

Preliminary Implementation of a Situation Aware Multipath Routing Algorithm

Georgeta BOANEA, Melinda BARABAS, Andrei Bogdan RUS, Virgil DOBROTĂ

Abstract

In this paper we describe the preliminary implementation of an intra-domain routing solution, called Situation Aware Multipath (SAMP) routing algorithm. The path between source and destination is selected based on statistical cross-layer Quality of Service information provided by a situation-aware network management application. The chosen path is the one which offers the highest global data rate. This is an effective method to increase throughput and to achieve load balancing by attempting to eliminate congestion in computer networks. SAMP can be used for QoS-constraint and real-time multimedia applications in wired networks.