

RSVP-TE extensions for dynamic hostname traversing OSPF routing areas

draft-zheng-ccamp-rsvp-te-dynamic-hostname-00

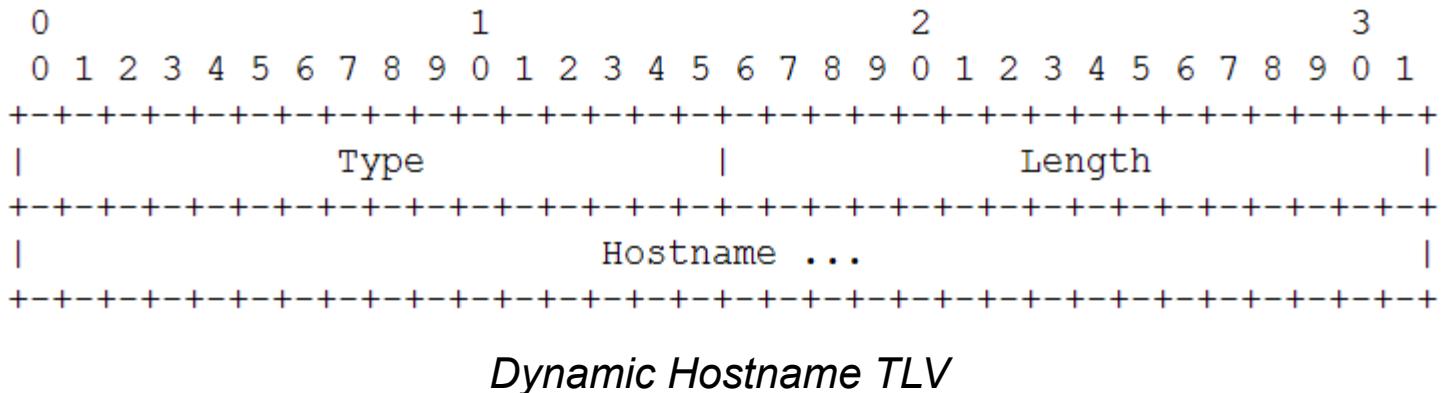
Zhi Zheng, zheng.zhi@zte.com.cn

Introduction

- support hostname-to-Router-ID mapping information traversing OSPF areas in RSVP-TE tunnel situations.
- makes use of the Notify message described in [RFC3473], by defining a new Dynamic Hostname Object.

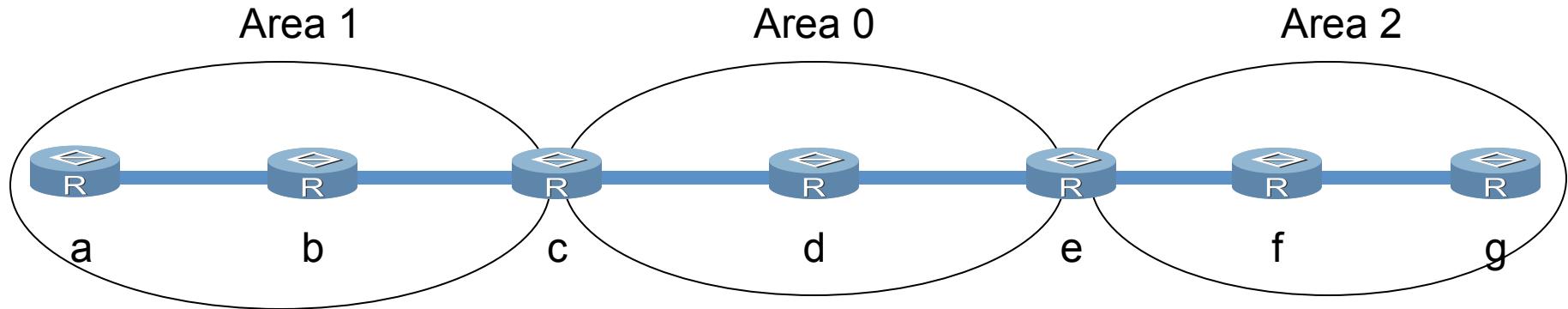
Background

- RFC 5642: Dynamic Hostname Exchange Mechanism for OSPF



- The flooding scope is controlled by the Opaque LSA type in OSPFv2.

Motivation



- A RSVP-TE head node can get the hostname-to-Router-ID mapping information by CSPF within an area.

Format of the New Object

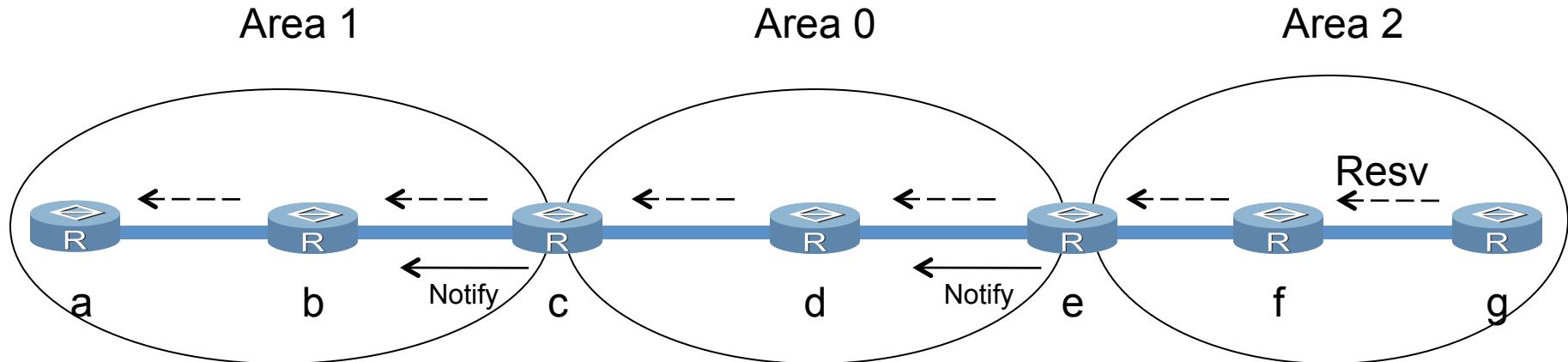
0	1	2	3								
0 1 2 3 4 5 6 7 8 9 0	1 2 3 4 5 6 7 8 9 0	1 2 3 4 5 6 7 8 9 0	1								
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+											
//	(Subobjects)		//								
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+											

Dynamic Hostname Object

0	1	2	3								
0 1 2 3 4 5 6 7 8 9 0	1 2 3 4 5 6 7 8 9 0	1 2 3 4 5 6 7 8 9 0	1								
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+											
	Type		Length								
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+											
	IPv4 Address (4 bytes)										
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+											
	Hostname ...										
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+											

Subobject 1: IPv4 address

Procedures



- ABRs generate Notify messages with Dynamic Hostname object containing the mapping information of those nodes in the LSP tunnel which are in the same area that the interface of the ABR received Resv message belongs to.

Comments?

Thank you!