BUM OVER BIER

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(based on heavy jousting with Ice W. ;-)

EVPN (OR ANY OTHER BUM) OVER BIER

› BIER is excellent candidate to optimize any kind of service that needs BUM 'channel', e.g. eVPN

  – Cheap broadcast

  – Good Multicast on same domain

Why Beer Is The Answer:

Because surveys show that 100% of people that drink water die.

SERVICE-SPECIFIC BIER DOMAINS

› Requirements:
  - Service specific BIER "domains" or "sub-domains" are needed:
    › Service specific BUM channel MUST be able to be taken down/up without affecting other services
    › Service specific BUM channel MUST be separable via queuing policies to prevent BUM of one service taking down BUM of another service or offer 'gold' services
    › Service must autoconfigure onto its service specific BUM channel
    › Maybe we can even do optionally 'source-specific' domains
  - Multi-Topology is heavy (all hellos), small (200), meant for other uses (restricting topology of the physical substrate)

HOW IT COULD WORK ?

› Today:
  - MT + MASKLENGTH = Primary Domain Key
    › Label range per node

› Tomorrow:
  - MT + MASKLENGTH + SERVICE-ID + (optional) SOURCE-ID
    › Label range per node

› Well-known service-IDs
  - 0: MVPN
  - 1: eVPN
  - 2: apply here

PROBLEMS ?

› Additional IGP flooding or other signaling

› More labels

› Is BFR-id per domain or 'service-specific domain'

Houston, We Have A Problem