**交换路由无线网关设备配置评分标准**

## 设备配置（530分）

要求：使用下面指定命令查看其设备状态，并使用FSCapture截图软件进行截图，将输入结果的截图插入到文档中；

注：

* 在测试报告中，如果整个大题没有截图则整个大题不得分，未使用抓图工具截图的，则不给分；
* 评分标准中关于IP地址做如下说明：
  + 所有IP地址第二段为任意，不做检查；
  + SSID的末位数字为任意（XX），不做检查。

### S1配置（45分）

|  |  |
| --- | --- |
| S1#sh run interface gigabitEthernet 0/1 | 20分 |
| S1#sh run interface gigabitEthernet 0/1  Building configuration...  Current configuration: 234 bytes  interface GigabitEthernet 0/1  switchport protected  description con\_To\_PC1  switchport access vlan 10  spanning-tree bpduguard enable  spanning-tree portfast  rate-limit output 10000 1024  rldp port loop-detect shutdown-port  S1# | Rate-limit 8分，其它每条2分 |
| Show run int gi0/24 | 10分 |
| S1#show run interface gigabitEthernet 0/24  Building configuration...  Current configuration: 332 bytes  interface GigabitEthernet 0/24  description con\_To\_S4\_Gi0/1  switchport mode trunk  switchport trunk allowed vlan only 10,20,30,40,50,100  ip dhcp snooping trust  no nfpp arp-guard enable  no nfpp icmp-guard enable  no nfpp ip-guard enable  no nfpp dhcp-guard enable  no nfpp dhcpv6-guard enable  no nfpp nd-guard enable  S1# | 标红处  Allowed vlan 2分  Ip dhcp 2分  No nfpp 每条1分 |
| S1#show run | include err | 5分 |
| S1#show run | include err  errdisable recovery interval 300  S1# | 严格匹配得5分 |
| S1#show spanning-tree mst 1 interface gigabitEthernet 0/24 | 5分 |
| S1#show spanning-tree mst 1 interface gigabitEthernet 0/24  ###### MST 1 vlans mapped :10, 20, 30  PortState : discarding  PortPriority : 128  PortDesignatedRoot : 4097.5869.6cf5.21b0  PortDesignatedCost : 0  PortDesignatedBridge : 8193.5869.6cf5.2123  PortDesignatedPortPriority : 128  PortDesignatedPort : 1  PortForwardTransitions : 0  PortAdminPathCost : 0  PortoperPathCost : 20000  PortRole : alternatePort | 标红处匹配得5分 |
| Show nfpp log summary | 5分 |
| S1#Show nfpp log summary  Total log buffer size : 1024  Syslog rate : 1 entry per 300 seconds  Logging: | 标红处匹配得5分 |

### S2配置（25分)

|  |  |
| --- | --- |
| Show version | 20分 |
| S2#show version  System description : Ruijie 10G Ethernet Switch(S2910-24GT4XS-E) By Ruijie Networks  System start time : 2018-08-30 11:06:15  System uptime : 0:10:27:53  System hardware version : 1.10  System software version : S2910\_RGOS 11.4(1)B1P3  System patch number : NA  System serial number : G1LD1ES009751  System boot version : 1.2.13  Module information:  Slot 0 : S2910-24GT4XS-E  Hardware version : 1.10  Boot version : 1.2.13  Software version : S2910\_RGOS 11.4(1)B1P3  Serial number : G1LD1ES009751  S2# | 设备为2910  版本为11.4(1)B1P3  得20分 |
| S2(config)#show cpu-protect type arp | 5分 |
| S2(config)#show cpu-protect type arp  Packet Type Traffic-class Bandwidth(pps) Rate(pps) Drop(pps) Total Total Drop  ------------------ ------------- -------------- --------- --------- --------- ----------  arp 1 500 0 0 31934 0  S2(config)# | 标红处匹配得5分 |

