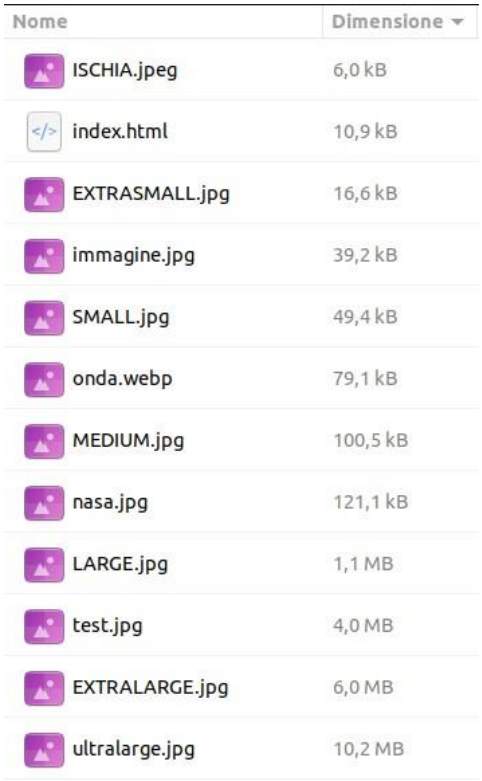
Workload characterization riassunto scelte effettuate

Dati

TG1 25 thread, RU 10s , duration 75s, CTT 500;
TG2 50 thread, RU 10s , duration 75s, CTT 1000;
TG3 75 thread, RU 10s , duration 75s, CTT 1500;
TG4 100 thread, RU 10s , duration 75s, CTT 2000;

11 Risorse per TG



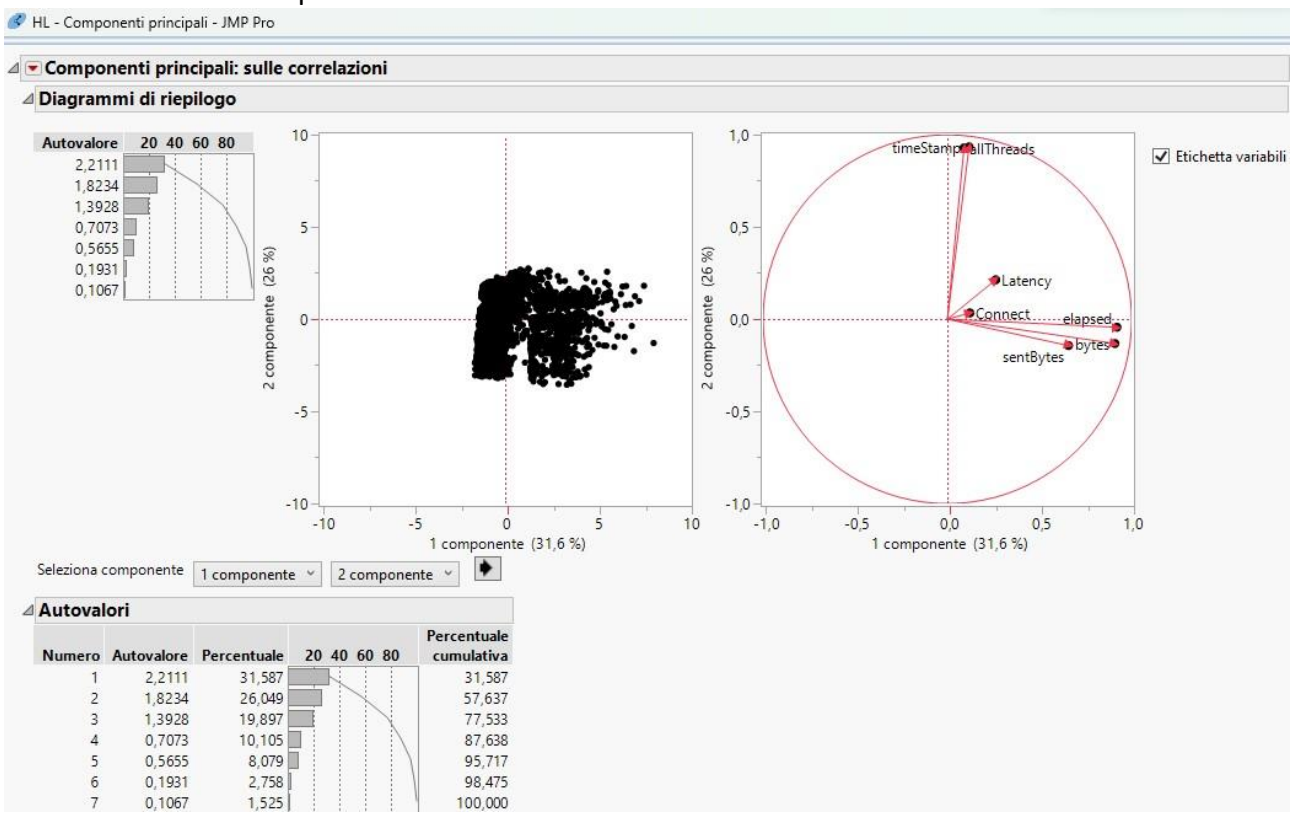
Nome	Dimensione
ISCHIA.jpeg	6,0 kB
index.html	10,9 kB
EXTRASMALL.jpg	16,6 kB
immagine.jpg	39,2 kB
SMALL.jpg	49,4 kB
onda.webp	79,1 kB
MEDIUM.jpg	100,5 kB
nasa.jpg	121,1 kB
LARGE.jpg	1,1 MB
test.jpg	4,0 MB
EXTRALARGE.jpg	6,0 MB
ultralarge.jpg	10,2 MB

