```
tnarayan@CCCWORK3 project3-test] $ emacs out
At time t=0.000000, rtinit0() called.
            via
  D0 | 1 2 3
 ----
dest 1 | 1 9999 9999
dest 2| 9999 3 9999
dest 3| 9999 9999 7
At time t=0.000000, node 0 sends packet to node 1 with: 0 1 3
At time t=0.000000, node 0 sends packet to node 2 with: 0 1 3 7
At time t=0.000000, node 0 sends packet to node 3 with: 0 1 3 7
At time t=0.000000, rtinit1() called.
            via
  D1 | 0 2
 ____
dest 0| 1 9999
dest 2| 9999 1
dest 3| 9999 9999
At time t=0.000000, node 1 sends packet to node 0 with: 1 0 1
At time t=0.000000, node 1 sends packet to node 2 with: 1 0
9999
At time t=0.000000, rtinit2() called.
            via
  D2 | 0 1 3
```

dest 0| 3 9999 9999

tnarayan@CCCWORK3 project3-test] \$./project3 1 > out

```
dest 1| 9999 1 9999 dest 3| 9999 9999 2

At time t=0.000000, node 2
```

At time t=0.000000, node 2 sends packet to node 0 with: 3 1 0 2 At time t=0.000000, node 2 sends packet to node 1 with: 3 1 0 2 At time t=0.000000, node 2 sends packet to node 3 with: 3 1 0 2 At time t=0.000000, rtinit3() called.

via

D3 | 0 2

dest 0| 7 9999 dest 1| 9999 9999

dest 2| 9999 2

At time t=0.000000, node 3 sends packet to node 0 with: 7 $\,$ 9999 $\,$ 2 $\,$ 0 $\,$

At time t=0.000000, node 3 sends packet to node 2 with: 7 $\,$ 9999 $\,$ 2 $\,$ 0

At time t=0.124745, rtupdate2() called. node 2 receives a packet from node 0

via

D2 | 0 1 3

dest 0| 3 9999 9999
dest 1| 4 1 9999
dest 3| 10 9999 2

At time t=0.124745, node 2 sends packet to node 0 with: 3 1 0 2 At time t=0.124745, node 2 sends packet to node 1 with: 3 1 0 2 At time t=0.124745, node 2 sends packet to node 3 with: 3 1 0 2 At time t=0.586824, rtupdate3() called. node 3 receives a packet from node 0

```
via

D3 | 0 2

----|------

dest 0| 7 9999

dest 1| 8 9999

dest 2| 10 2
```

At time t=0.586824, node 3 sends packet to node 0 with: 7 8 2 0 At time t=0.586824, node 3 sends packet to node 2 with: 7 8 2 0 At time t=0.609690, rtupdate2() called. node 2 receives a packet from node 1

At time t=0.609690, node 2 sends packet to node 0 with: 2 1 0 2 At time t=0.609690, node 2 sends packet to node 1 with: 2 1 0 2 At time t=0.609690, node 2 sends packet to node 3 with: 2 1 0 2 At time t=0.745790, rtupdate0() called. node 0 receives a packet from node 1

At time t=0.745790, node 0 sends packet to node 1 with: 0 1 2 7

At time t=0.745790, node 0 sends packet to node 2 with: 0 1 2 7 At time t=0.745790, node 0 sends packet to node 3 with: 0 1 2 7 At time t=0.810576, rtupdate3() called. node 3 receives a packet from node 2

via

D3 | 0 2

dest 0| 7 5

dest 1| 8 3

dest 2| 10 2

At time t=0.810576, node 3 sends packet to node 0 with: 5 3 2 0 At time t=0.810576, node 3 sends packet to node 2 with: 5 3 2 0 At time t=0.962070, rtupdate2() called. node 2 receives a packet from node 3

via

D2 | 0 1 3

----|------

dest 0| 3 2 9

dest 1| 4 1 9999

dest 3| 10 9999 2

At time t=0.962070, node 2 sends packet to node 0 with: 2 1 0 2 At time t=0.962070, node 2 sends packet to node 1 with: 2 1 0 2 At time t=0.962070, node 2 sends packet to node 3 with: 2 1 0 2 At time t=1.019291, rtupdate2() called. node 2 receives a packet from node 3

via

D2 | 0 1 3

dest 0| 3 2 9

dest 1| 4 1 10 dest 3| 10 9999 2

At time t=1.019291, node 2 sends packet to node 0 with: 2 1 0 2 At time t=1.019291, node 2 sends packet to node 1 with: 2 1 0 2 At time t=1.019291, node 2 sends packet to node 3 with: 2 1 0 2 At time t=1.080034, rtupdate1() called. node 1 receives a packet from node 0

