

Midpoint performance test protocol

Performance testing (version 2.2 demo)
Revision 6096

HW configuration

CPU: Intel(R) Core(TM) i5-2500K CPU 3.30GHz

RAM: 8.00 GB DDR3

Motherboard: Asus P8P67 DELUXE

GPU: NVIDIA Gainward GeForce GTX 570 Limited edition 2048MB

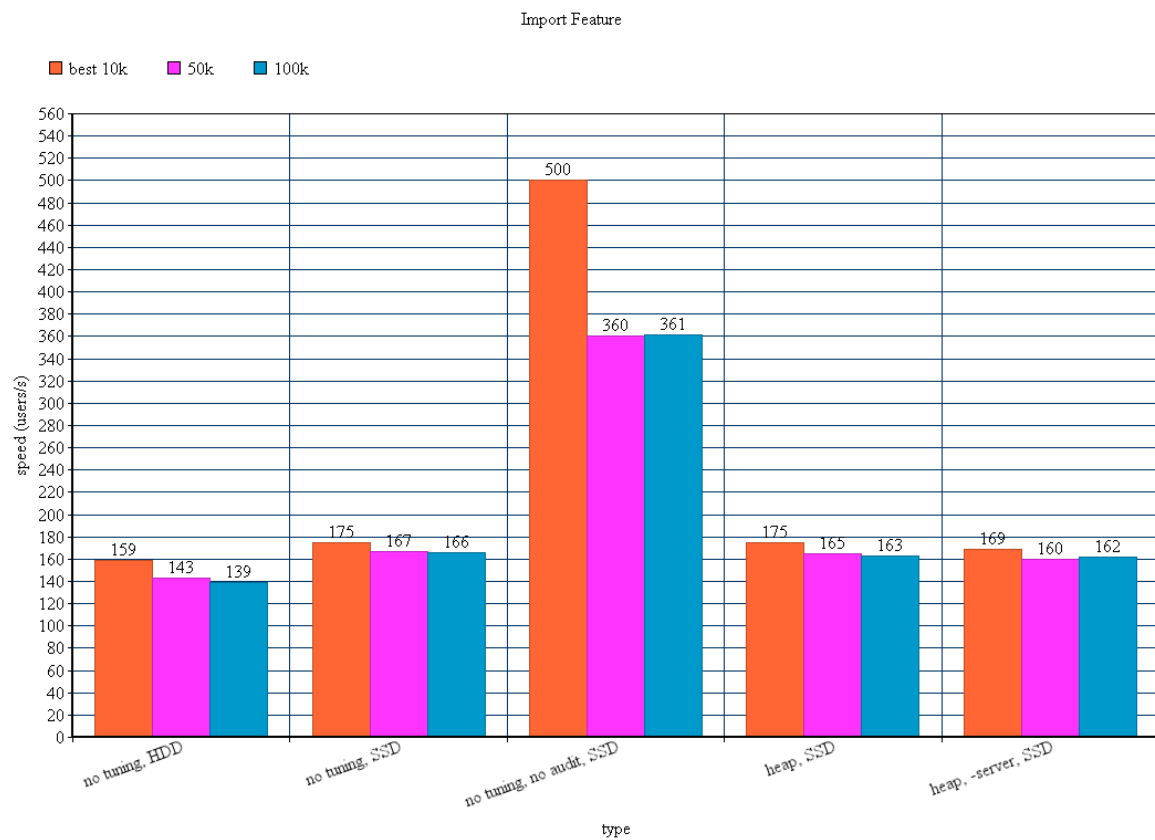
SW configuration

OS: Windows 7 Professional with SP1, 64b

