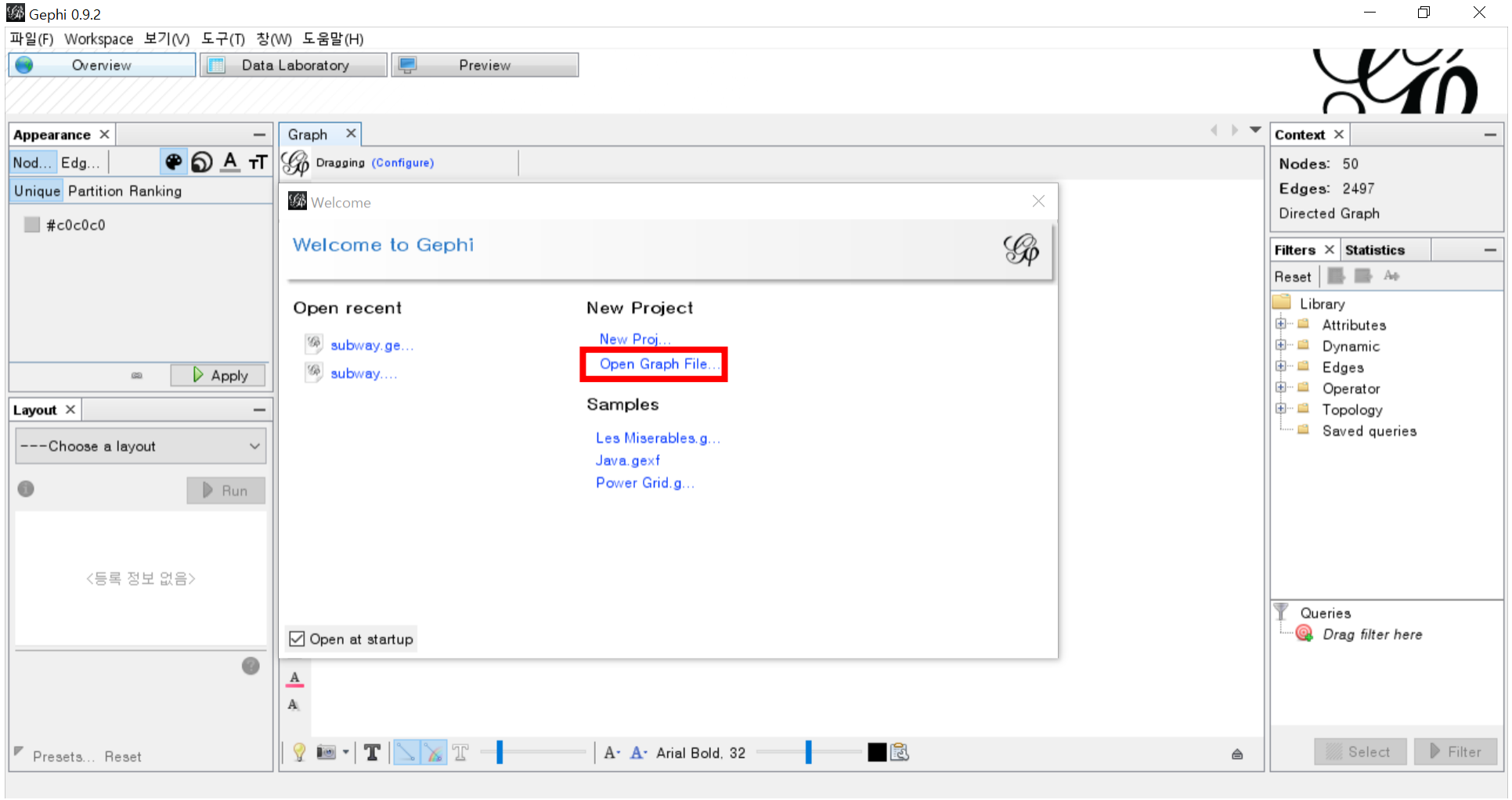
Gephi
배워보기

디자인팀 김수정

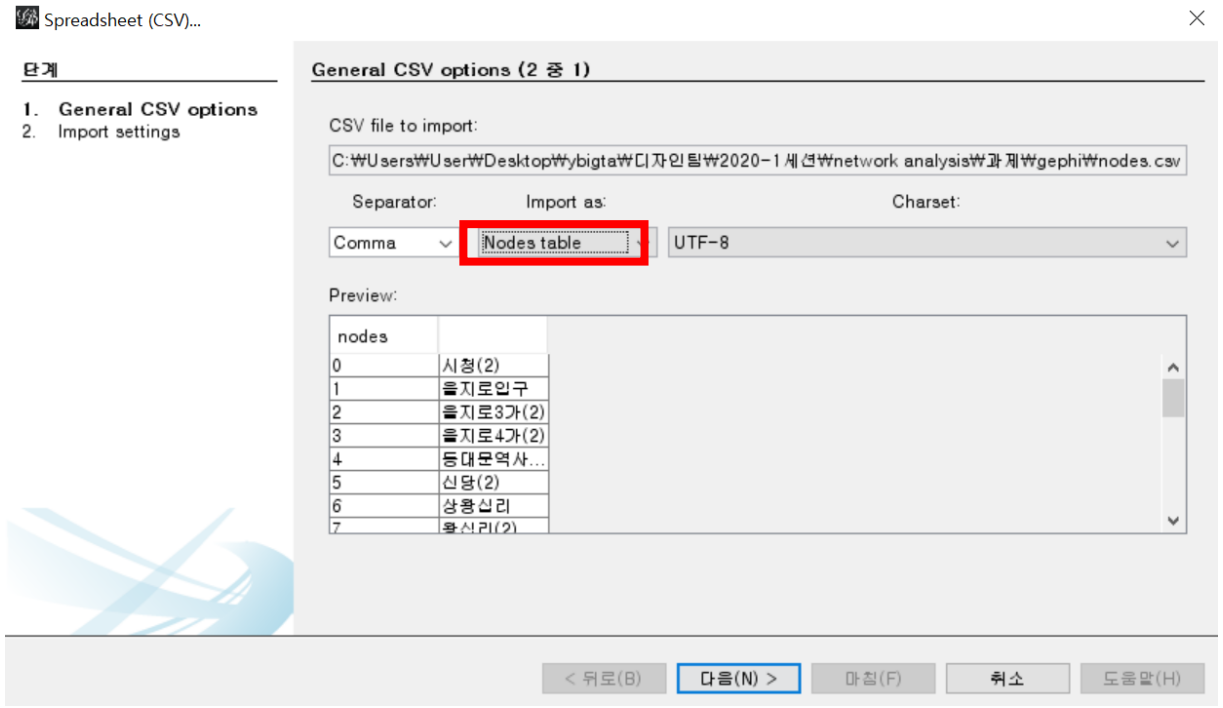
1. 설치 링크

https://gephi.org/

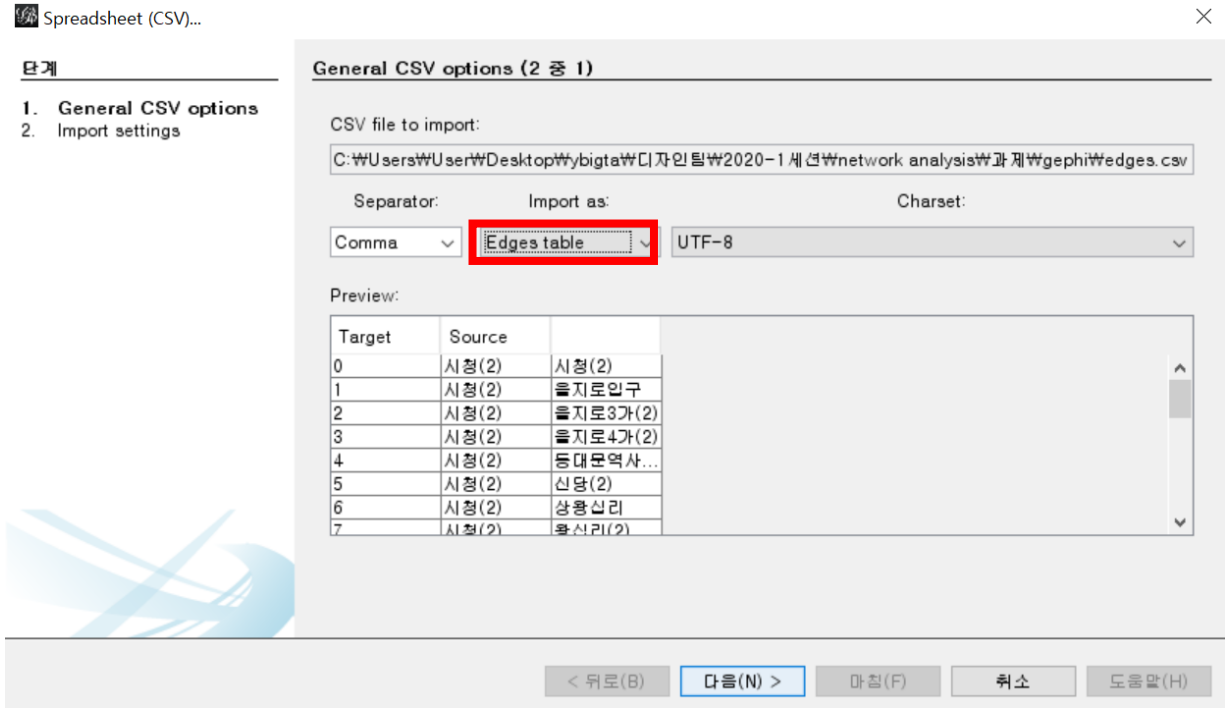
1. 파일 불러오기


Gephi 0.9.2
파일(F) Workspace 보기(V) 도구(T) 창(W) 도움말(H)
Overview
Data Laboratory
Preview
Appearance
Nod... Edg...
Unique Partition Ranking
#c0c0c0
Apply
Layout
---Choose a layout
Run
<등록 정보 없음>
Presets... Reset
Graph
Dragging (Configure)
Welcome
Welcome to Gephi
Open recent
subway.ge...
subway....
New Project
New Proj...
Open Graph File...
Samples
Les Miserables.g...
Java.gexf
Power Grid.g...
Open at startup
Arial Bold, 32
Context
Nodes: 50
Edges: 2497
Directed Graph
Filters
Statistics
Reset
Library
Attributes
Dynamic
Edges
Operator
Topology
Saved queries
Queries
Drag filter here
Select
Filter

