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PCEP Extension for Explicit Control of Region Boundary in PCE-Based Inter-Layer Architecture

draft-fuxh-pce-boundary-explicit-control-pcep-ext-00

Abstract

[draft-fuxh-pce-boundary-explicit-control-framework-00] defines the framework for explicit control of region boundary in PCE-based inter-layer architecture. This document defines the PCEP extension for region boundaries explicit control.

Conventions Used In This Document

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC 2119 \(Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels," March 1997.\)](#) [RFC2119].

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1. Introduction

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[draft-fuxh-pce-boundary-explicit-control-framework-00] defines the framework for explicit control of region boundary in PCE-based inter-layer architecture. There is a requirements for PCEP extensions to support explicit control of region boundary. A new object could be introduced in PCEP message.

2. ERBO (Explicit Region Boundary Object)

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The format of ERBO object is the same as an ERO. The ERBO including the region boundaries information can be carried in PCEP message.

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3. RSVP-TE Extension

The PCEP message is extended as followings:

```
<PCRep Message> ::= <Common Header>
                                <response-list>
<response-list> ::= <response> [<response-list>]
<response> ::= <RP>
                [<NO-PATH>]
                [<attribute-list>]
                [<path-list>]
<path-list> ::= <path> [<path-list>]
<path> ::= <ERO> [<ERBO>] <attribute-list>
<attribute-list> ::= [<LSPA>] [<BANDWIDTH>] [<metric-list>] [<IRO>] <metric-list> ::= <METRIC> [<M
```

4. Security Considerations

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5. IANA Considerations

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6. References

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6.1. Normative References

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