

Table 1: Distance vector routing example, step 0, initial setup

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	—	—	—	—	F	75	Z	150
B	A	3	B	0	C	5	D	20	F	4	—	—
C	—	—	B	5	C	0	D	10	F	8	—	—
D	—	—	B	20	C	10	D	0	—	—	Z	5
F	A	75	B	4	C	8	—	—	F	0	Z	60
Z	A	150	—	—	—	—	D	2	F	60	Z	0

Table 2: Distance vector routing example, step 1, update from A to B

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	—	—	—	—	F	75	Z	150
B	A	3	B	0	C	5	D	20	F	4	—	—
C	—	—	B	5	C	0	D	10	F	8	—	—
D	—	—	B	20	C	10	D	0	—	—	Z	5
F	A	75	B	4	C	8	—	—	F	0	Z	60
Z	A	150	A	153	—	—	D	2	F	60	Z	0

Table 3: Distance vector routing example, step 2, update from D to B

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	—	—	—	—	F	75	Z	150
B	A	3	B	0	C	5	D	20	F	4	—	—
C	—	—	B	5	C	0	D	10	F	8	—	—
D	—	—	B	20	C	10	D	0	—	—	Z	5
F	A	75	B	4	C	8	—	—	F	0	Z	60
Z	A	150	D	22	—	—	D	2	F	60	Z	0

Table 4: Distance vector routing example, step 4, update from Z to D

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	—	—	Z	152	F	75	Z	150
B	A	3	B	0	C	5	D	20	F	4	—	—
C	—	—	B	5	C	0	D	10	F	8	—	—
D	—	—	B	20	C	10	D	0	—	—	Z	5
F	A	75	B	4	C	8	Z	62	F	0	Z	60
Z	A	150	D	22	—	—	D	2	F	60	Z	0

Table 5: Distance vector routing example, step 5, update from F to C

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	83	Z	152	F	75	Z	150
B	A	3	B	0	C	5	D	20	F	4	—	—
C	—	—	B	5	C	0	D	10	F	8	—	—
D	—	—	B	20	C	10	D	0	—	—	Z	5
F	A	75	B	4	C	8	Z	62	F	0	Z	60
Z	A	150	D	22	F	68	D	2	F	60	Z	0

Table 6: Distance vector routing example, step 6, update from B to F

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	83	Z	152	B	7	Z	150
B	A	3	B	0	C	5	D	20	F	4	—	—
C	—	—	B	5	C	0	D	10	F	8	—	—
D	—	—	B	20	C	10	D	0	B	24	Z	5
F	A	75	B	4	C	8	Z	62	F	0	Z	60
Z	A	150	D	22	F	68	D	2	B	26	Z	0

Table 7: Distance vector routing example, step 7, update from F to Z

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	83	Z	152	B	7	F	67
B	A	3	B	0	C	5	D	20	F	4	F	64
C	—	—	B	5	C	0	D	10	F	8	F	68
D	—	—	B	20	C	10	D	0	B	24	Z	5
F	A	75	B	4	C	8	Z	62	F	0	Z	60
Z	A	150	D	22	F	68	D	2	B	26	Z	0

Table 8: Distance vector routing example, step 8, update from F to C

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	Z	152	B	7	F	67
B	A	3	B	0	C	5	D	20	F	4	F	64
C	—	—	B	5	C	0	D	10	F	8	F	68
D	—	—	B	20	C	10	D	0	B	24	Z	5
F	A	75	B	4	C	8	Z	62	F	0	Z	60
Z	A	150	D	22	F	34	D	2	B	26	Z	0

Table 9: Distance vector routing example, step 10, update from Z to A

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	Z	152	B	7	F	67
B	A	3	B	0	C	5	D	20	F	4	F	64
C	Z	218	B	5	C	0	D	10	F	8	F	68
D	Z	155	B	20	C	10	D	0	B	24	Z	5
F	A	75	B	4	C	8	Z	62	F	0	Z	60
Z	A	150	D	22	F	34	D	2	B	26	Z	0

Table 10: Distance vector routing example, step 12, update from Z to F

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	Z	152	B	7	F	67
B	A	3	B	0	C	5	D	20	F	4	F	64
C	Z	218	B	5	C	0	D	10	F	8	F	68
D	Z	155	B	20	C	10	D	0	B	24	Z	5
F	A	75	B	4	C	8	Z	62	F	0	Z	60
Z	A	150	D	22	F	34	D	2	B	26	Z	0

