app, users need to install the Java Development Kit (JDK). This is at the 4:02 timing mark.

Now, goto

<http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

to download the Java Development Kit, which for the Mac is like “jdk-8u25-macosx-x64.dmg”. The update version may change.

Click to Accept License Agreement. Double click on the jdk-8u25-macosx-64.dmg to begin the install and follow the on screen instructions. Then when you issue the Java command (Java -Xmx2G -Djava.library.path=. -jar Condor-3.2.0.jar) in the Terminal window it will work.

Thus, users should install the Java Runtime Environment (JRE) jre-8u25-macosx-z64.dmg to start the Condor 3~.jar with a double click.

#### 4. Condor 3 Three steps to install on a Mac

<http://youtu.be/FcN8UTIEZHI>

UPDATE: Condor 3 no longer supports Java 6.

Users must install Java 7 or Java 8 for Condor 3 to run.

#### 5. Condor 3 How to install Condor on a Mac V2 (6:53)

<http://youtu.be/yugwSj4JprU>

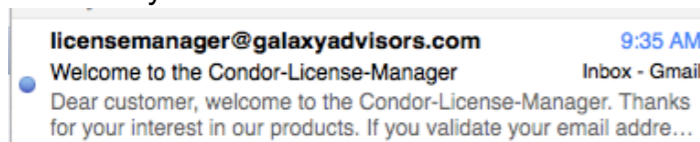
Condor 3 installation now requires an email verification step and at the end of the 14 day trail period users need to email Peter Gloor at: [pgloor@galaxyadvisors.com](mailto:pgloor@galaxyadvisors.com) and request a yearly license for a commercial use or a free academic license.

Overall, these are the four main steps:

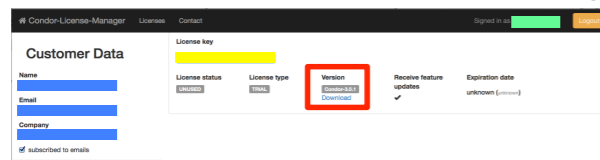
1. Complete Condor 3's Sign up Form to obtain your license key:

<http://guardian.galaxyadvisors.com/guardian/>

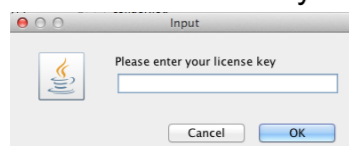
2. Validate your email address



3. Download Condor 3 from the License Manager link



4. Start Condor 3 and enter your license key:



#### Additional YouTube videos by Peter Gloor.

##### Swarmcreativity Lecture Series:

The Foundation of Swarmcreativity (8:29)

<http://youtu.be/8fZWPA8ObAU>

Thee Dimensions of Collaborative Communication (15:28)

<http://youtu.be/8fZWPA8ObAU>

Six Honest Signals of Creative Communication (22:12)

<http://youtu.be/dMXa8CiD6aM>

Coolhunting Principles Overview (44:35)

<http://youtu.be/eyw9VLaJsMA>

##### Condor Overview Video Series:

Condor E-Mail Analysis Intro (8:27)

<http://youtu.be/iiWUCxZ7a2U>

Condor E-Mail Analysis 6 HonestSignals (13:08)

<http://youtu.be/-FiT5ngsZrs>

Condor E Mail Content Analysis & Data Export (9:37)

<http://youtu.be/ZyZEmt6j9As>

Condor Twitter Analysis (10:22)

<http://youtu.be/RdAQ8WBWsDM>

Condor Blog Analysis (7:48)

<http://youtu.be/dtToIvYtOoQ>

Condor Wikipedia Example (12:39)

<http://youtu.be/EFM-RwVfAIY>

Condor Facebook Example (3:31)

<http://youtu.be/QqzD1puxbTM>

# Social Network Basics

The purpose of this chapter is to provide social network newbies an orientation to the field of Social Network Analysis, which includes: a brief history, the basic vocabulary, professional associations, and references.



YouTube Video:

Social Network Analysis – The Basics:

<http://www.youtube.com/watch?v=ei3YEn8xUnI&feature=youtu.be>

## Brief History



Linton C. Freeman

Lin Freeman's 2004 book *The Development of Social Network Analysis: A Study in the Sociology of Science* provides a great history of how social network analysis developed. Here are few links to Freeman's site and his book.

<http://moreno.ss.uci.edu/>

<http://moreno.ss.uci.edu/pubs.html>

[http://www.amazon.com/dp/1594577145/ref=rdr\\_ext\\_tmb](http://www.amazon.com/dp/1594577145/ref=rdr_ext_tmb)

## The Tower of Babel

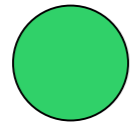


Social Network Network analysis is multi-disciplinary including the fields of:

- Anthropology
- Sociology
- Mathematics
- Communications
- Physics
- Computer Scientists
- ....

Consequently, there are strengths and weaknesses with its development. A fundamental issue is that the most basic terms have resulted in a "Tower of Babel." People refer to a "dot" or a "line" by many different names which often leads to confusion and often people who are unfamiliar with different terms are heard saying, "what are you talking about?"

## The Tower of Babel



Node

Link

Vertex

Edge

Actor

Tie

Connection

Arc

A “dot” is often referred to as a node, vertex, or actor and a “line” is often referred to as a link, edge, tie or arc. Something so basic has many different names. The point is to be familiar with the all the different ways to call the two basic concepts.

## The Node



Condor's Actor



Email = person's mail address



Web = URLs, http://.....



Wikipedia = Articles, URLs



Twitter name



Facebook name

Condor 3 uses the term Actor and Node interchangeable. Different kinds of data use different data elements for nodes. Specifically, Condor 3 defines a node as a person's email address, a Web URL or link, Wikipedia Articles and URLs, Twitter names or Ids, and Facebook names.

A node can have properties, attributes or characteristics too. For example, a person's email address can have, a domain, such as: .com, .edu. .org, .net, etc.

See Chapter 10 for a listing of node and edge properties.

# The Link

## Condor's "Edges"



Email: Message Source/From - Target/To



Web: URL Source/From - Target/To



Wikipedia: Articles or urls Source/From - Target/To



Twitter: Tweet Source/From - Target/To



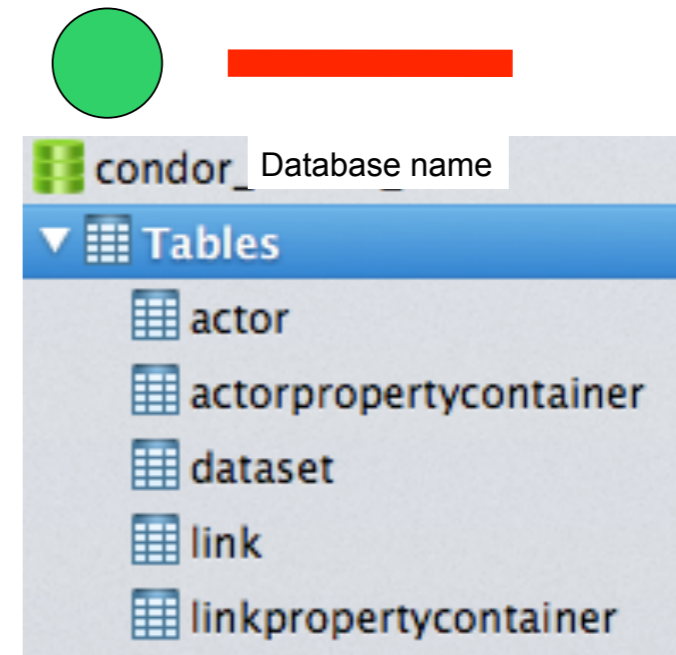
Facebook: Name Source/From - Target/To

Condor 3 uses the term Edge, Link and Connection interchangeably. Different kinds of data use different data elements for edges. Specifically, Condor 3 defines an edge as a person's mail message, a Web URL Source and Target, Wikipedia Articles URLs Source and Target, Twitter names or Ids Source and Target, and Facebook names Source and Target.

An edge can have properties, attributes or characteristics too. For example, a person's email message can have, a sentiment, emotionality etc.

See Chapter 10 for a listing of node and edge properties.

## Navicat: Condor 3 Databases and Datasets



The figure above is an example how Navicat displays Condor 3's universal database and dataset table structure regardless of the kind of data.



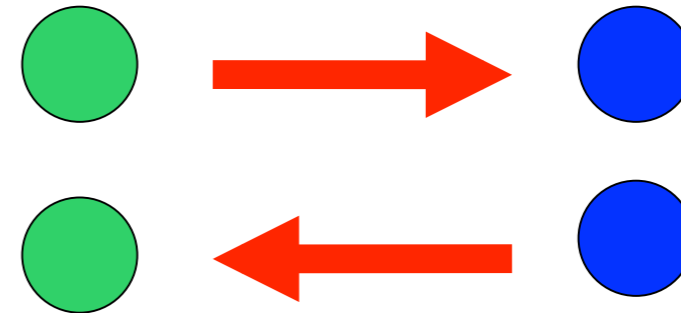
## Link: Undirected Vs Directed

Undirected 

Directed 

A link can be undirected, which means it is assumed that a relation goes both ways, such as between friends. Or, a link can be split in two, and be directed as shown in the figure above. Condor 3's Influence measure is a directed link where someones influence may not be the same in both directions.

## Reciprocal Links



Links can also be described as reciprocal.

For example, person A sends a message to person B, and B sends a reply back to A.

Condor '3 Process data > Annotation > Turn-taking annotation calculates a measure called: ART (h) which stands for **A**verage **R**esponse **T**ime in hours for nodes or actors.

## Unreciprocated Link



Links can be also unreciprocated, where A sends a message to B, but B does not reply.

## Basic Vocabulary

- Network Measures
  - Degree
  - Density
  - Bridge
  - Centrality
  - Betweenness
  - TRIADS

There are six fundamental social network vocabulary or terms that need to be understood as indicated in the figure above. The next pages define these measures.

## Degree

The count of the number of ties to other actors in the network.

- Indegree is a count of the number of ties directed to the node (popularity).



- Outdegree is the number of ties that the node directs to others (gregariousness).

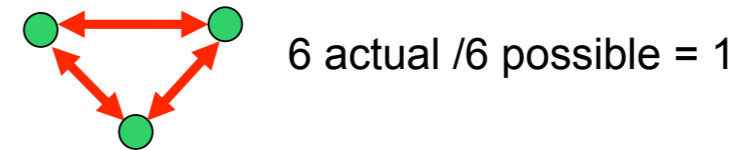


See:

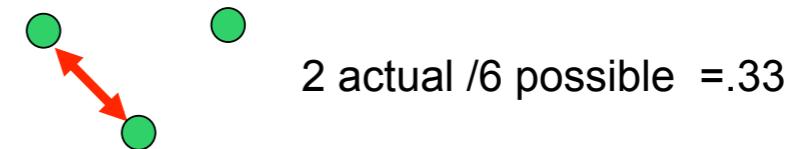
[http://en.wikipedia.org/wiki/Centrality#Degree\\_centrality](http://en.wikipedia.org/wiki/Centrality#Degree_centrality)

## Density

- In mathematics, a dense graph is a graph in which the number of edges is close to the maximal number of edges.



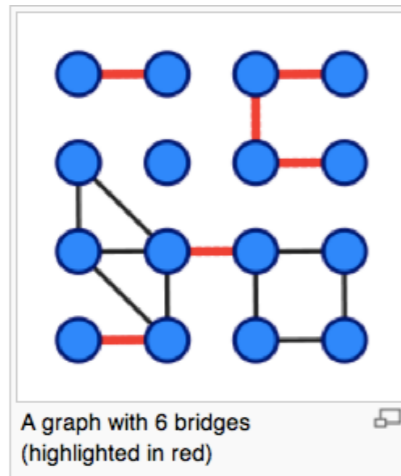
- A graph with only a few edges, is a sparse graph.



See: [http://en.wikipedia.org/wiki/Dense\\_graph](http://en.wikipedia.org/wiki/Dense_graph)

## Bridge

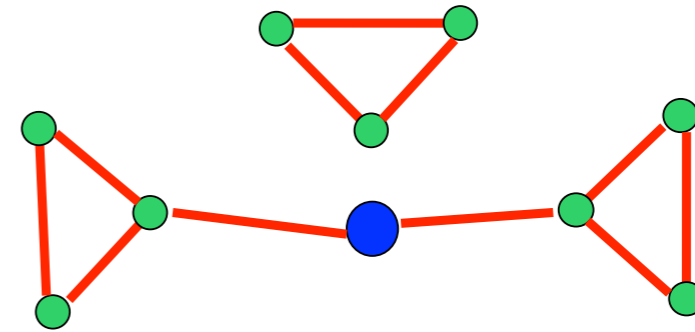
- An edge is said to be a bridge if deleting it would cause its endpoints to lie in different components of a graph



See: [http://en.wikipedia.org/wiki/Bridge\\_\(graph\\_theory\)](http://en.wikipedia.org/wiki/Bridge_(graph_theory))

## Centrality

- This measure gives a rough indication of the social power of a node based on how well they "connect" the network. "Betweenness," and "Degree" are all measures of centrality.

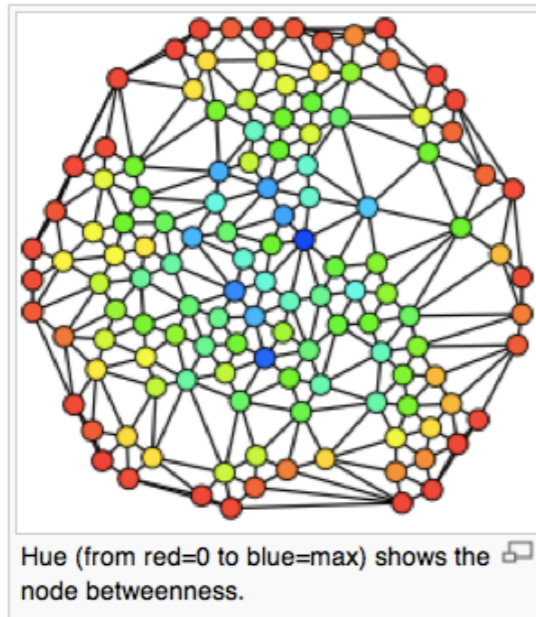


See:

[http://en.wikipedia.org/wiki/Betweenness#Betweenness\\_centrality](http://en.wikipedia.org/wiki/Betweenness#Betweenness_centrality)

# Betweenness

- The extent to which a node lies between other nodes in the network.