44 tipologie di richieste

Prefiltraggio HL
Colonne eliminate:
responseCode(Tutti 200) , responseMessage (OK), dataType(bin),success(true), failureMessage (vuota), idleTime (0),

vediamo correlazione
eliminiamo grpThreads (correlazione con all threads =1)

Abbiamo Scelto 5 Componenti con 21 Cluster



HL_P5_C21 - Cluster gerarchico - JMP Pro

Clusterizzazione gerarchica

Cronologia di clusterizzazione

Numero di cluster	Distanza	Leader	Subordinato
52	6,76204174	31	889
51	7,01605000	1207	3340
50	7,07356103	6	786
49	7,15689007	2159	2255
48	7,27550456	847	993
47	7,29855546	4258	4272
46	7,35732158	2216	2348
45	7,54124457	1719	3597
44	7,63581403	803	826
43	7,70618767	4254	4288
42	8,04960817	2216	4287
41	8,08701100	2226	4273
40	8,12358024	2209	3766
39	8,15877691	5	3609
38	8,43130627	2181	4267
37	8,43569267	40	754
36	8,89695415	771	2048
35	8,96951969	680	1726
34	8,99933090	23	900
33	9,36285300	1719	2210
32	9,47843646	1016	2263
31	9,59151283	1207	2696
30	10,03130478	20	26
29	10,80505597	856	2055
28	11,07867297	951	2209
27	11,89052276	4	25
26	12,45551308	2166	4254
25	12,80904568	1	31
24	12,97000944	188	2238
23	13,80020620	2	803
22	13,80678686	4	5
21	13,94401016	1	40
20	14,01438091	20	1719
19	14,18686012	23	1016
18	14,57464418	771	847
17	17,85034670	2166	2216
16	18,30581612	23	188
15	18,81006978	2	6
14	19,13162219	2159	4258
13	19,55636143	951	2181
12	22,02983925	680	856
11	23,14329186	2159	2226
10	26,34945710	4	951
9	26,87759712	23	1207
8	27,11956384	4	771
7	30,24255200	20	2159
6	35,07724696	1	2166
5	47,03480288	2	20
4	58,98995832	1	23
3	60,23447173	1	2
2	66,25284038	1	680
1	73,75112528	1	4

Abbiamo deciso di eliminare completamente il TG 1 in quanto non significative per il WL.

Clu	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R2	R2	R2	R2	R2	R2	R2	R2	R2	R2	R2
1	77	0	0	0	0	50	50	0	0	0	0	121	0	0	0	0	120	102	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	1	0	2	1	1	3	2	0	0	0	7	4	0	6	5	12	15	6	1	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	1
6	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	7
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
8	0	63	0	48	53	0	3	44	54	0	0	0	98	0	86	96	0	0	101	112	0	0
9	0	0	0	0	0	0	0	0	0	0	59	0	0	0	0	0	0	0	0	0	0	102
10	0	1	0	3	3	0	1	2	3	0	7	1	5	0	2	4	0	1	2	7	0	4
11	0	0	0	0	0	0	0	0	0	0	0	0	5	0	3	3	0	0	5	2	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	1	1
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
17	0	0	54	0	0	0	0	0	0	62	0	0	0	98	0	0	0	0	0	0	106	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	12	0

