

Network Topologies for Evaluating Diffserv

DECIDES BOF

OSLO IETF

Kathleen Nichols

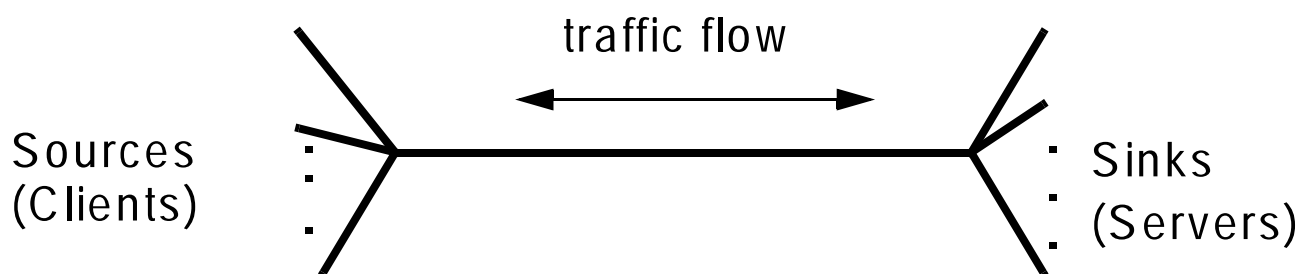
`kmn@cisco.com`

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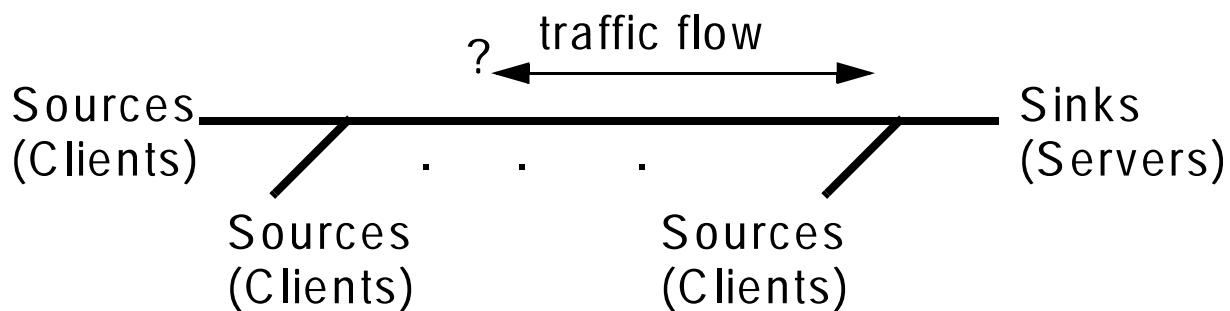
Criteria (Multiple Choice)

- Ease of drawing
- Ease of simulation
- Validation of analysis
- Exploration of the kinds of behavior expected to be observed in networks where diffserv is deployed

What kind of network?



