

Distance Vector Version 0

D_A	Dest:B	Dest:C	Dest:D	Dest:E	Dest:F
Via:B	inf	inf	inf	inf	inf
Via:C	inf	inf	inf	inf	inf
Via:E	inf	inf	inf	inf	inf
Via:F	inf	inf	inf	inf	inf

The router boots, and discovers its directly adjacent links, leading to this DA version 1:

Distance Vector Version 1

D_A	Dest:B	Dest:C	Dest:D	Dest:E	Dest:F
Via:B	21	inf	inf	inf	inf
Via:C	inf	7	inf	inf	inf
Via:E	inf	inf	inf	6	inf
Via:F	inf	inf	inf	inf	5

The router A receives the following DV messages:

- From B, containing {(C, 16), (D, 8), (F, 4)}
- From C, containing {(B, 16), (E, 12), (D, 3)}
- we can't go from D, containing {(C, 3), (B, 8), (F, 14), (E, 9)}
- From E, containing {(C, 12), (D, 9), (F, 2)}
- From F, containing {(B, 4), (D, 14), (E, 2)}

Distance Vector Version 2

D_A	Dest:B	Dest:C	Dest:D	Dest:E	Dest:F
Via:B	21	37	28	inf	25
Via:C	23	7	10	19	inf
Via:E	inf	18	15	6	8
Via:F	9	inf	19	7	5

Here we upgrade the nearest way to reach B,C,D,E,F which is 9,7,10,6,5 respectively, so we can upgrade the formula

- From D, containing {(C, 3), (B, 8), (F, 14), (E, 9)}

Distance Vector Version 2

D_A	Dest:B	Dest:C	Dest:D	Dest:E	Dest:F
Via:B	21	25	17	inf	13
Via:C	23	7	10	19	inf
Via:D	18	13	inf	19	24
Via:E	inf	18	15	6	8
Via:F	9	inf	19	7	5

From here the formula no longer changes(converges) because the nearest way doesn't change, so we get our final version.