



Comparison of the basic functionality configuration of Eltex and Cisco Ethernet switches

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Overview of the MES switch product lines

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Cisco/MES2324 configuration comparison

- Configuring the basic functionality
- Protecting client connections
- Dynamic routing

Overview of MES Switch models



MES switches are divided into series



MES14xx/24xx/34xx



MES23xx/33xx/5324
MES2300-xx/3300-xx/53xxA
MES5400-xx/5410-48/5500-32



MES5448/7048



Cisco and Eltex configuration



Basic setup

hostname and clock

creating VLAN

creating SVI

users and privileges

VLAN modes

Voice VLAN



Basic setup



Cisco

```
Switch# configure terminal
```

```
Switch(config)# hostname Switch01
```

```
Switch01# clock set 12:00:00 1 June 2024
```

Eltex

```
console# configure
```

```
console(config)# hostname MES2324
```

```
MES2324# clock set 12:00:00 jun 1 2024
```

Users and privileges



Cisco

```
Switch01(config)# username jack privilege 1 password password
```

```
Switch01(config)# enable password level 15 godemode
```

```
Switch01(config)# privilege exec level 1 show running-config
```

```
Switch01(config)# privilege exec level 1 configure
```

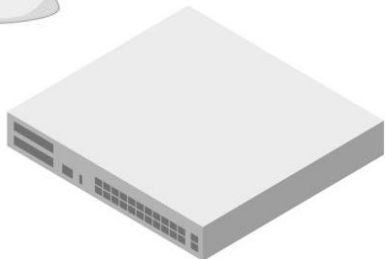
Eltex

```
MES2324(config)# username jack privilege 1 password password
```

```
MES2324(config)# enable password level 15 godemode
```

```
MES2324(config)# privilege exec 1 show running-config
```

```
MES2324(config)# privilege exec 1 configure
```



Creating and assigning VLAN to an interface



Cisco

```
Switch01(config)# vlan 20
```

```
Switch01(config-vlan)# name test20
```

```
Switch01(config)# interface gigabitethernet1/0/1
```

```
Switch01(config-if)# switchport mode access
```

```
Switch01(config-if)# switchport access vlan 20
```

Eltex

```
MES2324(config)# vlan database
```

```
MES2324(config-vlan)# vlan 20 name test
```

```
MES2324(config)# interface GigabitEthernet 1/0/1
```

```
MES2324(config-if)# switchport access vlan 20
```

Assigning a VLAN in a trunk mode to an interface



Cisco

```
Switch01(config)# interface gigabitethernet1/0/1  
  
Switch01(config-if)# switchport mode trunk  
  
Switch01(config-if)# switchport trunk allowed vlan add 10  
  
Switch01(config-if)# switchport trunk allowed vlan remove 10
```

Eltex

```
MES2324(config)# interface GigabitEthernet 1/0/1  
  
MES2324(config-if)# switchport mode trunk  
  
MES2324(config-if)# switchport trunk allowed vlan add 10  
  
MES2324(config-if)# switchport trunk allowed vlan remove 10  
  
console(config-if)# switchport trunk allowed vlan add all  
  
console(config-if)# switchport trunk allowed vlan all
```



IP-address configuration



Cisco

```
Switch01(config)# interface gigabitethernet1/0/1
```

```
Switch01(config-if)# no switchport
```

```
Switch01(config-if)# ip address 10.10.10.1 255.255.255.0
```

```
Switch01(config)#interface VLAN20
```

```
Switch01(config)#interface ip address 172.20.137.50 255.255.255.0
```

Eltex

```
MES2324(config)# interface GigabitEthernet1/0/20
```

```
MES2324(config-if)# ip address 10.10.10.1 /24
```

```
MES2324(config)# interface vlan 20
```

```
MES2324(config-if)# ip address 172.20.137.50 255.255.255.0
```

