

Appendix A Hospital Scenario NS2 Simulation Results

Table A-1 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 50 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
50	1226.72	92.2713	607.47	7194	6638	33	7.73
	1435.01	89.4548	543.14	6420	5743	28	10.55
	1268.88	93.9688	588.84	6914	6497	24	6.03
	1202.69	93.4041	598.69	7065	6599	37	6.60
	1206.03	92.115	600.09	7026	6472	50	7.88
	1086.57	91.7599	622.16	7330	6726	43	8.24
	1164.21	93.2238	619.11	7246	6755	16	6.78
	1288.2	91.317	612.38	7244	6615	17	8.68
	1254.82	93.3101	613.1	7175	6695	25	6.69
	1331.1	91.7305	587.34	6917	6345	46	8.27
Mean	1246.42	92.26	599.23	7053	6509	32	7.74
Standard deviation	95.04	1.32	22.97	263.44	296.90	11.91	1.32
Margin of error	58.91	0.82	14.24	163.28	184.02	7.38	0.82
Upper bound	1305.33	93.07	613.47	7216.38	6692.52	39.28	8.56
Lower bound	1187.51	91.44	584.99	6889.82	6324.48	24.52	6.93

Table A-2 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 100 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
100	1274.7	94.6474	626.96	14778	13987	63	5.353
	1058.98	94.587	595.99	13911	13158	42	5.413
	1321.19	96.0409	613.32	14372	13803	28	3.959
	1260.43	93.7212	586.6	13888	13016	77	6.279
	1223.97	94.3121	625.25	14610	13779	62	5.688
	1129.32	94.2581	645.82	15117	14249	56	5.742
	1338.73	95.395	635.79	14897	14211	46	4.605
	1269.94	94.8359	617.13	14562	13810	77	5.164
	1091.65	94.3769	590.2	13907	13125	56	5.623
	1365.64	94.0851	599.81	14083	13250	70	5.915
Mean	1233.46	94.63	613.69	14413	13639	58	5.37
Standard deviation	106.20	0.67	20.09	449.49	463.22	15.68	0.67
Margin of error	65.82	0.42	12.45	278.60	287.10	9.72	0.42
Upper bound	1299.28	95.04	626.14	14691.10	13925.90	67.42	5.79
Lower bound	1167.63	94.21	601.23	14133.90	13351.70	47.98	4.96

Table A-3 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 150 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
150	1283.68	95.1943	609.62	21537	20502	106	4.806
	1146.6	93.4023	551.32	19431	18149	91	6.598
	1322.95	97.0758	625.93	21955	21313	38	2.924
	1132.27	95.9516	619.29	21836	20952	68	4.048
	1191.47	94.5894	593.16	20922	19790	97	5.411
	1138.09	95.2151	654.99	22989	21889	75	4.785
	1345.62	96.4284	634.53	22287	21491	66	3.572
	1384.58	94.891	628.52	22157	21025	55	5.109
	1225.73	95.1324	612.94	21530	20482	57	4.868
	1272.99	95.3255	613.74	21564	20556	80	4.674
Mean	1244.40	95.32	614.40	21621	20615	73	4.68
Standard deviation	91.30	1.01	27.62	946.53	1051.72	20.87	1.01
Margin of error	56.59	0.63	17.12	586.67	651.86	12.94	0.63
Upper bound	1300.98	95.95	631.52	22207.47	21266.76	86.24	5.30
Lower bound	1187.81	94.70	597.29	21034.13	19963.04	60.36	4.05

Table A-4 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 200 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
200	1287.92	95.1639	603.04	28370	26998	152	4.836
	1033.14	94.736	552.43	25969	24602	90	5.264
	1371.05	97.1304	626.63	29272	28432	56	2.870
	1412.11	95.1152	585.03	27616	26267	156	4.885
	1201.01	95.9331	638.36	29826	28613	115	4.067
	1213.54	95.463	627.12	29403	28069	138	4.537
	1337.85	95.5301	615.48	28882	27591	122	4.470
	1399.72	93.4317	608.19	28607	26728	100	6.568
	1046.91	95.8997	628.89	29437	28230	85	4.100
	1371.12	94.7179	590.2	27735	26270	132	5.282
Mean	1267.44	95.31	607.54	28512	27180	115	4.69
Standard deviation	139.90	0.97	26.00	1154.37	1257.33	31.88	0.97
Margin of error	86.71	0.60	16.11	715.49	779.30	19.76	0.60
Upper bound	1354.15	95.91	623.65	29227.19	27959.30	134.36	5.29
Lower bound	1180.73	94.71	591.43	27796.21	26400.70	94.84	4.09

Table A-5 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 250 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
250	1352.27	96.4303	639.98	37566	36225	132	3.570
	1128.14	95.3454	584.82	34310	32713	137	4.655
	1337.98	97.6718	633.2	36939	36079	73	2.328
	1316.95	95.6676	600.74	35315	33785	143	4.332
	1397.76	94.3837	585.59	34453	32518	128	5.616
	1198.24	95.9421	642.14	37606	36080	146	4.058
	1312.39	96.0546	625.38	36650	35204	132	3.945
	1124.25	94.9503	605.51	35586	33789	136	5.050
	1234.58	96.3658	604.49	35386	34100	85	3.634
	1499.21	95.7162	608.05	35669	34141	112	4.284
Mean	1290.18	95.85	612.99	35948	34463	122	4.15
Standard deviation	119.23	0.90	21.05	1187.21	1369.30	24.82	0.90
Margin of error	73.90	0.56	13.05	735.84	848.70	15.38	0.56
Upper bound	1364.08	96.41	626.04	36683.84	35312.10	137.78	4.70
Lower bound	1216.27	95.30	599.94	35212.16	33614.70	107.02	3.59

