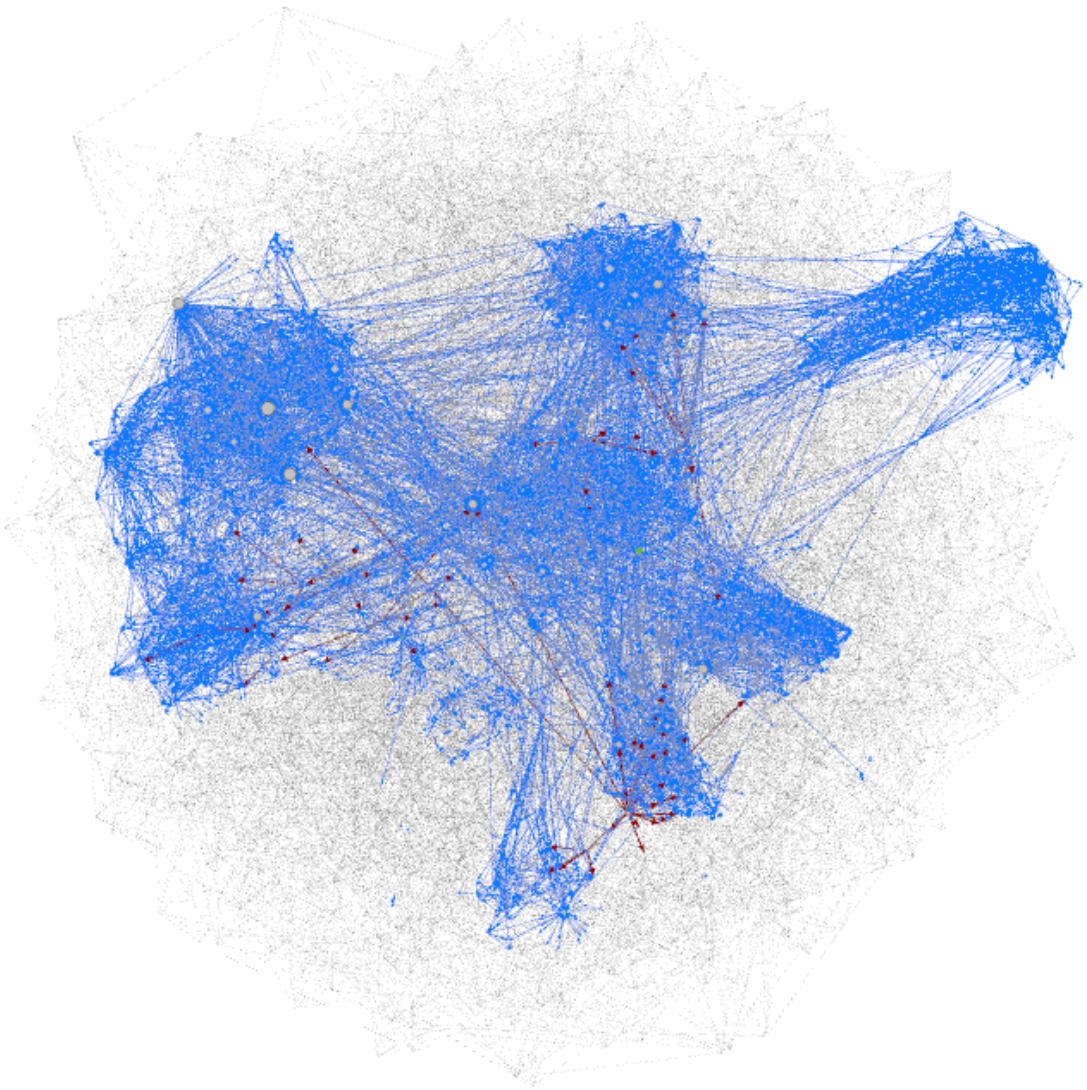
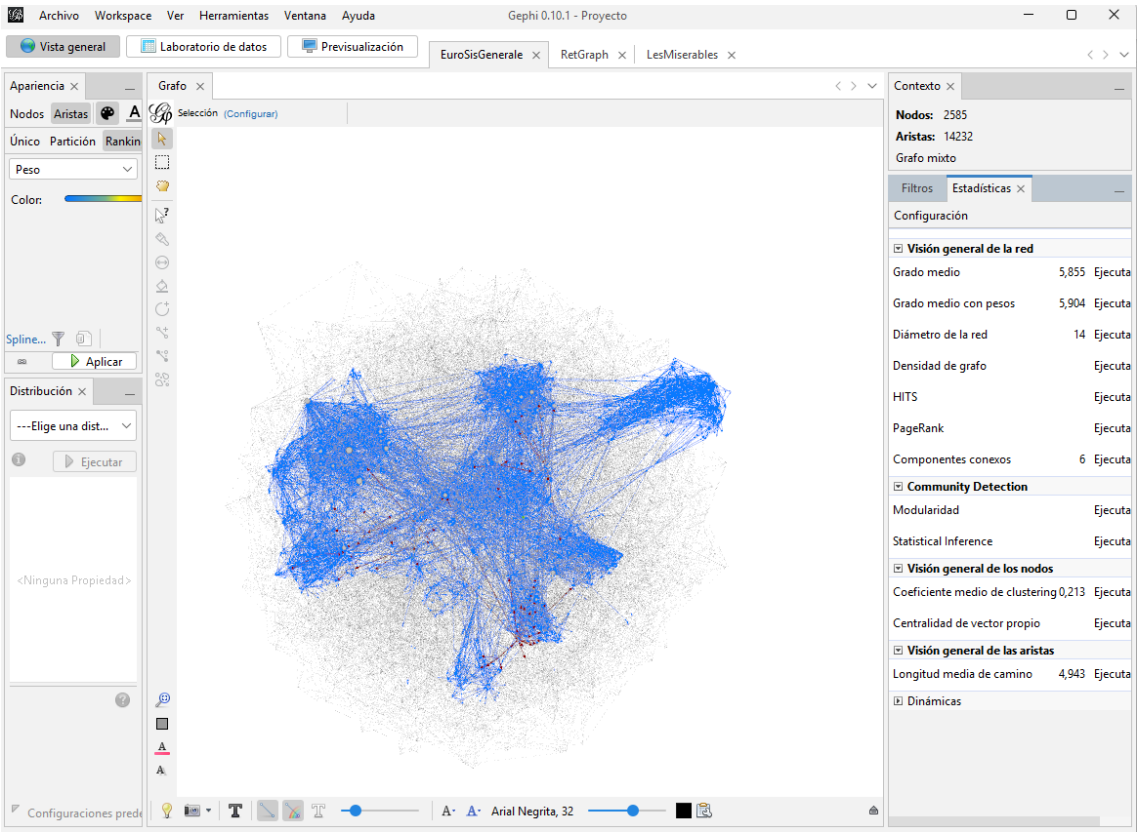
EuroSisGenerale.gexf



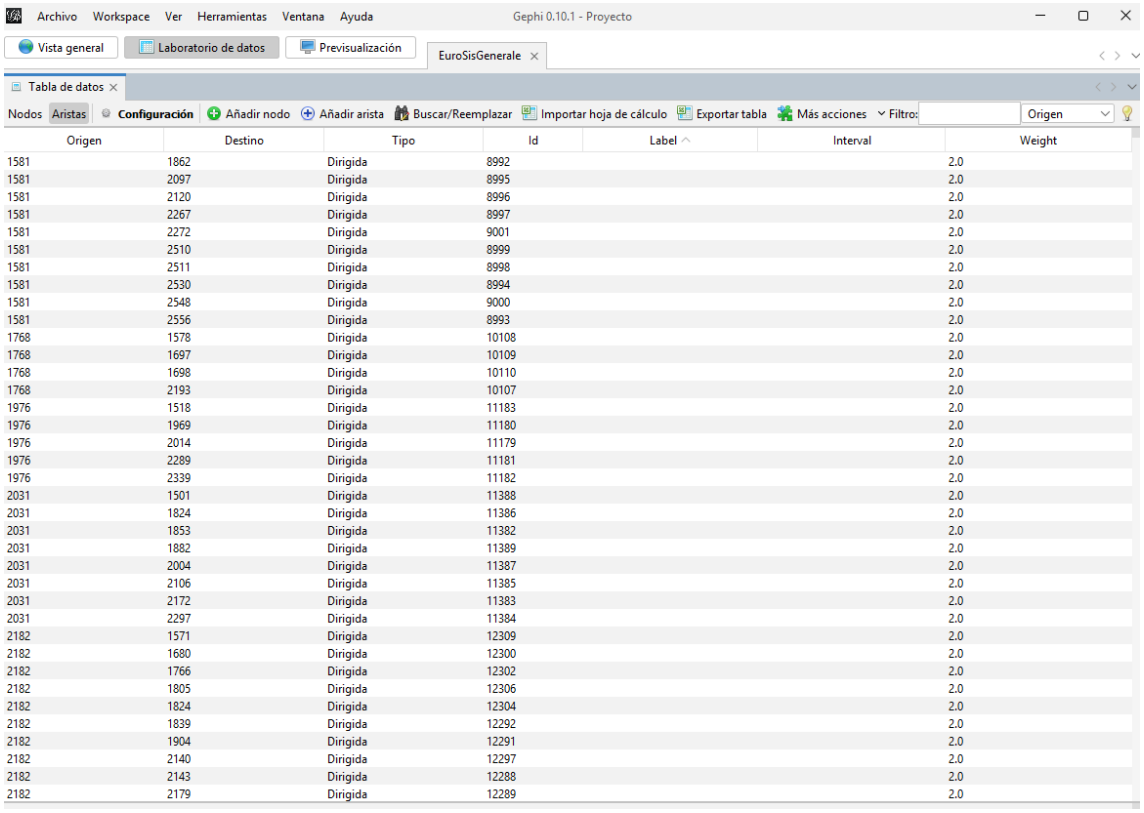


Nodos: 1285

Aristas: 7524

Grafo Dirigido: Si

Grafo con pesos: Si



Origen	Destino	Tipo	Id	Label	Interval	Weight
1581	1862	Dirigida	8992			2.0
1581	2097	Dirigida	8995			2.0
1581	2120	Dirigida	8996			2.0
1581	2267	Dirigida	8997			2.0
1581	2272	Dirigida	9001			2.0
1581	2510	Dirigida	8999			2.0
1581	2511	Dirigida	8998			2.0
1581	2530	Dirigida	8994			2.0
1581	2548	Dirigida	9000			2.0
1581	2556	Dirigida	8993			2.0
1768	1578	Dirigida	10108			2.0
1768	1697	Dirigida	10109			2.0
1768	1698	Dirigida	10110			2.0
1768	2193	Dirigida	10107			2.0
1976	1518	Dirigida	11183			2.0
1976	1969	Dirigida	11180			2.0
1976	2014	Dirigida	11179			2.0
1976	2289	Dirigida	11181			2.0
1976	2339	Dirigida	11182			2.0
2031	1501	Dirigida	11388			2.0
2031	1824	Dirigida	11386			2.0
2031	1853	Dirigida	11382			2.0
2031	1882	Dirigida	11389			2.0
2031	2004	Dirigida	11387			2.0
2031	2106	Dirigida	11385			2.0
2031	2172	Dirigida	11383			2.0
2031	2297	Dirigida	11384			2.0
2182	1571	Dirigida	12309			2.0
2182	1680	Dirigida	12300			2.0
2182	1766	Dirigida	12302			2.0
2182	1805	Dirigida	12306			2.0
2182	1824	Dirigida	12304			2.0
2182	1839	Dirigida	12292			2.0
2182	1904	Dirigida	12291			2.0
2182	2140	Dirigida	12297			2.0
2182	2143	Dirigida	12288			2.0
2182	2179	Dirigida	12289			2.0

Longitud Media de los Caminos entre nodos:

Graph Distance Report

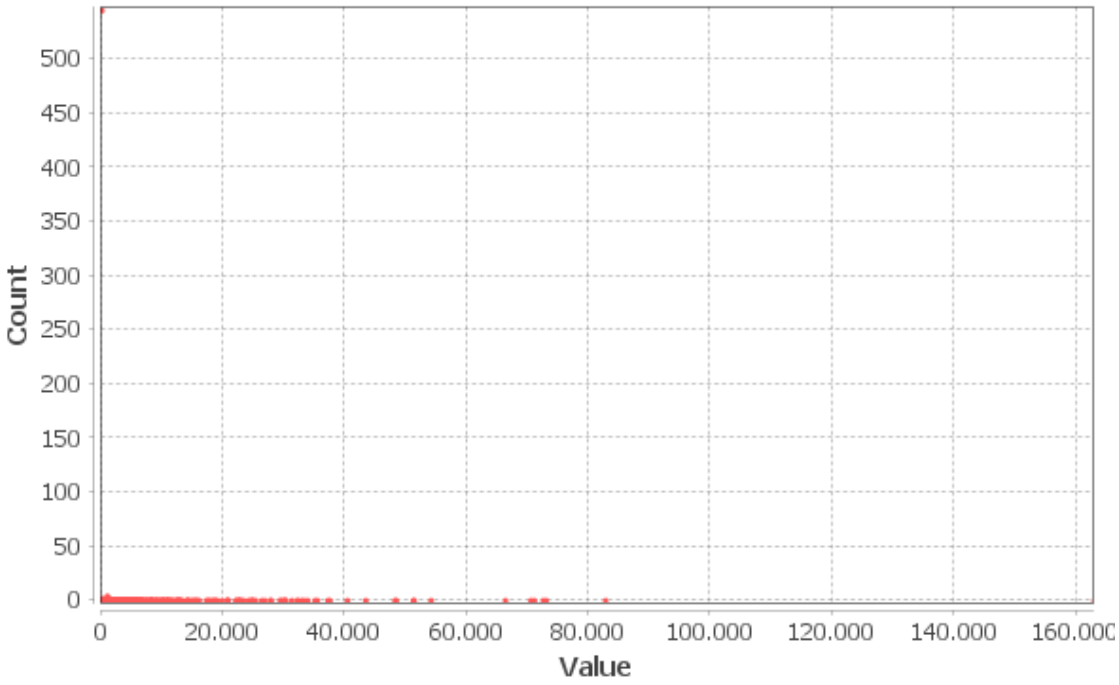
Parameters:

Network Interpretation: directed

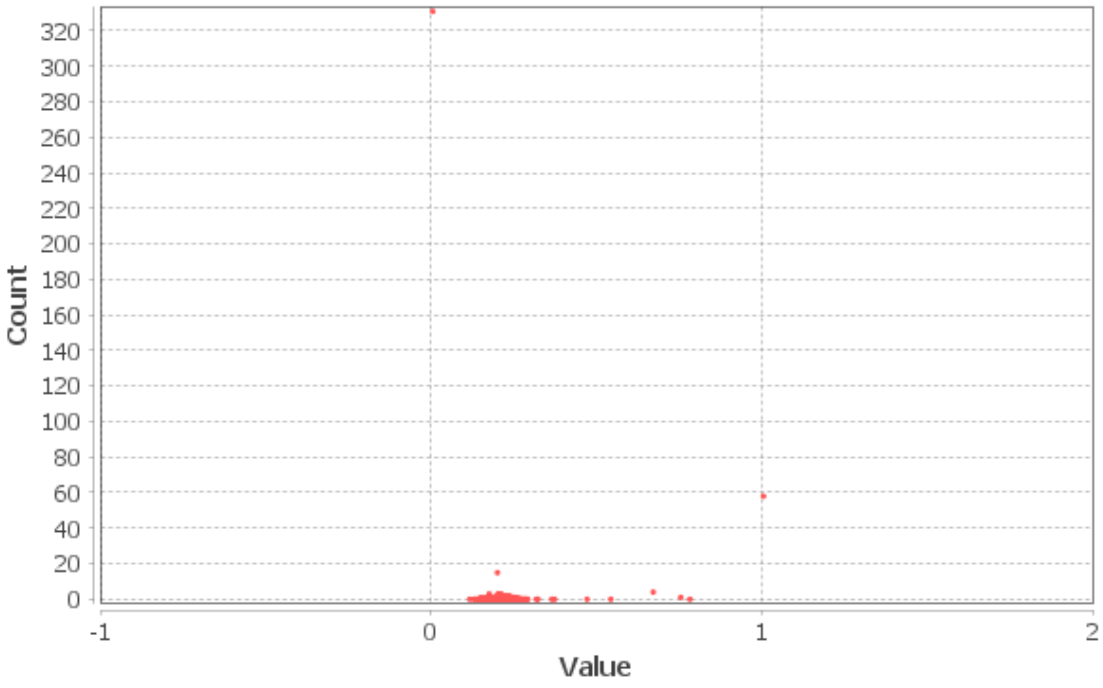
Results:

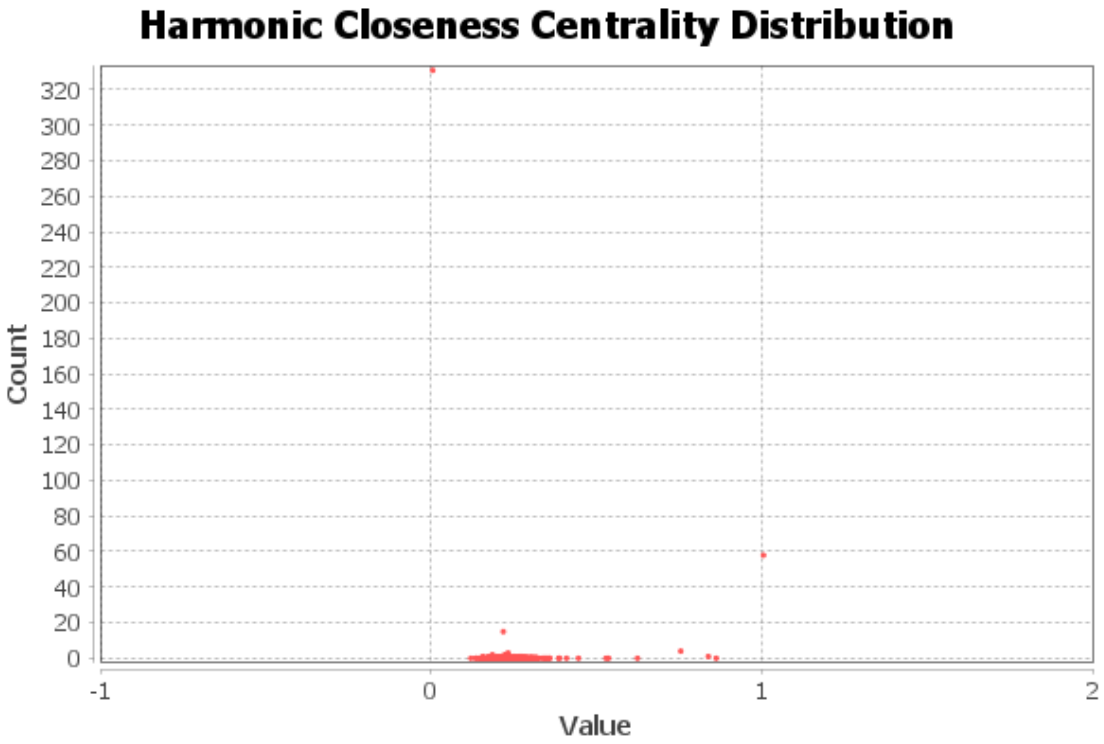
Diameter: 14
Radius: 0
Average Path length: 4.942991357845991

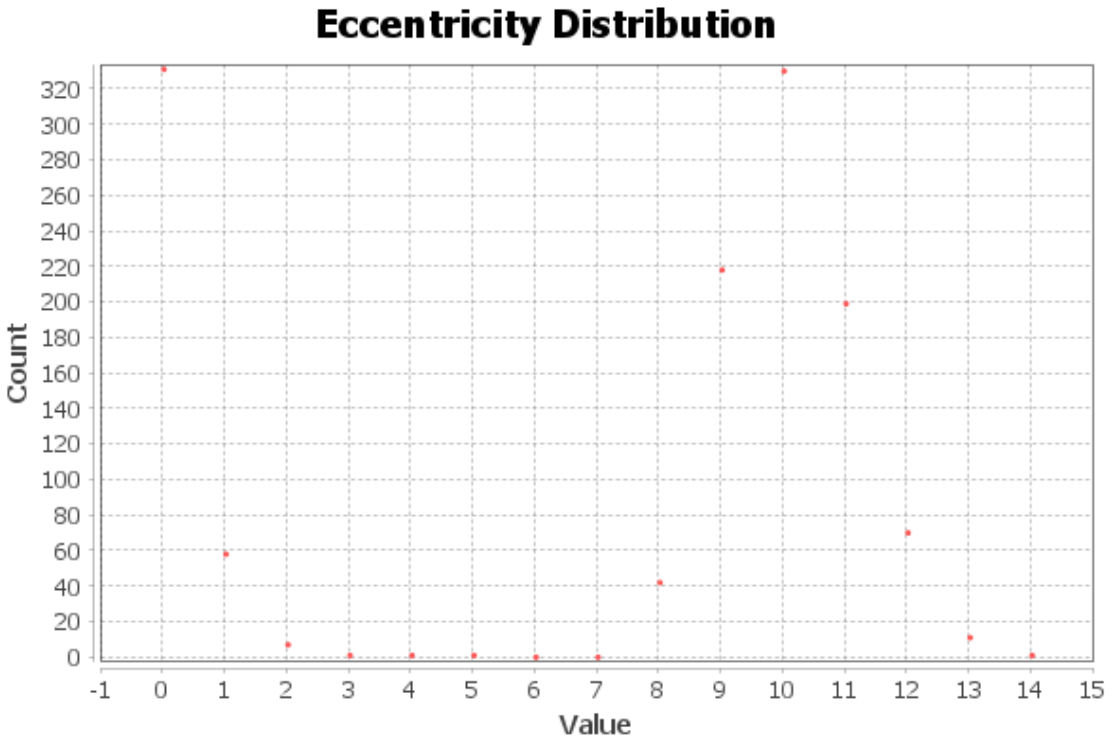
Betweenness Centrality Distribution



Closeness Centrality Distribution







Algorithm:

Ulrik Brandes, *A Faster Algorithm for Betweenness Centrality*, in Journal of Mathematical Sociology 25(2):163-177, (2001)

Coeficiente de Clustering medio:

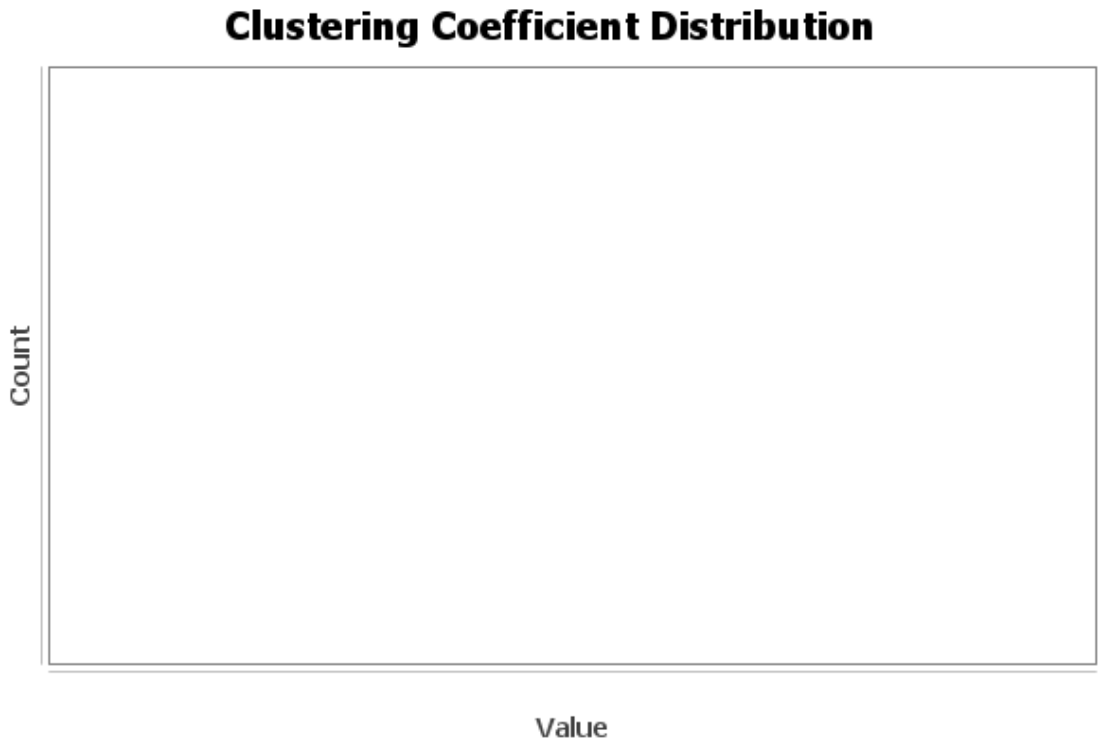
Clustering Coefficient Metric Report

Parameters:

Network Interpretation: directed

Results:

Average Clustering Coefficient: 0,213
The Average Clustering Coefficient is the mean value of individual coefficients.



