DTALite Log

Step 0: Reading setting.csv.

number\_of\_iterations= 20 in setting.csv.

route\_output = 1 in setting.csv.

simulation\_output = 0 in setting.csv.

number\_of\_memory\_blocks = 4 in settings.csv.

**0.083333**

cumulative profile no. 0, ratio at slot 86 (7:10) = 0.0033333,CR 0.16667

cumulative profile no. 0, ratio at slot 87 (7:15) = 0.0033333,CR 0.25

cumulative profile no. 0, ratio at slot 88 (7:20) = 0.0033333,CR 0.33333

cumulative profile no. 0, ratio at slot 89 (7:25) = 0.0033333,CR 0.41667

cumulative profile no. 0, ratio at slot 90 (7:30) = 0.0033333,CR 0.5

cumulative profile no. 0, ratio at slot 91 (7:35) = 0.0033333,CR 0.58333

cumulative profile no. 0, ratio at slot 92 (7:40) = 0.0033333,CR 0.66667

cumulative profile no. 0, ratio at slot 93 (7:45) = 0.0033333,CR 0.75

cumulative profile no. 0, ratio at slot 94 (7:50) = 0.0033333,CR 0.83333

cumulative profile no. 0, ratio at slot 95 (7:55) = 0.0033333,CR 0.91667

cumulative profile no. 0, ratio at slot 96 (8:0) = 0.0033333,CR 1

final cumulative profile ratio = 0.91667

number of demand periods = 1

Step 1.2: Reading mode\_type.csv...

number of mode types = 1

Step 1.3: Reading activity\_travel\_pattern.csv...

Warning: File activity\_travel\_pattern.csv cannot be opened. Note that, file activity\_travel\_pattern.csv is optional.

Step 1.3: Reading link\_type.csv

number of link types = 7

Step 1.31: Reading zone data in zone.csv...

reading 0 access nodes from zone.csv..

reading 0 access nodes from zone.csv..

Step 1.4: Reading node data in node.csv...

Reading node data

number of nodes = 4

number of multimodal activity nodes = 0

Note: One can add mode\_type in node.csv to denote transit stations as part of efforts for modleing multmodal activities

Step 1.5: Initializing O-D zone vector...

number of zones = 2

Reading file demand\_file\_list.csv...

Step 1.6: Reading link data in link.csv...

