LMP Behavior Negotiation

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draft-ietf-ccamp-lmp-behavior-negotiation-02.txt

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After Beijing (79th) Meeting

Compare with 01 version:

- Removed RFC2119 language for Backward Compatibility (Section 3)
- Explicitly state how the multiple <CONFIG> objects can be used (Section 3)
- Removed “O” bit, this draft can move forward without any dependency
  - “O” bit will be defined in “draft-ceccarelli-ccamp-gmpls-g709-lmp-test-02.txt”

New C-Type: BEHAVIOR CONFIG

- **Config Message (Msg Type = 1)** defined in [RFC4204]

Config Message in this ID:

<Config Message> ::= <Common Header>
<LOCAL_CCID> <MESSAGE_ID>
<LOCAL_NODE_ID> <CONFIG> [<CONFIG> …]

- **CONFIG Class = 6**

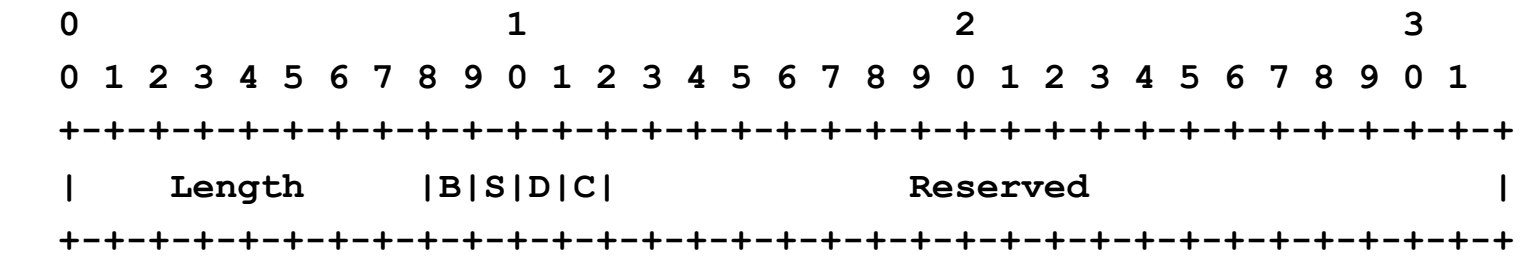
o C-Type = 1, HelloConfig, defined in [RFC4204]

o C-Type = 2, LMP_WDM_CONFIG, defined in [RFC4209]

o **C-Type = 3, BEHAVIOR_CONFIG, defined in This I-D**

Format of BEHAVIOR_CONFIG

Format of BEHAVIOR_CONFIG is changed



Length: 8 bits --- total length of the objects expressed in multiples of 4 bytes.

Flags:

B: 1 bit --- [RFC4204] **S**: 1 bit --- [RFC4207]

D: 1 bit --- [RFC4209] **C**: 1 bit --- [RFC5818]

Note:

- O-bit will be added by draft-ceccarelli-ccamp-gmpls-g709-lmp-test-02.txt.
  - The Reserved field **MUST** be sent as zero and **MUST NOT** be ignored on receipt. This allows the detection of supported / unsupported LMP behaviors.

Another Style for BEHAVIOR_CONFIG?

RFC 3392 style capabilities advertisement, refer to BGP Capabilities Optional Parameter:

```
+------------------------------+
|  Capability Code (1 octet)   |
+------------------------------+
|  Capability Length (1 octet) |
+------------------------------+
|  Capability Value (variable) |
+------------------------------+
```

Does LMP need to exchange configuration parameters in a generic fashion?

Since we just need to make the selection for the LMP behaviors, we think the *compact* format (defined in current draft) is ok.

How Will a Legacy LMP Node Respond?

<MESSAGE_ID> <LOCAL_NODE_ID>
<HelloConfig>|<LMP_WDM_CONFIG>
<BEHAVIOR_CONFIG>

-- unknown BEHAVIOR_CONFIG object

- **Reject** -- multiple <CONFIG> objects
- **Ignore** the second <CONFIG> object (behavior config)

The LSR receives a ConfigNack message, **MUST revert to current practices** of configuration or discovery.

Next Steps

  - Seems it's redundant because RFC4204 is mandatory

  - Draft is quiet simple and stable, ready for WG LC?

- Comments?