

Table 1

ML IDS performance test results without minimization.  
(*grum* was used as obfuscated test malware)

iteration	RPS (ms)	Latency (ms)	Throughroup (mbit/s)	htop (CPU core utilization, %)				RAM (utilization, %)
				I	II	III	IV	
0.	5,32658541	25,32648762	8	16	10	15	3	9
1.	5,02365874	22,32568745	9	15	12	14	3	9
2.	4,32657456	23,26578954	7	10	14	16	2	8
3.	5,12365874	22,35698742	6	16	15	15	6	8
4.	5,25685451	21,23001564	7	14	16	14	5	7
5.	4,32535698	23,10325698	8	15	14	15	2	9
6.	4,32012301	24,32569876	8	17	15	16	3	8
7.	5,45698712	25,64565456	9	18	16	15	3	7
8.	6,32145658	24,23564895	7	12	17	14	2	9
9.	7,12565478	25,32654895	11	15	15	15	3	8
10.	3,12014548	22,32654878	7	16	16	16	4	8
11.	5,85648245	23,23254565	9	14	14	14	5	8
12.	5,30121456	22,23214565	10	15	11	19	2	9
13.	6,32458452	23,32156545	11	16	13	14	3	9
14.	5,34585456	22,23654897	9	14	16	15	3	4
15.	5,01325487	20,36549875	8	15	14	16	2	4
16.	6,32154786	22,23654565	7	16	15	14	1	6
17.	5,63145865	23,26548978	9	14	16	15	2	5
18.	4,35648564	22,23687898	8	16	14	15	2	6
19.	5,35487896	24,23645986	9	16	18	15	3	6

Table 2

ML IDS performance test results with minimization  
(*grum* was used as obfuscated test malware)

iteration	RPS (ms)	Latency (ms)	Throughroup (mbit/s)	htop (CPU core utilization, %)				RAM (utilization, %)
				I	II	III	IV	
0.	1,32365987	5,321236547	19	10	12	10	4	34
1.	1,30021458	6,23658745	22	10	14	11	6	31
2.	2,23214587	2,32565874	21	8	10	12	3	30
3.	1,03256987	4,23698745	20	9	11	10	2	31
4.	1,23658987	9,56987456	18	7	13	12	3	32
5.	1,02365897	5,36589874	19	10	10	10	3	34
6.	2,23256545	4,523254569	22	11	12	11	2	30
7.	3,20125487	8,10021594	22	12	10	12	3	30
8.	2,12545654	8,10236585	21	10	11	14	4	32
9.	1,32156545	7,21365852	14	11	12	15	5	34
10.	1,23658789	4,23698564	25	12	14	10	4	32
11.	2,32546587	8,53215645	22	14	15	11	4	34
12.	2,32565478	5,45654565	20	15	10	9	6	30
13.	1,23214565	6,45698254	19	10	11	7	3	30
14.	2,32568745	5,23254652	19	11	9	8	2	31
15.	2,32658745	6,23658245	18	9	7	10	3	32
16.	2,32465897	5,23658245	21	7	8	16	4	34
17.	1,23256545	5,23659456	20	8	9	12	6	33
18.	1,23256545	5,23564568	22	12	8	10	2	32
19.	2,32569875	6,23654785	21	10	9	8	3	30