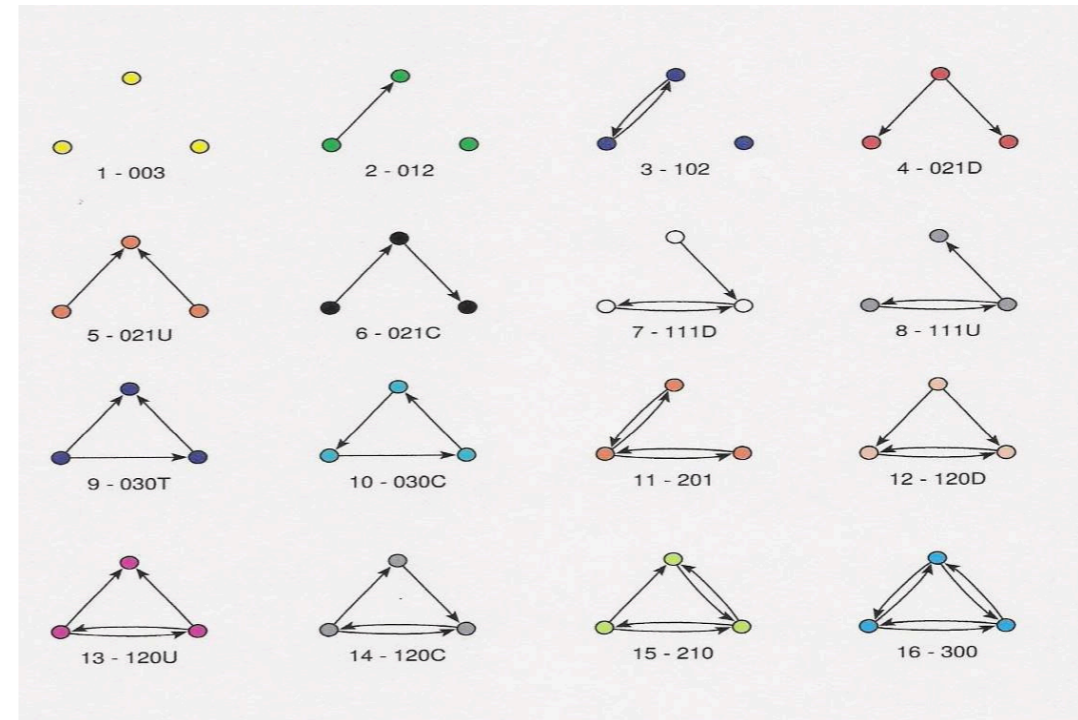
See:

[http://en.wikipedia.org/wiki/Betweenness#Betweenness\\_centrality](http://en.wikipedia.org/wiki/Betweenness#Betweenness_centrality)

# TRIADS

A group of three nodes with directed links.

There are 16 possible combinations



In sociology a triad is a group of three people. It is one of the simplest human groups that can be studied and is mostly looked at by microsociology. The study of triads, as well as dyads, was pioneered by German sociologist Georg Simmel at the end of the nineteenth century.

See: [http://en.wikipedia.org/wiki/Triad\\_\(sociology\)](http://en.wikipedia.org/wiki/Triad_(sociology))

MultiNet, a social network program, can create a Triad Census Profile based on the 16 unique triad communication types, which are shown in figure above

The triads are characterized by a three-digit Mutual, Asymmetric, and Null (MAN) index number.

The first digit represents Mutual, which gives the number of reciprocal dyads within the triad. Reciprocal means that the communication is happening both ways (two-way communication).

The second digit represents Asymmetric, which gives the number of directed dyads within the triad (one-way communication).

The third digit represents Null, which gives the number of dyads that have no interaction within the triad (no communication, Isolate).

A fourth digit (alpha) is sometimes added to the MAN index number to specify a directional or hierarchical relationship which is present with the triad. See cases #4, 5, 6, 7, 8, 9,10,12,13 and 14.

# Professional Associations

<http://www.insna.org>

The International Network for Social Network Analysis is the GOTO site for social network analysis.

**INSNA**  
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International Network for Social Network Analysis

**INSNA**  
INSNA is the professional association for researchers interested in social network analysis.

**Connections**  
Archives  
Current Issue:  
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**Sunbelt XXXVI 2016**  
Sunbelt XXXVI, 5-10 April 2016  
Marriott Hotel & Spa, Newport Beach, CA, USA!

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5

Methods for Collection of Participant-aided Sociograms for the Study of Social, Sexual and Substance-using Networks Among Young Men Who Have Sex with Men

The Content Structure of Intelligence Reports

Donor Motivations in the California State Legislature: A Social Network

# Collaborative Innovation Networks Conference (COINs)



See:

**COINs2009**

<http://www.coinsconference.org/coins09-savannah-usa/>

**COINs2010**

<http://www.coinsconference.org/coins10-savannah-usa/>

**COINs2011**

<http://www.coinsconference.org/coins11-basel-switzerland/>

**COINs2015**

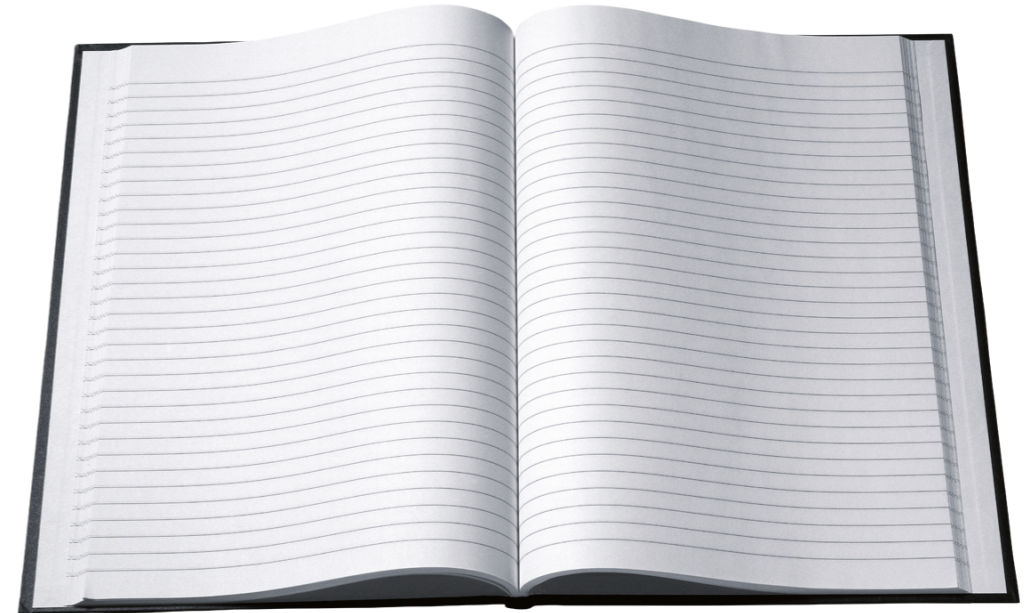
<http://www.coinsconference.org/coins15-tokyo-japan/>

COINs2016 Rome, Italy June 8-10,2016

# Social Network Books

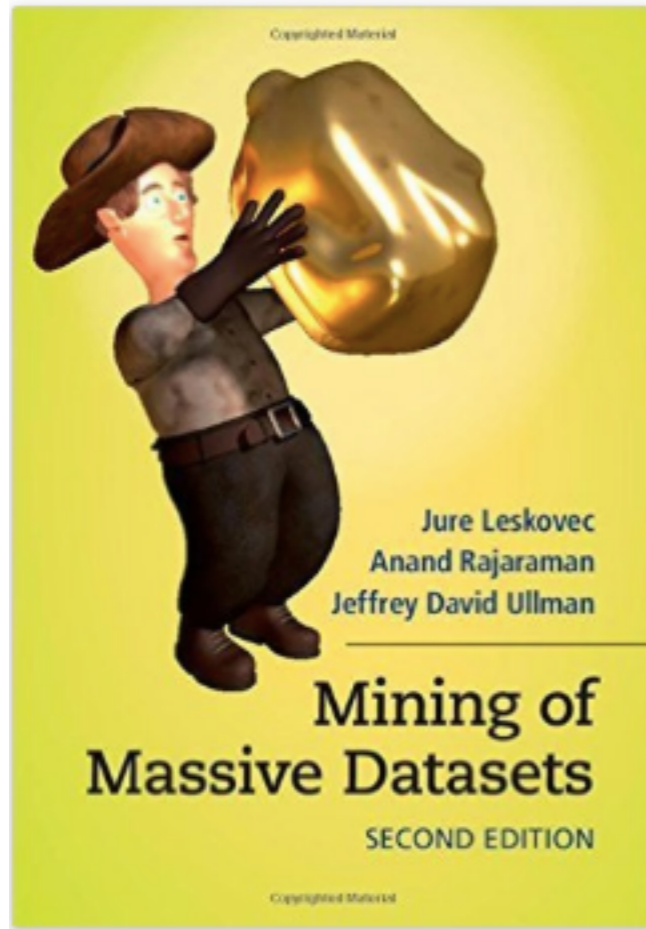
## SOCIAL NETWORK BOOKS

This section presents a variety of Social Network Books including: Massive Open Online Classes or MOOCs, Theory and Popular reading.

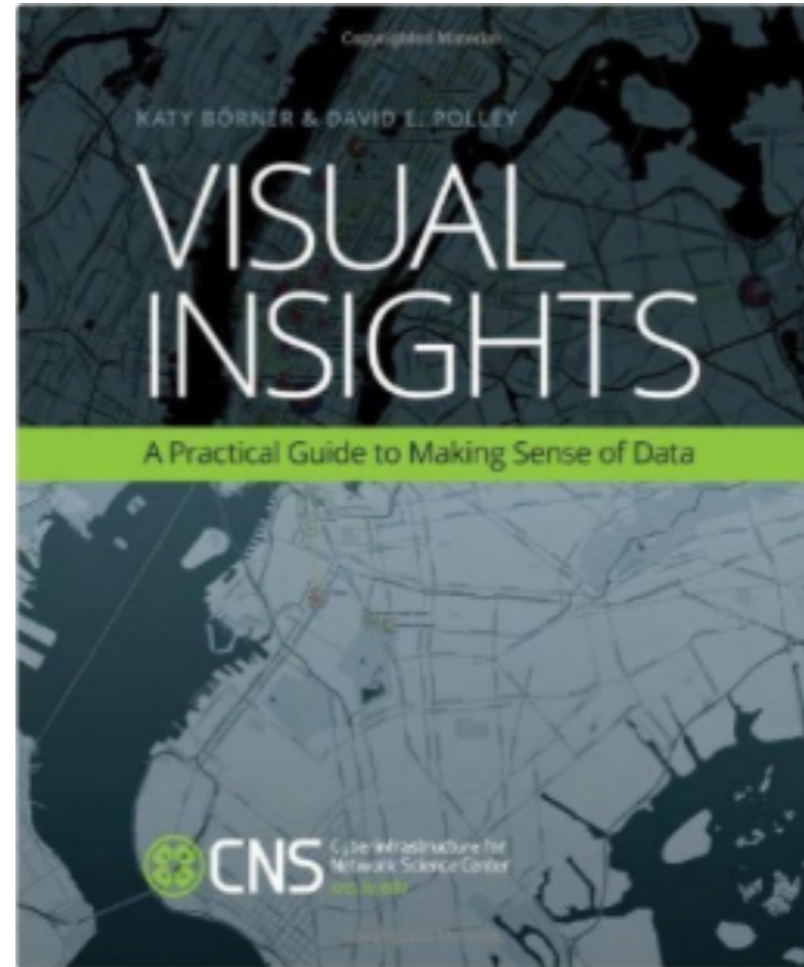




## Books for Massive Open Online Courses (MOOC) regarding Social Networks



[http://www.amazon.com/Leskovec-Mining-Massive-Datasets-Hardcover/dp/BooSCTWKF4/ref=sr\\_1\\_1?s=books&ie=UTF8&qid=1436209669&sr=1-1&keywords=mining+of+massive+databases+2nd+edition](http://www.amazon.com/Leskovec-Mining-Massive-Datasets-Hardcover/dp/BooSCTWKF4/ref=sr_1_1?s=books&ie=UTF8&qid=1436209669&sr=1-1&keywords=mining+of+massive+databases+2nd+edition)



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Forthcoming Dec 2015, but chapters available now as pdf downloads

**Network Science**  
by Albert-László Barabási

**About**

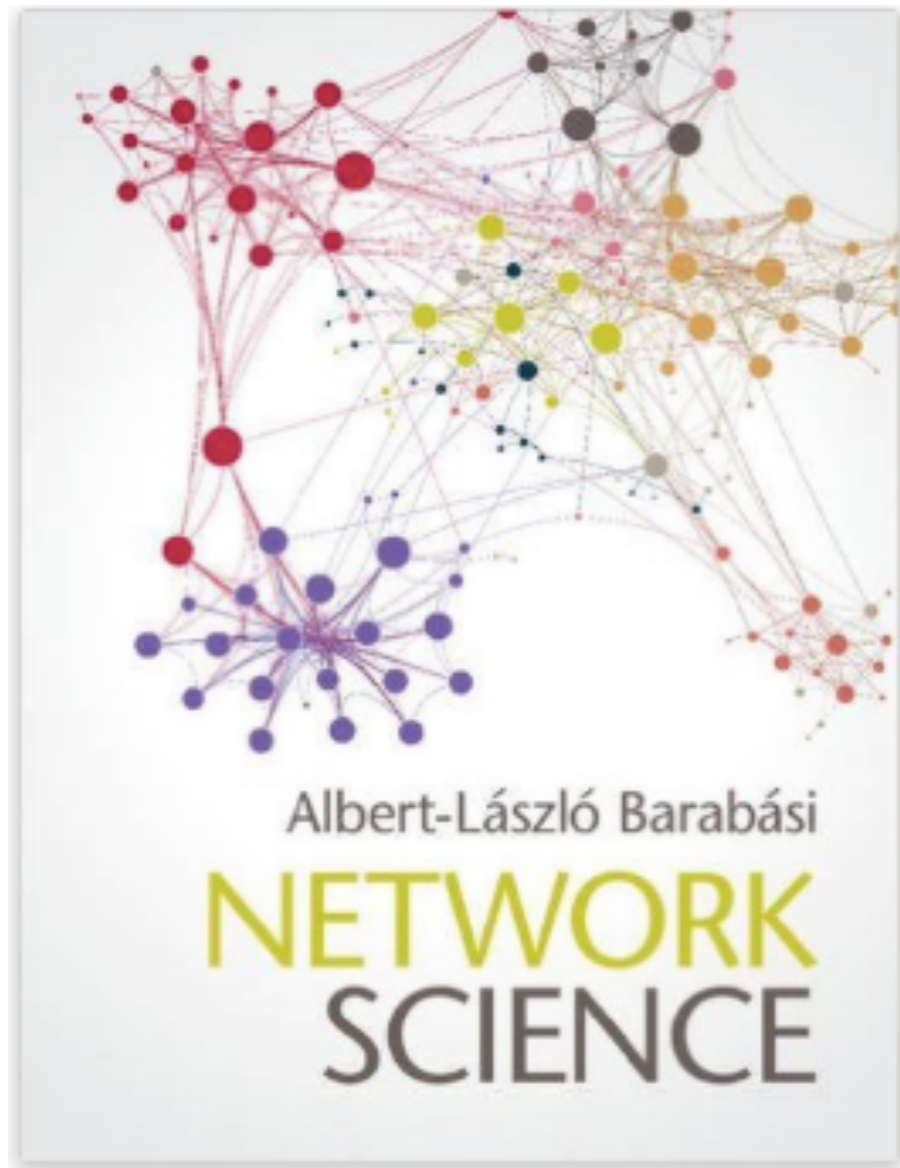
*The power of network science,  
the beauty of network visualization.*

Network Science, a textbook for network science, is freely available under the Creative Commons licence. Follow its development on [Facebook](#), [Twitter](#) or by signing up to our [mailing list](#), so that we can notify you of new chapters and developments.

The book is the result of a collaboration between a number of individuals, shaping everything, from content ([Albert-László Barabási](#)), to visualizations and interactive tools ([Gabriele Musella](#), [Mauro Martino](#), [Nicole Samay](#), [Klém Albrecht](#)), simulations and data analysis ([Márton Pósfai](#)). The printed version of the book will be published by Cambridge University Press in 2015. In the coming months the website will be expanded with an interactive version of the text, datasets, and slides to teach the material.

