

RIFT Multicast Update

draft-zzhang-rift-multicast-02

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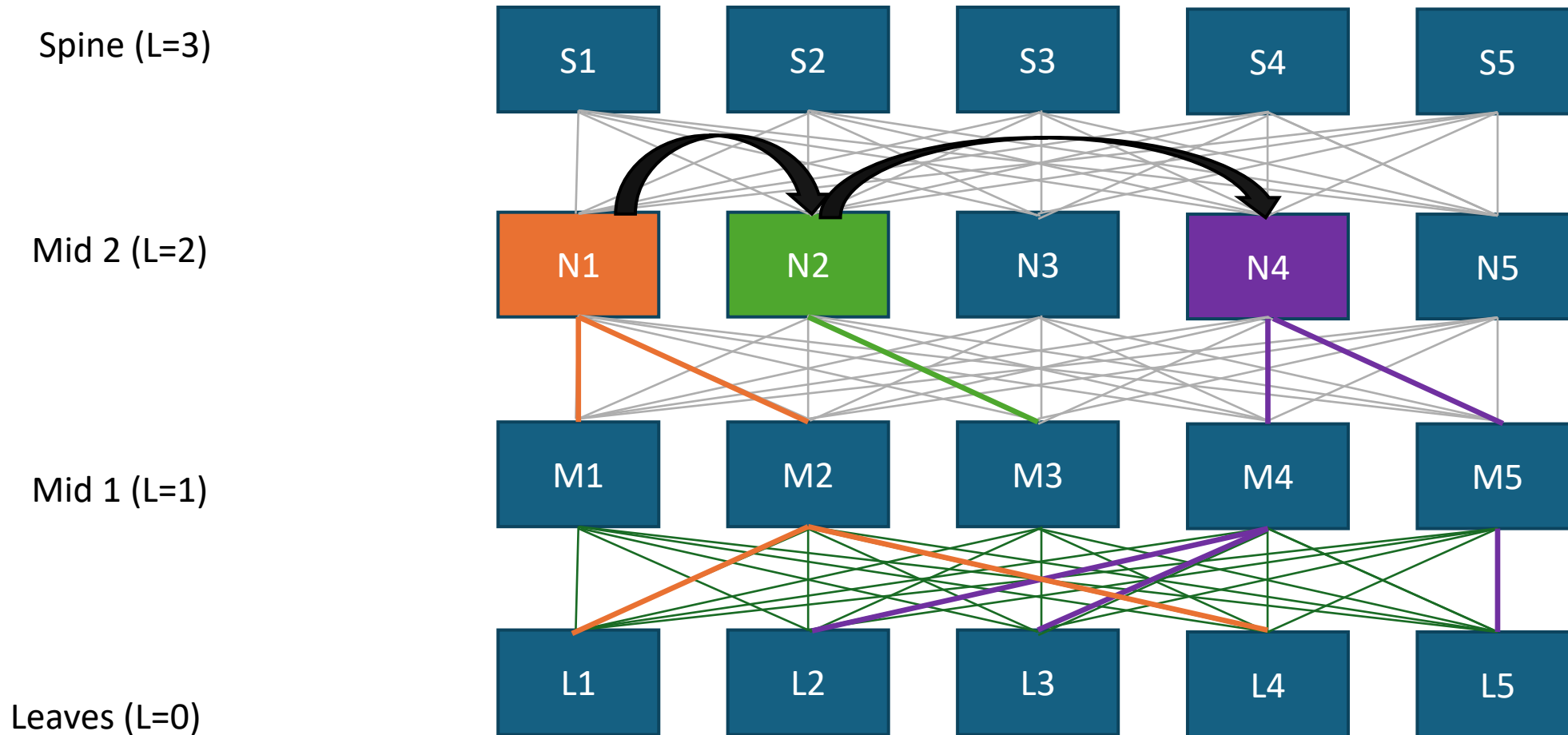
No New Update to the Draft/Solution

- The work has stalled for a while
- The purpose of this update is to update the WG
 - Refresh the concept and the thorny issues before we try to resurrect the work after rechartering