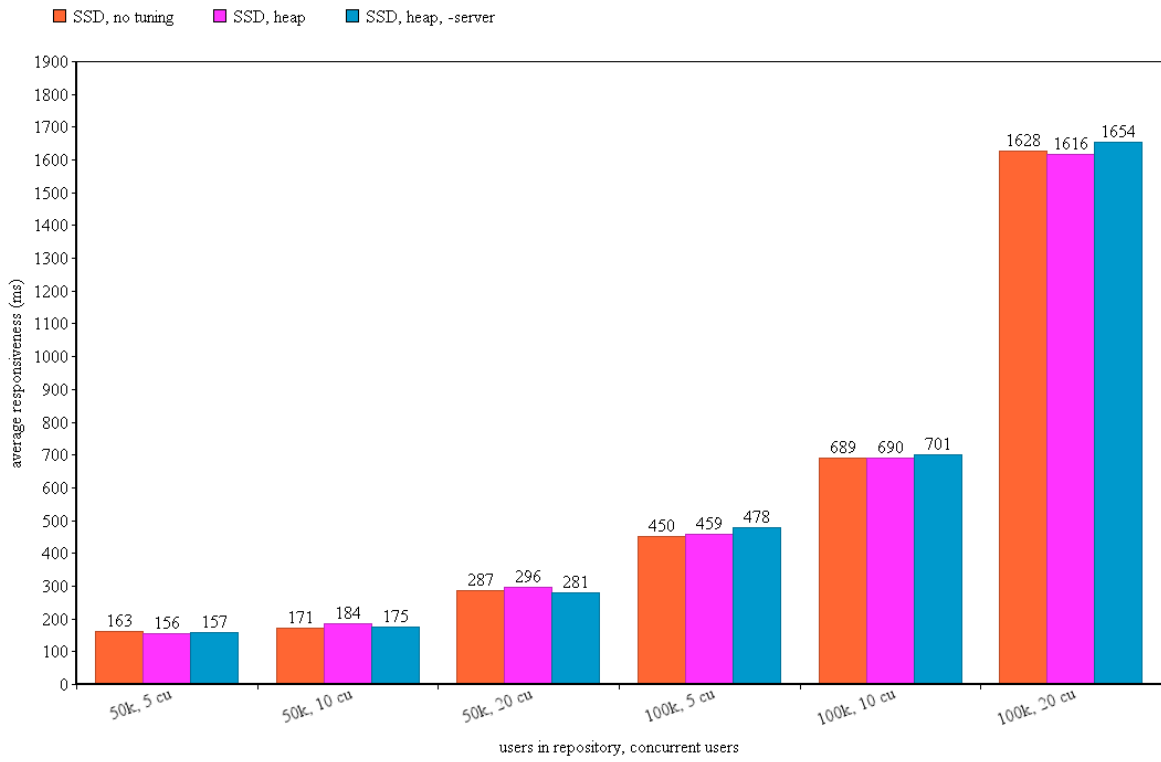
Web Container: Tomcat 7.0

PostgreSQL 9.2

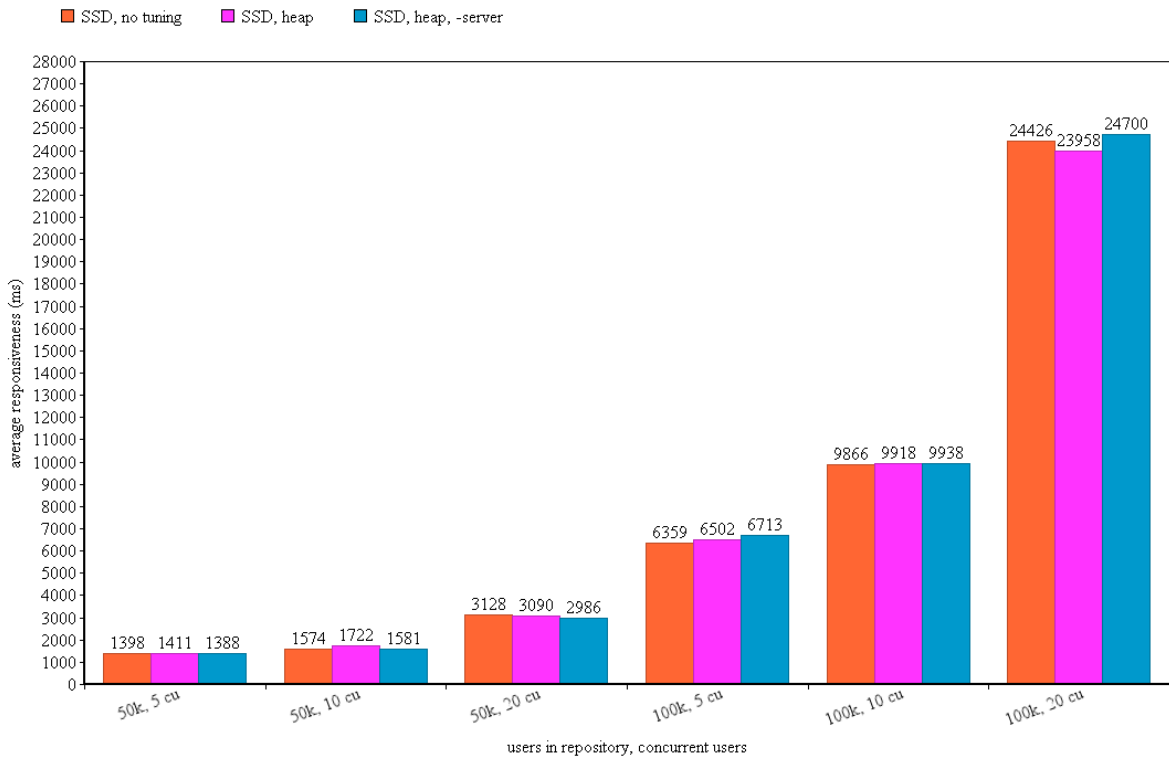
Overall Statistics

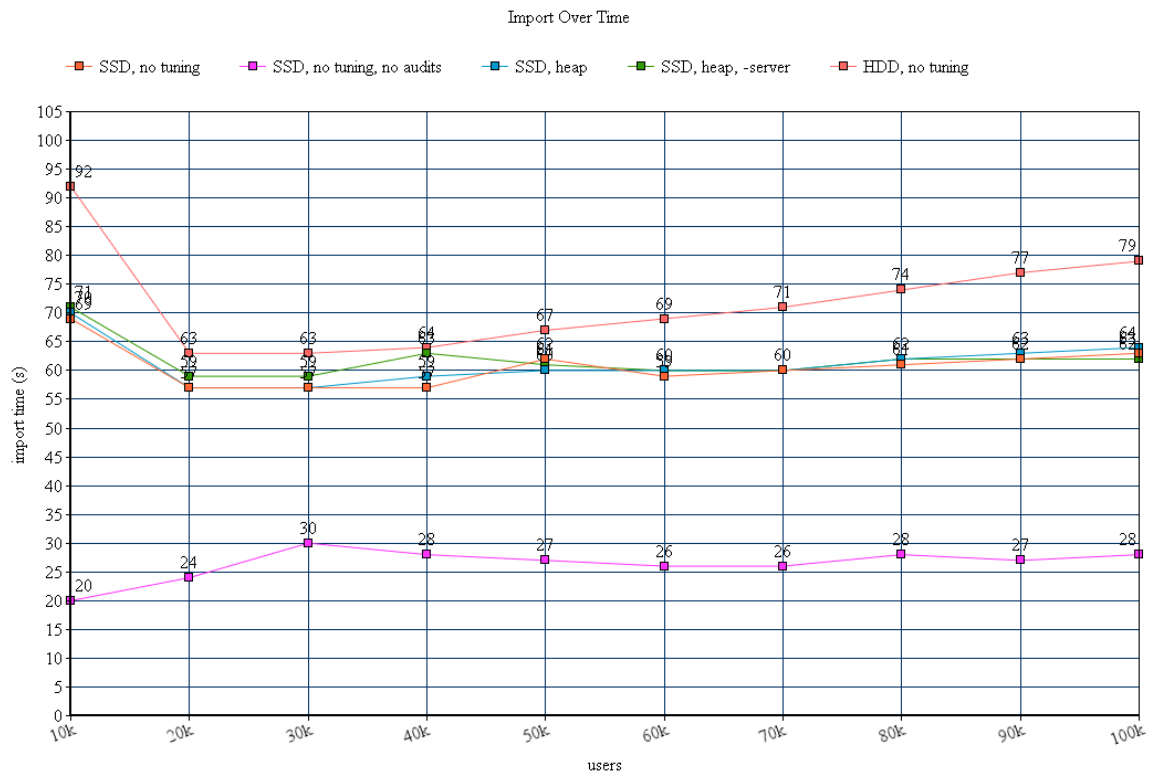


Responsiveness



List Users Request





PostgreSQL repository (no JVM tuning) - SSD

Import Feature Performance

	10 000	50000	100 000	500 000	1 000 000
DB size [MB]	-	-	587	-	-