### S3配置（35分）

|  |  |
| --- | --- |
| S3#show vrrp brief | 5分 |
| S3#show vrrp brief  Interface Grp Pri timer Own Pre State Master addr Group addr  VLAN 10 10 150 3.41 - P Master 192.1.10.252 192.1.10.254  VLAN 20 20 150 3.41 - P Master 192.1.20.252 192.1.20.254  VLAN 30 30 150 3.41 - P Master 192.1.30.252 192.1.30.254  VLAN 40 40 120 3.53 - P Backup 192.1.40.253 192.1.40.254  VLAN 50 50 120 3.53 - P Backup 192.1.50.253 192.1.50.254  VLAN 100 100 120 3.53 - P Backup 192.1.100.253 192.1.100.254  S3# | 前3个状态为MASTER  后3个状态为BACKUP  以上两点满足得5分 |
| S3#show ip ospf interface vlan 30 | 5分 |
| S3#show ip ospf interface vlan 30  VLAN 30 is up, line protocol is up  Internet Address 192.1.30.252/24, Ifindex 4126, Area 0.0.0.0, MTU 1500  Matching network config: 192.1.30.0/24  Process ID 10, Router ID 11.1.0.33, Network Type BROADCAST, Cost: 5  Transmit Delay is 1 sec, State DROther, Priority 1  No designated router on this network  No backup designated router on this network  Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5  No Hellos (Passive interface)  Neighbor Count is 0, Adjacent neighbor count is 0  Crypt Sequence Number is 12886  Hello received 0 sent 0, DD received 0 sent 0  LS-Req received 0 sent 0, LS-Upd received 0 sent 0  LS-Ack received 0 sent 0, Discarded 0 | 标红处匹配得5分 |
| S3#show ipv6 ospf interface vlan 40 | 5分 |
| S3#show ipv6 ospf interface vlan 40  VLAN 40 is up, line protocol is up  Interface ID 4136  IPv6 Prefixes  fe80::5a69:6cff:fef5:21b1/64 (Link-Local Address)  2001:192:40::252/64  OSPFv3 Process (10), Area 0.0.0.0, Instance ID 0  Router ID 11.1.0.33, Network Type BROADCAST, Cost: 1  Transmit Delay is 1 sec, State DR, Priority 1  Designated Router (ID) 11.1.0.33  Interface Address fe80::5a69:6cff:fef5:21b1  No backup designated router on this link  Timer interval configured, Hello 10, Dead 40, Wait 40, Retransmit 5  No Hellos (Passive interface)  Neighbor Count is 0, Adjacent neighbor count is 0  Hello received 23 sent 23, DD received 3 sent 4  LS-Req received 1 sent 1, LS-Upd received 15 sent 15  LS-Ack received 4 sent 8, Discarded 12  S3# | 标红处匹配得5分 |
| S3#show ip route ospf | 20分 |
| S3#show ip route ospf  O\*E1 0.0.0.0/0 [110/2] via 10.1.0.6, 04:37:53, GigabitEthernet 0/6  O 10.1.0.8/30 [110/6] via 10.1.0.42, 04:36:58, GigabitEthernet 0/4  O IA 10.1.0.12/30 [110/6] via 192.1.100.253, 06:23:45, VLAN 100  O 10.1.0.32/30 [110/6] via 10.1.0.2, 04:54:29, GigabitEthernet 0/5  O 10.1.0.36/30 [110/6] via 10.1.0.6, 04:36:48, GigabitEthernet 0/6  O IA 11.1.0.1/32 [110/6] via 192.1.100.253, 06:16:50, VLAN 100  O 11.1.0.5/32 [110/1] via 10.1.0.2, 04:54:29, GigabitEthernet 0/5  O 11.1.0.11/32 [110/1] via 10.1.0.6, 04:38:36, GigabitEthernet 0/6  O 11.1.0.12/32 [110/5] via 10.1.0.42, 04:37:53, GigabitEthernet 0/4  O 11.1.0.34/32 [110/5] via 192.1.100.253, 06:54:33, VLAN 100  O N1 172.16.0.0/24 [110/21] via 10.1.0.2, 04:54:29, GigabitEthernet 0/5  O E1 194.1.0.0/16 [110/26] via 192.1.100.253, 04:28:55, VLAN 100  O E1 195.1.0.0/16 [110/26] via 192.1.100.253, 04:27:19, VLAN 100  S3# | 标红处每条5分，若提供明细网段且在此范围内得分 |