Clu	R3	R3	R3	R3	R3	R3	R3	R3	R3	R3	R3	R4	R4	R4	R4	R4	R4	R4	R4	R4	R4	R4	
1	25	0	0	0	0	18	27	0	0	0	0	7	0	0	0	0	8	9	0	0	0	0	121
2	0	0	0	0	0	134	147	0	0	0	0	0	0	0	0	0	209	168	0	0	0	0	209
3	127	0	0	0	0	0	0	0	0	0	0	193	0	0	0	0	0	0	0	0	0	0	193
4	4	4	0	1	1	17	17	1	0	0	0	5	1	0	3	0	1	3	0	1	0	0	17
5	4	10	0	7	4	6	1	2	7	0	1	3	13	0	10	10	22	9	6	13	0	2	22
6	0	10	0	11	5	0	0	11	6	0	13	0	21	0	23	17	0	0	29	21	0	29	29
7	1	0	0	1	1	2	1	2	1	0	1	9	9	1	5	1	3	4	7	3	0	11	11
8	0	15	0	21	17	0	0	18	15	0	0	0	5	0	10	10	0	0	7	7	0	0	112
9	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	9	102
10	0	2	0	2	5	1	0	3	7	0	10	1	5	0	5	2	0	0	2	2	0	4	10
11	8	13	0	6	10	7	8	6	3	0	0	7	7	0	10	11	7	12	7	6	0	9	13
12	0	119	0	135	127	0	0	131	126	0	0	0	19	0	15	21	0	0	21	17	0	0	135
13	0	0	0	0	0	0	0	0	0	0	0	0	150	0	163	164	0	0	137	172	0	0	172
14	0	0	0	1	0	0	0	0	0	0	121	0	0	0	2	0	0	0	0	0	0	171	171
15	0	3	2	0	0	1	0	1	0	2	1	1	3	3	2	2	6	2	2	2	4	0	6
16	0	1	0	1	0	0	0	0	1	0	0	1	3	2	1	0	1	1	2	0	0	1	3
17	0	0	23	0	0	0	0	0	0	21	0	0	0	25	0	0	0	0	0	0	20	0	106
18	0	0	2	0	0	0	0	0	0	124	0	0	0	5	0	0	0	0	0	0	187	0	187
19	0	0	131	0	0	0	0	0	0	0	0	0	0	156	0	0	0	0	0	0	0	0	156
20	0	0	4	0	0	0	0	0	0	4	0	0	0	10	0	0	0	0	0	0	15	0	15
21	0	0	26	0	0	0	0	0	0	14	0	0	0	25	0	0	0	0	0	0	29	0	29

