

# Lab 3: Distance Vector Routing Algorithm

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## Part 1 Final tables

	D0		1	2	3
	----		-----		
	1		1	4	10
dest	2		2	3	9
	3		4	5	7

	D1		0	2
	----		-----	
	0		1	3
dest	2		3	1
	3		5	3

	D2		0	1	3
	----		-----		
	0		3	2	6
dest	1		4	1	5
	3		7	4	2

	D3		0	2
	----		-----	
	0		7	4
dest	1		8	3
	2		9	2

Enter TRACE:2  
[0] rtinit0 starts at 0.000000.

```

          via
D0 |    1    2    3
----|-----
    1|    1  999  999
dest 2|  999    3  999
    3|  999  999    7
[0] rtinit0 sends routing packet to 1.
[0] rtinit0 sends routing packet to 2.
[0] rtinit0 sends routing packet to 3.
[1] rtinit1 starts at 0.000000.
[1] rtinit1 send routing packet to 0.
[1] rtinit1 send routing packet to 2.
          via
D1 |    0    2
----|-----
    0|    1  999
dest 2|  999    1
    3|  999  999
[2] rtinit2 starts at 0.000000.
[2] rtinit2 sends routing packet to 0.
[2] rtinit2 sends routing packet to 1.
[2] rtinit2 sends routing packet to 3.
          via
D2 |    0    1    3
----|-----
    0|    3  999  999
dest 1|  999    1  999
    3|  999  999    2
[3] rtinit3 starts at 0.000000.
[3] rtinit3 sends routing packet to 0.
[3] rtinit3 sends routing packet to 2.
          via
D3 |    0    2
----|-----
    0|    7  999
dest 1|  999  999
    2|  999    2
MAIN: rcv event, t=0.947, at 3 src: 0, dest: 3, contents:  0  1  3  7
[3] rtupdate3 is called at 0.946640.
[3] routing packet from 0.
[3] rtupdate3 sends routing packet to 0.
[3] rtupdate3 sends routing packet to 2.
          via
D3 |    0    2
----|-----

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    0|    7   999
dest 1|    8   999
    2|   10    2
MAIN: rcv event, t=0.992, at 0 src: 1, dest: 0, contents:   1   0   1 999
[0] rtupdate0 is called at 0.992243.
[0] routing packet from 1.
      via
    D0 |    1    2    3
    ----|-----
    1|    1   999   999
dest 2|    2    3   999
    3|   999   999    7
[0] rtupdate0 sends routing packet to 1.
[0] rtupdate0 sends routing packet to 2.
[0] rtupdate0 sends routing packet to 3.
MAIN: rcv event, t=1.209, at 3 src: 2, dest: 3, contents:   3   1   0   2
[3] rtupdate3 is called at 1.209223.
[3] routing packet from 2.
[3] rtupdate3 sends routing packet to 0.
[3] rtupdate3 sends routing packet to 2.
      via
    D3 |    0    2
    ----|-----
    0|    7    5
dest 1|    8    3
    2|   10    2
MAIN: rcv event, t=1.276, at 3 src: 0, dest: 3, contents:   0   1   2   7
[3] rtupdate3 is called at 1.275716.
[3] routing packet from 0.
      via
    D3 |    0    2
    ----|-----
    0|    7    5
dest 1|    8    3
    2|    9    2
MAIN: rcv event, t=1.642, at 2 src: 0, dest: 2, contents:   0   1   3   7
[2] rtupdate2 is called at 1.641910.
[2] routing packet from 0.
      via
    D2 |    0    1    3
    ----|-----
    0|    3   999   999
dest 1|    4    1   999
    3|   10   999    2
MAIN: rcv event, t=1.871, at 1 src: 0, dest: 1, contents:   0   1   3   7

```

[1] rtupdate1 is called at 1.870574.  
 [1] routing packet from 0.  
 [1] rtupdate1 sends routing packet to 0.  
 [1] rtupdate1 sends routing packet to 2.

via  

D1	0	2
0	1	999
dest 2	4	1
3	8	999

MAIN: rcv event, t=2.166, at 2 src: 1, dest: 2, contents: 1 0 1 999

[2] rtupdate2 is called at 2.165707.  
 [2] routing packet from 1.  
 [2] rtupdate2 sends routing packet to 0.  
 [2] rtupdate2 sends routing packet to 1.  
 [2] rtupdate2 sends routing packet to 3.

