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PIM Version 2 DR Election Priority Option
<[draft-ietf-idmr-pimv2-dr-priority-00.txt](#)>

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Abstract

This draft specifies the DR Election Priority Option in PIM version 2 Hello messages.

1. Introduction

The current PIM specification uses an address-based designated router (DR) election algorithm. The router with the largest IP address is always elected as the DR.

The DR Election Priority option is used when people want to have control over which router is elected as the DR, irrespective of the address of routers on the same LAN. This is needed on LANs where new routers can be added and configured by different operators.

2. DR Election Priority Option

The DR election priority is a 32-bit unsigned number. The numerically larger priority is always preferred. The DR election priority is used only when all routers on the LAN include this option in their Hellos.

If no DR election priority option is specified in a Hello

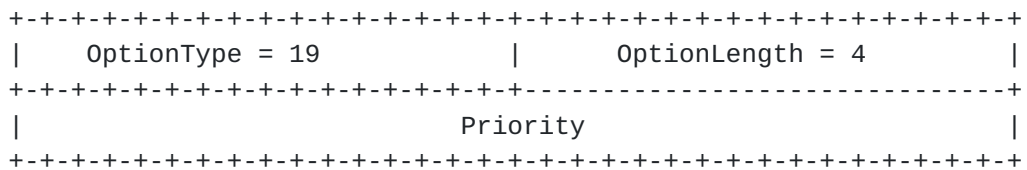
message, the Hello sender is deemed not capable of handling the DR election priority option. When such a hello message is received, the neighbor with the highest IP address is elected the DR. This way new systems can interoperate with older systems in the old way.

The DR election priority received in a Hello is kept until the next Hello from the same system arrives. The newly received priority replaces the cached priority for the same neighbor.

An implementation capable of doing this option should always include it in the Hellos even if no DR election priority is explicitly configured. The default priority is 1.

The following is the format of this option.

OptionType: 19
OptionLength: 4



Priority: 32-bit
Priority value. This should be treated as the higher order bits to the address during DR election.

3. Acknowledgmentssss

Pavlin Radoslavov commented on a previous version of this draft.

4. References

[PIM] [draft-ietf-idmr-pim-sm-specv2-00.txt](#)