Abbiamo lasciato solo le seguenti richieste

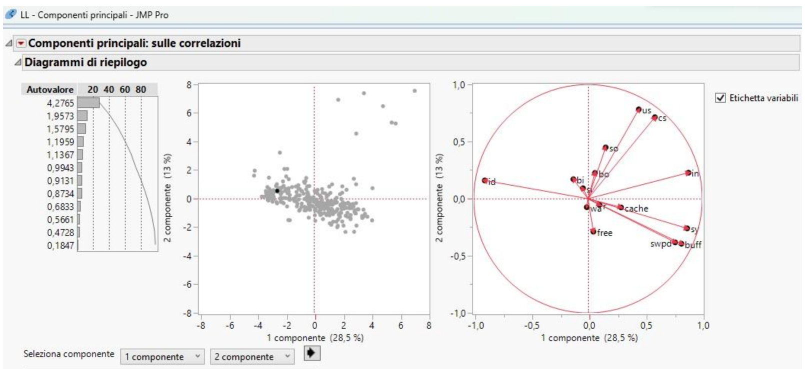
Cluster	R2_1	R2_9	R2_10	R2_11	R3_2	R3_4	R3_6	R3_7	R3_11	R4_1	R4_2	R4_3	R4_6	R4_8	R4_9	R4_10	R4_11
1	121	0	0	0	0	0	18	27	0	7	0	0	8	0	0	0	0
2	0	0	0	0	0	0	134	147	0	0	0	0	209	0	0	0	0
3	0	0	0	0	0	0	0	0	0	193	0	0	0	0	0	0	0
4	7	1	0	0	4	1	17	17	0	5	1	0	1	0	1	0	0
5	0	1	0	1	10	7	6	1	1	3	13	0	22	6	13	0	2
6	0	0	0	7	10	11	0	0	13	0	21	0	0	29	21	0	29
7	0	1	0	0	0	1	2	1	1	9	9	1	3	7	3	0	11
8	0	112	0	0	15	21	0	0	0	0	5	0	0	7	7	0	0
9	0	0	0	102	0	0	0	0	20	0	0	0	0	0	0	0	9
10	1	7	0	4	2	2	1	0	10	1	5	0	0	2	2	0	4
11	0	2	0	0	13	6	7	8	0	7	7	0	7	7	6	0	9
12	0	0	0	0	119	135	0	0	0	0	19	0	0	21	17	0	0
13	0	0	0	0	0	0	0	0	0	0	150	0	0	137	172	0	0
14	0	0	0	0	0	1	0	0	121	0	0	0	0	0	0	0	171
15	0	0	1	1	3	0	1	0	1	1	3	3	6	2	2	4	0
16	0	0	0	0	1	1	0	0	0	1	3	2	1	2	0	0	1
17	0	0	106	0	0	0	0	0	0	0	0	25	0	0	0	20	0
18	0	0	5	0	0	0	0	0	0	0	0	5	0	0	0	187	0
19	0	0	0	0	0	0	0	0	0	0	0	156	0	0	0	0	0
20	0	0	8	0	0	0	0	0	0	0	0	10	0	0	0	15	0
21	0	0	12	0	0	0	0	0	0	0	0	25	0	0	0	29	0

LL

Eliminiamo preventivamente colonne Prefiltraggio

B(0) , st(0) perché costanti

Facciamo pca LL da cui scegliamo 9 componenti principali e 25 cluster



Autovalori

Numero	Autovalore	Percentuale	20 40 60 80	Percentuale cumulativa
1	4,2765	28,510		28,510
2	1,9573	13,049		41,559
3	1,5795	10,530		52,089
4	1,1959	7,973		60,061
5	1,1367	7,578		67,639
6	0,9943	6,629		74,268
7	0,9131	6,088		80,356
8	0,8734	5,823		86,178
9	0,6833	4,555		90,734
10	0,5661	3,774		94,508
11	0,4728	3,152		97,660
12	0,1847	1,231		98,891
13	0,1087	0,725		99,616
14	0,0567	0,378		99,994
15	0,0010	0,006		100,000

LL’

B(0) , st(0) costanti

Eliminiamo buffer che è molto correlato con cache
Eliminiamo swpd molto correlato free

