

Write-Up Description

Length

1 Page. You must write in complete sentences. You must be specific (see below). **You and your partner should each turn in SEPARATE write-ups. This should be an individual effort.**

Content: This project spec was purposely open-ended so as to allow you some form of freedom in your design. Ultimately, this means you had to make certain decisions or assumptions, which may have impacted later design decisions or had a potential impact if this program were to be used in the real world. For this write-up, you are to pick THREE design decisions or assumptions that you made which you feel were important. For each item you pick, explain why this decision is justifiable, what impacts this would have in a real world deployment, and what other options you considered. Do not use the example as one of your assumptions.

Formatting

1" Margins, Size 11 Font, Paragraphs (Do not write in outline form). Include the assumptions on a separate line, and typeset them in **boldface**.

Turn In

A single .pdf document, named p3-writeup-<your_directory_id>.pdf (mine would be p3-writeup-apach01.pdf). Include your full name, and your directory id (not your student), as well as your partner's full name and directory ID.

Example

Assumption #1: We assumed that, during the simulation, nodes would not be restarted.

In order to detect routing loops, we designed a protocol in which all nodes sequentially number outgoing packets. Nodes in the network keep track of the highest sequence number seen for a given node, and will not forward a packet with a lower sequence number. If nodes are restarted, it will cause this protocol to break since the sequence numbers will restart at 0. This would have serious consequences in a real world application because a node would not be able to re-join the network until all other nodes had been restarted (and lost their state). We alternatively considered having the node broadcast a message to reset its sequence number. However, we did not think this would be feasible given the length of time between commands for the network to synchronize.