

Frequently Asked Questions

Question #1: Regarding 3, I'm not too sure what the configurations mean.

For example, in problem #3 of the provided file switch 3 starts at the following state:

Switch 3 --> 3 3 0

Then after loop #1

Switch 3 --> 3 1 1

I'm not sure what the numbers for the configuration mean, I only understand the first number is the switch ID number.

Answer #1: For "3 3 0", there are 3 values -

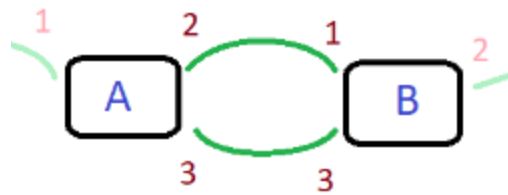
the 1st one is the switch number (the 1st '3' here),

and the 2nd one is what switch 3 is thinking about who the root is. Here, it is thinking of itself as the root, which is again '3',

0 implies how far this switch is from its root. Since it is the root itself, the distance is 0 here.

Question #2: If Switch A, port 2 is connected to Switch B, port 1,

and Switch A, port 3 is connected to Switch B, port 3:



Assuming A holds the data A|A|0,

and B holds the data B|A|1, how do Switches A and B decide which port to connect with?

Answer #2: Initially, A will send data to B via port 2, A|A|0|2 as well as via port 3, A|A|0|3 [Note the 4th parameter is the port number of the sending switch]

B will receive those data via ports 1 and 3, respectively. B will also send data to A similarly.

Now they will both know $A < B$ [i.e., A is a better root] and A's port 2 is connected to B's port 1, and A's port 3 is connected to B's 3. Since $A < B$, then we will pick A's lower port which is 2 and it is connected to B's port 1 and A and B both knew that after exchanging their data. Thus, they will disconnect the link which connects A's port #3 and B's port #3 and use the other connection.