

Standard Representation Of Domain Sequence - IRO Encoding Options!

draft-ietf-pce-pcep-domain-sequence-04

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IRO Encoding Options

Define a New IRO Type (new processing rules)

- (a.1) New IRO Type for domain-sequence sub-objects
 - Existing IRO Type for intra-domain
- (a.2) New IRO Type with both intra and inter-domain sub-objects

Use Existing IRO (existing processing rules)

- (b) Existing IRO Type for both intra and inter-domain sub-objects

(a.1) New IRO for domain-sequence

A new IRO Object Type is used for the Domain-Sequence sub-objects only

With strict order.

Support for loose hop.

Clear separation of scope.

Two IRO-Type may be included in PCReq

IRO Type 1 for intra-domain (no strict order).

IRO Type 2 for domain-sequence related subobjects.

Require change in PCReq message format - <iro-list> ☹️.

(a.2) New IRO both intra and inter-domain

A new IRO Object Type is used to include both intra nodes and inter-domains nodes

With strict order for domain sub-objects

Support for loose hop

Separation of scope because of order

Only the new IRO type 2 included in PCReq

May contains the intra domain network nodes & also domain sub-objects.

No need to change the PCReq message format.

(b) Existing IRO Type

An existing IRO Object Type is used to include both intra nodes and inter-domains nodes

Existing processing rules

No ordering for domain sub-objects ☹️

No support for loose hop ☹️

No separation in scope ☹️

Only the existing IRO type 1 included in PCReq

Intra domain network nodes and also domain sub-objects.

No need to change the PCReq message format.

Strict Order

- PCE to determine the order
- May lead to crankback
- Order can be easily specified in configuration or determination via Parent PCE.


Loose

- Existing IRO Type 1 do not support loose hop

Scope

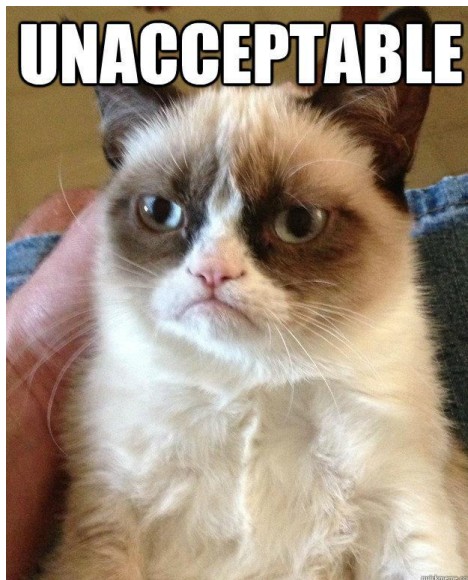
- All nodes in same IRO List without order.
- PCE responsible to determine the scope

Comparison

	(a.1) New IRO Type with domain-sequence sub-objects only	(a.2) New IRO Type with mix of intra and inter-domain sub-objects	(b) Existing IRO Type
Support Ordering?	Yes	Yes	No
Support Loose hop?	Yes	Yes	No
Consistent with PCReq Format?	No	Yes	Yes
Allow Separation of Scope?	Yes	Yes	No
Editor's Opinion:			

Question to the WG!

Option (a.2) - New IRO Type with mix of intra and inter-domain sub-objects!



Who cannot live with this
and finds it completely
unacceptable?

Thanks!