# TRILL IS-IS MTU Negotiation

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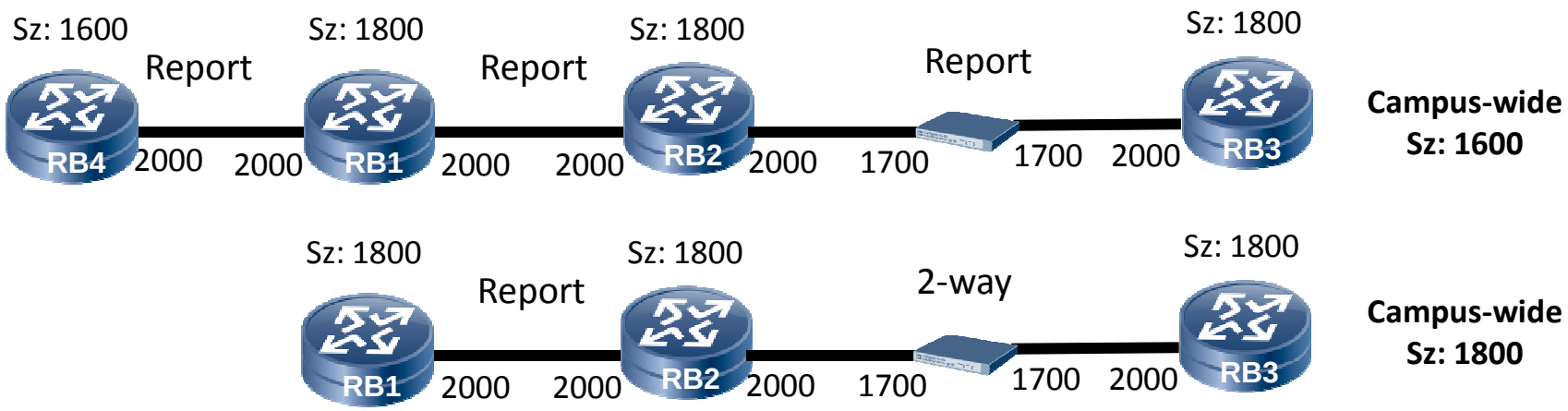
# Dependence on campus-wide Sz

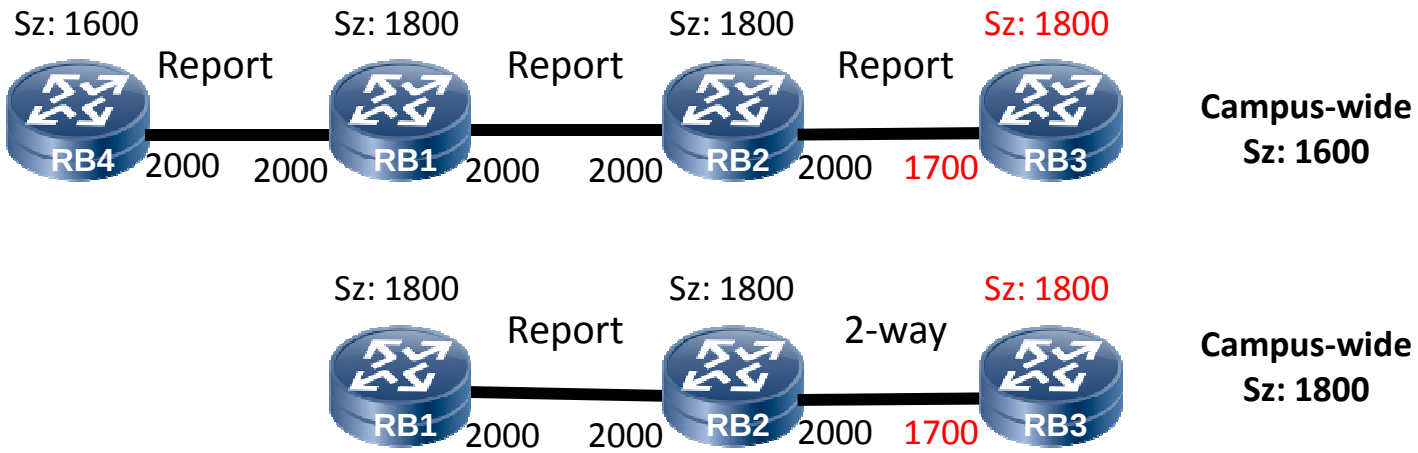
- Link MTU size >= campus-wide Sz
  - MTU size is a **property** of link, not a campus.
  - It SHOULD not  be related to a **global** value.
- CSNP/PSNP <= campus-wide Sz
  - These PDUs are exchanged only on a local link .
  - But, their sizes are improperly restricted by a **global** value now.
- The global dependence is problematic.

