

Modification Question

Duration: 1 Hour

An internet service provider wants to provide maximum bandwidth (BW) to the user at a minimum cost (C). They approached a networking company to develop a routing algorithm that identifies the minimum cost and maximum bandwidth path between the source and destination nodes. The networking company suggested to modify the distance vector routing algorithm in such a way that the next hop selection will be based on the maximum value of δ .

Where $\delta = \frac{BW+C}{C}$.

Help the internet service provider to achieve the constraint by modifying your distance vector routing algorithm to obtain the minimum cost maximum bandwidth path between the source and destination nodes.