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(54) Title: DYNAMIC QoS MANAGEMENT IN DIFFERENTIATED SERVICES USING BANDWIDTH BROKERS, RSVP AGGREGATION AND LOAD CONTROL PROTOCOLS

(57) Abstract: A method and network subsystem for providing on demand end to end Quality of Service (QoS) in a dynamic manner, use a combination of Resource Reservation Protocol (RSVP), load control protocol (and its successors) and Bandwidth Brokers (BBs)(1106) which communicate using a predetermined protocol. The predetermined protocol may be one of Common Open Policy Service Protocol (COPS) and Simple Network Management Protocol (SNMP) for direct communication by the BBs (1106). The network subsystem might also include differentiated services architecture (Diffserv)(1109) which might comprise a Diffserv domain (1309, 1409) including Border Routers (BRs)(1112) and Core Routers (CRs). The BBs (1106) may obtain resource availability information by communicating only with the BRs (1112) to the exclusion of CRs. The BBs (1106) may optionally have the capability of using an RSVP aggregation protocol and may have the ability to store and manage RSVP aggregation status. The method and network subsystem may additionally use Integrated Service Architecture (Intserv)(1108) which will enable achieving interoperability between Intserv and Diffserv through the use of an edge router (1103, 1104) on a bandwidth broker aggregator (1105).

