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COE-1530

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Project 3: Distance Vector Protocol

Comments:

To my knowledge, everything is working correctly. One thing I found to be weird (and think is correct but am not 100% sure), is that a least cost path to Node Y via Node W from Node X could be calculated by going through Node Y to Node W and then returning back to Node Y. I believe this is correct as the algorithm does not know the details of the least cost path from Node W to Node Y which allows this route to be calculated occasionally. This never affects the overall distance vector of Node X though, because it always costs less to reach Node Y from Node X via the direct link between them.

Target Routing Tables:

via

D0 | 1 2 3

----+------------

1| 1 4 10

2| 2 3 9

3| 4 5 7

Least Cost Path: [0,1,2,4]

via

D1 | 0 2

----+--------

0| 1 3

2| 3 1

3| 5 3

Least Cost Path: [1,0,1,3]

via

D2 | 0 1 3

----+------------

0| 3 2 6

1| 4 1 5

3| 7 4 2

Least Cost Path: [3,2,0,2]

via

D3 | 0 2

----+--------

0| 7 4

1| 8 3

2| 9 2

Least Cost Path: [4,3,2,0]

Sample Output:

Network Simulator v1.0

Enter trace level (>= 0): [0] Will the link change (1 = Yes, 0 = No): [0] Enter random seed: [random] [0.0] Entity0() -> Initializing link costs for neighbors 1,2,3

[0.0] Entity0.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

[0.0] Entity1() -> Initializing link costs for neighbors 0,2

[0.0] Entity1.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

[0.0] Entity2() -> Initializing link costs for neighbors 0,1,3

[0.0] Entity2.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

[0.0] Entity3() -> Initializing link costs for neighbors 0,2

[0.0] Entity3.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=1.0550546403918517, node=0

src=2, dest=0, contents=[3, 1, 0, 2]

[1.0550546403918517] Entity0.update() -> Recieved Packet: source: 2 dest: 0 mincosts: 0=3 1=1 2=0 3=2

via

D0 | 1 2 3

----+------------

1| 1 4 999

2| 999 3 999

3| 999 5 7

[1.0550546403918517] Entity0.update() -> Distance table has changed

[1.0550546403918517] Entity0.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=2.8694335717874537, node=3

src=0, dest=3, contents=[0, 1, 3, 7]

[2.8694335717874537] Entity3.update() -> Recieved Packet: source: 0 dest: 3 mincosts: 0=0 1=1 2=3 3=7

via

D3 | 0 2

----+--------

0| 7 999

1| 8 999

2| 10 2

[2.8694335717874537] Entity3.update() -> Distance vector has changed

[2.8694335717874537] Entity3.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=3.994453503635601, node=0

src=1, dest=0, contents=[1, 0, 1, 999]

[3.994453503635601] Entity0.update() -> Recieved Packet: source: 1 dest: 0 mincosts: 0=1 1=0 2=1 3=999

via

D0 | 1 2 3

----+------------

1| 1 4 999

2| 2 3 999

3| 999 5 7

[3.994453503635601] Entity0.update() -> Distance table has changed

[3.994453503635601] Entity0.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=4.690727303429815, node=2

src=0, dest=2, contents=[0, 1, 3, 7]

[4.690727303429815] Entity2.update() -> Recieved Packet: source: 0 dest: 2 mincosts: 0=0 1=1 2=3 3=7

via

D2 | 0 1 3

----+------------

0| 3 999 999

1| 4 1 999

3| 10 999 2

main(): event received. t=6.515946859823785, node=3

src=0, dest=3, contents=[0, 1, 3, 5]

[6.515946859823785] Entity3.update() -> Recieved Packet: source: 0 dest: 3 mincosts: 0=0 1=1 2=3 3=5

via

D3 | 0 2

----+--------

0| 7 999

1| 8 999

2| 10 2

main(): event received. t=7.577903716329618, node=1

src=0, dest=1, contents=[0, 1, 3, 7]

[7.577903716329618] Entity1.update() -> Recieved Packet: source: 0 dest: 1 mincosts: 0=0 1=1 2=3 3=7

distanceTable[0][0] = 1 + 0

distanceTable[2][0] = 1 + 3

distanceTable[3][0] = 1 + 7

via

D1 | 0 2

----+--------

0| 1 999

2| 4 1

3| 8 999

[7.577903716329618] Entity1.update() -> Distance vector has changed

[7.577903716329618] Entity1.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=8.818389566257807, node=2

src=0, dest=2, contents=[0, 1, 3, 5]