The printed version of the book will be published by Cambridge University Press in 2015. In the coming months the website will be expanded with an interactive version of the text, datasets, and slides to teach the material.

<http://barabasi.com/networksciencebook/>



[http://www.amazon.com/Network-Science-Albert-L-225-Barab/dp/1107076269/ref=sr\\_1\\_1?s=books&ie=UTF8&qid=1436378104&sr=1-1&keywords=Network+Science](http://www.amazon.com/Network-Science-Albert-L-225-Barab/dp/1107076269/ref=sr_1_1?s=books&ie=UTF8&qid=1436378104&sr=1-1&keywords=Network+Science)

Fall 2014



Welcome to the Network Science course website. Please tune in for updates, messages, homework assignments and useful links.

The lectures will take place on Mondays, Wednesdays, and occasionally on Fridays, 5:30 – 7:20 PM. Check the agenda weekly for Friday classes!

At the Center for Complex Network Research  
Northeastern University Physics Department  
110 Forsyth Street, Boston, MA 02115  
Hint: It's on the 5th floor of the Charles A. Dana building.  
Use the left elevator for 5th floor access.

The course will be presented by [Prof. Albert-László Barabási](#)  
and assisted by [Dr. Roberta Sinatra](#)

[Syllabus](#) [Class Agenda](#) [OpenRev Portal](#)

<http://barabasilab.neu.edu/courses/phys5116/>

[http://barabasilab.neu.edu/courses/phys5116/content/phys5116\\_syllabus\\_2014.pdf](http://barabasilab.neu.edu/courses/phys5116/content/phys5116_syllabus_2014.pdf)

# COINs and e-Research



**Knowledge Machines:  
Digital Transformations of the Sciences  
and Humanities (Infrastructures),  
April 2015**

**By**

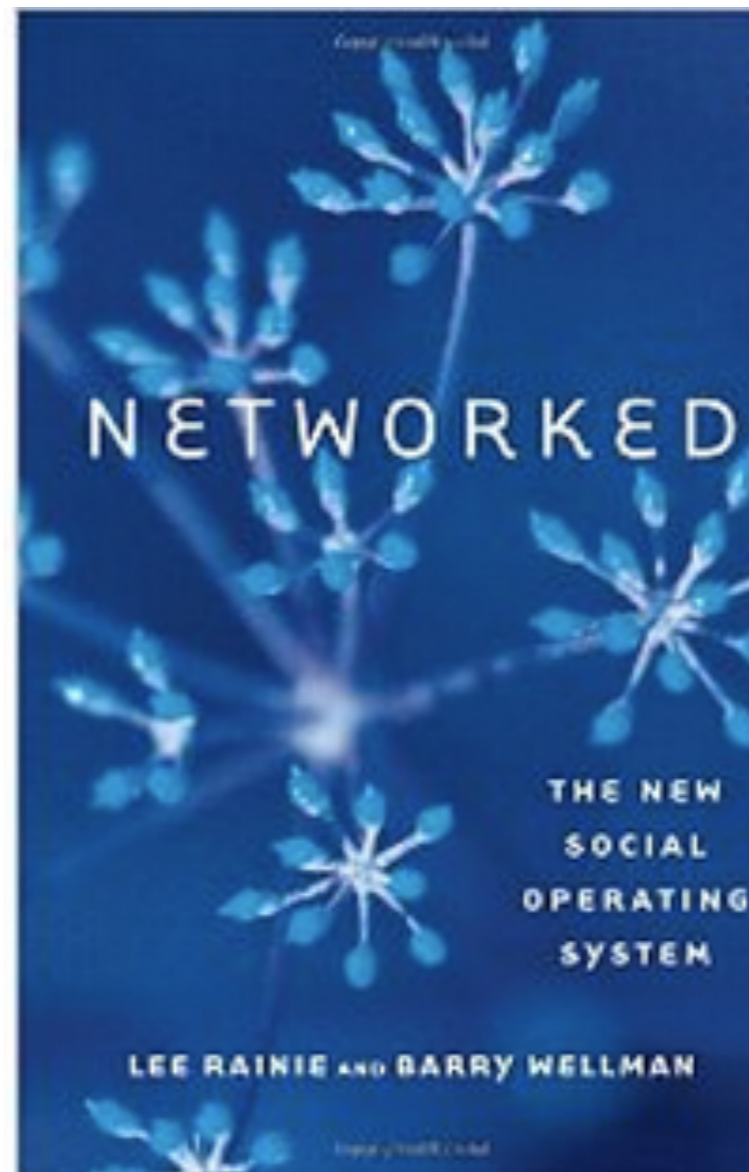
[Eric T. Meyer and Ralph Schroeder](#)

.... digital tools and data, used collectively and in distributed mode -- which they term *e-research* -- have transformed not just the consumption of knowledge but also the production of knowledge.

