

What is the OSPF configuration for router 10.2.10.10 to advertise networks 172.16.102.0/24

```
router ospf 1
router-id 10.2.10.10
network 172.16.102.0 0.0.0.255 area 0
```

What is the command used to dynamically assign an IP address to interface FastEthernet0/0/0 via DHCP?

```
interface FastEthernet0/0/0
ip address dhcp
no shutdown
```

What is the command to enable OSPF under VRF custA with router ID 10.0.0.103?

```
router ospf 1 vrf custA
router-id 10.0.0.103
area 0
```

How to configure OSPF authentication (MD key 12345) on interface GigabitEthernet0/1?

```
interface GigabitEthernet0/1
ip ospf authentication message-digest
ip ospf message-digest-key 1 md5 12345
```

How to configure OSPF to redistribute connected routes?

```
router ospf 1
redistribute connected subnets
```

How to configure an ACL that allows only 192.168.10.0/24 to access 10.0.0.1 via SSH?

```
ip access-list extended SSH_ONLY
permit tcp 192.168.10.0 0.0.0.255 host 10.0.0.1 eq 22
deny ip any host 10.0.0.1
permit ip any any
```

How to configure a DHCP relay agent on interface GigabitEthernet0/1 with server 10.0.0.5?

```
interface GigabitEthernet0/1
ip helper-address 10.0.0.5
```

How to configure DHCP for multiple VLANs (10 and 20)?

```
ip dhcp pool VLAN10
network 192.168.10.0 255.255.255.0
default-router 192.168.10.1
ip dhcp pool VLAN20
network 192.168.20.0 255.255.255.0
default-router 192.168.20.1
```

How to configure an ACL to block all traffic from subnet 192.168.100.0/24 except DNS (UDP 53)?

```
ip access-list extended BLOCK_100
permit udp 192.168.100.0 0.0.0.255 any eq 53
deny ip 192.168.100.0 0.0.0.255 any
permit ip any any
```

How to configure DHCP relay agent with multiple servers (10.1.1.1 and 10.2.2.2) on VLAN 30 interface?

```
interface Vlan30
ip address 192.168.30.1 255.255.255.0
ip helper-address 10.1.1.1
ip helper-address 10.2.2.2
```

How to configure DHCP option 66 (TFTP server name tftp.example.com) and option 150 (server IP 10.10.10.5) for a VOIP pool?

```
ip dhcp pool VOIP
network 192.168.60.0 255.255.255.0
default-router 192.168.60.1
option 66 ascii tftp.example.com
option 150 ip 10.10.10.5
```

How to configure a DHCP pool with two DNS servers (8.8.8.8 and 8.8.4.4) and lease time of 12 hours?

```
ip dhcp pool USERS
network 192.168.50.0 255.255.255.0
default-router 192.168.50.1
dns-server 8.8.8.8 8.8.4.4
lease 0 12
```

How to configure an ACL to allow only SSH (22) and HTTPS (443) from 192.168.10.0/24 to 10.0.0.0/24?

```
ip access-list extended SECURE_ONLY
permit tcp 192.168.10.0 0.0.0.255 10.0.0.0 0.0.0.255 eq 22
permit tcp 192.168.10.0 0.0.0.255 10.0.0.0 0.0.0.255 eq 443
deny ip any any
```

How to configure DHCP snooping on VLANs 10 and 20 trusting uplink GigabitEthernet0/1?

```
ip dhcp snooping
ip dhcp snooping vlan 10 20
interface GigabitEthernet0/1
ip dhcp snooping trust
```

How to configure a DHCP pool with default gateway 2 DNS servers and domain name and a custom lease of 2 days?

```
ip dhcp pool ENTERPRISE
network 10.100.0.0 255.255.255.0
default-router
```

```
10.100.0.1 /n dns-server 8.8.8.8 1.1.1.1 /n domain-name
enterprise.local /n lease 2
How to configure ACL to block all traffic from 203.0.113.0/24 and
log it? ip access-list extended BLOCK_ATTACKERS /n deny ip
203.0.113.0 0.0.0.255 any log /n permit ip any any
How to configure ACL with object-groups for multiple services (HTTP
HTTPS SSH)?      object-group service ALLOWED_SERVICES tcp /n port-
object eq 80 /n port-object eq 443 /n port-object eq 22 /n ip
access-list extended FILTER_GROUP /n permit tcp any any object-group
ALLOWED_SERVICES /n deny ip any any
```