At time t=1.080034, node 1 sends packet to node 0 with: 1 0 1 8 At time t=1.080034, node 1 sends packet to node 2 with: 1 0 1 8 At time t=1.201254, rtupdate2() called. node 2 receives a packet from node 0

At time t=1.201254, node 2 sends packet to node 0 with: 2 1 0 2 At time t=1.201254, node 2 sends packet to node 1 with: 2 1 0 2 At time t=1.201254, node 2 sends packet to node 3 with: 2 1 0 2 At time t=1.224738, rtupdate0() called. node 0 receives a packet from node 2

At time t=1.224738, node 0 sends packet to node 1 with: 0 1 2 5 At time t=1.224738, node 0 sends packet to node 2 with: 0 1 2 5 At time t=1.224738, node 0 sends packet to node 3 with: 0 1 2 5 At time t=1.701228, rtupdate3() called. node 3 receives a packet from node 2

At time t=1.826770, rtupdate0() called. node 0 receives a packet from node 3

At time t=1.826770, node 0 sends packet to node 1 with: 0 1 2 5 At time t=1.826770, node 0 sends packet to node 2 with: 0 1 2 5 At time t=1.826770, node 0 sends packet to node 3 with: 0 1 2 5

At time t=2.275775, rtupdate0() called. node 0 receives a packet from node 2

		via		
D0	1	2	3	
dest 1	1	4	9999	
dest 2	2	3	9	
dest 3	9999	5	7	

At time t=2.490709, rtupdate3() called. node 3 receives a packet from node 2

At time t=2.490709, node 3 sends packet to node 0 with: 4 3 2 0 At time t=2.490709, node 3 sends packet to node 2 with: 4 3 2 0 At time t=2.718230, rtupdate2() called. node 2 receives a packet from node 3

At time t=2.718230, node 2 sends packet to node 0 with: 2 1 0 2 At time t=2.718230, node 2 sends packet to node 1 with: 2 1 0 2

At time t=2.718230, node 2 sends packet to node 3 with: 2 $\,$ 1 $\,$ 0 $\,$ 2 At time t=2.735769, rtupdate3() called. node 3 receives a packet from node 0

via

D3 | 0 2

dest 0| 7 4

dest 1| 8 3

dest 2| 9 2

At time t=2.735769, node 3 sends packet to node 0 with: 4 3 2 0 At time t=2.735769, node 3 sends packet to node 2 with: 4 3 2 0 At time t=2.768510, rtupdate1() called. node 1 receives a packet from node 2

via

D1 | 0 2

dest 0| 1 4

dest 2| 4 1

dest 3| 8 3

At time t=2.768510, node 1 sends packet to node 0 with: 1 0 1 3 At time t=2.768510, node 1 sends packet to node 2 with: 1 0 1 3 At time t=3.186960, rtupdate1() called. node 1 receives a packet from node 2

via

D1 | 0 2

dest 0| 1 4

dest 2| 4 1

dest 3| 8 3

At time t=3.190339, rtupdate1() called. node 1 receives a packet from node 2

via

D1 | 0 2

dest 0| 1 3

dest 2| 4 1

dest 3| 8 3

node 3

At time t=3.190339, node 1 sends packet to node 0 with: 1 0 1 3 At time t=3.190339, node 1 sends packet to node 2 with: 1 0 1 3 At time t=3.463617, rtupdate0() called. node 0 receives a packet from

via

D0 | 1 2 3

dest 1| 1 4 15

dest 2| 2 3 9

dest 3| 9999 5 7

At time t=3.463617, node 0 sends packet to node 1 with: 0 1 2 5 At time t=3.463617, node 0 sends packet to node 2 with: 0 1 2 5 At time t=3.463617, node 0 sends packet to node 3 with: 0 1 2 5 At time t=3.898621, rtupdate2() called. node 2 receives a packet from node 1

via

D2 | 0 1 3

dest 0| 3 2 7

dest 1| 4 1 5

```
dest 3| 10 9 2
```

At time t=3.898621, node 2 sends packet to node 0 with: 2 1 0 2 At time t=3.898621, node 2 sends packet to node 1 with: 2 1 0 2 At time t=3.898621, node 2 sends packet to node 3 with: 2 1 0 2 At time t=4.005606, rtupdate1() called. node 1 receives a packet from node 0