via  

D2	0	1	3
0	3	2	999
dest 1	4	1	999
3	10	999	2

MAIN: rcv event, t=2.407, at 0 src: 2, dest: 0, contents: 3 1 0 2

[0] rtupdate0 is called at 2.406722.  
 [0] routing packet from 2.

via  

D0	1	2	3
1	1	4	999
dest 2	2	3	999
3	999	5	7

[0] rtupdate0 sends routing packet to 1.  
 [0] rtupdate0 sends routing packet to 2.  
 [0] rtupdate0 sends routing packet to 3.

MAIN: rcv event, t=2.421, at 2 src: 3, dest: 2, contents: 7 999 2 0

[2] rtupdate2 is called at 2.421268.  
 [2] routing packet from 3.

via  

D2	0	1	3
0	3	2	9
dest 1	4	1	999
3	10	999	2

MAIN: rcv event, t=2.811, at 1 src: 2, dest: 1, contents: 3 1 0 2

[1] rtupdate1 is called at 2.810933.

[1] routing packet from 2.

[1] rtupdate1 sends routing packet to 0.

[1] rtupdate1 sends routing packet to 2.

via

D1	0	2
----		-----
0	1	4
dest 2	4	1
3	8	3

MAIN: rcv event, t=3.293, at 2 src: 3, dest: 2, contents: 7 8 2 0

[2] rtupdate2 is called at 3.292663.

[2] routing packet from 3.

via

D2	0	1	3
----		-----	-----
0	3	2	9
dest 1	4	1	10
3	10	999	2

MAIN: rcv event, t=3.602, at 3 src: 2, dest: 3, contents: 2 1 0 2

[3] rtupdate3 is called at 3.601910.

[3] routing packet from 2.

[3] rtupdate3 sends routing packet to 0.

[3] rtupdate3 sends routing packet to 2.

via

D3	0	2
----		-----
0	7	4
dest 1	8	3
2	9	2

MAIN: rcv event, t=4.063, at 2 src: 0, dest: 2, contents: 0 1 2 7

[2] rtupdate2 is called at 4.063167.

[2] routing packet from 0.

via

D2	0	1	3
----		-----	-----
0	3	2	9
dest 1	4	1	10
3	10	999	2

MAIN: rcv event, t=4.104, at 0 src: 3, dest: 0, contents: 7 999 2 0

[0] rtupdate0 is called at 4.103641.

[0] routing packet from 3.

via

D0	1	2	3
----		-----	-----
1	1	4	999

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dest 2|    2    3    9
      3| 999    5    7
MAIN: rcv event, t=4.169, at 2 src: 3, dest: 2, contents:  5  3  2  0
[2] rtupdate2 is called at 4.169482.
[2] routing packet from 3.
      via
D2 |    0    1    3
----|-----
0|    3    2    7
dest 1|    4    1    5
      3|   10  999    2
MAIN: rcv event, t=4.330, at 0 src: 3, dest: 0, contents:  7  8  2  0
[0] rtupdate0 is called at 4.330418.
[0] routing packet from 3.
      via
D0 |    1    2    3
----|-----
1|    1    4   15
dest 2|    2    3    9
      3| 999    5    7
MAIN: rcv event, t=4.643, at 1 src: 0, dest: 1, contents:  0  1  2  7
[1] rtupdate1 is called at 4.643052.
[1] routing packet from 0.
      via
D1 |    0    2
----|-----
0|    1    4
dest 2|    3    1
      3|    8    3
MAIN: rcv event, t=5.213, at 0 src: 3, dest: 0, contents:  5  3  2  0
[0] rtupdate0 is called at 5.212747.
[0] routing packet from 3.
      via
D0 |    1    2    3
----|-----
1|    1    4   10
dest 2|    2    3    9
      3| 999    5    7
MAIN: rcv event, t=5.384, at 3 src: 0, dest: 3, contents:  0  1  2  5
[3] rtupdate3 is called at 5.383835.
[3] routing packet from 0.
      via
D3 |    0    2
----|-----
0|    7    4

```