Voice VLAN



Cisco

```
Switch01(config)# switchport voice vlan 30
```

```
Switch(config)# network-policy 1
```

```
Switch(config-network-policy)# voice vlan 30 cos 4
```

```
Switch(config)# interface gigabitethernet1/0/1
```

```
Switch(config-if)# network-policy profile 1
```

```
Switch(config-if)# lldp med-tlv-select network-policy
```

Eltex

```
MES2324(config)# voice vlan oui-table add a8f94b
```

```
MES2324(config)# voice vlan id 30
```

```
MES2324(config)# voice vlan state oui-enabled
```

```
MES2324(config)# lldp med network-policy 1 voice vlan 30 vlan-type  
tagged up 4
```

```
MES2324(config)# interface gigabitethernet 1/0/1
```

```
MES2324(config-if)# switchport mode general
```

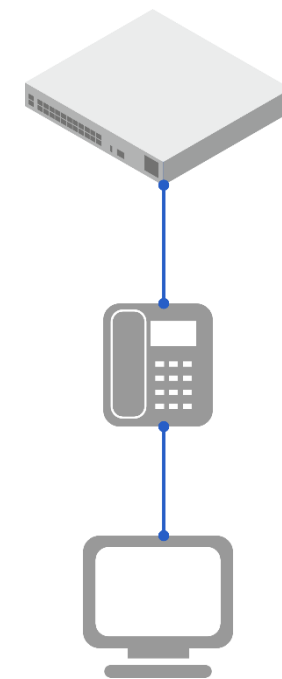
```
MES2324(config-if)# voice vlan enable
```

```
MES2324(config-if)# lldp med enable network-policy
```

```
MES2324(config-if)# lldp med network-policy add 1
```

```
MES2324(config-if)# switchport general allowed vlan add 20 untagged
```

```
MES2324(config-if)# switchport general pvid 20
```



Cisco and Eltex configuration



Protecting client connections

Storm Control

Port Security

DHCP Relay, Snooping

Loopback Detection

ACL

Dynamic ARP, IPSG

Storm Control



Cisco

```
Switch01(config)#interface GigabitEthernet1/0/1  
Switch01(config-if)# storm-control broadcast level 15  
Switch01(config-if)#storm-control unicast level pps 1k  
Switch01(config-if)#storm-control multicast level bps 12k  
Switch01(config-if)# storm-control action trap  
Switch01(config-if)# storm-control action shutdown
```

Eltex

```
MES2324(config)#errdisable recovery cause storm-control  
MES2324(config)#interface gigabitethernet1/0/3  
MES2324(config-if)storm-control broadcast level 15 trap  
MES2324(config-if)storm-control unicast pps 12500  
shutdown  
MES2324(config-if)storm-control multicast kbps 20480  
trap shutdown
```

Cisco

```
Switch01(config)#loopback-detection enable
```

```
Switch01(config)#interface GigabitEthernet 1/0/1
```

```
Switch01(config-if)#loopback-detection interval {10 — 60}
```

```
Switch01(config)#errdisable recovery cause loopback-detection
```

Eltex

```
MES2324(config)#loopback-detection enable
```

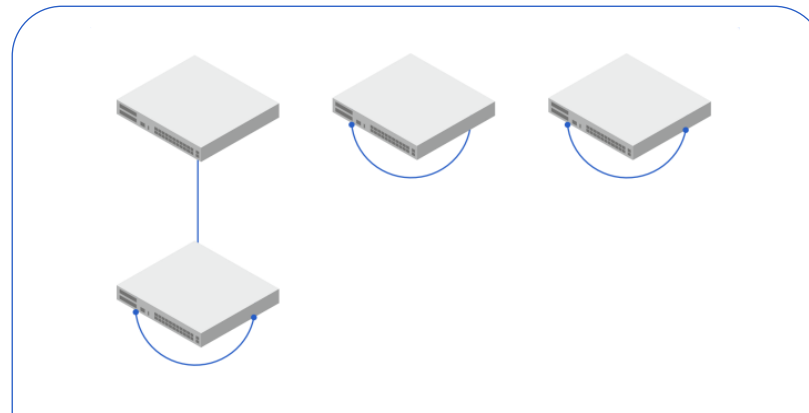
```
MES2324(config)#errdisable recovery cause loopback-detection
```

```
MES2324(config)#loopback-detection mode base-mac-addr
```

```
MES2324(config)#loopback-detection interval 1
```

```
MES2324(config)#interface GigabitEthernet 1/0/1
```

```
MES2324(config-if)#loopback-detection enable
```