1. 파일 불러오기

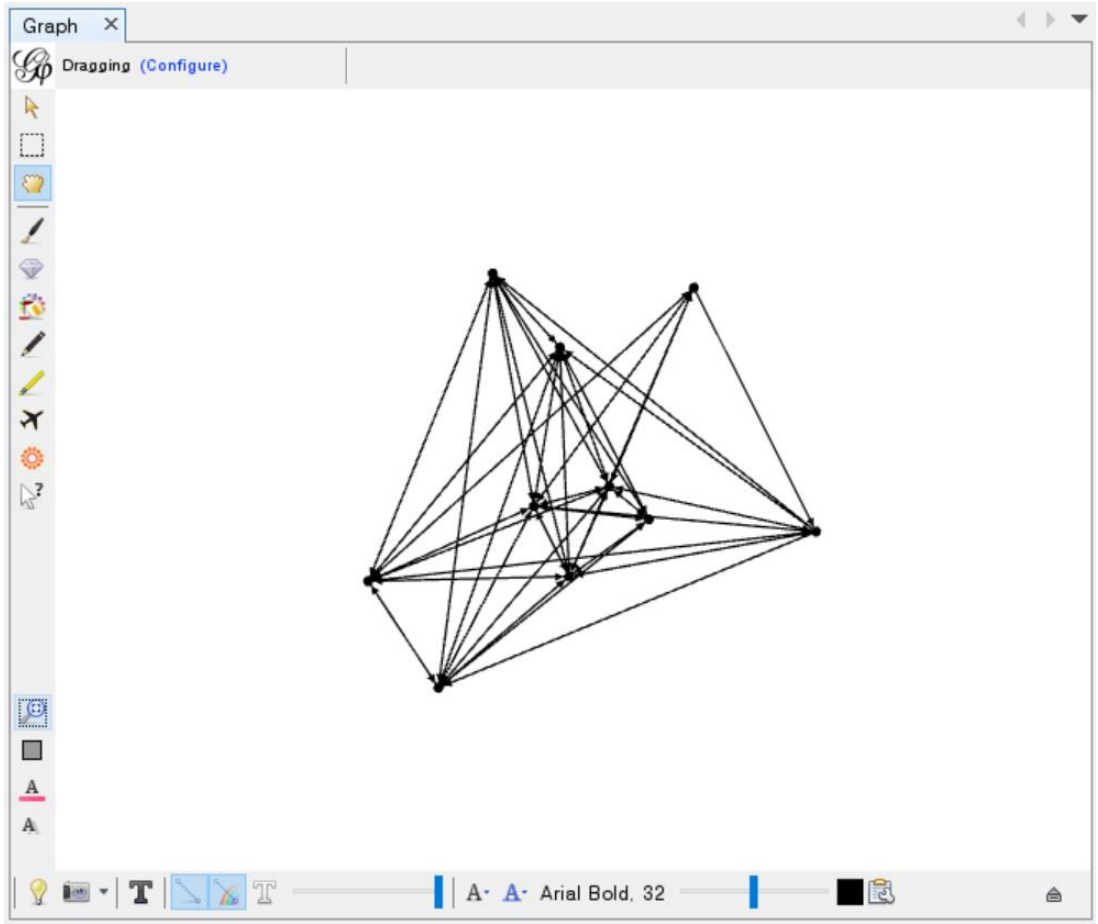


nodes.csv -> Nodes table



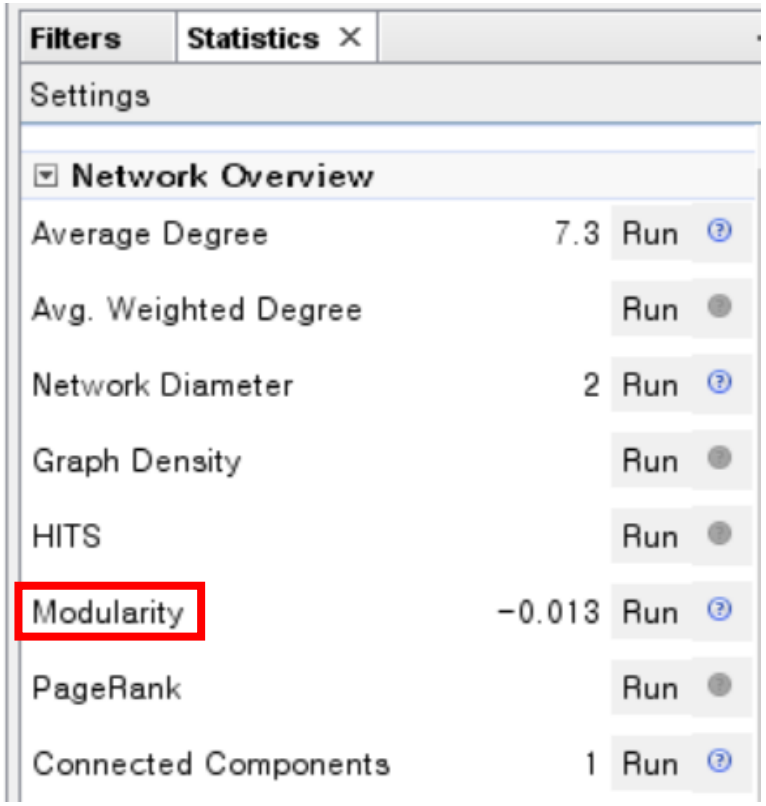
edges.csv -> Edges table

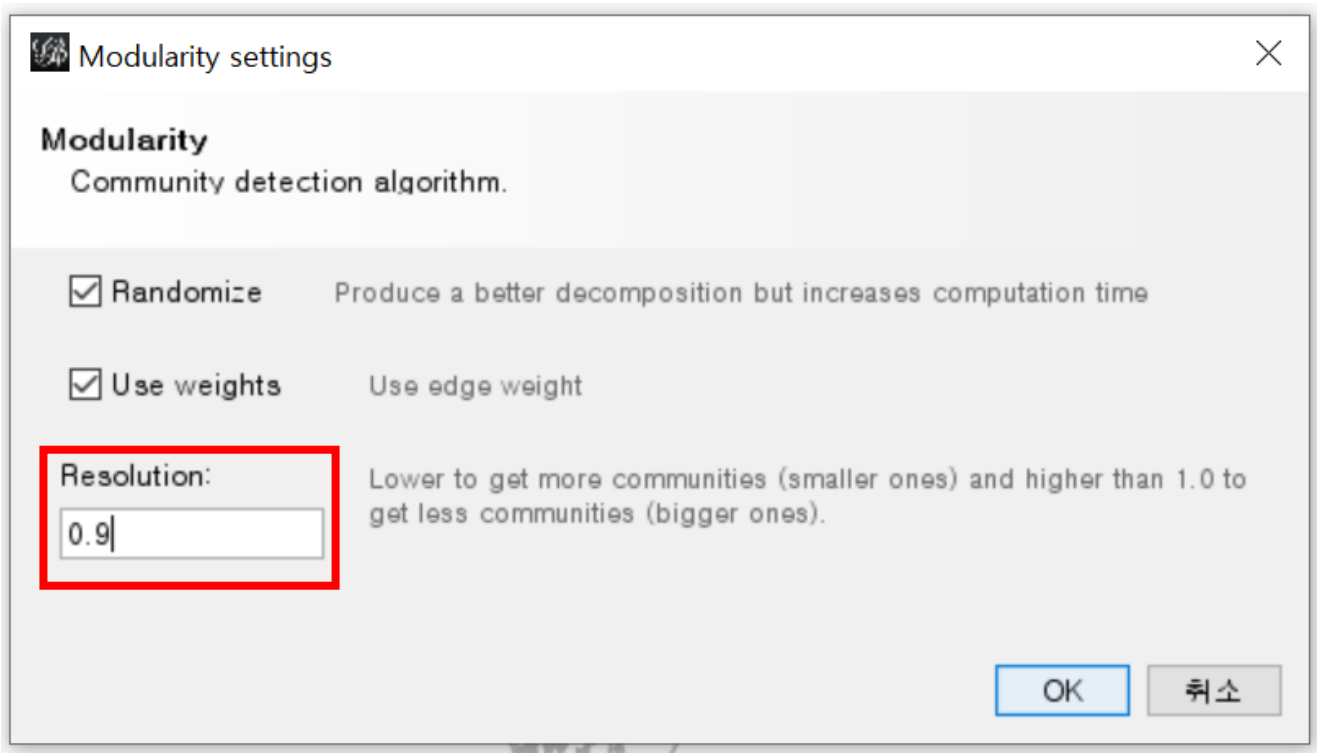
