

Chapter 36

DVMRP Overview

DVMRP is a distance-vector routing protocol that provides connectionless datagram delivery to a group of hosts across an internetwork. DVMRP is a distributed protocol that dynamically generates IP multicast delivery trees using a technique called reverse path multicasting (RPM) to forward multicast traffic to downstream interfaces. These mechanisms allow the formation of shortest-path trees, which are used to reach all group members from each network source of multicast traffic.

DVMRP is designed to be used as an interior gateway protocol (IGP) within a multicast domain.

Because not all IP routers support native multicast routing, DVMRP includes direct support for tunneling IP multicast datagrams through routers. The IP multicast datagrams are encapsulated in unicast IP packets and addressed to the routers that do support native multicast routing. DVMRP treats tunnel interfaces and physical network interfaces the same.

DVMRP routers dynamically discover their neighbors by sending neighbor probe messages periodically to an IP multicast group address that is reserved for all DVMRP routers.

DVMRP Standards

DVMRP is defined in *Distance Vector Multicast Routing Protocol*, Internet Draft draft-ietf-idmr-dvmrp-v3-07.

To access Internet RFCs and drafts, go to the IETF Web site at <http://www.ietf.org>.

