CS 925
Lecture 16
Real-Time Traffic and Media Delivery

Thursday, March 26, 2024

Real-Time Traffic

▸ Elastic vs inelastic traffic (rate adaptation)

▸ Real-time transport

  – timing is critical (low latency and low jitter)

  – perishable data

  – (often) constant rate of delivery

▸ Hard vs soft real time…

Media Delivery

▸ Challenges

- — multitude of formats

- — multitude of server and player (client) capabilities

- — multiple simultaneous streams (video, audio, text) delivered

- — synchronization between streams

- — stream control (play, pause, fast-forward, …)

- — changing network conditions

- — security and content protection

- — real-time, near real-time, on-demand (VOD)