

Configuration

Basic Configuration Steps: -

Basic settings to all devices plus ssh on the 2 routers and 17 switches.

- Subnetting and IP addressing
- OSPF on the routers and 13 switches.
- Static IP address to server Room devices.
- DHCP server device configurations.
- Inter-VLAN routing on the 13 switches plus IP DHCP helper addresses.
- Wireless network configurations.
- PAT + Access Control List
- Verifying and testing configurations.

Cafeteria CLI Commands: -

Switch>en

Switch#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#hostname Cafeteria-SW

Cafeteria-SW(config)#banner motd #NO Unauthorised access!!!#

Cafeteria-SW(config)#no ip domain lookup

Cafeteria-SW(config)#line console 0

Cafeteria-SW(config-line)#passw cafeteria1234

Cafeteria-SW(config-line)#login

Cafeteria-SW(config-line)#ex

% Ambiguous command: "ex"

Cafeteria-SW(config-line)#exit

Cafeteria-SW(config)#enable passw cafeteria1234

Cafeteria-SW(config)#service password-encryption

Cafeteria-SW(config)#ex

Cafeteria-SW#

%SYS-5-CONFIG_I: Configured from console by console

Cafeteria-SW#wr

Building configuration...

[OK]

Cafeteria-SW#

Reception & Visitor Lounge CLI Commands: -

```

Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname Reception-SW
Reception-SW(config)#banner motd #NO Unauthorised access!!!#
Reception-SW(config)#no ip domain lookup
Reception-SW(config)#line console 0
Reception-SW(config-line)#passw reception1234
Reception-SW(config-line)#login
Reception-SW(config-line)#ex
% Ambiguous command: "ex"
Reception-SW(config-line)#exit
Reception-SW(config)#enable passw reception1234
Reception-SW(config)#service password-encryption
Reception-SW(config)#ex
Reception-SW#
%SYS-5-CONFIG_I: Configured from console by console

Reception-SW#wr
Building configuration...
[OK]
Reception-SW#

```

Industrial Devices Dept CLI Commands: -

```

Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname ID-SW
ID-SW(config)#line console 0
ID-SW(config-line)#password cisco
ID-SW(config-line)#login
ID-SW(config-line)#exit
ID-SW(config)#enable password cisco
ID-SW(config)#no ip domain-lookup
ID-SW(config)#banner motd #NO Unauthorised Access! ! !#
ID-SW(config)#service password-encryption
ID-SW(config)#do wr
Building configuration...
[OK]
ID-SW(config)#
ID-SW(config)#

```

Manufacturing Production Dept CLI Commands: -

```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname MPD-SW
MPD-SW(config)#line console 0
MPD-SW(config-line)#password cisco
MPD-SW(config-line)#login
MPD-SW(config-line)#exit
MPD-SW(config)#enable password cisco
MPD-SW(config)#no ip domain-lookup
MPD-SW(config)#banner motd #NO Unauthorised Access! ! !#
MPD-SW(config)#service password-encryption
MPD-SW(config)#do wr
Building configuration...
[OK]
MPD-SW(config)#
```

Engineering Workstation Dept CLI Commands: -

```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname EWD-SW
EWD-SW(config)#line console 0
EWD-SW(config-line)#password cisco
EWD-SW(config-line)#login
EWD-SW(config-line)#exit
EWD-SW(config)#enable password cisco
EWD-SW(config)#no ip domain-lookup
EWD-SW(config)#banner motd #NO Unauthorised Access! ! !#
EWD-SW(config)#service password-encryption
EWD-SW(config)#do wr
Building configuration...
[OK]
EWD-SW(config)#
```

Design & Maintenance Dept CLI Commands: -

```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname DMD-SW
DMD-SW(config)#line console 0
DMD-SW(config-line)#password cisco
DMD-SW(config-line)#login
DMD-SW(config-line)#exit
DMD-SW(config)#enable password cisco
```

```
DMD-SW(config)#no ip domain-lookup
DMD-SW(config)#banner motd #NO Unauthorised Access! ! !#
DMD-SW(config)#service password-encryption
DMD-SW(config)#do wr
Building configuration...
[OK]
DMD-SW(config)#
DMD-SW(config)#
```

Inventory Management Dept CLI Commands: -

```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname IMD-SW
IMD-SW(config)#line console 0
IMD-SW(config-line)#password cisco
IMD-SW(config-line)#login
IMD-SW(config-line)#exit
IMD-SW(config)#enable password cisco
IMD-SW(config)#no ip domain-lookup
IMD-SW(config)#banner motd #NO Unauthorised Access! ! !#
IMD-SW(config)#service password-encryption
IMD-SW(config)#do wr
Building configuration...
[OK]
IMD-SW(config)#
IMD-SW(config)#
```