### S4截图（30分）

|  |  |
| --- | --- |
| s4#show ipv6 vrrp brief | 5分 |
| S4#show ipv6 vrrp brief  Interface Grp Pri timer Own Pre State Master addr Group addr  VLAN 10 10 120 3.53 - P Backup FE80::5A69:6CFF:FEF5:21B1 FE80::3  VLAN 20 20 120 3.53 - P Backup FE80::5A69:6CFF:FEF5:21B1 FE80::3  VLAN 30 30 120 3.53 - P Backup FE80::5A69:6CFF:FEF5:21B1 FE80::3  VLAN 40 40 150 3.41 - P Master FE80::5A69:6CFF:FEF5:2124 FE80::3  VLAN 100 100 150 3.41 - P Master FE80::5A69:6CFF:FEF5:2124 FE80::3  S4# | 标红处匹配得5分 |
| S4#show ip ospf interface gigabitEthernet 0/6 | 5分 |
| S4#show ip ospf interface gigabitEthernet 0/6  GigabitEthernet 0/6 is up, line protocol is up  Internet Address 10.1.0.9/30, Ifindex 6, Area 0.0.0.2, MTU 1500  Matching network config: 10.1.0.8/30  Process ID 10, Router ID 11.1.0.34, Network Type POINTOPOINT, Cost: 1  Transmit Delay is 1 sec, State Point-To-Point  Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5  Hello due in 00:00:06  Neighbor Count is 1, Adjacent neighbor count is 1  Crypt Sequence Number is 21281  Hello received 1708 sent 1707, DD received 4 sent 3  LS-Req received 0 sent 0, LS-Upd received 190 sent 295  LS-Ack received 174 sent 74, Discarded 0  S4# | 标红处匹配得5分 |
| S4#show ipv6 route ospf | 15分 |
| S4#show ipv6 route ospf  IPv6 routing table name - Default - 35 entries  Codes: C - Connected, L - Local, S - Static  R - RIP, O - OSPF, B - BGP, I - IS-IS, V - Overflow route  N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2  E1 - OSPF external type 1, E2 - OSPF external type 2  SU - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2  IA - Inter area  O 2001:191:10::/64 [110/2] via FE80::5A69:6CFF:FE6A:3925, GigabitEthernet 0/7  O 2001:193:30::/64 [110/3] via FE80::5A69:6CFF:FE6A:3925, GigabitEthernet 0/7  O E2 2001:194:10::/64 [110/20] via FE80::5A69:6CFF:FE6A:3925, GigabitEthernet 0/7  O 2001:195:10::/64 [110/4] via FE80::5A69:6CFF:FE6A:3925, GigabitEthernet 0/7  O E2 2002::/16 [110/20] via FE80::5A69:6CFF:FE6A:3925, GigabitEthernet 0/7  S4# | 标红处每处5分，若提供汇总网段32位前缀可得分 |
| S4#show ipv6 route static | 5分 |
| S4#show ipv6 route static  IPv6 routing table name - Default - 35 entries  Codes: C - Connected, L - Local, S - Static  R - RIP, O - OSPF, B - BGP, I - IS-IS, V - Overflow route  N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2  E1 - OSPF external type 1, E2 - OSPF external type 2  SU - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2  IA - Inter area  S 2001:192:60::/64 [1/0] via 2001:192:100::1 (recursive via 2001:192:100::1, VLAN 100)  S4# | 标红处匹配5分 |

### S5配置(15分)

|  |  |
| --- | --- |
| S5#Show run | in password、S5#show run | be line | 5分 |
| S5#Show run | in password  username admin password admin  no service password-encryption  enable password admin  password admin  S5#show run | be line  line console 0  line vty 0 4  login local  password admin  !  end  S5# | 标红处匹配5分 |
| Show run | in snmp | 5分 |
| S5#Show run | in snmp  snmp-server host 172.16.0.254 traps version 2c ruijie  snmp-server host 172.16.0.254 traps version 2c public  snmp-server enable traps  snmp-server community ruijie rw  snmp-server community public ro  S5# | 每条严格匹配得1分 |
| S5#show ip route | include O\*IA | 5分 |
| S5#show ip route | include O\*IA  Running this command may take some time, please wait or press "Ctrl+C" to break.  O\*IA 0.0.0.0/0 [110/2] via 10.1.0.1, 05:13:58, GigabitEthernet 0/23 | 标红处匹配5分 |

### S6配置（10分）

|  |  |
| --- | --- |
| S6#show ipv6 route ospf | 10分 |
| S6#show ipv6 route ospf  IPv6 routing table name - Default - 11 entries  Codes: C - Connected, L - Local, S - Static  R - RIP, O - OSPF, B - BGP, I - IS-IS, V - Overflow route  N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2  E1 - OSPF external type 1, E2 - OSPF external type 2  SU - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2  IA - Inter area  O E2 2001:192::/32 [110/20] via FE80::5A69:6CFF:FE93:DBE8, GigabitEthernet 0/24  O E2 2002::/16 [110/20] via FE80::5A69:6CFF:FE93:DBE8, GigabitEthernet 0/24  S6# | 标红处每处5分，若提供明细网段且在此范围内可得分 |

### S7配置（10分）

|  |  |
| --- | --- |
| S7#show ip rip peer | 5分 |
| S7#show ip rip peer  Peer 10.1.0.29:  Local address: 10.1.0.30  Input interface: GigabitEthernet 0/24  Peer version: RIPv2  Received bad packets: 0  Received bad routes: 0 | 标红处匹配5分 |
| S7#show ipv6 ospf neighbor | 5分 |
| S7#show ipv6 ospf neighbor  OSPFv3 Process (30), 1 Neighbors, 1 is Full:  Neighbor ID Pri State Dead Time Instance ID Interface  11.1.0.3 1 Full/DR 00:00:40 0 GigabitEthernet 0/24  S7# | 标红处匹配5分 |