[8.818389566257807] Entity2.update() -> Recieved Packet: source: 0 dest: 2 mincosts: 0=0 1=1 2=3 3=5

via

D2 | 0 1 3

----+------------

0| 3 999 999

1| 4 1 999

3| 8 999 2

main(): event received. t=8.926668874952401, node=3

src=0, dest=3, contents=[0, 1, 2, 5]

[8.926668874952401] Entity3.update() -> Recieved Packet: source: 0 dest: 3 mincosts: 0=0 1=1 2=2 3=5

via

D3 | 0 2

----+--------

0| 7 999

1| 8 999

2| 9 2

main(): event received. t=9.433739340063727, node=2

src=3, dest=2, contents=[7, 999, 2, 0]

[9.433739340063727] Entity2.update() -> Recieved Packet: source: 3 dest: 2 mincosts: 0=7 1=999 2=2 3=0

via

D2 | 0 1 3

----+------------

0| 3 999 9

1| 4 1 999

3| 8 999 2

main(): event received. t=9.458788499037189, node=3

src=2, dest=3, contents=[3, 1, 0, 2]

[9.458788499037189] Entity3.update() -> Recieved Packet: source: 2 dest: 3 mincosts: 0=3 1=1 2=0 3=2

via

D3 | 0 2

----+--------

0| 7 5

1| 8 3

2| 9 2

[9.458788499037189] Entity3.update() -> Distance vector has changed

[9.458788499037189] Entity3.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=9.524754258968745, node=0

src=3, dest=0, contents=[7, 999, 2, 0]

[9.524754258968745] Entity0.update() -> Recieved Packet: source: 3 dest: 0 mincosts: 0=7 1=999 2=2 3=0

via

D0 | 1 2 3

----+------------

1| 1 4 999

2| 2 3 9

3| 999 5 7

main(): event received. t=9.673343173208869, node=1

src=2, dest=1, contents=[3, 1, 0, 2]

[9.673343173208869] Entity1.update() -> Recieved Packet: source: 2 dest: 1 mincosts: 0=3 1=1 2=0 3=2

distanceTable[0][2] = 1 + 3

distanceTable[2][2] = 1 + 0

distanceTable[3][2] = 1 + 2

via

D1 | 0 2

----+--------

0| 1 4

2| 4 1

3| 8 3

[9.673343173208869] Entity1.update() -> Distance vector has changed

[9.673343173208869] Entity1.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=9.709803184817087, node=2

src=1, dest=2, contents=[1, 0, 1, 999]

[9.709803184817087] Entity2.update() -> Recieved Packet: source: 1 dest: 2 mincosts: 0=1 1=0 2=1 3=999

via

D2 | 0 1 3

----+------------

0| 3 2 9

1| 4 1 999

3| 8 999 2

[9.709803184817087] Entity2.update() -> Distance table has changed

[9.709803184817087] Entity2.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=11.477443132357648, node=2

src=3, dest=2, contents=[7, 8, 2, 0]

[11.477443132357648] Entity2.update() -> Recieved Packet: source: 3 dest: 2 mincosts: 0=7 1=8 2=2 3=0

via

D2 | 0 1 3

----+------------

0| 3 2 9

1| 4 1 10

3| 8 999 2

main(): event received. t=11.967667330950848, node=2

src=1, dest=2, contents=[1, 0, 1, 8]

[11.967667330950848] Entity2.update() -> Recieved Packet: source: 1 dest: 2 mincosts: 0=1 1=0 2=1 3=8

via

D2 | 0 1 3

----+------------

0| 3 2 9

1| 4 1 10

3| 8 9 2

main(): event received. t=11.981722124219116, node=0

src=1, dest=0, contents=[1, 0, 1, 8]

[11.981722124219116] Entity0.update() -> Recieved Packet: source: 1 dest: 0 mincosts: 0=1 1=0 2=1 3=8

via

D0 | 1 2 3

----+------------

1| 1 4 999

2| 2 3 9

3| 9 5 7

main(): event received. t=11.988007513760422, node=1

src=2, dest=1, contents=[2, 1, 0, 2]

