

Service Level Specification Semantics, Parameters and negotiation requirements

draft-tequila-diffserv-sls-00.txt

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Objective of the draft

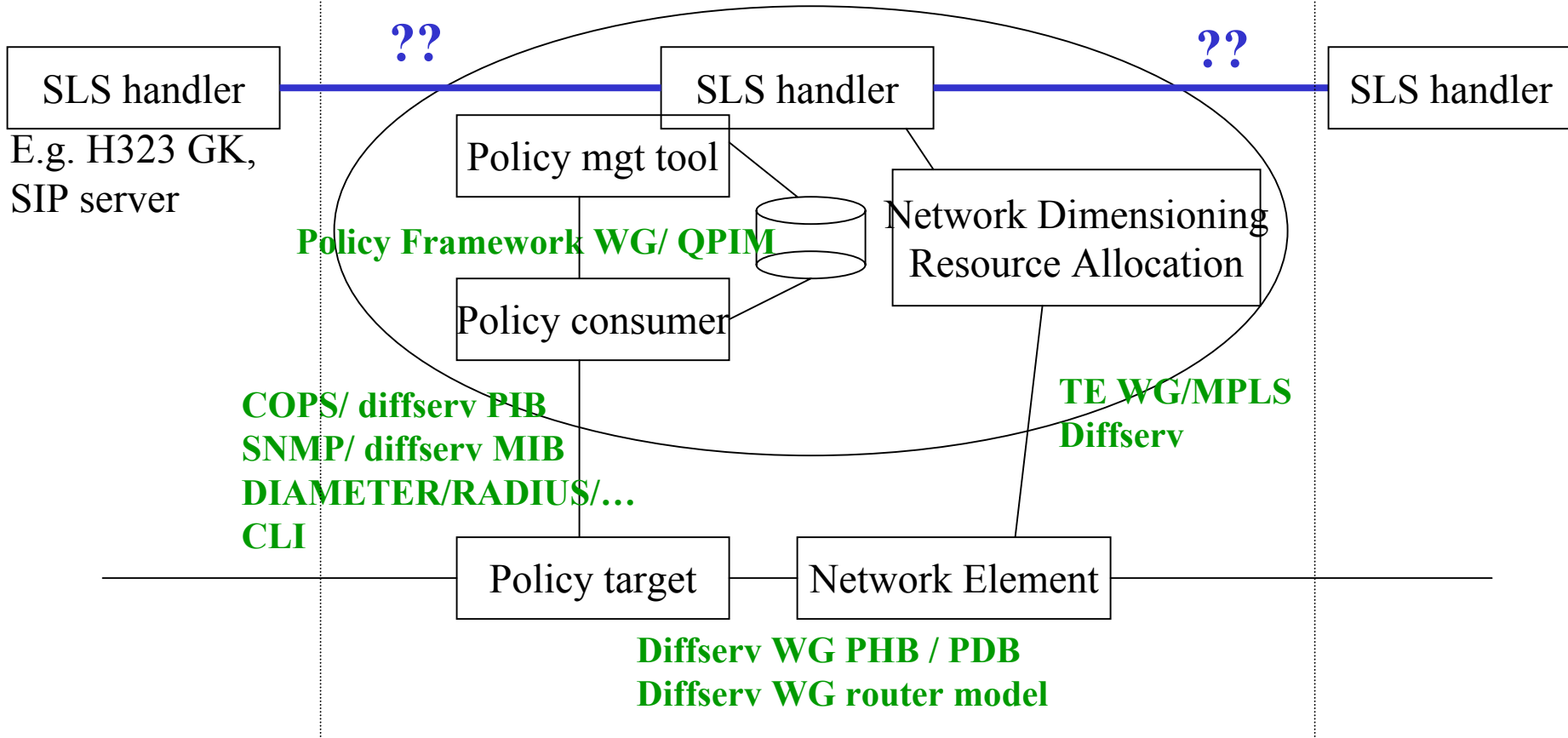
- Define template for definition of *Service Level Specification*, suitable for negotiation at customer - provider and provider - provider boundaries
- Provide early idea on requirements on the negotiation protocol
- Is there a home for this at the IETF ? if not, propose to organize BoF in San Diego

Relation to other work

CPN

ISP

ISP



Why needed ?

- Allow automated and dynamic negotiation of Service Level Specifications
 - at CPN/ISP boundary
 - at ISP/ISP boundary
- Allow design of Bandwidth Broker functionality (irrespective if distributed or centralized) in multi-vendor and multi-domain environment

SLS parameters

- Scope (ingress, egress)
 - (1,1), (1,N), (1,all), (N,1), (all, 1)
- Flow Identification
- Traffic Conformance Testing
 - Combination of Traffic Conformance Parameters & Traffic Conformance Algorithm
- Excess Treatment
 - Dropped, Shaped, Remarked

SLS parameters (ctd)

- Performance Guarantees
 - delay | optional quantile
 - jitter | optional quantile
 - packet loss
 - throughput
- Quantitative as soon as one of the above is quantified
- Qualitative if delay and/or packet loss are qualified as low, medium, high

SLS parameters

- Service Schedule
 - Time of day, day of week, week of year, ...
- Reliability
 - Mean Down Time
 - Max time to repair
- others for further study

Services to be constructed as example

- Virtual Leased Line
- Minimum rate guarantee with allowed excess
- Qualitative Olympic Services
- Funnel Service

Interest in BoF ?

- Objectives (proposed)
 - Specification of information and semantics (maybe build upon CIM)
 - List requirements on negotiation protocol (no new protocol !)
- Lot's of work underway :
 - EC IST projects : TEQUILA, AQUILA, CADENUS
 - Internet2 Qbone
 - DMTF SLA WG

Next...

- See upcoming message on creation of
sls@ist-tequila.org
- See <http://www.ist-tequila.org>