number of links =8

number of links =8

Step 2.0: Reading file departure\_time\_profile.csv

T6h0min=0.003242

T6h5min=0

T6h10min=0.003242

T6h15min=0.003218

T6h20min=0.003218

T6h25min=0.003218

T6h30min=0.003803

T6h35min=0.003803

T6h40min=0.003803

T6h45min=0.004459

T6h50min=0.004459

T6h55min=0.004459

T7h0min=0.005002

T7h5min=0

T7h10min=0.005002

T7h15min=0.005207

T7h20min=0.005207

T7h25min=0.005207

T7h30min=0.005677

T7h35min=0.005677

T7h40min=0.005677

T7h45min=0.005994

T7h50min=0.005994

T7h55min=0.005994

T8h0min=0.006018

T8h5min=0.006018

T8h10min=0

T8h15min=0.005508

T8h20min=0.005508

T8h25min=0

T8h30min=0.00529

T8h35min=0.00529

T8h40min=0.00529

T8h45min=0.005058

T8h50min=0.005058

T8h55min=0

T9h0min=0.004833

cumulative profile no. 1, ratio at slot 73 (6:5) = 0.0033333,CR 0.01974

cumulative profile no. 1, ratio at slot 74 (6:10) = 0.003242,CR 0.03894

cumulative profile no. 1, ratio at slot 75 (6:15) = 0.003218,CR 0.057998

cumulative profile no. 1, ratio at slot 76 (6:20) = 0.003218,CR 0.077055

cumulative profile no. 1, ratio at slot 77 (6:25) = 0.003218,CR 0.096113

cumulative profile no. 1, ratio at slot 78 (6:30) = 0.003803,CR 0.11863

cumulative profile no. 1, ratio at slot 79 (6:35) = 0.003803,CR 0.14116

cumulative profile no. 1, ratio at slot 80 (6:40) = 0.003803,CR 0.16368

cumulative profile no. 1, ratio at slot 81 (6:45) = 0.004459,CR 0.19009

cumulative profile no. 1, ratio at slot 82 (6:50) = 0.004459,CR 0.21649

cumulative profile no. 1, ratio at slot 83 (6:55) = 0.004459,CR 0.2429

cumulative profile no. 1, ratio at slot 84 (7:0) = 0.005002,CR 0.27252

cumulative profile no. 1, ratio at slot 85 (7:5) = 0.0033333,CR 0.29226

cumulative profile no. 1, ratio at slot 86 (7:10) = 0.005002,CR 0.32188

cumulative profile no. 1, ratio at slot 87 (7:15) = 0.005207,CR 0.35272

cumulative profile no. 1, ratio at slot 88 (7:20) = 0.005207,CR 0.38356

cumulative profile no. 1, ratio at slot 89 (7:25) = 0.005207,CR 0.41439

cumulative profile no. 1, ratio at slot 90 (7:30) = 0.005677,CR 0.44801

cumulative profile no. 1, ratio at slot 91 (7:35) = 0.005677,CR 0.48163

cumulative profile no. 1, ratio at slot 92 (7:40) = 0.005677,CR 0.51525

cumulative profile no. 1, ratio at slot 93 (7:45) = 0.005994,CR 0.55075

cumulative profile no. 1, ratio at slot 94 (7:50) = 0.005994,CR 0.58625

cumulative profile no. 1, ratio at slot 95 (7:55) = 0.005994,CR 0.62175

cumulative profile no. 1, ratio at slot 96 (8:0) = 0.006018,CR 0.65739

cumulative profile no. 1, ratio at slot 97 (8:5) = 0.006018,CR 0.69303

cumulative profile no. 1, ratio at slot 98 (8:10) = 0.0033333,CR 0.71277

cumulative profile no. 1, ratio at slot 99 (8:15) = 0.005508,CR 0.74539

cumulative profile no. 1, ratio at slot 100 (8:20) = 0.005508,CR 0.778

cumulative profile no. 1, ratio at slot 101 (8:25) = 0.0033333,CR 0.79774

cumulative profile no. 1, ratio at slot 102 (8:30) = 0.00529,CR 0.82907

cumulative profile no. 1, ratio at slot 103 (8:35) = 0.00529,CR 0.8604

cumulative profile no. 1, ratio at slot 104 (8:40) = 0.00529,CR 0.89173

cumulative profile no. 1, ratio at slot 105 (8:45) = 0.005058,CR 0.92168

cumulative profile no. 1, ratio at slot 106 (8:50) = 0.005058,CR 0.95164

cumulative profile no. 1, ratio at slot 107 (8:55) = 0.0033333,CR 0.97138

cumulative profile no. 1, ratio at slot 108 (9:0) = 0.004833,CR 1

final cumulative profile ratio = 0.97138

allocating 4D memory for no.0 zone,nM=2,nX=2,nY=1,nZ=1

Step 2.1: Reading file demand\_file\_list.csv...

reading demand file for scenario index =0

o\_zone\_id:1, d\_zone\_id: 2, value = 7000

o\_zone\_id:2, d\_zone\_id: 1, value = 7000

cumulative total demand volume is 14000

reading demand file for scenario index =0

o\_zone\_id:1, d\_zone\_id: 2, value = 7000

o\_zone\_id:2, d\_zone\_id: 1, value = 7000

cumulative total demand volume is 14000

Step 2.2: Reading supply side scenario data...

reading 0 sa capacity scenario..

reading 0 dms scenario..

Step 3: Assigning computing tasks to memory blocks...

There are 2 SP networks in memory.

There are 2 agent type\*zones to be computed in CPU.

Step 4: Column Generation for Traffic Assignment...

Total number of column generation iteration = 20

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global scenario index =0

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Current iteration number = No. 011296CPU time: 0.003 s

,system wide travel time (TT) = 0, least system TT = 2.8e+05,gap = -100 %

Current iteration number = No. 111296CPU time: 0.004 s

,system wide travel time (TT) = 0, least system TT = 2.8e+05,gap = -100 %

Current iteration number = No. 211296CPU time: 0.006 s

,system wide travel time (TT) = 6.7392e+05, least system TT = 4.2e+05,gap = 60.455 %

Current iteration number = No. 311296CPU time: 0.008 s

,system wide travel time (TT) = 6.7392e+05, least system TT = 4.2e+05,gap = 60.455 %

Current iteration number = No. 411296CPU time: 0.009 s

,system wide travel time (TT) = 3.8623e+05, least system TT = 3.5781e+05,gap = 7.9412 %

Current iteration number = No. 511296CPU time: 0.011 s

,system wide travel time (TT) = 4.2067e+05, least system TT = 3.0462e+05,gap = 38.095 %

Current iteration number = No. 611296CPU time: 0.013 s

,system wide travel time (TT) = 3.8576e+05, least system TT = 3.3106e+05,gap = 16.524 %

Current iteration number = No. 711296CPU time: 0.015 s

,system wide travel time (TT) = 3.8623e+05, least system TT = 3.5781e+05,gap = 7.9412 %

Current iteration number = No. 811296CPU time: 0.017 s

,system wide travel time (TT) = 3.968e+05, least system TT = 3.8254e+05,gap = 3.7273 %

Current iteration number = No. 911296CPU time: 0.018 s

,system wide travel time (TT) = 4.1031e+05, least system TT = 4.0464e+05,gap = 1.3999 %

Current iteration number = No. 1011296CPU time: 0.02 s

,system wide travel time (TT) = 4.2425e+05, least system TT = 4.2416e+05,gap = 0.021012 %

Current iteration number = No. 1111296CPU time: 0.022 s

,system wide travel time (TT) = 4.3768e+05, least system TT = 4.2299e+05,gap = 3.4723 %