[11.988007513760422] Entity1.update() -> Recieved Packet: source: 2 dest: 1 mincosts: 0=2 1=1 2=0 3=2

distanceTable[0][2] = 1 + 2

distanceTable[2][2] = 1 + 0

distanceTable[3][2] = 1 + 2

via

D1 | 0 2

----+--------

0| 1 3

2| 4 1

3| 8 3

main(): event received. t=12.152472795991969, node=1

src=0, dest=1, contents=[0, 1, 3, 5]

[12.152472795991969] Entity1.update() -> Recieved Packet: source: 0 dest: 1 mincosts: 0=0 1=1 2=3 3=5

distanceTable[0][0] = 1 + 0

distanceTable[2][0] = 1 + 3

distanceTable[3][0] = 1 + 5

via

D1 | 0 2

----+--------

0| 1 3

2| 4 1

3| 6 3

main(): event received. t=13.02694870815119, node=0

src=1, dest=0, contents=[1, 0, 1, 3]

[13.02694870815119] Entity0.update() -> Recieved Packet: source: 1 dest: 0 mincosts: 0=1 1=0 2=1 3=3

via

D0 | 1 2 3

----+------------

1| 1 4 999

2| 2 3 9

3| 4 5 7

[13.02694870815119] Entity0.update() -> Distance table has changed

[13.02694870815119] Entity0.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=15.04535789899747, node=3

src=2, dest=3, contents=[2, 1, 0, 2]

[15.04535789899747] Entity3.update() -> Recieved Packet: source: 2 dest: 3 mincosts: 0=2 1=1 2=0 3=2

via

D3 | 0 2

----+--------

0| 7 4

1| 8 3

2| 9 2

[15.04535789899747] Entity3.update() -> Distance vector has changed

[15.04535789899747] Entity3.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=15.08310690490486, node=0

src=3, dest=0, contents=[7, 8, 2, 0]

[15.08310690490486] Entity0.update() -> Recieved Packet: source: 3 dest: 0 mincosts: 0=7 1=8 2=2 3=0

via

D0 | 1 2 3

----+------------

1| 1 4 15

2| 2 3 9

3| 4 5 7

main(): event received. t=15.757423944498587, node=2

src=0, dest=2, contents=[0, 1, 2, 5]

[15.757423944498587] Entity2.update() -> Recieved Packet: source: 0 dest: 2 mincosts: 0=0 1=1 2=2 3=5

via

D2 | 0 1 3

----+------------

0| 3 2 9

1| 4 1 10

3| 8 9 2

main(): event received. t=15.871170619978244, node=3

src=0, dest=3, contents=[0, 1, 2, 4]

[15.871170619978244] Entity3.update() -> Recieved Packet: source: 0 dest: 3 mincosts: 0=0 1=1 2=2 3=4

via

D3 | 0 2

----+--------

0| 7 4

1| 8 3

2| 9 2

main(): event received. t=17.405663560952938, node=0

src=2, dest=0, contents=[2, 1, 0, 2]

[17.405663560952938] Entity0.update() -> Recieved Packet: source: 2 dest: 0 mincosts: 0=2 1=1 2=0 3=2

via

D0 | 1 2 3

----+------------

1| 1 4 15

2| 2 3 9

3| 4 5 7

main(): event received. t=17.675883733045843, node=2

src=1, dest=2, contents=[1, 0, 1, 3]

[17.675883733045843] Entity2.update() -> Recieved Packet: source: 1 dest: 2 mincosts: 0=1 1=0 2=1 3=3

via

D2 | 0 1 3

----+------------

0| 3 2 9

1| 4 1 10

3| 8 4 2

main(): event received. t=19.72449307562107, node=2

src=3, dest=2, contents=[5, 3, 2, 0]

[19.72449307562107] Entity2.update() -> Recieved Packet: source: 3 dest: 2 mincosts: 0=5 1=3 2=2 3=0

via

D2 | 0 1 3

----+------------

0| 3 2 7

1| 4 1 5

3| 8 4 2

main(): event received. t=20.087295716704567, node=1

src=0, dest=1, contents=[0, 1, 2, 5]