Users per second	175	167	166	-	-
Total time [s]	57	302	607	-	-

Import over time

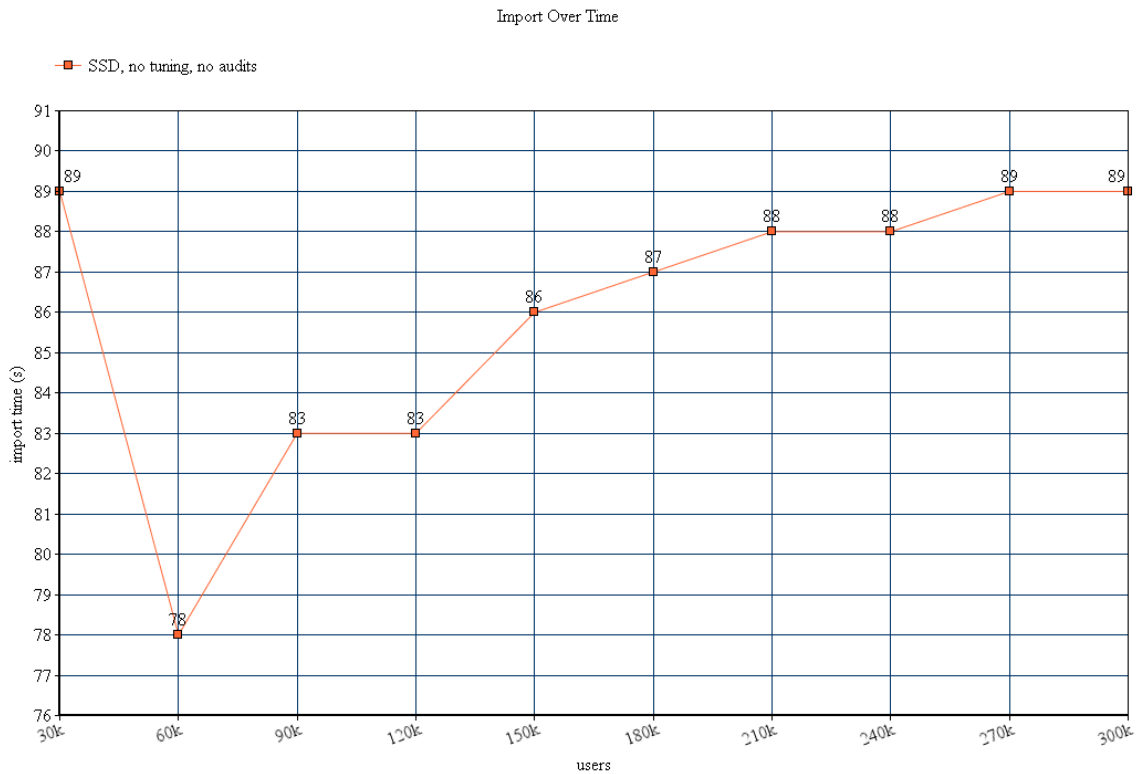
	10k	20k	30k	40k	50k	60k	70k	80k	90k	100k
Time [s]	69	57	57	57	62	59	60	61	62	63

Import Feature Performance (no auditing)

	10 000	50000	100 000	300 000	1 000 000
DB size [MB]	-	-	587	-	-
Users per second	500	360	361	349	-
Total time [s]	20	139	277	860	-

Import over time (no auditing)

300k	30k	60k	90k	120k	150k	180k	210k	240k	270k	300k
Time [s]	89	78	83	83	86	87	88	88	89	89



With PostgreSQL DB as midPoint repository, system was responsive even with 300k users in DB. Requests to users page or object/user pages in debug section lasts about 15-20s and does not kill database as we experienced with MySQL installation.