Current iteration number = No. 1211296CPU time: 0.023 s

,system wide travel time (TT) = 4.5026e+05, least system TT = 4.2205e+05,gap = 6.6847 %

Current iteration number = No. 1311296CPU time: 0.025 s

,system wide travel time (TT) = 4.1031e+05, least system TT = 4.0464e+05,gap = 1.3999 %

Current iteration number = No. 1411296CPU time: 0.026 s

,system wide travel time (TT) = 3.9088e+05, least system TT = 3.7049e+05,gap = 5.5019 %

Current iteration number = No. 1511296CPU time: 0.028 s

,system wide travel time (TT) = 3.968e+05, least system TT = 3.8254e+05,gap = 3.7273 %

Current iteration number = No. 1611296CPU time: 0.031 s

,system wide travel time (TT) = 4.034e+05, least system TT = 3.9393e+05,gap = 2.4046 %

Current iteration number = No. 1711296CPU time: 0.033 s

,system wide travel time (TT) = 4.1031e+05, least system TT = 4.0464e+05,gap = 1.3999 %

Current iteration number = No. 1811296CPU time: 0.034 s

,system wide travel time (TT) = 4.173e+05, least system TT = 4.1471e+05,gap = 0.62526 %

Current iteration number = No. 1911296CPU time: 0.036 s

,system wide travel time (TT) = 4.2425e+05, least system TT = 4.2416e+05,gap = 0.021012 %

Step 5: Column Pool Updating

Total number of column pool updating iterations = 2

column updating: iteration= 0, avg travel time = 31.263(min), optimization obj = 14687,Relative\_gap=3.2896 %

column updating: iteration= 1, avg travel time = 30.36(min), optimization obj = 601.99,Relative\_gap=0.14154 %

Step 6: OD demand matrix estimation if file sensor\_data.csv is provided.

Step 7: perform sensivity analysis if supply\_side\_scenario.csv is provided for types = SA and DMS.

Step 8: traffic simulation if simulation\_output = 1 in settings.csv .

CPU Running Time for the entire computing progress = 0.005 s

Step 9: record corridor performance summary

Step 10: output assignment result

writing link\_performance\_s0.csv

writing route\_assignment.csv..

writing link\_background\_volume.csv..

writing data for 2 zones

writing demand.bin..

writing data for 2 zones

Complete writing 0K binary demand pairs with CPU time 0 s.

writing choice\_set\_output.csv..

updating\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

global scenario index =1

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Current iteration number = No. 011296CPU time: 0.008 s

,system wide travel time (TT) = 3.1904e+05, least system TT = 2.8905e+05,gap = 10.374 %

Current iteration number = No. 111296CPU time: 0.01 s

,system wide travel time (TT) = 0, least system TT = 2.8e+05,gap = -100 %

Current iteration number = No. 211296CPU time: 0.012 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 311296CPU time: 0.013 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 411296CPU time: 0.015 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 511296CPU time: 0.017 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 611296CPU time: 0.019 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 711296CPU time: 0.02 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 811296CPU time: 0.022 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 911296CPU time: 0.024 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 1011296CPU time: 0.025 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 1111296CPU time: 0.027 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 1211296CPU time: 0.029 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 1311296CPU time: 0.03 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 1411296CPU time: 0.032 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 1511296CPU time: 0.034 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 1611296CPU time: 0.035 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 1711296CPU time: 0.037 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 1811296CPU time: 0.039 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Current iteration number = No. 1911296CPU time: 0.04 s

,system wide travel time (TT) = 3.0462e+05, least system TT = 3.0462e+05,gap = -3.8216e-14 %

Step 5: Column Pool Updating

Total number of column pool updating iterations = 2

column updating: iteration= 0, avg travel time = 21.759(min), optimization obj = 0,Relative\_gap=0 %

column updating: iteration= 1, avg travel time = 21.759(min), optimization obj = 0,Relative\_gap=0 %

Step 6: OD demand matrix estimation if file sensor\_data.csv is provided.

Step 7: perform sensitivity analysis if supply\_side\_scenario.csv is provided for types = SA and DMS.

Step 8: traffic simulation if simulation\_output = 1 in settings.csv .

CPU Running Time for the entire computing progress = 0.005 s

Step 9: record corridor performance summary

Step 10: output assignment result

writing link\_performance\_s1.csv

writing route\_assignment.csv..

writing link\_background\_volume.csv..

writing data for 2 zones

writing demand.bin..

writing data for 2 zones

Complete writing 0K binary demand pairs with CPU time 0 s.

writing choice\_set\_output.csv..

updatingwriting od\_performance.csv..

writing data for 2 zones

, # of connected OD pairs = 0

Please check the connectivity of OD pairs and in network and field allow\_uses in link.csv.

Please check the model\_shortest\_path\_tree.csv file.

writing link\_performances\_summary.csv..

writing link\_performances\_summary\_2way.csv..

Output for assignment with 20 iterations. Traffic assignment completes!

CPU Running Time for outputting simulation results: 0.011 s

free memory..

CPU Running Time for Entire Process: 0 min 6 sec

done.