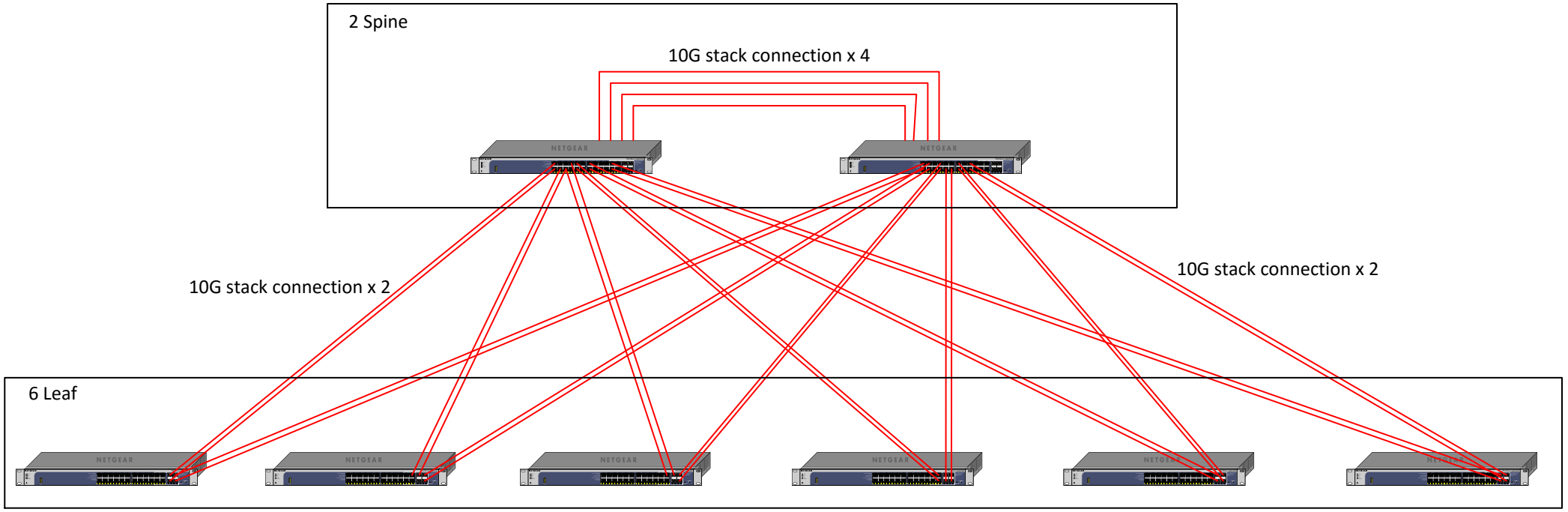
# M4300 Spine and Leaf Topology Switching Capacity Calculation




**Spine capacity = total stack link throughput on each unit x number of spine unit**
**Leaf capacity = total stack link throughput on each unit x number of leaf unit**

In the above example :
- 2 spine, interconnected together with 4 x 10G
- 6 leaf, connected to each spine with 2 x 10G (total 4 x 10G on each leaf connect to 2 spine)

Total Spine capacity :
Spine interconnected stack link throughput = 4 x 10G x 2 (full duplex) x 2 (no. of spine) = 160G
Spine connected to 6 leaf stack link throughput = 2 x 10G x 2 (full duplex) x 6 (no. of leaf) x 2 (no. of spine) = 480G
**Total Spine capacity = 160G + 480G = 640G**

Total Leaf capacity :
Leaf connected to 2 spine stack link throughput = 4 x 10G x 2 (full duplex) x 6 (no. of leaf) = 480G
**Total Leaf capacity = 480G**

**In this 2 x spine 6 x leaf topology, total switching capacity = 640G + 480G = 1120G**