

QBone View of SLSs

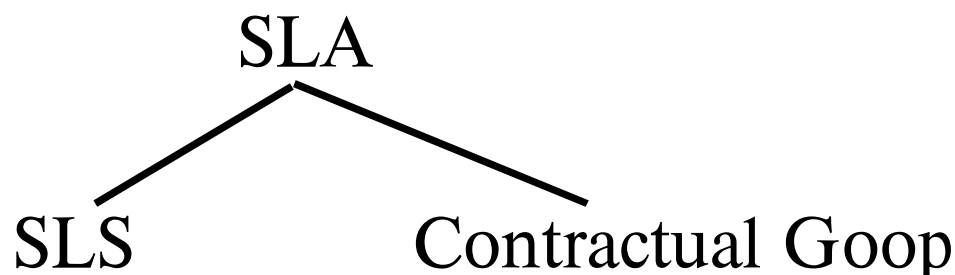
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What is “QBone”?

- Internet2 effort to build an **interdomain** diff-serv testbed
- **Service objective:** Premium/VLL
- **Other objectives:** thorough instrumentation and open dissemination of measurements
- **Implementation status:** embryonic
 - Abilene: PSC (Penn State), UIUC, iCAIR, OARNet (Ohio State), ANL, MAGPI (U. Penn), NASA (Ames and Goddard)
 - ESnet: ANL, LBNL
- *We hope to be a place where experience with QoS SLSs is gained and shared!*

SLS Basics

- An SLS is the technical component of an SLA

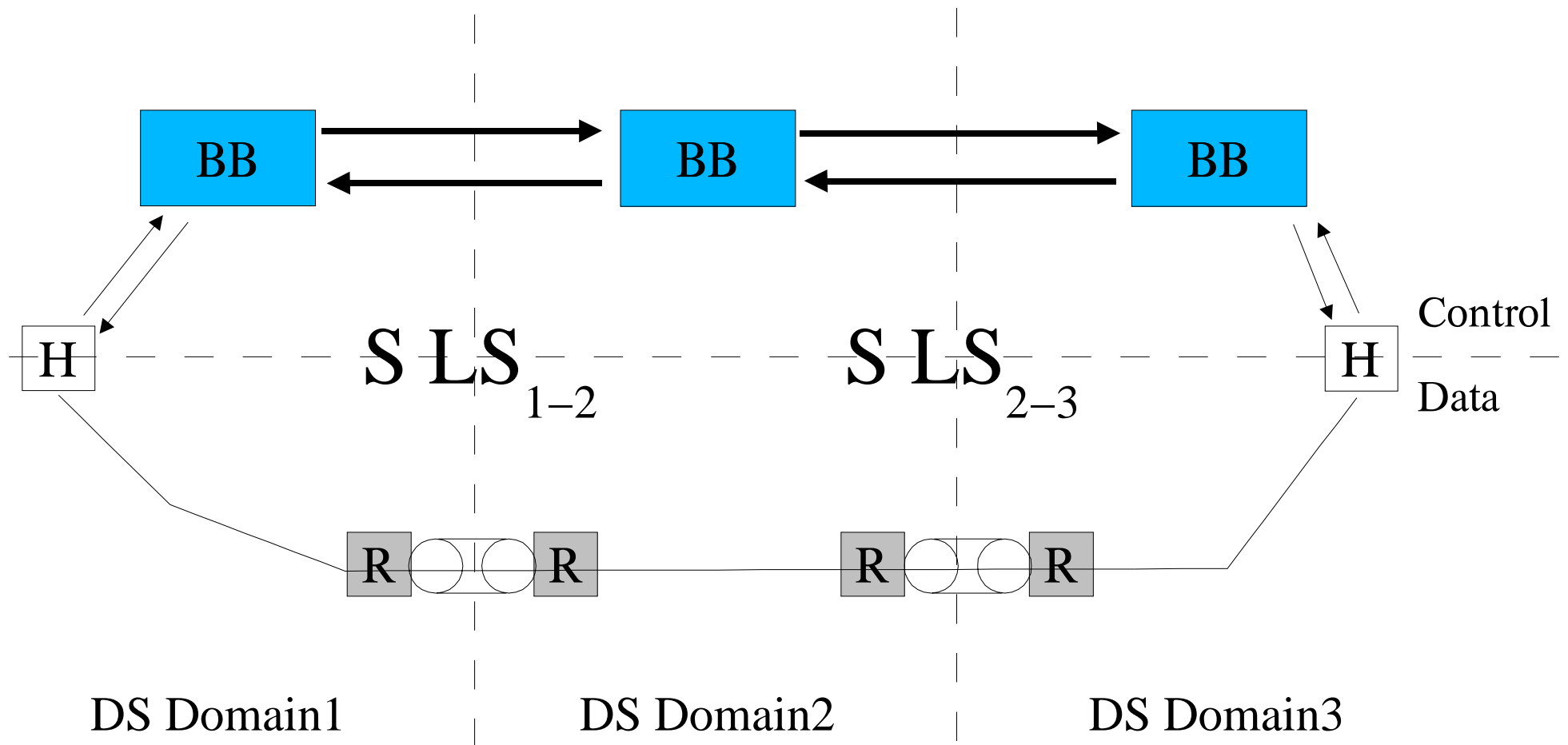


- SLSs are bilateral and private
- An SLS is **not** a reservation
- SLSs can be arbitrarily weird; *for example...*
 - Per {sourceContinent, destContinent} RTT bounds
 - All VLL requests under 1 Mbps will be rejected
 - 100 Mbps VLL to MIT OK with 7 days notice

Our Solution

- Define *services* and *reservations*; punt on SLSs
- Services
 - Globally well-known and defined
 - Include many parameters from **draft-tequila-sls-00.txt** (scope, traffic envelope, performance guarantees, etc)
- Reservations
 - Identify a service ID
 - Specify service parameters
- Treat SLS as black box: *can this reservation be extended across the peering; yes or no?*

Simple Interdomain Bandwidth Broker Signalling (SIBBS)



Conclusions

- Limited diff-serv implementation experiences
- Even less experience with diff-serv peering
- Need to specify a few internet-wide *services*
- TEQUILA draft could be recast as a framework for specifying services
- Formal specification language for SLSs is probably premature
- Automated negotiation of SLSs is premature

For More Info...

- <http://qbone.internet2.edu/architecture.shtml>