[20.087295716704567] Entity1.update() -> Recieved Packet: source: 0 dest: 1 mincosts: 0=0 1=1 2=2 3=5

distanceTable[0][0] = 1 + 0

distanceTable[2][0] = 1 + 2

distanceTable[3][0] = 1 + 5

via

D1 | 0 2

----+--------

0| 1 3

2| 3 1

3| 6 3

main(): event received. t=21.951326296867077, node=2

src=0, dest=2, contents=[0, 1, 2, 4]

[21.951326296867077] Entity2.update() -> Recieved Packet: source: 0 dest: 2 mincosts: 0=0 1=1 2=2 3=4

via

D2 | 0 1 3

----+------------

0| 3 2 7

1| 4 1 5

3| 7 4 2

main(): event received. t=22.337638721327288, node=0

src=3, dest=0, contents=[5, 3, 2, 0]

[22.337638721327288] Entity0.update() -> Recieved Packet: source: 3 dest: 0 mincosts: 0=5 1=3 2=2 3=0

via

D0 | 1 2 3

----+------------

1| 1 4 10

2| 2 3 9

3| 4 5 7

main(): event received. t=22.386856888122608, node=2

src=3, dest=2, contents=[4, 3, 2, 0]

[22.386856888122608] Entity2.update() -> Recieved Packet: source: 3 dest: 2 mincosts: 0=4 1=3 2=2 3=0

via

D2 | 0 1 3

----+------------

0| 3 2 6

1| 4 1 5

3| 7 4 2

main(): event received. t=25.98828899674763, node=1

src=0, dest=1, contents=[0, 1, 2, 4]

[25.98828899674763] Entity1.update() -> Recieved Packet: source: 0 dest: 1 mincosts: 0=0 1=1 2=2 3=4

distanceTable[0][0] = 1 + 0

distanceTable[2][0] = 1 + 2

distanceTable[3][0] = 1 + 4

via

D1 | 0 2

----+--------

0| 1 3

2| 3 1

3| 5 3

main(): event received. t=28.94791301701228, node=0

src=3, dest=0, contents=[4, 3, 2, 0]

[28.94791301701228] Entity0.update() -> Recieved Packet: source: 3 dest: 0 mincosts: 0=4 1=3 2=2 3=0

via

D0 | 1 2 3

----+------------

1| 1 4 10

2| 2 3 9

3| 4 5 7

main(): event received. t=10000.0, node=0

Link cost change.

[10000.0] Entity0.linkCostChangeHandler() -> Link 1 cost has changed to 20

via

D0 | 1 2 3

----+------------

1| 20 4 10

2| 21 3 9

3| 23 5 7

[10000.0] Entity0.linkCostChangeHandler() -> Distance vector has changed

[10000.0] Entity0.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

[10000.0] Entity1.linkCostChangeHandler() -> Link 0 cost has changed to 20

via

D1 | 0 2

----+--------

0| 20 3

2| 22 1

3| 24 3

[10000.0] Entity1.linkCostChangeHandler() -> Distance vector has changed

[10000.0] Entity1.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=10001.09615969884, node=1

src=0, dest=1, contents=[0, 4, 3, 5]

[10001.09615969884] Entity1.update() -> Recieved Packet: source: 0 dest: 1 mincosts: 0=0 1=4 2=3 3=5

distanceTable[0][0] = 20 + 0

distanceTable[2][0] = 20 + 3

distanceTable[3][0] = 20 + 5

via

D1 | 0 2

----+--------

0| 20 3

2| 23 1

3| 25 3

main(): event received. t=10002.449389910345, node=2

src=0, dest=2, contents=[0, 4, 3, 5]

[10002.449389910345] Entity2.update() -> Recieved Packet: source: 0 dest: 2 mincosts: 0=0 1=4 2=3 3=5

via

D2 | 0 1 3

----+------------

0| 3 2 6

1| 7 1 5

3| 8 4 2

main(): event received. t=10002.602493619735, node=3

src=0, dest=3, contents=[0, 4, 3, 5]

[10002.602493619735] Entity3.update() -> Recieved Packet: source: 0 dest: 3 mincosts: 0=0 1=4 2=3 3=5

via

D3 | 0 2

----+--------

0| 7 4

1| 11 3

2| 10 2

main(): event received. t=10005.863573583054, node=0

src=1, dest=0, contents=[3, 0, 1, 3]

