

IP ADDRESSING TABLES

Bus Topology

Device	IPv4 Address/Mask	IPv6 Address/Prefix
PC0	192.168.1.1/29	2001:DB8:ACAD:1::1/125
PC1	192.168.1.2/29	2001:DB8:ACAD:1::2/125
PC2	192.168.1.3/29	2001:DB8:ACAD:1::3/125
PC3	192.168.1.4/29	2001:DB8:ACAD:1::4/125
PC4	192.168.1.5/29	2001:DB8:ACAD:1::5/125
PC5	192.168.1.6/29	2001:DB8:ACAD:1::6/125

Mesh Topology

Device	IPv4 Address/Mask	IPv6 Address/Prefix
PC0	192.168.1.1/29	2001:DB8:ACAD:1::1/125
PC1	192.168.1.2/29	2001:DB8:ACAD:1::2/125
PC2	192.168.1.3/29	2001:DB8:ACAD:1::3/125
PC3	192.168.1.4/29	2001:DB8:ACAD:1::4/125
PC4	192.168.1.5/29	2001:DB8:ACAD:1::5/125
PC5	192.168.1.6/29	2001:DB8:ACAD:1::6/125

Star Topology

Device	IPv4 Address/Mask	IPv6 Address/Prefix
PC0	192.168.1.1/29	2001:DB8:ACAD:1::1/125
PC1	192.168.1.2/29	2001:DB8:ACAD:1::2/125
PC2	192.168.1.3/29	2001:DB8:ACAD:1::3/125
PC3	192.168.1.4/29	2001:DB8:ACAD:1::4/125
PC4	192.168.1.5/29	2001:DB8:ACAD:1::5/125
PC5	192.168.1.6/29	2001:DB8:ACAD:1::6/125

Ring Topology

Device	IPv4 Address/Mask	IPv6 Address/Prefix
PC0	192.168.1.1/29	2001:DB8:ACAD:1::1/125
PC1	192.168.1.2/29	2001:DB8:ACAD:1::2/125
PC2	192.168.1.3/29	2001:DB8:ACAD:1::3/125
PC3	192.168.1.4/29	2001:DB8:ACAD:1::4/125
PC4	192.168.1.5/29	2001:DB8:ACAD:1::5/125
PC5	192.168.1.6/29	2001:DB8:ACAD:1::6/125

Extended Star Topology

Device	IPv4 Address/Mask	IPv6 Address/Prefix
PC0	192.168.1.1/28	2001:DB8:ACAD:1::1/124
PC1	192.168.1.2/28	2001:DB8:ACAD:1::2/124
PC2	192.168.1.3/28	2001:DB8:ACAD:1::3/124
PC3	192.168.1.4/28	2001:DB8:ACAD:1::4/124
PC4	192.168.1.5/28	2001:DB8:ACAD:1::5/124
PC5	192.168.1.6/28	2001:DB8:ACAD:1::6/124
PC6	192.168.1.7/28	2001:DB8:ACAD:1::7/124
PC7	192.168.1.8/28	2001:DB8:ACAD:1::8/124
PC8	192.168.1.9/28	2001:DB8:ACAD:1::9/124
PC9	192.168.1.10/28	2001:DB8:ACAD:1::A/124
PC10	192.168.1.11/28	2001:DB8:ACAD:1::B/124
PC11	192.168.1.12/28	2001:DB8:ACAD:1::C/124

Hybrid Topology

IPv4

Device	Dept/VLAN Name	VLAN ID	IPv4 Address/Mask	IPv4 Gateway
Core-SW	Server	99	192.168.99.1/29	-
Core-SW	IT	10	192.168.10.1/29	-
Core-SW	HR	20	192.168.20.1/29	-
Core-SW	Sales	30	192.168.30.1/29	-
Core-SW	Finance	40	192.168.40.1/29	-
Sever	Server	99	192.168.99.2/29	192.168.99.1
IT-PC1	IT	10	192.168.10.2/29	192.168.10.1
IT-PC2	IT	10	192.168.10.3/29	192.168.10.1
HR-PC1	HR	20	192.168.20.2/29	192.168.20.1
HR-PC2	HR	20	192.168.20.3/29	192.168.20.1
Sales-PC1	Sales	30	192.168.30.2/29	192.168.30.1
Sales-PC2	Sales	30	192.168.30.3/29	192.168.30.1
Finance-PC1	Finance	40	192.168.40.2/29	192.168.40.1
Finance-PC2	Finance	40	192.168.40.3/29	192.168.40.1
Finance-PC3	Finance	40	192.168.40.4/29	192.168.40.1
Finance-PC4	Finance	40	192.168.40.5/29	192.168.40.1

IPv6

Device	Dept/VLAN Name	VLAN ID	IPv6 Address/Prefix	IPv6 Gateway
Core-SW	Server	99	2001:DB8:99::1/64	-
Core-SW	IT	10	2001:DB8:10::1/64	-
Core-SW	HR	20	2001:DB8:20::1/64	-
Core-SW	Sales	30	2001:DB8:30::1/64	-
Core-SW	Finance	40	2001:DB8:40::1/64	-
Sever	Server	99	2001:DB8:99::2/64	2001:DB8:99::1
IT-PC1	IT	10	2001:DB8:10::2/64	2001:DB8:10::1
IT-PC2	IT	10	2001:DB8:10::3/64	2001:DB8:10::1
HR-PC1	HR	20	2001:DB8:20::2/64	2001:DB8:20::1
HR-PC2	HR	20	2001:DB8:20::3/64	2001:DB8:20::1
Sales-PC1	Sales	30	2001:DB8:30::2/64	2001:DB8:30::1

Sales-PC2	Sales	30	2001:DB8:30::3/64	2001:DB8:30::1
Finance-PC1	Finance	40	2001:DB8:40::2/64	2001:DB8:40::1
Finance-PC2	Finance	40	2001:DB8:40::3/64	2001:DB8:40::1
Finance-PC3	Finance	40	2001:DB8:40::4/64	2001:DB8:40::1
Finance-PC4	Finance	40	2001:DB8:40::5/64	2001:DB8:40::1

PartII -WIRELESS MESH NETWORK WITH IPv6

IPv4

Device	IPv4 Address/Mask	IPv4 Gateway
Server	192.168.1.14/28	192.168.1.1
Tablet PC0	192.168.1.2/28	192.168.1.1
Tablet PC1	192.168.1.3/28	192.168.1.1
Laptop0	192.168.1.4/28	192.168.1.1
Laptop1	192.168.1.5/28	192.168.1.1
Smartphone0	192.168.1.6/28	192.168.1.1
Smartphone1	192.168.1.7/28	192.168.1.1
Smartphone2	192.168.1.8/28	192.168.1.1

IPv6

Device	IPv6 Address/Prefix	IPv6 Gateway
Server	2001:DB8:1::E/64	2001:DB8:1::1
Tablet PC0	2001:DB8:1::2 /64	2001:DB8:1::1
Tablet PC1	2001:DB8:1::3 /64	2001:DB8:1::1
Laptop0	2001:DB8:1::4 /64	2001:DB8:1::1
Laptop1	2001:DB8:1::5 /64	2001:DB8:1::1
Smartphone0	2001:DB8:1::6 /64	2001:DB8:1::1
Smartphone1	2001:DB8:1::7 /64	2001:DB8:1::1
Smartphone2	2001:DB8:1::8 /64	2001:DB8:1::1