

MPLS LDP Identifier Name

draft-abd-mpls-ldp-identifier-name-00

Anil Kumar S N (anil.ietf@gmail.com)

Basil Saji(sajibasil@gmail.com)

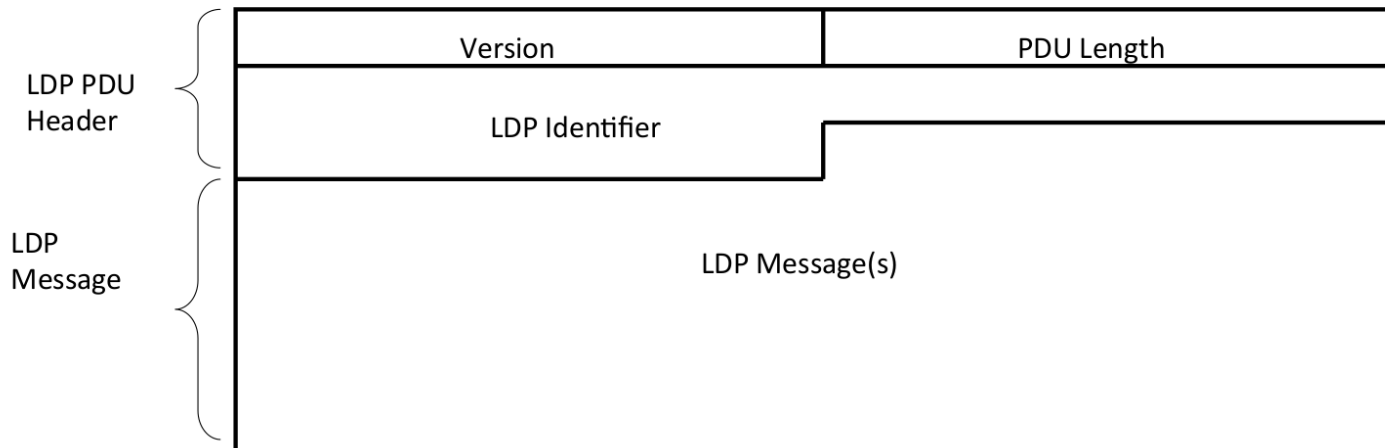
Deepak J Gowda(deepakj4982@gmail.com)

Dhruv Dhody(dhruv.ietf@gmail.com)

Introduction

LDP Identifier is the field uniquely identifies the label space of the sending LSR for which this PDU applies. The first 4 octets encode the IP address assigned to the LSR. The last 2 indicate a label space within the LSR.

This draft describes a mechanism to provide a simple and dynamic mechanism for LDP routers to learn about symbolic LDP Identifier Names.



LDP Identifier Name

Multiple approaches to provide a LDP-Identifier-to-Name mapping service.

- Static Method
 - This approach greatly suffers from maintainability and scalability considerations.
- Centralized location maintaining LDP-Identifier-to-Name Map (Ex: DNS)
 - The DNS could be used for this.
 - But,
 - Reachability or network problems to reach DNS
 - The response time from DNS
 - Operationally, an added dependency to DNS
 - Also, network operator may desire a different name mapping than the one in the DNS
 - *it is easier to make changes directly at the router instead!*
- Protocol itself to carry the LDP-Identifier-to-Name mapping in a TLV
 - Routers that understand this TLV can use it to create the symbolic LDP-Identifier-to-Name mapping, and routers that don't understand it can simply ignore it

LDP Identifier Name TLV

This specification provides the semantics and mapping mechanism for LDP, leveraging the LDP Optional TLVs exchanged in LDP Hellos. (As per RFC 5036).

[RFC5036] defines the encoding for the Hello message. Each Hello message contains zero or more Optional Parameters, each encoded as a TLV. Three Optional Parameters are defined by [RFC5036].

[RFC7349] defines optional Cryptographic Authentication TLV.

This document defines a new Optional Parameter “LDP Identifier Name parameter”

Optional Parameter	Type
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IPv4 Transport Address	0x0401 (RFC5036)
Configuration Sequence Number	0x0402 (RFC5036)
IPv6 Transport Address	0x0403 (RFC5036)
Cryptographic Authentication	0x0405 (RFC7349)
LDP Identifier Name	TBD1 (this document, TBD1 by IANA)

Questions & Next Steps

- Is this feature useful?
- Is the extension (TLV) - the right approach?
- Any further suggestions to improve the document?

Thank You