### R1配置（40分）

|  |  |
| --- | --- |
| R1#Show run | include ssh | 5分 |
| R1#Show run | include ssh  enable service ssh-server  R1# | 完全匹配5分 |
| R1#show interfaces serial 2/0 description | 5分 |
| R1#show interfaces serial 2/0 description  Interface Status Administrative Description  -------------------------------- -------- -------------- -----------  Serial 2/0 up up con\_To\_R2\_S2/0  R1# | 标红处匹配5分 |
| R1#show ppp multilink | 5分 |
| R1#show ppp multilink  multilink 1 (active)  authname ( ruijie) / endpoint( ruijie)  interface state: UP  ipcp state: Open  ipv6cp state: not Open  frag queue: 0 bytes, 0 frags, drops: 0 timeout, 0 lack  group members: 2, active members: 2, bund min/max: 0/16  Serial 4/0 (active)  Serial 3/0 (active)  1 MLP bundle in system  R1# | 标红处匹配5分 |
| R1#show crypto ipsec sa interface multilink 1 | include #pkts decaps:（广州分校VPN建立后） | 5分 |
| R1#show crypto ipsec sa interface multilink 1 | include #pkts decaps:  #pkts decaps: 910, #pkts decrypt: 910, #pkts verify 910  R1# | 标红处非0得5分 |
| R1#show crypto ipsec sa interface serial 2/0 | include #pkts decaps:（北京分校VPN建立后） | 5分 |
| R1#show crypto ipsec sa interface serial 2/0 | include #pkts decaps:  #pkts decaps: 73, #pkts decrypt: 73, #pkts verify 73  R1# | 标红处非0得5分 |
| R1#show interface tunnel 0 | 5分 |
| R1#show interface tunnel 0  Index(dec):40 (hex):28  Tunnel 0 is UP , line protocol is UP  Hardware is Tunnel  Interface address is: no ip address  MTU 1476 bytes, BW 1000000 Kbit  Encapsulation protocol is Tunnel, loopback not set  Keepalive interval is no set  Carrier delay is 2 sec  Rxload is 1/255, Txload is 1/255  Tunnel source 10.1.0.22, destination 10.1.0.21  Tunnel TOS/Traffic Class not set, Tunnel TTL 255  Tunnel config nested limit is 4, current nested number is 0  Tunnel protocol/transport GRE/IP  Key disabled, Sequencing disabled  Checksumming of packets disabled  Queueing strategy: FIFO  Output queue 0/40, 0 drops;  Input queue 0/75, 0 drops  5 minutes input rate 63 bits/sec, 0 packets/sec  5 minutes output rate 81 bits/sec, 0 packets/sec  2810 packets input, 231852 bytes, 0 no buffer, 0 dropped  Received 0 broadcasts, 0 runts, 0 giants  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 abort  2886 packets output, 312144 bytes, 0 underruns , 0 dropped  0 output errors, 0 collisions, 0 interface resets  R1# | 标红处匹配5分 |
| R1#show interface tunnel 1 | 5分 |
| R1#show interface tunnel 1  Index(dec):39 (hex):27  Tunnel 1 is UP , line protocol is UP  Hardware is Tunnel  Interface address is: no ip address  MTU 1480 bytes, BW 1000000 Kbit  Encapsulation protocol is Tunnel, loopback not set  Keepalive interval is no set  Carrier delay is 2 sec  Rxload is 1/255, Txload is 1/255  Tunnel source 20.0.0.1, destination: UNKNOWN  Tunnel TOS/Traffic Class not set, Tunnel TTL 255  Tunnel protocol/transport IPv6 6to4  Queueing strategy: FIFO  Output queue 0/40, 0 drops;  Input queue 0/75, 0 drops  5 minutes input rate 0 bits/sec, 0 packets/sec  5 minutes output rate 0 bits/sec, 0 packets/sec  45 packets input, 6464 bytes, 0 no buffer, 0 dropped  Received 0 broadcasts, 0 runts, 0 giants  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 abort  24 packets output, 4604 bytes, 0 underruns , 0 dropped  0 output errors, 0 collisions, 0 interface resets  R1# | 标红处匹配5分 |
| R1#show ipv6 route ospf | 5分 |
| R1#show ipv6 route ospf  IPv6 routing table name is - Default - 24 entries  Codes: C - Connected, L - Local, S - Static, R - RIP, B - BGP  I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary  O - OSPF intra area, OI - OSPF inter area, OE1 - OSPF external type 1, OE2 - OSPF external type 2  ON1 - OSPF NSSA external type 1, ON2 - OSPF NSSA external type 2  O 2001:192:10::/64 [110/2] via FE80::5A69:6CFF:FEF5:2124, GigabitEthernet 0/0  O 2001:192:20::/64 [110/2] via FE80::5A69:6CFF:FEF5:2124, GigabitEthernet 0/0  O 2001:192:30::/64 [110/2] via FE80::5A69:6CFF:FEF5:2124, GigabitEthernet 0/0  O 2001:192:40::/64 [110/2] via FE80::5A69:6CFF:FEF5:2124, GigabitEthernet 0/0  OE2 2001:192:60::/64 [110/20] via FE80::5A69:6CFF:FEF5:2124, GigabitEthernet 0/0  O 2001:192:100::/64 [110/2] via FE80::5A69:6CFF:FEF5:2124, GigabitEthernet 0/0  O 2001:193:30::/64 [110/2] via FE80::A01:15, Tunnel 0  O 2001:195:10::/64 [110/3] via FE80::A01:15, Tunnel 0  R1# | 标红处每处1分 |