Port Security



Cisco

```
Switch01(config)# interface GigabitEthernet1/0/1
```

```
Switch01(config-if)# port security max 10
```

```
Switch01(config-if)# port security mac-address sticky
```

```
Switch01(config-if)# port security violation restrict
```

```
Switch01(config-if)# port security
```

Eltex

```
MES2324(config)#interface GigabitEthernet 1/0/1
```

```
MES2324(config-if)# port security mode secure permanent
```

```
MES2324(config-if)# port security max 10
```

```
MES2324(config-if)# port security discard trap 100
```

```
MES2324(config-if)# port security
```



Cisco

```
Switch01(config)# ip access-list extended TEST_deny
```

```
Switch01(config-ext-nacl)# deny ip host 192.168.1.1 any
```

```
Switch01(config-ext-nacl)# permit ip any any
```

```
Switch01(config)# ip access-list extended TEST_permit
```

```
Switch01(config-ext-nacl)# permit ip host 192.168.1.1 192.168.1.0 0.0.0.255
```

Eltex

```
MES2324(config)# ip access-list extended TESTdeny
```

```
MES2324(config-ip-al)# deny ip 192.168.1.1 0.0.0.0 any
```

```
MES2324(config-ip-al)# permit ip any any any any
```

```
MES2324(config)# ip access-list extended TESTpermit
```

```
MES2324(config-ip-al)# permit ip 192.168.1.1 0.0.0.0 192.168.1.0 0.0.0.255
```



Management ACL



Cisco

```
Switch01(config)# management access-list Telnet_permit
```

```
Switch01(config-macl)# permit ip-source 192.168.1.1 mask /24 service telnet
```

Eltex

```
MES2324(config)# management access-list Telnet_permit
```

```
MES2324(config-macl)# permit ip-source 192.168.1.1 mask /24 service telnet
```

```
MES2324(config)# management access-list SSH_permit_v20
```

```
MES2324(config-macl)# permit vlan 20 service ssh
```


DHCP Relay



Cisco

```
Switch01(config)#ip dhcp relay enable  
Switch01(config)#ip dhcp relay address 192.168.2.1  
Switch01(config)# interface vlan 10  
Switch01(config-if)# ip dhcp relay enable  
Switch01(config)# interface vlan 100  
Switch01(config-if)# ip address 192.168.2.45
```

Eltex

```
MES2324(config)# ip dhcp relay enable  
MES2324(config)# ip dhcp relay address 192.168.2.1  
MES2324(config)# interface vlan 10  
MES2324(config-if)# ip dhcp relay enable  
MES2324(config)# interface vlan 100  
MES2324(config-if)# ip address 192.168.2.45
```



DHCP Snooping



Cisco

```
Switch01(config)# ip dhcp snooping
```

```
Switch01(config)# ip dhcp snooping vlan 200
```

```
Switch01(config)# interface gigaethernet 1/0/1
```

```
Switch01(config-if)# ip dhcp snooping trust
```

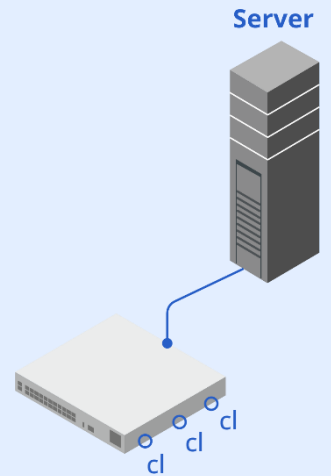
Eltex

```
MES2324(config)# ip dhcp snooping
```

```
MES2324(config)# ip dhcp snooping vlan 10
```

```
MES2324(config)# interface gigabitethernet 1/0/1
```

```
MES2324(config-if)# ip dhcp snooping trust
```