Table 11: Distance vector routing example, step 13, update from C to D

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	C	25	B	7	F	67
B	A	3	B	0	C	5	C	15	F	4	F	64
C	Z	218	B	5	C	0	D	10	F	8	F	68
D	Z	155	B	20	C	10	D	0	B	24	Z	5
F	A	75	B	4	C	8	C	18	F	0	Z	60
Z	A	150	D	22	F	34	D	2	B	26	Z	0

Table 12: Distance vector routing example, step 14, update from B to A

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	C	25	B	7	F	67
B	A	3	B	0	C	5	C	15	F	4	F	64
C	B	8	B	5	C	0	D	10	F	8	F	68
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	Z	60
Z	B	25	D	22	F	34	D	2	B	26	Z	0

Table 13: Distance vector routing example, step 15, update from A to F

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	C	25	B	7	F	67
B	A	3	B	0	C	5	C	15	F	4	F	64
C	B	8	B	5	C	0	D	10	F	8	F	68
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	Z	60
Z	B	25	D	22	F	34	D	2	B	26	Z	0

Table 14: Distance vector routing example, step 17, update from D to B

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	C	25	B	7	F	67
B	A	3	B	0	C	5	C	15	F	4	F	64
C	B	8	B	5	C	0	D	10	F	8	F	68
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	Z	60
Z	B	25	D	22	F	34	D	2	B	26	Z	0

Table 15: Distance vector routing example, step 18, update from D to C

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	C	25	B	7	F	67
B	A	3	B	0	C	5	C	15	F	4	F	64
C	B	8	B	5	C	0	D	10	F	8	F	68
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	Z	60
Z	B	25	D	22	D	12	D	2	B	26	Z	0

Table 16: Distance vector routing example, step 20, update from F to B

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	C	25	B	7	F	67
B	A	3	B	0	C	5	C	15	F	4	F	64
C	B	8	B	5	C	0	D	10	F	8	F	68
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	Z	60
Z	B	25	D	22	D	12	D	2	B	26	Z	0

Table 17: Distance vector routing example, step 21, update from Z to F

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	C	25	B	7	F	67
B	A	3	B	0	C	5	C	15	F	4	F	64
C	B	8	B	5	C	0	D	10	F	8	F	68
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	Z	60
Z	B	25	D	22	D	12	D	2	B	26	Z	0

Table 18: Distance vector routing example, step 22, update from D to Z

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	B	26	Z	0

Table 19: Distance vector routing example, step 24, update from B to F

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	B	26	Z	0

Table 20: Distance vector routing example, step 25, update from A to Z

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	B	26	Z	0

Table 21: Distance vector routing example, step 27, update from Z to F

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	F	15	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	B	26	Z	0

Table 22: Distance vector routing example, step 28, update from B to C

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	B	26	Z	0

Table 23: Distance vector routing example, step 29, update from F to C

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	B	26	Z	0

Table 24: Distance vector routing example, step 30, update from A to Z

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	B	26	Z	0

Table 25: Distance vector routing example, step 31, update from D to Z

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	B	24	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	B	26	Z	0

Table 26: Distance vector routing example, step 32, update from C to F

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 27: Distance vector routing example, step 33, update from D to B

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 28: Distance vector routing example, step 35, update from A to B

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 29: Distance vector routing example, step 36, update from A to B

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 30: Distance vector routing example, step 37, update from F to A

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 31: Distance vector routing example, step 38, update from F to C

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 32: Distance vector routing example, step 39, update from Z to D

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	25	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0



Table 33: Distance vector routing example, step 40, update from C to D

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	18	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 34: Distance vector routing example, step 41, update from C to D

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	18	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 35: Distance vector routing example, step 42, update from Z to D

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	18	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 36: Distance vector routing example, step 43, update from C to F

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	18	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 37: Distance vector routing example, step 44, update from Z to D

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	18	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 38: Distance vector routing example, step 45, update from B to A

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	18	B	7	D	30
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 39: Distance vector routing example, step 46, update from D to Z

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	18	B	7	D	23
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 40: Distance vector routing example, step 47, update from B to C

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	18	B	7	D	23
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0

Table 41: Distance vector routing example, step 49, update from A to Z

Destination	A		B		C		D		F		Z	
	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost	via	Cost
A	A	0	B	3	B	8	C	18	B	7	D	23
B	A	3	B	0	C	5	C	15	F	4	D	20
C	B	8	B	5	C	0	D	10	F	8	D	15
D	B	23	B	20	C	10	D	0	C	18	Z	5
F	B	7	B	4	C	8	C	18	F	0	D	23
Z	B	25	D	22	D	12	D	2	C	20	Z	0