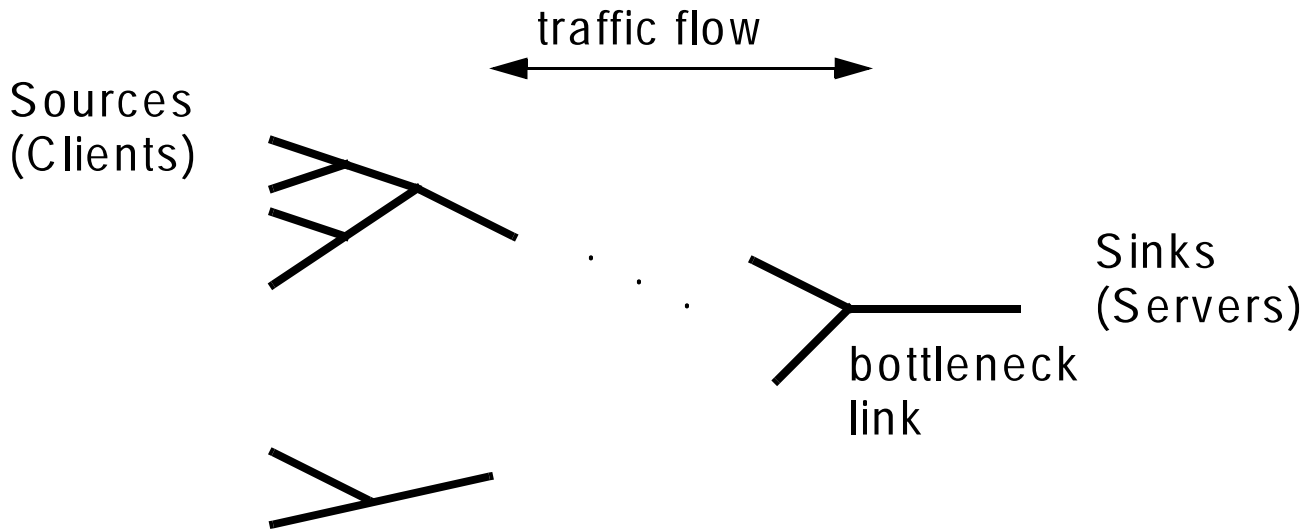
Dumbbells and Dancehalls



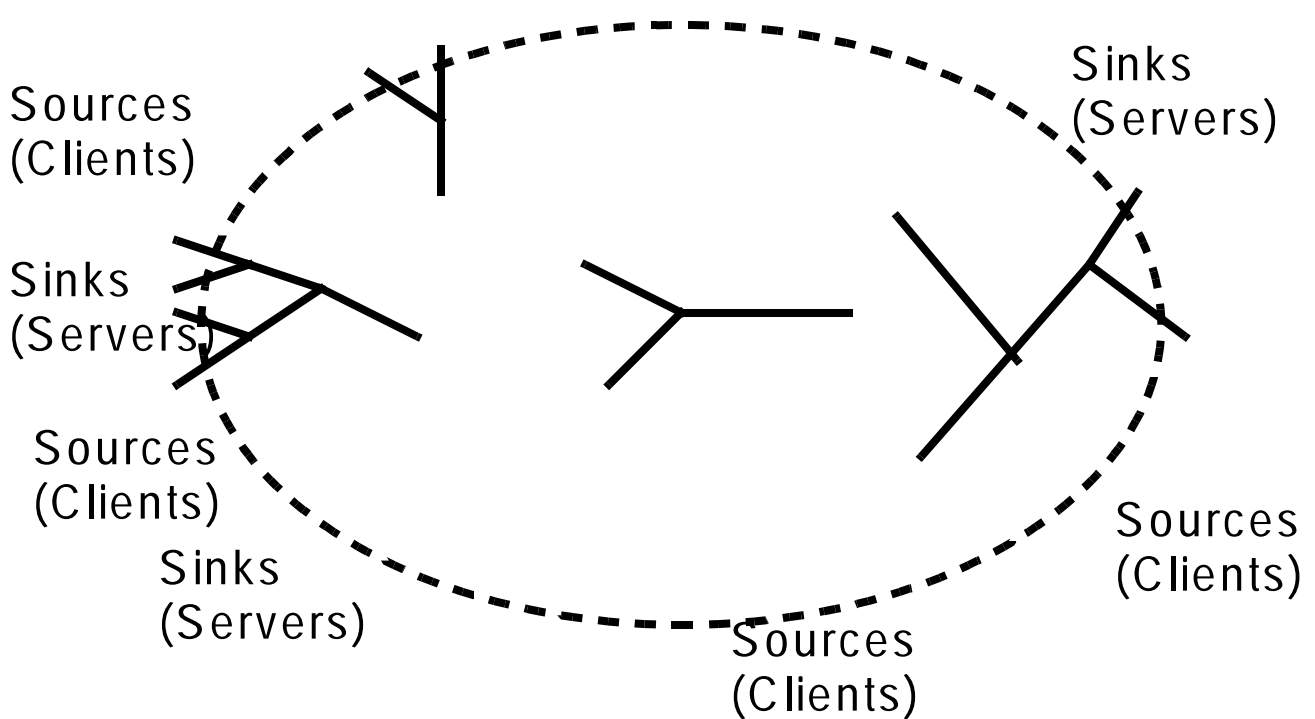
Freeway with On-ramps

More Topologies

Branch-y (Trees)



Branch-y and Mesh-y



What kind of traffic?

- Random packet generation

Seriously...

- Trace-driven packet generation

What about dropped packets?

- Packet traffic that affects and is affected by the network

1. Model the protocol behavior realistically (e.g., SYNs, FINs, ACKs) and
2. Present data packets to the protocol model from application models that are our best understanding of the salient characteristics of real usage patterns