### R2配置（20分）

|  |  |
| --- | --- |
| Show ip route rip | 10分 |
| R2#show ip route rip  R 11.1.0.6/32 [120/1] via 10.1.0.26, 06:47:34, GigabitEthernet 0/0  R 194.1.10.0/24 [120/1] via 10.1.0.26, 06:10:30, GigabitEthernet 0/0  R 194.1.20.0/24 [120/1] via 10.1.0.26, 06:10:30, GigabitEthernet 0/0  R 194.1.30.0/24 [120/1] via 10.1.0.26, 06:10:30, GigabitEthernet 0/0  R2# | 标红处每处5分 |
| R2#show ipv6 route static | 10分 |
| R2#show ipv6 route static  IPv6 routing table name is - Default - 13 entries  Codes: C - Connected, L - Local, S - Static, R - RIP, B - BGP  I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary  O - OSPF intra area, OI - OSPF inter area, OE1 - OSPF external type 1, OE2 - OSPF external type 2  ON1 - OSPF NSSA external type 1, ON2 - OSPF NSSA external type 2  S 2001:192::/32 [1/0] via 2002:1400:1::1 (recursive via 2002:1400:1::1, Tunnel 1)  S 2002::/16 [1/0] via Tunnel 1, directly connected  R2# | 标红处每处5分，若提供明细路由且在此范围内可得分 |

### R3配置（20分）

|  |  |
| --- | --- |
| R3#Show rate-limit interface gi0/0 | 5分 |
| R3#Show rate-limit interface gi0/0  GigabitEthernet 0/0  Input  matches all traffic  params: 10000000 bps, 1000000 limit, 2000000 extended limit  conformed 5305 packets, 520516 bytes; action: transmit  exceeded 0 packets, 0 bytes; action: drop  cbucket 2999870, cbs 3000000; ebucket 0 ebs 0  R2# | 标红处匹配5分 |
| show traffic-shape multilink 1 | 5分 |
| R3#show traffic-shape multilink 1  Interface multilink 1  Access Target Byte Sustain Excess Interval Increment Adapt  VC List Rate Limit bits/int bits/int (ms) (bytes) Active  - - 4000000 20000 80000 80000 20 10000 - | 标红处匹配5分 |
| R3#Show ipv6 ospf neighbor | 10分 |
| R3#Show ipv6 ospf neighbor  OSPFv3 Process (30), 2 Neighbors, 2 is Full:  Neighbor ID Pri State BFD State Dead Time Instance ID Interface  11.1.0.7 1 Full/BDR - 00:00:36 0 GigabitEthernet 0/0  11.1.0.1 1 Full/ - - 00:00:33 0 Tunnel 0 | 标红处每处5分 |

### AC1配置(60分)

|  |  |
| --- | --- |
|  | 5分 |
| AC1#show interface gigabitEthernet 0/1 switchport  Interface Switchport Mode Access Native Protected VLAN lists  -------------------------------- ---------- --------- ------ ------ --------- ----------------------  GigabitEthernet 0/1 enabled TRUNK 1 1 Disabled 60,100  AC1# | Vlan修剪正确得5分 |
| AC1#show ac-config client (无线用户关联成功后收集) | 5分 |
| AC1#show ac-config client  ========= show sta status =========  AP : ap name/radio id  Status: Speed/Power Save/Work Mode/Roaming State/MU MIMO, E = enable power save, D = disable power save  Total Sta Num : 1  STA MAC IPV4 Address AP Wlan Vlan Status Asso Auth Net Auth Up time  -------------- --------------- ---------------------------------------- ---- ---- --------------- --------------- --------------- ------------  f042.1c0f.65f4 192.1.60.1 AP1/1 1 60 1.0M/D/bgn OPEN OPEN 0:00:00:12  AC1# | 标红处非0得5分 |
| AC1#show ap-config summary | 10分 |
| AC1#show ap-config summary  ========= show ap status =========  Radio: Radio ID or Band: 2.4G = 1#, 5G = 2#  E = enabled, D = disabled, N = Not exist  Current Sta number  Channel: \* = Global  Power Level = Percent  Online AP number: 1  Offline AP number: 0  AP Name IP Address Mac Address Radio Radio Up/Off time State  ---------------------------------------- --------------- -------------- ------------------- ------------------- ------------- -----  AP1 192.1.50.101 5869.6cf8.55e6 1 E 1 6\* 100 2 E 0 153\* 100 0:07:53:35 Run  AC1# | 标红处匹配10分 |
| AC1#show ap-config running | include sta | 10分 |
| AC1#show ap-config running | include sta  sta-limit 16  AC1# | 存在得10分 |
| AC1#show run | begin wids（截图wids相关配置） | 10分 |
| AC1#show run | begin wids  wids  user-isolation ap enable  whitelist max 10  whitelist mac-address 0811.966e.1af8  ! | User 5分  Max 3分  Mac 2分 |
| Show wlan hot-backup 11.1.0.205 | 10分 |
| AC1#Show wlan hot-backup 11.1.0.205  wlan hot-backup 11.1.0.205  hot-backup : Enable  connect state : CHANNEL\_UP  hello-interval : 1000  kplv-pkt : ip  work-mode : NORMAL  !  context 10  hot-backup role : PAIR-ACTIVE  hot-backup rdnd state : REALTIME-SYN  hot-backup priority : 7  AC1# | 标红处匹配10分 |
| AC1#sh run | include disabled | 10分 |
| AC1#sh run | include disabled  802.11g network rate 1 disabled  802.11g network rate 2 disabled  802.11g network rate 5 disabled  802.11g network rate 6 disabled  802.11b network rate 1 disabled  802.11b network rate 2 disabled  802.11b network rate 5 disabled  802.11a network rate 6 disabled  AC1# | 1\2\5\6都关闭得5分 |