Algorithm:

Simple and slow brute force.

diámetro de la Red:

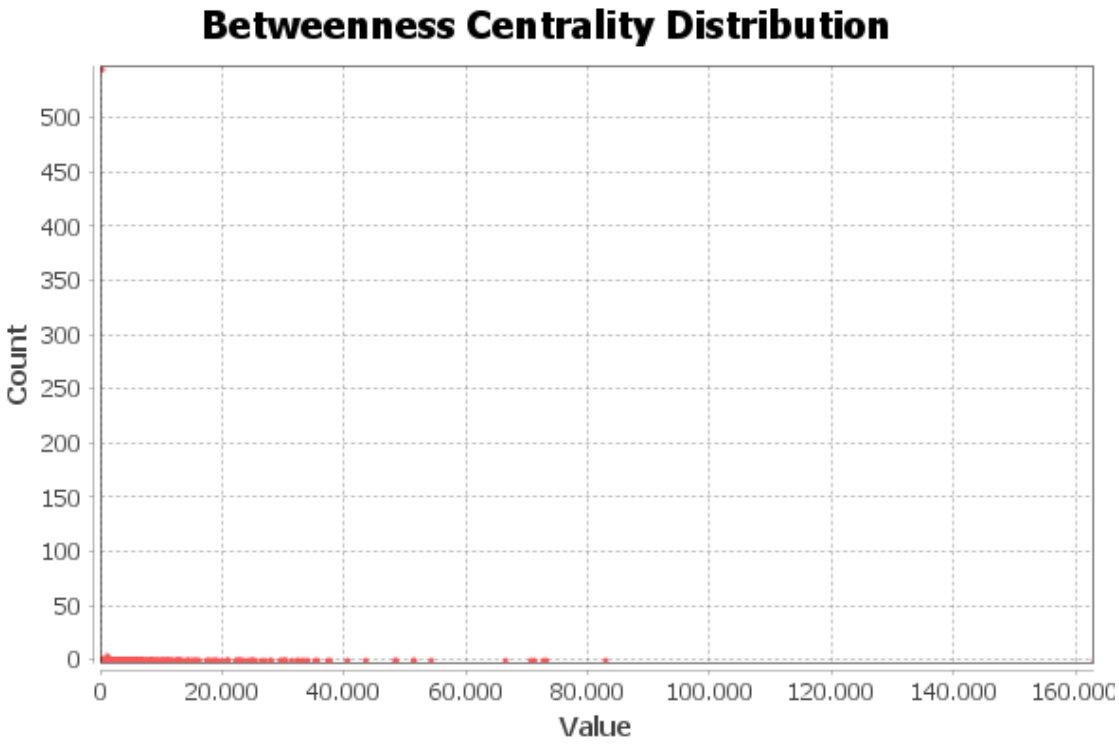
Graph Distance Report

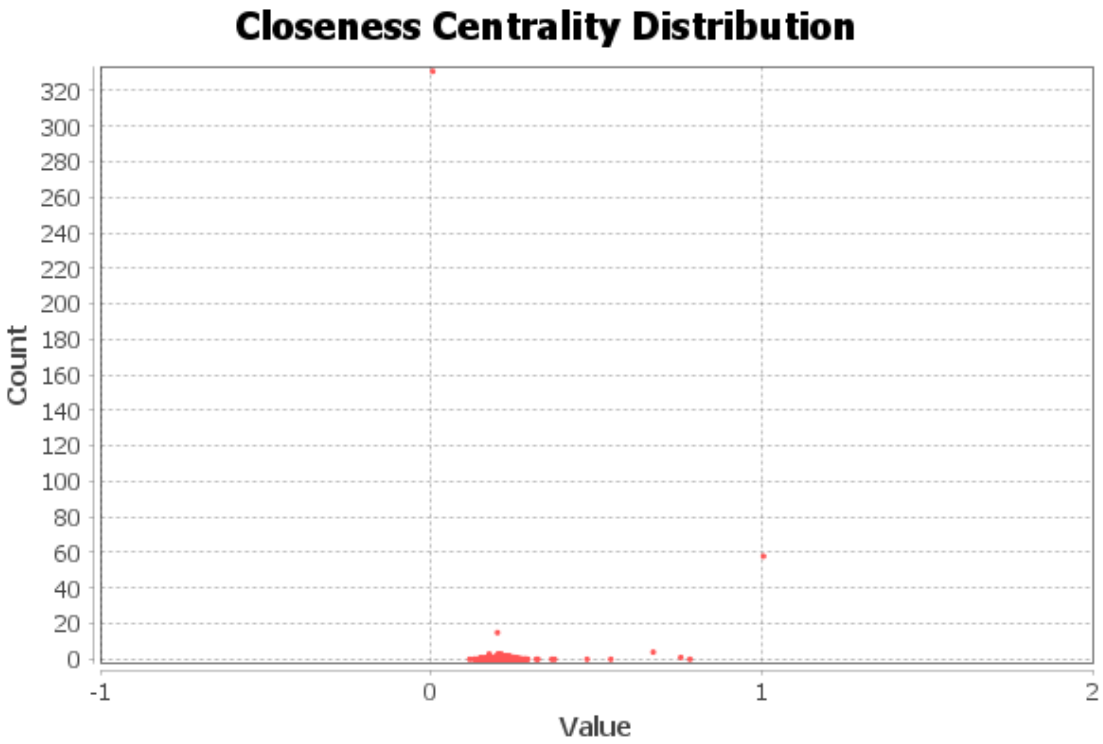
Parameters:

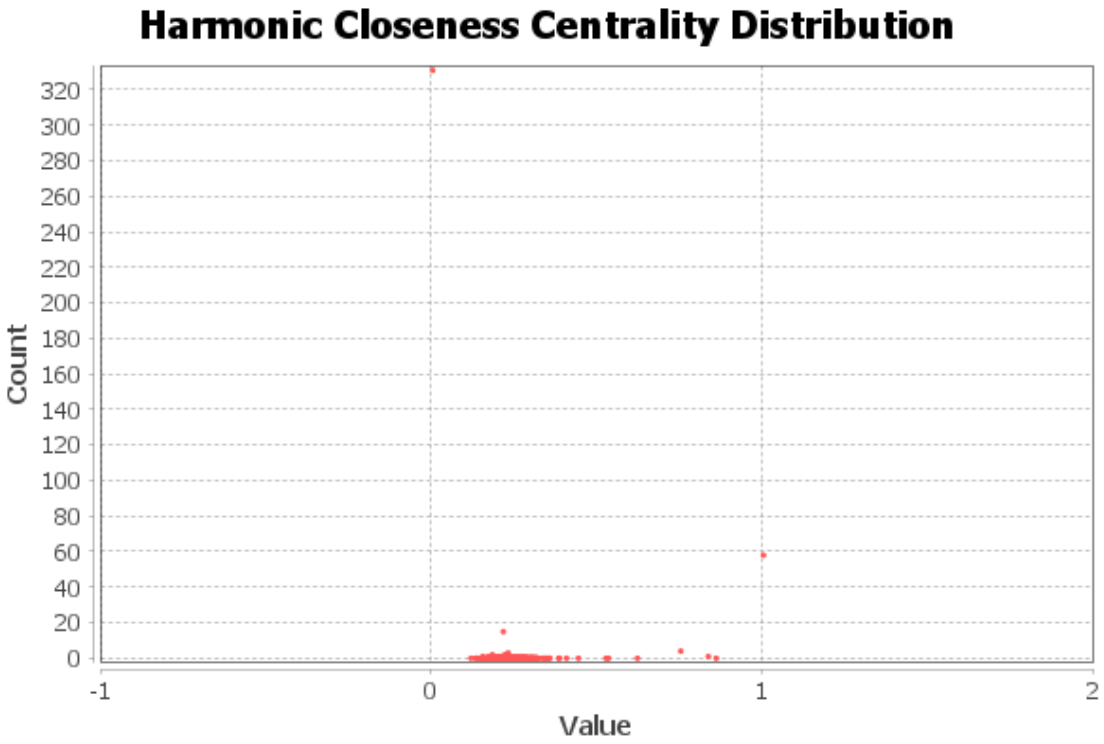
Network Interpretation: directed

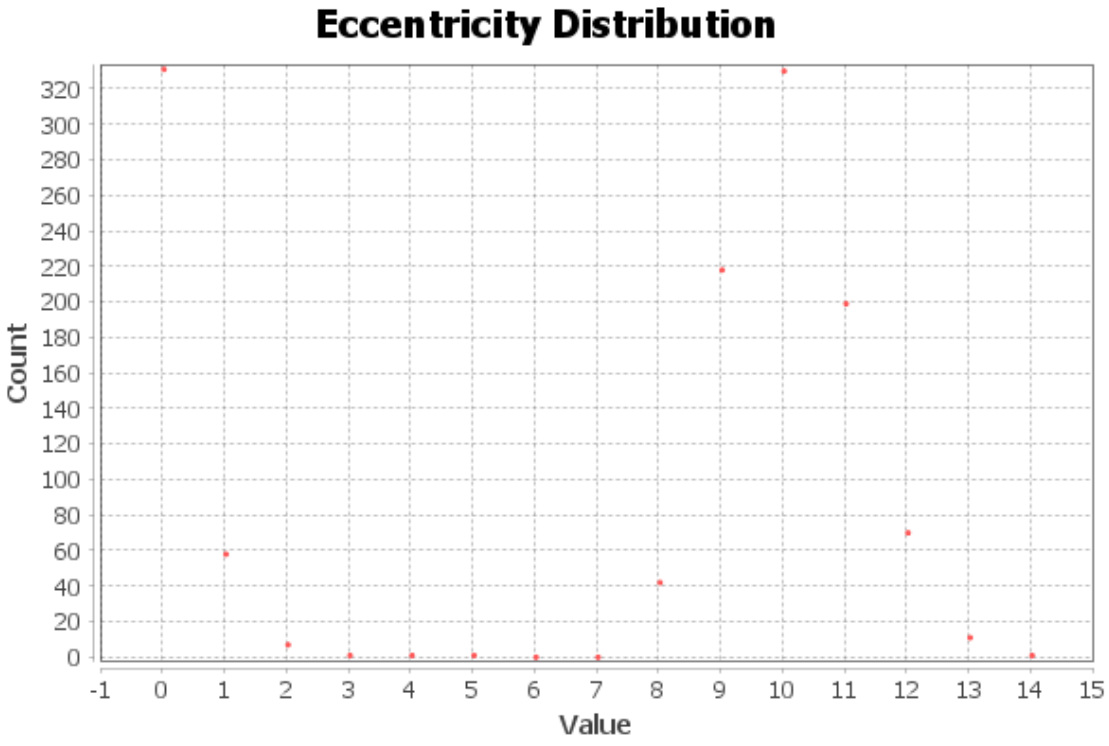
Results:

Diameter: 14
Radius: 0
Average Path length: 4.942991357845991









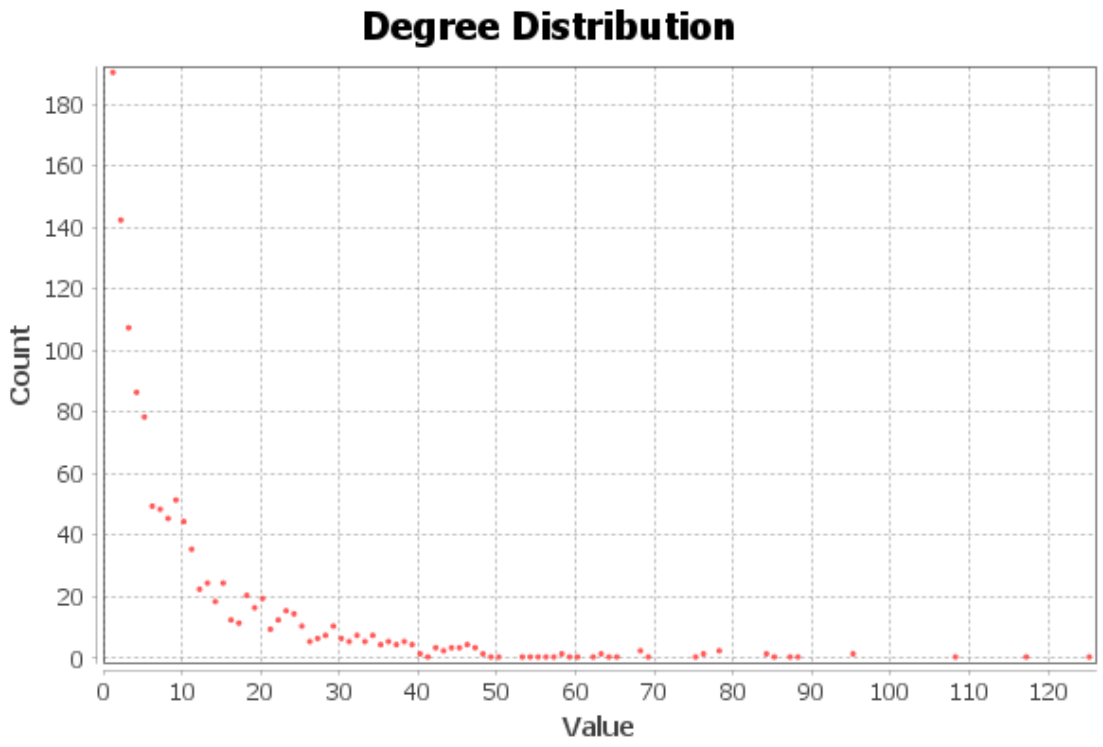
Algorithm:

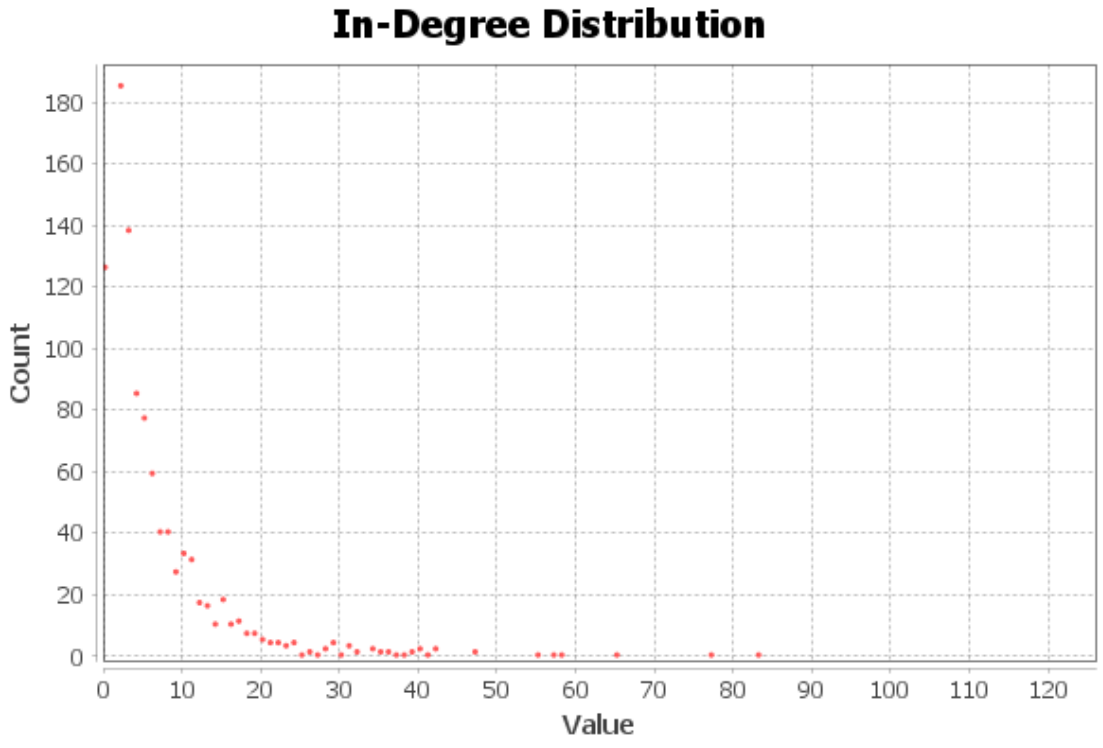
Ulrik Brandes, *A Faster Algorithm for Betweenness Centrality*, in Journal of Mathematical Sociology 25(2):163-177, (2001)

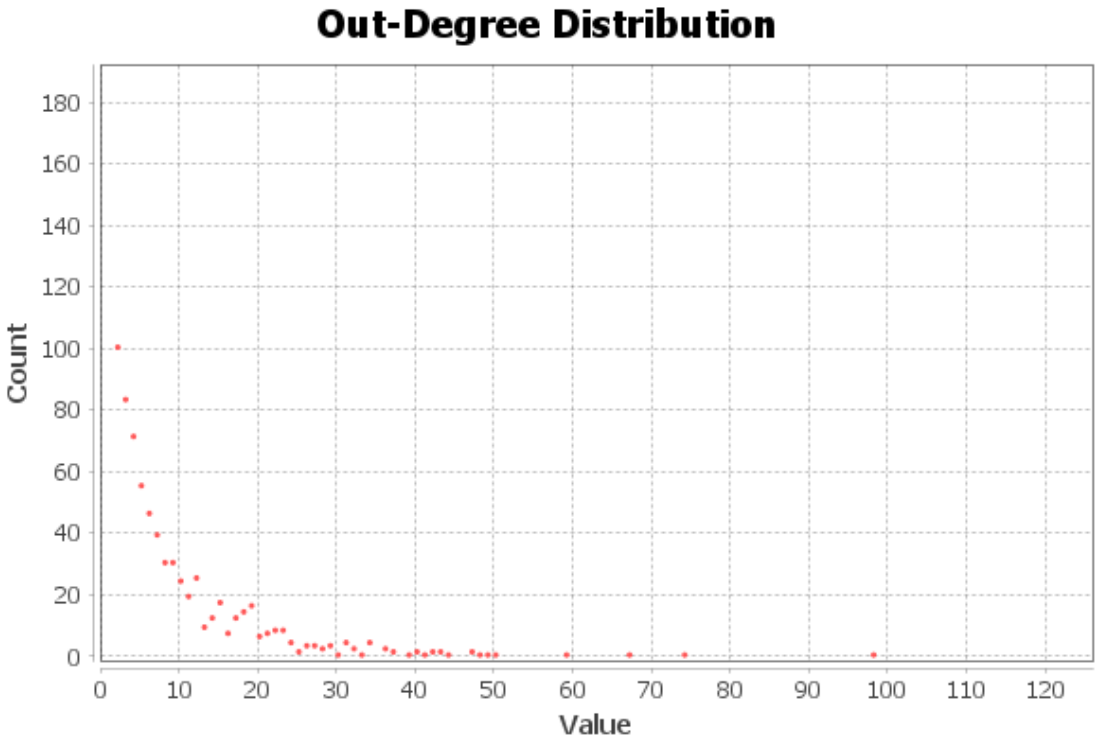
Grado Medio: **Degree Report**

Results:

Average Degree: 5,855







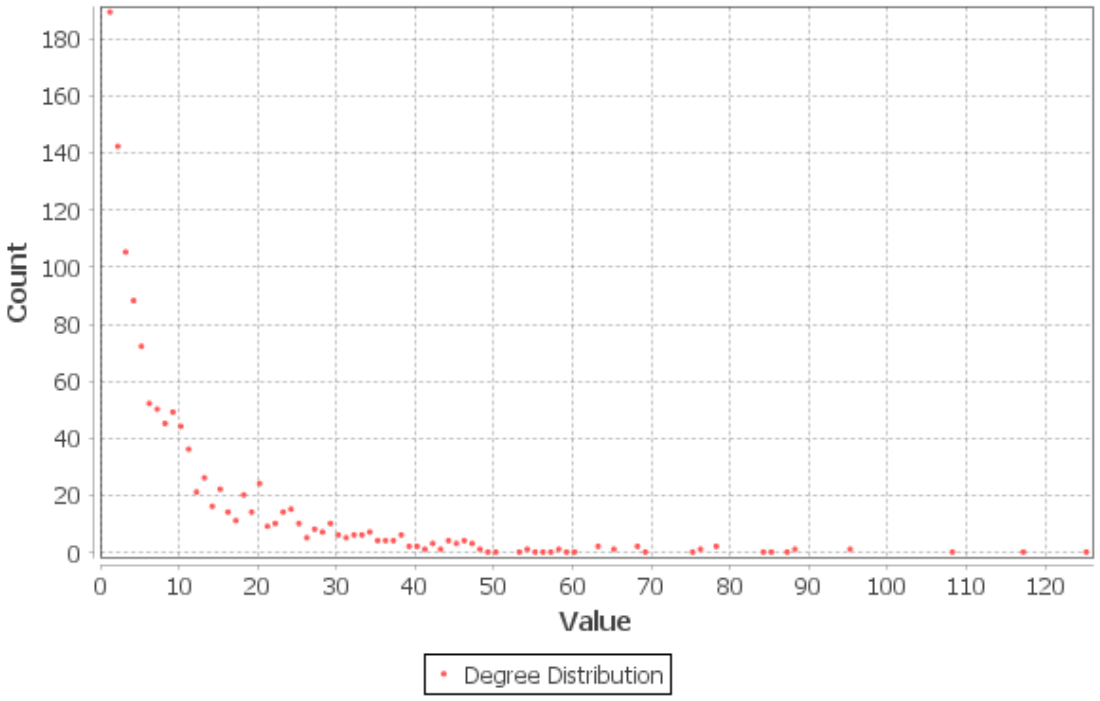
Grado Medio con Pesos:

Weighted Degree Report

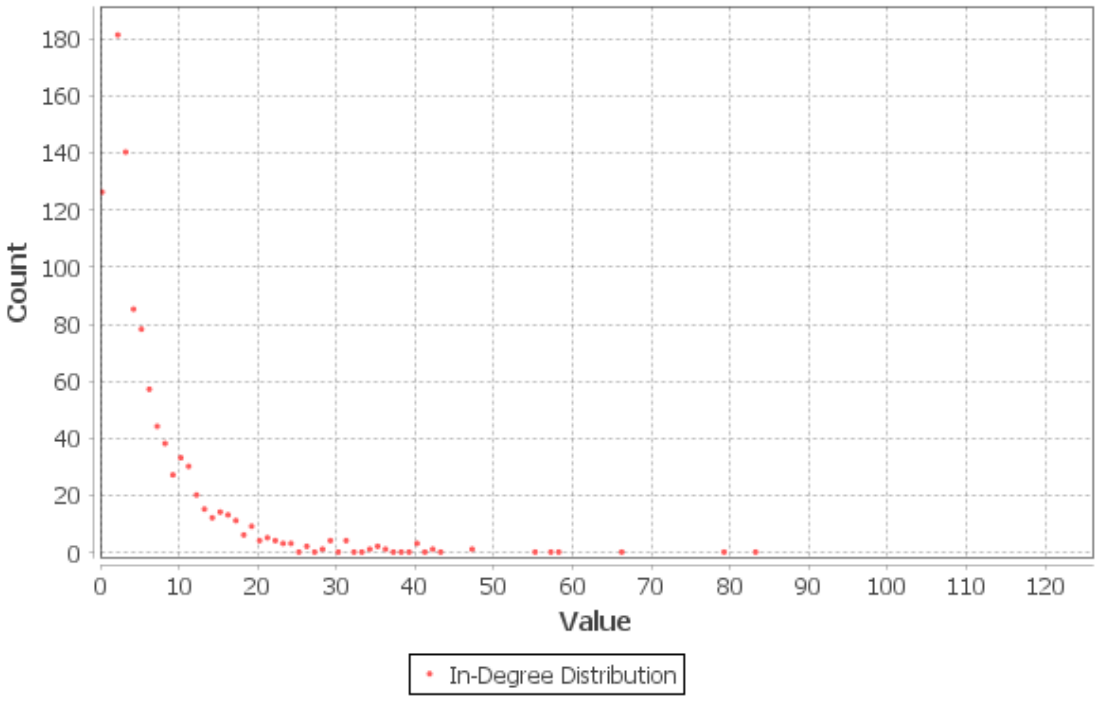
Results:

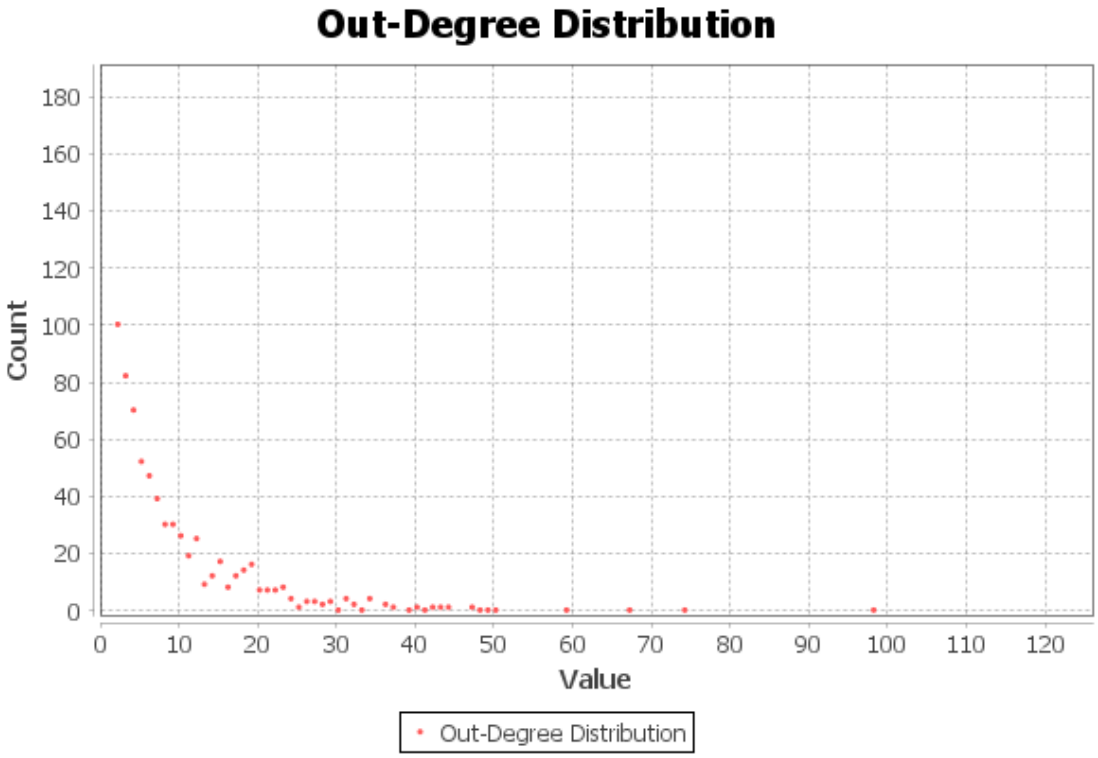
Average Weighted Degree: 5,904

Degree Distribution



In-Degree Distribution





Número de componentes conexas fuerte y débilmente conectadas.

