

# Signaling SAVNET Capability Using IGP

draft-cheng-lsr-adv-savnet-capbility

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IETF121

# Problem & Solution

Problem 1: All prefixes are involved in the SAVNET

- A large number of SAV entries.
- Possible false filtering.

Solution: SAVNET Source Prefix Flag of Prefix

Used to identify whether the prefix will be considered as a SAVNET prefix

Problem 2 : The savnet capability of the devices needs to be identified.

Solution:

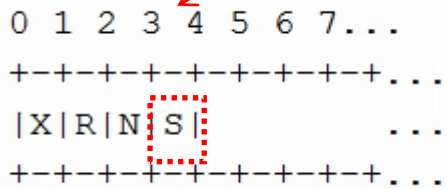
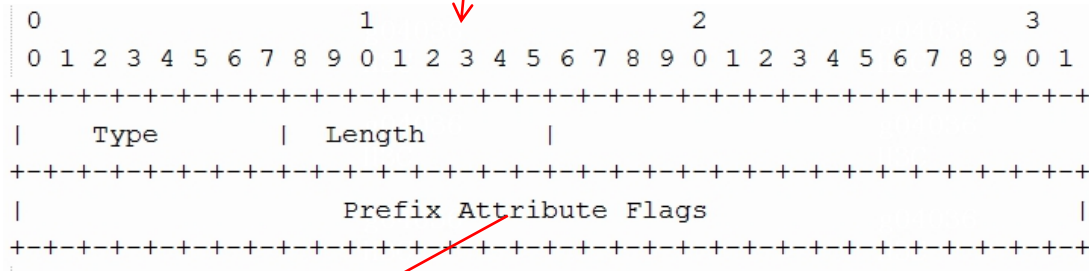
- SAVNET Capability TLV of Node
- SAVNET Capability in BGP-LS

Possible cases: controller-based SAVNET

SAVNET solutions are out of scope in this draft.

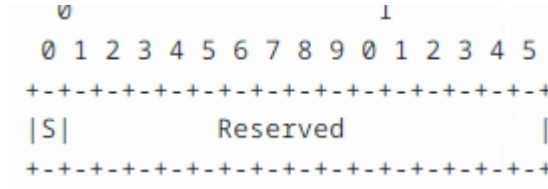
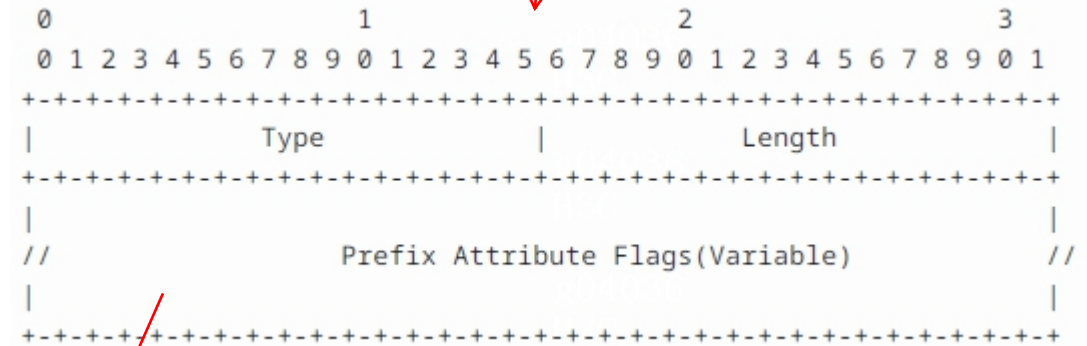
# Extension of SAVNET Source Prefix Flag

A new bit in the prefix Attribute Flag [RFC7794] for IS-IS are defined:



