

30 IPv6 on Routers

Addresses that reach multiple destinations	
What prefix do they use	
Addresses that are unique only within a single LAN	
What prefix do they use	
Addresses that can be arbitrarily generated for internal use	
What prefix do they use	
What prefix is used for link-local multicasts	
What prefix is used for organization-local multicasts throughout an enterprise but not beyond, to the internet.	

Multicast Addresses	IPv6	IPv4
All-nodes (any interface running IPv6)		(Subnet broadcast)
All-routers		(none)
All Routers Running OSPF (All-OSPF)		
All OSPF DRs (Designated Routers)		
All RIPng Routers		
All EIGRP Routers		
All Routers acting as DHCP relay agents		(none)

IPv6 Net Prefix	MAC Address	EUI-64 Address
2001:DB8::/64	0002.3b9d.e192	
2001:DB8::/64	E4:E7:8B:01:7C:E6	
2001:DB8::/64	0018.baa6.9f58	
2001:DB8::/64	10dd.b13c.8dc2	
2001:DB8::/64	00c0.029d.e192	
2001:DB8::/64	000d.932b.116f	
2001:DB8::/64	0816.cb2b.116f	
2001:DB8::/64	f0de.f1d1.a460	
2001:DB8::/64		2001:DB8::0205:5eff:fe3c:8dc2/64

IPv6 Address	Solicited-Node Multicast Address
2001:DB8::0218:baff:fea6:9f58/64	
2001:DB8::12dd:b1ff:fe3c:8dc2/64	
2001:DB8::02c0:02ff:fe9d:e192/64	