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A Simulation Model for IP Multicast with RSVP

Status of this Memo

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Abstract

This document describes a detailed model of IPv4 multicast with RSVP that has been developed using the OPNET simulation package [4], with protocol procedures defined in the C language. The model was developed to allow investigation of performance constraints on routing but should have wide applicability in the Internet multicast/resource reservation community. We are making this model publicly available with the intention that it can be used to provide expanded studies of resource-reserved multicasting.

Table of Contents

1. Background 2
2. The OPNET Simulation Environment 3
3. IP Multicast Model 3
3.1 Address Format 3
3.2 Network Layer 4
3.3 Node layer 5
4. RSVP Model 15
4.1 RSVP Application 15

4.2 RSVP on Routers 16
4.3 RSVP on Hosts 20
5. Multicast Routing Model Interface 22
5.1 Creation of multicast routing processor node 22
5.2 Interfacing processor nodes 22
5.3 Interrupt Generation 24
5.4 Modifications of modules in the process model 25
6. OSPF and MOSPF Models 25
6.1 Init 25
6.2 Idle 26
6.3 BCOspfLsa 26
6.4 BCMospfLsa 26
6.5 Arr 27
6.6 Hello_pks 27
6.7 Mospfspfcalc 27
6.8 Ospfspfcalc 28
6.9 UpstrNode 29
6.10 DABRA 29
7. DVMRP Model 29
7.1 Init 29
7.2 Idle 29
7.3 Probe_Send State 29
7.4 Report_Send 29
7.5 Prune _Send 30
7.6 Graft_send 30
7.7 Arr_Pkt 31
7.8 Route_Calc 32
7.9 Timer 32
8. Simulation performance 32
9. Future Work 32
10. Security Considerations 33
11. References 33
Authors' Addresses 34
Full Copyright Statement 35

1. Background

The successful deployment of IP multicasting [1] and its availability in the Mbone has led to continuing increase in real-time multimedia Internet applications. Because the Internet has traditionally supported only a best-effort quality of service, there is considerable interest to create mechanisms that will allow adequate resources to be reserved in networks using the Internet protocol suit