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Project 5 Report

1)
I tried to implement a fully functional Diffserv and miserably failed in the end.
The code is not working at all now and couldn't fix it until the last minute.
I had implemented setting up LSP.
had to change a lot of code to implement Diffserv properly.

2) In an additional 1-2 pages discuss the following questions: Based on your results do you recommend implementation of DiffServ in a triple-play type network service (cable, telephone, and internet)? In these networks there are quite a few different types of traffic: standard television, on demand video through cable box, internet traffic, on demand video through web browser, and telephone traffic. Based on your experiences, how should you break these different types of traffic into different traffic categories?

It is not a good idea to implement diffserv in the triple play type network as mentioned in the report. Diffserv doesn't serve the purpose if there are a wide variety of services running in the network.

The traffic needs to be categorized as follows :-
On Demand Video through web browser - AF1, with a decent drop-rate allowed
On Demand Video through cable box - AF2, Packets must not be dropped
Standard Television - AF3, Packets must not be dropped
Telephone Traffic - EF, with a decent drop-rate allowed
Internet Traffic - Best Effort

The reason behind this is that On-Demand Video through web browser could be more problematic than the on-demand video through the cable box and more prone to packet loss and delay in the internet and hence must be give a higher priority than the On-demand video over cable networks.

Telephone traffic must be given EF priority because it is delay sensitive as it a user-interactive service and any additional delay just cannot be tolerated. Considering the fact that it occupies much lesser bandwidth compared to the other options, it wouldn't eat much into the available bandwidth as well.
Internet Traffic has to be given a best effort service since it is unpredictable and there is no point reserving resources for it since the destination varies a lot over time and it wouldn't make sense setting up pipes every single time.

Standard Television should maintain the expected quality in the service but a considerable delay could be tolerated. These packets must not be dropped but they could be queued up for a longer period