At time t=4.005606, node 1 sends packet to node 0 with: 1 0 1 3 At time t=4.005606, node 1 sends packet to node 2 with: 1 0 1 3 At time t=4.295501, rtupdate3() called. node 3 receives a packet from node 2

At time t=4.830842, rtupdate3() called. node 3 receives a packet from node 2

dest 1 | 8 3 dest 2 | 9 2

At time t=5.155933, rtupdate1() called. node 1 receives a packet from node 2

via D1 | 0 2

dest 0| 1 3

dest 2| 3 1

dest 3| 8 3

At time t=5.174571, rtupdate0() called. node 0 receives a packet from node 2

via

D0 | 1 2 3

dest 1 | 1 | 4 | 15

dest 2| 2 3 9

dest 3| 9999 5 7

At time t=5.174571, node 0 sends packet to node 1 with: 0 1 2 5 At time t=5.174571, node 0 sends packet to node 2 with: 0 1 2 5

At time t=5.174571, node 0 sends packet to node 3 with: 0 1 2 5

At time t=5.807990, rtupdate2() called. node 2 receives a packet from node 0

via

D2 | 0 1 3

dest 0| 3 2 7

dest 1 | 4 | 1 | 5

```
dest 3| 8 9 2
```

At time t=5.807990, node 2 sends packet to node 0 with: 2 1 0 2 At time t=5.807990, node 2 sends packet to node 1 with: 2 1 0 2 At time t=5.807990, node 2 sends packet to node 3 with: 2 1 0 2 At time t=5.885198, rtupdate0() called. node 0 receives a packet from node 3

At time t=5.885198, node 0 sends packet to node 1 with: 0 1 2 5 At time t=5.885198, node 0 sends packet to node 2 with: 0 1 2 5 At time t=5.885198, node 0 sends packet to node 3 with: 0 1 2 5 At time t=6.192557, rtupdate1() called. node 1 receives a packet from node 2

At time t=6.199400, rtupdate3() called. node 3 receives a packet from node 2

via
D3 | 0 2

dest 0 | 7 4
dest 1 | 8 3
dest 2 | 9 2

At time t=6.733784, rtupdate2() called. node 2 receives a packet from node 0

At time t=6.971700, rtupdate3() called. node 3 receives a packet from node 0

At time t=6.971700, node 3 sends packet to node 0 with: 4 3 2 0 At time t=6.971700, node 3 sends packet to node 2 with: 4 3 2 0 At time t=7.232019, rtupdate2() called. node 2 receives a packet from node 3

dest 3| 8 9 2

At time t=7.232019, node 2 sends packet to node 0 with: 2 1 0 2 At time t=7.232019, node 2 sends packet to node 1 with: 2 1 0 2 At time t=7.232019, node 2 sends packet to node 3 with: 2 1 0 2 At time t=7.712124, rtupdate0() called. node 0 receives a packet from node 2

At time t=7.903831, rtupdate1() called. node 1 receives a packet from node 2

At time t=8.132249, rtupdate0() called. node 0 receives a packet from node 2

At time t=8.790092, rtupdate2() called. node 2 receives a packet from node 3

		via		
D2	0	1	3	
dest 0	3	2	6	
dest 1	4	1	5	
dest 3	8	9	2	

At time t=8.796252, rtupdate3() called. node 3 receives a packet from node 0

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

At time t=8.864112, rtupdate2() called. node 2 receives a packet from node 1

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

At time t=8.864112, node 2 sends packet to node 0 with: 2 1 0 2 At time t=8.864112, node 2 sends packet to node 1 with: 2 1 0 2 At time t=8.864112, node 2 sends packet to node 3 with: 2 1 0 2

