SWITCH CORE 1:

enable

configure terminal

hostname sw-core1

ip routing

interface GigabitEthernet0/0

ip address 172.16.0.2 255.255.255.252

no shutdown

interface GigabitEthernet0/1

ip address 10.0.0.1 255.255.255.252

no shutdown

interface GigabitEthernet0/2

ip address 10.0.0.17 255.255.255.252

no shutdown

interface GigabitEthernet0/3

ip address 10.0.0.13 255.255.255.252

no shutdown

router ospf 1

network 10.0.0.0 0.0.0.255 area 0

network 172.16.0.0 0.0.0.255 area 0

exit

do wr

SWITCH CORE 2:

enable

configure terminal

hostname sw-core2

ip routing

interface GigabitEthernet0/0

ip address 10.0.0.18 255.255.255.252

no shutdown

interface GigabitEthernet0/1

ip address 10.0.0.9 255.255.255.252

no shutdown

interface GigabitEthernet0/2

ip address 10.0.0.5 255.255.255.252

no shutdown

interface GigabitEthernet0/3

ip address 172.16.0.6 255.255.255.252

no shutdown

router ospf 1

network 10.0.0.0 0.0.0.255 area 0

network 172.16.0.0 0.0.0.255 area 0

exit

do wr

SWITCH DISTRIBUTION 1 (VTP SERVER)

enable

configure terminal

hostname sw-dis1

ip routing

vtp mode server

```
vtp domain NVC

vtp password 123

vlan 10

name SALES

vlan 20

name MARKETING

vlan 30

name IT

vlan 40

name HR

exit

interface GigabitEthernet0/1

switchport trunk encapsulation dot1q

switchport mode trunk

no shutdown

interface GigabitEthernet0/2

switchport trunk encapsulation dot1q

switchport mode trunk

no shutdown

interface GigabitEthernet0/3

switchport trunk encapsulation dot1q

switchport mode trunk

no shutdown

interface GigabitEthernet1/0

switchport trunk encapsulation dot1q

switchport mode trunk
```

```
no shutdown

interface GigabitEthernet0/0

no switchport

ip address 10.0.0.2 255.255.255.252

no shutdown

interface GigabitEthernet1/1

no switchport

ip address 10.0.0.6 255.255.255.252

no shutdown

interface Vlan10

ip address 192.168.10.2 255.255.255.0

standby 10 ip 192.168.10.1

standby 10 priority 105

standby 10 preempt

no shutdown

interface Vlan20

ip address 192.168.20.2 255.255.255.0

standby 20 ip 192.168.20.1

standby 20 priority 105

standby 20 preempt

no shutdown

interface Vlan30

ip address 192.168.30.2 255.255.255.0

standby 30 ip 192.168.30.1

standby 30 preempt

no shutdown
```

```
interface Vlan40

ip address 192.168.40.2 255.255.255.0

standby 40 ip 192.168.40.1

standby 40 preempt

no shutdown

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

spanning-tree mode mst

spanning-tree mst configuration

name Region1

revision 1

instance 1 vlan 10,20

instance 2 vlan 30,40

exit

spanning-tree mst 1 priority 24576

router ospf 1

network 10.0.0.0 0.0.0.255 area 0

network 192.168.0.0 0.0.255.255 area 0

passive-interface GigabitEthernet0/1

passive-interface GigabitEthernet0/2

passive-interface GigabitEthernet0/3

passive-interface GigabitEthernet1/0
```

exit

do wr

SWITCH DISTRIBUTION 2 (VTP CLIENT)

enable

configure terminal

hostname sw-dis2

ip routing

vtp mode client

vtp domain NVC

vtp password 123

interface GigabitEthernet0/1

 switchport trunk encapsulation dot1q

 switchport mode trunk

 no shutdown

interface GigabitEthernet0/2

 switchport trunk encapsulation dot1q

 switchport mode trunk

 no shutdown

interface GigabitEthernet0/3

 switchport trunk encapsulation dot1q

 switchport mode trunk

 no shutdown

interface GigabitEthernet1/0

 switchport trunk encapsulation dot1q

 switchport mode trunk

```
 no shutdown
interface GigabitEthernet0/0
 no switchport
 ip address 10.0.0.10 255.255.255.252
 no shutdown
interface GigabitEthernet1/1
 no switchport
 ip address 10.0.0.14 255.255.255.252
 no shutdown
interface Vlan10
 ip address 192.168.10.3 255.255.255.0
 standby 10 ip 192.168.10.1
 standby 10 preempt
 no shutdown
interface Vlan20
 ip address 192.168.20.3 255.255.255.0
 standby 20 ip 192.168.20.1
 standby 20 preempt
 no shutdown
interface Vlan30
ip address 192.168.30.3 255.255.255.0
standby 30 ip 192.168.30.1
standby 30 priority 105
standby 30 preempt
no shutdown
interface Vlan40
```

```
ip address 192.168.40.3 255.255.255.0

standby 40 ip 192.168.40.1

standby 40 priority 105

standby 40 preempt

no shutdown

ip dhcp pool VLAN30

network 192.168.30.0 255.255.255.0

default-router 192.168.30.1

ip dhcp pool VLAN40

network 192.168.40.0 255.255.255.0

default-router 192.168.40.1

spanning-tree mode mst

spanning-tree mst configuration

name Region1

revision 1

instance 1 vlan 10,20

instance 2 vlan 30,40

exit

spanning-tree mst 2 priority 24576

router ospf 1

network 10.0.0.0 0.0.0.255 area 0

network 192.168.0.0 0.0.255.255 area 0

passive-interface GigabitEthernet0/1

passive-interface GigabitEthernet0/2

passive-interface GigabitEthernet0/3

passive-interface GigabitEthernet1/0
```

exit

do wr

SWITCH ACCESS 1 (VTP CLIENT)

enable

configure terminal

hostname sw-acc1

vtp mode client

vtp domain NVC

vtp password 123

spanning-tree mode mst

spanning-tree mst configuration

name Region1

revision 1

instance 1 vlan 10,20

instance 2 vlan 30,40

exit

interface GigabitEthernet0/0

switchport trunk encapsulation dot1q

switchport mode trunk

interface GigabitEthernet0/1

switchport trunk encapsulation dot1q

switchport mode trunk

interface GigabitEthernet0/2

switchport trunk encapsulation dot1q

switchport mode trunk

interface GigabitEthernet0/3

switchport mode access

switchport access vlan 10

interface GigabitEthernet1/0

switchport mode access

switchport access vlan 20

exit

do wr

SWITCH ACCESS 2 (VTP CLIENT)

enable

configure terminal

hostname sw-acc2

vtp mode client

vtp domain NVC

vtp password 123

spanning-tree mode mst

spanning-tree mst configuration

name Region1

revision 1

instance 1 vlan 10,20

instance 2 vlan 30,40

exit

interface GigabitEthernet0/0

switchport trunk encapsulation dot1q

switchport mode trunk

```
interface GigabitEthernet0/1

switchport trunk encapsulation dot1q

switchport mode trunk

interface GigabitEthernet0/2

switchport trunk encapsulation dot1q

switchport mode trunk

interface GigabitEthernet0/3

switchport mode access

switchport access vlan 30

interface GigabitEthernet1/0

switchport mode access

switchport access vlan 40

exit

do wr
```

Firewall

```
config system interface

edit port3
set ip 192.168.136.133 255.255.255.0
set allowaccess ping https ssh http fgfm

set vdom "root"

set mode dhcp

set type physical

set role wan

set lldp-reception enable

set snmp-index 3
set alias mgmt

next

end
```