**S-flag:** When set, it indicates that the prefix is used for source address validation in the data plane

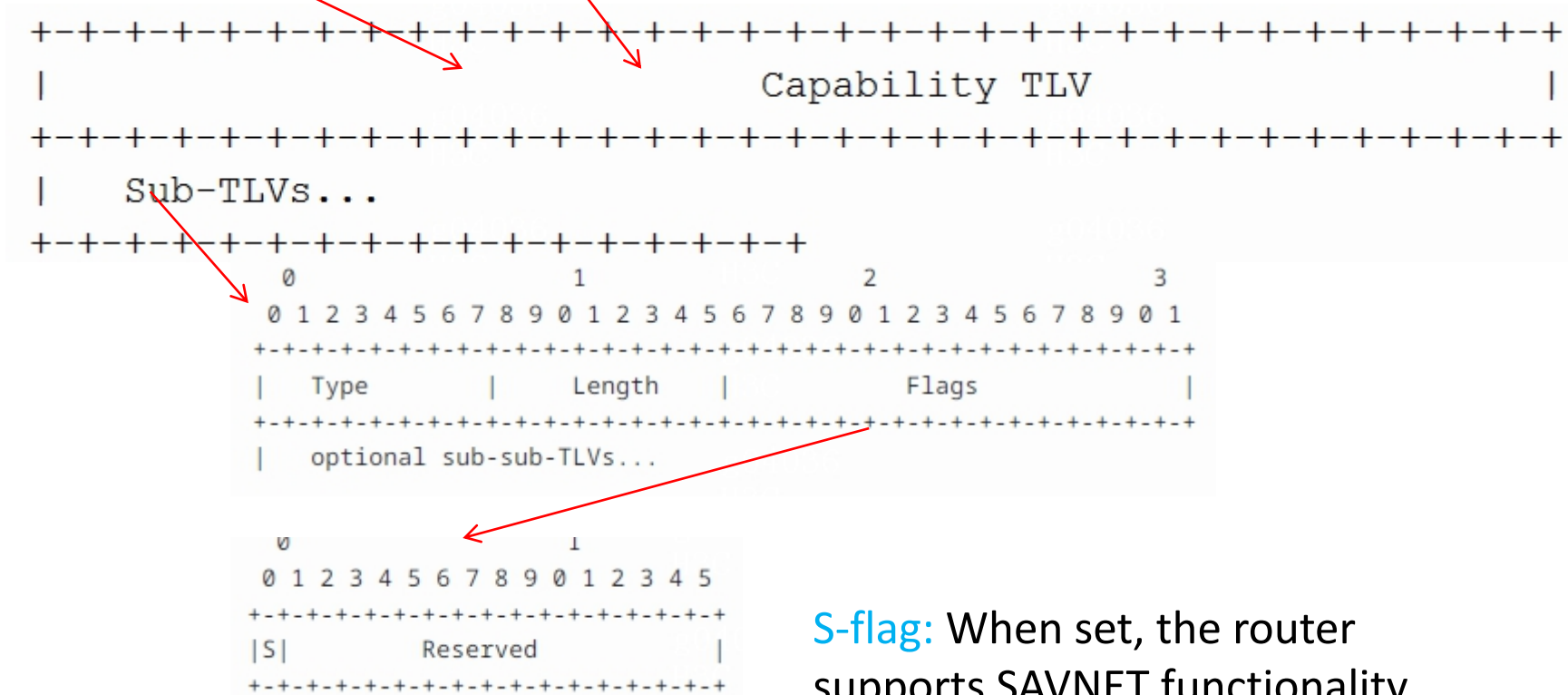
A new bit in the prefix Attribute Flags [I-D. draft-ietf-lsr-ospf-prefix-extended-flags-00] for OSPF are defined:



**S-flag:** When set, it indicates that the prefix is used for source address validation in the data plane

# Extension of SAVNET Capability

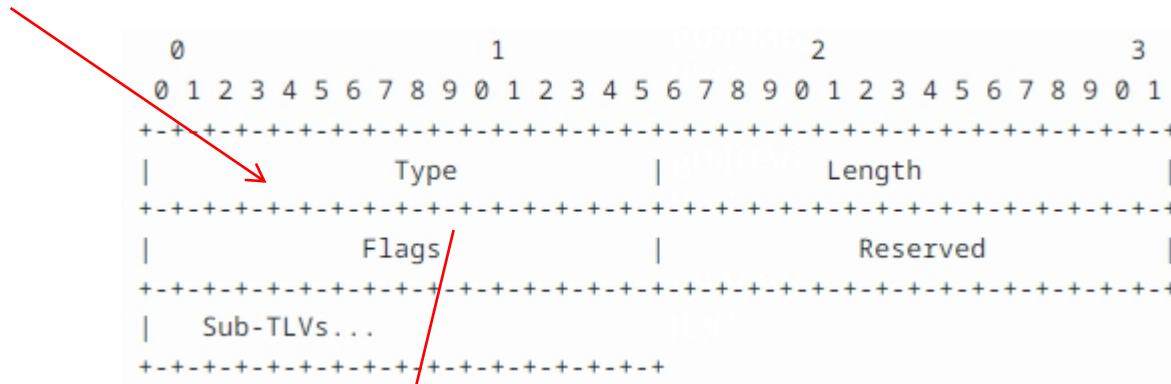
While IS-IS [RFC7981] advertise **IS-IS Router CAPABILITY TLV**, OSPF/OSPFv3[RFC7770] advertise **OSPF Router Informational Capabilities TLV**, they carry the SAVNET Capability Sub-TLV.



# Extension SAVNET Capability in BGP-LS

```
1034    SR Capabilities [RFC9085, Section 2.1.2]
1035    SR Algorithm    [RFC9085, Section 2.1.3]
1036    SR Local Block  [RFC9085, Section 2.1.4]
1037    SRMS Preference [RFC9085, Section 2.1.5]
1038    SRv6 Capabilities [RFC9514]
TBD     SAVNET Capabilities
```

New SAVNET Capability TLV in BGP-LS NLRI and Attribute TLVs:



**S-flag:** When set, the router supports SAVNET functionality.