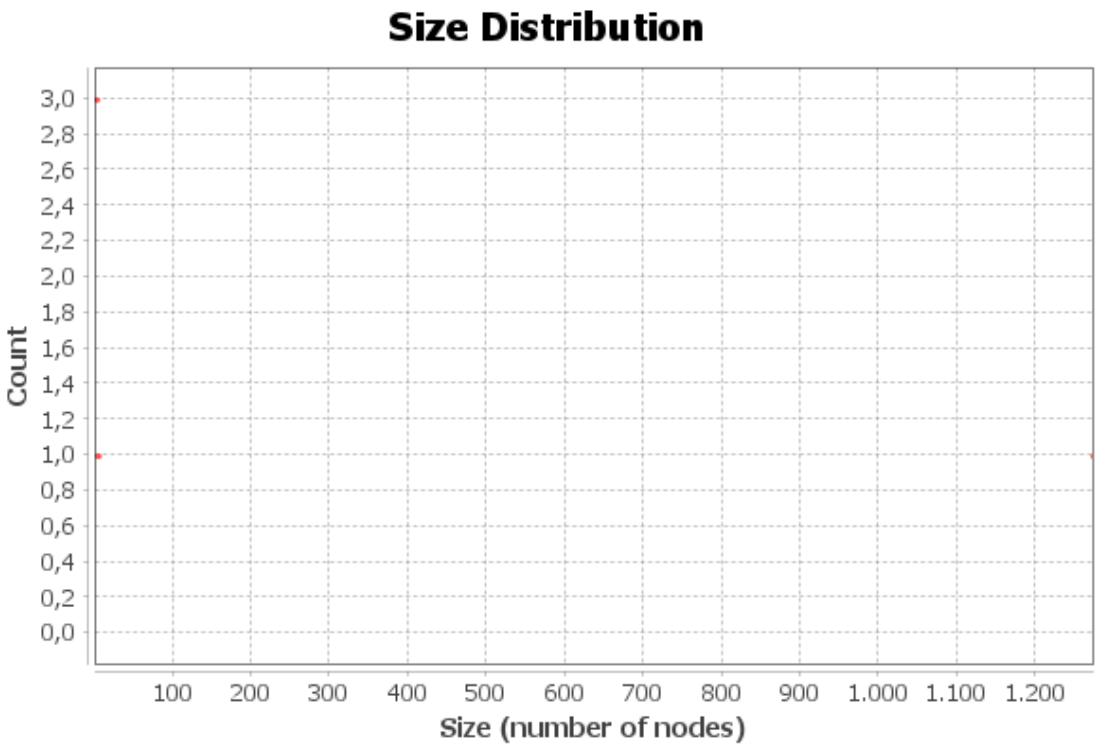
Connected Components Report

Parameters:

Network Interpretation: directed

Results:

Number of Weakly Connected Components: 6
Number of Strongly Connected Components: 511

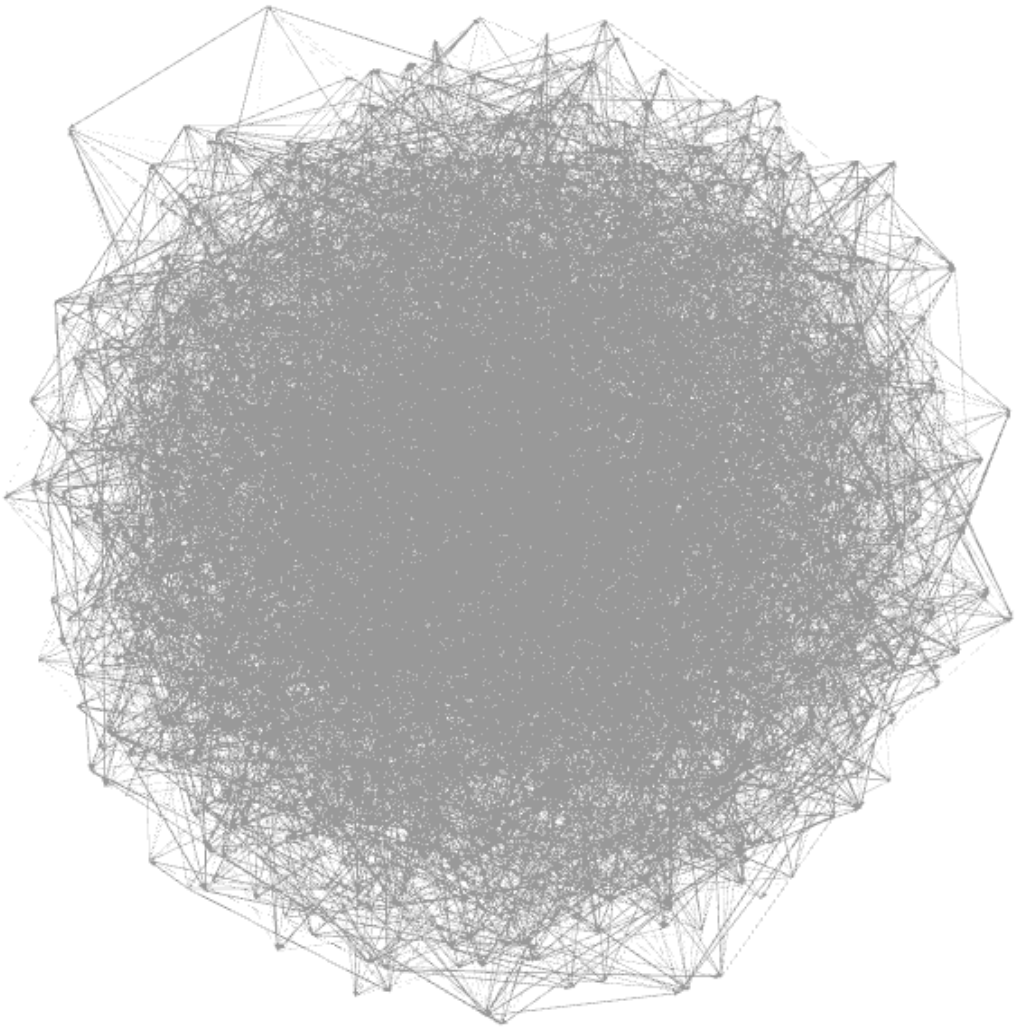


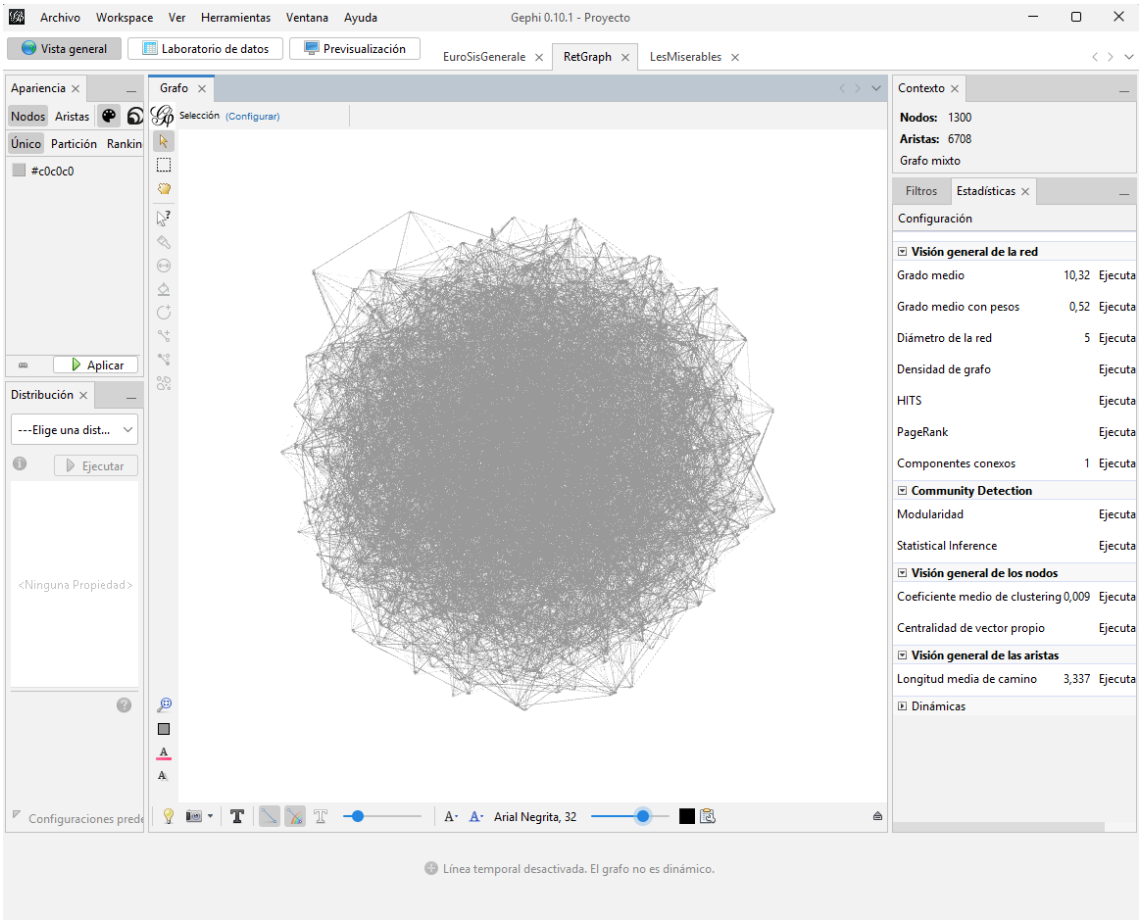
Algorithm:

Robert Tarjan, *Depth-First Search and Linear Graph Algorithms*, in SIAM Journal on Computing 1 (2): 146–160 (1972)

reflexión acerca de su distribución del grado y una posible clasificación según los modelos de red o tipos de grafo presentados en el curso:

RetGraph.gephi



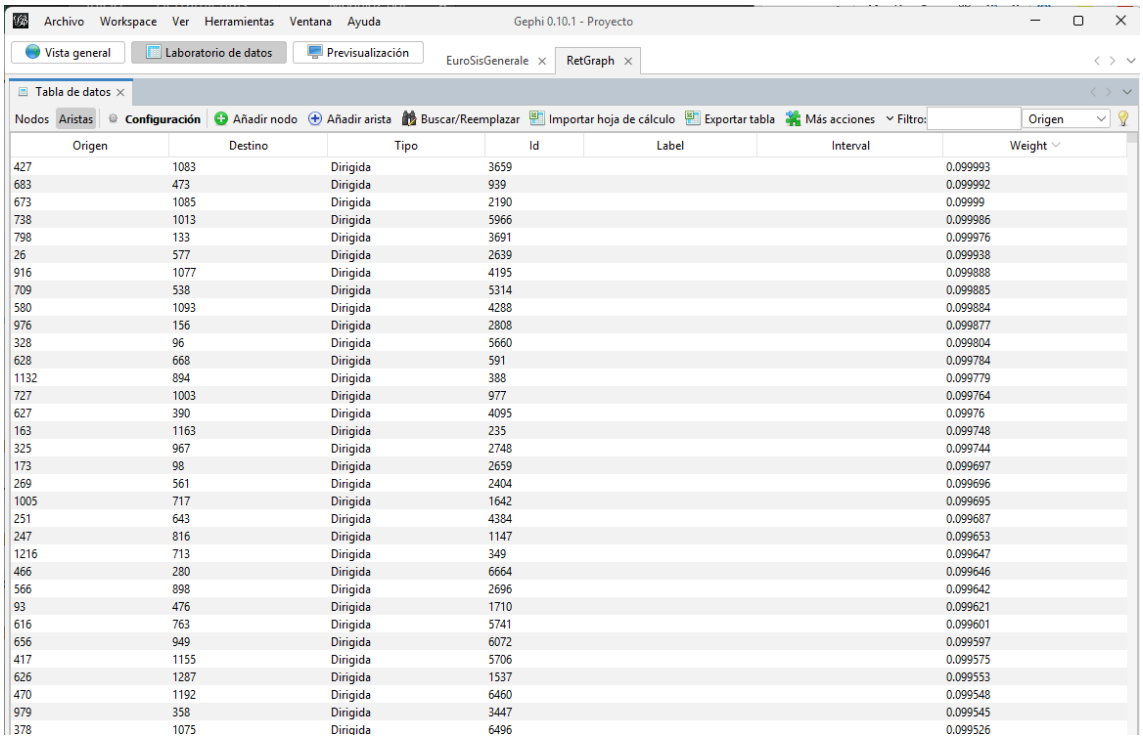


- Nodos:1300

- Aristas:6708

- Si se trata de un grafo dirigido o no.: Si

- Si se trata de un grafo con pesos o no.: Si



Origen	Destino	Tipo	Id	Label	Interval	Weight
427	1083	Dirigida	3659			0.099993
683	473	Dirigida	939			0.099992
673	1085	Dirigida	2190			0.09999
738	1013	Dirigida	5966			0.099986
798	133	Dirigida	3691			0.099976
26	577	Dirigida	2639			0.099938
916	1077	Dirigida	4195			0.099888
709	538	Dirigida	5314			0.099885
580	1093	Dirigida	4288			0.099884
976	156	Dirigida	2808			0.099877
328	96	Dirigida	5660			0.099804
628	668	Dirigida	591			0.099784
1132	894	Dirigida	388			0.099779
727	1003	Dirigida	977			0.099764
627	390	Dirigida	4095			0.09976
163	1163	Dirigida	235			0.099748
325	967	Dirigida	2748			0.099744
173	98	Dirigida	2659			0.099697
269	561	Dirigida	2404			0.099696
1005	717	Dirigida	1642			0.099695
251	643	Dirigida	4384			0.099687
247	816	Dirigida	1147			0.099653
1216	713	Dirigida	349			0.099647
466	280	Dirigida	6664			0.099646
566	898	Dirigida	2696			0.099642
93	476	Dirigida	1710			0.099621
616	763	Dirigida	5741			0.099601
656	949	Dirigida	6072			0.099597
417	1155	Dirigida	5706			0.099575
626	1287	Dirigida	1537			0.099553
470	1192	Dirigida	6460			0.099548
979	358	Dirigida	3447			0.099545
378	1075	Dirigida	6496			0.099526

- Longitud Media de los Caminos entre nodos:

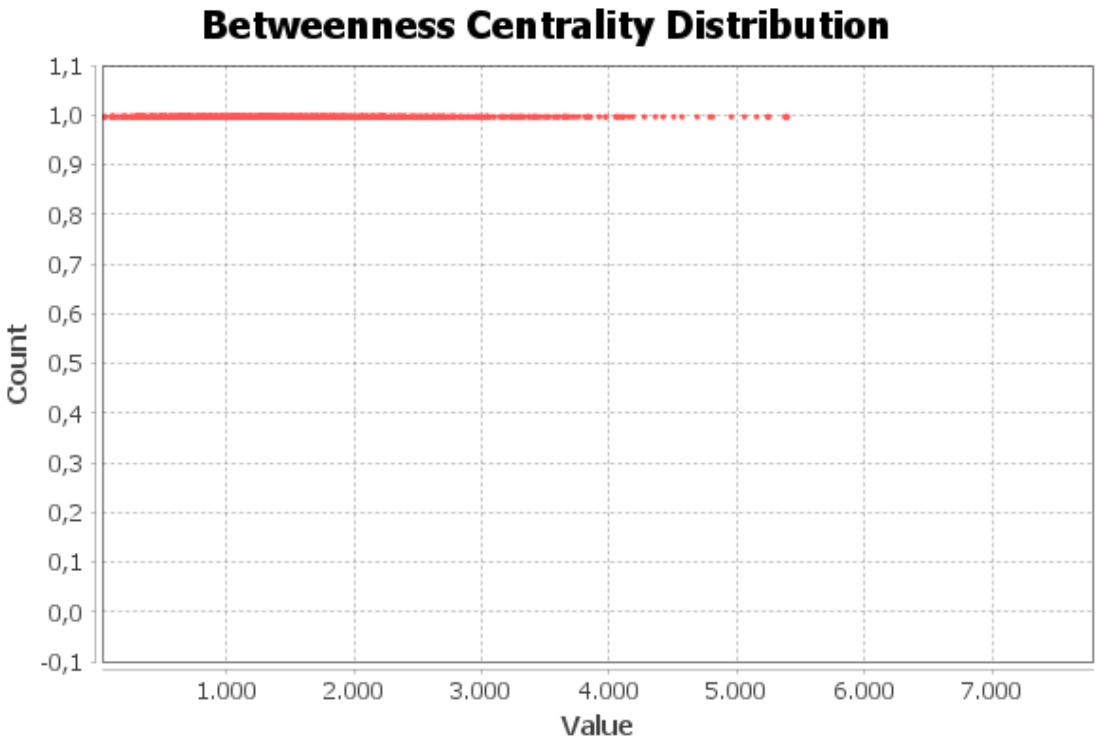
Graph Distance Report

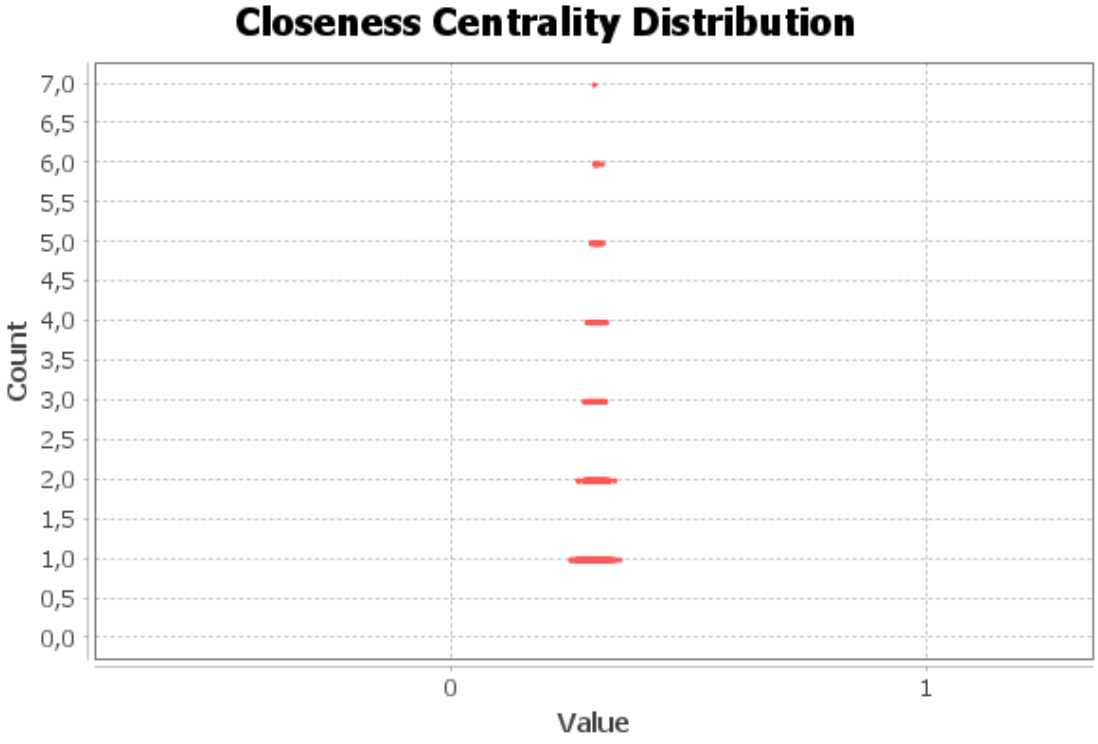
Parameters:

