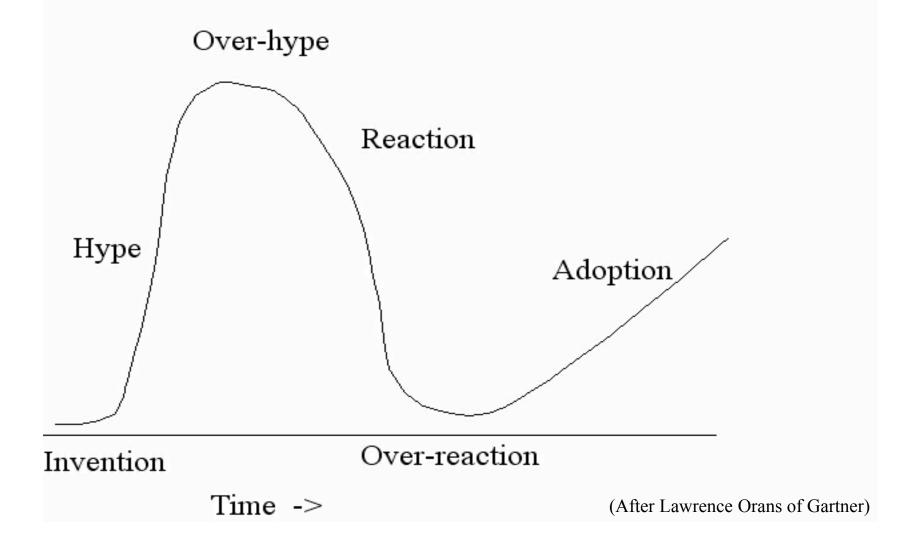
Whither MBoned?

Marshall Eubanks

What Happened to Multicast?

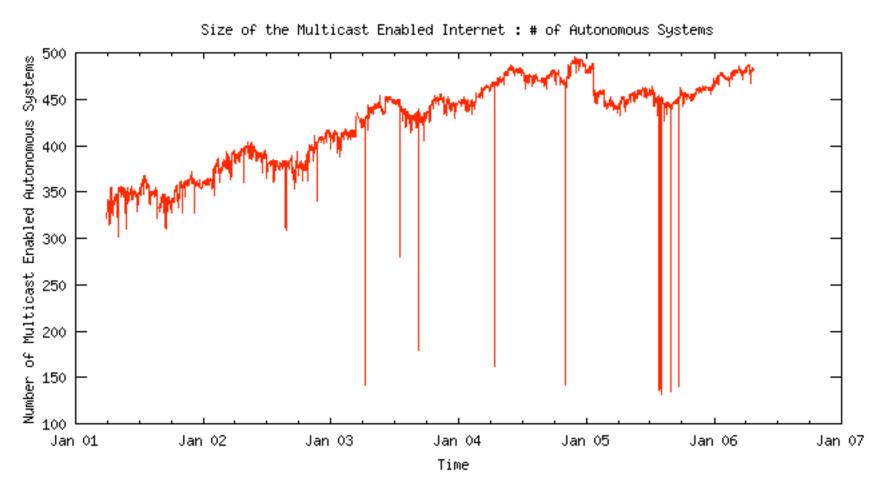
- By 1995, multicast seemed well on its way to universal adoption.
 - The MBone (Multicast backBone) had been set up and was growing.
 - Audiocasts and Videocasts of meetings, seminars, etc., such as the IETF, were fairly routine.
 - Serious interest was coming from industry.
- So why isn't it ubiquitous 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



RIPE-52 Istanbul 2006

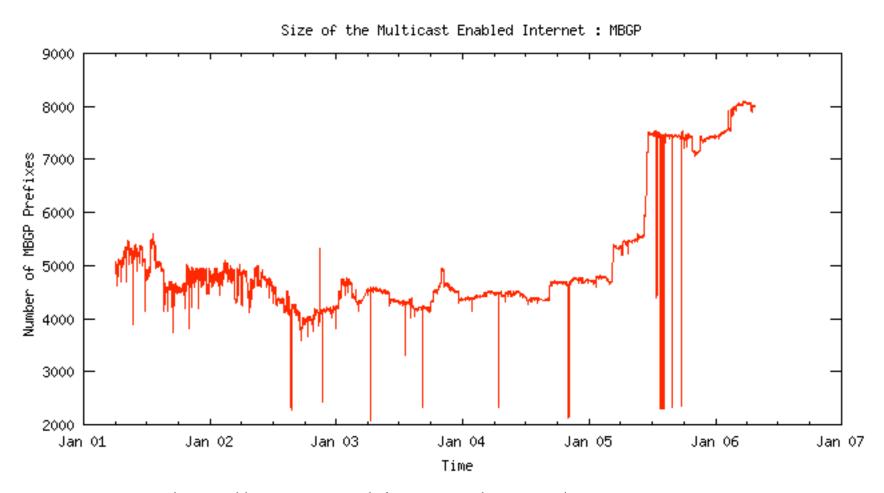
"Global" Multicast Deployment is lagging...



http://www.multicasttech.com/status

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... but still growing...



http://www.multicasttech.com/status

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...while Multicast is suddenly "hot"

- I looked at references to Multicast as seen by my news filters from March 22 to April 22, 2006
 - Try to decide what area they are in (may not be perfect...)

• 3GPP MBMS & BCMCS

• IPTV

Monitoring / Control

General products

Applications (zero conf)

• DSL

• IP Core

• Other

: 17 press references

: 16 press mentions

: 3 press mentions

: 3 press mentions

: 3 press mentions

: 2 press mentions

: 1 press mentions

: 8 press mentions

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What Multicast areas are actually seeing activity?

- 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

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.
 - That's why I'm here!
 - Others?