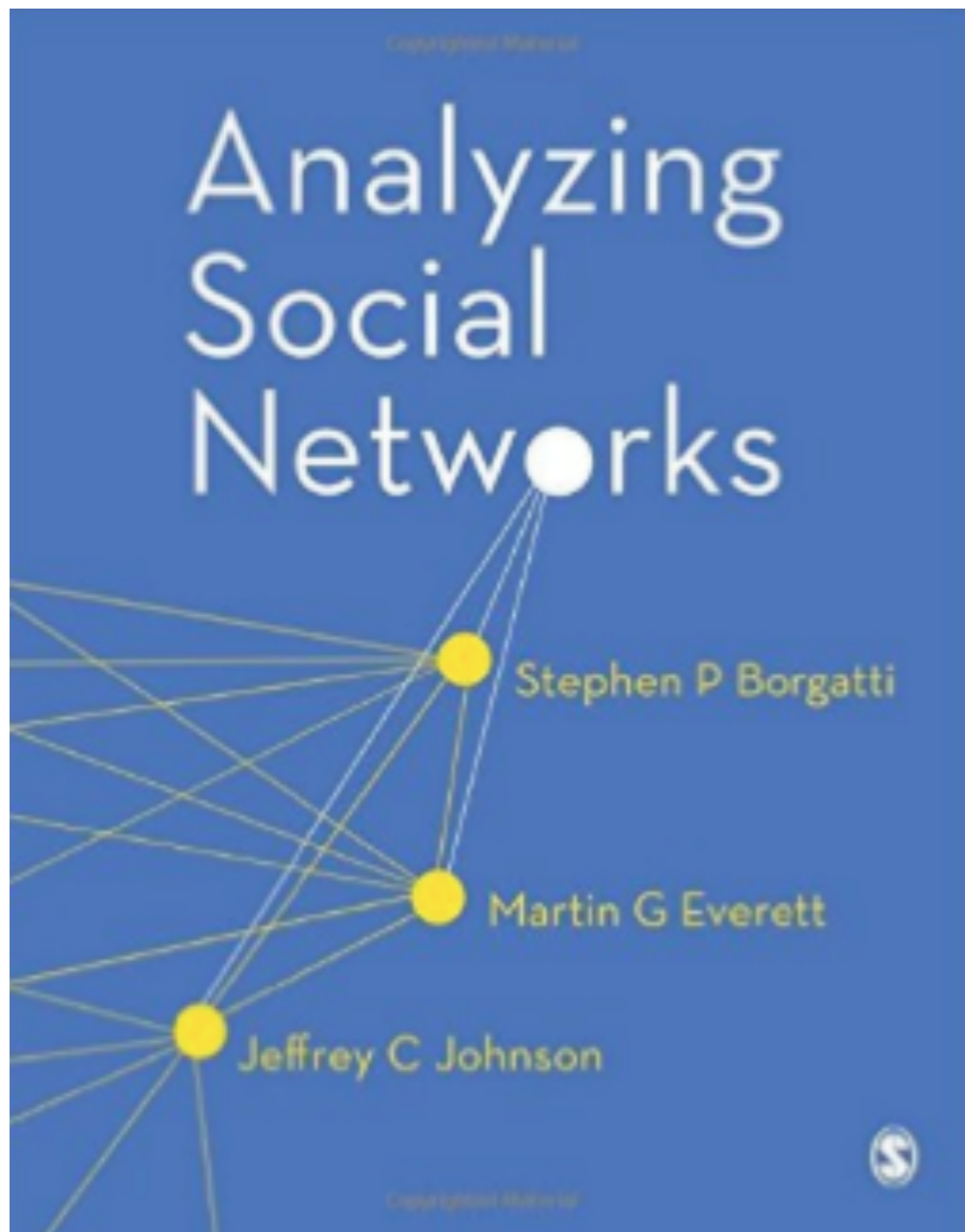
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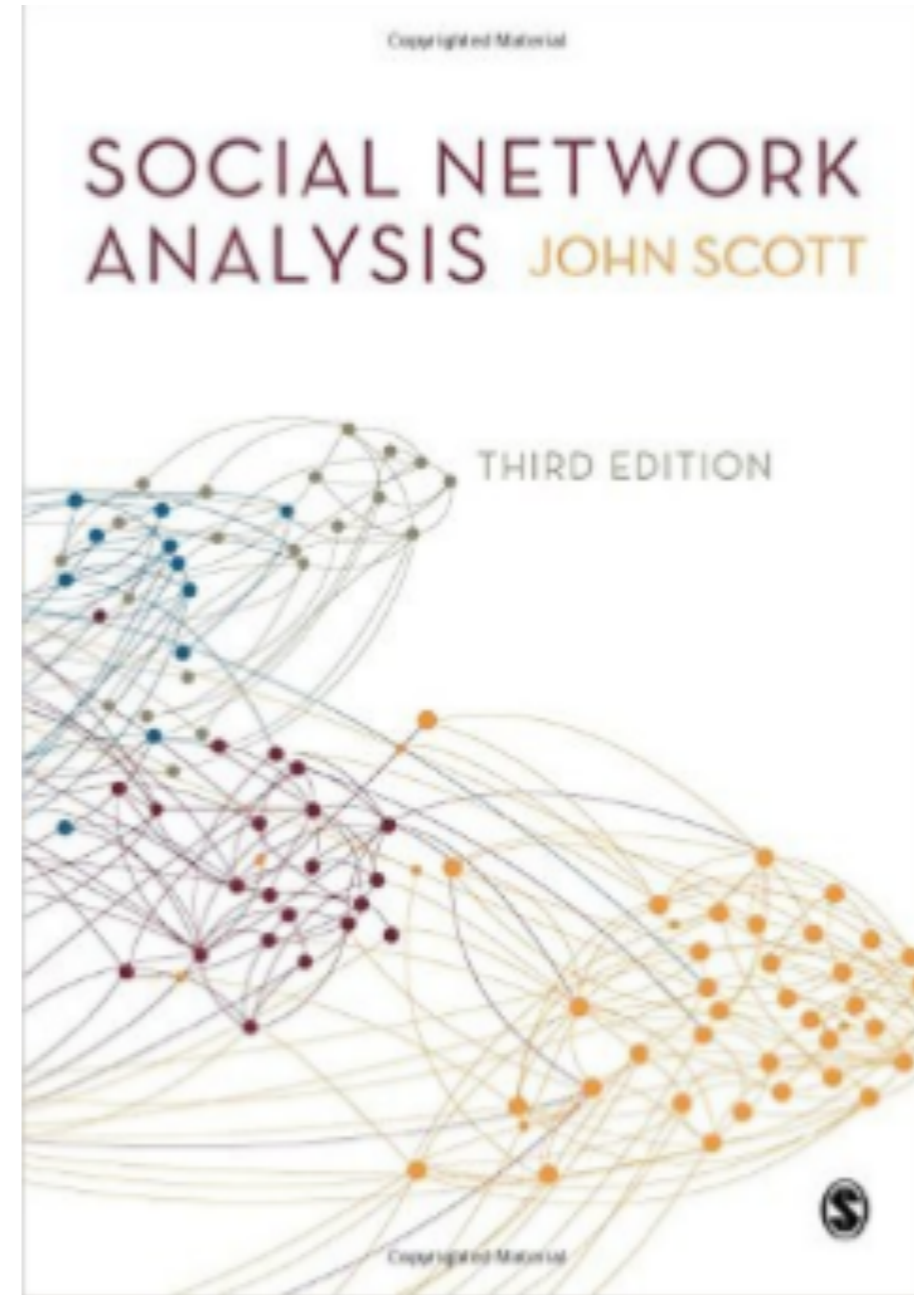
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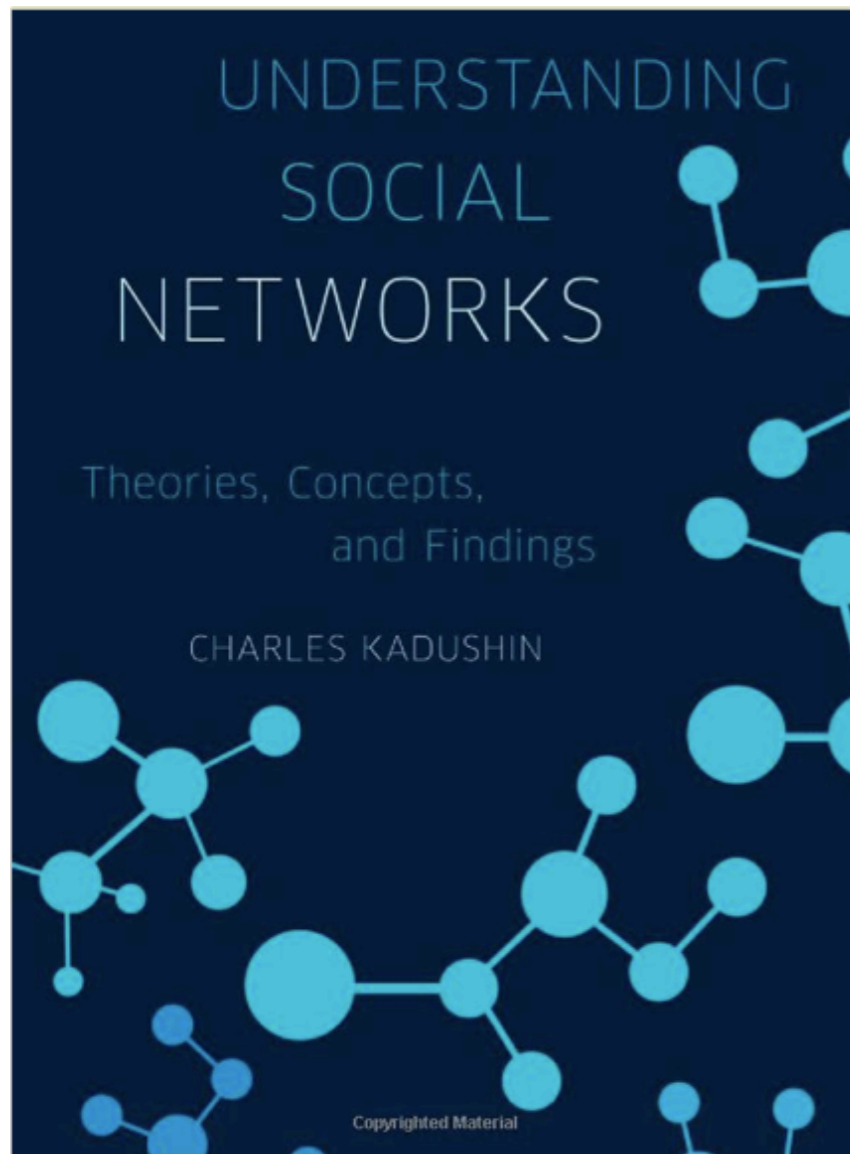
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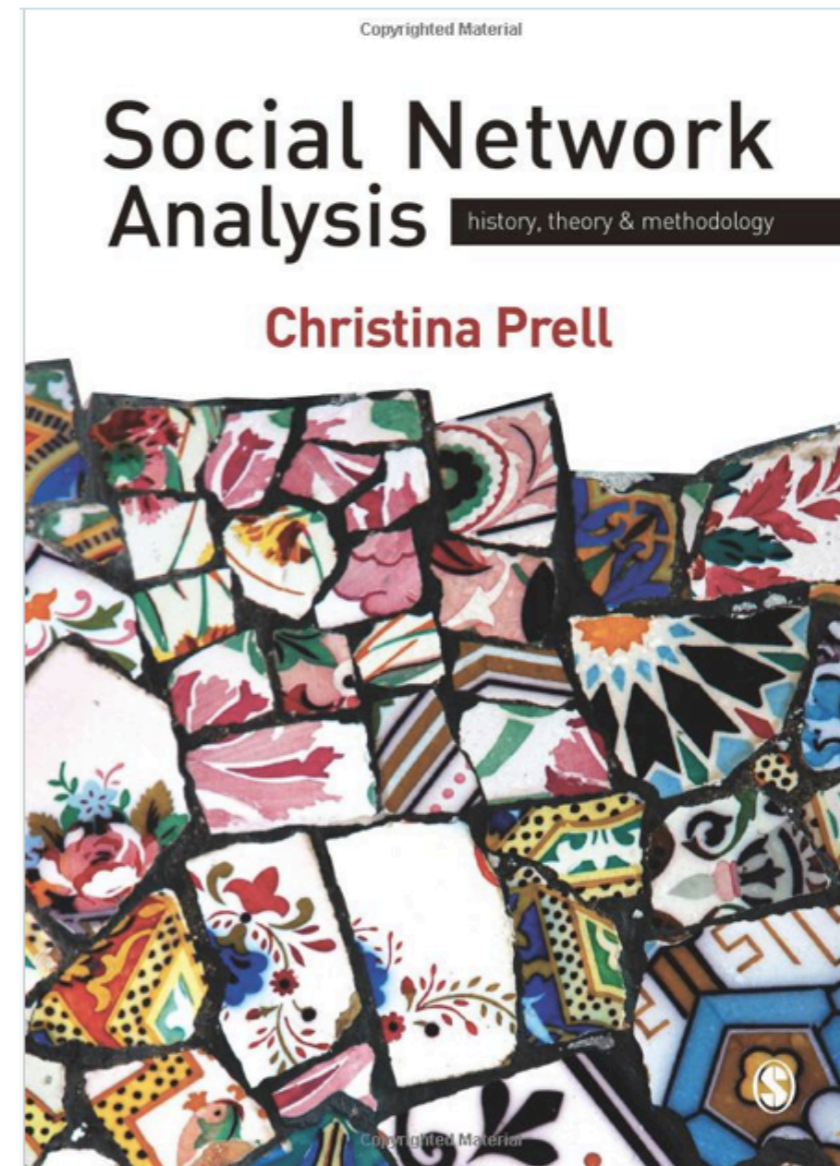
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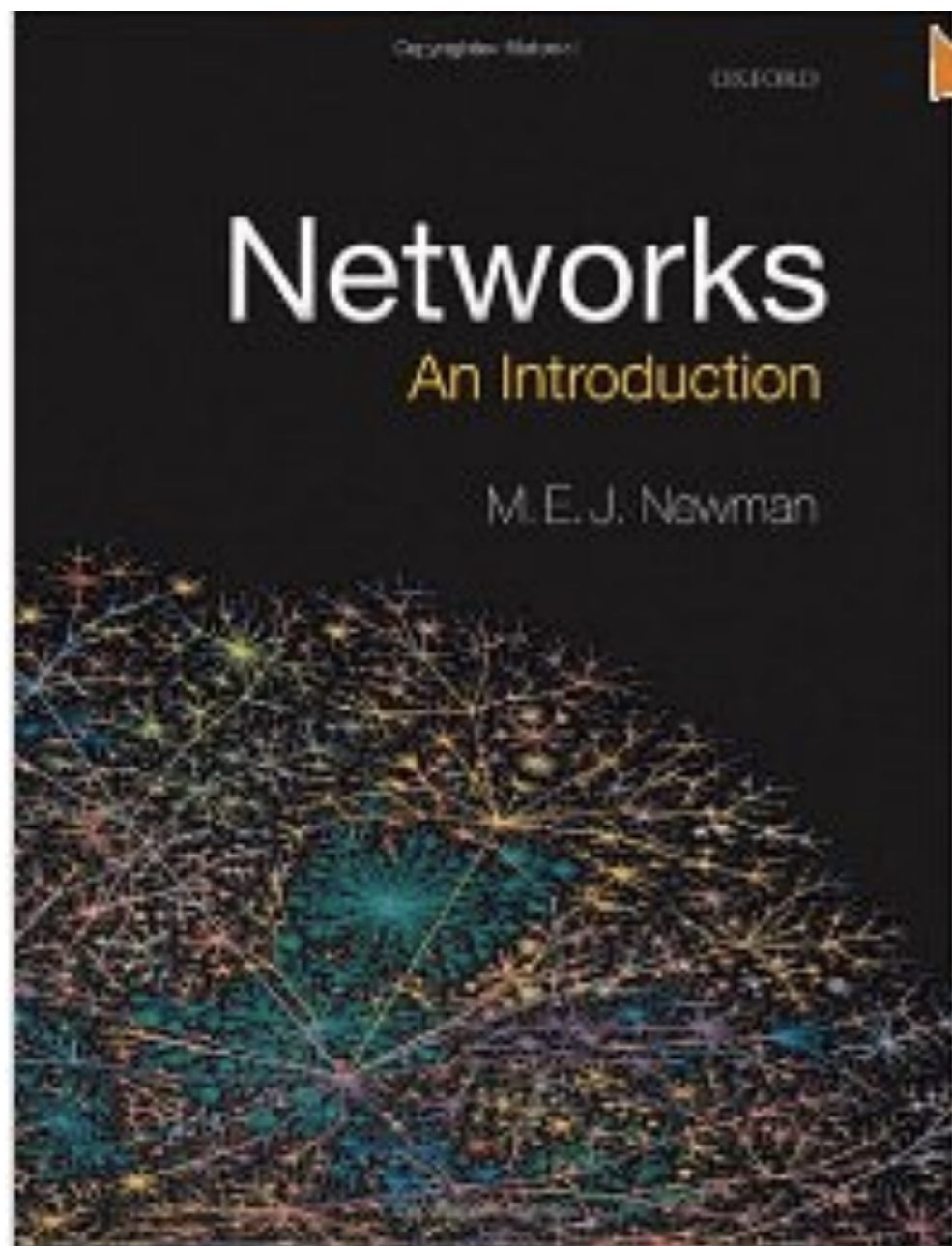
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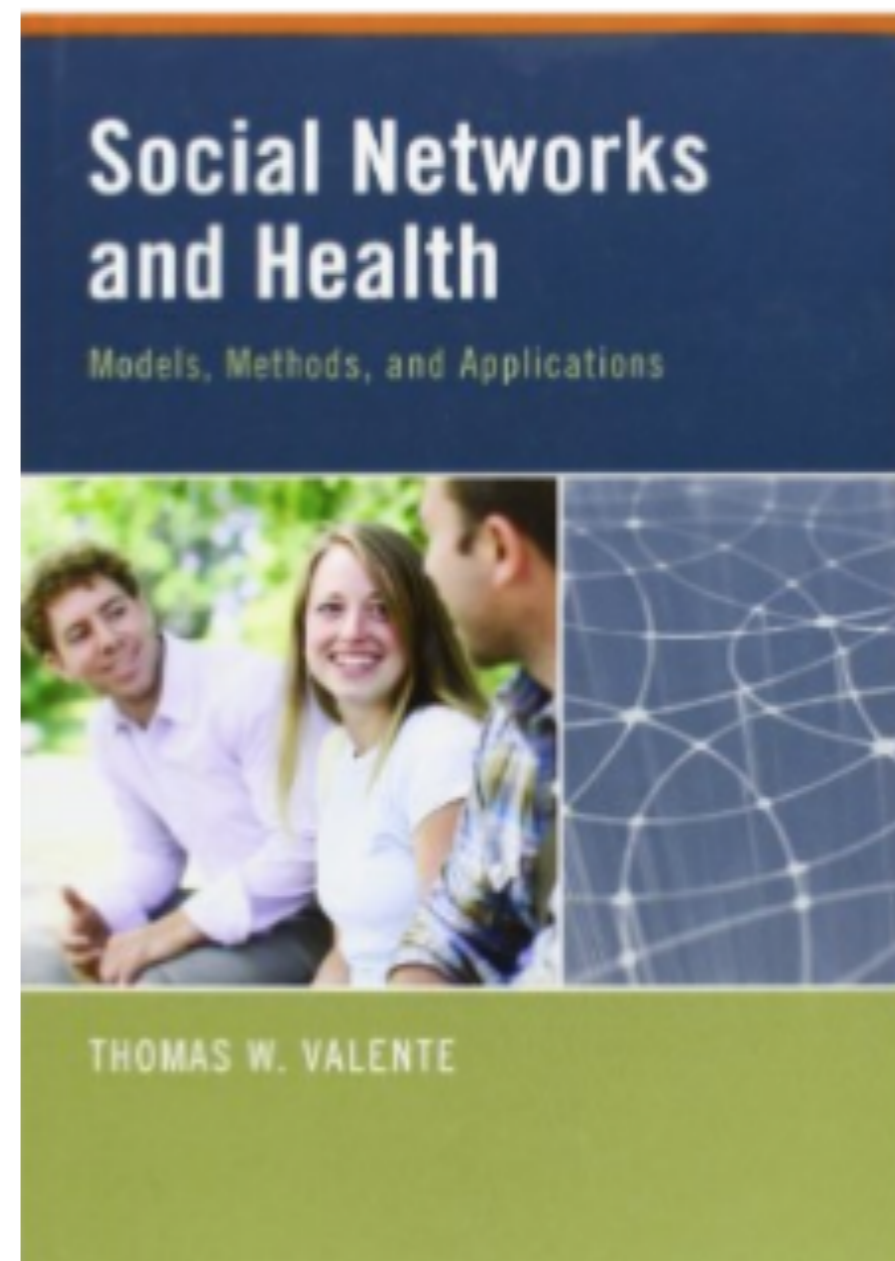
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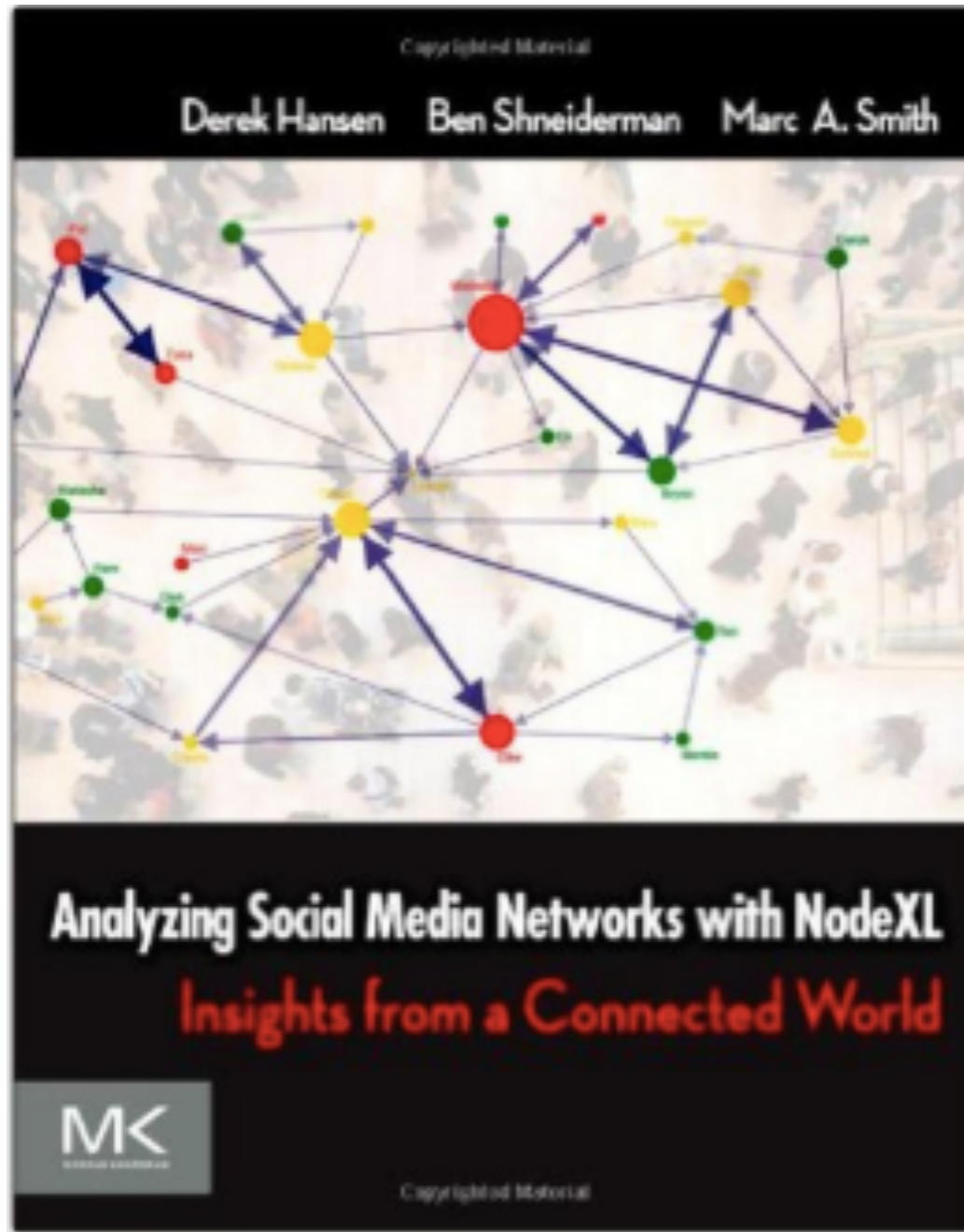


