

Network Testbed Connectivity and Addressing

Node Number	IP Address on Control Net (eth0)	Neighbour Nodes (eth1) (eth2)	
1	192.168.3.1	2, 3	8, 15
2	192.168.3.2	1, 3	9, 16
3	192.168.3.3	2, 3	10, 17
4	192.168.3.4	5, 6	11, 18
5	192.168.3.5	4, 6	12, 19
6	192.168.3.6	4, 5	13, 20
7	192.168.3.7	8, 9	14
8	192.168.3.9	7, 9	1, 15
9	192.168.3.10	7, 8	2, 16
10	192.168.3.11	11, 12	3, 17
11	192.168.3.12	10, 12	4, 18
12	192.168.3.13	10, 11	5, 19
13	192.168.3.14	14, 15	6, 20
14	192.168.3.15	13, 15	7
15	192.168.3.17	13, 14	1, 8
16	192.168.3.18	17, 18	2, 9
17	192.168.3.19	16, 18	3, 10
18	192.168.3.20	16, 17	4, 11
19	192.168.3.21	20	5, 12
20	192.168.3.22	19	6, 13

Test Network Configuration

Nodes interface numbers eth1, eth2, eth3, eth4, eth5 are used on the test network.

Unicast IP address uniquely identify a node on the network. That means that a node may be assigned multiple IP addresses on different/same interfaces, but an address will be assigned to a single node. Otherwise nodes can not route packet to each other and results in faulty configuration.

IP address allocation on test network will be form the range 10.x.y.z with 24 bit subnet mask. Value of x will be 1 for eth1, 2 for eth2, .. 5 for eth5.

Example Assignment of interface IP address

Node-eth	IP Address/ Netmask	Node-eth	IP Addr/Netmask
1-1	10.1.1.1/24	1-2	10.2.1.1/24
2-1	10.1.1.2/24	8-2	10.2.1.9/24
3-1	10.1.1.3/24	15-2	10.2.1.17/24
4-1	10.1.2.4/24	2-2	10.2.2.2/24
5-1	10.1.2.5/24	9-2	10.2.2.10/24
6-1	10.1.2.6/24	16-2	10.2.2.18/24
7-1	10.1.3.7/24	3-2	10.2.3.3/24
8-1	10.1.3.9/24	10-2	10.2.3.11/24
9-1	10.1.3.10/24	17-2	10.2.3.19/24
10-1	10.1.4.11/24	4-2	10.2.4.4/24
11-1	10.1.4.12/24	11-2	10.2.4.12/24
12-1	10.1.4.13/24	18-2	10.2.4.20/24
13-1	10.1.5.14/24	5-2	10.2.5.5/24
14-1	10.1.5.15/24	12-2	10.2.5.13/24
15-1	10.1.5.17/24	19-2	10.2.5.21/24
16-1	10.1.6.18/24	6-2	10.2.6.6/24
17-1	10.1.6.19/24	13-2	10.2.6.14/24
18-1	10.1.6.20/24	20-2	10.2.6.22/24
19-1	10.1.7.21/24	7-2	10.2.7.7/24
20-1	10.1.7.22/24	14-2	10.2.7.15/24