Table A-6 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 300 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
300	1244.97	95.3703	615.87	43307	41302	113	4.630
	985.751	95.5311	602.31	42382	40488	94	4.469
	1328.92	97.018	593.57	41683	40440	153	2.982
	1328.7	94.8937	617.77	43574	41349	197	5.106
	1213.95	96.1785	622.42	43700	42030	155	3.822
	1279.9	95.5477	617.71	43483	41547	130	4.452
	1512.19	96.8381	625.69	43961	42571	143	3.162
	1357.29	95.3036	628.74	44311	42230	220	4.696
	1137.09	95.1501	588.59	41547	39532	160	4.850
	1458.19	96.3866	620.9	43643	42066	172	3.613
Mean	1284.70	95.82	613.36	43159	41356	154	4.18
Standard deviation	152.31	0.73	13.74	953.19	952.04	37.33	0.73
Margin of error	94.40	0.46	8.52	590.80	590.08	23.14	0.46
Upper bound	1379.10	96.28	621.87	43749.90	41945.58	176.84	4.63
Lower bound	1190.29	95.37	604.84	42568.30	40765.42	130.56	3.72

Table A-7 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 350 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
350	1418.88	96.9684	640.71	52546	50953	167	3.032
	1476.75	96.064	627.56	36814	35365	203	3.936
	1288.63	96.9585	592.01	48528	47052	163	3.042
	1010.09	96.6642	609.64	50033	48364	136	3.336
	1234.47	96.3005	618.79	50709	48833	153	3.700
	1231.79	94.1787	653.67	53613	50492	163	5.821
	1235.32	96.1764	605.39	49692	47792	184	3.824
	1172.6	94.8743	618.86	36346	34483	168	5.126
	1174.01	96.2157	629.59	36863	35468	124	3.784
	1426.96	95.9442	606.64	35628	34183	146	4.056
Mean	1266.95	96.03	620.29	45077	43299	161	3.97
Standard deviation	141.41	0.88	18.25	7596.78	7348.25	22.77	0.88
Margin of error	87.65	0.55	11.31	4708.53	4554.49	14.12	0.55
Upper bound	1354.60	96.58	631.60	49785.73	47852.99	174.82	4.51
Lower bound	1179.30	95.49	608.98	40368.67	38744.01	146.58	3.42

Table A-8 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 400 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
400	1157.74	94.7633	613.83	57689	54668	212	5.237
	1145.35	94.9993	617.78	58032	55130	200	5.001
	1352.61	97.1963	618.75	57887	56264	147	2.804
	1517.5	96.5504	630.12	59109	57070	237	3.450
	1320.25	95.9763	610.48	57236	54933	232	4.024
	1171.53	96.0385	631.29	59145	56802	238	3.961
	1314.55	97.1818	638.89	59684	58002	158	2.818
	1147.45	96.4354	649.29	60932	58760	228	3.565
	1218.95	96.1291	631.96	59289	56994	198	3.871
	1416.88	97.2302	632.17	59174	57535	153	2.770
Mean	1276.28	96.25	627.46	58818	56616	200	3.75
Standard deviation	128.77	0.87	12.09	1106.60	1362.40	35.82	0.87
Margin of error	79.81	0.54	7.49	685.88	844.42	22.20	0.54
Upper bound	1356.09	96.79	634.95	59503.58	57460.22	222.50	4.29
Lower bound	1196.47	95.71	619.96	58131.82	55771.38	178.10	3.21

Table A-9 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 450 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
450	1354.49	95.892	617.61	65068	62395	150	4.108
	1161.66	94.7716	612.79	64647	61267	190	5.228
	1316.33	96.1446	638.52	67257	64664	244	3.855
	1192.85	96.215	617.96	65126	62661	207	3.785
	1110.06	96.0473	631.98	66588	63956	224	3.953
	1230.62	94.2255	642.55	67919	63997	265	5.775
	1269.33	96.8788	629.48	66288	64219	185	3.121
	1320.66	95.723	641.68	67665	64771	157	4.277
	1269.55	96.8433	620.82	65385	63321	205	3.157
	1464.97	96.7635	631.72	66616	64460	279	3.236
Mean	1269.05	95.95	628.51	66256	63571	211	4.05
Standard deviation	102.57	0.87	10.70	1156.12	1142.93	42.95	0.87
Margin of error	63.57	0.54	6.63	716.57	708.39	26.62	0.54
Upper bound	1332.62	96.49	635.14	66972.47	64279.49	237.22	4.59
Lower bound	1205.48	95.41	621.88	65539.33	62862.71	183.98	3.51