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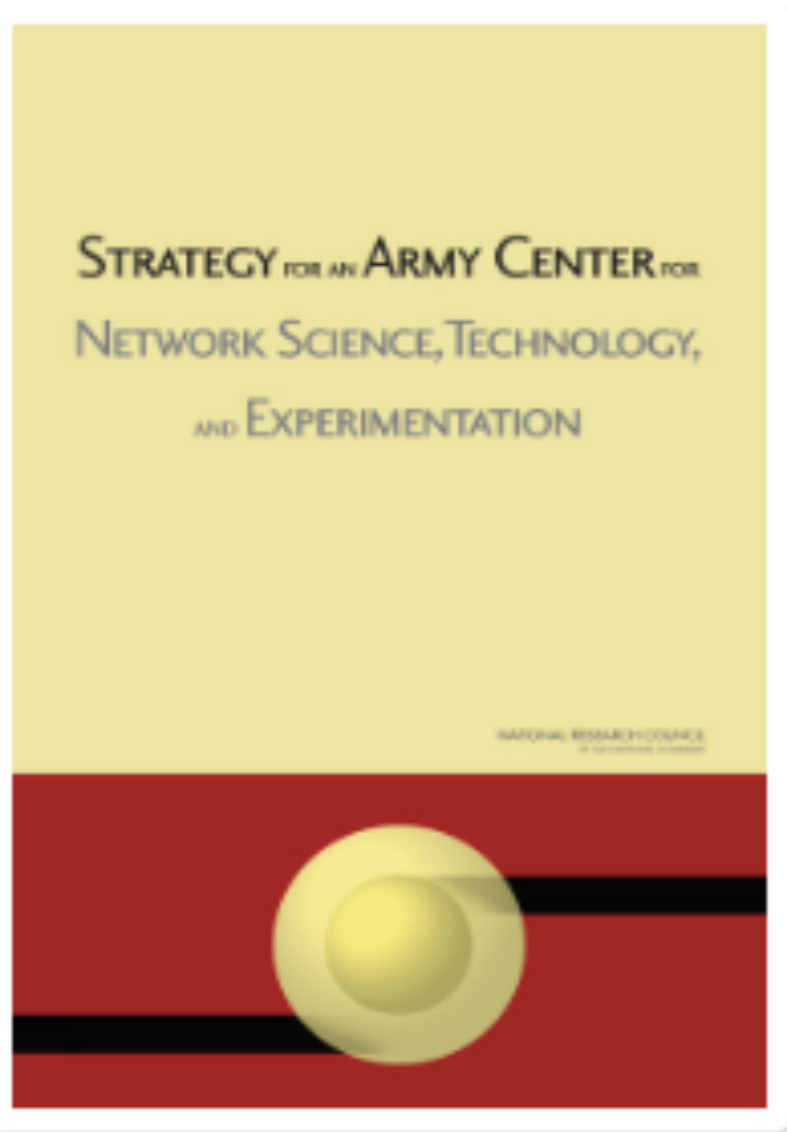
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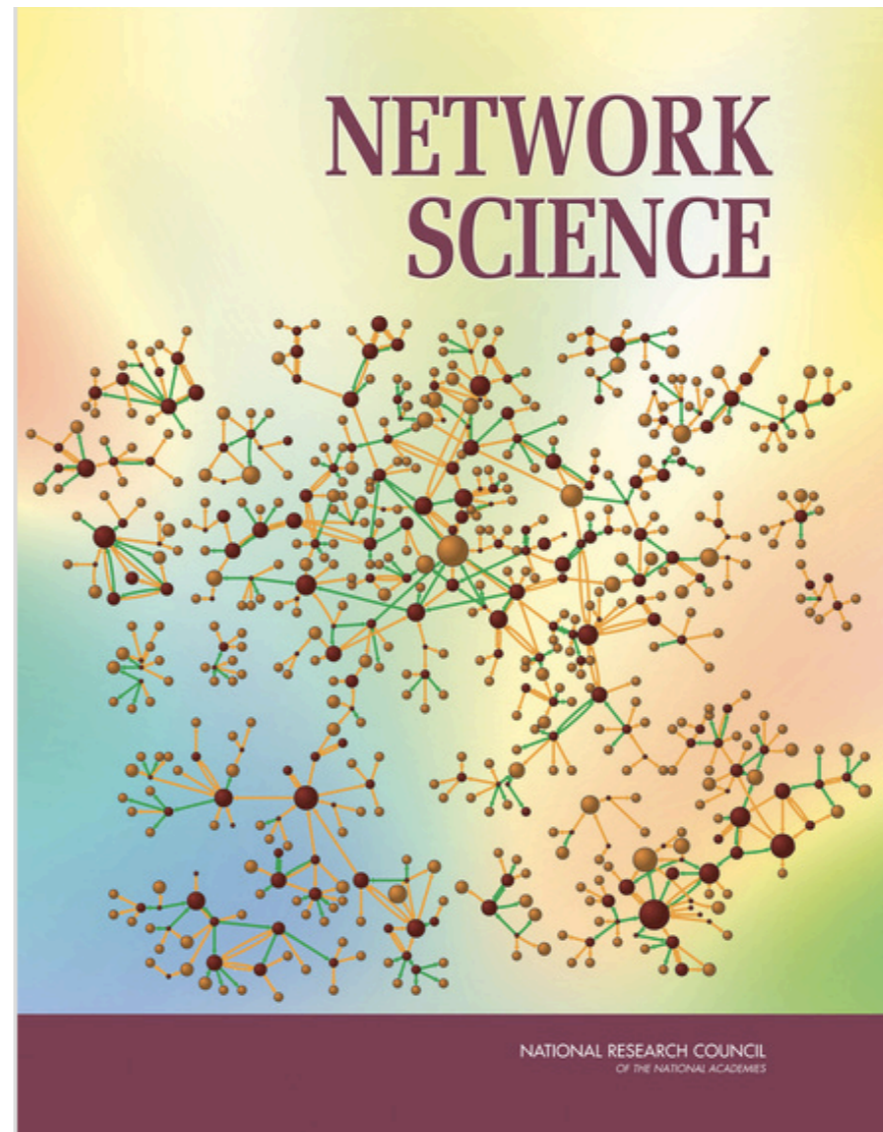
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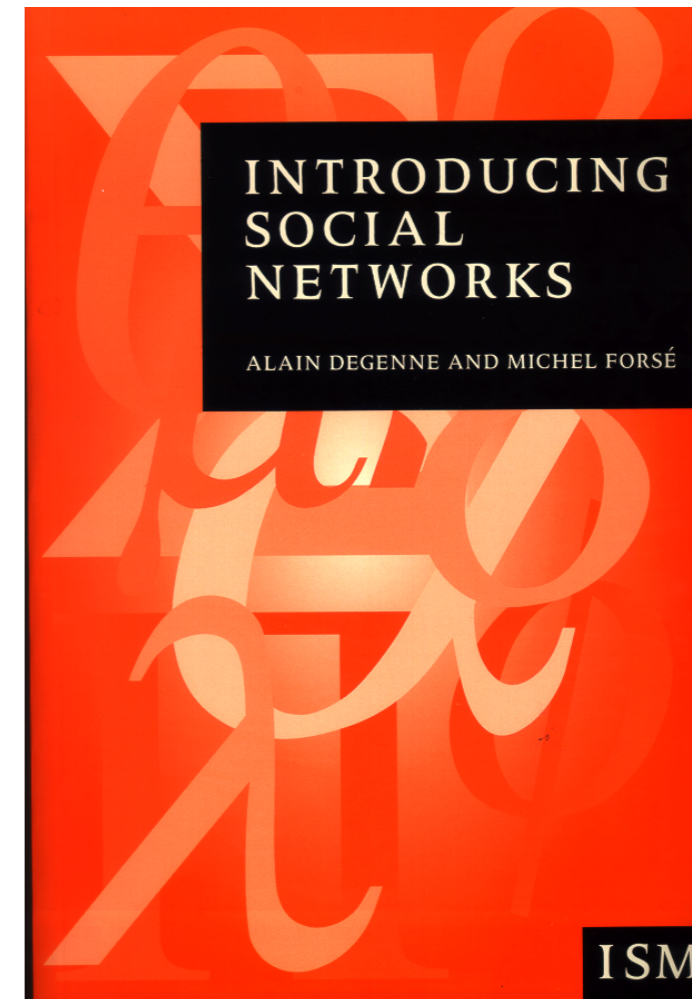
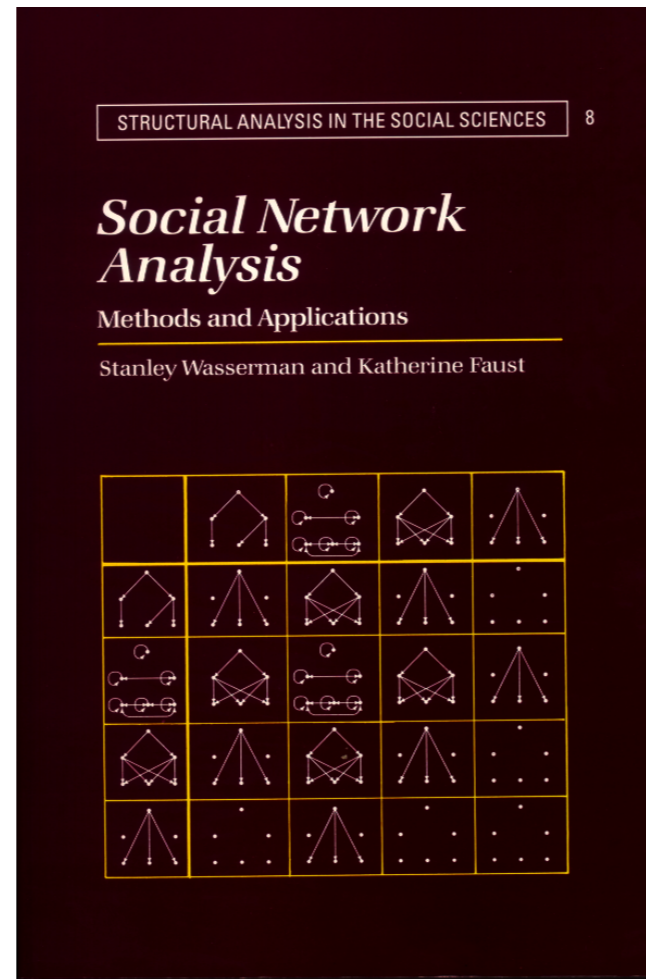
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# References - Handbooks

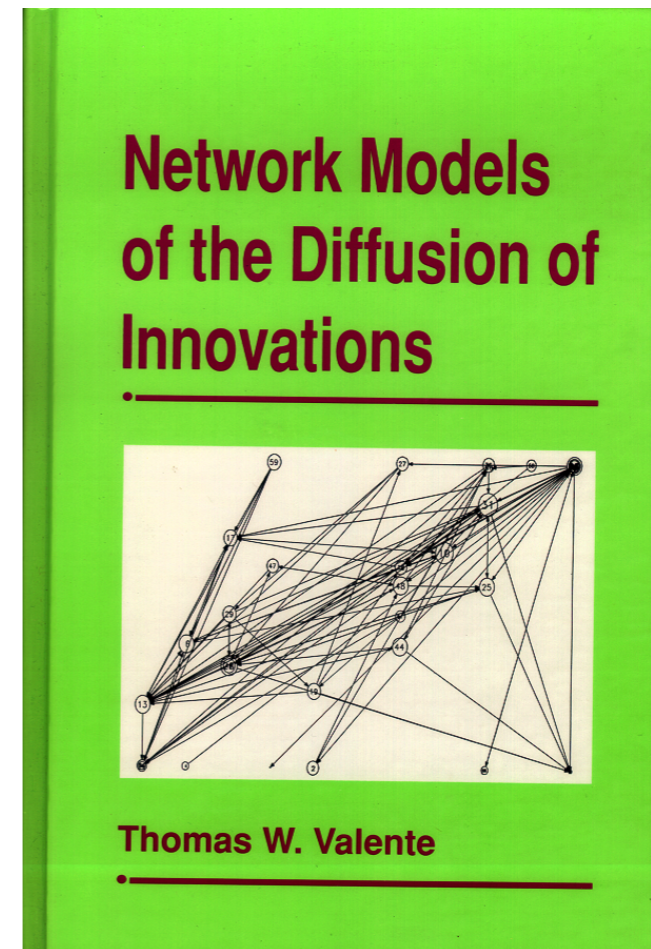
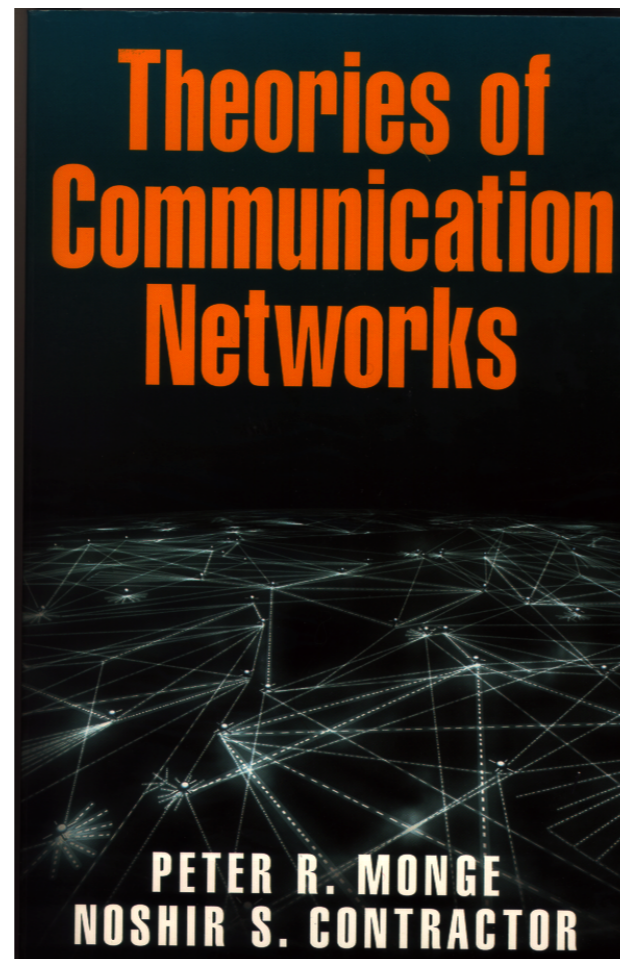
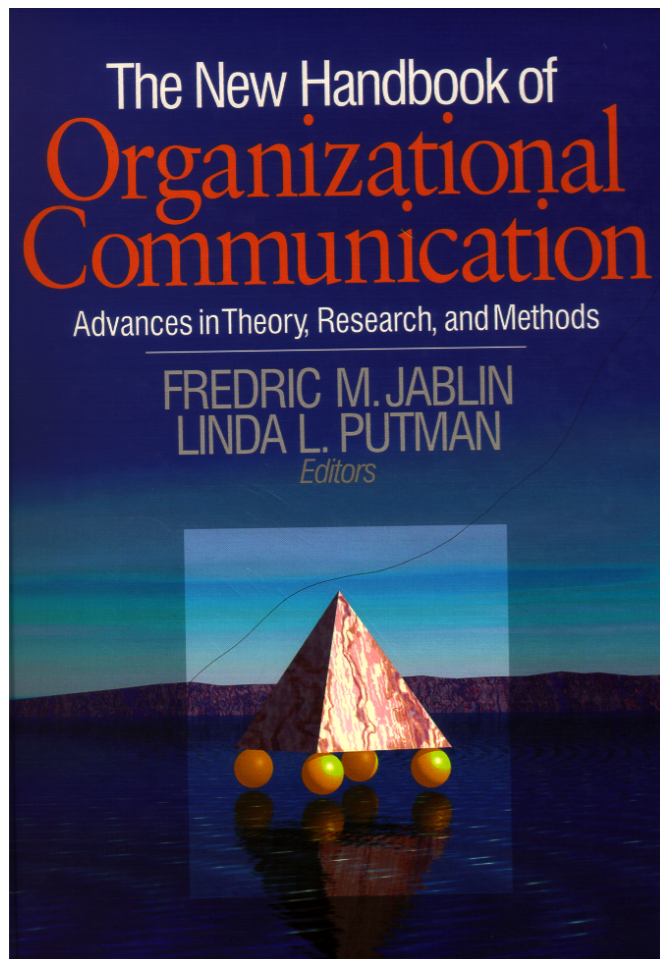
THE DEVELOPMENT OF SOCIAL  
NETWORK ANALYSIS  
A STUDY IN THE SOCIOLOGY OF SCIENCE