At time t=9.260755, rtupdate3() called. node 3 receives a packet from node 2

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

At time t=9.267067, rtupdate1() called. node 1 receives a packet from node 0

		via	
D1	0	2	
dest 0	1	3	
dest 2	3	1	
dest 3	6	3	

At time t=9.267067, node 1 sends packet to node 0 with: 1 0 1 3 At time t=9.267067, node 1 sends packet to node 2 with: 1 0 1 3 At time t=9.305321, rtupdate1() called. node 1 receives a packet from node 0

		vi	.a
D1	.	0	2
	-		
dest	0	1	3
dest	2	3	1
dest	3	6	3

At time t=9.523180, rtupdate3() called. node 3 receives a packet from node 0

At time t=9.539471, rtupdate2() called. node 2 receives a packet from node 1

At time t=9.540557, rtupdate2() called. node 2 receives a packet from node 0

At time t=9.609680, rtupdate0() called. node 0 receives a packet from node 1

dest 3| 9 5 7

At time t=9.609680, node 0 sends packet to node 1 with: 0 1 2 5 At time t=9.609680, node 0 sends packet to node 2 with: 0 1 2 5 At time t=9.609680, node 0 sends packet to node 3 with: 0 1 2 5 At time t=9.756216, rtupdate3() called. node 3 receives a packet from node 2

At time t=10.370619, rtupdate1() called. node 1 receives a packet from node 2

At time t=10.428965, rtupdate0() called. node 0 receives a packet from node 2

At time t=10.595822, rtupdate3() called. node 3 receives a packet from node 0

At time t=11.131254, rtupdate1() called. node 1 receives a packet from node 0

At time t=11.415976, rtupdate2() called. node 2 receives a packet from node 1

At time t=11.669786, rtupdate0() called. node 0 receives a packet from node 3

via
D0 | 1 2 3

```
----
dest 1| 1 4 10
dest 2| 2 3 9
dest 3| 9 5 7
At time t=11.669786, node 0 sends packet to node 1 with: 0 1 2 5
At time t=11.669786, node 0 sends packet to node 2 with: 0 1 2 5
At time t=11.669786, node 0 sends packet to node 3 with: 0 1 2
At time t=11.690392, rtupdate3() called. node 3 receives a packet from
node 2
           via
  D3 | 0 2
 ----
dest 0| 7 4
dest 1| 8
            3
dest 2| 9 2
At time t=12.859119, rtupdate1() called. node 1 receives a packet from
node 2
           via
  D1 | 0 2
 ----
dest 0| 1 3
dest 2| 3 1
dest 3| 6 3
At time t=12.931823, rtupdate2() called. node 2 receives a packet from
node 0
```

via

D2 | 0 1 3

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

At time t=13.024735, rtupdate1() called. node 1 receives a packet from node 0

At time t=13.153989, rtupdate2() called. node 2 receives a packet from node 0

At time t=13.180450, rtupdate1() called. node 1 receives a packet from node 2

At time t=13.341965, rtupdate2() called. node 2 receives a packet from node 3

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

At time t=13.511702, rtupdate0() called. node 0 receives a packet from node 2

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

At time t=13.605406, rtupdate1() called. node 1 receives a packet from node 0

At time t=13.635763, rtupdate3() called. node 3 receives a packet from node 0

via			
2	0	3	D3

dest	0	7	4
dest	1	8	3
dest	21	9	2

At time t=13.780288, rtupdate2() called. node 2 receives a packet from node 1

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

At time t=14.088828, rtupdate1() called. node 1 receives a packet from node 2

		V	ia
D	L	0	2
dest	0	1	3
dest	2	3	1
dest	3	6	3

At time t=14.396902, rtupdate0() called. node 0 receives a packet from node 3

		via		
DO	1	2	3	
dest 1	1	4	10	
dest 2	2	3	9	
dest 3	9	5	7	

At time t=14.500940, rtupdate1() called. node 1 receives a packet from node 2

At time t=14.521216, rtupdate3() called. node 3 receives a packet from node 2

At time t=14.890537, rtupdate3() called. node 3 receives a packet from node 2

At time t=14.918118, rtupdate0() called. node 0 receives a packet from node 1

via
D0 | 1 2 3

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

At time t=14.918118, node 0 sends packet to node 1 with: 0 1 2 4 At time t=14.918118, node 0 sends packet to node 2 with: 0 1 2 4 At time t=14.918118, node 0 sends packet to node 3 with: 0 1 2 4 At time t=14.982059, rtupdate0() called. node 0 receives a packet from node 1

