

300-135 TSHOOT 考试

故障排除并维护 Cisco IP 网络

考试编号:	300-135
相关认证:	CCNP
时间:	120 分钟 (15-25 个问题)
可选择语言:	英语
点击此处报名:	Pearson VUE
考试题型:	单选、多选、填空、拖图、Lab
考试费用:	\$250USD

考试说明

TSHOOT 300-135 考试证明通过的考生具备以下的知识和技能：

- 设计和实施适用于复合型企业路由交换网络的定期维护
- 使用基于技术性实践和系统性的 ITIL 兼容方式来进行网络故障排除

准备参加考试的考生必须注意：虽然此考试的官方先决条件是获得 CCNA 路由交换认证，您还需要掌握路由 (300-101)和交换(300-115)考试中涵盖的知识和考点以便通过考试。

考试要点

以下是故障排除并维护 Cisco IP 网络 v2(300-135)考试的主要内容和考点。然而，在考试的特定版本中也可能出现其他相关的考点为了更好地反映考试内容并明确考试目的，下面的考试大纲可能在不发出通知的情况下随时调整。

1.0 Network Principles 5%

1.1 Use Cisco IOS troubleshooting tools

- 1.1.a Debug, conditional debug
- 1.1.b Ping and trace route with extended options

1.2 Apply troubleshooting methodologies

- 1.2.a Diagnose the root cause of networking issues (analyze symptoms, identify and describe root cause)
- 1.2.b Design and implement valid solutions
- 1.2.c Verify and monitor resolution

2.0 Layer 2 Technologies 40%

2.1 Troubleshoot switch administration

- 2.1.a SDM templates
- 2.1.b Managing MAC address table
- 2.1.c Troubleshoot Err-disable recovery

2.2 Troubleshoot Layer 2 protocols

- 2.2.a CDP, LLDP
- 2.2.b UDLD

2.3 Troubleshoot VLANs

- 2.3.a Access ports
- 2.3.b VLAN database
- 2.3.c Normal, extended VLAN, voice VLAN

2.4 Troubleshoot trunking

- 2.4.a VTPv1, VTPv2, VTPv3, VTP pruning
- 2.4.b dot1Q
- 2.4.c Native VLAN
- 2.4.d Manual pruning

2.5 Troubleshoot EtherChannels

- 2.5.a LACP, PAgP, manual
- 2.5.b Layer 2, Layer 3
- 2.5.c Load balancing
- 2.5.d EtherChannel misconfiguration guard

2.6 Troubleshoot spanning tree

- 2.6.a PVST+, RPVST+, MST
- 2.6.b Switch priority, port priority, path cost, STP timers
- 2.6.c PortFast, BPDUguard, BPDUfilter
- 2.6.d Loopguard, Rootguard

2.7 Troubleshoot other LAN switching technologies

- 2.7.a SPAN, RSPAN
- 2.8 Troubleshoot chassis virtualization and aggregation technologies
- 2.8.a Stackwise

3.0 Layer 3 Technologies

40%

- 3.1 Troubleshoot IPv4 addressing and subnetting
 - 3.1.a Address types (Unicast, broadcast, multicast, and VLSM)
 - 3.1.b ARP
 - 3.1.c DHCP relay and server
 - 3.1.d DHCP protocol operations
- 3.2 Troubleshoot IPv6 addressing and subnetting
 - 3.2.a Unicast
 - 3.2.b EUI-64
 - 3.2.c ND, RS/RA
 - 3.2.d Autoconfig (SLAAC)
 - 3.2.e DHCP relay and server
 - 3.2.f DHCP protocol operations
- 3.3 Troubleshoot static routing
- 3.4 Troubleshoot default routing
- 3.5 Troubleshoot administrative distance
- 3.6 Troubleshoot passive interfaces
- 3.7 Troubleshoot VRF lite
- 3.8 Troubleshoot filtering with any protocol
- 3.9 Troubleshoot between any routing protocols or routing sources
- 3.10 Troubleshoot manual and autosummarization with any routing protocol
- 3.11 Troubleshoot policy-based routing
- 3.12 Troubleshoot suboptimal routing
- 3.13 Troubleshoot loop prevention mechanisms
 - 3.13.a Route tagging, filtering
 - 3.13.b Split-horizon
 - 3.13.c Route poisoning
- 3.14 Troubleshoot RIPv2
- 3.15 Troubleshoot EIGRP neighbor relationship and authentication
- 3.16 Troubleshoot loop free path selection
 - 3.16.a RD, FD, FC, successor, feasible successor
- 3.17 Troubleshoot EIGPR operations
 - 3.17.a Stuck in active
- 3.18 Troubleshoot EIGRP stubs
- 3.19 Troubleshoot EIGRP load balancing
 - 3.19.a Equal cost
 - 3.19.b Unequal cost
- 3.20 Troubleshoot EIGRP metrics
- 3.21 Troubleshoot EIGRP for IPv6

3.22 Troubleshoot OSPF neighbor relationship and authentication

3.23 Troubleshoot network types, area types, and router types

- 3.23.a Point-to-point, multipoint, broadcast, nonbroadcast
- 3.23.b LSA types, area type: backbone, normal, transit, stub, NSSA, totally stub
- 3.23.c Internal router, backbone router, ABR, ASBR
- 3.23.d Virtual link

3.24 Troubleshoot OSPF path preference

3.25 Troubleshoot OSPF operations

3.26 Troubleshoot OSPF for IPv6

3.27 Troubleshoot BGP peer relationships and authentication

- 3.27.a Peer group
- 3.27.b Active, passive
- 3.27.c States and timers

3.28 Troubleshoot eBGP

- 3.28.a eBGP
- 3.28.b 4-byte AS number
- 3.28.c Private AS

4.0 VPN Technologies

5%

4.1 Troubleshoot GRE

5.0 Infrastructure Security

5%

5.1 Troubleshoot IOS AAA using local database

5.2 Troubleshoot device access control

- 5.2.a Lines (VTY, AUX, console)
- 5.2.b Management plane protection
- 5.2.c Password encryption

5.3 Troubleshoot router security features

- 5.3.a IPv4 access control lists (standard, extended, time-based)
- 5.3.b IPv6 traffic filter
- 5.3.c Unicast reverse path forwarding

6.0 Infrastructure Services

5%

6.1 Troubleshoot device management

- 6.1.a Console and VTY
- 6.1.b Telnet, HTTP, HTTPS, SSH, SCP
- 6.1.c (T) FTP

6.2 Troubleshoot SNMP

- 6.2.a v2
- 6.2.b v3

6.3 Troubleshoot logging

- 6.3.a Local logging, syslog, debugs, conditional debugs

- 6.3.b Timestamps
- 6.4 Troubleshoot Network Time Protocol(NTP)
- 6.4.a NTP master, client, version 3, version 4
- 6.4.b NTP authentication
- 6.5 Troubleshoot IPv4 and IPv6 DHCP
- 6.5.a DHCP client, IOS DHCP server, DHCP relay
- 6.5.b DHCP options (describe)
- 6.6 Troubleshoot IPv4 Network Address Translation (NAT)
- 6.6.a Static NAT, Dynamic NAT, PAT
- 6.7 Troubleshoot SLA architecture
- 6.8 Troubleshoot tracking objects
- 6.8.a Tracking objects
- 6.8.b Tracking different entities (for example, interfaces, IPSLA results)