Linton C. Freeman

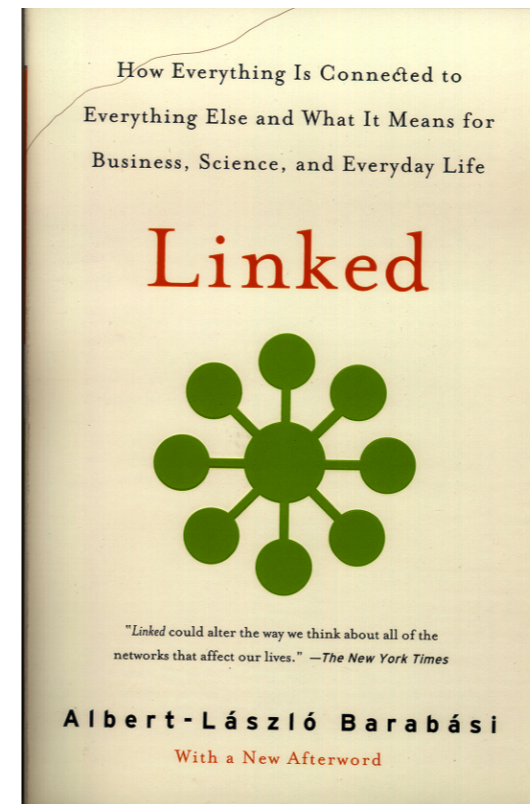
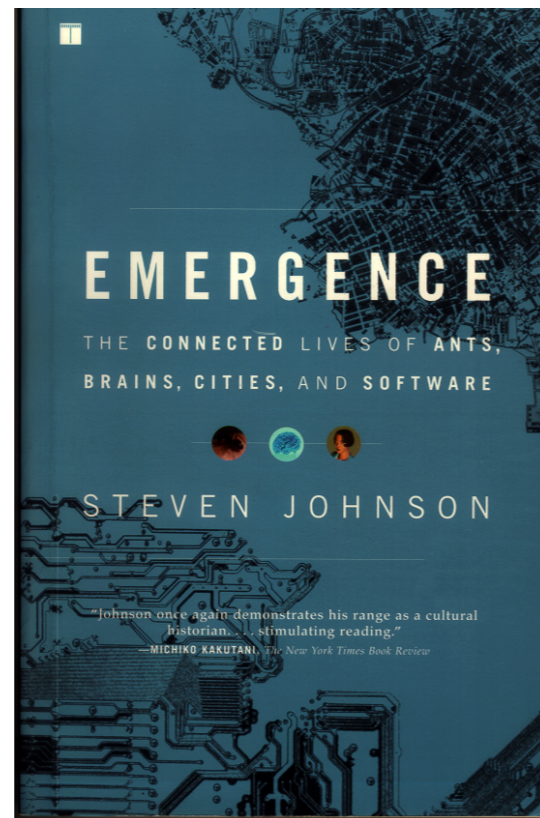
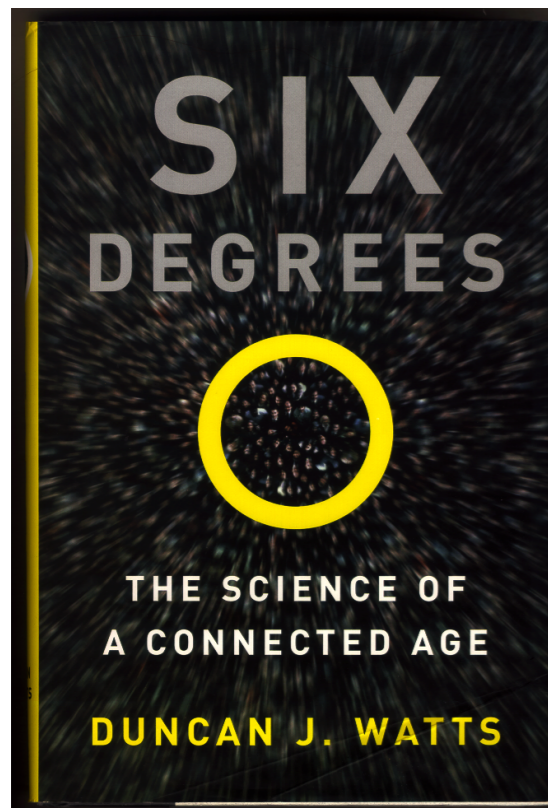
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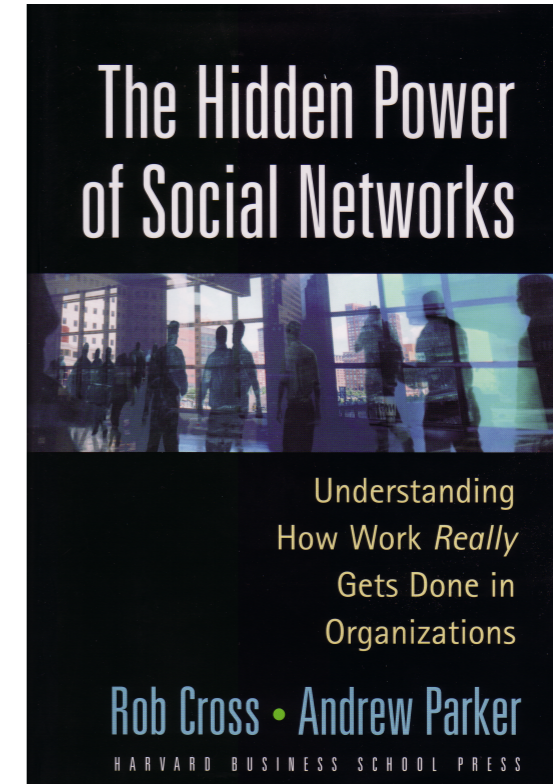
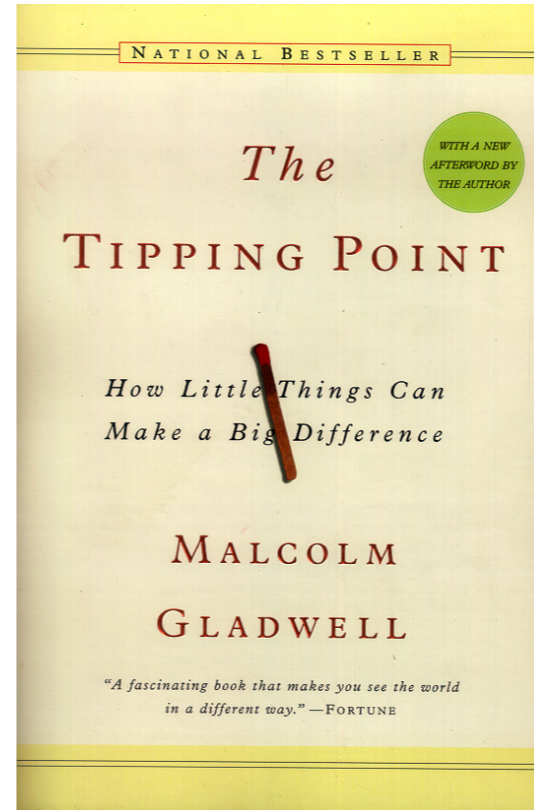
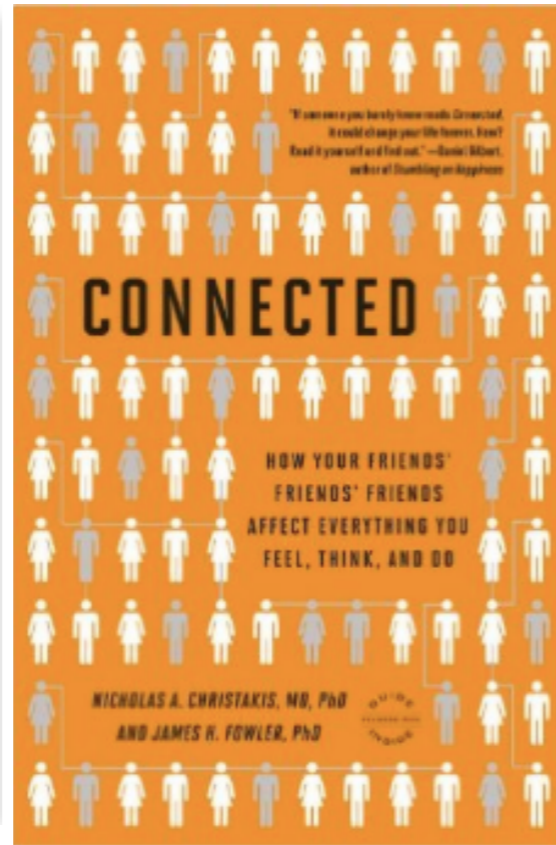
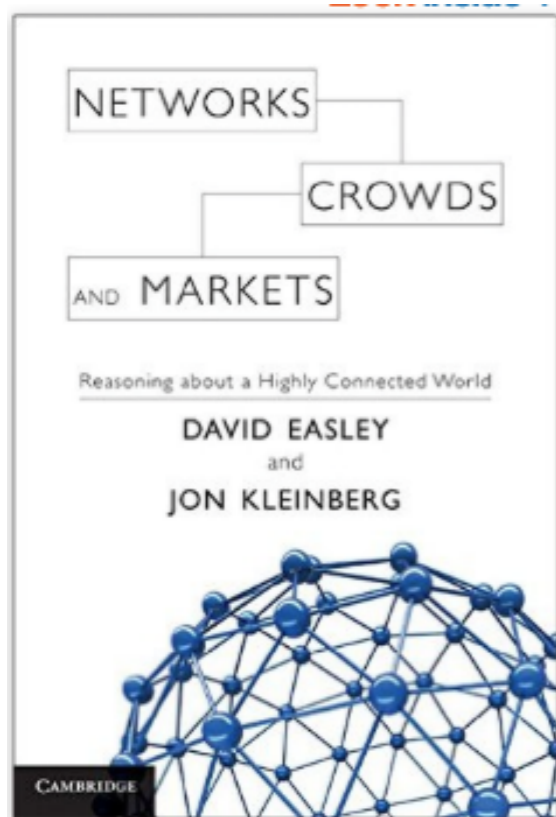
# References: Theory Review



# Popular Reading



# Popular Reading



# COINs Conferences, Websites, & Publicationss

This section contains the links to the COINs Conferences Publications and Websites for:

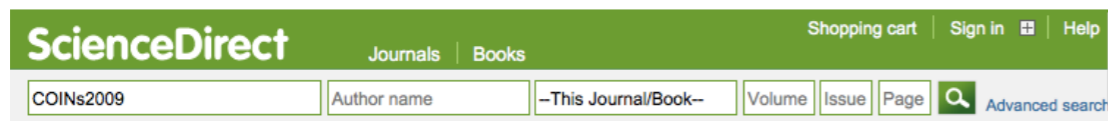
COINs2009, COINs2010, COINs2012, COINs2013, COINs2015, and Next COINs16 in Rome.



## COINs2009

Procedia - Social and Behavioral Sciences, Volume 2, Issue 4, 2010.

<http://www.sciencedirect.com/science/journal/18770428> Search All Fields for: COINs2009



Kenneth Riopelle, Peter Gloor, Christine Miller, Julia Gluesing, Introduction, Procedia - Social and Behavioral Sciences, Volume 2, Issue 4, 2010, Pages 6387-6388, ISSN 1877-0428,

<http://dx.doi.org/10.1016/j.sbspro.2010.04.047>.

(<http://www.sciencedirect.com/science/article/pii/S1877042810011055>)

Brooke M Davis, Creativity & Innovation in Business 2010 Teaching the Application of Design Thinking to Business, Procedia - Social and Behavioral Sciences, Volume 2, Issue 4, 2010, Pages 6532-6538, ISSN 1877-0428, <http://dx.doi.org/10.1016/j.sbspro.2010.04.062>.

(<http://www.sciencedirect.com/science/article/pii/S1877042810011201>)

Keywords: Creativity; Innovation; Business

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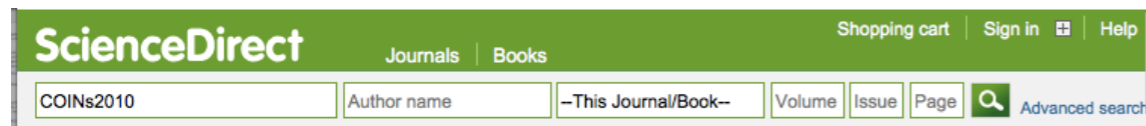
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Keywords: Wikipedia; collaboration; persistent history; content creation

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Keywords: Open Government; COINs; COINs for Government; Collective Intelligence Framework

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Keywords: Social Network Analysis; COINS; Clinical Teams; Team Network Structure

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Saad Aqeel Alzarooni, R Wade Campbell, Yushi Wang, Christine Z. Miller, Exploring the Strategic Value of Interdisciplinary Collaboration: COINs in the Creation of

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Keywords: Interdisciplinary Collaboration; Design  
Management; Business Models Canvas; Collaborative  
Innovation Networks

Cristobal Garcia Herrera, Alvaro Piña-Stranger, The ef-  
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Keywords: Email networks; COINs; organizational  
structure; interdisciplinary academia; administrative  
and epistemic authorities

## COINs2011

International Journal of Organisational Design and Engineering 2012 Vol. 2 No. 2

Special Issue on Collaborative Innovation Networks (COINs)

<http://www.inderscience.com/info/inarticletoc.php?jcode=ijode&year=2012&vol=2&issue=2>

Pages

Title and authors

132-148

Lessons learned and future directions: designing for multidisciplinary in collaborative innovation networks (COINs)

Christine Miller

DOI: 10.1504/IJODE.2012.047571

149-166

Supporting development efforts of clinical care teams

Francesca Grippa; Margaret Palazzolo; John C. Bucuvalas; Peter A. Gloor

DOI: 10.1504/IJODE.2012.047572

167-188

Collective intelligence-based resource allocation to optimise knowledge and innovation harnessing in corporate environments

Ioanna Lykourantzou; Dimitrios J. Vergados; Amedeo Napoli

DOI: 10.1504/IJODE.2012.047573

189-203

Entrepreneur online social networks - structure, diversity and impact on start-up survival

Yang Song; Tsvi Vinig

DOI: 10.1504/IJODE.2012.047574

204-224

Wikimaps: dynamic maps of knowledge

Reto Kleeb; Peter A. Gloor; Keiichi Nemoto; Michael  
Henninger

DOI: 10.1504/IJODE.2012.047575

## COINs2013

Available through <http://arxiv.org> operated by Cornell University Library

<http://arxiv.org/abs/1308.1028>

Title: Proceedings of the 4th International Conference on Collaborative Innovation Networks COINs13, Santiago de Chile, August 11-13, 2013

Authors: Garcia, Cristobal J.; Gloor, Peter A.; Gluesing, Julia; Lassenius, Casper; Miller, Christine; Paasivaara, Maria; Riopelle, Ken

Publication: eprint arXiv:1308.1028

Publication Date: 07/2013

Origin:ARXIV

Keywords: Computer Science - Social and Information Networks, Computer Science - Human-Computer Interaction

Comment: 17 papers

Bibliographic Code: 2013arXiv1308.1028G

Elysia Wells, Science Fiction as a Worldwide Phenomenon: A Study of International Creation, Consumption and Dissemination (2013)

PROCEEDINGS, COINs13 SCIENCE FICTION AS A WORLDWIDE PHENOMENON: A STUDY OF ... unpublished at the time when this was written. (Wells, 2013). Companion to Science Fiction almost exclusively ... to inexpensive magazines. 1 PROCEEDINGS, COINs13 The term science ficti ...

