

Design Concern	Flat IS-IS/Single Level Design	Multi Level IS-IS Design
Scalability	It is scalable but compare to Multi Level,It is not scalable	Yes better than Flat IS-IS/Single Level Design
Working on Full Mesh topology	Yes but not scalable, Mesh Group feature provides scalability	Yes, more scalable and Mesg Group feature is available as well
Working on Hub and Spoke	Yes	Yes
Convergence	Better than Multi Level IS-IS	L1-L2 routers add additional latency (Processing delay) during convergence
Reachability Information	Yes,Inside a Level (Sub-domain), all the routers have same Link State Database	No, reachability information is not sent between IS-IS levels(Sub-domain).Only default route is sent from the Level 2 to Level 1 with ATT bit
Topology Information	Yes,Inside a Level(Sub-domain), all the routers have same Link State Database	No,L1-L2 router stops topology information, one level (Sub-domain) topology is not known by the other Level (Sub-domain)
MPLS Traffic Engineering	Good,every router has same topology information : Which router is connected to which router, what is the metric between them and so on	Hard, it requires MPLS TE extension or Path Computation Element.
Troubleshooting	Easier than Multi Level IS-IS design	More nodes, more LSPs make it harder to troubleshoot compare to Single Level/Flat IS-IS design
Stuff Experince	Not well known	Not well known
IPv6 Support	Yes	Yes
Additional Nodes	None	L1-L2 router (Similar to OSPF ABR)
QoS Support	Good,No difference	Good,No difference
Multicast Support	Good,No difference	Good,No difference
Resource Requirement	More, every router needs to keep both reachability and the topology information inside IS-IS domain	Less, routers only keep topology information of their Level (Sub-domain), but reachability information of the entire IS-IS domain
DMVPN Support	No, IS-IS can not run over DMVPN	No, IS-IS can not run over DMVPN
IPv6 Support	Yes	Yes
Can run over other VPN ?	Yes, it can run over GRE and Multipoint GRE	Yes, can be designed over GRE and Multipoint GRE