FFmpeg Video Streaming using Mininet
(Wired and Wireless environment)

COURSE: COMPUTER NETWORKS-2
COURSE CODE: 20ECSC303

TEAM B16

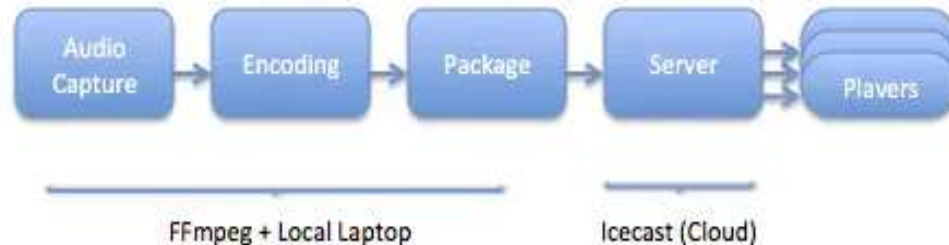|		
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Problem Statement

FFmpeg Video Streaming using Mininet (Wired and Wireless environment)

Introduction

FFmpeg:
- Used for multimedia processing.
- It streams video and audio over network to some other remote machine by capturing them from computer's camera.

Streaming:
- A method of viewing video or listening to audio content without downloading the media files.

FFmpeg Video Streaming:
- A a method of viewing video using the most popular framework called FFmpeg

Objectives

- To create a topology using hosts and switches.
- To demonstrate the video streaming with wired connections.
- To demonstrate the video streaming with wired connections. (Wifi)
- To compare both wired and wireless streaming in the end.

Understanding the problem
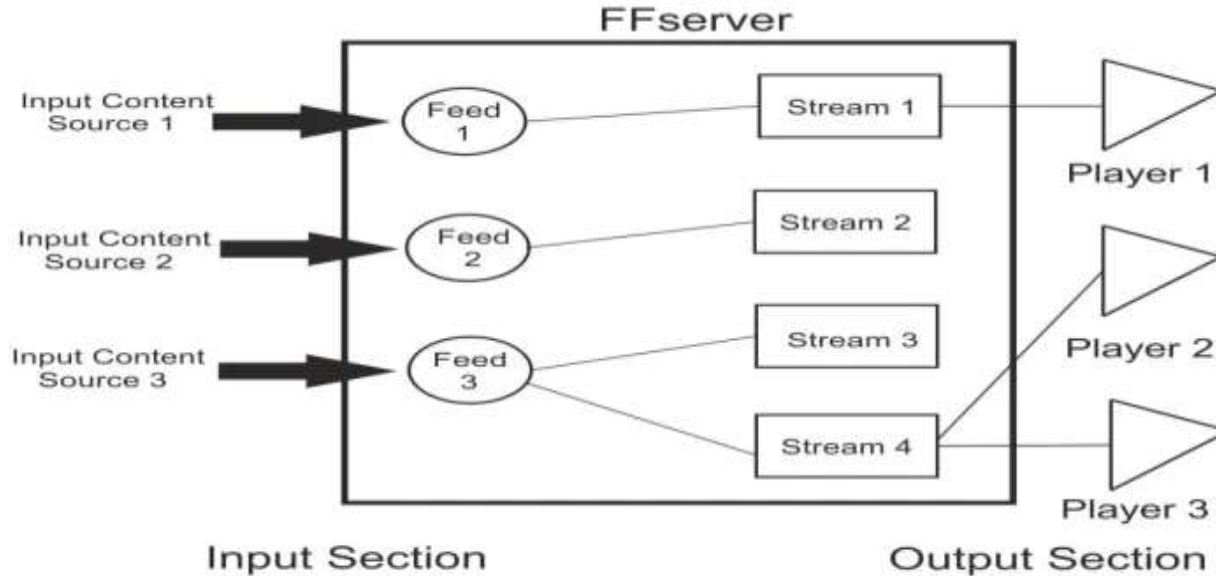
FFmpeg Working

Understanding the problem

•Create hosts for video sending.

•Connect switches as a medium.

This is done using mininet.

The following functions can be done using Ffmpeg

•Convert between different file formats and codecs (i.e. encoding)

•Adjust volume, remove audio and/or merge an audio file with a video file

•Crop, scale or rotate a video file

•Recording input from a webcam or other video source

•Broadcast live stream a video feed

References:

- https://www.youtube.com/watch?v=zjLSAgKJSE0
- http://csie.nqu.edu.tw/smallko/sdn/ffmpeg_streaming_rtp.htm
- https://fftrac-bg.ffmpeg.org/wiki/StreamingGuide
- https://www.youtube.com/watch?v=Rl9HBtFc6Ow