Backup Storage Dept CLI Commands: -

```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname BSD-SW
BSD-SW(config)#line console 0
BSD-SW(config-line)#password cisco
BSD-SW(config-line)#login
BSD-SW(config-line)#exit
BSD-SW(config)#enable password cisco
BSD-SW(config)#no ip domain-lookup
BSD-SW(config)#banner motd #NO Unauthorised Access! ! !#
BSD-SW(config)#service password-encryptio
BSD-SW(config)#do wr
Building configuration...
[OK]
BSD-SW(config)#
```

Logistics Dept CLI Commands: -

```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname LD-SW
LD-SW(config)#line console 0
LD-SW(config-line)#password cisco
LD-SW(config-line)#login
LD-SW(config-line)#exit
LD-SW(config)#enable password cisco
LD-SW(config)#no ip domain-lookup
LD-SW(config)#banner motd #NO Unauthorised Access! ! !#
LD-SW(config)#service password-encryption
LD-SW(config)#do wr
Building configuration...
[OK]
LD-SW(config)#
```

Human Resources Dept CLI Commands: -

```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname HRD-SW
HRD-SW(config)#line console 0
HRD-SW(config-line)#password cisco
HRD-SW(config-line)#login
HRD-SW(config-line)#exit
HRD-SW(config)#enable password cisco
HRD-SW(config)#no ip domain-lookup
HRD-SW(config)#banner motd #NO Unauthorised Access! ! !#
HRD-SW(config)#service password-encryption
HRD-SW(config)#do wr
Building configuration...
[OK]
HRD-SW(config)#
```

Finance & Accounts Dept CLI Commands: -

```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname FAD-SW
FAD-SW(config)#line console 0
FAD-SW(config-line)#password cisco
FAD-SW(config-line)#login
FAD-SW(config-line)#exit
FAD-SW(config)#enable password cisco
FAD-SW(config)#no ip domain-lookup
FAD-SW(config)#banner motd #NO Unauthorised Access! ! !#
FAD-SW(config)#service password-encryption
FAD-SW(config)#do wr
Building configuration...
[OK]
```

FAD-SW(config)#

Sales & Marketing Dept CLI Commands: -

Switch>en

Switch#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#hostname SMD-SW

SMD-SW(config)#line console 0

SMD-SW(config-line)#password cisco

SMD-SW(config-line)#login

SMD-SW(config-line)#exit

SMD-SW(config)#enable password cisco

SMD-SW(config)#no ip domain-lookup

SMD-SW(config)#banner motd #NO Unauthorised Access! ! !#

SMD-SW(config)#service password-encryption

SMD-SW(config)#do wr

Building configuration...

[OK]

SMD-SW(config)#

Administrator & Public Relation Dept CLI Commands: -

Switch>en

Switch#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#hostname APR-SW

APR-SW(config)#line console 0

APR-SW(config-line)#password cisco

APR-SW(config-line)#login

APR-SW(config-line)#exit

APR-SW(config)#enable password cisco

APR-SW(config)#no ip domain-lookup

APR-SW(config)#banner motd #NO Unauthorised Access! ! !#

APR-SW(config)#service password-encryption

APR-SW(config)#do wr

Building configuration...

[OK]

APR-SW(config)#

IT Dept CLI Commands: -

Switch>en

Switch#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#hostname ITD-SW

ITD-SW(config)#line console 0

ITD-SW(config-line)#password cisco

ITD-SW(config-line)#login

ITD-SW(config-line)#exit

ITD-SW(config)#enable password cisco

ITD-SW(config)#no ip domain-lookup

ITD-SW(config)#banner motd #NO Unauthorised Access! ! !#

ITD-SW(config)#service password-encryption

```
ITD-SW(config)#do wr
Building configuration...
[OK]
ITD-SW(config)#
```

Vendor Portals & Communication Dept CLI Commands: -

```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname VPC-SW
VPC-SW(config)#line console 0
VPC-SW(config-line)#password cisco
VPC-SW(config-line)#login
VPC-SW(config-line)#exit
VPC-SW(config)#enable password cisco
VPC-SW(config)#no ip domain-lookup
VPC-SW(config)#banner motd #NO Unauthorised Access! ! !#
VPC-SW(config)#service password-encryption
VPC-SW(config)#do wr
Building configuration...
[OK]
VPC-SW(config)#
```

Security Dept CLI Commands: -

```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname SD-SW
SD-SW(config)#line console 0
SD-SW(config-line)#password cisco
SD-SW(config-line)#login
SD-SW(config-line)#exit
SD-SW(config)#enable password cisco
SD-SW(config)#no ip domain-lookup
SD-SW(config)#banner motd #NO Unauthorised Access! ! !#
SD-SW(config)#service password-encryption
SD-SW(config)#do wr
Building configuration...
[OK]
SD-SW(config)#
```