[10005.863573583054] Entity0.update() -> Recieved Packet: source: 1 dest: 0 mincosts: 0=3 1=0 2=1 3=3

via

D0 | 1 2 3

----+------------

1| 20 4 10

2| 21 3 9

3| 23 5 7

main(): event received. t=10009.764506089268, node=2

src=1, dest=2, contents=[3, 0, 1, 3]

[10009.764506089268] Entity2.update() -> Recieved Packet: source: 1 dest: 2 mincosts: 0=3 1=0 2=1 3=3

via

D2 | 0 1 3

----+------------

0| 3 4 6

1| 7 1 5

3| 8 4 2

[10009.764506089268] Entity2.update() -> Distance table has changed

[10009.764506089268] Entity2.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=10012.722925213437, node=3

src=2, dest=3, contents=[3, 1, 0, 2]

[10012.722925213437] Entity3.update() -> Recieved Packet: source: 2 dest: 3 mincosts: 0=3 1=1 2=0 3=2

via

D3 | 0 2

----+--------

0| 7 5

1| 11 3

2| 10 2

[10012.722925213437] Entity3.update() -> Distance vector has changed

[10012.722925213437] Entity3.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=10012.9733450715, node=0

src=2, dest=0, contents=[3, 1, 0, 2]

[10012.9733450715] Entity0.update() -> Recieved Packet: source: 2 dest: 0 mincosts: 0=3 1=1 2=0 3=2

via

D0 | 1 2 3

----+------------

1| 20 4 10

2| 21 3 9

3| 23 5 7

main(): event received. t=10014.315194245917, node=1

src=2, dest=1, contents=[3, 1, 0, 2]

[10014.315194245917] Entity1.update() -> Recieved Packet: source: 2 dest: 1 mincosts: 0=3 1=1 2=0 3=2

distanceTable[0][2] = 1 + 3

distanceTable[2][2] = 1 + 0

distanceTable[3][2] = 1 + 2

via

D1 | 0 2

----+--------

0| 20 4

2| 23 1

3| 25 3

[10014.315194245917] Entity1.update() -> Distance vector has changed

[10014.315194245917] Entity1.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=10015.660136285791, node=2

src=1, dest=2, contents=[4, 0, 1, 3]

[10015.660136285791] Entity2.update() -> Recieved Packet: source: 1 dest: 2 mincosts: 0=4 1=0 2=1 3=3

via

D2 | 0 1 3

----+------------

0| 3 5 6

1| 7 1 5

3| 8 4 2

main(): event received. t=10015.821327366199, node=2

src=3, dest=2, contents=[5, 3, 2, 0]

[10015.821327366199] Entity2.update() -> Recieved Packet: source: 3 dest: 2 mincosts: 0=5 1=3 2=2 3=0

via

D2 | 0 1 3

----+------------

0| 3 5 7

1| 7 1 5

3| 8 4 2

main(): event received. t=10017.610987132479, node=0

src=3, dest=0, contents=[5, 3, 2, 0]

[10017.610987132479] Entity0.update() -> Recieved Packet: source: 3 dest: 0 mincosts: 0=5 1=3 2=2 3=0

via

D0 | 1 2 3

----+------------

1| 20 4 10

2| 21 3 9

3| 23 5 7

main(): event received. t=10023.324373010815, node=0

src=1, dest=0, contents=[4, 0, 1, 3]

[10023.324373010815] Entity0.update() -> Recieved Packet: source: 1 dest: 0 mincosts: 0=4 1=0 2=1 3=3

via

D0 | 1 2 3

----+------------

1| 20 4 10

2| 21 3 9

3| 23 5 7

main(): event received. t=20000.0, node=0

Link cost change.