Refresh of The Solution

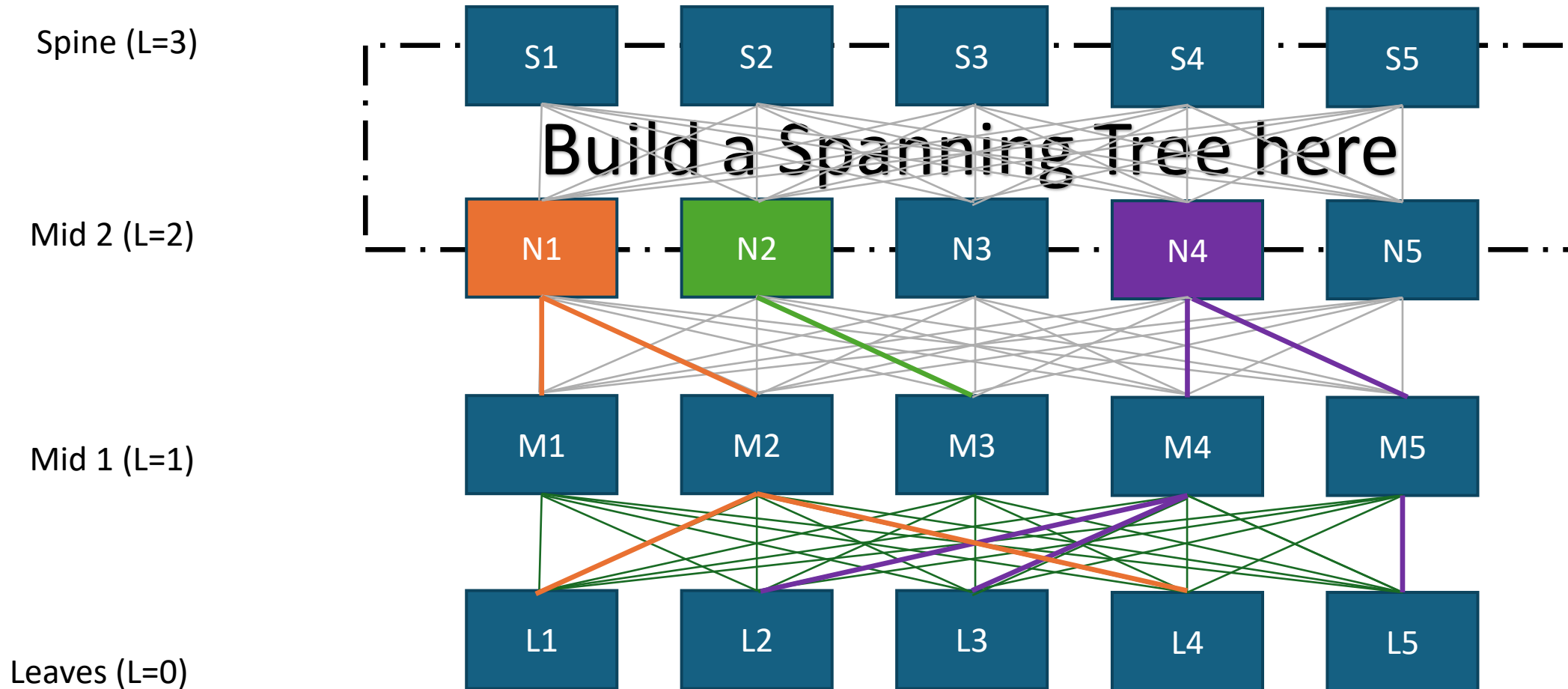
- Bidirectional sub-trees
 - Rooted at sub ToFs
 - No RPAs – each node will just send joins (TIEs) north
- The roots of sub-trees will form a spanning tree so that traffic can be from one sub-tree to another
- <https://datatracker.ietf.org/meeting/104/materials/slides-104-rift-rift-multicast-considerations-00>
- <https://datatracker.ietf.org/meeting/108/materials/slides-108-rift-rift-multicast-00>

Goal: connect the sub-trees



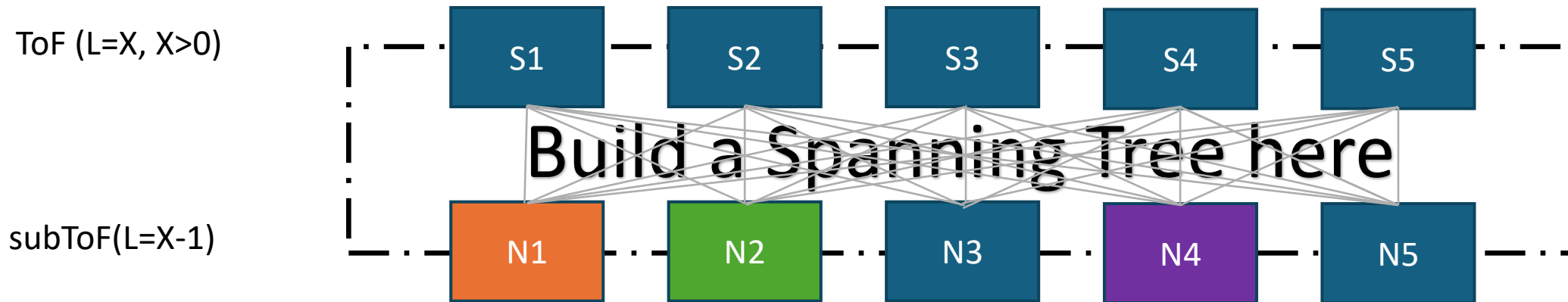
Proposal: Build a loopless a meta-tree (a tree of trees) by joins those trees via the superspine

Approach: build a spanning tree of ToF and SubToF



The spanning tree must span all subToF and may span some or optionally all ToF nodes

Feasibility



ToF + SubToF may be complete bipartite mesh => Easy

ToF + SubToF must be connected if not => Need a protocol

ToF + SubToF cannot be partitioned (disconnected)

=> Partitions kill auto-disaggregation, this is why we have a ring in multiplane

The Spanning Tree of Sub-Tree Roots

- Existing draft specified a way to form that spanning tree dynamically
- We need to be sure that the way is sound
 - Further scrutiny by the authors and the WG
- The complexity and (fear of) potential problems come from situations with badly broken ToF/subToF connections
 - Considering discounting those situations to simplify the solution and its proof

Next Steps

- Welcome comments/suggestions and collaborators