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Tomoki Furukawazono, Shota Seshimo, Daiki Muramatsu et al., Designing a Pattern Language For Surviving Earthquakes (2013)

abstract: ... have not been passed down sufficiently. This paper presented the four patterns of the Survival Language: "Daily Use of R ... language has been a tool for collaboration since it was presented by Christopher Alexander.

<http://arxiv.org/abs/1308.1175>

Jorge Fabrega, Javier Sajuria, The Emergence of Political Discourse on Digital Networks: The Case of the Occupy Movement (2013)

PROCEEDINGS, COINs13 THE EMERGENCE OF POLITICAL DISCOURSE ON DIGITAL ... Ibañez Diagonal Las Torres 2640 Peñalolen, Santiago, Chile ... to reach mainstream media outlets (Sajuria 2013; Theodorakis 2012). In that way, the actions ... and ...

<http://arxiv.org/abs/1308.1176>

Peter A. Gloor, Maria Paasivaara, COINs change leaders - Lessons Learned from a Distributed Course (2013)

PROCEEDINGS, COINs13 Maria Paasivaara Peter A. Gloor ... et al. 2012), and Jazz musicians (Gloor et al. 2013) using sociometric badges (Olguin 2007) that measure d ... teams. At the end of the course, each team presented their results to their ...

<http://arxiv.org/abs/1308.1158>

Cristobal Garcia, Paul Chauveau, Javier Ledezma et al., What can Social Media teach us about protests? Analyzing the Chilean 2011-12 Student Movement's Network evolution through Twitter data (2013)

... J. & Pinto, Ma. Pontificia Universidad Catolica de Chile's School of Business 4860 ... 2012: CONFECH leaders participate in NUS National Conference, at England. ... September 27, 2012: march called ... student and a leader of the student movement in Chile ...

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Personal Global Life (2013)

PROCEEDINGS, COINs13 GLOBAL LIFE PATTERNS:  
A PATTERN LANGUAGE TO DESIGN ... What can be  
claimed from these insights presented in this chapter is  
that (a) we are currently experiencing ... Form,??? Con-  
tentCreationWiki, accessed July 2013, 19,  
<http://c2.com/cgi/wiki?Alexandrian> ...

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Petteri Raety, Benjamin Behm, Kim-Karol Dikert et al.,  
Communication Practices in a Distributed Scrum Pro-  
ject (2013)

PROCEEDINGS, COINs 2013 3 1 0 2 g u A 9 ] E S . s c [  
... with the Canadian instructor. DISCUSSION Now  
that we have presented our results, it is time to answer  
our research questions ba ... In Software Engineering  
(ICSE), 2012 34th International Conference on, pages  
1235 ???1244, june ...

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methodology design good describi ... future from Japa-  
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Dirk Brunberg, Peter A. Gloor, Gianni Giacomelli, Predicting Client Satisfaction through (E-Mail) Network Analysis: The Communication Score Card (2013)

?? 1 PROCEEDINGS,COINs13 ?? ?? ?? ?? ?? ?? ?? PRE-DICTING ... organization??s performance. The network metrics presented in the following are explained by Wasserman & Faus ... advantage. In Proceedings of the Academy of Management Conference, Ph ...

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Stori Hybbeneth, Dirk Brunnberg, Peter A. Gloor, Increasing Knowledge Worker Efficiency through a "Virtual Mirror" of the Social Network (2013)

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PROCEEDINGS, COINs13 Rahman O. Oloritun Masdar Institute P. O Box ... performed at the nodal level and network level are presented in this section. Nodal Level Analysis Results Weekly in ... of an SEIR infectious disease model on the dynamic contact network of c ...

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Eduardo Marisca, The Networks Are Out There: Building Cultural and Economic Resilience Through Informal Communities of Practice (2013)

... MA, 02139, USA e-mail: [emarisca@mit.edu](mailto:emarisca@mit.edu) PROCEEDINGS, COINs13 ... work for an anime movie he was following (Condry 2013, 144). It can hardly be said that had he not taken part o ... CONCLUSIONS In the early 1990s, Michael Porter presented a reading of inno ...

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Yoshiaki Matsuzawa, Sayaka Tohyama, Sanshiro Sakai, The Course Design To Develop Meta-Cognitive Skills for Collaborative Learning Through Tool-Assisted Discourse Analysis (2013)

abstract: This paper presents the course design titled "Learning Management" of which the goal is to "learn collaborative learning" for a first-year undergraduate student. The objective of the class design is to help transform the student's belief of learning from a passive, individual model to an active, ...

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Gaetano R. Lotrecchiano, Role and Discipline Relationships in a Transdisciplinary Biomedical Team: Structuration, Values Override and Context Scaffolding (2013)

... praxis, and interpenetration of epistemologies presented earlier that have the power to reorient the meaning ... team. Clinical and Translational Science in press (2013). Klein, J. T. Evaluation of interdisciplinary resear

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## COINs2015

Available through <http://arxiv.org> operated by Cornell University Library.

See:

<http://arxiv.org/find/all/1/all:+Coins15/o/1/o/all/o/1>

17 Papers.

### 1. arXiv:1503.03289 [pdf]

An Exploration of Rotating Leadership in a Knowledge Building Community

Leanne Ma, Yoshiaki Matsuzawa, Derya Kici, Marlene Scardamalia

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INs15, Tokyo, Japan March 12-14, 2015 (arXiv:1502.01142)

Subjects: Social and Information Networks (cs.SI)

### 2. arXiv:1503.03137 [pdf]

Comparing Network Structures of Commercial and Non-commercial Biohacking Online-communities

Sipra Bihani, Michael Hartman, Florian Sobiegalla, Amanda Rosenberg

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INs15, Tokyo, Japan March 12-14, 2015 (arXiv:1502.01142)

Subjects: Social and Information Networks (cs.SI)

### 3. arXiv:1503.01427 [pdf]

The business model bank: conceptualizing a database structure for large-sample study of an emerging management concept

Fredrik Hacklin, Nobuaki Minato, Toma Kobayashi

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INs15, Tokyo, Japan March 12-14, 2015 (arXiv:1502.01142)

Subjects: Computers and Society (cs.CY)

4. arXiv:1503.01067 [pdf]

Exploring Cultures through Pattern Mining - Practices from Generative Beauty Workshops

Jei-Hee Hong, Yuma Akado, Sakurako Kogure, Alice Sasabe, Keishi Saruwatari, Takashi Iba

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INS15, Tokyo, Japan March 12-14, 2015 (arXiv:1502.01142)

Subjects: Computers and Society (cs.CY)

5. arXiv:1503.01066 [pdf]

Collective achievement of making in cosplay culture

Rie Matsuura, Daisuke Okabe

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INS15, Tokyo, Japan March 12-14, 2015 (arXiv:1502.01142)

Subjects: Computers and Society (cs.CY)

6. arXiv:1503.01065 [pdf]

Collaboration Tools and Patterns for Creative Thinking

Christian Kohls

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INS15, Tokyo, Japan March 12-14, 2015 (arXiv:1502.01142)

Subjects: Computers and Society (cs.CY)

7. arXiv:1503.00477 [pdf]

Behavioral Aspects of Social Network Analysis

Sung Joo Park, Jong Woo Kim, Hong Joo Lee, Hyun Jung Park, Peter Gloor

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INS15, Tokyo, Japan March 12-14, 2015 (arXiv:1502.01142)

Subjects: Social and Information Networks (cs.SI); Computers and Society (cs.CY)

8. arXiv:1503.00288 [pdf]

Success factors for Crowdfunding founders and funders

Yang Song, Robert van Boeschoten

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INS15, Tokyo, Japan March 12-14, 2015 (arXiv:1502.01142)

Subjects: Computers and Society (cs.CY); Human-Computer Interaction (cs.HC); Social and Information Networks (cs.SI)

9. arXiv:1503.00197 [pdf]

Emerging Methods and Tools for Sparking New Global Creative Networks

Jeff Horon

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INS15, Tokyo, Japan March 12-14, 2015 (arXiv:1502.01142)

Subjects: Computers and Society (cs.CY); Human-Computer Interaction (cs.HC)

10. arXiv:1503.00174 [pdf]

CSCW Principles to Support Citizen Science

Julia Katherine Haines

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INS15, Tokyo, Japan March 12-14, 2015 (arXiv:1502.01142)

Subjects: Computers and Society (cs.CY); Human-Computer Interaction (cs.HC)

11. arXiv:1502.05264 [pdf]

Measuring Creativity of Wikipedia Editors

Pentti Launonen, KC Kern, Sanna Tiilikainen

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INS15, Tokyo, Japan March 12-14, 2015 (arXiv:1502.01142)

Subjects: Social and Information Networks (cs.SI); Physics and Society (physics.soc-ph)

12. arXiv:1502.05263 [pdf]

Comparing Online Community Structure of Patients of Chronic Diseases

Hanuma Teja Maddali, Peter A. Gloor, Peter Margolis

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INS15, Tokyo, Japan March 12-14, 2015  
(arXiv:1502.01142)

Subjects: Social and Information Networks (cs.SI); Physics and Society (physics.soc-ph)

13. arXiv:1502.05260 [pdf]

Lessons from the Coinseminar

Peter Gloor, Maria Paasivaara, Christine Miller

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INS15, Tokyo, Japan March 12-14, 2015  
(arXiv:1502.01142)

Subjects: Social and Information Networks (cs.SI); Computers and Society (cs.CY)

14. arXiv:1502.05256 [pdf]

Cultural Anthropology Through the Lens of Wikipedia - A Comparison of Historical Leadership Networks in the English, Chinese, Japanese and German Wikipedia

Peter Gloor, Patrick De Boer, Wei Lo, Stefan Wagner, Keiichi Nemoto, Hauke Fuehres

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INS15, Tokyo, Japan March 12-14, 2015  
(arXiv:1502.01142)

Subjects: Social and Information Networks (cs.SI)

15. arXiv:1502.04997 [pdf]

Measuring Organizational Consciousness Through E-Mail Based Social Network Analysis

Peter A. Gloor, Andrea Fronzetti Colladon

Comments: Proceedings of the 5th International Conference on Collaborative Innovation Networks CO-INS15, Tokyo, Japan March 12-14, 2015  
(arXiv:1502.01142)

Subjects: Social and Information Networks (cs.SI);  
Computers and Society (cs.CY); Physics and Society  
(physics.soc-ph)

16. arXiv:1502.04312 [pdf]

WIKI THANKS: Cultural Differences in Thanks Net-  
work of Different-Language Wikipedias

Keiichi Nemoto, Ken-ichi Okada

Comments: Proceedings of the 5th International Con-  
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INs15, Tokyo, Japan March 12-14, 2015  
(arXiv:1502.01142)

Subjects: Social and Information Networks (cs.SI)

17. arXiv:1502.01142 [html]

Proceedings of the 5th International Conference on Col-  
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Keiichi Nemoto, Peter A. Gloor, Cristobal J. Garcia,  
Julia Gluesing, Takashi Iba, Casper Lassenius, Chris-  
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Subjects: Social and Information Networks (cs.SI)

Note: Selected papers will be published in a forthcom-  
ing special issue of International Journal of Organisa-  
tional Design and Engineering.



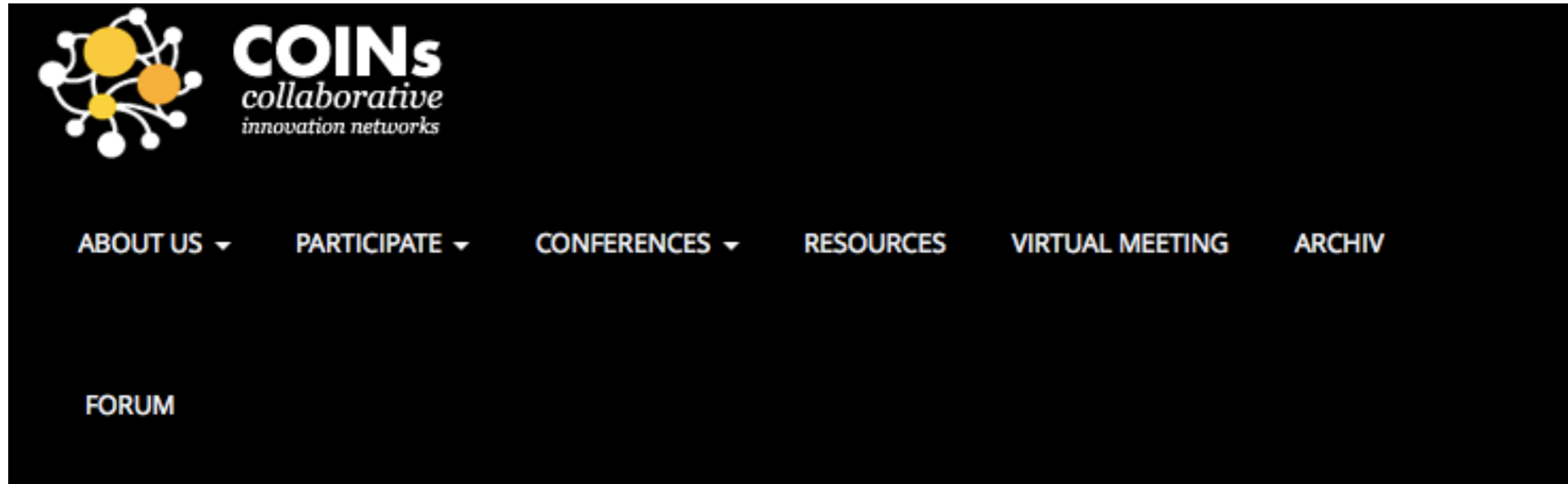
# COINs Conference Websites

## COINs CONFERENCES WEBSITES

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This Section contains the links to the COINs Conference Websites





# COINs2010

<http://www.coinsconference.org/coins10-savannah-usa/>



**COINs**  
collaborative  
innovation networks

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FORUM



**COINs** 2010  
collaborative innovation networks

ARNOLD HALL, 1810 Bull St.,  
Savannah, GA, USA  
October 7-9 | [www.coins2010.com](http://www.coins2010.com)



## COINs11, Basel, Switzerland

The third international conference on Collaborative Innovation Networks (COINs) brings together practitioners, researchers and students of the emerging science and design of collaboration.

'Thinking the Swarm' asks what is relevant with regard to the innovative powers of creative swarms, what are the observable qualities of virtual collaboration, and how does the quest for global cooperation affect local networks?

Where science and art meet, COINs11 looks at the emerging forces behind the phenomena of open-source, creative and entrepreneurial movements. Through interactive workshops and fascinating keynotes, COINs11 combines a wide range of interdisciplinary fields such as social network analysis, group dynamics, design and visualization, information systems and the psychology and sociality of collaboration.