# Global Dependence, Example 1



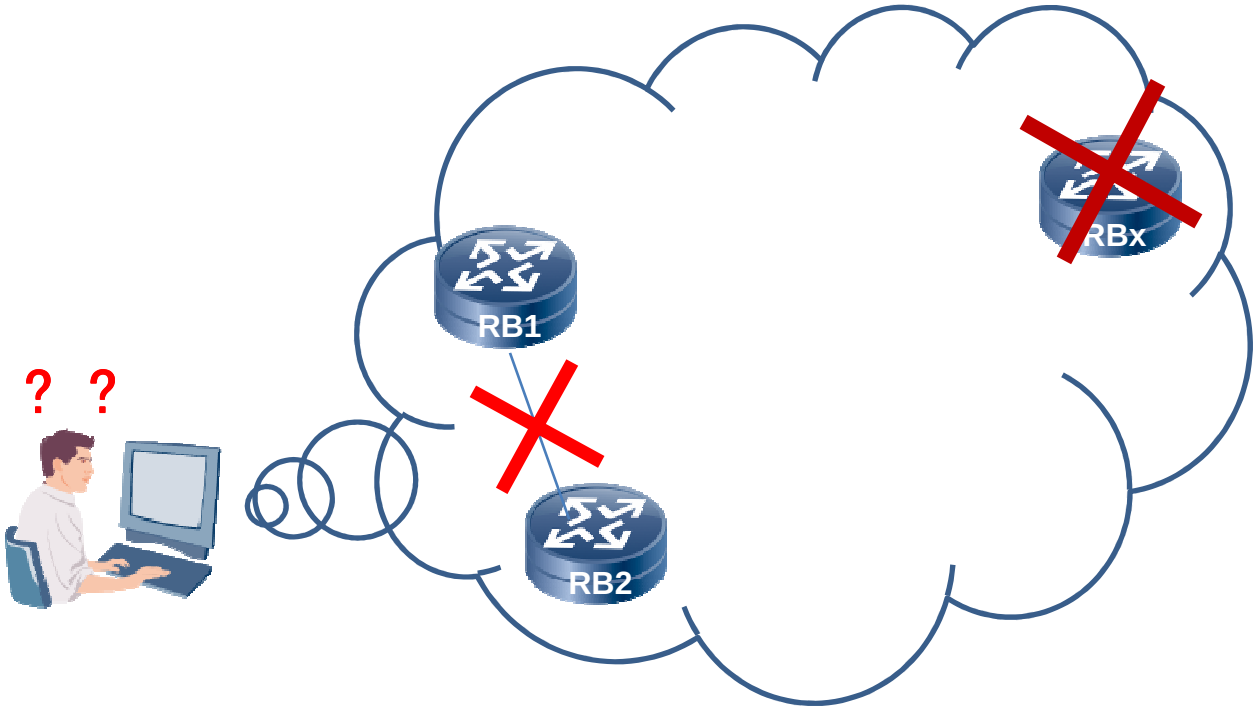

- RB4 leaves the campus, and its LSPs ages out, the campus-wide Sz will increase from 1600 to 1800.
- The adjacency between RB2 and RB3 changes to 2-way!
- The state of an adjacency can be determined by a remote adjacency. It can be confusing to operators.