### AC2配置(40分)

|  |  |
| --- | --- |
| AC2#Show wlan hot-backup 11.1.0.204 | 10分 |
| AC2#Show wlan hot-backup 11.1.0.204  wlan hot-backup 11.1.0.204  hot-backup : Enable  connect state : CHANNEL\_UP  hello-interval : 1000  kplv-pkt : ip  work-mode : NORMAL  !  context 10  hot-backup role : PAIR-STANDBY  hot-backup rdnd state : REALTIME-SYN  hot-backup priority : 4  AC2# | 标红处匹配10分 |
| Show vrrp brief | 10分 |
| AC2#show vrrp brief  Interface Grp Pri timer Own Pre State Master addr Group addr  VLAN 60 60 120 3.53 - P Backup 192.1.60.252 192.1.60.254  VLAN 100 110 150 3.41 - P Backup 192.1.100.2 192.1.100.1 | 标红处每处5分 |
| AC2#show ipv6 vrrp brief | 10分 |
| AC2#show ipv6 vrrp brief  Interface Grp Pri timer Own Pre State Master addr Group addr  VLAN 60 60 120 3.53 - P Backup FE80::5A69:6CFF:FEB4:B052 FE80::4  VLAN 100 110 150 3.41 - P Backup FE80::5A69:6CFF:FEB4:B052 FE80::4 | 标红处每处5分 |
| AC2#show ipv6 rout static | 10 |
| AC2#show ipv6 rout static  IPv6 routing table name - Default - 10 entries  Codes: C - Connected, L - Local, S - Static  R - RIP, O - OSPF, B - BGP, I - IS-IS, V - Overflow route  N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2  E1 - OSPF external type 1, E2 - OSPF external type 2  SU - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2  IA - Inter area  S ::/0 [1/0] via 2001:192:100::254 (recursive via 2001:192:100::254, VLAN 100)  AC2# | 标红处匹配10分 |

### AP2配置（30分）

|  |  |
| --- | --- |
| AP2#show dot11 wlan 1（截图SSID及VLAN映射相关信息） | 10分 |
| Network Name (SSID): Ruijie-BJ-1  Interface.................... Dot11radio 1/0  Vlan (group) id.............. 20  MAC Address.................. 0674.9c1f.ebee  Beacon Period................ 100  RTS Threshold................ 2347 | 标红处匹配10分 |
| AP2#show web-auth user all | 20分 |
| AP2#shw web-auth user all  Current user num: 1, Online 1  Address Online Time Limit Time used Status Name  --------------------------------------- ------- -------------- -------------- --------------- ---------  194.1.20.1 On 0d 00:00:00 0d 00:00:41 Active user1  AP2# | 有认证成功表象的20分 |

### AP3配置（20分）

|  |  |
| --- | --- |
| AP3#sho version | 10分 |
| AP3#sho version  System description : Ruijie indoor AP520(W2) (802.11a/n/ac and 802.11b/g/n) By Ruijie Networks.  System uptime : 0:17:32:04  System hardware version : 1.01  System software version : AP\_RGOS 11.1(5)B9P11, Release(03212617)  System patch number : NA  System serial number : G1LQ4JR029107  System boot version : 2.0.16 | 标红处匹配10分 |
| AP3#show wids whitelist | 5分 |
| AP3#show wids whitelist  ------------- White list Information ---------------  Total num:1  NUM MAC-ADDRESS  1 0046.657c.b926  AP3# | 有白名单得5分 |
| AP3#show dot11 associations all-client | 5分 |
| AP3#show dot11 associations all-client  RADIO-ID WLAN-ID ADDR AID CHAN RATE\_DOWN RATE\_UP RSSI ASSOC\_TIME IDLE TXSEQ RXSEQ ERP STATE CAPS HTCAPS VHT\_MU\_CAP  1 1 f0:42:1c:0f:65:f4 1 1 144.5M 144.5M 62 0:04:28 135 31 5168 0x0 0x3 ESs M SU  AP3# | 有关联表象得5分 |