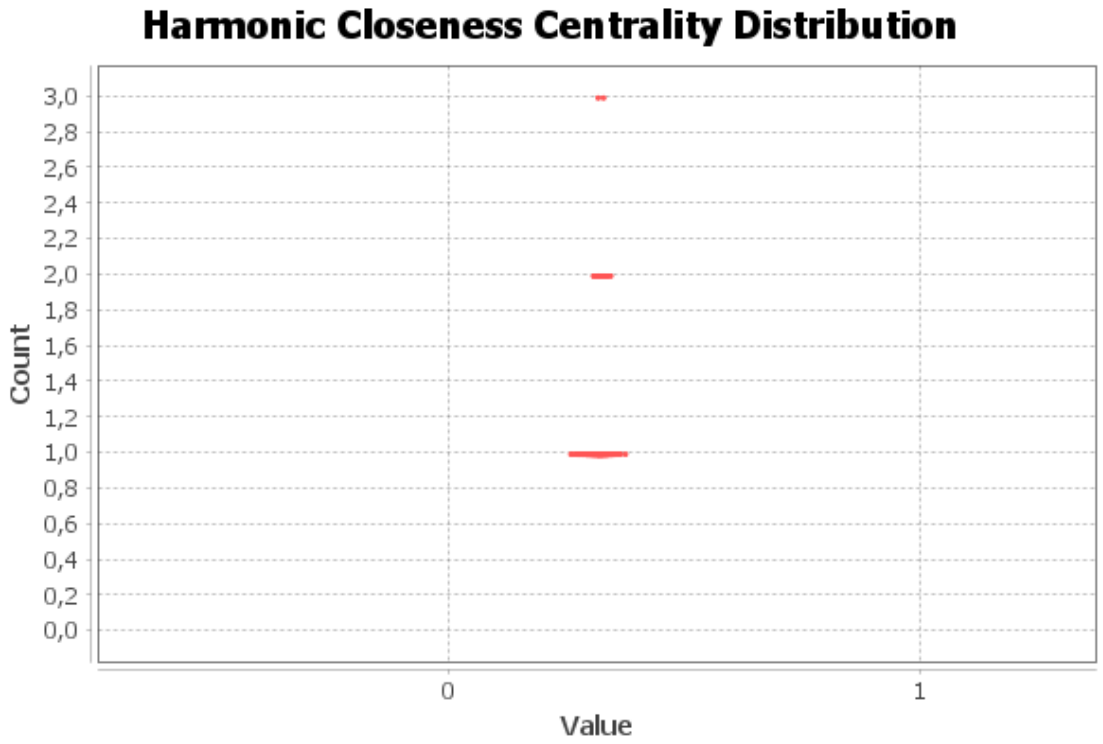
Network Interpretation: undirected

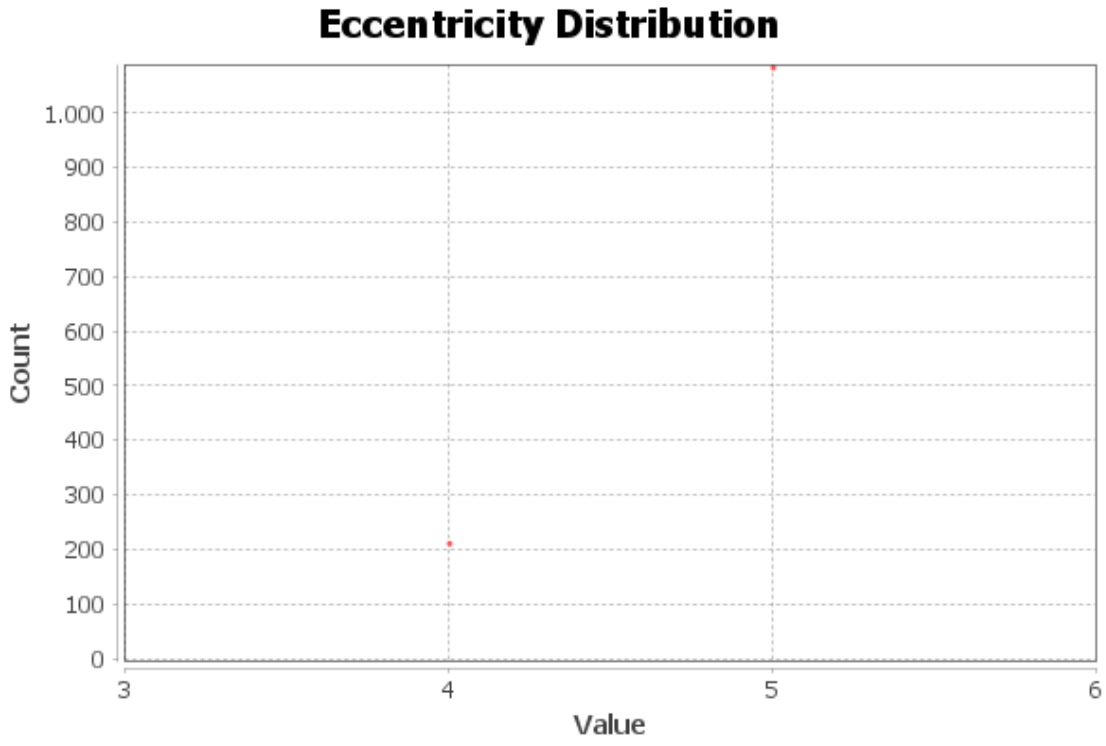
Results:

Diameter: 5
Radius: 4
Average Path length: 3.3372985136495528


Betweenness Centrality Distribution
Count
1,1
1,0
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
0,1
0,0
-0,1
1.000
2.000
3.000
4.000
5.000
6.000
7.000
Value


Closeness Centrality Distribution
Count
7,0
6,5
6,0
5,5
5,0
4,5
4,0
3,5
3,0
2,5
2,0
1,5
1,0
0,5
0,0
0
1
Value





Algorithm:

Ulrik Brandes, *A Faster Algorithm for Betweenness Centrality*, in Journal of Mathematical Sociology 25(2):163-177, (2001)

- Coeficiente de Clustering Medio

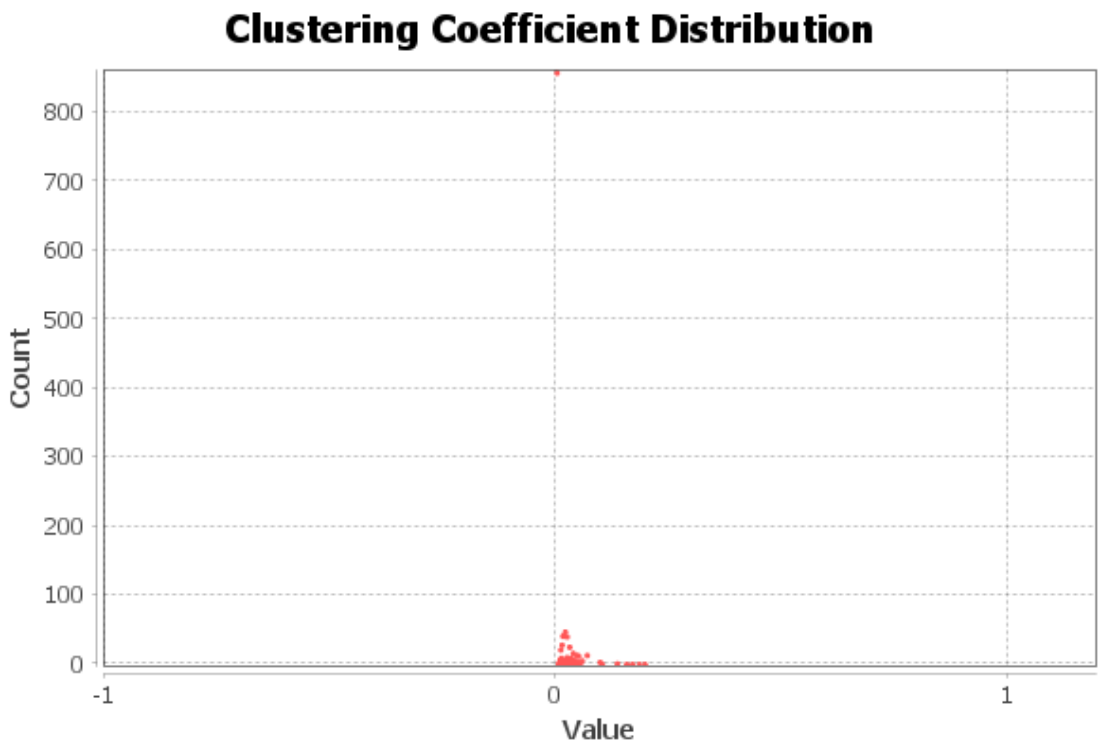
Clustering Coefficient Metric Report

Parameters:

Network Interpretation: undirected

Results:

Average Clustering Coefficient: 0,009
Total triangles: 208
The Average Clustering Coefficient is the mean value of individual coefficients.



Algorithm:

Matthieu Latapy, *Main-memory Triangle Computations for Very Large (Sparse (Power-Law)) Graphs*, in Theoretical Computer Science (TCS) 407 (1-3), pages 458-473, 2008

- Diámetro de la Red:

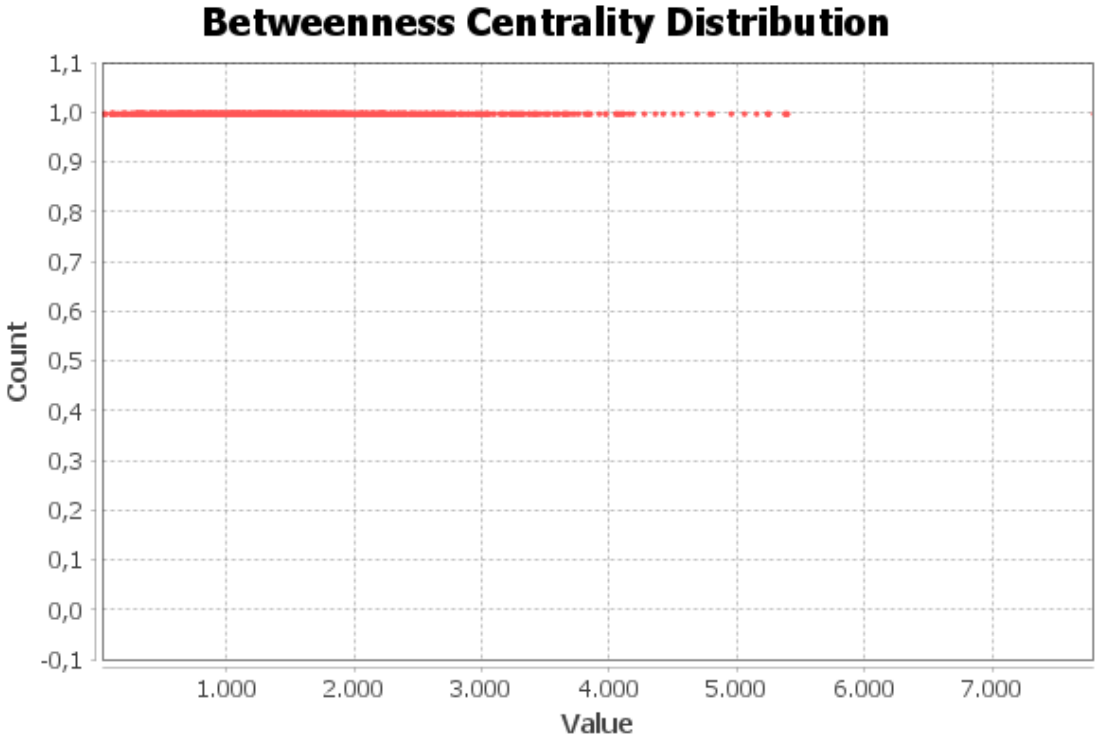
Graph Distance Report

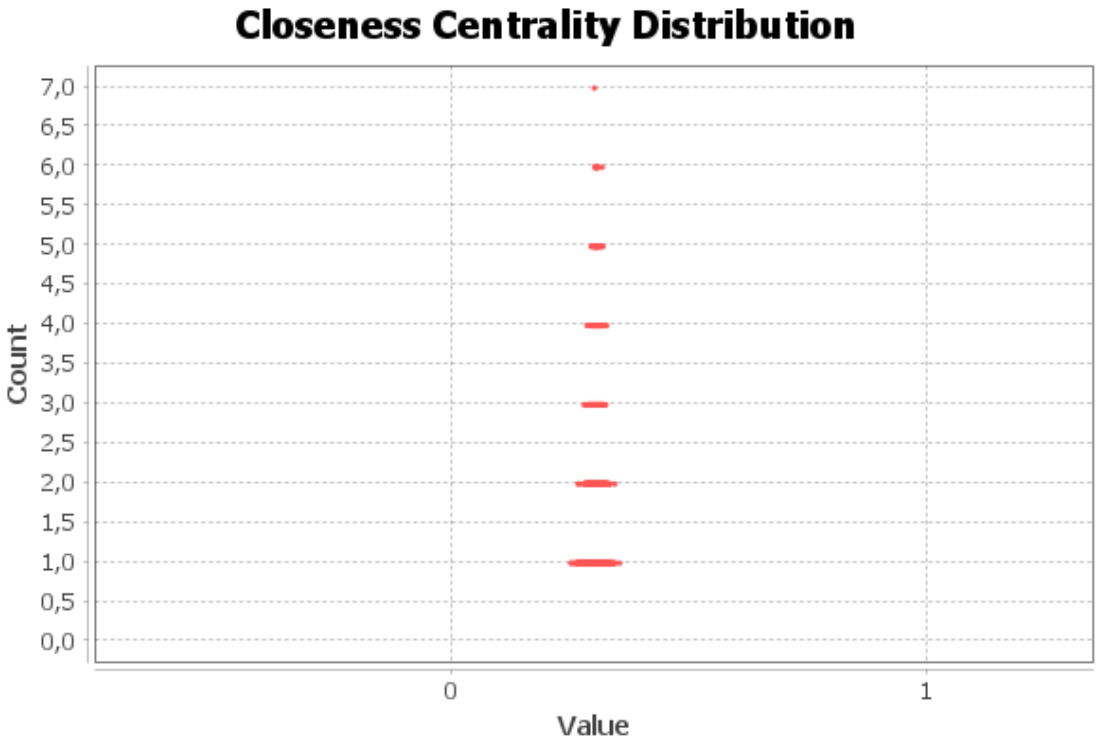
Parameters:

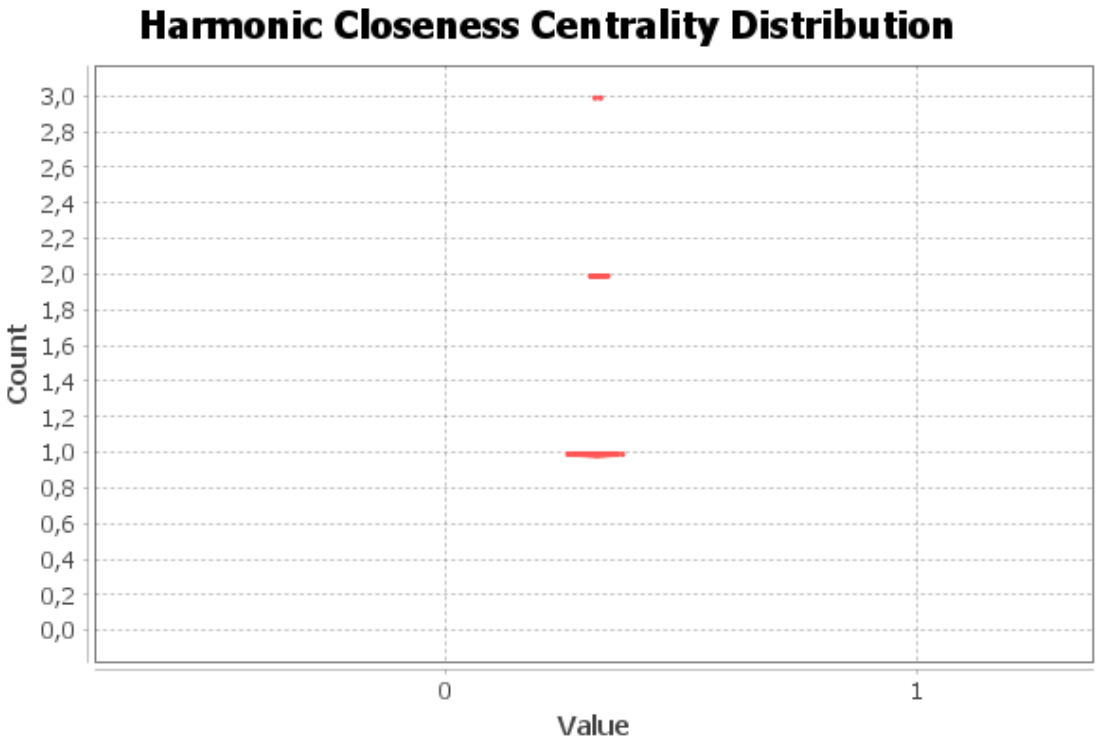
Network Interpretation: undirected

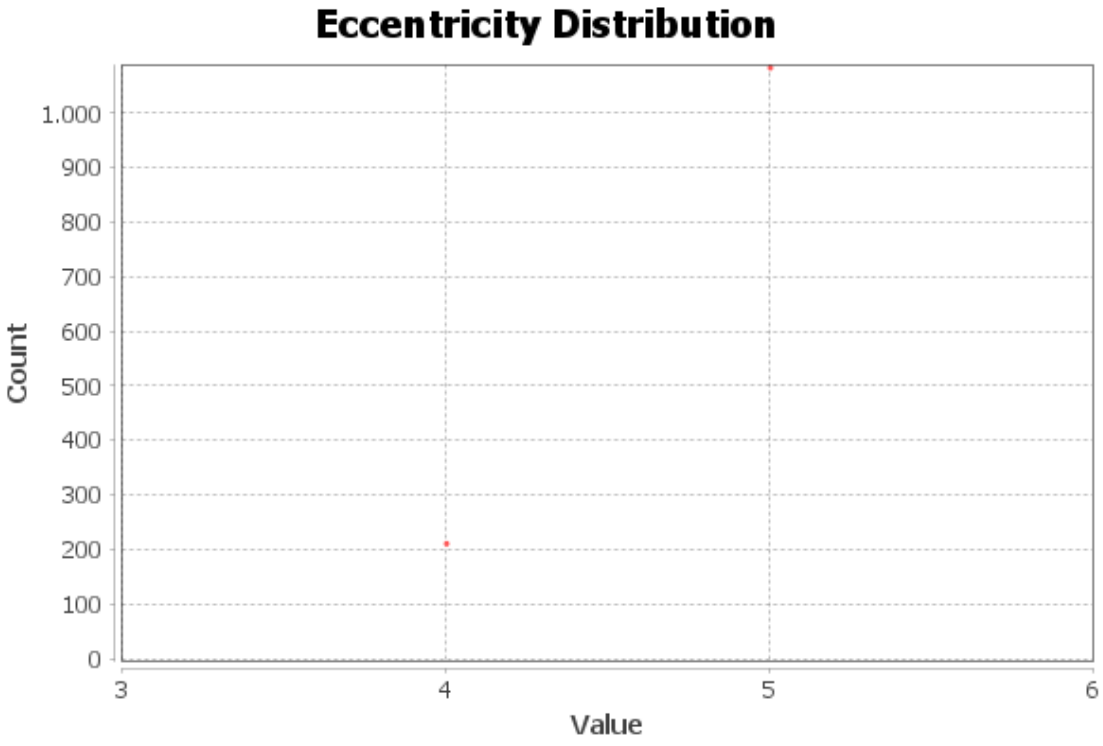
Results:

Diameter: 5
Radius: 4
Average Path length: 3.3372985136495528









Algorithm:

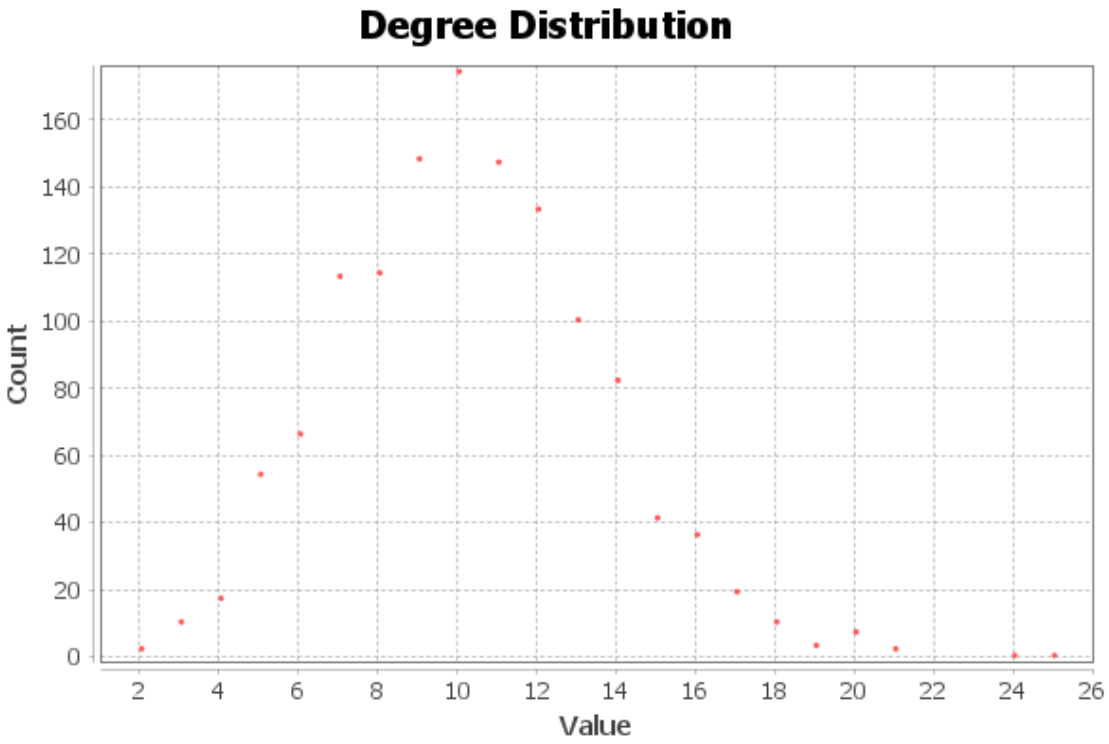
Ulrik Brandes, *A Faster Algorithm for Betweenness Centrality*, in Journal of Mathematical Sociology 25(2):163-177, (2001)

- Grado Medio:

Degree Report

Results:

Average Degree: 10,320

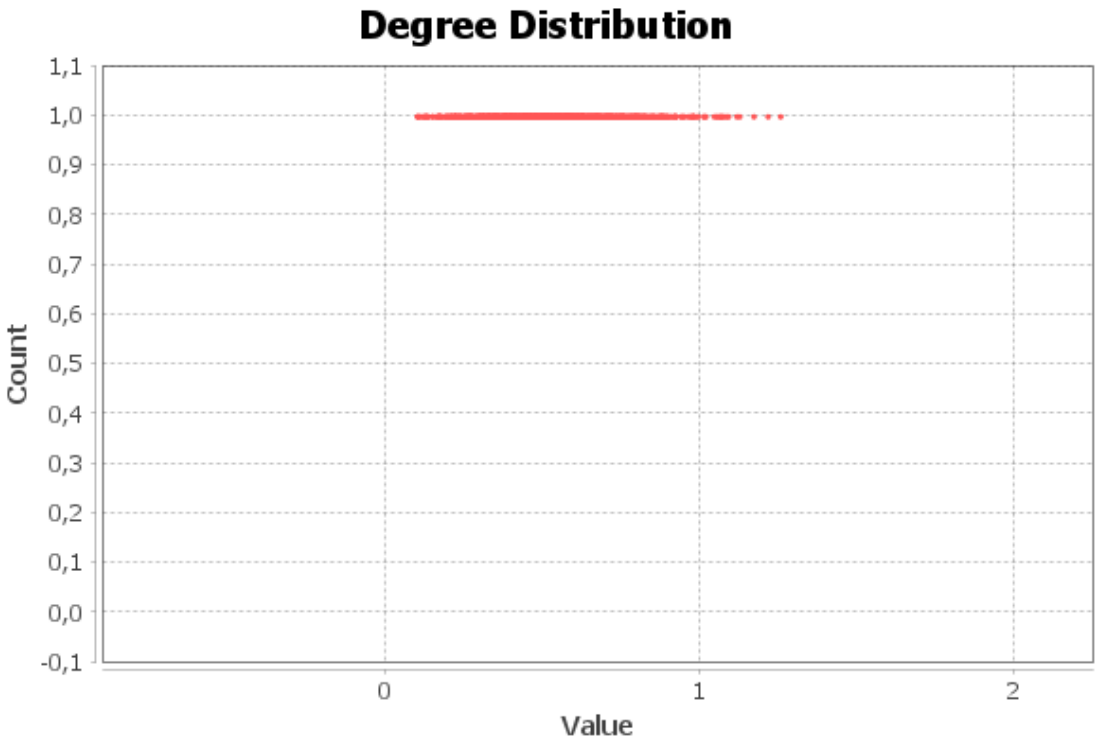


- Grado Medio con Pesos:

Weighted Degree Report

Results:

Average Weighted Degree: 0,520



- Número de componentes conexas fuerte y débilmente conectadas.

