

# Adaptive Bit Rates and Video Streaming

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## **Abstract:**

Video streaming (e.g. Netflix, iPlayer, YouTube, ...) comprises over 50% of the Internet traffic today; and the fraction is growing. Each service stores video corresponding to several different quality levels, then delivers the highest quality it can, while trying to avoid overwhelming the available network capacity. The trick is to avoid unstable interactions between two control loops; I will outline the problem, and then describe earlier work on a so-called Buffer Based Algorithm (BBA) to overcome it. Over the past decade, the very nature of video streaming has changed because of huge increases in global network capacity; in the talk, I'll describe a surprising (bad) side effect of this.