### EG1配置(55分)

|  |  |
| --- | --- |
| EG1#show ip route ospf | include 192.1. | 10分 |
| EG1#show ip route ospf | include 192.1.  Running this command may take some time, please wait or press "Ctrl+C" to break.  O IA 192.1.10.0/24 [110/6] via 10.1.0.5, 06:30:06, GigabitEthernet 0/0  O IA 192.1.20.0/24 [110/6] via 10.1.0.5, 06:30:06, GigabitEthernet 0/0  O IA 192.1.30.0/24 [110/6] via 10.1.0.5, 06:30:06, GigabitEthernet 0/0  O IA 192.1.40.0/24 [110/10] via 10.1.0.37, 06:30:06, GigabitEthernet 0/3  O IA 192.1.50.0/24 [110/2] via 10.1.0.5, 06:30:06, GigabitEthernet 0/0  O E1 192.1.60.0/24 [110/26] via 10.1.0.5, 06:30:06, GigabitEthernet 0/0  O IA 192.1.100.0/24 [110/6] via 10.1.0.5, 06:30:06, GigabitEthernet 0/0  EG1# | 192.1.10\20\30与192.1.40走不同接口得10分 |
| Show run | be ip nat pool | 15分 |
| EG1#Show run | be ip nat pool  ip nat pool nat\_pool prefix-length 24  address interface GigabitEthernet 0/1 match interface GigabitEthernet 0/1  address interface GigabitEthernet 0/2 match interface GigabitEthernet 0/2  !  ip nat inside source static tcp 11.1.0.4 23 196.1.0.10 23 permit-inside  ip nat inside source list 110 pool nat\_pool overload  ! | 地址池匹配2个接口得5分  Ip nat 映射条目每个得5分 |
| Show access-lists | 10分 |
| EG1#show access-lists  ip access-list extended 110  10 permit ip 192.1.0.0 0.0.255.255 any  20 permit ip 194.1.0.0 0.0.255.255 any  30 permit ip 195.1.10.0 0.0.0.255 any  40 permit ip 172.16.0.0 0.0.255.255 any  ip access-list extended 112  10 permit tcp any host 196.1.0.1 eq www  20 permit tcp any host 197.1.0.1 eq www  30 permit ip 192.1.0.0 0.0.255.255 any  40 permit ip 194.1.0.0 0.0.255.255 any  50 permit ip 195.1.0.0 0.0.255.255 any  60 permit ip 172.16.0.0 0.0.255.255 any  70 permit tcp any host 196.1.0.10 eq telnet  80 permit ospf any any  EG1# | 第1个acl得5分  第2个acl得5分  若提供明细网段且在此范围内得分，ACL112有提供放通SSH，Telnet、Snmp得分 |
| EG1#sh run interface gigabitEthernet 0/2 | 10分 |
| EG1#sh run interface gigabitEthernet 0/2  Building configuration...  Current configuration: 160 bytes  interface GigabitEthernet 0/2  bandwidth 1000000  nexthop 197.1.0.2  reverse-path  ip address 197.1.0.1 255.255.255.0  ip nat outside  flow-policy Gi0/2  EG1# | 标红处匹配10分 |
| Show run | inc route-auto-choose | 10分 |
| EG1#Show run | inc route-auto-choose  route-auto-choose cnc GigabitEthernet 0/1 196.1.0.2  route-auto-choose cernet GigabitEthernet 0/2 197.1.0.2  EG1# | 每个条目严格匹配得5分 |

