Supplementary Experiments

Table 1: Results for the 2E-CVRP instances of Random Set(51 nodes and 3 satellites).

Instance	Gurobi(10m)			DRL-2ECVRP(TL)		
	B.O	T(s)	Gap	B.O	T(s)	Gap(%)
51c_3s_0.pkl	10.57	600.00	0.00	10.81	34.88	2.23
51c_3s__1.pkl	8.83	600.00	0.00	8.97	33.48	1.64
51c_3s__2.pkl	12.24	600.00	0.00	12.31	33.16	0.59
51c_3s__3.pkl	9.21	600.00	0.00	9.44	34.57	2.45
51c_3s__4.pkl	9.16	600.00	0.00	9.23	32.88	0.78
51c_3s__5.pkl	11.49	600.00	0.00	11.57	33.43	0.65
51c_3s__6.pkl	11.36	600.00	0.00	11.59	34.40	2.02
51c_3s__7.pkl	11.92	600.00	0.00	12.05	33.82	1.12
51c_3s__8.pkl	14.27	600.00	0.00	14.43	32.56	1.12
51c_3s__9.pkl	10.29	600.00	0.00	10.30	34.61	0.13

Table 2: Results for the 2E-CVRP instances of Random Set(51 nodes and 7 satellites).

Instance	Gurobi(10m)			DRL-2ECVRP(TL)		
	B.O	T(s)	Gap(%)	B.O	T(s)	Gap(%)
51c_7s_0.pkl	9.09	600.00	1.25	8.98	34.88	0.00
51c_7s__1.pkl	9.29	600.00	0.00	9.36	33.48	0.71
51c_7s__2.pkl	9.87	600.00	0.00	10.07	33.16	2.00
51c_7s__3.pkl	8.50	600.00	0.00	8.64	34.57	1.60
51c_7s__4.pkl	8.20	600.00	1.22	8.10	32.88	0.00
51c_7s__5.pkl	8.12	600.00	0.00	8.20	33.43	1.00
51c_7s__6.pkl	10.05	600.00	0.16	10.03	34.40	0.00
51c_7s__7.pkl	9.28	600.00	0.00	9.52	33.82	2.56
51c_7s__8.pkl	8.92	600.00	1.29	8.81	32.56	0.00
51c_7s__9.pkl	11.12	600.00	5.01	10.59	34.61	0.00

Table 3: Results for the 2E-CVRP instances of Random Set(100 nodes and 8 satellites).

Instance	Gurobi(10m)			DRL-2ECVRP(TL)		
	B.O	T(s)	Gap(%)	B.O	T(s)	Gap(%)
100c_8s_0.pkl	15.95	600.00	7.51	14.84	129.60	0.00
100c_8s__1.pkl	16.04	600.00	5.18	15.25	130.70	0.00
100c_8s__2.pkl	16.16	600.00	6.60	15.16	144.11	0.00
100c_8s__3.pkl	16.04	600.00	4.21	15.39	138.02	0.00
100c_8s__4.pkl	14.27	600.00	0.00	14.27	136.84	0.00
100c_8s__5.pkl	16.16	600.00	5.00	15.39	142.18	0.00
100c_8s__6.pkl	16.55	600.00	13.94	14.53	149.85	0.00
100c_8s__7.pkl	16.18	600.00	8.00	14.98	148.60	0.00
100c_8s__8.pkl	15.49	600.00	1.11	15.32	147.50	0.00
100c_8s__9.pkl	14.65	600.00	8.35	13.52	136.90	0.00

Table 4: Results for the 2E-CVRP instances of Random Set(100 nodes and 12 satellites).

Instance	Gurobi(10m)			DRL-2ECVRP(TL)		
	B.O	T(s)	Gap(%)	B.O	T(s)	Gap(%)
100c_12s_0.pkl	16.36	600.00	25.57	13.03	137.43	0.00
100c_12s__1.pkl	18.29	600.00	9.98	16.63	139.78	0.00
100c_12s__2.pkl	14.59	600.00	6.89	13.65	141.92	0.00
100c_12s__3.pkl	16.77	600.00	12.35	14.93	143.99	0.00
100c_12s__4.pkl	14.43	600.00	4.83	13.76	142.15	0.00
100c_12s__5.pkl	14.61	600.00	14.48	12.76	142.53	0.00
100c_12s__6.pkl	14.32	600.00	6.07	13.50	139.51	0.00
100c_12s__7.pkl	15.28	600.00	12.42	13.59	137.54	0.00
100c_12s__8.pkl	15.98	600.00	9.25	14.63	134.87	0.00
100c_12s__9.pkl	15.73	600.00	9.56	14.36	135.59	0.00

Table 5: Results for the 2E-CVRP instances of Random Set(200 nodes and 10 satellites).

Instance	Gurobi(10m)			DRL-2ECVRP(TL)		
	B.O	T(s)	Gap(%)	B.O	T(s)	Gap(%)
200c_10s_0.pkl	190.38	600.00	656.68	25.16	255.94	0.00
200c_10s__1.pkl	121.44	600.00	390.29	24.77	259.81	0.00
200c_10s__2.pkl	26.96	600.00	3.00	26.17	254.29	0.00
200c_10s__3.pkl	29.41	600.00	22.44	24.02	253.86	0.00
200c_10s__4.pkl	29.97	600.00	9.79	27.30	253.34	0.00
200c_10s__5.pkl	26.22	600.00	13.07	23.19	250.75	0.00
200c_10s__6.pkl	24.59	600.00	0.00	25.26	252.26	2.72
200c_10s__7.pkl	34.31	600.00	25.46	27.35	256.50	0.00
200c_10s__8.pkl	30.60	600.00	4.79	29.20	254.55	0.00
200c_10s__9.pkl	27.58	600.00	8.49	25.42	256.15	0.00

Table 6: Results for the 2E-CVRP instances of Random Set(300 nodes and 15 satellites).

Instance	Gurobi(10m)			DRL-2ECVRP(TL)		
	B.O	T(s)	Gap(%)	B.O	T(s)	Gap(%)
300c_15s_0.pkl	-	600.00	-	37.65	600.00	0.00
300c_15s__1.pkl	-	600.00	-	33.95	600.00	0.00
300c_15s__2.pkl	-	600.00	-	36.26	600.00	0.00
300c_15s__3.pkl	-	600.00	-	36.14	600.00	0.00
300c_15s__4.pkl	-	600.00	-	33.70	600.00	0.00
300c_15s__5.pkl	201.48	600.00	406.88	39.75	600.00	0.00
300c_15s__6.pkl	-	600.00	-	33.17	600.00	0.00
300c_15s__7.pkl	275.33	600.00	632.83	37.57	600.00	0.00
300c_15s__8.pkl	-	600.00	-	34.88	600.00	0.00
300c_15s__9.pkl	224.15	600.00	518.68	36.23	600.00	0.00