IS-IS Hello Capability

draft-ginsberg-lsr-hello-capability-01

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Motivation

TLV codepoints are a limited resource in IS-IS (255)

IS-IS has a Router Capabilities TLV to advertise in Link State PDUs support for various node capabilities

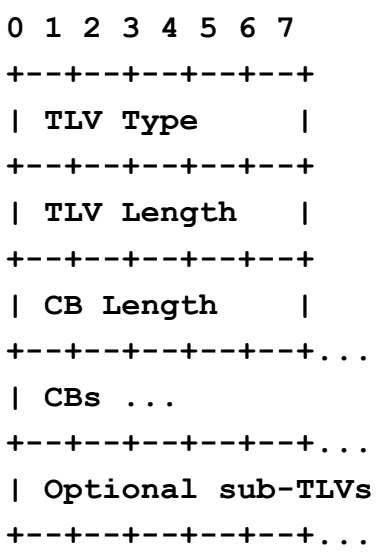
Currently 30 different sub-TLVs have been defined

It is useful to advertise support for optional capabilities to neighbors.

Following Router Capabilities Model, we introduce a top level “Hello Capability” TLV to advertise support for optional features in hellos.

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TLV Format



CB Length is length of the Capability Bits ((Number of bits + 7) / 8 octets May be 0.

CBs are the Capability Bits starting with Bit #0.

Optional sub-TLVs

Multiple Hello Capability TLVs MAY appear in a hello – but only the first one can have a non-zero CB length

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Level Considerations

Capability Bits: May define a single bit that applies to all supported levels or may define a bit/level

Sub-TLVs: Encoding can include a level indicator if needed

New Registries

IS-IS Bit Values for the Hello Capabilities TLV

IS-IS Sub-TLVs for the Hello Capabilites TLV

Use Cases

None defined in the draft but two proposals exist in new drafts

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Next Steps

Questions/comments welcomed…

Request WG Adoption

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