1. 파일 불러오기



짠 ! 기본 형태 완성 ☺

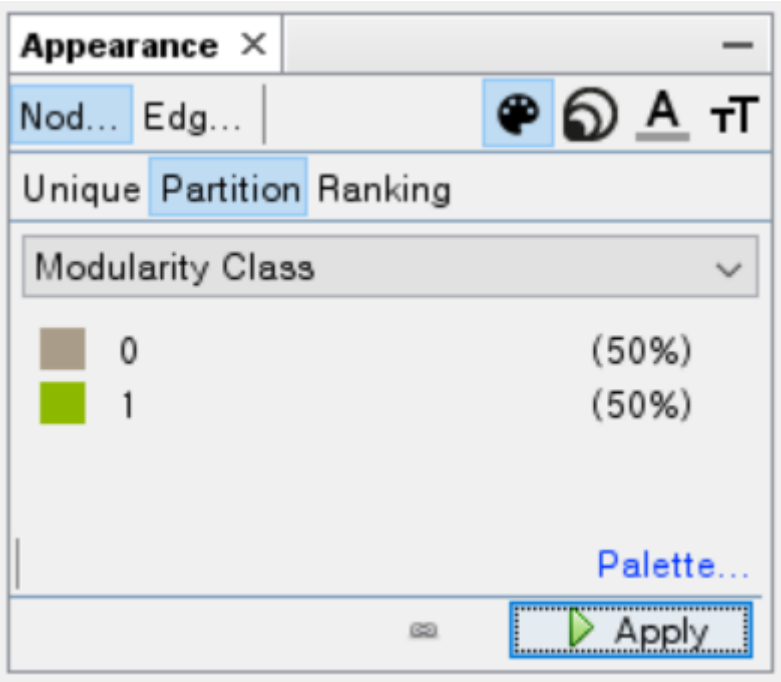
2. Community Detection





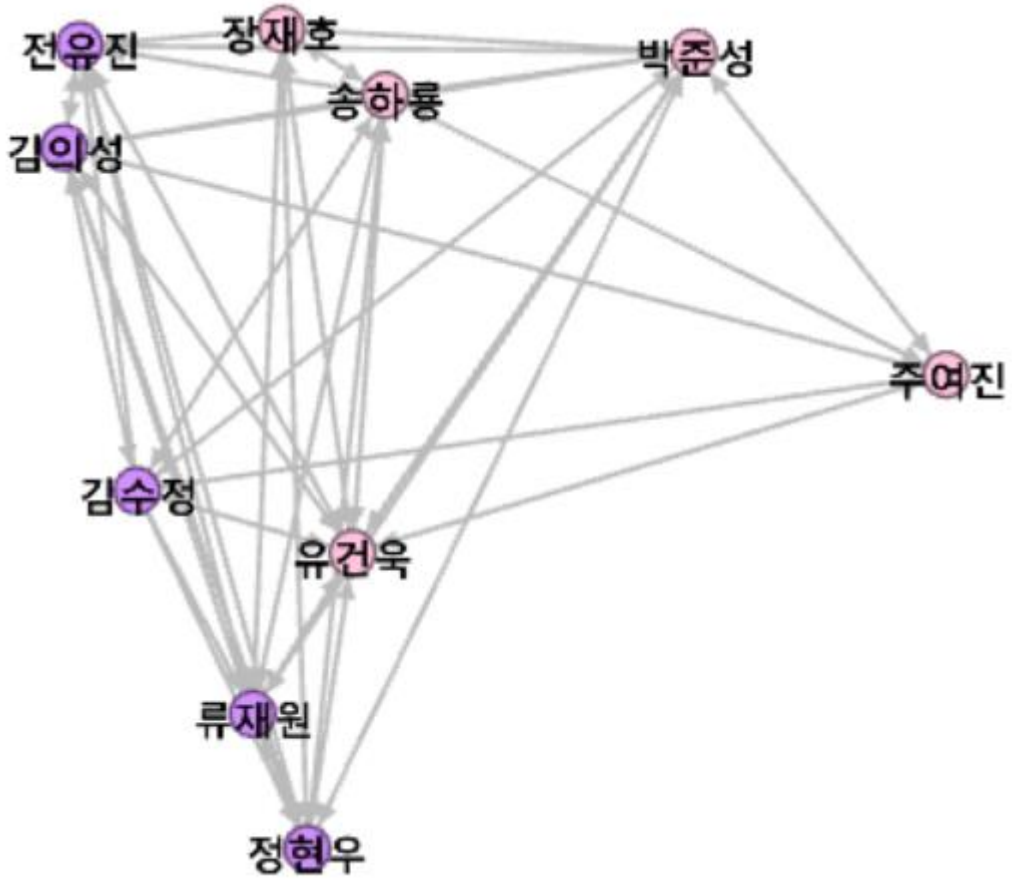
Statistic tap에서 Modularity를 Run해줍니다!