LL_ - Multivariato - JMP Pro

Multivariato

Correlazioni

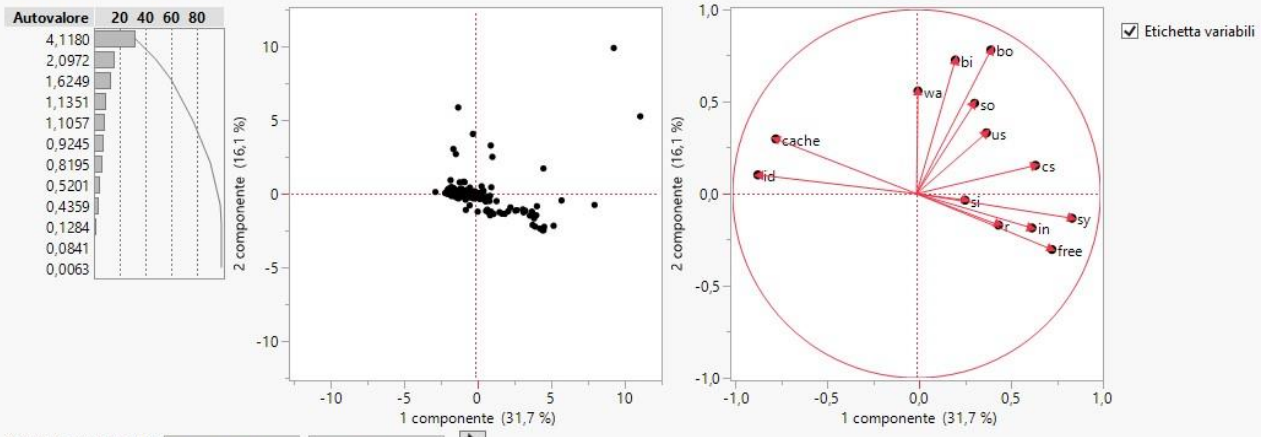
	r	swpd	free	buff	cache	si	so	bi	bo	in	cs	us	sy	id	wa
r	1,0000	0,2418	0,2280	-0,2431	-0,2450	0,0096	0,0138	0,0620	0,0916	0,4684	0,1409	0,0692	0,3307	-0,3319	-0,0845
swpd	0,2418	1,0000	0,9863	-0,9988	-0,9960	0,1432	0,1388	0,0015	0,1019	0,4529	0,3603	0,0979	0,5050	-0,5064	-0,0905
free	0,2280	0,9863	1,0000	-0,9824	-0,9901	0,1398	0,0905	0,0185	0,0911	0,4021	0,3628	0,1211	0,4646	-0,4683	-0,0620
buff	-0,2431	-0,9988	-0,9824	1,0000	0,9935	-0,1423	-0,1394	0,0109	-0,0943	-0,4533	-0,3563	-0,0939	-0,5029	0,5040	0,0978
cache	-0,2450	-0,9960	-0,9901	0,9935	1,0000	-0,1430	-0,1431	-0,0136	-0,1194	-0,4606	-0,3559	-0,1080	-0,5002	0,5025	0,0736
si	0,0096	0,1432	0,1398	-0,1423	-0,1430	1,0000	-0,0049	0,0022	-0,0181	0,0217	0,5072	0,0842	0,1372	-0,1433	-0,0098
so	0,0138	0,1388	0,0905	-0,1394	-0,1431	-0,0049	1,0000	0,1288	0,7296	0,1715	0,0401	0,0269	0,1964	-0,1974	0,0212
bi	0,0620	0,0015	0,0185	0,0109	-0,0136	0,0022	0,1288	1,0000	0,5261	0,0161	0,2238	0,2010	0,0588	-0,0763	0,4668
bo	0,0916	0,1019	0,0911	-0,0943	-0,1194	-0,0181	0,7296	0,5261	1,0000	0,2074	0,2081	0,3116	0,1865	-0,2103	0,2564
in	0,4684	0,4529	0,4021	-0,4533	-0,4606	0,0217	0,1715	0,0161	0,2074	1,0000	0,0135	0,0691	0,5379	-0,5353	-0,0379
cs	0,1409	0,3603	0,3628	-0,3563	-0,3559	0,5072	0,0401	0,2238	0,2081	0,0135	1,0000	0,6418	0,4950	-0,5403	-0,0132
us	0,0692	0,0979	0,1211	-0,0939	-0,1080	0,0842	0,0269	0,2010	0,3116	0,0691	0,6418	1,0000	0,1540	-0,2254	0,0030
sy	0,3307	0,5050	0,4646	-0,5029	-0,5002	0,1372	0,1964	0,0588	0,1865	0,5379	0,4950	0,1540	1,0000	-0,9969	-0,0095
id	-0,3319	-0,5064	-0,4683	0,5040	0,5025	-0,1433	-0,1974	-0,0763	-0,2103	-0,5353	-0,5403	-0,2254	-0,9969	1,0000	0,0048
wa	-0,0845	-0,0905	-0,0620	0,0978	0,0736	-0,0098	0,0212	0,4668	0,2564	-0,0379	-0,0132	0,0030	-0,0095	0,0048	1,0000

Le correlazioni sono stimate per metodo A livello di riga.

LL_ - Componenti principali - JMP Pro

Componenti principali: sulle correlazioni

Diagrammi di riepilogo



Autovalori

Numero	Autovalore	Percentuale	20 40 60 80	Percentuale cumulativa
1	4,1180	31,677		31,677
2	2,0972	16,132		47,809
3	1,6249	12,499		60,308
4	1,1351	8,731		69,039
5	1,1057	8,505		77,545
6	0,9245	7,111		84,656
7	0,8195	6,304		90,960
8	0,5201	4,001		94,961
9	0,4359	3,353		98,314
10	0,1284	0,988		99,302
11	0,0841	0,647		99,949
12	0,0063	0,048		99,997
13	0,0004	0,003		100,000

Componenti principali 9
Cluster 24