Table A-10 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 500 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
500	1392.31	96.7856	627.65	73606	71240	266	3.214
	1375.14	96.2789	633.49	74279	71515	331	3.721
	1380.17	97.6682	616.34	72134	70452	258	2.332
	1207.57	96.3057	623.06	73140	70438	336	3.694
	1206.95	96.6605	621.54	72705	70277	236	3.340
	1281.78	96.6909	631.34	73887	71442	247	3.309
	1372.66	96.2902	627.84	73482	70756	230	3.710
	1157.49	97.0953	643.45	75498	73305	229	2.905
	1172.27	95.1421	642.68	72007	68509	295	4.858
	1340.66	96.4166	617.76	72446	69850	241	3.583
Mean	1288.70	96.53	628.52	73318	70778	267	3.47
Standard deviation	94.52	0.65	9.43	1074.86	1250.16	40.24	0.65
Margin of error	58.58	0.40	5.84	666.21	774.86	24.94	0.40
Upper bound	1347.28	96.94	634.36	73984.61	71553.26	291.84	3.87
Lower bound	1230.12	96.13	622.67	72652.19	70003.54	241.96	3.06

Appendix B Elderly House NS2 Simulation Results

Table B-1 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 50 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
50	1226.72	92.2713	607.47	7194	6638	33	7.73
	1435.01	89.4548	543.14	6420	5743	28	10.55
	1268.88	93.9688	588.84	6914	6497	24	6.03
	1202.69	93.4041	598.69	7065	6599	37	6.60
	1206.03	92.115	600.09	7026	6472	50	7.88
	1086.57	91.7599	622.16	7330	6726	43	8.24
	1164.21	93.2238	619.11	7246	6755	16	6.78
	1288.2	91.317	612.38	7244	6615	17	8.68
	1254.82	93.3101	613.1	7175	6695	25	6.69
	1331.1	91.7305	587.34	6917	6345	46	8.27
Mean	1246.42	92.26	599.23	7053	6509	32	7.74
Standard deviation	95.04	1.32	22.97	263.44	296.90	11.91	1.32
Margin of error	58.91	0.82	14.24	163.28	184.02	7.38	0.82
Upper bound	1305.33	93.07	613.47	7216.38	6692.52	39.28	8.56
Lower bound	1187.51	91.44	584.99	6889.82	6324.48	24.52	6.93

Table B-2 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 100 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
100	1274.7	94.6474	626.96	14778	13987	63	5.353
	1058.98	94.587	595.99	13911	13158	42	5.413
	1321.19	96.0409	613.32	14372	13803	28	3.959
	1260.43	93.7212	586.6	13888	13016	77	6.279
	1223.97	94.3121	625.25	14610	13779	62	5.688
	1129.32	94.2581	645.82	15117	14249	56	5.742
	1338.73	95.395	635.79	14897	14211	46	4.605
	1269.94	94.8359	617.13	14562	13810	77	5.164
	1091.65	94.3769	590.2	13907	13125	56	5.623
	1365.64	94.0851	599.81	14083	13250	70	5.915
Mean	1233.46	94.63	613.69	14413	13639	58	5.37
Standard deviation	106.20	0.67	20.09	449.49	463.22	15.68	0.67
Margin of error	65.82	0.42	12.45	278.60	287.10	9.72	0.42
Upper bound	1299.28	95.04	626.14	14691.10	13925.90	67.42	5.79
Lower bound	1167.63	94.21	601.23	14133.90	13351.70	47.98	4.96

Table B-3 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 150 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
150	1283.68	95.1943	609.62	21537	20502	106	4.806
	1146.6	93.4023	551.32	19431	18149	91	6.598
	1322.95	97.0758	625.93	21955	21313	38	2.924
	1132.27	95.9516	619.29	21836	20952	68	4.048
	1191.47	94.5894	593.16	20922	19790	97	5.411
	1138.09	95.2151	654.99	22989	21889	75	4.785
	1345.62	96.4284	634.53	22287	21491	66	3.572
	1384.58	94.891	628.52	22157	21025	55	5.109
	1225.73	95.1324	612.94	21530	20482	57	4.868
	1272.99	95.3255	613.74	21564	20556	80	4.674
Mean	1244.40	95.32	614.40	21621	20615	73	4.68
Standard deviation	91.30	1.01	27.62	946.53	1051.72	20.87	1.01
Margin of error	56.59	0.63	17.12	586.67	651.86	12.94	0.63
Upper bound	1300.98	95.95	631.52	22207.47	21266.76	86.24	5.30
Lower bound	1187.81	94.70	597.29	21034.13	19963.04	60.36	4.05

Table B-4 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 200 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
200	1287.92	95.1639	603.04	28370	26998	152	4.836
	1033.14	94.736	552.43	25969	24602	90	5.264
	1371.05	97.1304	626.63	29272	28432	56	2.870
	1412.11	95.1152	585.03	27616	26267	156	4.885
	1201.01	95.9331	638.36	29826	28613	115	4.067
	1213.54	95.463	627.12	29403	28069	138	4.537
	1337.85	95.5301	615.48	28882	27591	122	4.470
	1399.72	93.4317	608.19	28607	26728	100	6.568
	1046.91	95.8997	628.89	29437	28230	85	4.100
	1371.12	94.7179	590.2	27735	26270	132	5.282
Mean	1267.44	95.31	607.54	28512	27180	115	4.69
Standard deviation	139.90	0.97	26.00	1154.37	1257.33	31.88	0.97
Margin of error	86.71	0.60	16.11	715.49	779.30	19.76	0.60
Upper bound	1354.15	95.91	623.65	29227.19	27959.30	134.36	5.29
Lower bound	1180.73	94.71	591.43	27796.21	26400.70	94.84	4.09