### EG2配置(45分)

|  |  |
| --- | --- |
| EG2#show web-auth user all | 5分 |
| EG2#show web-auth user all  Current user num: 1, Online 1  Address Online Time Limit Time used Status Name  --------------- ------- -------------- -------------- --------------- ---------  192.1.10.1 On 0d 00:00:00 0d 00:00:12 Active user1 | 有认证条目得5分 |
| EG2#show web-auth direct-host range | 5 |
| EG2#show web-auth direct-host range  Direct host Ranges: 3  Start Address End Address Port Binding Group Description  --------------- --------------- -------------- -------------------------------------------------- --------------------------------------------------  192.1.60.1 192.1.60.254 N/A N/A N/A  194.1.20.1 194.1.20.254 N/A N/A N/A  195.1.20.1 195.1.20.254 N/A N/A N/A  EG2# | 有3条且范围匹配得5分 |
| EG2#show run | include avoid-monitor | 5分 |
| EG2#show run | include avoid-monitor  subscriber set "user1" attribute avoid-monitor  EG2# | 匹配条目得5分 |
| EG2#show flow-control | include channel-group WEB | 10分 |
| EG2#show flow-control | include channel-group WEB  channel-group WEB parent root cir 100000 pir 100000 pri 4 per-net per-pir 1000 limit 2000  channel-group WEB parent root cir 100000 pir 100000 pri 4 per-net per-pir 1000 limit 2000 | 有条目，且标红处匹配得10分 |
| EG2#Show content-policy | begin content-policy P2P | 10分 |
| EG2#Show content-policy | begin content-policy P2P  content-policy P2P  (inactive)app-rule 1 time-range p2p app-group P2PӦction deny audit cause 1/2/1/  EG2# | 有P2P得10分 |
| EG2#show app route | 10分 |
| EG2#show app route  CLASS SRC-GRP DST-GRP INTERFACE(GROUP) TIME-RANGE STATE  -------------------------------- ---------- -------------------------------------------------- ------------------------------ ------------------------- ----------  P2PӦ any any GigabitEthernet 0/2 Night Inactive  EG2# | 有条目，且匹配接口和应用得10分 |

### 验证测试（30分）

|  |  |
| --- | --- |
| tracert 2001:192:10::254（PC1连接总部无线SSID获取IPV6地址后收集） | 5分 |
| C:\Users\Administrator>tracert 2001:192:10::254  通过最多 30 个跃点跟踪到 2001:192:10::254 的路由  1 7 ms 1 ms 1 ms 2001:192:60::252  2 3 ms 3 ms 2 ms 2001:192:100::253  3 3 ms 5 ms 3 ms 2001:192:10::254  跟踪完成。 | 路径正确得5分 |
| tracert 197.1.0.1（PC1连接总部无线SSID获取IPV4地址后收集） | 5分 |
| C:\Users\Administrator>tracert 197.1.0.1  通过最多 30 个跃点跟踪到 197.1.0.1 的路由  1 4 ms 2 ms 1 ms 192.1.60.252  2 5 ms 4 ms 2 ms 192.1.100.253  3 4 ms 1 ms 2 ms 10.1.0.10  4 5 ms 3 ms 2 ms 197.1.0.1  跟踪完成。 | 路径正确得5分 |
| PC2上使用tracert 197.1.0.1(PC2连接北京分校S6 1口手动分配地址后) | 5分 |
| C:\Users\Administrator>tracert 197.1.0.1  通过最多 30 个跃点跟踪到 197.1.0.1 的路由  1 2 ms 2 ms 2 ms 194.1.10.254  2 1 ms 1 ms 1 ms 10.1.0.25  3 44 ms 45 ms 44 ms 20.0.0.1  4 52 ms 52 ms 52 ms 10.1.0.13  5 51 ms 53 ms 52 ms 10.1.0.10  6 46 ms 49 ms 50 ms 197.1.0.1  跟踪完成。 | 路径正确得5分 |
| PC3上使用tracert 197.1.0.1（PC3连接广州分校无线获取IP） | 5分 |
| C:\Users\Administrator>tracert 197.1.0.1  通过最多 30 个跃点跟踪到 197.1.0.1 的路由  1 2 ms 1 ms 1 ms 195.1.20.254  2 5 ms 3 ms 2 ms 10.1.0.49  3 5 ms 3 ms 1 ms 10.1.0.29  4 39 ms 39 ms 37 ms 10.1.0.22  5 45 ms 62 ms 42 ms 10.1.0.13  6 43 ms 40 ms 42 ms 10.1.0.10  7 44 ms 43 ms 40 ms 197.1.0.1  跟踪完成。 | 路径正确得5分 |
| S6#traceroute ipv6 2001:192:10::254 source 2001:194:10::254（S6设备执行） | 5分 |
| S6#traceroute ipv6 2001:192:10::254 source 2001:194:10::254  < press Ctrl+C to break >  Tracing the route to 2001:192:10::254  1 2001:193:20::1 <1 msec <1 msec <1 msec  2 2002:1400:1::1 81 msec 70 msec 79 msec  3 2001:193:10::1 79 msec 71 msec 72 msec  4 2001:192:10::254 65 msec 67 msec 75 msec  S6# | 路径正确得5分 |
| traceroute ipv6 2001:192:10::254 source 2001:195:10::254（S7设备执行） | 5分 |
| S7#traceroute ipv6 2001:192:10::254 source 2001:195:10::254  < press Ctrl+C to break >  Tracing the route to 2001:192:10::254  1 2001:193:30::1 <1 msec 2 msec 2 msec  2 2001:191:10::1 62 msec 53 msec 53 msec  3 2001:193:10::1 51 msec 54 msec 53 msec  4 2001:192:10::254 48 msec 50 msec 49 msec  S7# | 路径正确得5分 |