Whither MBoned?

Marshall Eubanks

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What Happened to Multicast?

• By 1995, multicast seemed well on its way to universal adoption.
  – The MBone (Multicast backBone) had been set up and was growing.
  – Audiocasts and Videocasts of meetings, seminars, etc., such as the IETF, were fairly routine.
  – Serious interest was coming from industry.
• So why isn’t it ubiquitous now?
  – The hype got ahead of the technology!
  – The original technology was not suitable for adoption throughout the Internet. Basic parts had to be re-engineered on the basis of experience (see the first rule).
  – This took from ~ 1997 to early 2001.
The Life Cycle of New Technologies in General

(After Lawrence Orans of Gartner)

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“Global” Multicast Deployment is lagging...

http://www.multicasttech.com/status

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...but Multicast is Hot

- By 2006, with the use of Multicast accelerating, “Triple Play” became the buzzword of the moment - Voice, data and (Multicast) video, all on the same network.
  - 14,000 hits for “Triple Play” this morning on Google™ News
  - 2140 hits for “IPTV” this morning on Google™ News
- Multicast is BCP for Triple Play / IPTV video
  - Generally ASM with IGMPv2
- 3G Wireless has adopted IP Multicast in the 3GPP MBMS and 3GPP2 BCMCS services
  - This includes multicast at the RF link layer.
- L3VPN Multicast is a hot topic in the IETF

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Multicast Video: Walled Garden or Global Village?

- Most current plans for IPTV multicast streaming do not accept video from outside.
  - The “walled garden” approach.
- The real question is whether Zipf’s Law will allow the walls to stand.
  - My statistical models predict 100,000’s of channels will be supportable commercially in the USA alone.
  - It’s hard to see how the walled garden can be extended to encompass 100,000’s of channels
  - 100,000 channels is ~ 10,000 servers
    - The content provider should buy these, not the ISP.

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What is to be done?

- People are making money from Multicast
- Many of these people are not represented in MBoneD
  - Any IPTV operators here?
  - Any wireless operators here?
- One idea that I find gets resonance is to push IPTV standardization
  - Needed to free the walled garden
  - But some of this will not be at layer 3
- Some specific ideas
  - Operator Survey
  - Go to them - standardization BOFs at IPTV events, trade shows, etc. etc.
  - Others?

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