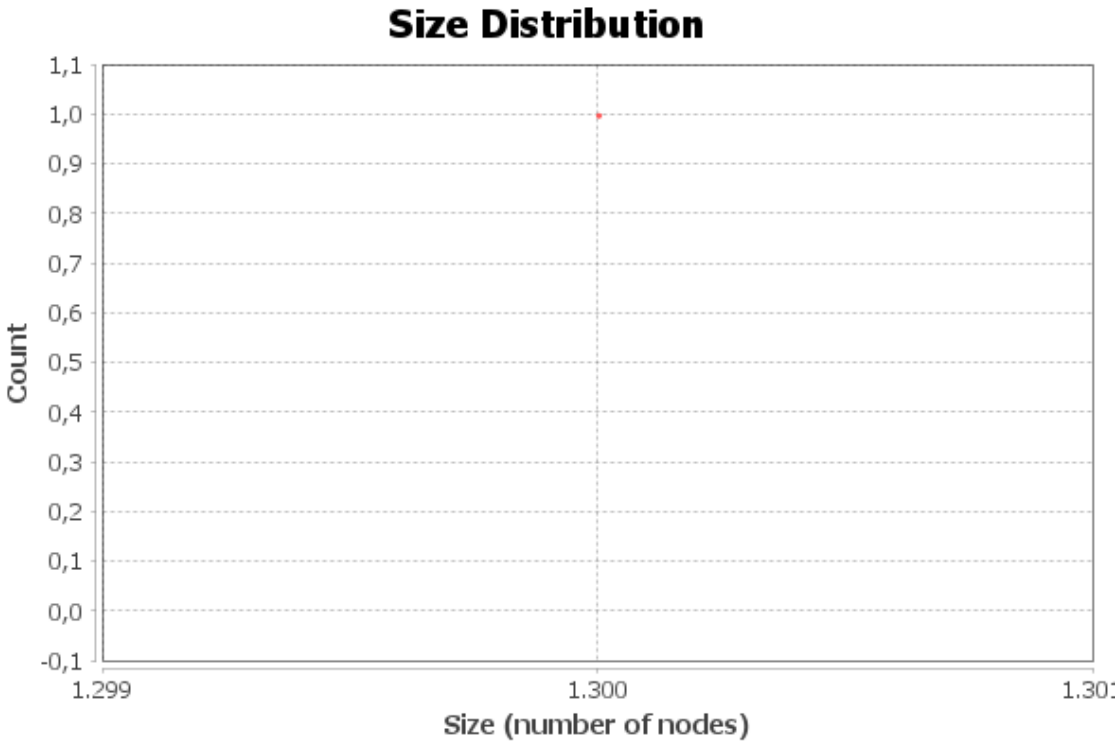
Connected Components Report

Parameters:

Network Interpretation: undirected

Results:

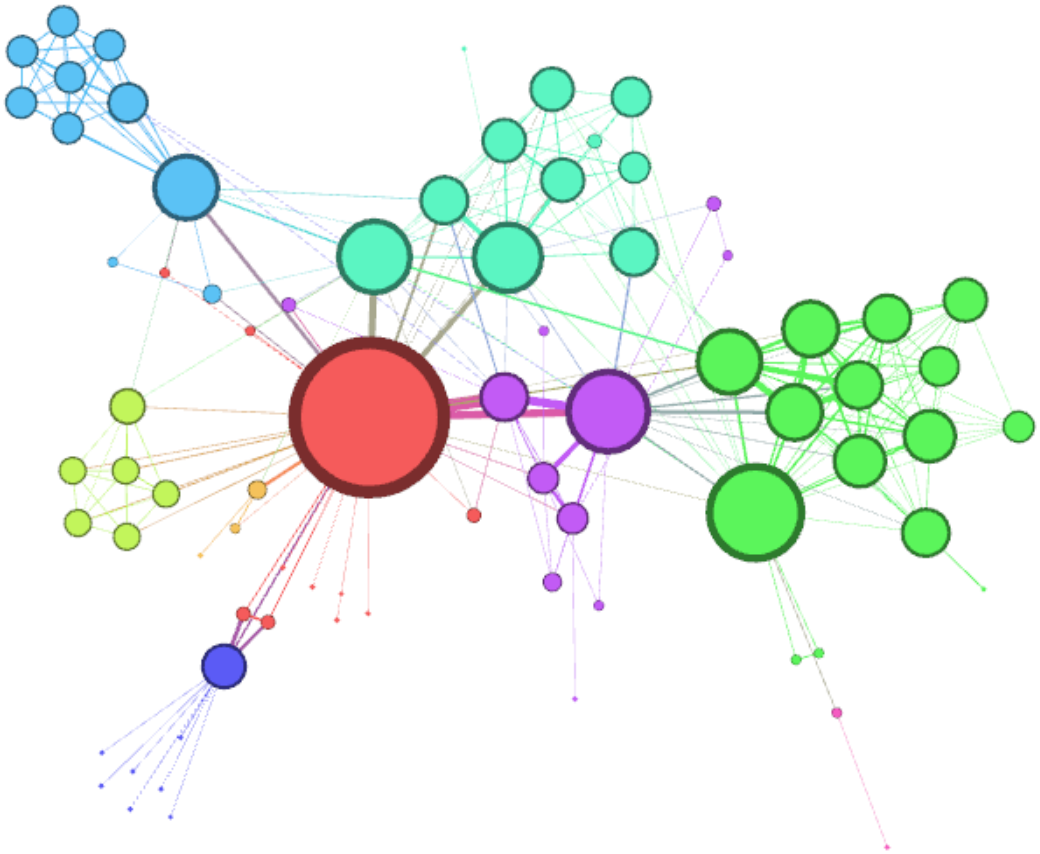
Number of Weakly Connected Components: 1

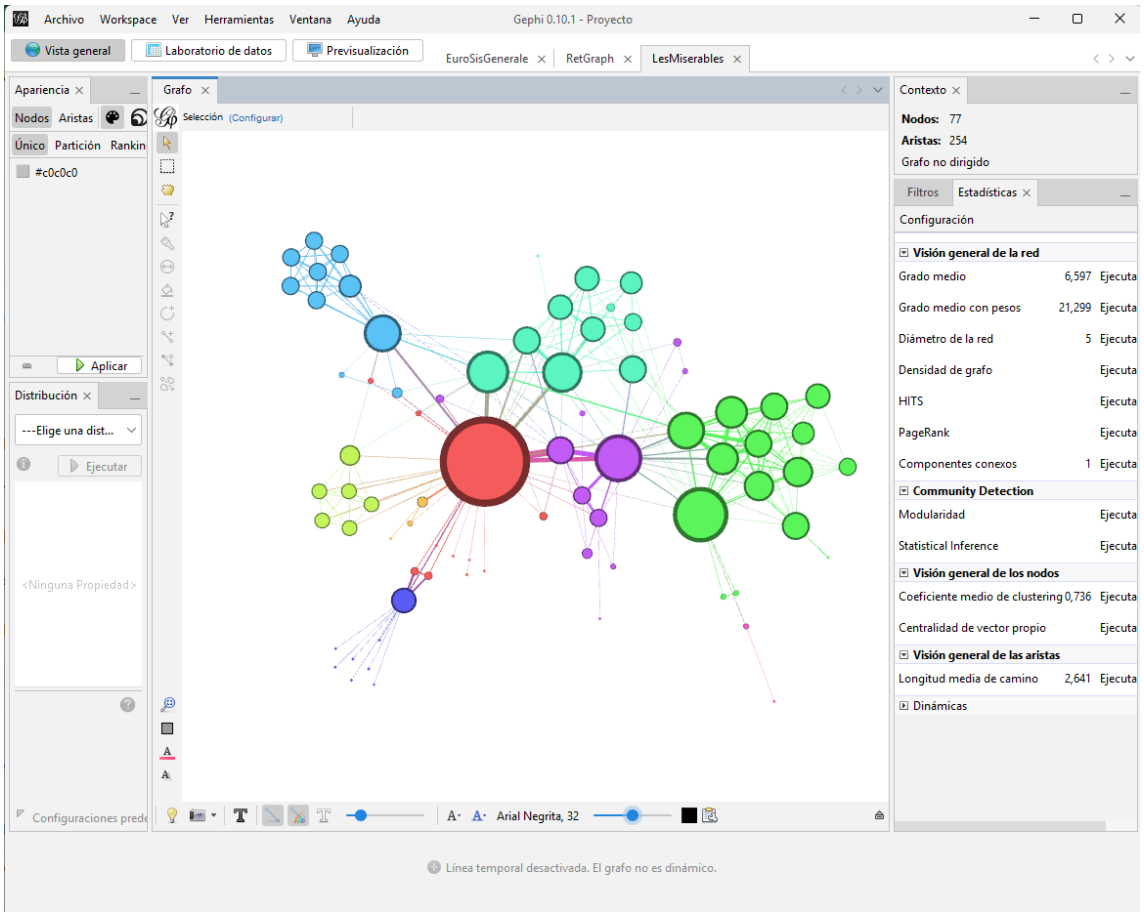


Algorithm:

Robert Tarjan, *Depth-First Search and Linear Graph Algorithms*, in SIAM Journal on Computing 1 (2): 146–160 (1972)

LesMiserables.gephi



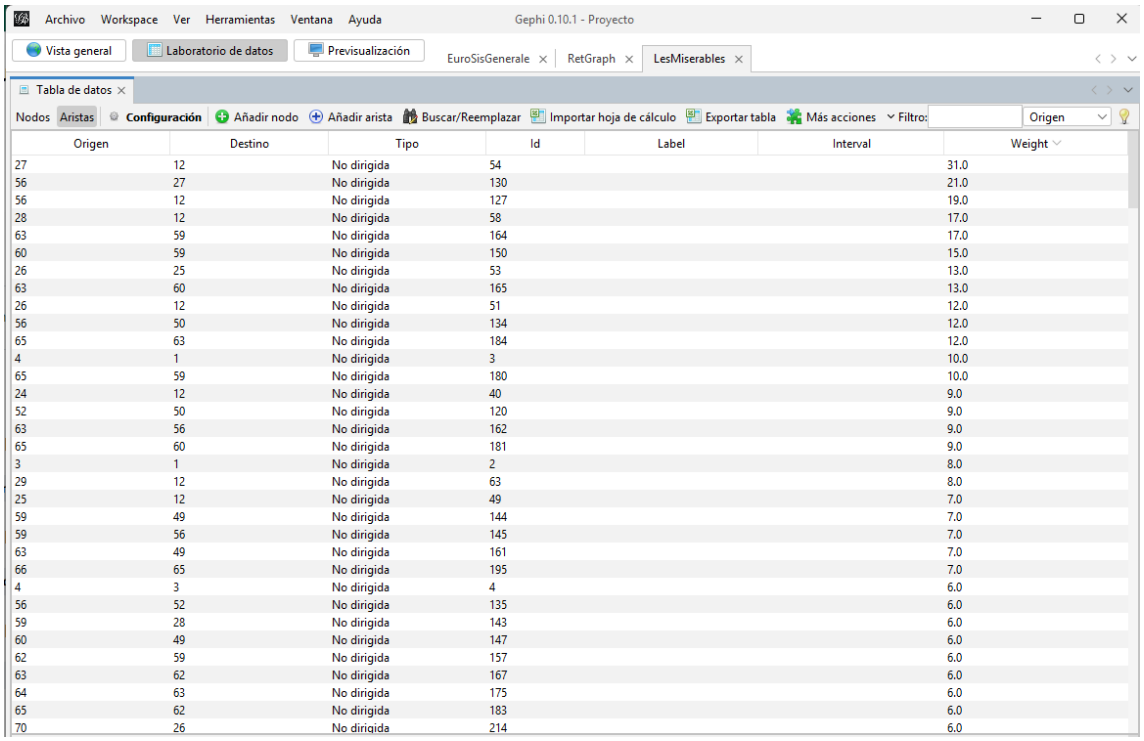


- Nodos: 77

- Aristas: 254

- Si se trata de un grafo dirigido o no.:

- Si se trata de un grafo con pesos o no.



Origen	Destino	Tipo	Id	Label	Interval	Weight
27	12	No dirigida	54			31.0
56	27	No dirigida	130			21.0
56	12	No dirigida	127			19.0
28	12	No dirigida	58			17.0
63	59	No dirigida	164			17.0
60	59	No dirigida	150			15.0
26	25	No dirigida	53			13.0
63	60	No dirigida	165			13.0
26	12	No dirigida	51			12.0
56	50	No dirigida	134			12.0
65	63	No dirigida	184			12.0
4	1	No dirigida	3			10.0
65	59	No dirigida	180			10.0
24	12	No dirigida	40			9.0
52	50	No dirigida	120			9.0
63	56	No dirigida	162			9.0
65	60	No dirigida	181			9.0
3	1	No dirigida	2			8.0
29	12	No dirigida	63			8.0
25	12	No dirigida	49			7.0
59	49	No dirigida	144			7.0
59	56	No dirigida	145			7.0
63	49	No dirigida	161			7.0
66	65	No dirigida	195			7.0
4	3	No dirigida	4			6.0
56	52	No dirigida	135			6.0
59	28	No dirigida	143			6.0
60	49	No dirigida	147			6.0
62	59	No dirigida	157			6.0
63	62	No dirigida	167			6.0
64	63	No dirigida	175			6.0
65	62	No dirigida	183			6.0
70	26	No dirigida	214			6.0

- Longitud Media de los Caminos entre nodos:

Graph Distance Report

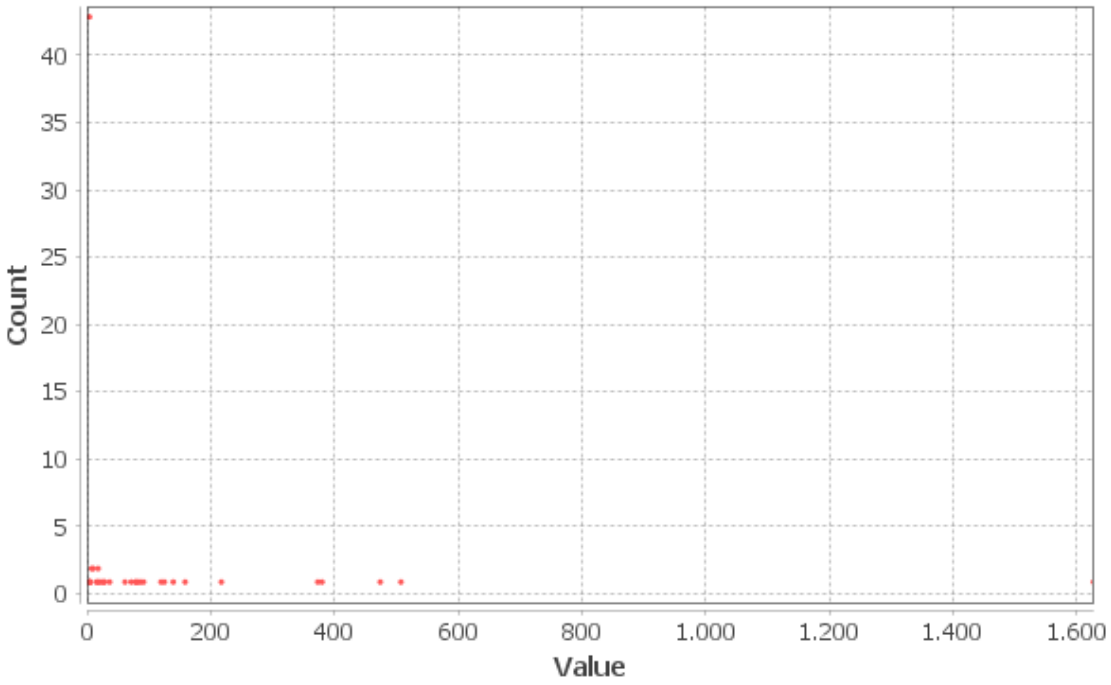
Parameters:

Network Interpretation: undirected

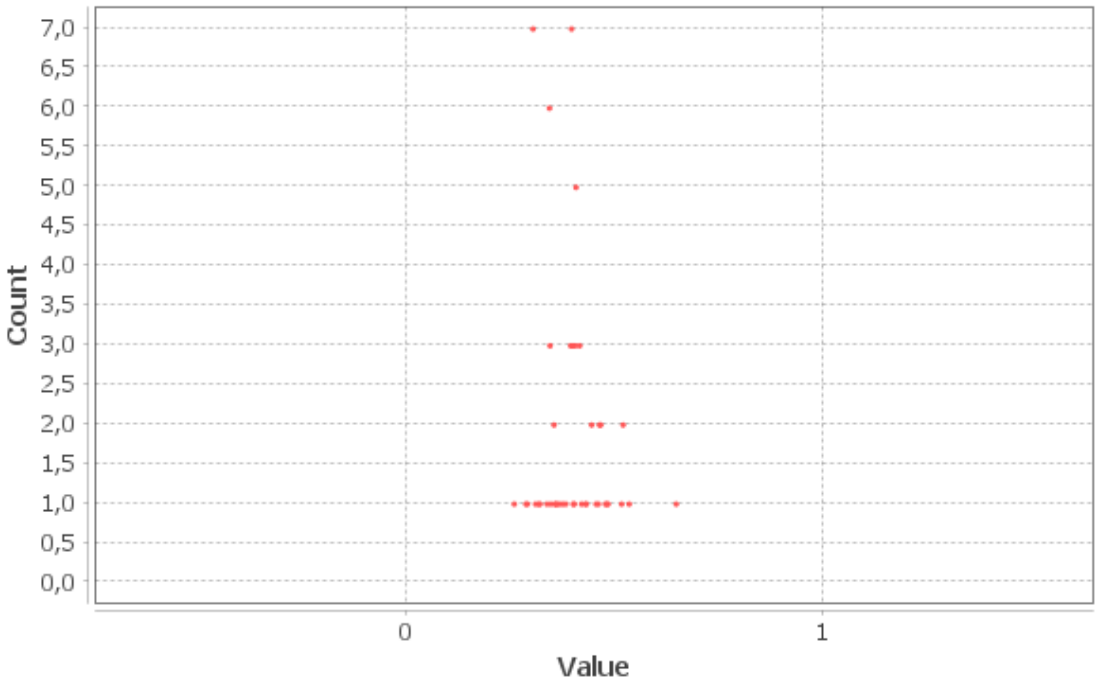
Results:

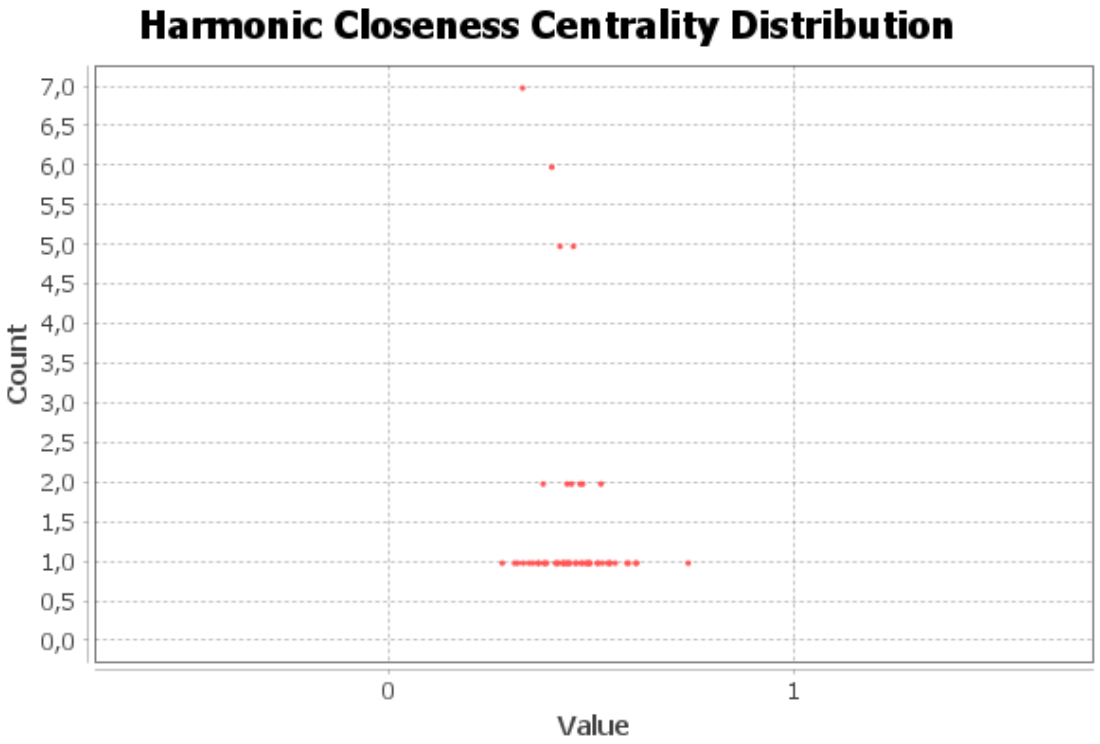
Diameter: 5
Radius: 3
Average Path length: 2.6411483253588517

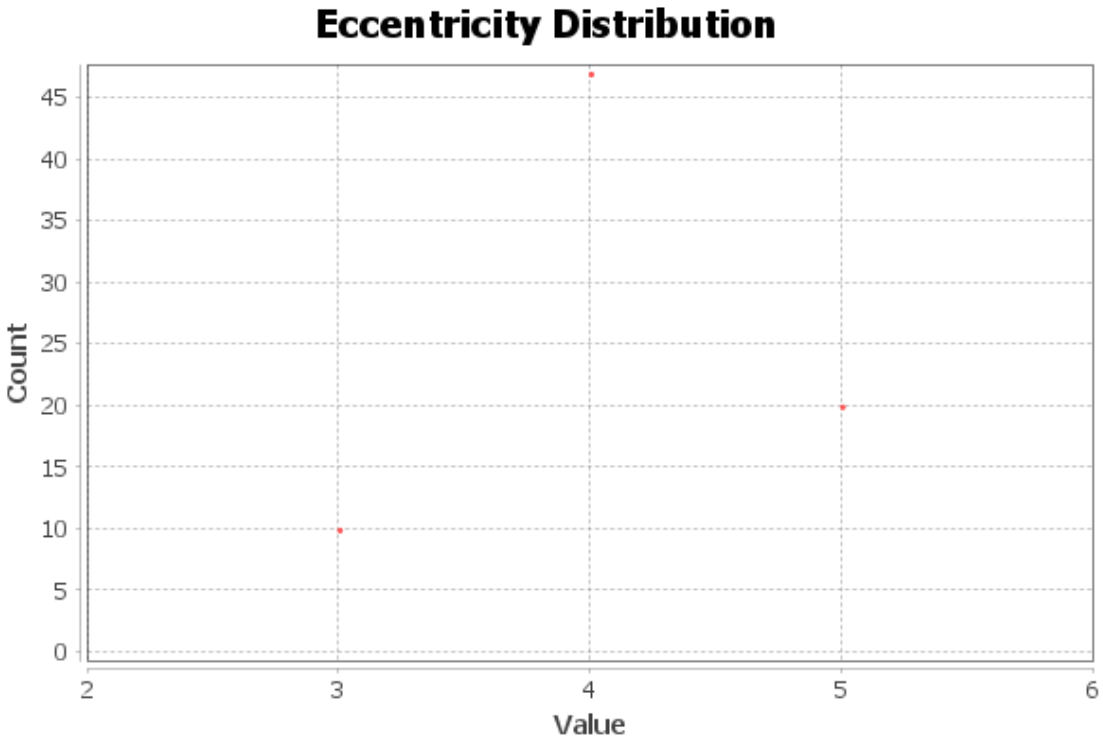
Betweenness Centrality Distribution



Closeness Centrality Distribution







Algorithm:

Ulrik Brandes, *A Faster Algorithm for Betweenness Centrality*, in Journal of Mathematical Sociology 25(2):163-177, (2001)

- Coeficiente de Clustering Medio:

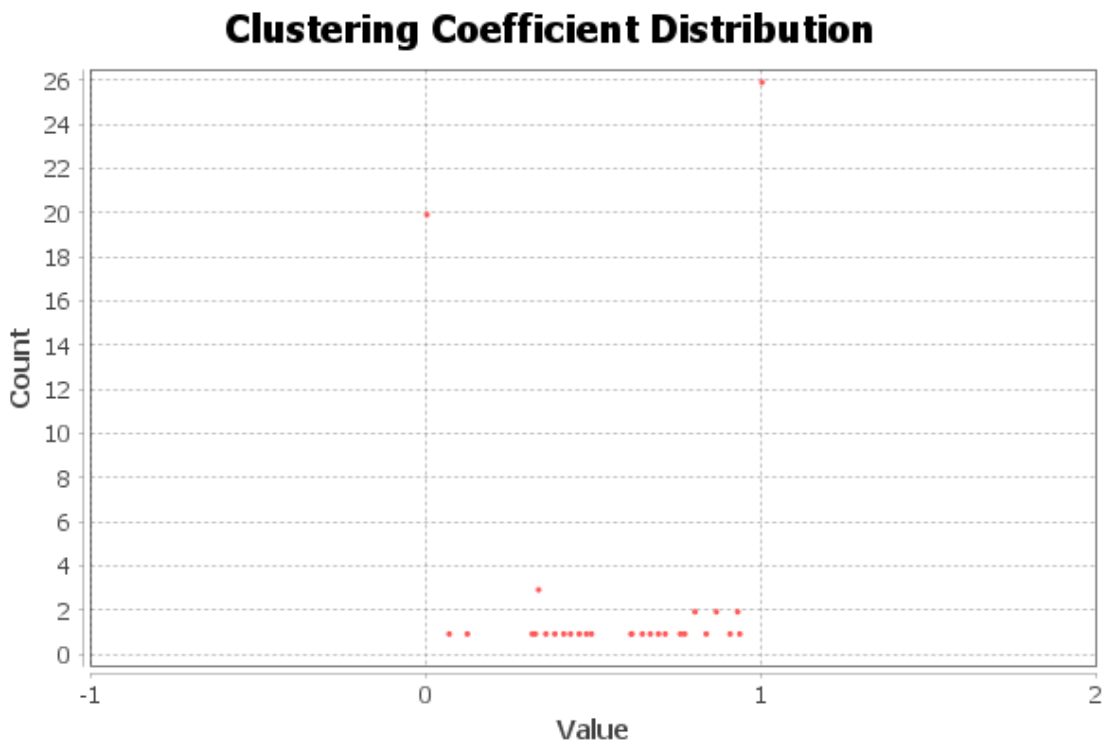
Clustering Coefficient Metric Report

Parameters:

Network Interpretation: undirected

Results:

Average Clustering Coefficient: 0,736
Total triangles: 467
The Average Clustering Coefficient is the mean value of individual coefficients.