Table B-5 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 250 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
250	1352.27	96.4303	639.98	37566	36225	132	3.570
	1128.14	95.3454	584.82	34310	32713	137	4.655
	1337.98	97.6718	633.2	36939	36079	73	2.328
	1316.95	95.6676	600.74	35315	33785	143	4.332
	1397.76	94.3837	585.59	34453	32518	128	5.616
	1198.24	95.9421	642.14	37606	36080	146	4.058
	1312.39	96.0546	625.38	36650	35204	132	3.945
	1124.25	94.9503	605.51	35586	33789	136	5.050
	1234.58	96.3658	604.49	35386	34100	85	3.634
	1499.21	95.7162	608.05	35669	34141	112	4.284
Mean	1290.18	95.85	612.99	35948	34463	122	4.15
Standard deviation	119.23	0.90	21.05	1187.21	1369.30	24.82	0.90
Margin of error	73.90	0.56	13.05	735.84	848.70	15.38	0.56
Upper bound	1364.08	96.41	626.04	36683.84	35312.10	137.78	4.70
Lower bound	1216.27	95.30	599.94	35212.16	33614.70	107.02	3.59

Table B-6 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 300 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
300	1244.97	95.3703	615.87	43307	41302	113	4.630
	985.751	95.5311	602.31	42382	40488	94	4.469
	1328.92	97.018	593.57	41683	40440	153	2.982
	1328.7	94.8937	617.77	43574	41349	197	5.106
	1213.95	96.1785	622.42	43700	42030	155	3.822
	1279.9	95.5477	617.71	43483	41547	130	4.452
	1512.19	96.8381	625.69	43961	42571	143	3.162
	1357.29	95.3036	628.74	44311	42230	220	4.696
	1137.09	95.1501	588.59	41547	39532	160	4.850
	1458.19	96.3866	620.9	43643	42066	172	3.613
Mean	1284.70	95.82	613.36	43159	41356	154	4.18
Standard deviation	152.31	0.73	13.74	953.19	952.04	37.33	0.73
Margin of error	94.40	0.46	8.52	590.80	590.08	23.14	0.46
Upper bound	1379.10	96.28	621.87	43749.90	41945.58	176.84	4.63
Lower bound	1190.29	95.37	604.84	42568.30	40765.42	130.56	3.72

Table B-7 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 350 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
350	1418.88	96.9684	640.71	52546	50953	167	3.032
	1476.75	96.064	627.56	36814	35365	203	3.936
	1288.63	96.9585	592.01	48528	47052	163	3.042
	1010.09	96.6642	609.64	50033	48364	136	3.336
	1234.47	96.3005	618.79	50709	48833	153	3.700
	1231.79	94.1787	653.67	53613	50492	163	5.821
	1235.32	96.1764	605.39	49692	47792	184	3.824
	1172.6	94.8743	618.86	36346	34483	168	5.126
	1174.01	96.2157	629.59	36863	35468	124	3.784
	1426.96	95.9442	606.64	35628	34183	146	4.056
Mean	1266.95	96.03	620.29	45077	43299	161	3.97
Standard deviation	141.41	0.88	18.25	7596.78	7348.25	22.77	0.88
Margin of error	87.65	0.55	11.31	4708.53	4554.49	14.12	0.55
Upper bound	1354.60	96.58	631.60	49785.73	47852.99	174.82	4.51
Lower bound	1179.30	95.49	608.98	40368.67	38744.01	146.58	3.42

Table B-8 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 400 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
400	1157.74	94.7633	613.83	57689	54668	212	5.237
	1145.35	94.9993	617.78	58032	55130	200	5.001
	1352.61	97.1963	618.75	57887	56264	147	2.804
	1517.5	96.5504	630.12	59109	57070	237	3.450
	1320.25	95.9763	610.48	57236	54933	232	4.024
	1171.53	96.0385	631.29	59145	56802	238	3.961
	1314.55	97.1818	638.89	59684	58002	158	2.818
	1147.45	96.4354	649.29	60932	58760	228	3.565
	1218.95	96.1291	631.96	59289	56994	198	3.871
	1416.88	97.2302	632.17	59174	57535	153	2.770
Mean	1276.28	96.25	627.46	58818	56616	200	3.75
Standard deviation	128.77	0.87	12.09	1106.60	1362.40	35.82	0.87
Margin of error	79.81	0.54	7.49	685.88	844.42	22.20	0.54
Upper bound	1356.09	96.79	634.95	59503.58	57460.22	222.50	4.29
Lower bound	1196.47	95.71	619.96	58131.82	55771.38	178.10	3.21