2. Community Detection

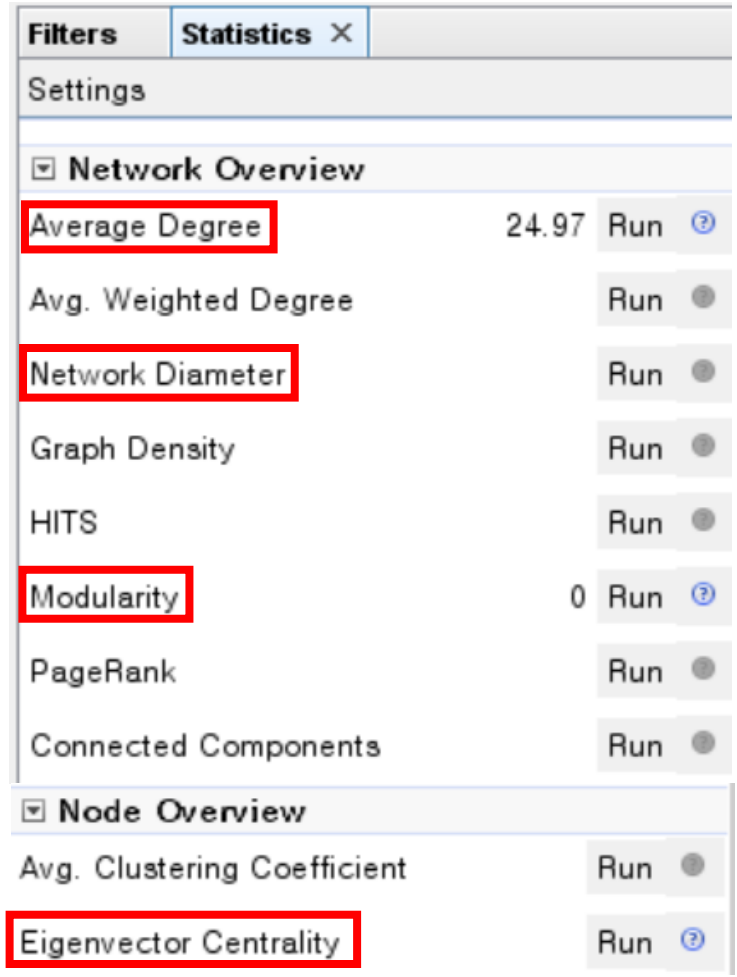


Node의 색을
Modularity Class를 기준으로
설정해줍니다

2. Community Detection



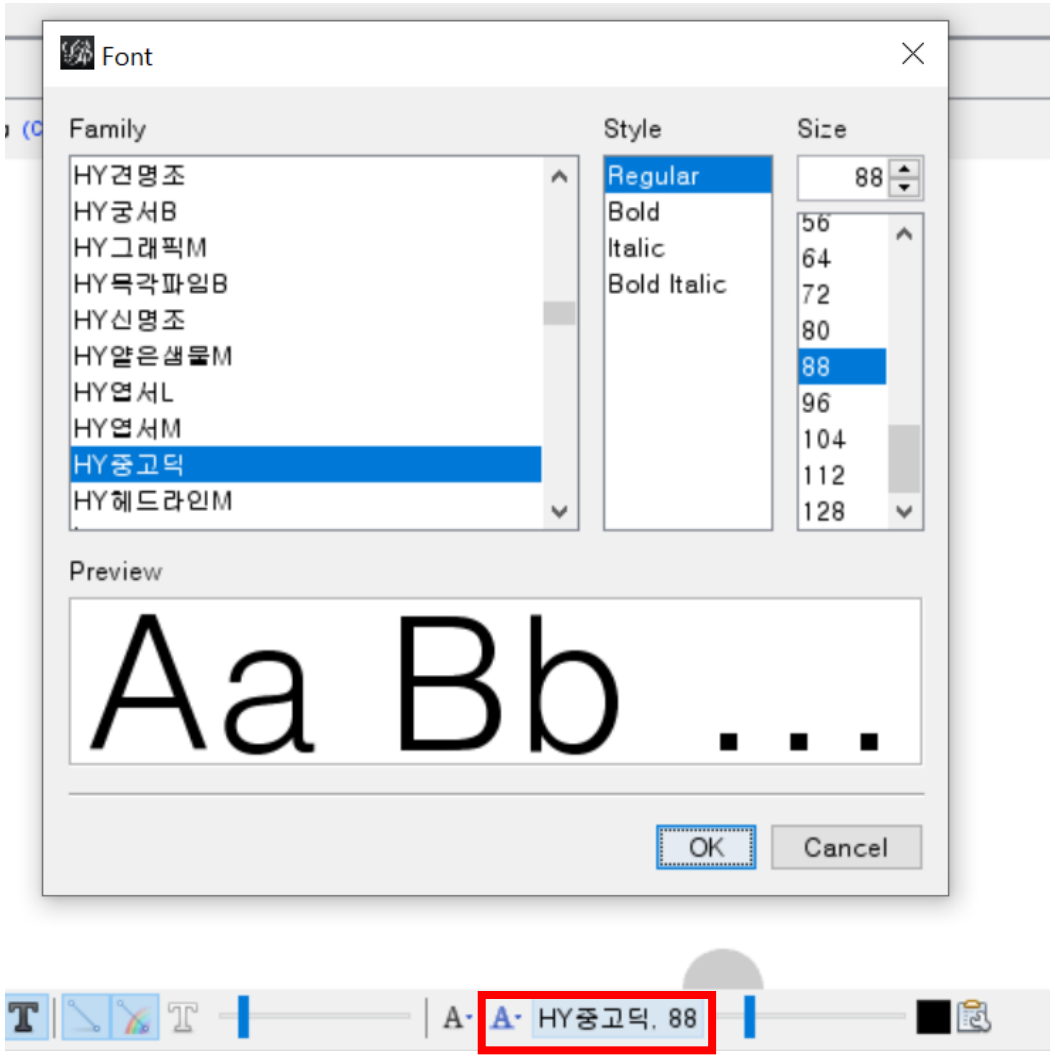
3. Graph Visualization



Statistic tap에서
Average Degree,
Network Diameter,
Eigenvector Centrality
를 Run해줍니다!

(쓸 수 있는 지표들이 더 많아짐)

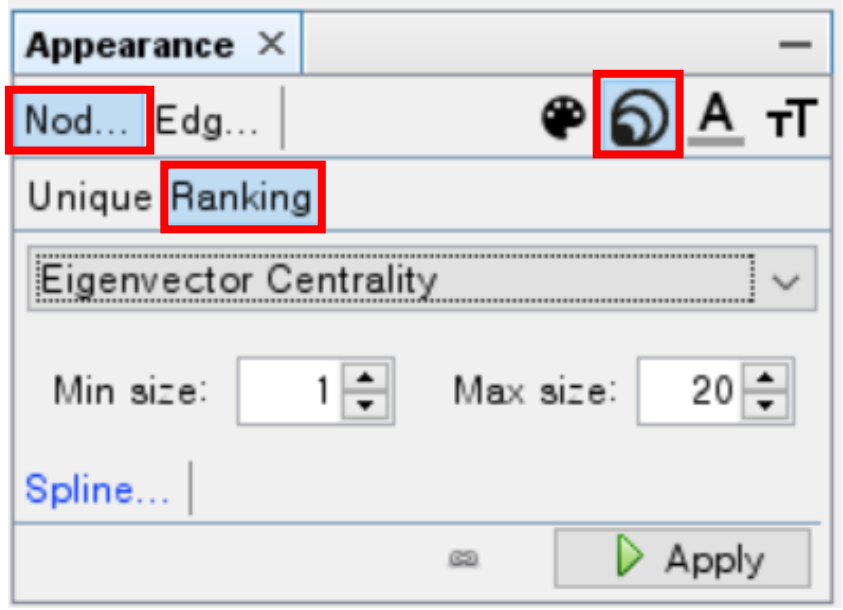
3. Graph Visualization – Fonts



폰트가 깨지지 않도록
한글 폰트로 바꿔주기!