Algorithm:

Matthieu Latapy, *Main-memory Triangle Computations for Very Large (Sparse (Power-Law)) Graphs*, in Theoretical Computer Science (TCS) 407 (1-3), pages 458-473, 2008

- Diámetro de la Red:

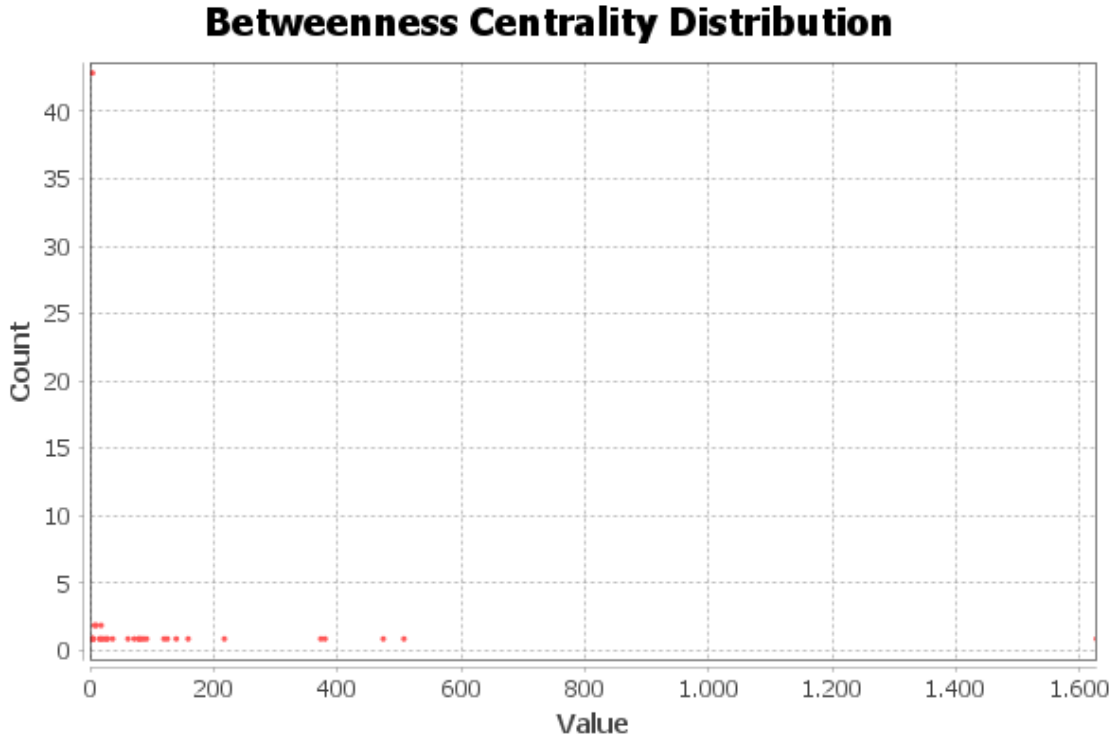
Graph Distance Report

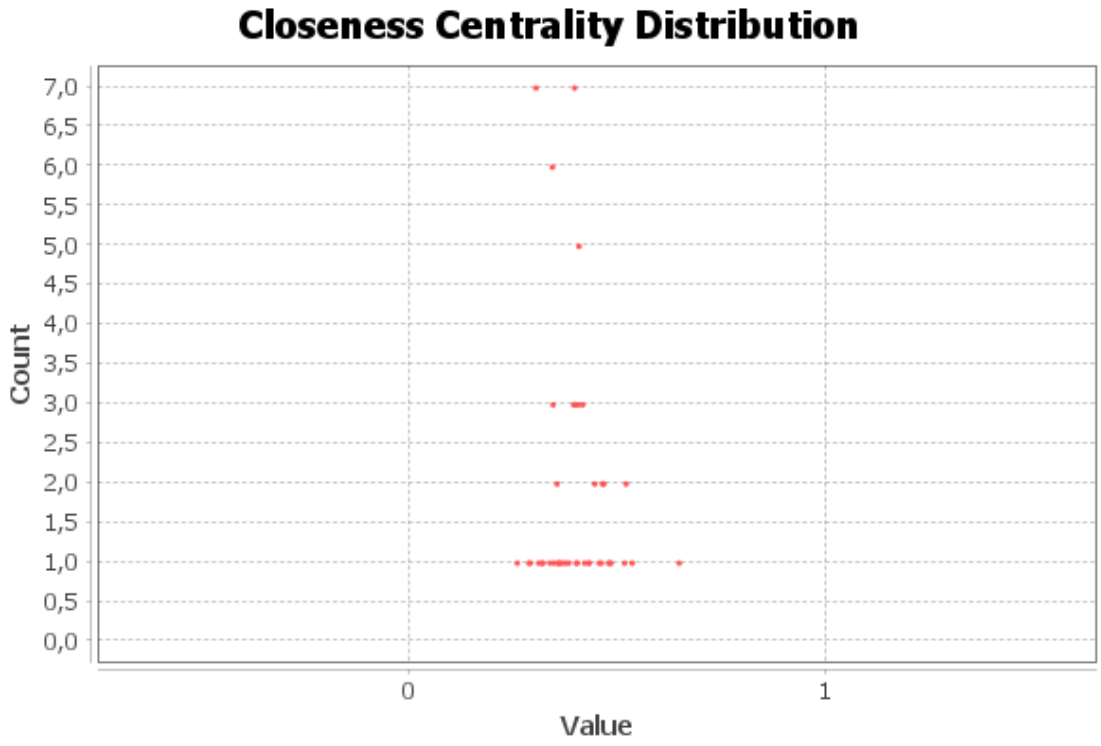
Parameters:

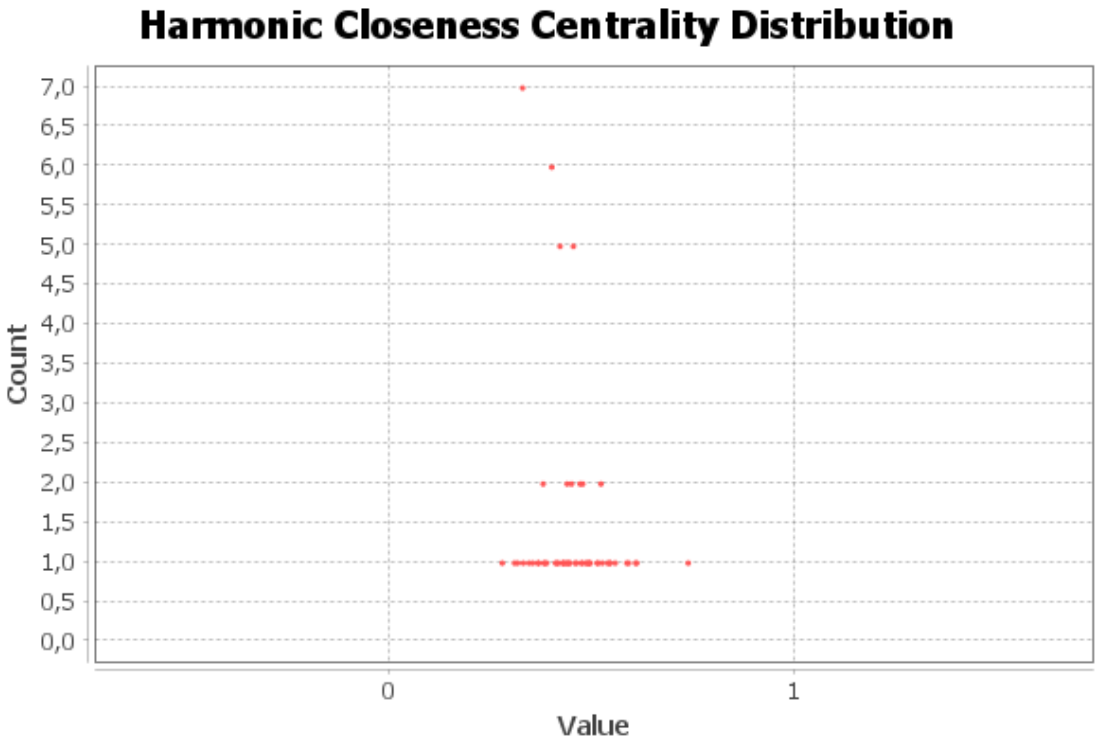
Network Interpretation: undirected

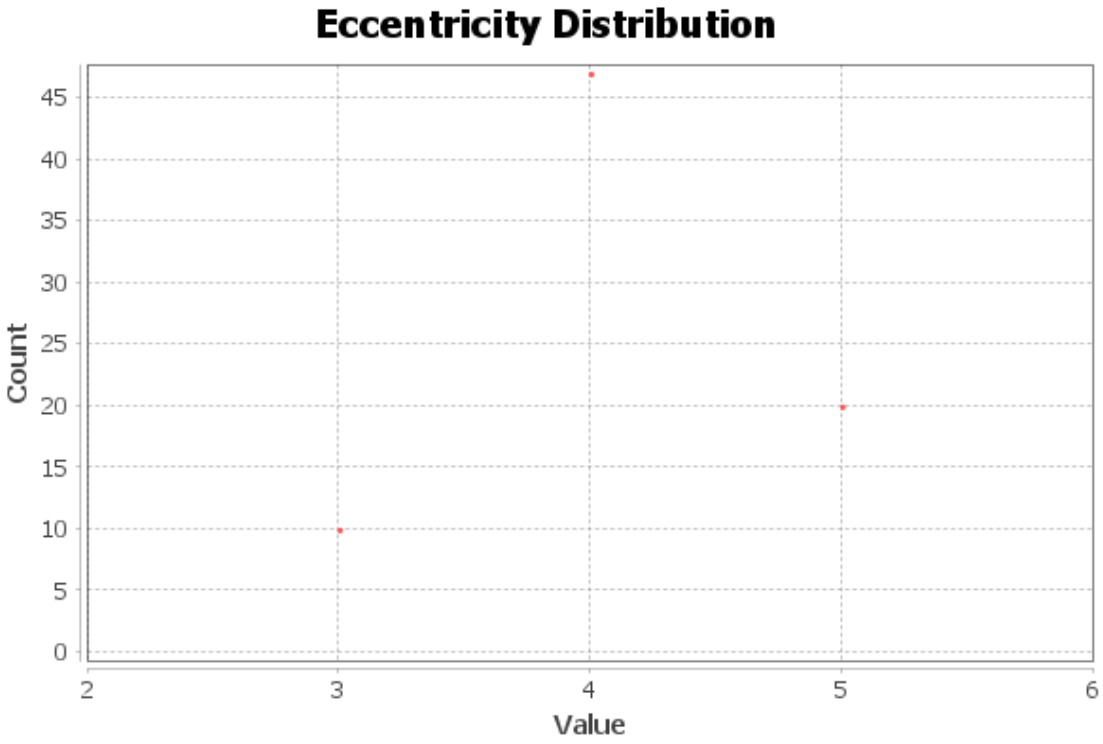
Results:

Diameter: 5
Radius: 3
Average Path length: 2.6411483253588517









Algorithm:

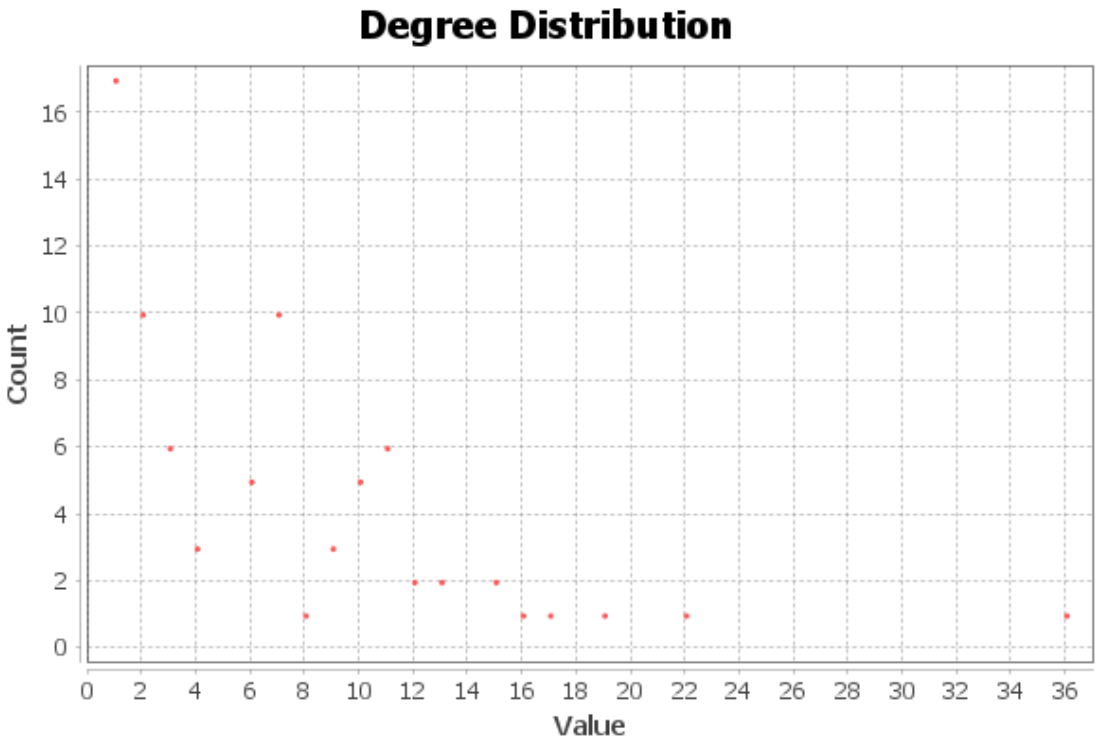
Ulrik Brandes, *A Faster Algorithm for Betweenness Centrality*, in Journal of Mathematical Sociology 25(2):163-177, (2001)

- Grado Medio:

Degree Report

Results:

Average Degree: 6,597

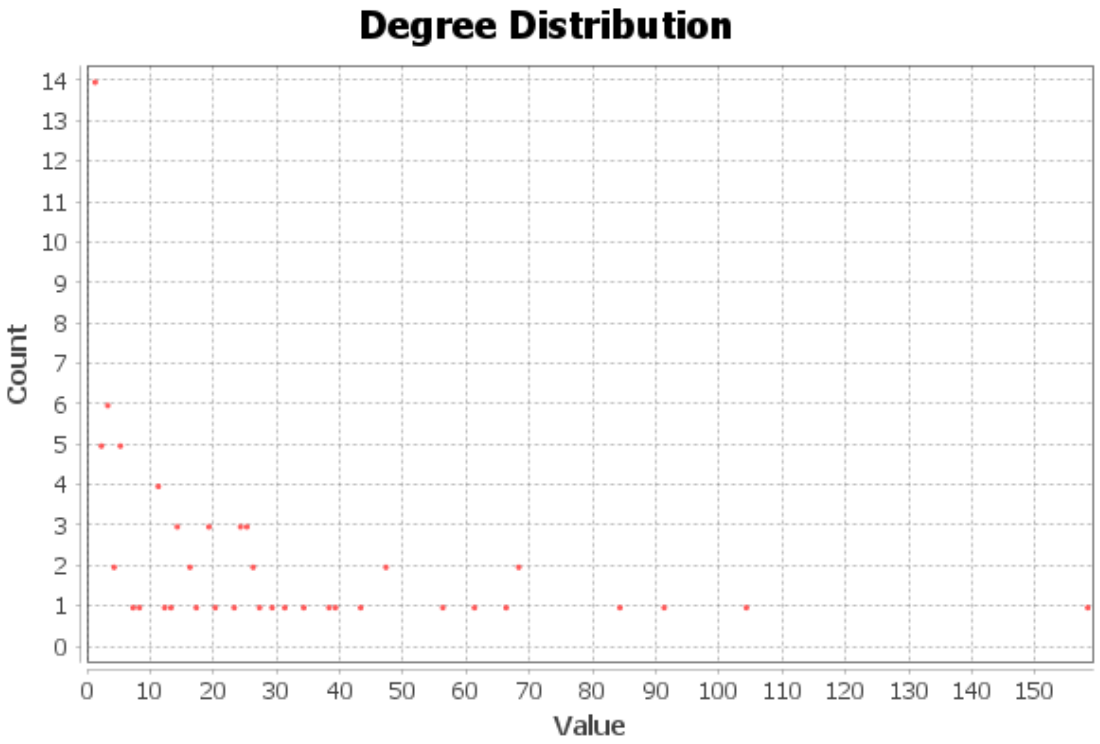


- Grado Medio con Pesos:

Weighted Degree Report

Results:

Average Weighted Degree: 21,299

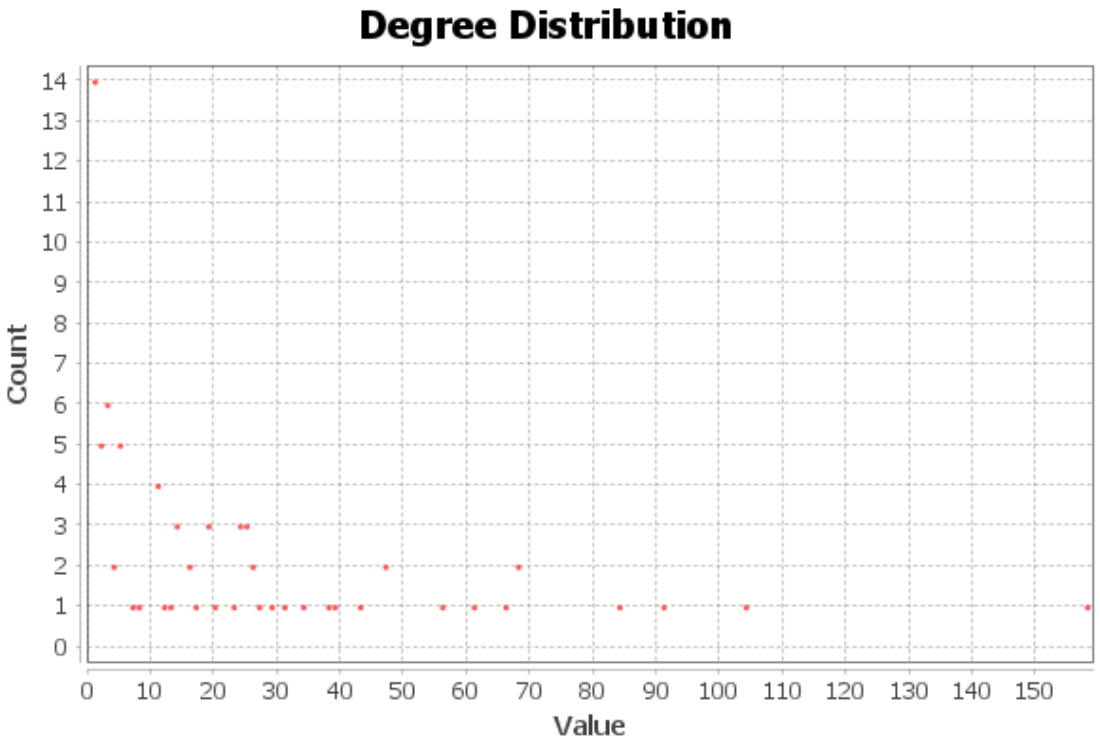


- Número de componentes conexas fuerte y débilmente conectadas:

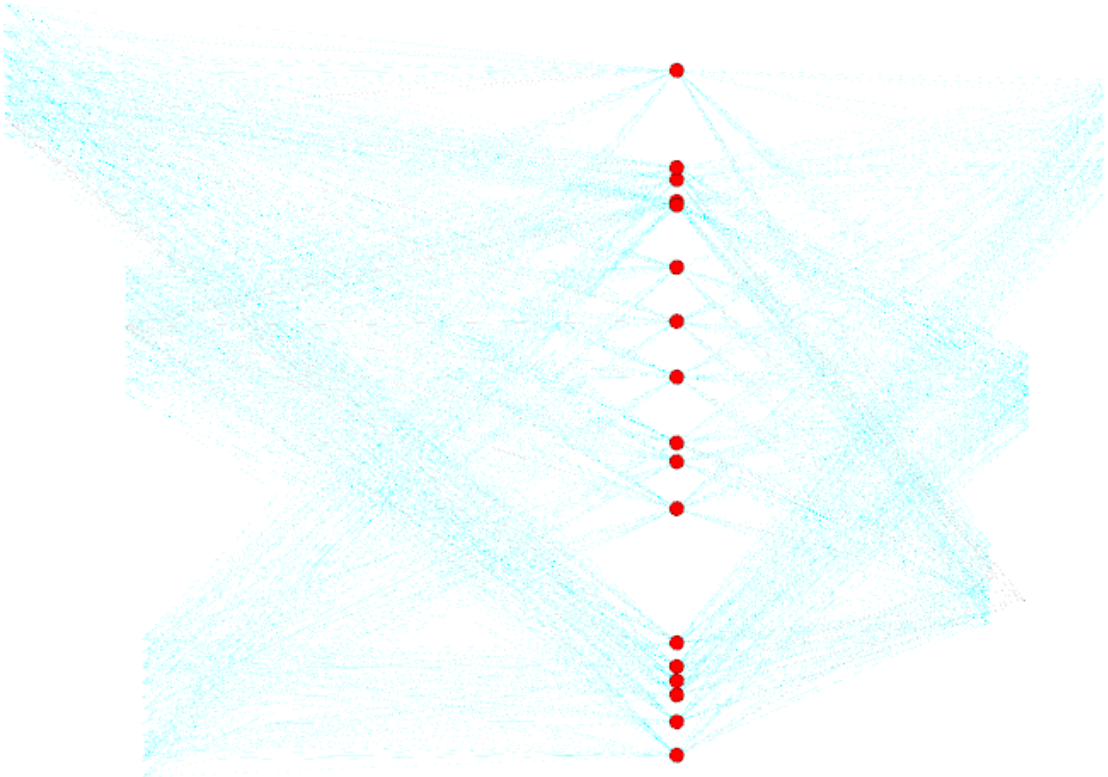
Weighted Degree Report

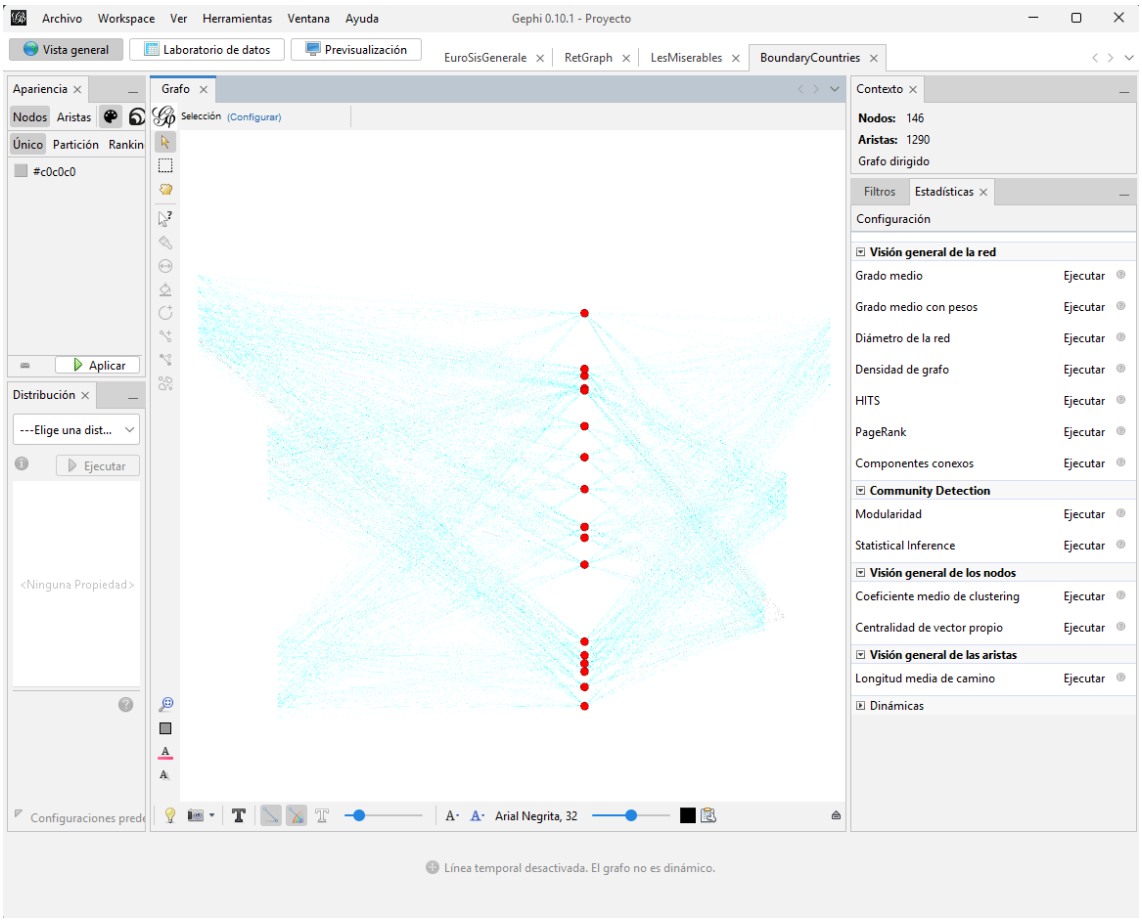
Results:

Average Weighted Degree: 21,299



BoundaryCountries.gephi



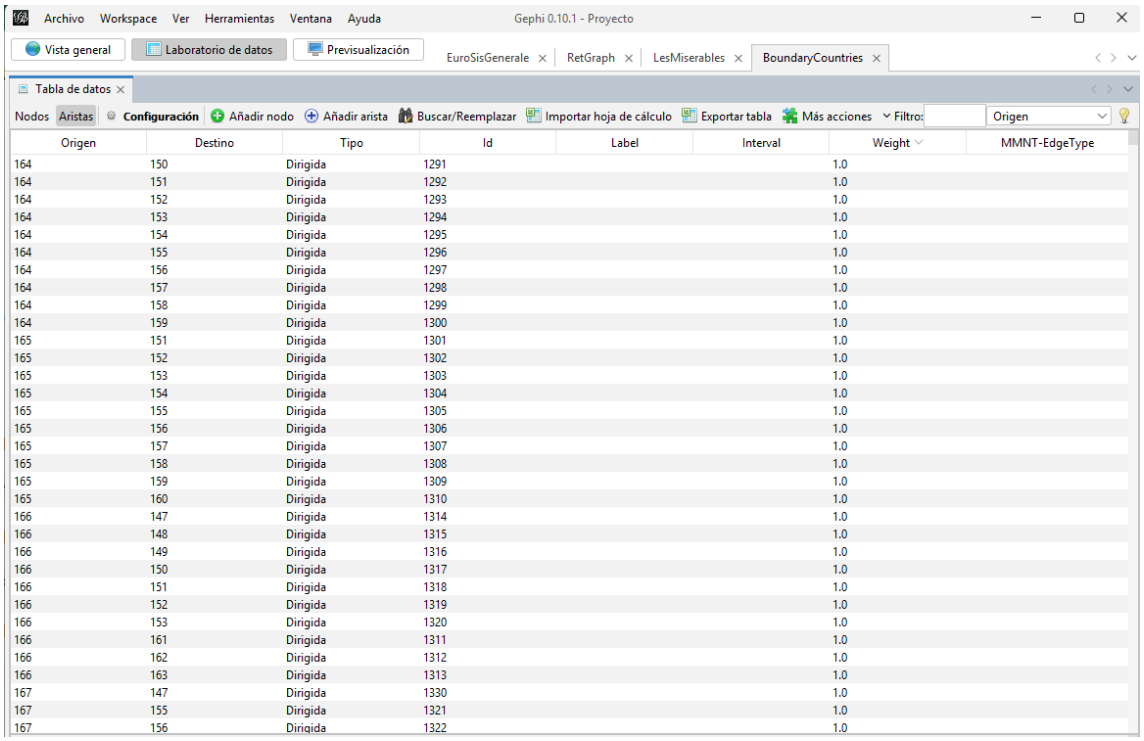


- Nodos: 146

- Aristas: 1290

- Si se trata de un grafo dirigido o no: Si

- Si se trata de un grafo con pesos o no: No



Origen	Destino	Tipo	Id	Label	Interval	Weight	MMNT-EdgeType
164	150	Dirigida	1291			1.0	
164	151	Dirigida	1292			1.0	
164	152	Dirigida	1293			1.0	
164	153	Dirigida	1294			1.0	
164	154	Dirigida	1295			1.0	
164	155	Dirigida	1296			1.0	
164	156	Dirigida	1297			1.0	
164	157	Dirigida	1298			1.0	
164	158	Dirigida	1299			1.0	
164	159	Dirigida	1300			1.0	
165	151	Dirigida	1301			1.0	
165	152	Dirigida	1302			1.0	
165	153	Dirigida	1303			1.0	
165	154	Dirigida	1304			1.0	
165	155	Dirigida	1305			1.0	
165	156	Dirigida	1306			1.0	
165	157	Dirigida	1307			1.0	
165	158	Dirigida	1308			1.0	
165	159	Dirigida	1309			1.0	
165	160	Dirigida	1310			1.0	
166	147	Dirigida	1314			1.0	
166	148	Dirigida	1315			1.0	
166	149	Dirigida	1316			1.0	
166	150	Dirigida	1317			1.0	
166	151	Dirigida	1318			1.0	
166	152	Dirigida	1319			1.0	
166	153	Dirigida	1320			1.0	
166	161	Dirigida	1311			1.0	
166	162	Dirigida	1312			1.0	
166	163	Dirigida	1313			1.0	
167	147	Dirigida	1330			1.0	
167	155	Dirigida	1321			1.0	
167	156	Dirigida	1322			1.0	

- Longitud Media de los Caminos entre nodos:

Graph Distance Report

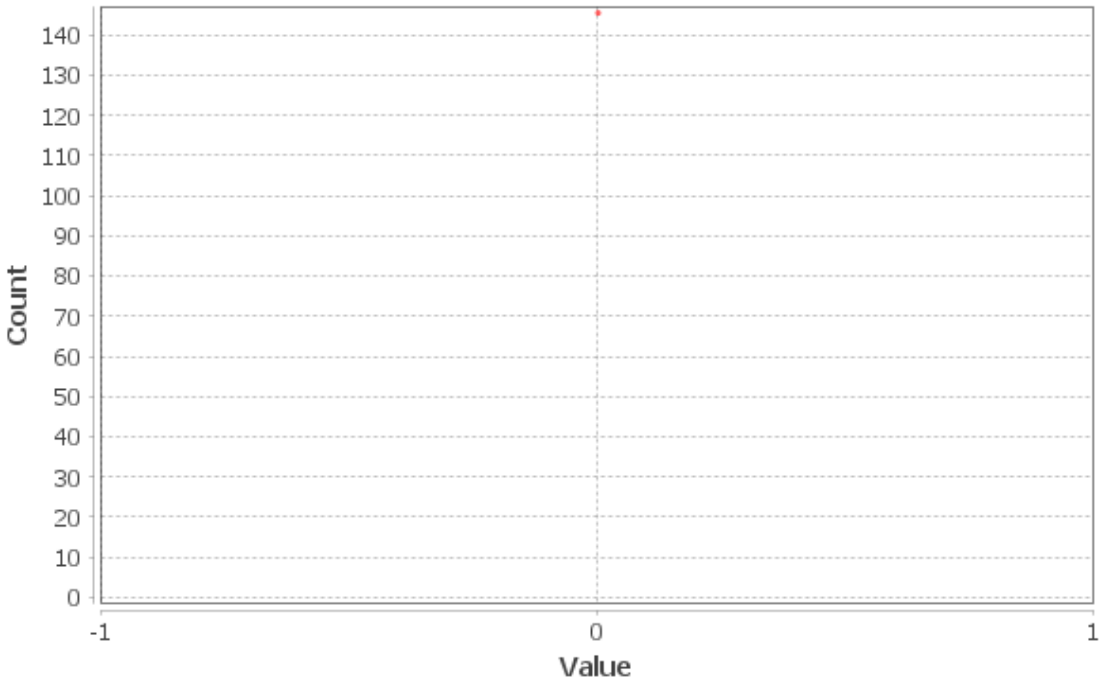
Parameters:

Network Interpretation: directed

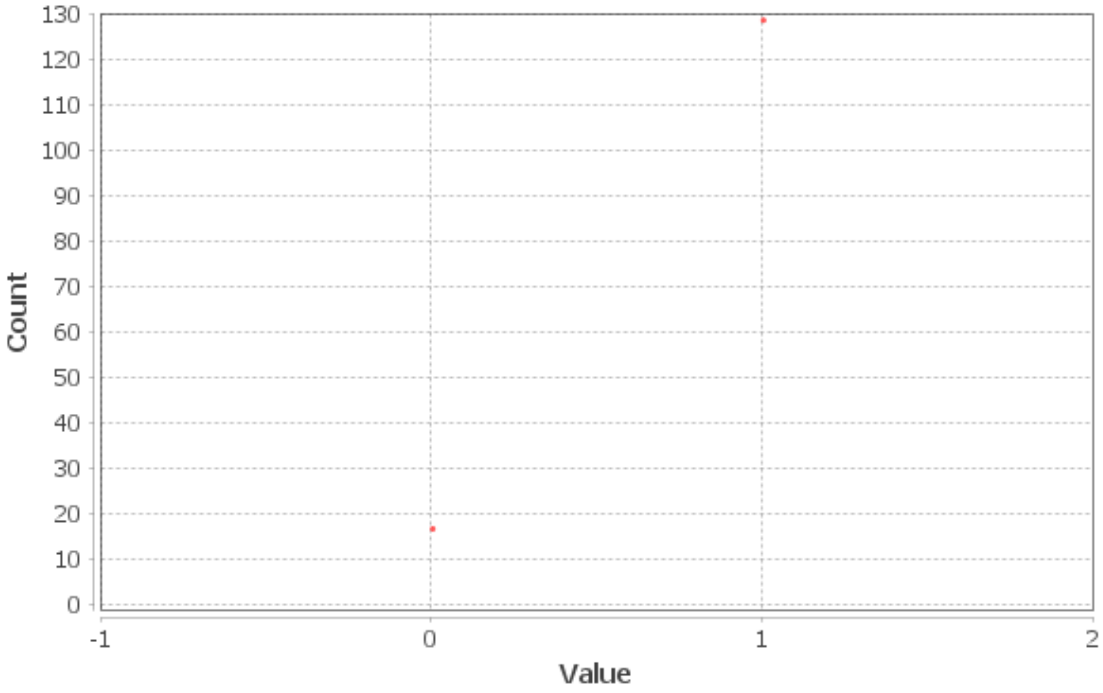
Results:

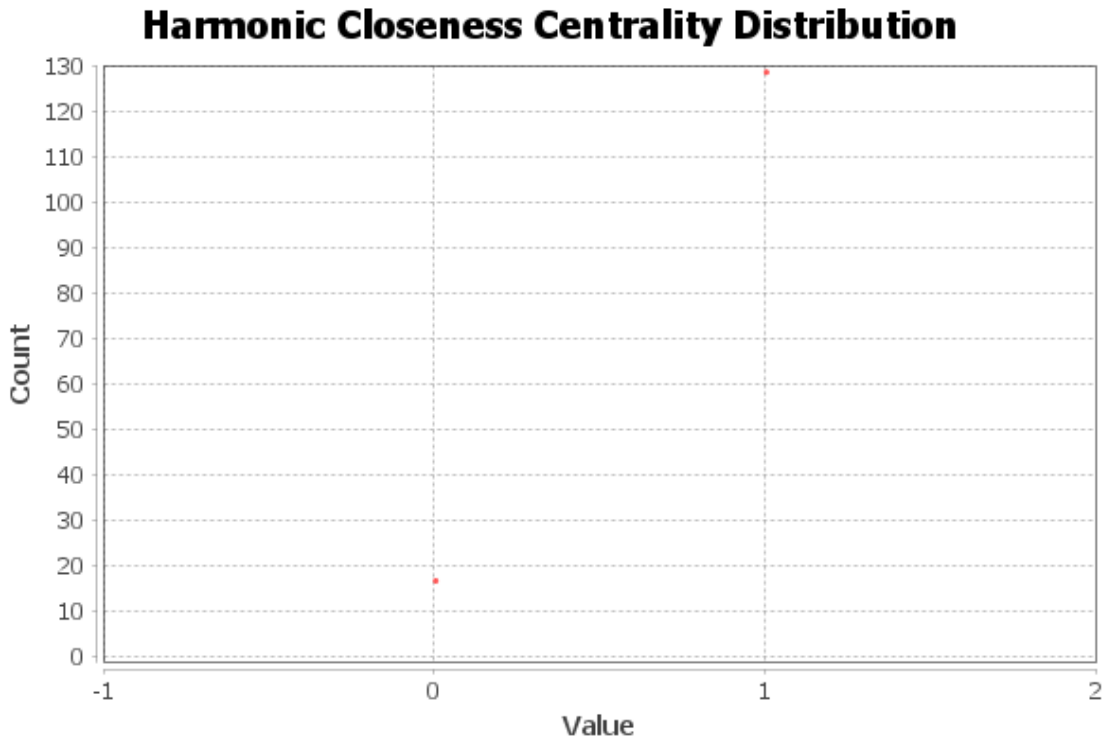
Diameter: 1
Radius: 0
Average Path length: 1.0

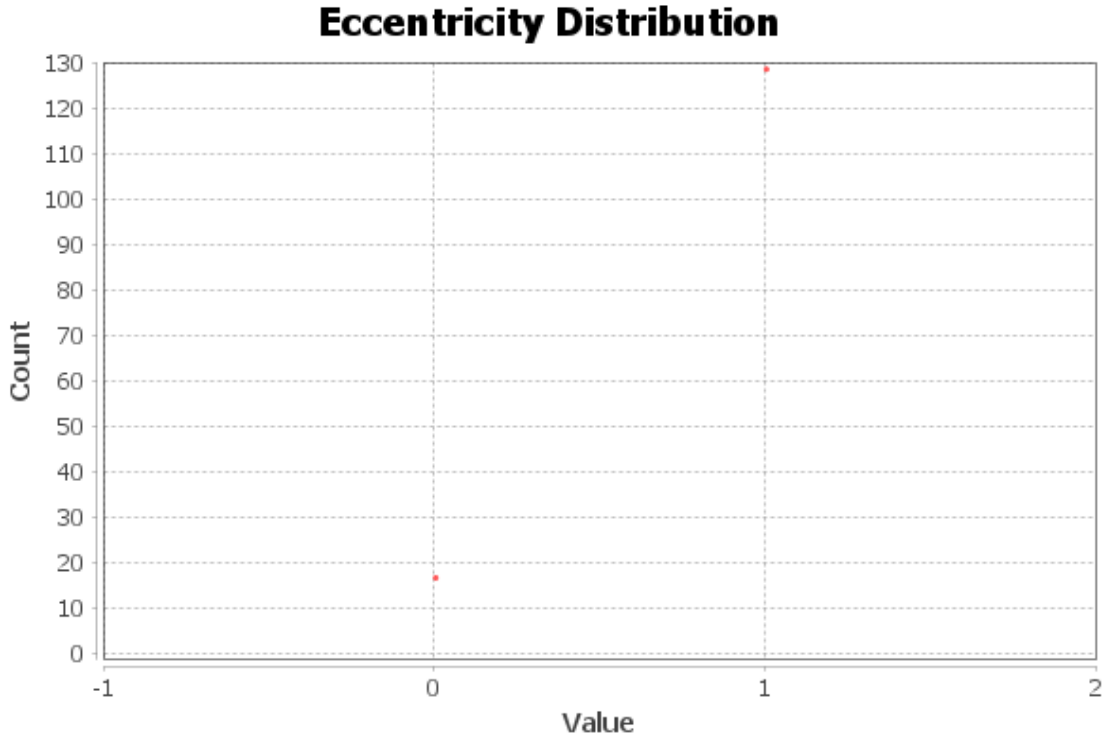
Betweenness Centrality Distribution



Closeness Centrality Distribution







Algorithm:

Ulrik Brandes, *A Faster Algorithm for Betweenness Centrality*, in Journal of Mathematical Sociology 25(2):163-177, (2001)

- Coeficiente de Clustering Medio:

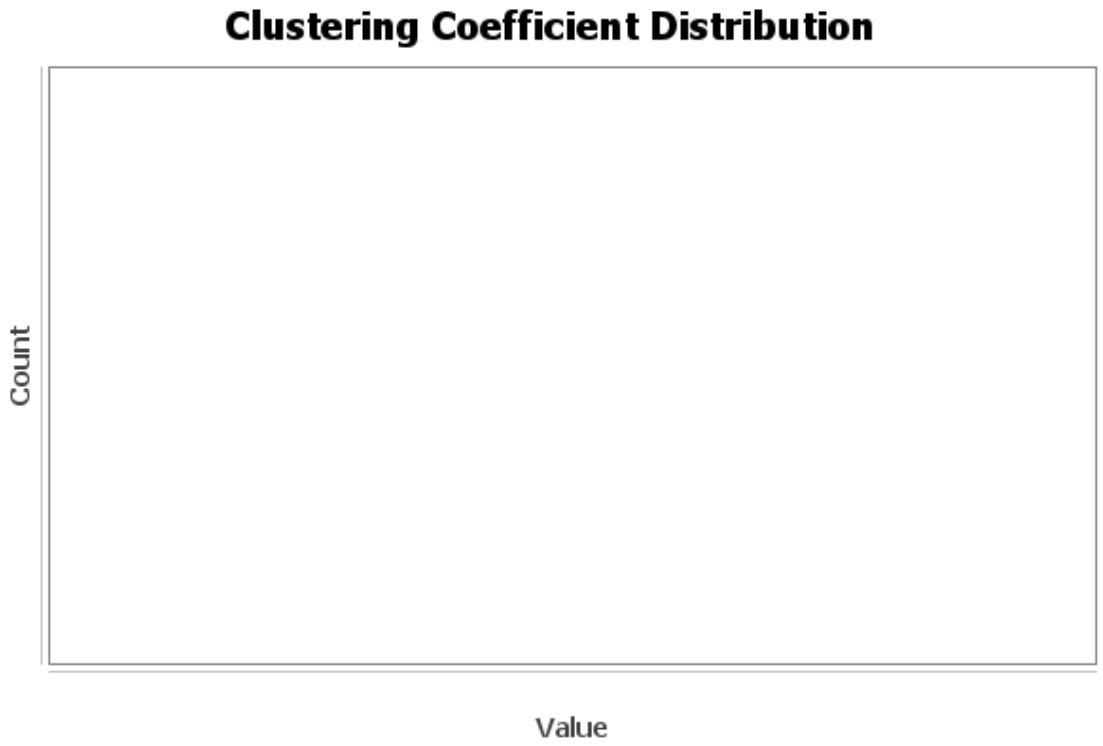
Clustering Coefficient Metric Report

Parameters:

Network Interpretation: directed

Results:

Average Clustering Coefficient: 0,000
The Average Clustering Coefficient is the mean value of individual coefficients.



Algorithm:

Simple and slow brute force.

- Diámetro de la Red:

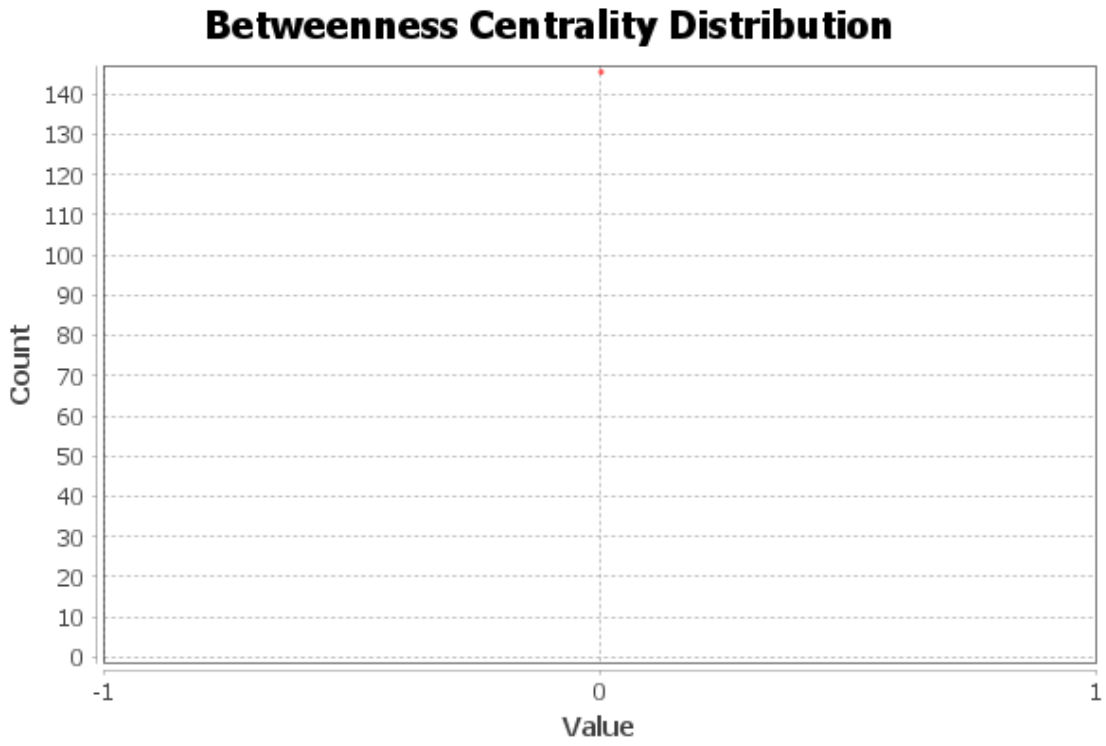
Graph Distance Report

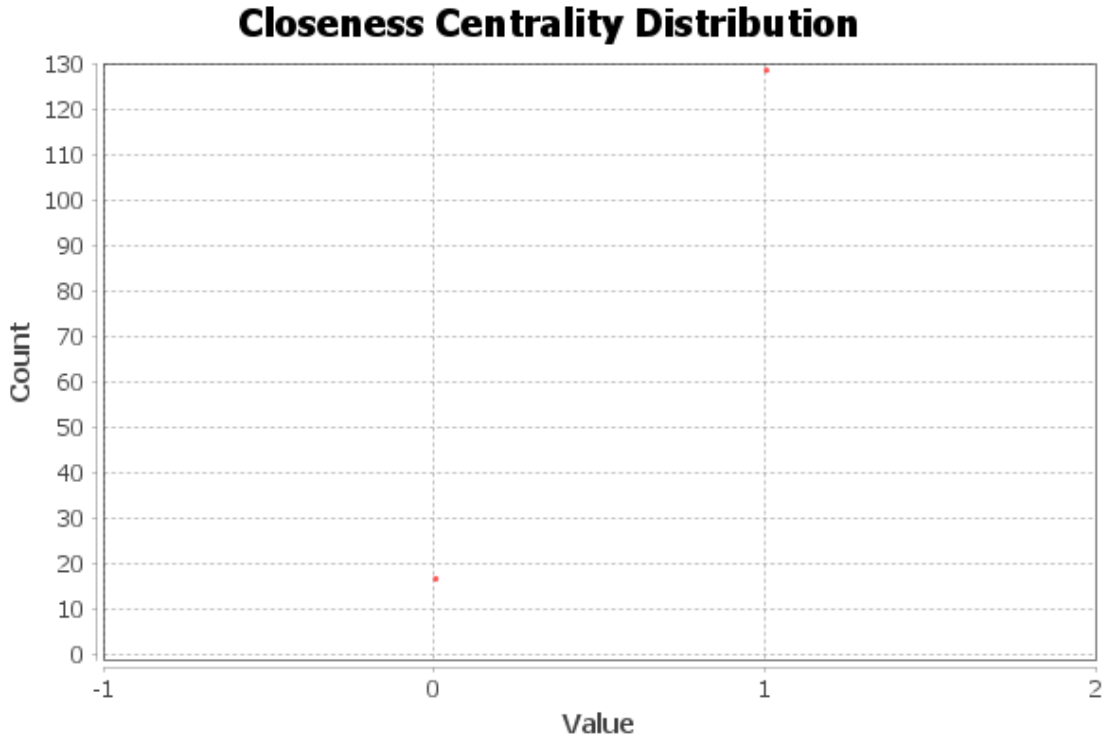
Parameters:

