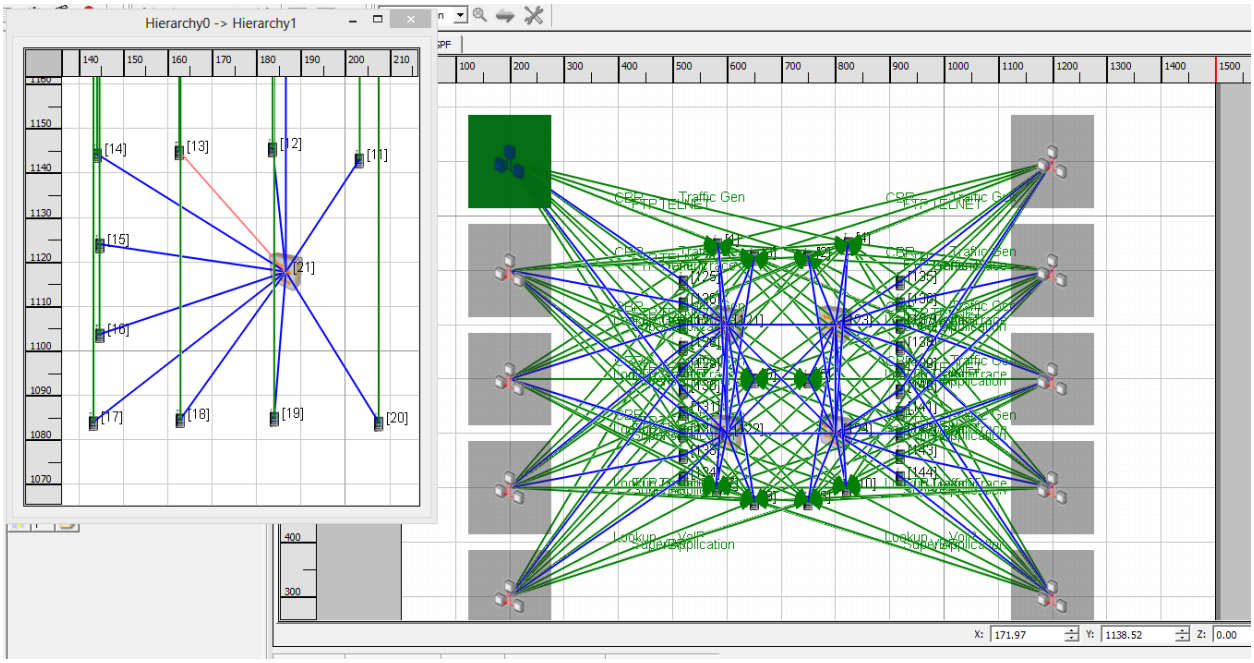
SCENARIO PURPOSE: Small scale Layer 3 switched Ethernet networks in QualNet and EXata

SCENARIO:



There are four Ethernet Switches that form a fully meshed wired network backbone. Each switch has a default device acting as a layer 3 switch port linked with a 1 Tbps to the switch. The default device facilitates assigning a subnet IP address to the network spooked from the switch as EXata / QualNet Ethernet Switches do not support layer 3 switching definitions. One hundred nodes are connected in groups of ten to Ethernet switches. The ten Ethernet switches are then dual homed to the core network

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via 100 Mbps Ethernet. The routing protocol is OSPF. Application traffic is from the end device to an "application server".

APPLICATIONS:

CBR: Source - 11, 22, 33, 44, 55, 66, 77, 88, 99, 110; Destination - 1

FTP: Source - 12, 23, 34, 45, 56, 67, 78, 89, 100, 111; Destination - 3

FTP/GENERIC: Source – 13, 24, 35, 46, 57, 68, 79, 90, 101, 112; Destination - 5

LOOKUP: Source – 14, 25, 36, 47, 58, 69, 80, 91, 102, 113; Destination - 7

SUPER-APPLICATION: Source – 15, 26, 37, 48, 59, 70, 81, 92, 103, 114; Destination - 9

TELNET: Source – 16, 27, 38, 49, 60, 71, 93, 104, 115; Destination - 2

TRAFFIC-GEN: Source – 17, 28, 39, 50, 61, 72, 83, 94, 105, 116; Destination - 4

TRAFFIC-TRACE: Source – 18, 29, 40, 51, 62, 73, 84, 95, 106, 117; Destination - 6

VBR: Source – 19, 30, 41, 52, 63, 74, 85, 96, 107, 118; Destination - 8

VOIP: Source – 20, 31, 42, 53, 64, 75, 86, 97, 108, 119; Destination - 10

DESCRIPTION OF THE FILES:-\

1. Wired-100NodedOSPF.app - QualNet configuration file for application input.
2. Wired-100NodedOSPF.config - QualNet configuration input file.
3. Wired-100NodedOSPF.expected.stat - QualNet statistics collection.
4. Wired-100NodedOSPF.nodes - QualNet configuration file for node position.
5. Wired-100NodesOSPF.endpoint – Terminal Address File.
6. Wired-100NodesOSPF.trc – QualNet configuration file for Traffic Trace.
7. Wired-100NodesOSPF README.docx – This File source.
8. Wired-100NodesOSPF README.pdf – This file Distributable.

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