CCIE Service Provider Lab Exam Topics v3.0

The following topics are general guidelines for the content likely to be   included on the lab exam. However, other related topics may also appear   on any specific delivery of the exam. In order to better reflect the   contents of the exam and for clarity purposes, the guidelines below may   change at any time without notice.

Exam Sections and Sub-task Objectives

	CCIE SP Lab Exam Topics v3.0	✓
1.0	Implement, Optimize and Troubleshoot Core IP Technologies	
1.1	Implement, Optimize and Troubleshoot Packet over SONET	
1.2	Implement, Optimize and Troubleshoot GE/10GE in the core	
1.3	Implement, Optimize and Troubleshoot IGP routing	
1.4	Implement, Optimize and Troubleshoot MPLS and LDP	
1.5	Implement, Optimize and Troubleshoot MPLS Traffic Engineering	
1.6	Implement, Optimize and Troubleshoot BGP	
1.7	Implement, Optimize and Troubleshoot Muliticast	
1.8	Implement, Optimize and Troubleshoot High availability	
1.9	Implement, Optimize and Troubleshoot Convergence	
1.10	Implement, Optimize and Troubleshoot SP QoS	
1.11	Implement, Optimize and Troubleshoot Security in the core	
2.0	Implement, Optimize and Troubleshoot Access/Edge Connection Technologies	
2.1	Implement, Optimize and Troubleshoot FE/GE and Ethernet Trunk connections	
2.2	Implement, Optimize and Troubleshoot Frame-relay connections	
2.3	Implement, Optimize and Troubleshoot PPP connections	
3.0	Implement, Optimize and Troubleshoot L3VPN Technologies	
3.1	Implement, Optimize and Troubleshoot Intra-AS L3VPN	
3.2	Implement, Optimize and Troubleshoot Inter-AS L3VPN	
3.3	Implement, Optimize and Troubleshoot Carrier Supporting Carrier (CSC)	
3.4	Implement, Optimize and Troubleshoot VPN extranet , Internet access	
3.5	Implement, Optimize and Troubleshoot VRF Service	
3.6	Implement, Optimize and Troubleshoot Multicast VPN	
3.7	Implement, Optimize and Troubleshoot GRE L3VPN	
4.0	Implement, Optimize and Troubleshoot L2VPN Technologies	
4.1	Implement, Optimize and Troubleshoot AToM	

4.2	Implement, Optimize and Troubleshoot VPLS and Carrier Ethernet	
4.3	Implement, Optimize and Troubleshoot L2TPv3 for L2 VPN	
4.4	Implement, Optimize and Troubleshoot GRE L2VPN	
5.0	**Implement, Optimize and Troubleshoot Managed Services Traversing the Core**	
5.1	Implement, Optimize and Troubleshoot Managed Voice/Video services traversing the core	
5.2	Implement, Optimize and Troubleshoot Managed Security services traversing the core	
5.3	Implement, Optimize and Troubleshoot Service Level Agreements for managed services traversing the core	