Dynamic ARP Inspection



Cisco

```
Switch01(config)# ip arp inspection vlan 10
```

```
Switch01(config)# interface gigaethernet 1/0/1
```

```
Switch01(config-if)# ip arp inspection trust
```

Eltex

```
MES2324(config)# ip ap inspection
```

```
MES2324(config)# ip arp inspection vlan 10
```

```
MES2324(config)# interface gigabitethernet 1/0/1
```

```
MES2324(config-if)# ip arp inspection trust
```



IP Source Guard



Cisco

```
Switch01(config)# interface gigaethernet 1/0/1  
Switch01(config-if)# ip verify source  
Switch01(config-if)# switchport port-security  
Switch01(config-if)# ip verify source port-security
```

Eltex

```
MES2324(config)# ip source guard  
MES2324(config)# interface gigabitethernet 1/0/1  
MES2324(config-if)# ip source guard
```

Cisco and Eltex configuration



Dynamic Routing

OSPF

Routing table resources

VRRP





Cisco

```
Switch01(config)# interface vlan 10
```

```
Switch01(config-if)# ip address 192.168.1.10 255.255.255.0
```

```
Switch01(config)# router ospf 1
```

```
Switch01(config-router)# router-id 192.168.1.10
```

```
Switch01(config-router)# network 192.168.1.0 0.0.0.255 area 0
```

```
Switch01(config-router)# redistribute connected subnets
```

Eltex

```
MES2324(config)# interface vlan 10
```

```
MES2324(config-if)# ip address 192.168.1.10 /24
```

```
MES2324(config)# router ospf 1
```

```
MES2324(router_ospf_process)# router-id 192.168.1.10
```

```
MES2324(router_ospf_process)# network 192.168.1.10 area 0.0.0.0
```

```
MES2324(router_ospf_process)# redistribute connected subnets
```



VRRP



Cisco

```
Switch01(config)# interface vlan 100  
Switch01(config-if)# ip address 192.168.100.2  
Switch01(config-if)# vrrp 100 ip 192.168.100.1  
Switch01(config-if)# vrrp 100 priority 120  
Switch01(config-if)# vrrp 100 timers learn  
Switch01(config-if)# vrrp 100 preempt
```

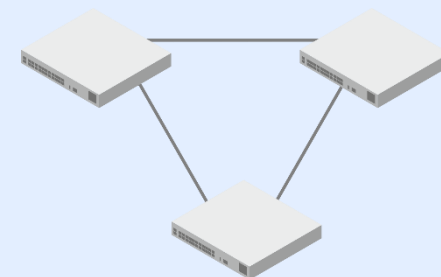
Eltex

```
MES2324(config)#interface vlan 100  
MES2324(config-if)# ip address 172.16.2.2 /24  
MES2324(config-if)#vrrp 100 ip 172.16.2.1  
MES2324(config-if)#vrrp 100 priority 120  
MES2324(config-if)#vrrp 100 preempt  
MES2324(config-if)#no vrrp 100 shutdown
```



VRRP Master
Virtual IP 10.10.10.1

VRRP Backup
Virtual IP 10.10.10.1



Routing table resources



2324(config)#system router resources ip-entries 824 ipv6-entries 32 ipm-entries 8 ipmv6-entries 32

	In-Use -----	Reserved (Current) -----	Reserved (New) -----
IPv4 Entries	12	512	824
Number of Routes	0		
Number of Neighbors	0		
Number of Interfaces	4		
IPv6 Entries	0	256	32
Number of Routes	0		
Number of Neighbors	0		
Number of Interfaces	0		
Number of Prefixes	0		
IPv4 Multicast	4	64	8
IPv6 Multicast	0	64	32



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