+) 폰트 크기도 함께 설정

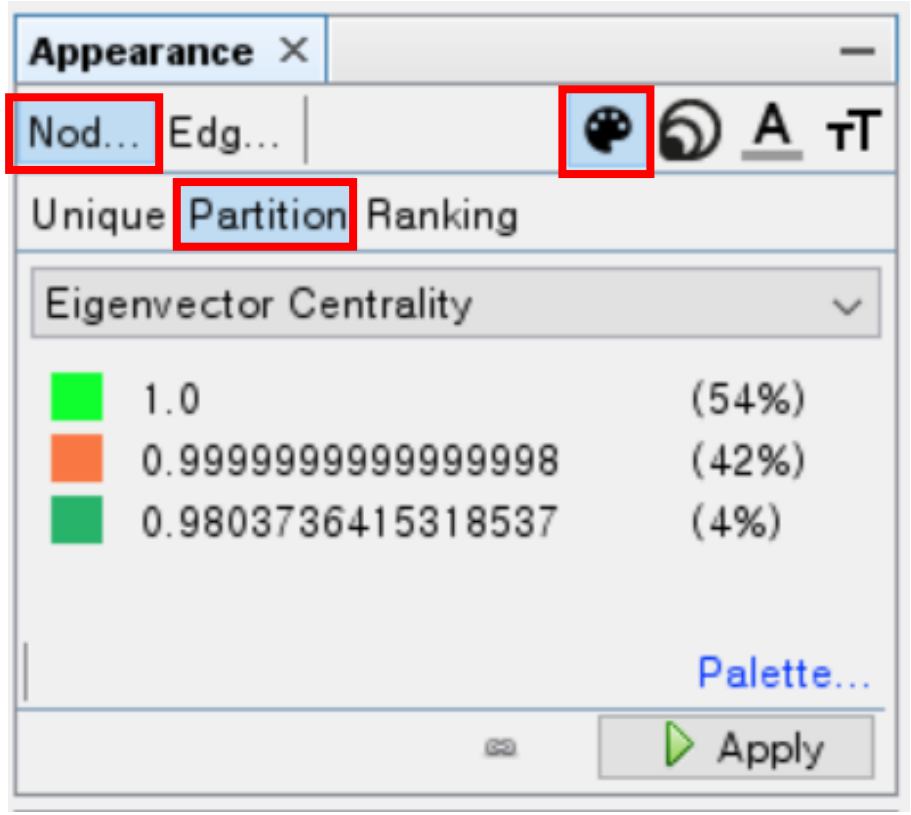
3. Graph Visualization – Nodes



먼저 노드의 크기를 조절해줍니다.

Eigenvector Centrality, Degree Centrality, Betweenness Centrality 등 본인이 원하는 Centrality로 설정!

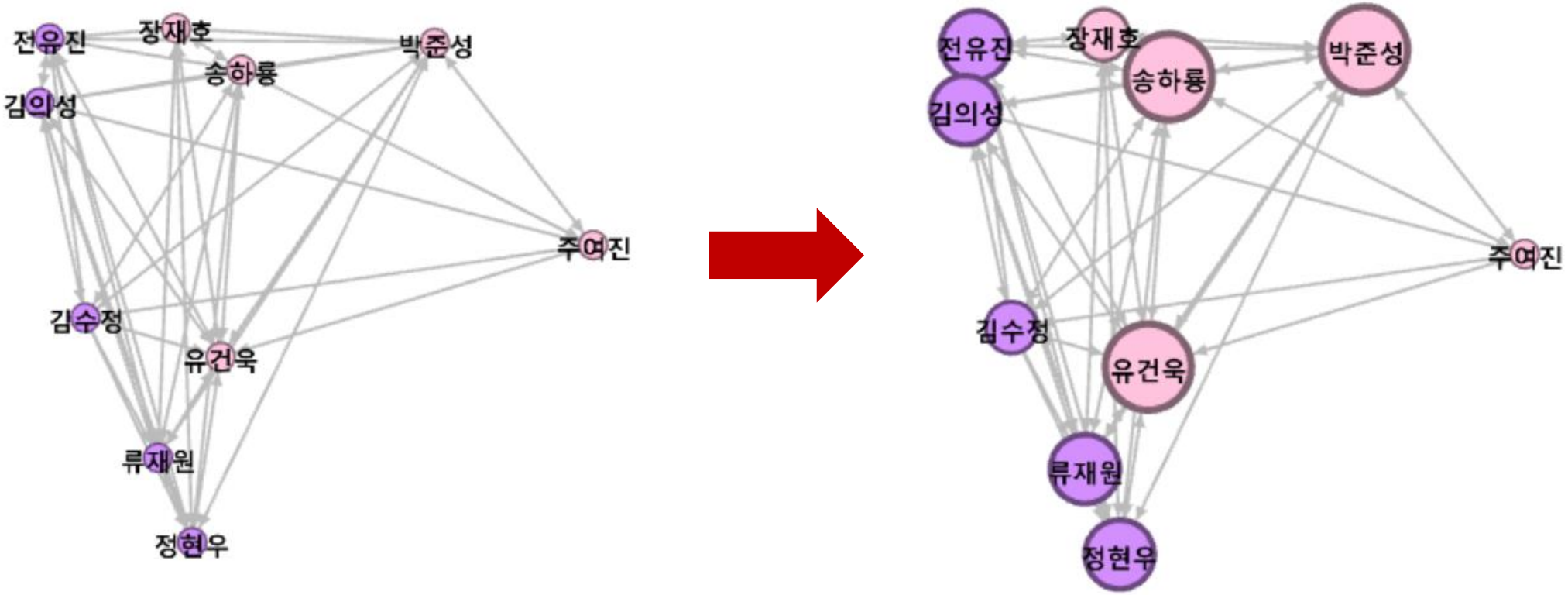
3. Graph Visualization – Nodes



그 다음엔 노드의 색을 선택해줍니다.

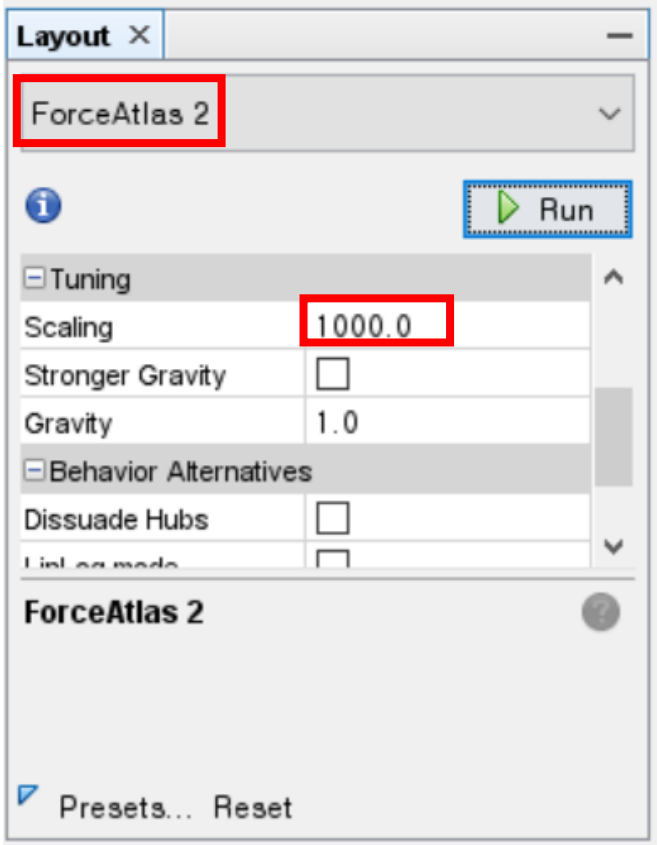
Unique탭 : 모든 노드를 한 가지 색으로 통일하고 싶을 때
Partition탭: centrality 등 어떤 기준으로 색을 나누고 싶을 때
Ranking탭: centrality 등 어떤 기준에 따라 색을 그라데이션으로 입히고 싶을 때

