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| **PIM6 - Protocol Independent Multicast for IPv6** |

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| VyOS facilitates IPv6 Multicast by supporting **PIMv6** and **MLD**. |

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| PIMv6 (Protocol Independent Multicast for IPv6) must be configured in every interface |

of every participating router. Every router must also have the location of the Rendevouz

Point manually configured. Then, unidirectional shared trees rooted at the Rendevouz

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| Point will automatically be built for multicast distribution. |

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| Traffic from multicast sources will go to the Rendezvous Point, and receivers will pull it |

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| from a shared tree using MLD (Multicast Listener Discovery). |

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| Multicast receivers will talk MLD to their local router, so, besides having PIMv6 |

configured in every router, MLD must also be configured in any router where there

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| could be a multicast receiver locally connected. |

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| VyOS supports both MLD version 1 and version 2 (which allows source-specific |

multicast).

**Basic commands**

These are the commands for a basic setup.

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| **set protocols pim6 interface <interface-name>** |

Use this command to enable PIMv6 in the selected interface so that it can communicate with

PIMv6 neighbors. This command also enables MLD reports and query on the interface

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| unless mld disable is configured.   |  | | --- | |  | |

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| **set protocols pim6 interface <interface-name> mld disable** |

Disable MLD reports and query on the interface.

**Tuning commands**

You can also tune multicast with the following commands.

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| **set protocols pim6 interface <interface-name> mld interval <seconds>** |

Use this command to configure in the selected interface the MLD host query interval (1-65535) in seconds that PIM will use. The default value is 125 seconds.

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| **set protocols pim6 interface <interface-name> mld join <multicast-address>** |

Use this command to allow the selected interface to join a multicast group.

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| **set protocols pim6 interface <interface-name> mld join <multicast-address> source <source-address>** |

Use this command to allow the selected interface to join a source-specific multicast group.

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| **set protocols pim6 interface <interface-name> mld last-member-query-count <count>** |

Set the MLD last member query count. The default value is 2.

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| **set protocols pim6 interface <interface-name> mld last-member-query-interval <milliseconds>** |

Set the MLD last member query interval in milliseconds (100-6553500). The default value is 1000 milliseconds.

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| **set protocols pim6 interface <interface-name> mld max-response-time <milliseconds>** |

Set the MLD query response timeout in milliseconds (100-6553500). The default value is 10000 milliseconds.

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| **set protocols pim6 interface <interface-name> mld version <version-number>** |

Set the MLD version used on this interface. The default value is 2.

**Configuration Example**

To enable MLD reports and query on interfaces *eth0* and *eth1*:

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| set protocols pim6 interface eth0  set protocols pim6 interface eth1 |

The following configuration explicitly joins multicast group *ff15::1234* on interface *eth1* and source-specific multicast group *ff15::5678* with source address *2001:db8::1* on interface *eth1*:

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| set protocols pim6 interface eth0 mld join ff15::1234  set protocols pim6 interface eth1 mld join ff15::5678 source 2001:db8::1 |