Table B-9 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 450 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
450	1354.49	95.892	617.61	65068	62395	150	4.108
	1161.66	94.7716	612.79	64647	61267	190	5.228
	1316.33	96.1446	638.52	67257	64664	244	3.855
	1192.85	96.215	617.96	65126	62661	207	3.785
	1110.06	96.0473	631.98	66588	63956	224	3.953
	1230.62	94.2255	642.55	67919	63997	265	5.775
	1269.33	96.8788	629.48	66288	64219	185	3.121
	1320.66	95.723	641.68	67665	64771	157	4.277
	1269.55	96.8433	620.82	65385	63321	205	3.157
	1464.97	96.7635	631.72	66616	64460	279	3.236
Mean	1269.05	95.95	628.51	66256	63571	211	4.05
Standard deviation	102.57	0.87	10.70	1156.12	1142.93	42.95	0.87
Margin of error	63.57	0.54	6.63	716.57	708.39	26.62	0.54
Upper bound	1332.62	96.49	635.14	66972.47	64279.49	237.22	4.59
Lower bound	1205.48	95.41	621.88	65539.33	62862.71	183.98	3.51

Table B-10 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 500 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
500	1392.31	96.7856	627.65	73606	71240	266	3.214
	1375.14	96.2789	633.49	74279	71515	331	3.721
	1380.17	97.6682	616.34	72134	70452	258	2.332
	1207.57	96.3057	623.06	73140	70438	336	3.694
	1206.95	96.6605	621.54	72705	70277	236	3.340
	1281.78	96.6909	631.34	73887	71442	247	3.309
	1372.66	96.2902	627.84	73482	70756	230	3.710
	1157.49	97.0953	643.45	75498	73305	229	2.905
	1172.27	95.1421	642.68	72007	68509	295	4.858
	1340.66	96.4166	617.76	72446	69850	241	3.583
Mean	1288.70	96.53	628.52	73318	70778	267	3.47
Standard deviation	94.52	0.65	9.43	1074.86	1250.16	40.24	0.65
Margin of error	58.58	0.40	5.84	666.21	774.86	24.94	0.40
Upper bound	1347.28	96.94	634.36	73984.61	71553.26	291.84	3.87
Lower bound	1230.12	96.13	622.67	72652.19	70003.54	241.96	3.06

Appendix C Battlefield Scenario NS2 Simulation Results

Table C-1 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 50 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
50	1226.72	92.2713	607.47	7194	6638	33	7.73
	1435.01	89.4548	543.14	6420	5743	28	10.55
	1268.88	93.9688	588.84	6914	6497	24	6.03
	1202.69	93.4041	598.69	7065	6599	37	6.60
	1206.03	92.115	600.09	7026	6472	50	7.88
	1086.57	91.7599	622.16	7330	6726	43	8.24
	1164.21	93.2238	619.11	7246	6755	16	6.78
	1288.2	91.317	612.38	7244	6615	17	8.68
	1254.82	93.3101	613.1	7175	6695	25	6.69
	1331.1	91.7305	587.34	6917	6345	46	8.27
Mean	1246.42	92.26	599.23	7053	6509	32	7.74
Standard deviation	95.04	1.32	22.97	263.44	296.90	11.91	1.32
Margin of error	58.91	0.82	14.24	163.28	184.02	7.38	0.82
Upper bound	1305.33	93.07	613.47	7216.38	6692.52	39.28	8.56
Lower bound	1187.51	91.44	584.99	6889.82	6324.48	24.52	6.93

Table C-2 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 100 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
100	1274.7	94.6474	626.96	14778	13987	63	5.353
	1058.98	94.587	595.99	13911	13158	42	5.413
	1321.19	96.0409	613.32	14372	13803	28	3.959
	1260.43	93.7212	586.6	13888	13016	77	6.279
	1223.97	94.3121	625.25	14610	13779	62	5.688
	1129.32	94.2581	645.82	15117	14249	56	5.742
	1338.73	95.395	635.79	14897	14211	46	4.605
	1269.94	94.8359	617.13	14562	13810	77	5.164
	1091.65	94.3769	590.2	13907	13125	56	5.623
	1365.64	94.0851	599.81	14083	13250	70	5.915
Mean	1233.46	94.63	613.69	14413	13639	58	5.37
Standard deviation	106.20	0.67	20.09	449.49	463.22	15.68	0.67
Margin of error	65.82	0.42	12.45	278.60	287.10	9.72	0.42
Upper bound	1299.28	95.04	626.14	14691.10	13925.90	67.42	5.79
Lower bound	1167.63	94.21	601.23	14133.90	13351.70	47.98	4.96

Table C-3 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 150 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
150	1283.68	95.1943	609.62	21537	20502	106	4.806
	1146.6	93.4023	551.32	19431	18149	91	6.598
	1322.95	97.0758	625.93	21955	21313	38	2.924
	1132.27	95.9516	619.29	21836	20952	68	4.048
	1191.47	94.5894	593.16	20922	19790	97	5.411
	1138.09	95.2151	654.99	22989	21889	75	4.785
	1345.62	96.4284	634.53	22287	21491	66	3.572
	1384.58	94.891	628.52	22157	21025	55	5.109
	1225.73	95.1324	612.94	21530	20482	57	4.868
	1272.99	95.3255	613.74	21564	20556	80	4.674
Mean	1244.40	95.32	614.40	21621	20615	73	4.68
Standard deviation	91.30	1.01	27.62	946.53	1051.72	20.87	1.01
Margin of error	56.59	0.63	17.12	586.67	651.86	12.94	0.63
Upper bound	1300.98	95.95	631.52	22207.47	21266.76	86.24	5.30
Lower bound	1187.81	94.70	597.29	21034.13	19963.04	60.36	4.05