Server Room CLI Commands: -

```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname SR-SW
SR-SW(config)#line console 0
SR-SW(config-line)#password cisco
SR-SW(config-line)#login
SR-SW(config-line)#exit
SR-SW(config)#enable password cisco
```

```
SR-SW(config)#no ip domain-lookup
SR-SW(config)#banner motd #NO Unauthorised Access! ! !#
SR-SW(config)#service password-encryption
SR-SW(config)#do wr
Building configuration...
[OK]
SR-SW(config)#
```

Multilayer Switch 1 CLI Commands: -

```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname MS1-SW
MS1-SW(config)#line console 0
MS1-SW(config-line)#password cisco
MS1-SW(config-line)#login
MS1-SW(config-line)#exit
MS1-SW(config)#enable password cisco
MS1-SW(config)#no ip domain-lookup
MS1-SW(config)#banner motd #NO Unauthorised Access! ! !#
MS1-SW(config)#service password-encryption
MS1-SW(config)#do wr
Building configuration...
Compressed configuration from 7383 bytes to 3601 bytes[OK]
[OK]
MS1-SW(config)#ip domain name cisco.net
MS1-SW(config)#username admin password cisco
MS1-SW(config)#crypto key generate rsa
The name for the keys will be: MS1-SW.cisco.net
Choose the size of the key modulus in the range of 360 to 4096 for your
General Purpose Keys. Choosing a key modulus greater than 512 may take
a few minutes.
```

```
How many bits in the modulus [512]: 1024
% Generating 1024 bit RSA keys, keys will be non-exportable...[OK]
```

```
MS1-SW(config)#line vty 15
*Mar 1 0:38:48.550: %SSH-5-ENABLED: SSH 1.99 has been enabled
MS1-SW(config-line)#login local
MS1-SW(config-line)#transport input ssh
MS1-SW(config-line)#exit
MS1-SW(config)#do wr
Building configuration...
Compressed configuration from 7383 bytes to 3601 bytes[OK]
[OK]
MS1-SW(config)#
ML1-SW(config)#ip ssh version 2
```

Multilayer Switch 2 CLI Commands: -

```
Switch>en
```



```
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname ML2-SW
ML2-SW(config)#line console 0
ML2-SW(config-line)#password cisco
ML2-SW(config-line)#login
ML2-SW(config-line)#exit
ML2-SW(config)#enable password cisco
ML2-SW(config)#no ip domain-lookup
ML2-SW(config)#banner motd #NO Unauthorised Access! ! !#
ML2-SW(config)#service password-encryption
ML2-SW(config)#do wr
Building configuration...
Compressed configuration from 7383 bytes to 3601 bytes[OK]
[OK]
ML2-SW(config)#ip domain name cisco.net
ML2-SW(config)#username admin password cisco
ML2-SW(config)#crypto key generate rsa
The name for the keys will be: ML2-SW.cisco.net
Choose the size of the key modulus in the range of 360 to 4096 for your
General Purpose Keys. Choosing a key modulus greater than 512 may take
a few minutes.
```

```
How many bits in the modulus [512]: 1024
% Generating 1024 bit RSA keys, keys will be non-exportable...[OK]
```

```
ML2-SW(config)#line vty 15
*Mar 1 0:38:48.550: %SSH-5-ENABLED: SSH 1.99 has been enabled
ML2-SW(config-line)#login local
ML2-SW(config-line)#transport input ssh
ML2-SW(config-line)#exit
ML2-SW(config)#do wr
Building configuration...
Compressed configuration from 7383 bytes to 3601 bytes[OK]
[OK]
ML2-SW(config)#
```

```
ML2-SW(config)#ip ssh version 2
```

Multilayer Switch 3 CLI Commands: -

```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname ML3-SW
ML3-SW(config)#line console 0
ML3-SW(config-line)#password cisco
ML3-SW(config-line)#login
ML3-SW(config-line)#exit
ML3-SW(config)#enable password cisco
ML3-SW(config)#no ip domain-lookup
ML3-SW(config)#banner motd #NO Unauthorised Access! ! !#
```

```
ML3-SW(config)#service password-encryption
ML3-SW(config)#do wr
Building configuration...
Compressed configuration from 7383 bytes to 3601 bytes[OK]
[OK]
ML3-SW(config)#ip domain name cisco.net
ML3-SW(config)#username admin password cisco
ML3-SW(config)#crypto key generate rsa
The name for the keys will be: ML3-SW.cisco.net
Choose the size of the key modulus in the range of 360 to 4096 for your
General Purpose Keys. Choosing a key modulus greater than 512 may take
a few minutes.
```

```
How many bits in the modulus [512]: 1024
% Generating 1024 bit RSA keys, keys will be non-exportable...[OK]
```

```
ML3-SW(config)#line vty 15
*Mar 1 0:38:48.550: %SSH-5-ENABLED: SSH 1.99 has been enabled
ML3-SW(config-line)#login local
ML3-SW(config-line)#transport input ssh
ML3-SW(config-line)#exit
ML3-SW(config)#do wr
Building configuration...
Compressed configuration from 7383 bytes to 3601 bytes[OK]
[OK]
ML3-SW(config)#
ML3-SW(config)#ip ssh version 2
```