[20000.0] Entity0.linkCostChangeHandler() -> Link 1 cost has changed to 1

via

D0 | 1 2 3

----+------------

1| 1 4 10

2| 2 3 9

3| 4 5 7

[20000.0] Entity0.linkCostChangeHandler() -> Distance vector has changed

[20000.0] Entity0.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

[20000.0] Entity1.linkCostChangeHandler() -> Link 0 cost has changed to 1

via

D1 | 0 2

----+--------

0| 1 4

2| 4 1

3| 6 3

[20000.0] Entity1.linkCostChangeHandler() -> Distance vector has changed

[20000.0] Entity1.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=20002.07855138074, node=3

src=0, dest=3, contents=[0, 1, 2, 4]

[20002.07855138074] Entity3.update() -> Recieved Packet: source: 0 dest: 3 mincosts: 0=0 1=1 2=2 3=4

via

D3 | 0 2

----+--------

0| 7 5

1| 8 3

2| 9 2

main(): event received. t=20006.331413194766, node=1

src=0, dest=1, contents=[0, 1, 2, 4]

[20006.331413194766] Entity1.update() -> Recieved Packet: source: 0 dest: 1 mincosts: 0=0 1=1 2=2 3=4

distanceTable[0][0] = 1 + 0

distanceTable[2][0] = 1 + 2

distanceTable[3][0] = 1 + 4

via

D1 | 0 2

----+--------

0| 1 4

2| 3 1

3| 5 3

main(): event received. t=20006.872290362062, node=0

src=1, dest=0, contents=[1, 0, 1, 3]

[20006.872290362062] Entity0.update() -> Recieved Packet: source: 1 dest: 0 mincosts: 0=1 1=0 2=1 3=3

via

D0 | 1 2 3

----+------------

1| 1 4 10

2| 2 3 9

3| 4 5 7

main(): event received. t=20006.896562428166, node=2

src=0, dest=2, contents=[0, 1, 2, 4]

[20006.896562428166] Entity2.update() -> Recieved Packet: source: 0 dest: 2 mincosts: 0=0 1=1 2=2 3=4

via

D2 | 0 1 3

----+------------

0| 3 5 7

1| 4 1 5

3| 7 4 2

main(): event received. t=20009.858905206023, node=2

src=1, dest=2, contents=[1, 0, 1, 3]

[20009.858905206023] Entity2.update() -> Recieved Packet: source: 1 dest: 2 mincosts: 0=1 1=0 2=1 3=3

via

D2 | 0 1 3

----+------------

0| 3 2 7

1| 4 1 5

3| 7 4 2

[20009.858905206023] Entity2.update() -> Distance table has changed

[20009.858905206023] Entity2.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=20012.71954277227, node=0

src=2, dest=0, contents=[2, 1, 0, 2]

[20012.71954277227] Entity0.update() -> Recieved Packet: source: 2 dest: 0 mincosts: 0=2 1=1 2=0 3=2

via

D0 | 1 2 3

----+------------

1| 1 4 10

2| 2 3 9

3| 4 5 7

main(): event received. t=20014.23075070867, node=1

src=2, dest=1, contents=[2, 1, 0, 2]

[20014.23075070867] Entity1.update() -> Recieved Packet: source: 2 dest: 1 mincosts: 0=2 1=1 2=0 3=2

distanceTable[0][2] = 1 + 2

distanceTable[2][2] = 1 + 0

distanceTable[3][2] = 1 + 2

via

D1 | 0 2

----+--------

0| 1 3

2| 3 1

3| 5 3

main(): event received. t=20015.029053294147, node=3

src=2, dest=3, contents=[2, 1, 0, 2]

[20015.029053294147] Entity3.update() -> Recieved Packet: source: 2 dest: 3 mincosts: 0=2 1=1 2=0 3=2

via

D3 | 0 2

----+--------

0| 7 4

1| 8 3

2| 9 2

[20015.029053294147] Entity3.update() -> Distance vector has changed

[20015.029053294147] Entity3.notifyNeighbors() -> Sending update packets to neighbors 1,2,3

main(): event received. t=20019.03154519472, node=0

src=3, dest=0, contents=[4, 3, 2, 0]

[20019.03154519472] Entity0.update() -> Recieved Packet: source: 3 dest: 0 mincosts: 0=4 1=3 2=2 3=0

via

D0 | 1 2 3

----+------------

1| 1 4 10

2| 2 3 9

3| 4 5 7

main(): event received. t=20020.017965347004, node=2

src=3, dest=2, contents=[4, 3, 2, 0]

[20020.017965347004] Entity2.update() -> Recieved Packet: source: 3 dest: 2 mincosts: 0=4 1=3 2=2 3=0

via

D2 | 0 1 3

----+------------

0| 3 2 6

1| 4 1 5

3| 7 4 2

Simulator terminated at t=20020.017965347004, no packets in medium.