Table C-4 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 200 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
200	1287.92	95.1639	603.04	28370	26998	152	4.836
	1033.14	94.736	552.43	25969	24602	90	5.264
	1371.05	97.1304	626.63	29272	28432	56	2.870
	1412.11	95.1152	585.03	27616	26267	156	4.885
	1201.01	95.9331	638.36	29826	28613	115	4.067
	1213.54	95.463	627.12	29403	28069	138	4.537
	1337.85	95.5301	615.48	28882	27591	122	4.470
	1399.72	93.4317	608.19	28607	26728	100	6.568
	1046.91	95.8997	628.89	29437	28230	85	4.100
	1371.12	94.7179	590.2	27735	26270	132	5.282
Mean	1267.44	95.31	607.54	28512	27180	115	4.69
Standard deviation	139.90	0.97	26.00	1154.37	1257.33	31.88	0.97
Margin of error	86.71	0.60	16.11	715.49	779.30	19.76	0.60
Upper bound	1354.15	95.91	623.65	29227.19	27959.30	134.36	5.29
Lower bound	1180.73	94.71	591.43	27796.21	26400.70	94.84	4.09

Table C-5 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 250 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
250	1352.27	96.4303	639.98	37566	36225	132	3.570
	1128.14	95.3454	584.82	34310	32713	137	4.655
	1337.98	97.6718	633.2	36939	36079	73	2.328
	1316.95	95.6676	600.74	35315	33785	143	4.332
	1397.76	94.3837	585.59	34453	32518	128	5.616
	1198.24	95.9421	642.14	37606	36080	146	4.058
	1312.39	96.0546	625.38	36650	35204	132	3.945
	1124.25	94.9503	605.51	35586	33789	136	5.050
	1234.58	96.3658	604.49	35386	34100	85	3.634
	1499.21	95.7162	608.05	35669	34141	112	4.284
Mean	1290.18	95.85	612.99	35948	34463	122	4.15
Standard deviation	119.23	0.90	21.05	1187.21	1369.30	24.82	0.90
Margin of error	73.90	0.56	13.05	735.84	848.70	15.38	0.56
Upper bound	1364.08	96.41	626.04	36683.84	35312.10	137.78	4.70
Lower bound	1216.27	95.30	599.94	35212.16	33614.70	107.02	3.59

Table C-6 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 300 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
300	1244.97	95.3703	615.87	43307	41302	113	4.630
	985.751	95.5311	602.31	42382	40488	94	4.469
	1328.92	97.018	593.57	41683	40440	153	2.982
	1328.7	94.8937	617.77	43574	41349	197	5.106
	1213.95	96.1785	622.42	43700	42030	155	3.822
	1279.9	95.5477	617.71	43483	41547	130	4.452
	1512.19	96.8381	625.69	43961	42571	143	3.162
	1357.29	95.3036	628.74	44311	42230	220	4.696
	1137.09	95.1501	588.59	41547	39532	160	4.850
	1458.19	96.3866	620.9	43643	42066	172	3.613
Mean	1284.70	95.82	613.36	43159	41356	154	4.18
Standard deviation	152.31	0.73	13.74	953.19	952.04	37.33	0.73
Margin of error	94.40	0.46	8.52	590.80	590.08	23.14	0.46
Upper bound	1379.10	96.28	621.87	43749.90	41945.58	176.84	4.63
Lower bound	1190.29	95.37	604.84	42568.30	40765.42	130.56	3.72

Table C-7 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 350 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
350	1418.88	96.9684	640.71	52546	50953	167	3.032
	1476.75	96.064	627.56	36814	35365	203	3.936
	1288.63	96.9585	592.01	48528	47052	163	3.042
	1010.09	96.6642	609.64	50033	48364	136	3.336
	1234.47	96.3005	618.79	50709	48833	153	3.700
	1231.79	94.1787	653.67	53613	50492	163	5.821
	1235.32	96.1764	605.39	49692	47792	184	3.824
	1172.6	94.8743	618.86	36346	34483	168	5.126
	1174.01	96.2157	629.59	36863	35468	124	3.784
	1426.96	95.9442	606.64	35628	34183	146	4.056
Mean	1266.95	96.03	620.29	45077	43299	161	3.97
Standard deviation	141.41	0.88	18.25	7596.78	7348.25	22.77	0.88
Margin of error	87.65	0.55	11.31	4708.53	4554.49	14.12	0.55
Upper bound	1354.60	96.58	631.60	49785.73	47852.99	174.82	4.51
Lower bound	1179.30	95.49	608.98	40368.67	38744.01	146.58	3.42