	50 000 users in repository			100 000 users in repository		
	5 users	10 users	20 users	5 users	10 users	20 users
MidPoint	45	45	75	47	48	93
Login	86	103	139	131	155	161
Dashboard	56	38	64	31	34	60
List users	1398	1574	3128	6359	9866	24426
Open user	97	77	86	64	69	97
List roles	125	101	93	53	57	95
Open role	76	45	86	35	52	55
List resources	97	93	74	40	59	72
Work Items	73	61	62	47	32	43
List tasks	125	118	120	93	102	123
Add task	69	64	56	36	50	52
Open reports	56	71	59	25	49	43
Debug pages	133	106	130	95	65	77
Import object	59	62	75	35	37	42
Logging	59	80	75	51	48	66
Logout	51	97	276	65	297	536
Average	163	171	287	450	689	1628

Average users page request with internalSize() count (cached for 60s): 4,527 s

PostgreSQL repository (2G Xms, Xmx, 512m 2nd gen heap) - SSD

Import Feature Performance

	10 000	50000	100 000	500 000	1 000 000
DB size [MB]	-	-	587	-	-
Users per second	175	165	163	-	-
Total time [s]	57	303	612	-	-

Import over time

100k	10k	20k	30k	40k	50k	60k	70k	80k	90k	100k
Time [s]	70	57	57	59	60	60	60	62	63	64

	50 000 users in repository			100 000 users in repository		
	5 users	10 users	20 users	5 users	10 users	20 users
MidPoint	44	64	58	48	50	96
Login	100	128	171	103	150	259
Dashboard	35	40	62	34	56	124
List users	1411	1722	3090	6502	9918	23958
Open user	77	71	122	74	76	92
List roles	100	105	121	58	61	119
Open role	100	67	76	38	47	67
List resources	115	108	103	41	54	51
Work Items	48	54	81	50	34	62
List tasks	121	131	141	111	117	177
Add task	41	64	64	38	57	63
Open reports	59	68	63	48	47	65
Debug pages	99	121	109	56	59	81
Import object	44	46	68	30	29	44
Logging	59	58	71	43	49	59
Logout	37	102	336	70	245	542
Average	156	184	296	459	690	1616

PostgreSQL repository (-server, 2G Xms, Xmx, 512m 2nd gen heap) - SSD

Import Feature Performance

	10 000	50000	100 000	500 000	1 000 000
DB size [MB]	-	-	587	-	-
Users per second	169	160	162	-	-
Total time [s]	59	313	619	-	-

Import over time

100k	10k	20k	30k	40k	50k	60k	70k	80k	90k	100k
Time [s]	71	59	59	63	61	60	60	62	62	62

	50 000 users in repository			100 000 users in repository		
	5 users	10 users	20 users	5 users	10 users	20 users
MidPoint	50	58	70	48	61	91
Login	118	108	148	123	134	279
Dashboard	38	34	43	38	39	76
List users	1388	1581	2986	6713	9938	24700
Open user	85	83	138	70	85	105
List roles	118	77	98	63	87	71
Open role	64	83	57	44	48	42
List resources	141	103	64	31	42	56
Work Items	49	62	51	39	30	39
List tasks	132	132	121	118	126	114
Add task	51	59	73	49	59	87
Open reports	72	55	66	40	36	40
Debug pages	79	102	106	92	82	85
Import object	33	42	42	30	31	48
Logging	44	69	66	48	52	61
Logout	51	156	370	107	367	568
Average	157	175	281	478	701	1654

PostgreSQL repository (no JVM tuning) - HDD

Import Feature Performance

	10 000	50000	100 000	500 000	1 000 000
DB size [MB]	-	-	587	-	-
Users per second	159	143	139	-	-
Total time [s]	63	349	719	-	-

Import over time

100k	10k	20k	30k	40k	50k	60k	70k	80k	90k	100k
Time [s]	92	63	63	64	67	69	71	74	77	79