```

dest 1|    8    3
      2|    9    2
MAIN: rcv event, t=5.820, at 1 src: 2, dest: 1, contents:  2  1  0  2
[1] rtupdate1 is called at 5.820477.
[1] routing packet from 2.
      via
      D1 |    0    2
      ----|-----
          0|    1    3
dest 2|    3    1
      3|    8    3
MAIN: rcv event, t=6.042, at 2 src: 1, dest: 2, contents:  1  0  1  8
[2] rtupdate2 is called at 6.042466.
[2] routing packet from 1.
      via
      D2 |    0    1    3
      ----|-----
          0|    3    2    7
dest 1|    4    1    5
      3|   10    9    2
MAIN: rcv event, t=6.071, at 0 src: 1, dest: 0, contents:  1  0  1  8
[0] rtupdate0 is called at 6.071281.
[0] routing packet from 1.
      via
      D0 |    1    2    3
      ----|-----
          1|    1    4   10
dest 2|    2    3    9
      3|    9    5    7
MAIN: rcv event, t=6.532, at 1 src: 0, dest: 1, contents:  0  1  2  5
[1] rtupdate1 is called at 6.532176.
[1] routing packet from 0.
      via
      D1 |    0    2
      ----|-----
          0|    1    3
dest 2|    3    1
      3|    6    3
MAIN: rcv event, t=7.021, at 0 src: 2, dest: 0, contents:  2  1  0  2
[0] rtupdate0 is called at 7.020665.
[0] routing packet from 2.
      via
      D0 |    1    2    3
      ----|-----
          1|    1    4   10

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dest 2|    2    3    9
      3|    9    5    7
MAIN: rcv event, t=7.160, at 2 src: 0, dest: 2, contents:  0  1  2  5
[2] rtupdate2 is called at 7.160166.
[2] routing packet from 0.
      via
D2 |    0    1    3
----|-----
0|    3    2    7
dest 1|    4    1    5
      3|    8    9    2
MAIN: rcv event, t=7.405, at 0 src: 1, dest: 0, contents:  1  0  1  3
[0] rtupdate0 is called at 7.405163.
[0] routing packet from 1.
      via
D0 |    1    2    3
----|-----
1|    1    4   10
dest 2|    2    3    9
      3|    4    5    7
[0] rtupdate0 sends routing packet to 1.
[0] rtupdate0 sends routing packet to 2.
[0] rtupdate0 sends routing packet to 3.
MAIN: rcv event, t=7.579, at 3 src: 0, dest: 3, contents:  0  1  2  4
[3] rtupdate3 is called at 7.579368.
[3] routing packet from 0.
      via
D3 |    0    2
----|-----
0|    7    4
dest 1|    8    3
      2|    9    2
MAIN: rcv event, t=7.941, at 1 src: 0, dest: 1, contents:  0  1  2  4
[1] rtupdate1 is called at 7.941363.
[1] routing packet from 0.
      via
D1 |    0    2
----|-----
0|    1    3
dest 2|    3    1
      3|    5    3
MAIN: rcv event, t=8.086, at 0 src: 3, dest: 0, contents:  4  3  2  0
[0] rtupdate0 is called at 8.085963.
[0] routing packet from 3.
      via

```



D0	1	2	3
1	1	4	10
dest 2	2	3	9
3	4	5	7

MAIN: rcv event, t=8.639, at 2 src: 1, dest: 2, contents: 1 0 1 3  
 [2] rtupdate2 is called at 8.638953.  
 [2] routing packet from 1.

via

D2	0	1	3
0	3	2	7
dest 1	4	1	5
3	8	4	2

MAIN: rcv event, t=8.943, at 2 src: 3, dest: 2, contents: 4 3 2 0  
 [2] rtupdate2 is called at 8.942584.  
 [2] routing packet from 3.

via

D2	0	1	3
0	3	2	6
dest 1	4	1	5
3	8	4	2

MAIN: rcv event, t=9.960, at 2 src: 0, dest: 2, contents: 0 1 2 4  
 [2] rtupdate2 is called at 9.959651.  
 [2] routing packet from 0.

via

D2	0	1	3
0	3	2	6
dest 1	4	1	5
3	7	4	2

Simulator terminated at t=9.959651, no packets in medium