Table C-8 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 400 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
400	1157.74	94.7633	613.83	57689	54668	212	5.237
	1145.35	94.9993	617.78	58032	55130	200	5.001
	1352.61	97.1963	618.75	57887	56264	147	2.804
	1517.5	96.5504	630.12	59109	57070	237	3.450
	1320.25	95.9763	610.48	57236	54933	232	4.024
	1171.53	96.0385	631.29	59145	56802	238	3.961
	1314.55	97.1818	638.89	59684	58002	158	2.818
	1147.45	96.4354	649.29	60932	58760	228	3.565
	1218.95	96.1291	631.96	59289	56994	198	3.871
	1416.88	97.2302	632.17	59174	57535	153	2.770
Mean	1276.28	96.25	627.46	58818	56616	200	3.75
Standard deviation	128.77	0.87	12.09	1106.60	1362.40	35.82	0.87
Margin of error	79.81	0.54	7.49	685.88	844.42	22.20	0.54
Upper bound	1356.09	96.79	634.95	59503.58	57460.22	222.50	4.29
Lower bound	1196.47	95.71	619.96	58131.82	55771.38	178.10	3.21

Table C-9 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 450 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
450	1354.49	95.892	617.61	65068	62395	150	4.108
	1161.66	94.7716	612.79	64647	61267	190	5.228
	1316.33	96.1446	638.52	67257	64664	244	3.855
	1192.85	96.215	617.96	65126	62661	207	3.785
	1110.06	96.0473	631.98	66588	63956	224	3.953
	1230.62	94.2255	642.55	67919	63997	265	5.775
	1269.33	96.8788	629.48	66288	64219	185	3.121
	1320.66	95.723	641.68	67665	64771	157	4.277
	1269.55	96.8433	620.82	65385	63321	205	3.157
	1464.97	96.7635	631.72	66616	64460	279	3.236
Mean	1269.05	95.95	628.51	66256	63571	211	4.05
Standard deviation	102.57	0.87	10.70	1156.12	1142.93	42.95	0.87
Margin of error	63.57	0.54	6.63	716.57	708.39	26.62	0.54
Upper bound	1332.62	96.49	635.14	66972.47	64279.49	237.22	4.59
Lower bound	1205.48	95.41	621.88	65539.33	62862.71	183.98	3.51

Table C-10 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 500 seconds

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)
500	1392.31	96.7856	627.65	73606	71240	266	3.214
	1375.14	96.2789	633.49	74279	71515	331	3.721
	1380.17	97.6682	616.34	72134	70452	258	2.332
	1207.57	96.3057	623.06	73140	70438	336	3.694
	1206.95	96.6605	621.54	72705	70277	236	3.340
	1281.78	96.6909	631.34	73887	71442	247	3.309
	1372.66	96.2902	627.84	73482	70756	230	3.710
	1157.49	97.0953	643.45	75498	73305	229	2.905
	1172.27	95.1421	642.68	72007	68509	295	4.858
	1340.66	96.4166	617.76	72446	69850	241	3.583
Mean	1288.70	96.53	628.52	73318	70778	267	3.47
Standard deviation	94.52	0.65	9.43	1074.86	1250.16	40.24	0.65
Margin of error	58.58	0.40	5.84	666.21	774.86	24.94	0.40
Upper bound	1347.28	96.94	634.36	73984.61	71553.26	291.84	3.87
Lower bound	1230.12	96.13	622.67	72652.19	70003.54	241.96	3.06

Appendix D Simulation-based Analysis Overhead

Table D-1 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, clock ticks, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 50 seconds for 1 scalar sensor

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)	Clock Ticks
50	1128.56	93.948	599.07	7006	6582	17	6.052	228969
	1186.4	93.5059	607.02	7145	6681	43	6.494	236137
	1115.53	93.3602	591.83	6943	6482	30	6.640	266975
	1084.28	93.9328	588.67	6939	6518	25	6.067	240740
	1004.45	92.6417	580.52	6863	6358	51	7.358	252736
	1176.97	92.7086	604.26	7118	6599	57	7.291	240400
	1182.05	93.7535	604.8	7076	6634	42	6.246	232455
	1125.88	93.0287	586.8	6871	6392	28	6.971	233640
	985.612	93.7614	607.66	7133	6688	60	6.239	241992
	1033.58	93.6108	603.82	7137	6681	32	6.389	234032
Mean	1102.33	93.43	597.45	7023.10	6561.50	38.50	6.57	240807.66
Standard deviation	73.54	0.48	9.71	112.68	120.19	14.39	0.48	11341.17
Margin of error	45.58	0.30	6.02	69.84	74.49	8.92	0.30	7029.33
Upper bound	1147.91	93.72	603.46	7092.94	6635.99	47.42	6.87	247836.99
Lower bound	1056.75	93.13	591.43	6953.26	6487.01	29.58	6.28	233778.33

Table D-2 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, clock ticks, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 100 seconds for 2 scalar sensors and 2 multimedia sensor with privacy and security applied