3. Graph Visualization – Nodes



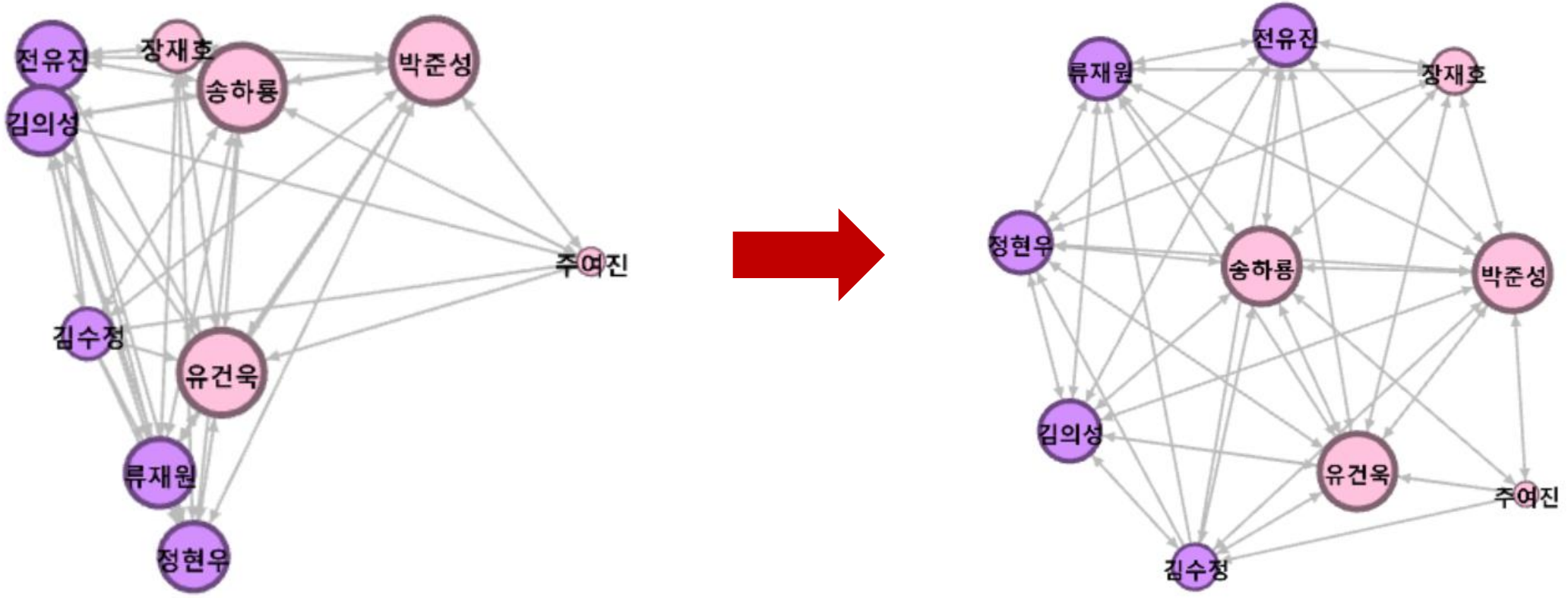
노드는 이런 식으로 완성!

3. Graph Visualization - Nodes



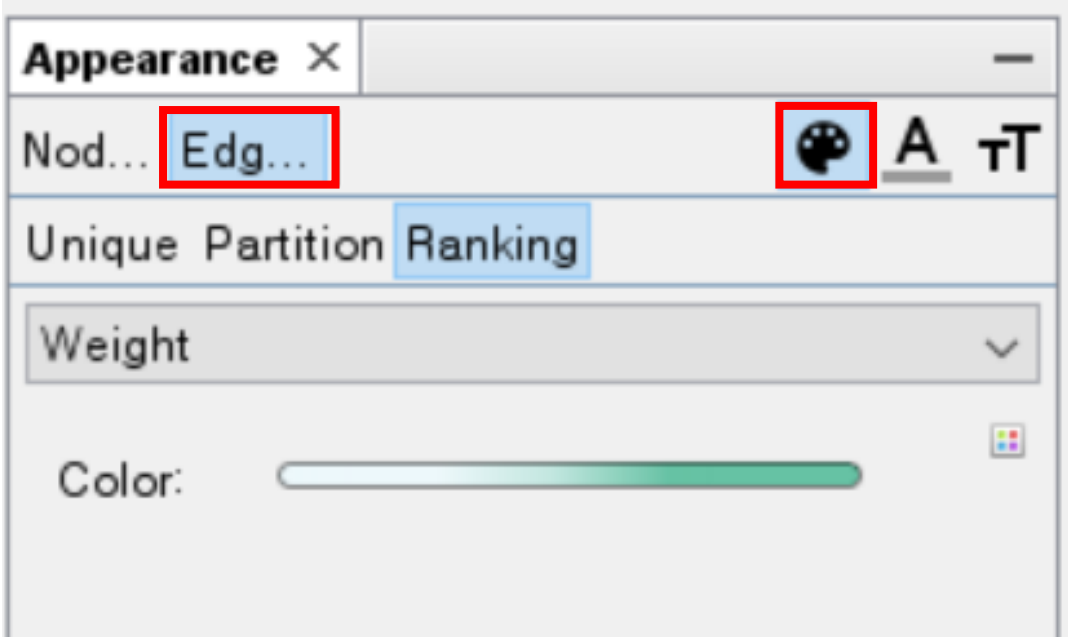
노드가 너무 모여있으니
보기 좋게 하기 위해 Scaling을 해줍니다!
(다른 layout도 적용해보세요)