# Global Dependence, Example 2




- Wrong configuration at RB3: Sz > port MTU.
- RB3 operates normally until RB4 leaves and campus-wide Sz becomes 1800.

# Puzzling Trouble Shooting




- The root cause of the failure of the connection between RB1 and RB2 maybe the failure of RBx.

# The Right Way

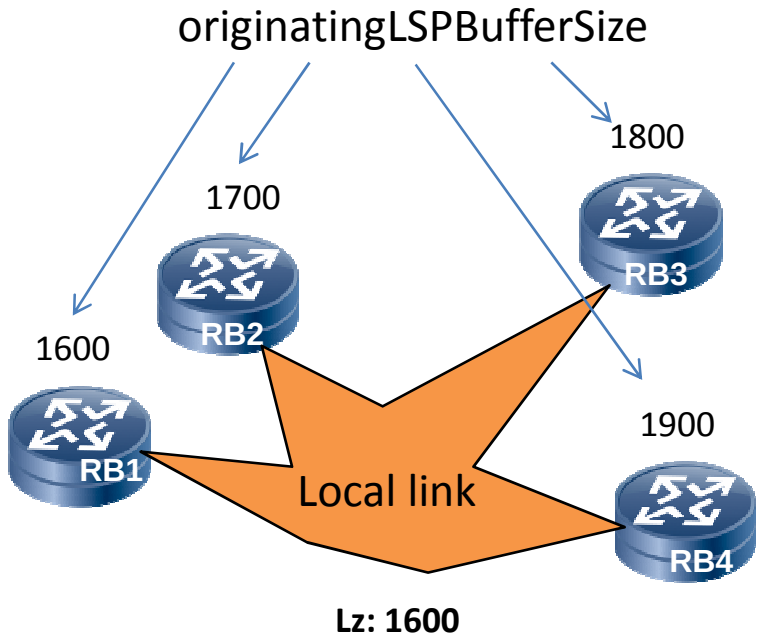
- Use it directly for confining the LSP size.
- Do not use the campus-wide Sz in link MTU testing.
- To make the link MTU testing totally a local matter.

# Solution To Break the Dependence

- A new value to replace Sz for link MTU testing
  - Lz: Minimum acceptable Inter-RBridge link size on a local link
  - Default, the minimum originatingLSPBufferSize
- Define an MTU testing algorithm
  - Using Lz

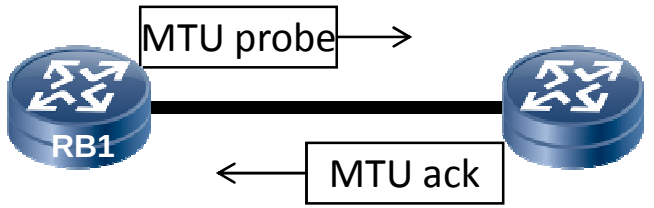
# Minimum Acceptable Inter-RBridge Link Size: Lz

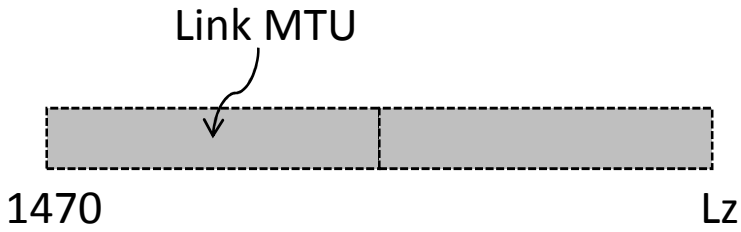
- Lz is used in link MTU size testing and for those link-local PDUs to replace the role of campus-wide Sz.



# Link MTU Testing Algorithm

- “Binary Search” is used for link MTU size testing.
- Link MTU is a value between 1470 and Lz.



# Traffic MTU Size

- Not confined by Lz or Sz, only confined by the physical port MTU.
- We can use the same testing method as the IS-IS MTU testing algorithm to test the traffic MTU of a link.

# Next Step

- Call for WG adoption

# Thanks!