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Transcoding for SatCom

Cost effective approach to optimization

Cost effective Transcoding

- Advanced software solutions running on off the shelf servers
- Linux based OS and applications
- In depth understanding of the Pentium processors
- Years of experience in digital video encoding and transmission

Video Transcoding

- Re encoding digital video
- MPEG-2 to H.264 - Reduce bit rate
  - MPEG-2 Standard Definition broadcast quality – **~2.5Mbps**
  - H.264 - Standard Definition broadcast quality – **~1.5Mbps**

  - HD – from 19M to 5M

- **Maintaining video quality !!!**
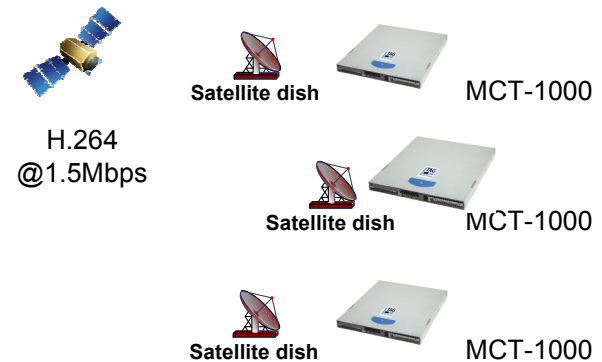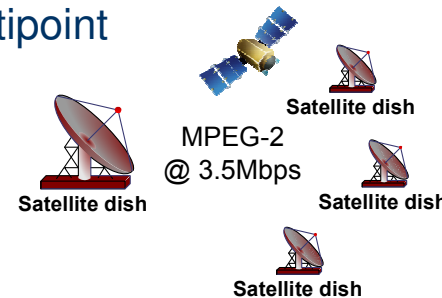
Video Transcoding

- MCT-1000 - Multi channel transcoder
  - Professional broadcast quality
  - From 2 (MCT-1020) to 8 (MCT-1080) channels per 1U server
  - Support MPEG-2 to H.264 and H.264 to MPEG-2
  - IP and ASI interfaces
  - SD TV services at 1.5Mbps

Cost effective – starting at 2K$ per channel !!!

Video Transcoding

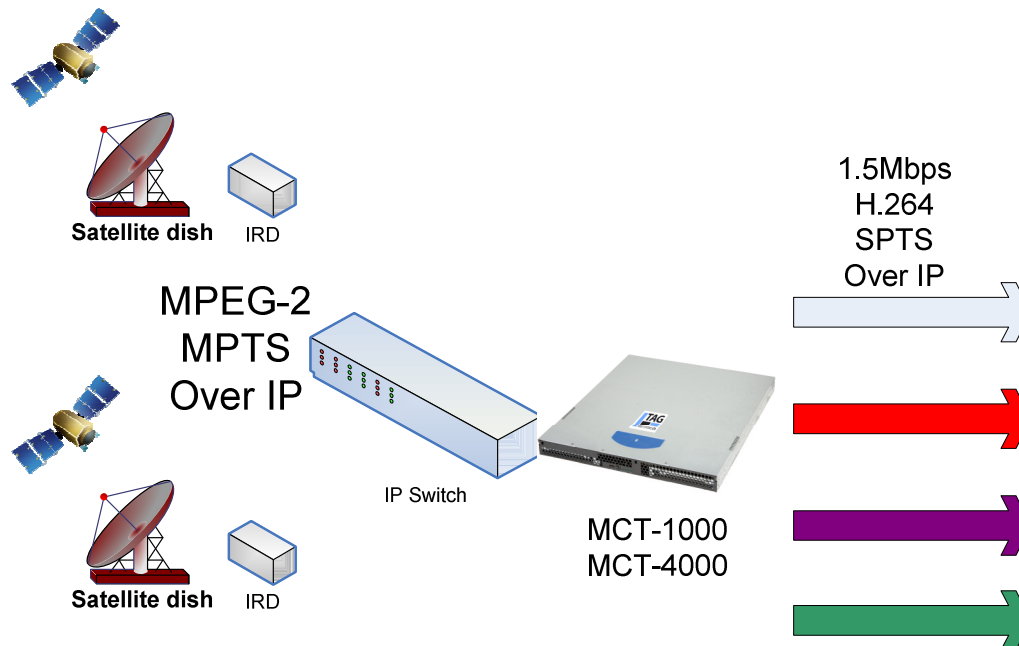- Typical applications
  - MPEG-2 -> H.264 -> MPEG-2

  save on space segment in point to multipoint video distribution.