3. Graph Visualization – Nodes

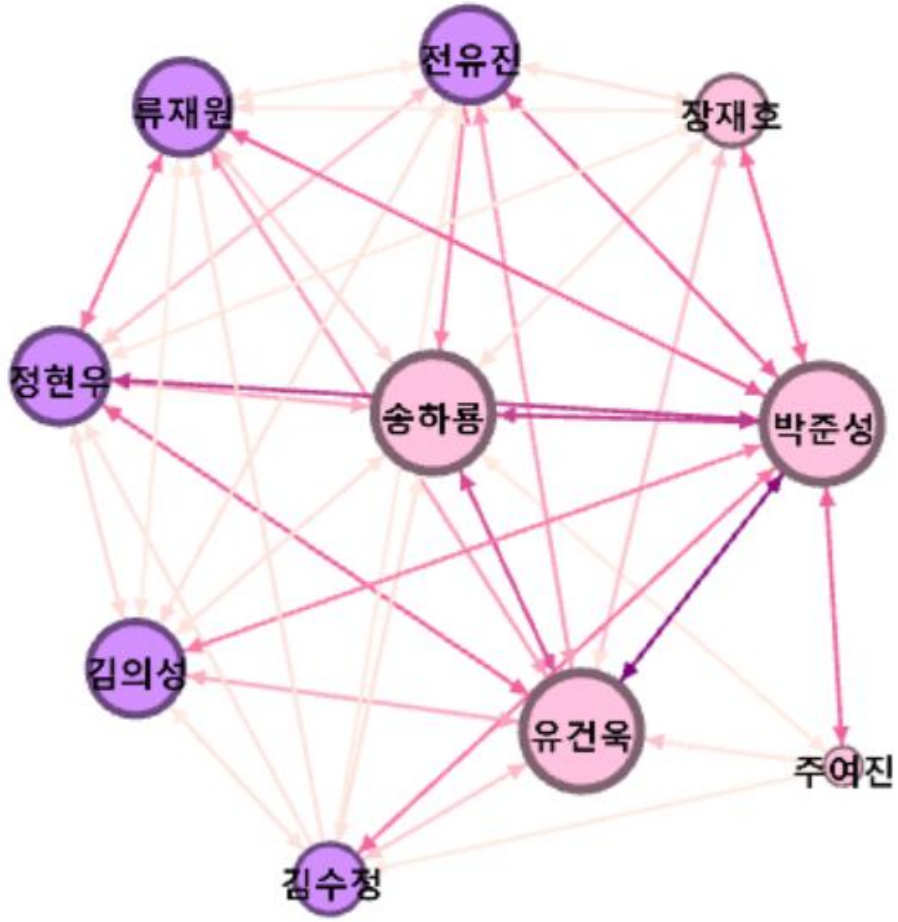


3. Graph Visualization – Edges

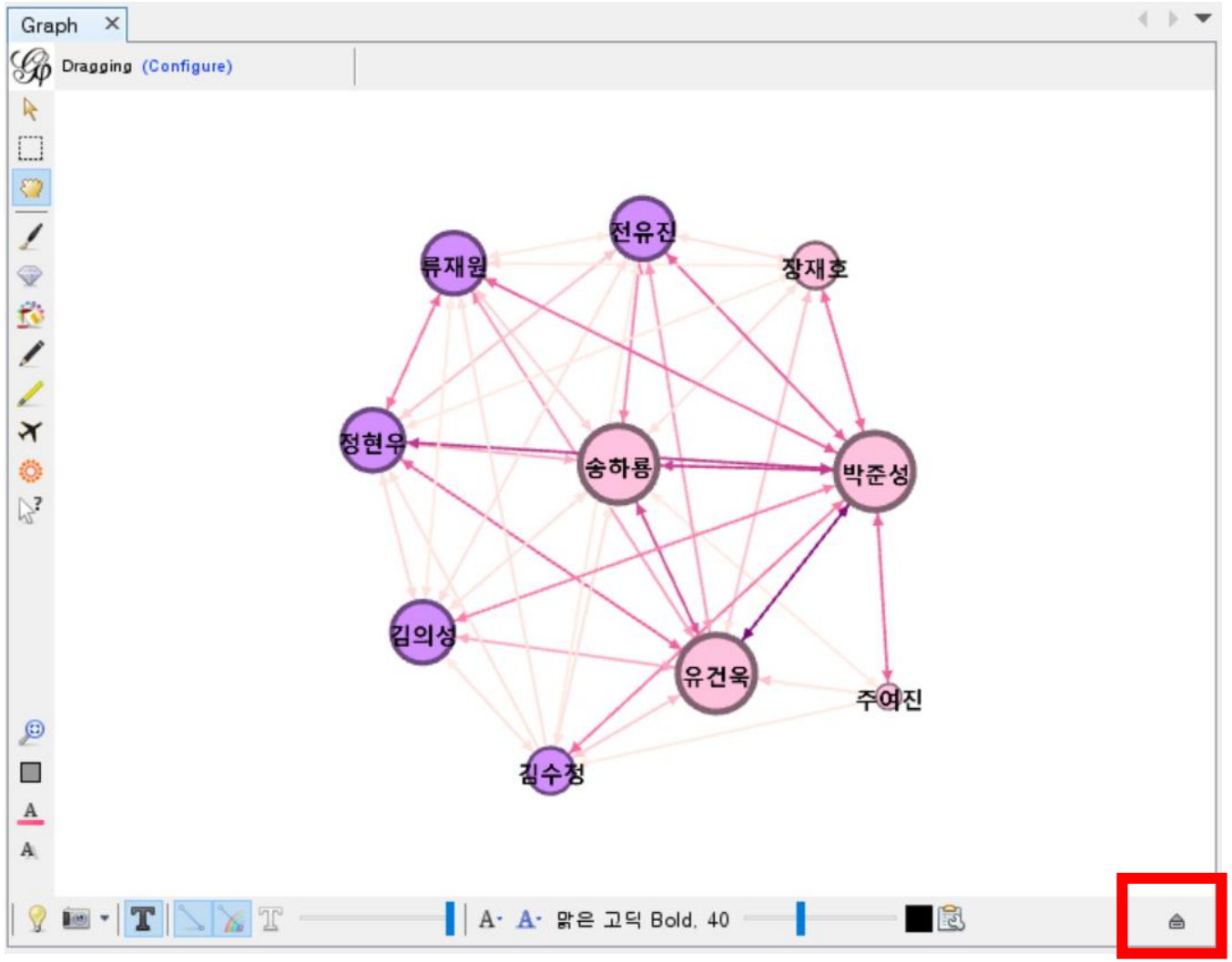
Edge의 경우 이미 Weights를 기준으로 색을 지정해줍니다!



2. Graph Visualization – Edges



3. 추가기능


Graph
Dragging (Configure)
전유진
류재원
장재호
정현우
송하룡
박준성
김의성
유건욱
주여진
김수청
맑은 고딕 Bold, 40

감사합니다☺