## COINs2015

<http://www.coinsconference.org/coins15-tokyo-japan/>



## COINs15, Tokyo, Japan

### Collaborative Innovation Networks Conference (COINs)

**When:** March 12-14, 2015

**Where:** Keio University, Japan

**Papers:** Paper submission deadline Nov 30, 2014

**Workshops:** Proposal submission deadline Nov 30, 2014

**Artifacts:** Proposal submission deadline Nov 30, 2014

**Web:** <http://www.coinsconference.org>

**Facebook:** <https://www.facebook.com/coinsconference>

COINs2016 will be held in Rome, Italy

When: Jun 8-10, 2016

Where: Tor Vergata University of Rome, Rome, Italy <http://web.uniroma2.it>

Papers: Paper submission deadline February 29, 2016

Workshops: Proposal submission deadline February 29, 2016

Artifacts: Proposal submission deadline February 29, 2016

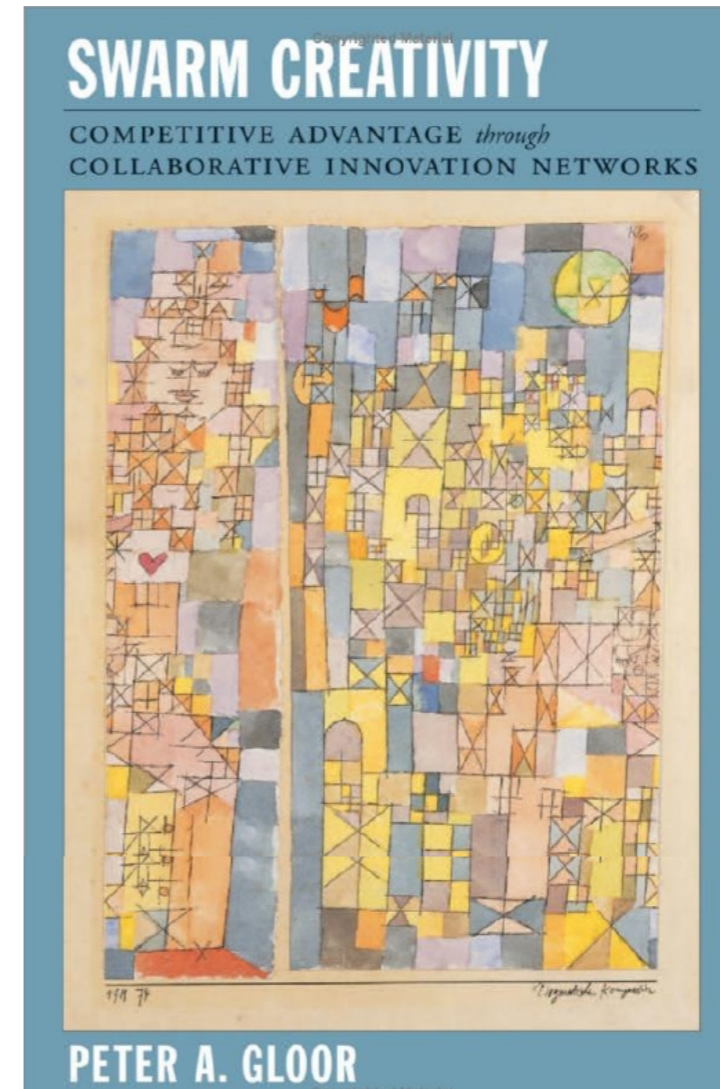
Web: <http://rome16.coinsconference.org>

Conference Chair: Agostino La Bella (Tor Vergata University)

Local Chair: Andrea Fronzetti Colladon (Tor Vergata University)

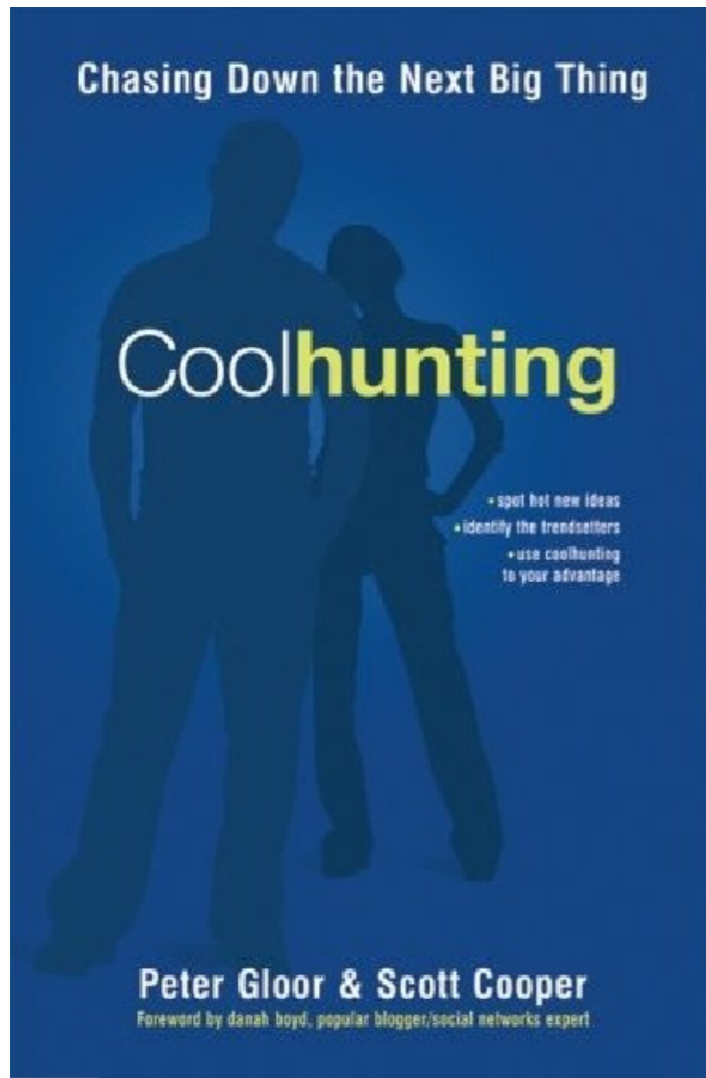
# Books

The following are recommended books.



***Swarm Creativity***

[http://www.amazon.com/Swarm-Creativity-Competitive-Collaborative-Innovation/dp/0195304128/ref=sr\\_1\\_1?s=books&ie=UTF8&qid=1347046646&sr=1-1&keywords=swarm+creativity](http://www.amazon.com/Swarm-Creativity-Competitive-Collaborative-Innovation/dp/0195304128/ref=sr_1_1?s=books&ie=UTF8&qid=1347046646&sr=1-1&keywords=swarm+creativity)



### ***Coolhunting***

[http://www.amazon.com/Coolhunting-Chasing-Down-Next-Thing/dp/0814473865/ref=pd\\_sim\\_b\\_1](http://www.amazon.com/Coolhunting-Chasing-Down-Next-Thing/dp/0814473865/ref=pd_sim_b_1)



### **Coolfarming**

[http://www.amazon.com/Coolfarming-Turn-Your-Great-Thing/dp/B005DI9X98/ref=pd\\_sim\\_b\\_2](http://www.amazon.com/Coolfarming-Turn-Your-Great-Thing/dp/B005DI9X98/ref=pd_sim_b_2)



# Condor Converter

Condor Converter is java program that converts older Condor 2.6.6 databases and datasets to the newer Condor 3 universal database and dataset format.

The program consists of two files:

1. A `CondorConverter.jar`, and
2. `condorconverter.properties` file.

Both files need to be in the same folder.

Create a new folder, such as, CondorConverter and download the following two files into it:

a. Download the CondorConverter.jar at:

<https://www.dropbox.com/s/kqlrrdibpzre9hq/CondorConverter.jar>

b. Download the Condor.properties file at:

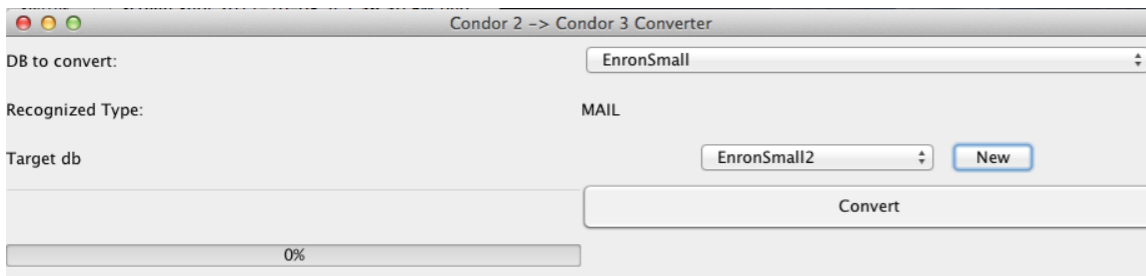
<https://www.dropbox.com/s/md3wefrfsg6h7n3/converter.properties>

Here is an example Condor 2.6.6 dataset conversion.

1. Start MySQL

2. Double click the CondorConverter.jar or start from the Terminal app.

### The CondorConverter Form Opens

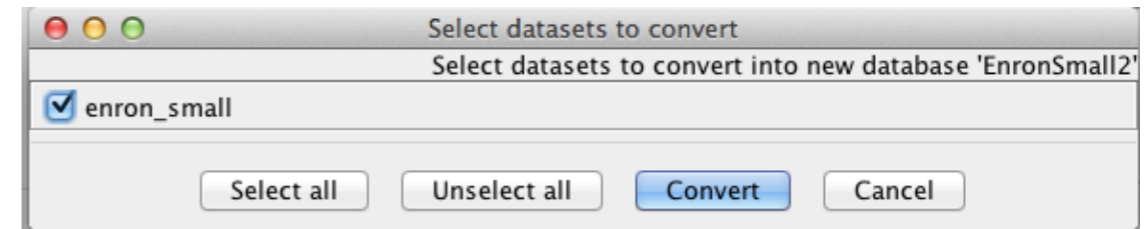


2. Click on the DB to convert dropdown button and select your Condor 2.6.6. database to convert. In this example, I have selected the EnronSmall database.

3. Note: the Recognized Type is indicated. Such as, MAIL, in this example.

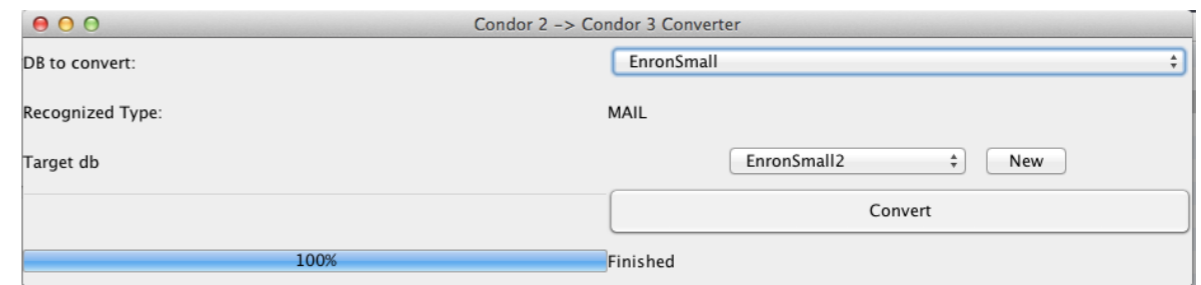
4. Click New to create a new Condor 3 database, such as, EnronSmall2.

5. Select the dataset(s) you wish to convert



6. Click Convert

7. A “100% Finish” message displays when completed.



8. Start Condor 3

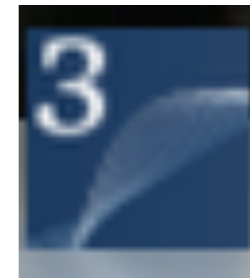
9. Click File > Switch database and choose your new database

10. Click File > Open dataset and your converted dataset(s) will open.

# Frequently Asked Questions (FAQ)

The purpose of this chapter is to answer frequently asked Condor 3 questions.

## Condor 3



## Frequently asked Questions (FAQ)

### 1. How much time does it take to get started with Condor 3?

Answer: Getting started with Condor 3 requires roughly the following time commitments:

First, installing the Software and Keys (Chapters 3 & 4 for Mac users, or Chapters 5 & 6 for PC users):

- a. 1-3 hours to install the prerequisite software of Java, MySQL, MySQL Workbench, and Condor 3 itself.
- b. Add another hour for Getting the Google CSE Key and the four Twitter Keys (Chapter 3 Sections 4 & 5).

Second, if needed, reviewing Social Network Basics takes about 30 minutes (Chapter 15).

Third reviewing the Condor 3 Menus and GUIs takes another 1-2 hours (Chapters 7 & 8).

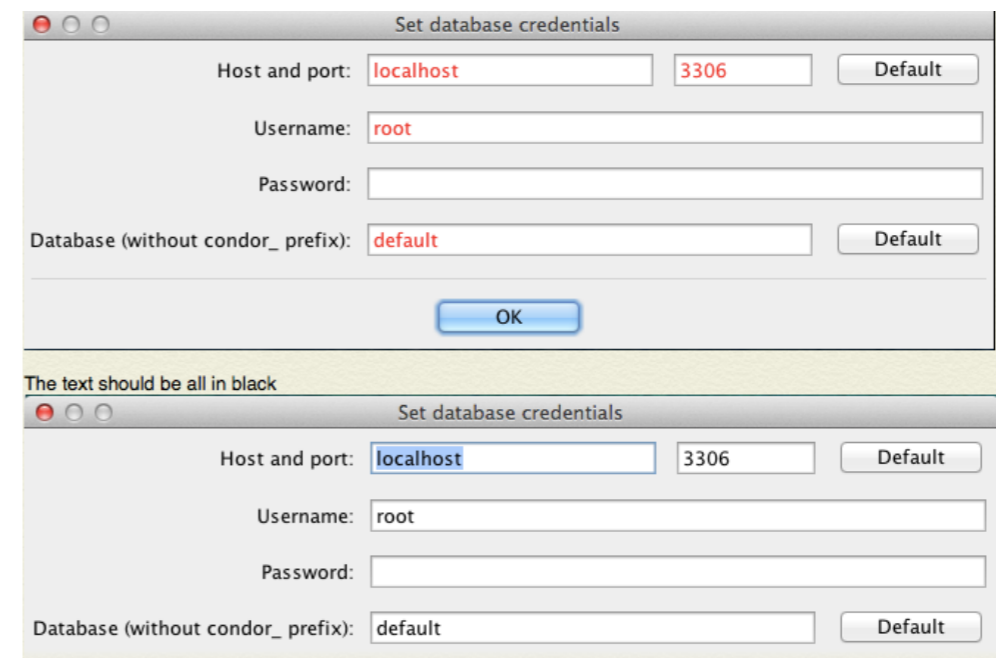
Fourth trying out a few examples takes another 2-3 hours (Chapter 9).

In sum, getting started from scratch takes about 5-10 hours depending upon your computer skills, internet speed and background in social networks.

You do not need to repeat any of the one-time software installation steps.

### 2. What is a typical error that users encounter when starting out working with Condor 3?

A typical error is not starting MySQL server first before starting Condor 3. If so, you get this error message. The text in Set Database credentials turns all red



To fix the error, simply start MySQL.

### 3. How do you print a map or visualization?

There is no print function in Condor 3. You can take a screenshot or export the network as .CSV files (Node and Link) and use another network program to print your map.

#### **4. Can you run Condor 3 from an iPad, Android or Amazon Fire tablet?**

First, there is no native Condor 3 iPad or Android app, BUT you can use a third party app, like Parallel's Access to connect to your computer and run Condor remotely.

#### **5. Can Condor 3 run on Amazon Workspaces?**

Yes, Condor 3 does run on a Amazon Workspaces and can be remotely controlled from a Mac, PC, iPad, Android or Amazon Fire tablet using AWS's custom clients.

see:

<http://aws.amazon.com/workspaces/>

<https://clients.amazonworkspaces.com>

Just setup an AWS Workspaces and following the Condor 3 install instructions for a PC.

#### **5. Is there a Server version of Condor 3?**

Yes, Condor 3 is available in both a desktop version and a server version called CondorCore, which is expected to be released in 2015.