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)	Clock Ticks
100	1264.99	95.0856	571.65	13430	12770	59	4.914	3760025
	1393.83	94.7039	564.32	13274	12571	74	5.296	3900178
	1199.43	94.84	585.5	13721	13013	42	5.160	4097914
	1271.32	95.2852	586	13744	13096	34	4.715	4119698
	1347.03	93.7248	580.72	13657	12800	44	6.275	4023654
	1255.03	95.2263	567.95	13344	12707	26	4.774	4049753
	1348.39	95.1048	587.51	13789	13114	28	4.895	4032872
	1524.69	94.7921	562.63	13230	12541	85	5.208	3577058
	1192.36	94.1965	569.1	13423	12644	56	5.803	3575159
	1491.86	95.529	602.77	14158	13525	48	4.471	4071485
Mean	1328.89	94.85	577.82	13577.00	12878.10	49.60	5.15	3920779.60
Standard deviation	114.54	0.54	12.80	288.55	307.25	19.25	0.54	210106.81
Margin of error	70.99	0.34	7.94	178.85	190.43	11.93	0.34	130225.55
Upper bound	1399.89	95.18	585.75	13755.85	13068.53	61.53	5.49	4051005.15
Lower bound	1257.90	94.51	569.88	13398.15	12687.67	37.67	4.82	3790554.05

Table D-3 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, clock ticks, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 150 seconds for 1 scalar sensors and 1 multimedia sensor

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)	Clock Ticks
150	1237.87	96.2195	625.19	21849	21023	75	3.780	281406
	1184.34	96.0793	600.87	21144	20315	111	3.921	307924
	1123.56	96.0256	628.51	21991	21117	72	3.974	281609
	1150.56	96.4234	628.78	22088	21298	67	3.577	276879
	1095.69	95.3366	618.63	21744	20730	48	4.663	283889
	1179.74	95.9996	610.81	21423	20566	96	4.000	296915
	1272.51	96.7932	624.64	21922	21219	63	3.207	285306
	1132.29	95.9428	619.4	21764	20881	111	4.057	286678
	1286.34	95.3103	620.46	21835	20811	106	4.690	282438
	1172.53	96.3606	624.59	21954	21155	105	3.639	280392
Mean	1183.54	96.05	620.19	21771.40	20911.50	85.40	3.95	286343.60
Standard deviation	63.77	0.46	8.64	284.87	312.17	22.99	0.46	9260.02
Margin of error	39.53	0.28	5.35	176.57	193.48	14.25	0.28	5739.42
Upper bound	1223.07	96.33	625.54	21947.97	21104.98	99.65	4.23	292083.02
Lower bound	1144.02	95.77	614.83	21594.83	20718.02	71.15	3.67	280604.18

Table D-4 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, clock ticks, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 200 seconds for 1 scalar sensors and 1 multimedia sensor with privacy and security applied

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)	Clock Ticks
200	1182.39	95.7527	608.17	28512	27301	76	4.247	3882498
	1221.48	95.9052	603.74	28231	27075	117	4.095	3853272
	1318.65	95.4449	612.58	28693	27386	122	4.555	3849272
	1262.5	97.1137	629.89	29484	28633	110	2.886	3865740
	1201.46	95.9747	600.56	28147	27014	108	4.025	3808803
	1281.83	96.9093	606.05	28311	27436	80	3.091	3882483
	1247	96.6086	611.97	28661	27689	98	3.391	3884096
	1219.5	95.9618	615.43	28874	27708	114	4.038	3873406
	1362.41	96.1596	600.21	28096	27017	105	3.840	3855428
	1383.45	96.5424	609.58	28546	27559	104	3.458	3851615
Mean	1268.07	96.24	609.82	28555.50	27481.80	103.40	3.76	3860661.30
Standard deviation	68.10	0.53	8.68	413.48	479.54	15.05	0.53	22787.08
Margin of error	42.21	0.33	5.38	256.28	297.22	9.33	0.33	14123.58
Upper bound	1310.28	96.57	615.20	28811.78	27779.02	112.73	4.09	3874784.88
Lower bound	1225.86	95.91	604.44	28299.22	27184.58	94.07	3.43	3846537.72

Table D-5 Average end-to-end delay, PDR, throughput, generated packets, dropped packets, PLR, clock ticks, mean, standard deviation, margin of error, upper bound and lower bound results for simulation time of 450 seconds for 1 scalar sensors and 1 multimedia sensor

Simulation Time (s)	Average End-to-end Delay (ms)	PDR (%)	Throughput (kps)	Generated Packets	Received Packets	Dropped Packets	PLR (%)	Clock Ticks
450	1148.02	96.8366	643.97	67680	65539	178	3.163	304439
	1156.81	97.0869	638.16	67043	65090	188	2.913	298808
	1131.95	96.8773	636.57	66994	64902	208	3.123	297328
	1171.37	96.8733	642.29	67516	65405	280	3.127	299120
	1171.29	97.3826	656.63	69076	67268	261	2.617	296206
	1224.84	97.6666	652.8	68611	67010	192	2.333	311936
	1293.47	97.2515	651.22	68582	66697	191	2.749	291552
	1132.3	95.8011	632.32	66541	63747	174	4.199	321099
	1167.05	96.9529	642.62	67672	65610	213	3.047	308928
	1151.19	97.2167	632.78	66539	64687	173	2.783	304890
Mean	1174.83	96.99	642.94	67625.40	65595.50	205.80	3.01	303430.60
Standard deviation	49.34	0.50	8.39	888.31	1107.04	36.81	0.50	8745.60
Margin of error	30.58	0.31	5.20	550.58	686.15	22.82	0.31	5420.58
Upper bound	1205.41	97.30	648.14	68175.98	66281.65	228.62	3.31	308851.18
Lower bound	1144.25	96.69	637.73	67074.82	64909.35	182.98	2.70	298010.02