ZebOS®
Advanced Routing Suite

PIM-DMv4 Module

SKU ZOS-PIMDM

The ZebOS® Advanced Routing Suite (ARS) Protocol Independent Multicast - Dense Mode v4 (PIM-DMv4) is a data-driven multicast routing protocol, which builds source-based multicast distribution trees that operate on the flood-and-prune principle. It requires unicast-routing information but does not depend on a specific unicast routing protocol. Protocol Independent Multicast - Dense Mode (PIM-DM) is a multicast routing protocol designed to effectively distribute data to target recipients in a concentrated area. Ideally suited for routers and switches, PIM-DM functionality greatly optimizes the delivery of video conferencing, streaming music and movies, Voice over IP (VoIP), distributed downloads, internet TV, and more into Local Area Networks.

The ZebOS PIM-DMv4 Module is written in the ANSI C programming language and fully integrated into the ZebOS Network Services Module (NSM) and the ZebOS IPv4 protocol modules.

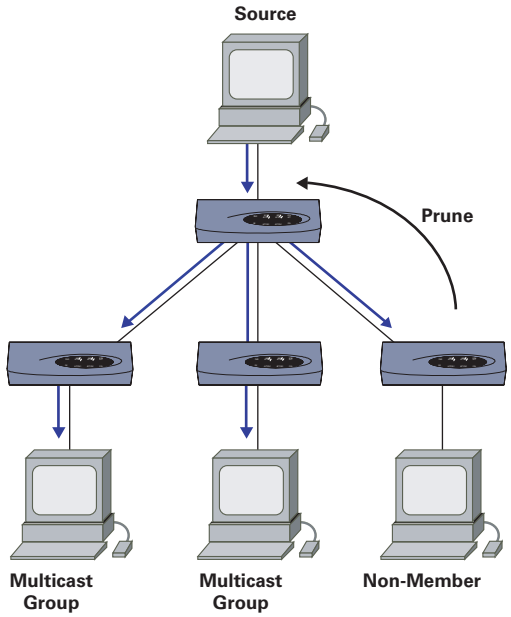

Figure 1 PIM-DMv4 Network Topography

Features

- Reverse Path Forwarding (RPF) algorithm Support
- Rooted shared trees and source specific trees (Multicast delivery trees) using periodic and triggered Join/Prune messages Support
- IGMPv2 Support via ZebOS NSM or protocol daemon
- Neighbor Discovery Support
- Industry Standard Command Line Interface
- Process all types of packets as defined by the IETF PIM-DM specification
- Each interface can enable/disable PIM-DM independently or concurrently
- Random delivery of triggered HELLO messages to avoid synchronization
- Delayed prune override to avoid prune storm

Benefits

- Stable, robust implementation of PIM-DM
- Interoperable with major router vendors
- Can be used in embedded equipment and on standard server platforms
- Delivers significant time-to-market advantages for customer
- Platform-independent implementation
- PIM-DM is independent of the routing protocol used.

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