

PIM MIB

draft-ietf-pim-mib-v2-03

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Introduction

- Structure of this presentation
 - Background
 - Major changes in –02 and –03 revisions
 - Structure of the new MIB
 - Remaining work
 - Issues for working group input
 - Where next?

Background

- History
 - Existing PIM MIB defined in RFC 2934 (October 2000)
 - Work on draft-ietf-pim-mib-v2 began in 2002
 - Progress stalled until early 2005
 - Recently (since IETF 62) published two new revisions, with major changes
- Mailing list
 - <http://www.mountain2sea.com/mailman/listinfo/pim-mib>

Major changes in –02 revision

- Address family independence
- Addition of support for BIDIR-PIM
- Removal of support for PIM-DM
- Removal of support for PIM-SM v1
- Removal of dependency on the IPv4 Multicast Routing MIB (RFC 2932)
- Addition of lots of useful objects to the Interface and Neighbor tables
- Addition of a Neighbor Secondary Address table

Major changes in –03 revision

- Replacement of the pimIpMRoute and pimIpMRouteNextHop tables with six new tables
- Addition of a table for configuring SSM ranges
- Addition of a table for configuring static RPs
- Replacement of the pimRPSetTable with the pimGroupMappingTable, which supports mappings learned from all sources, not just BSR
- Substantial reworking of the BSR tables

Structure of the new MIB (1 of 2)

- Interfaces and neighbors
 - pimInterfaceTable
 - pimNeighborTable
 - pimNbrSecAddressTable
- Multicast tree state
 - pimStarGTable
 - pimStarGITable
 - pimSGTable
 - pimSGITable
 - pimSGRptTable
 - pimSGRptITable
 - pimBidirDFElectionTable

Structure of the new MIB (2 of 2)

- SSM and RPs
 - pimSsmRangeTable
 - pimStaticRPTable
 - pimGroupMappingTable
- BSR
 - bsrCandidateRPTable
 - bsrRPSetTable
 - bsrCandidateBSRTable
 - bsrElectedBSRTable
- Notifications (SNMP traps)
 - pimNeighborLoss

Remaining work

- Work on notifications
 - Currently only one defined
 - Think about adding more
- Various minor technical issues
 - Extra objects to be added
 - Some objects to be removed
 - Minor ASN.1 usage issues
- Lots of minor editorial issues

Issues for working group input

- Move BSR tables to a separate MIB?
- Move SSM range table to a separate MIB?
- Fate of PIM-DM support in the MIB
- Support for explicit tracking of next-hop neighbors in the tree state tables?
- Do we need support for scope zones or "components"?
- Support for Anycast-RP using PIM?
- PIM message statistics collection?

Where next?

- WG last call soon?
- Wait for implementations and operational experience?
- More reviewing?
- Updated IP Multicast Routing MIB?

The End

- Reminder
 - <http://www.mountain2sea.com/mailman/listinfo/pim-mib>
- Questions or comments?