At time t=15.070696, rtupdate2() called. node 2 receives a packet from node 0

At time t=15.403141, rtupdate1() called. node 1 receives a packet from node 0

dest 2| 3 1 dest 3| 6 3

At time t=15.570726, rtupdate0() called. node 0 receives a packet from node 2

At time t=16.215332, rtupdate0() called. node 0 receives a packet from node 1

At time t=16.270386, rtupdate1() called. node 1 receives a packet from node 0

At time t=16.785276, rtupdate3() called. node 3 receives a packet from node 0

via D3 | 0 2 ---dest 0| 7 4 dest 1| 8 3 dest 2| 9 2 At time t=16.860922, rtupdate2() called. node 2 receives a packet from node 0 via D2 | 0 1 3 ---dest 0| 3 2 6 dest 1| 4 1 5 dest 3| 8 4 2 At time t=17.106541, rtupdate3() called. node 3 receives a packet from node 0 via D3 | 0 2 dest 0| 7 4 dest 1| 8 3 dest 2| 9 2 At time t=17.274082, rtupdate2() called. node 2 receives a packet from node 0 via D2 | 0 1 3

dest 0| 3 2 6

dest 1 | 4 | 1 | 5 | dest 3 | 7 | 4 | 2

At time t=17.274082, node 2 sends packet to node 0 with: 2 1 0 2 At time t=17.274082, node 2 sends packet to node 1 with: 2 1 0 2 At time t=17.274082, node 2 sends packet to node 3 with: 2 1 0 2 At time t=17.483980, rtupdate0() called. node 0 receives a packet from node 2

At time t=17.761694, rtupdate1() called. node 1 receives a packet from node 0

At time t=17.761694, node 1 sends packet to node 0 with: 1 0 1 3 At time t=17.761694, node 1 sends packet to node 2 with: 1 0 1 3 At time t=17.966894, rtupdate2() called. node 2 receives a packet from node 1

via
D2 | 0 1 3

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

At time t=19.081123, rtupdate3() called. node 3 receives a packet from node 0

At time t=19.081123, node 3 sends packet to node 0 with: 4 3 2 0 At time t=19.081123, node 3 sends packet to node 2 with: 4 3 2 0 At time t=19.260189, rtupdate1() called. node 1 receives a packet from node 2

via

D1 | 0 2

----|-----
dest 0| 1 3

dest 2| 3 1

dest 3| 5 3

At time t=19.340717, rtupdate0() called. node 0 receives a packet from node 3

dest 3| 4 5 7

At time t=19.474649, rtupdate2() called. node 2 receives a packet from node 3

		<mark>via</mark>		
D2	0	1	3	
dest 0	3	2	6	
dest 1	4	1	5	
dest 3	7	4	2	

At time t=20.282084, rtupdate3() called. node 3 receives a packet from node 2

			<mark>via</mark>
D.	3	0	2
	-		
dest	0	7	4
dest	1	8	3
<mark>dest</mark>	2	9	2

At time t=20.657936, rtupdate0() called. node 0 receives a packet from node 2

At time t=22.470062, rtupdate0() called. node 0 receives a packet from node 2

D()	1	2	3
dest	1	1	4	10
dest	2	2	3	9
dest	3	4	5	7

At time t=23.647812, rtupdate0() called. node 0 receives a packet from node 1

At time t=24.449234, rtupdate0() called. node 0 receives a packet from node 2

At time t=24.984856, rtupdate0() called. node 0 receives a packet from node 1

dest 3| 4 5 7

At time t=25.775383, rtupdate0() called. node 0 receives a packet from node 3

			<mark>via</mark>	
D()	1	2	3
	-			
dest	1	1	4	10
dest	2	2	3	9
dest	3	4	5	7

Simulator terminated at t=25.775383, no packets in medium