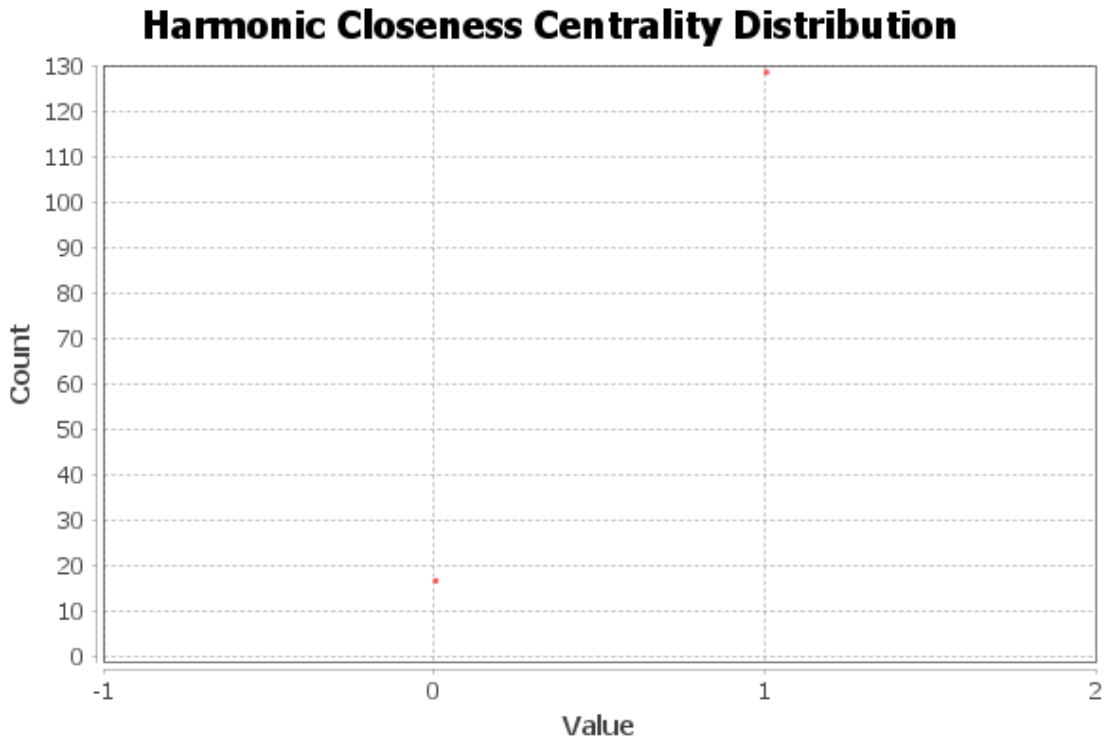
Network Interpretation: directed

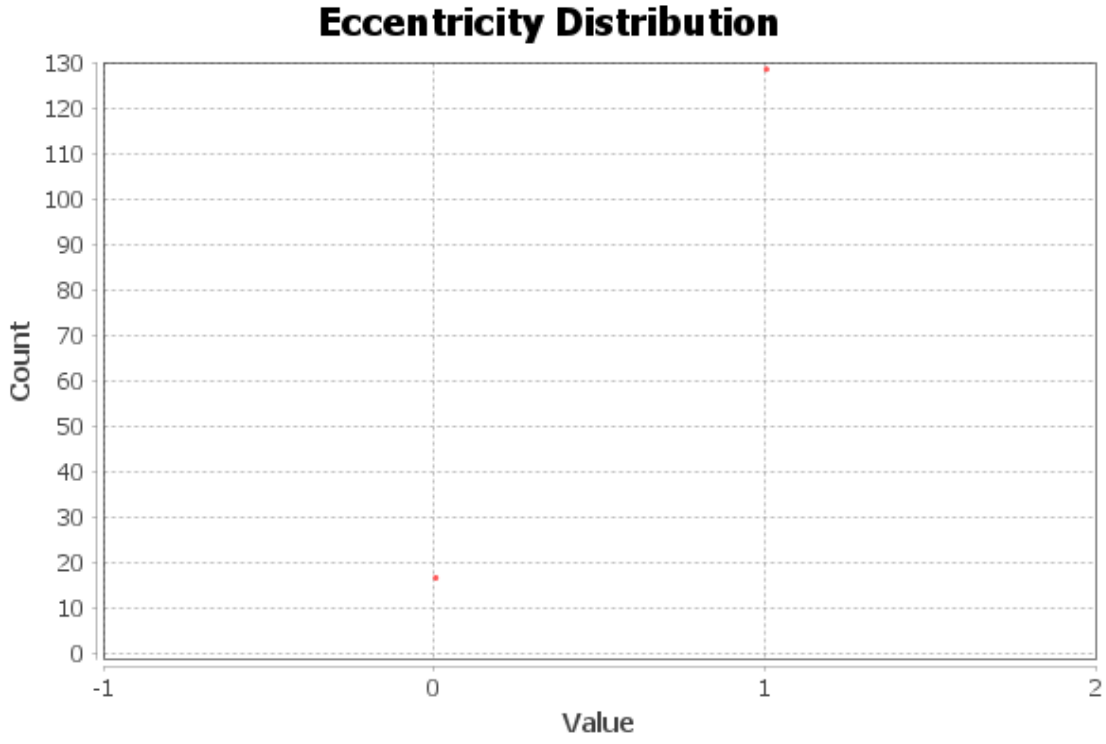
Results:

Diameter: 1
Radius: 0
Average Path length: 1.0









Algorithm:

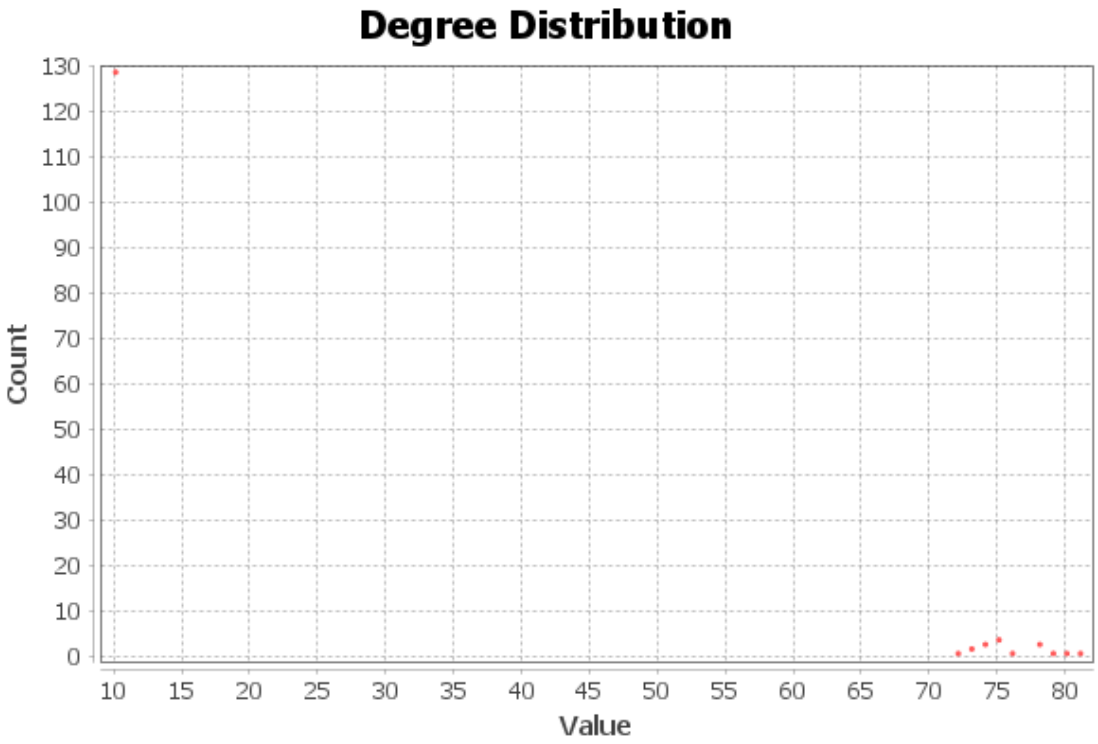
Ulrik Brandes, *A Faster Algorithm for Betweenness Centrality*, in Journal of Mathematical Sociology 25(2):163-177, (2001)

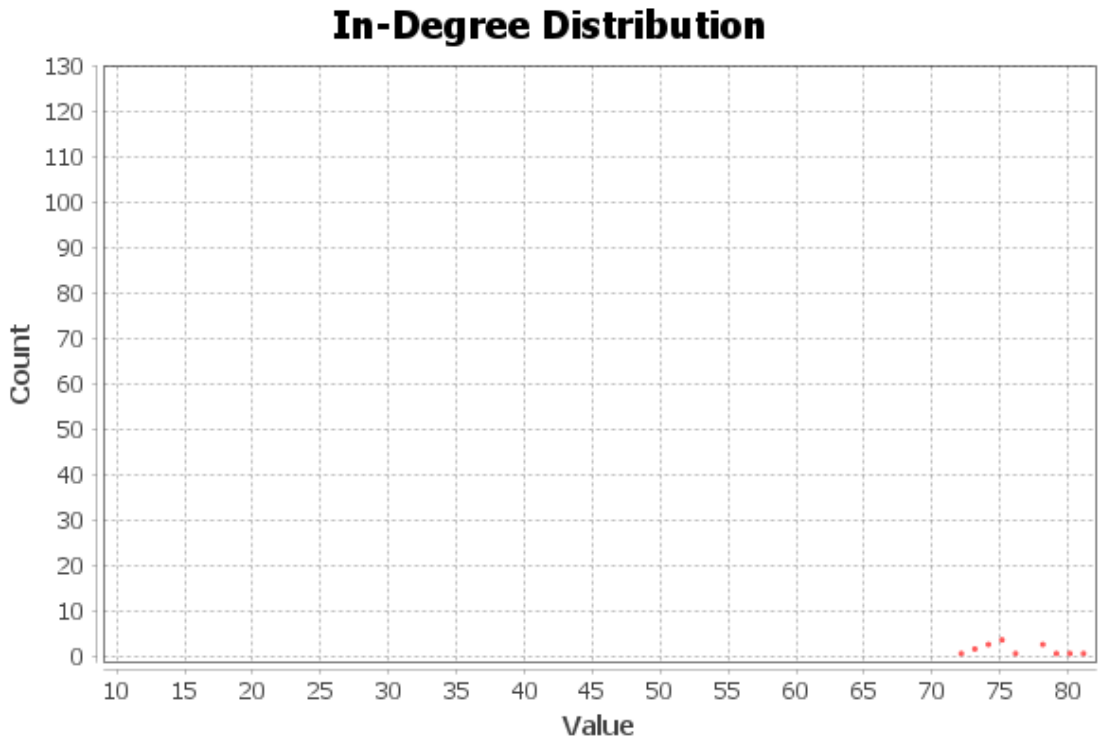
- Grado Medio:

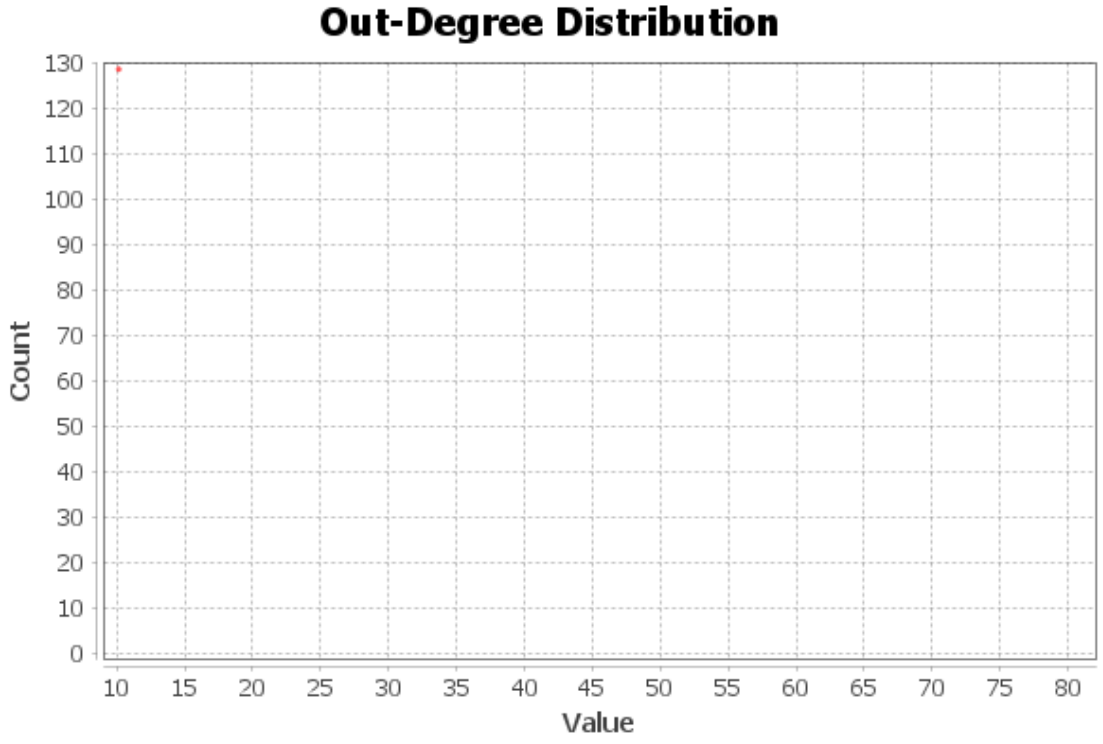
Degree Report

Results:

Average Degree: 8,836





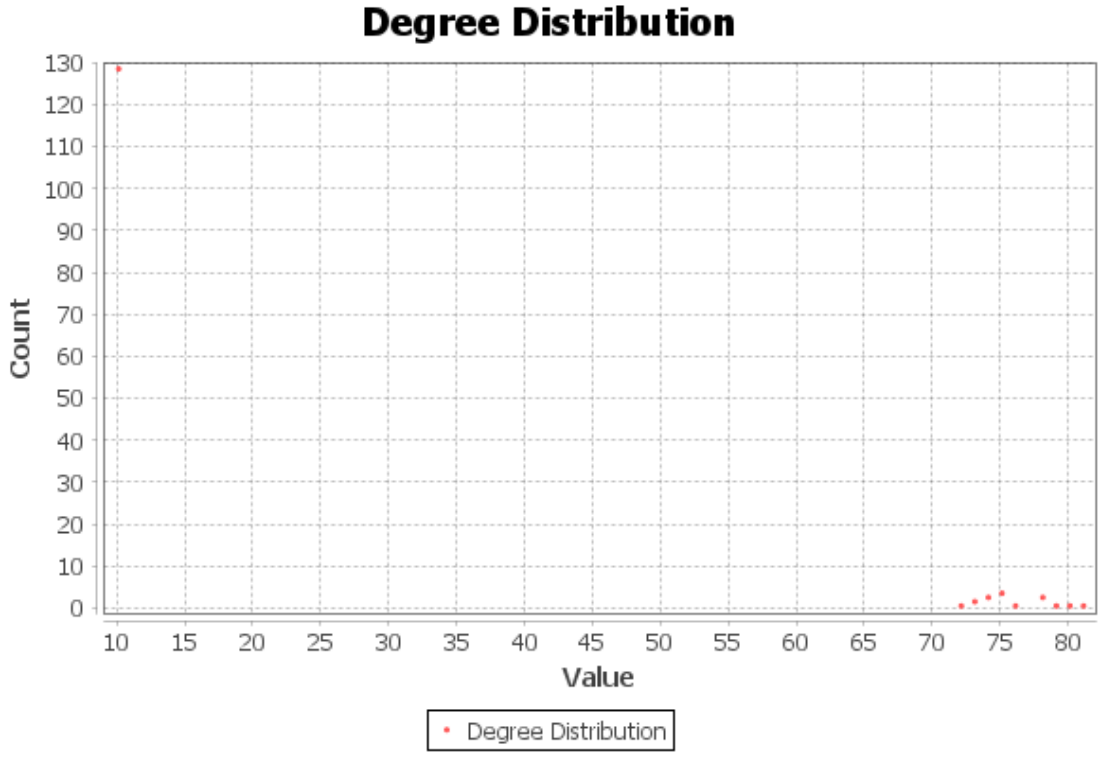


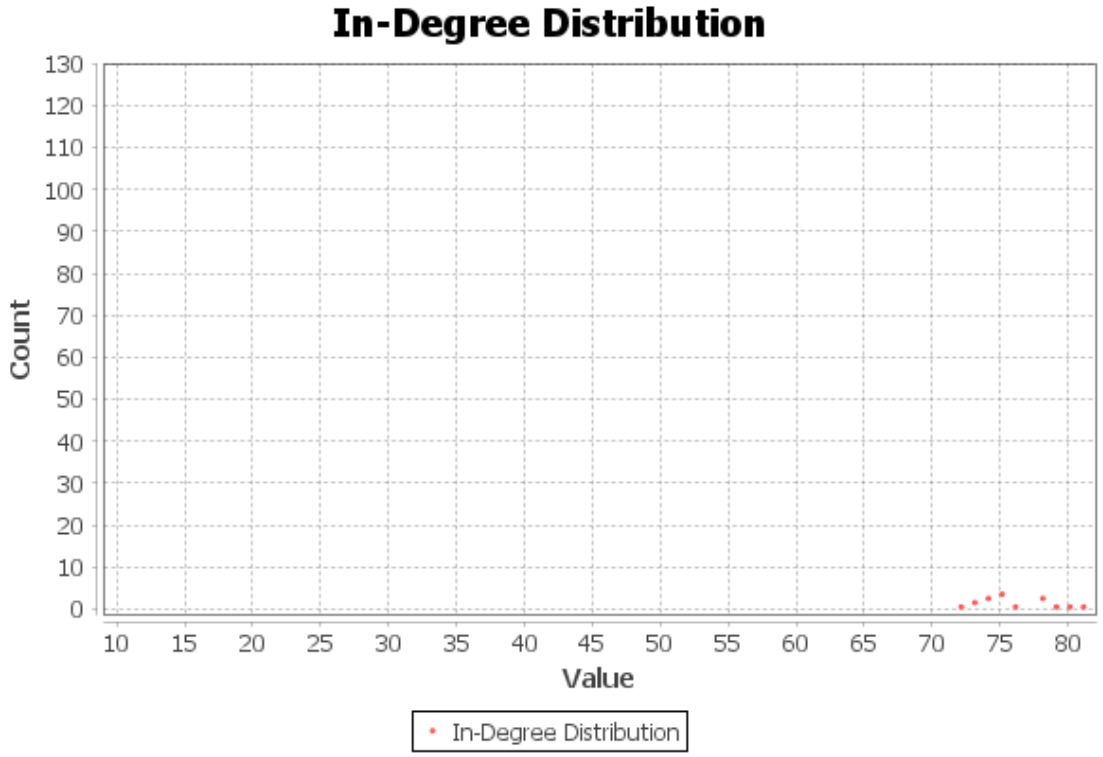
- Grado Medio con Pesos:

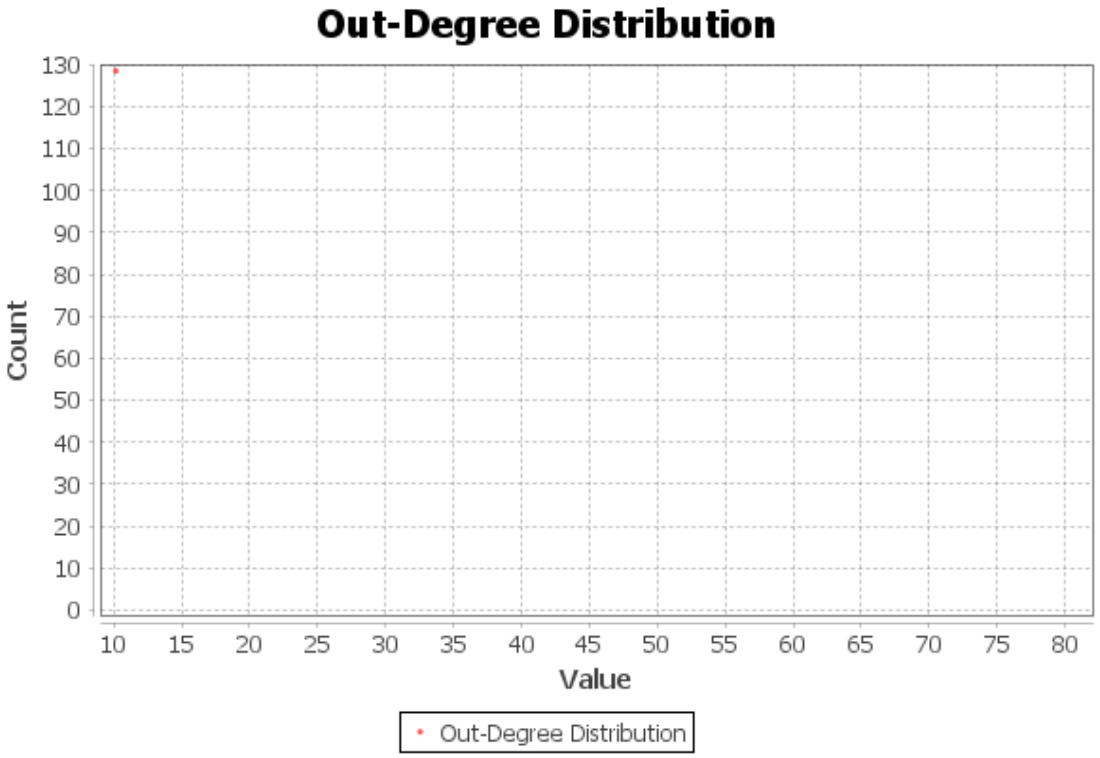
Weighted Degree Report

Results:

Average Weighted Degree: 8,836







- Número de componentes conexas fuerte y débilmente conectadas:

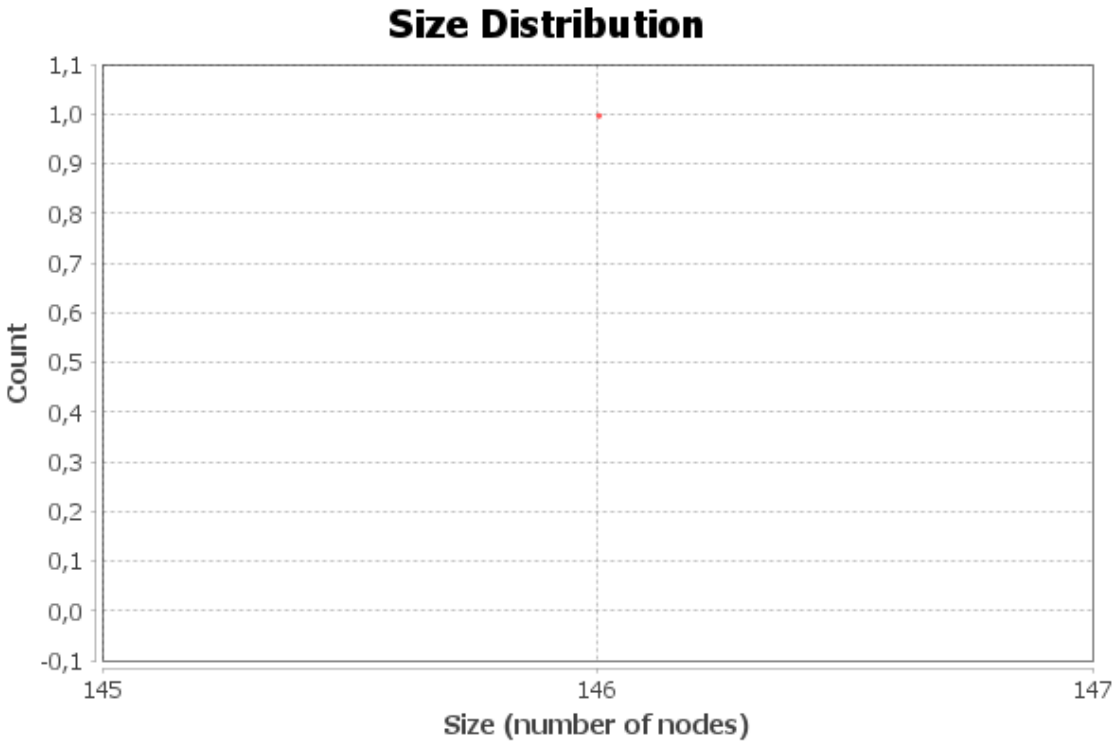
Connected Components Report

Parameters:

Network Interpretation: directed

Results:

Number of Weakly Connected Components: 1
Number of Strongly Connected Components: 146



Algorithm:

Robert Tarjan, *Depth-First Search and Linear Graph Algorithms*, in SIAM Journal on Computing 1 (2): 146–160 (1972)