- Typical saving 2Mbps per Video
- 2Mbps = 8K$/Month
- Transcoding cost 2.5K$

MPEG-2 @ 3.5Mbps

Satellite dish

Satellite dish

Satellite dish

Satellite dish

Satellite dish

1000

Satellite dish

H.264 @1.5Mbps

Satellite dish   MCT-1000

Satellite dish   MCT-1000

Satellite dish   MCT-1000

Video Transcoding

- Typical applications
  - IPTV over DSL – providing broadcast video quality @ 1.5mbps

Audio Transcoding

- Bridging between streaming and Broadcast
- Audio, with high quality, can be streamed today over the internet.
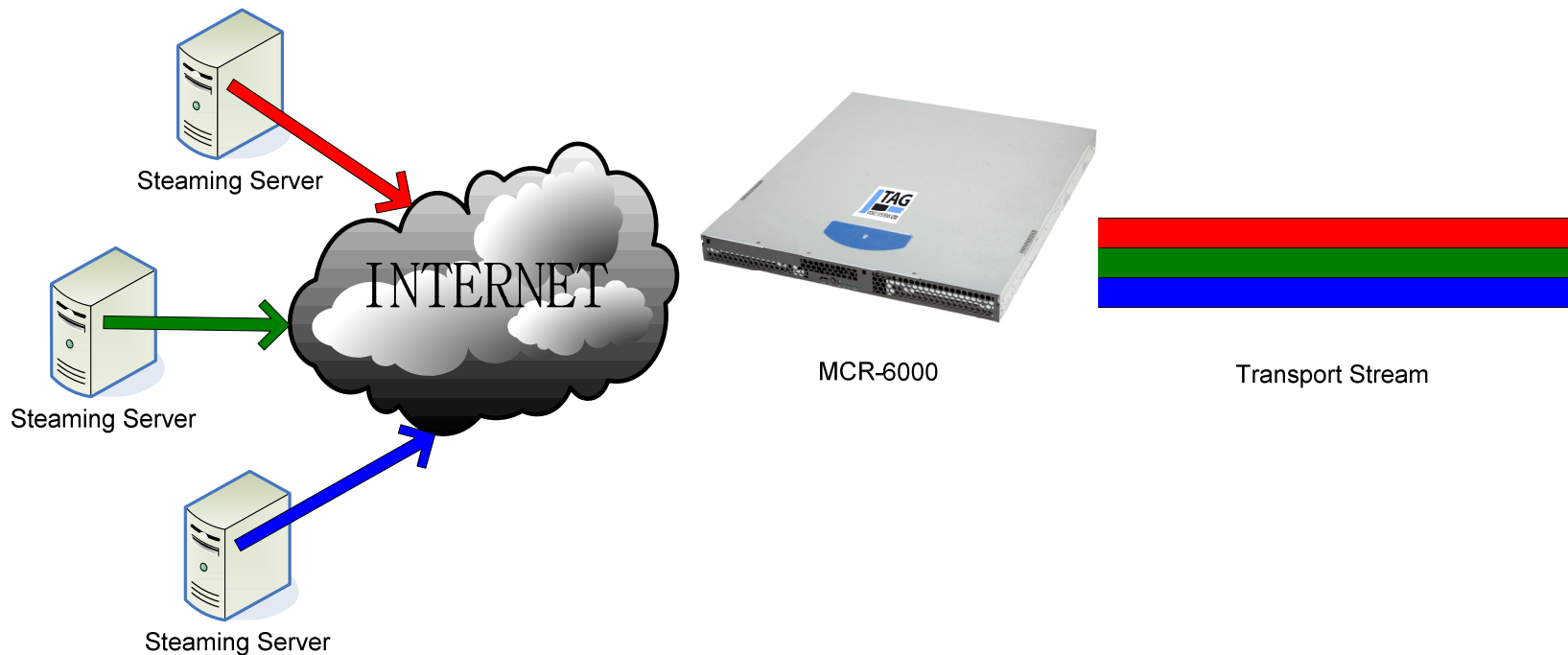- In multiple hop transmission – some hops can be replaced by Internet.

Audio Transcoding

- ## MCR-6000

  – Real time audio transcoding

  – Up to 48 channels on 1U server

  – IP and ASI interfaces

  – Source redundancy

  Cost effective – starting at 1K$ per channel !!!

Audio Transcoding

- Typical applications
  - Internet Radio to cable / DTH networks

Steaming Server

Steaming Server

Steaming Server

INTERNET

MCR-6000

Transport Stream

Audio Transcoding

- Typical applications
  - Reducing number of hops in audio transmission

Internet + single Hop

Double Hop