

# IS-IS and OSPF extensions for TVR (Time-Variant Routing)

draft-zw-lsr-tvr-extensions-01

LSR WG

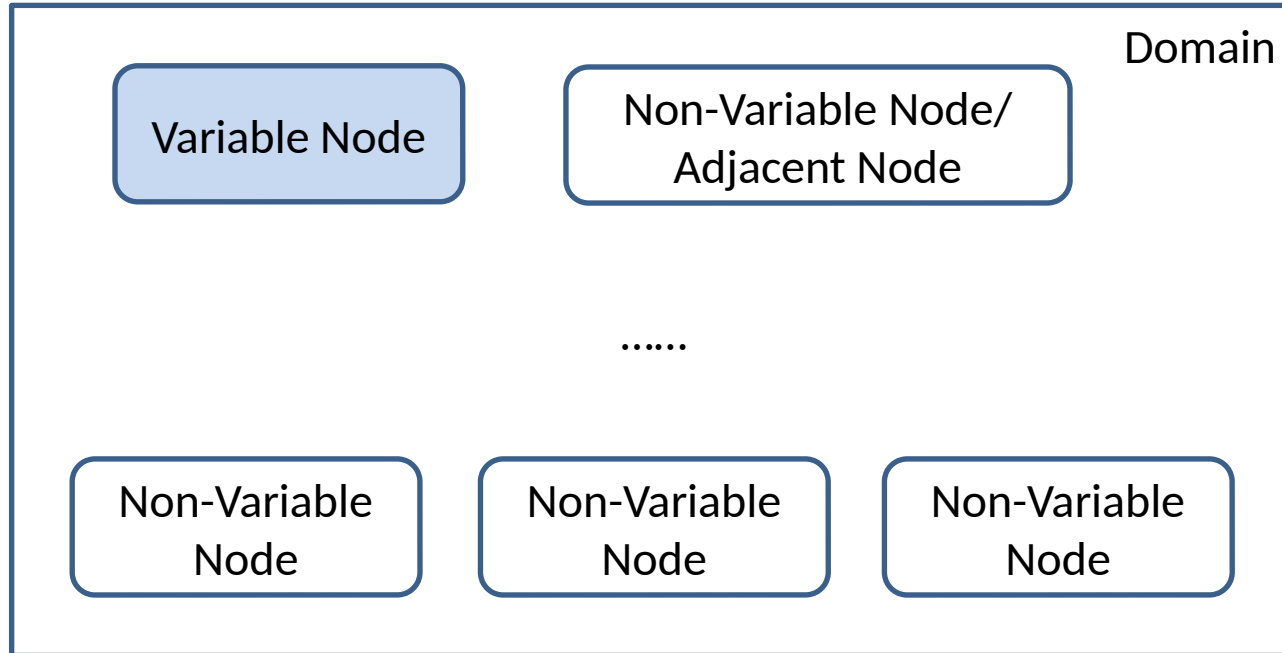
IETF119

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# Background



For example, there is a ground network with some nodes (variable nodes) are connected with satellites.

The variable node connects to the satellites and knows the scheduled metric changing information. The non-variable nodes don't connect to the satellites but the path to the variable node may be affected because of the changing metric.

The nodes in the ground network need to know the scheduled metric changing information and calculate routing table ahead of the scheduled time.

# Introduction

- This document helps the implementation of Intrinsic schedule defined in draft-ietf-tvr-requirements.
- The schedule based on Flex Algorithm can solve the time overlap issues. The schedule in different FAs can be overlapped.
- The extension can be generated by:
  - The variable node itself
  - The adjacent node when the variable node doesn't support IGP protocols.
- The advertisement is flooded and received by all the other non-variable nodes. All the nodes calculate routing table ahead of the scheduled time.
- The advertisement needs not be periodically.
- The calculation process is like FAD processing.

# Specification

- The scheduled metric changing information is treated as constrains that affecting routing calculation. The method defined in RFC9350 is used for the constrains advertisement.
- A new time variant sub-TLV is defined in IS-IS/OSPF FAD sub-TLV to carry the scheduled metric changing information.
- A new metric-type is defined for the schedule variant info advertisement.
- In version 01, the recurrence-type is added to align with the yang model in TVR WG.

- The draft was “draft-zw-tvr-lsr-extensions” before, the authors would like to get more feedback in LSR WG.
- Any comments welcomed ☐

Thanks!