Core Router 1 CLI Commands: -

```
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Core-R1
Core-R1(config)#line console 0
Core-R1(config-line)#password cisco
Core-R1(config-line)#login
Core-R1(config-line)#exit
Core-R1(config)#enable password cisco
Core-R1(config)#no ip domain-lookup
Core-R1(config)#banner motd #NO Unauthorised Access! ! !#
Core-R1(config)#service password-encryption
Core-R1(config)#do wr
Building configuration...
[OK]
Core-R1(config)#ip domain name cisco.net
Core-R1(config)#username admin password cisco
Core-R1(config)#crypto key generate rsa
The name for the keys will be: Core-R1.cisco.net
Choose the size of the key modulus in the range of 360 to 4096 for your
General Purpose Keys. Choosing a key modulus greater than 512 may take
```

a few minutes.

How many bits in the modulus [512]: 1024

% Generating 1024 bit RSA keys, keys will be non-exportable...[OK]

Core-R1(config)#line vty 015

*Mar 1 1:24:50.156: %SSH-5-ENABLED: SSH 1.99 has been enabled

Core-R1(config-line)#login local

Core-R1(config-line)#transport input ssh

Core-R1(config-line)#exit

Core-R1(config)#do wr

Building configuration...

[OK]

Core-R1(config)#

Core-R1(config)#ip ssh version 2

Core Router 2 CLI Commands: -

Router>en

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname Core-R2

Core-R2(config)#line console 0

Core-R2(config-line)#password cisco

Core-R2(config-line)#login

Core-R2(config-line)#exit

Core-R2(config)#enable password cisco

Core-R2(config)#no ip domain-lookup

Core-R2(config)#banner motd #NO Unauthorised Access! ! !#

Core-R2(config)#service password-encryption

Core-R2(config)#do wr

Building configuration...

[OK]

Core-R2(config)#ip domain name cisco.net

Core-R2(config)#username admin password cisco

Core-R2(config)#crypto key generate rsa

The name for the keys will be: Core-R2.cisco.net

Choose the size of the key modulus in the range of 360 to 4096 for your

General Purpose Keys. Choosing a key modulus greater than 512 may take

a few minutes.

How many bits in the modulus [512]: 1024

% Generating 1024 bit RSA keys, keys will be non-exportable...[OK]

Core-R2(config)#line vty 015

*Mar 1 1:26:23.983: %SSH-5-ENABLED: SSH 1.99 has been enabled

Core-R2(config-line)#login local

Core-R2(config-line)#transport input ssh

Core-R2(config-line)#exit

Core-R2(config)#do wr

Building configuration...

[OK]

Core-R2(config)#

Core-R2(config)#ip ssh version 2

VLANs assignment plus all access and trunk ports on 12 and 13 switches.

Cafeteria CLI Commands: -

Cafeteria-SW(config)#int range fa0/1-3

Cafeteria-SW(config-if-range)#switch mode trunk

Cafeteria-SW(config-if-range)#

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up

Cafeteria-SW(config-if-range)#exi

Cafeteria-SW(config)# int range fa0/4-24

Cafeteria-SW(config-if-range)#switchport mode access

Cafeteria-SW(config-if-range)#switchport access vlan 10

% Access VLAN does not exist. Creating vlan 10

Cafeteria-SW(config-if-range)#ex

Cafeteria-SW(config)#vlan 10

Cafeteria-SW(config-vlan)#name Cafeteria

Cafeteria-SW(config-vlan)#ex

Cafeteria-SW(config)#do wr

Building configuration...

[OK]

Cafeteria-SW(config)#

Reception CLI Commands: -

Reception-SW(config)#int range fa0/1-3

Reception-SW(config-if-range)#switchport mode trunk

Reception-SW(config-if-range)#exit

Reception-SW(config)#

Reception-SW(config)#vlan 61

Reception-SW(config-vlan)#name Reception

Reception-SW(config-vlan)#exit

```
Reception-SW(config)#
Reception-SW(config)#int range fa0/4-24
Reception-SW(config-if-range)#switchport mode access
Reception-SW(config-if-range)#switchport access vlan 61
Reception-SW(config-if-range)#exit
Reception-SW(config)#
Reception-SW(config)#do wr
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
up
```

Industrial Devices Dept CLI Commands: -

```
ID-SW(config)#int range fa0/1-3
ID-SW(config-if-range)#switchport mode trunk
ID-SW(config-if-range)#exit
ID-SW(config)#
ID-SW(config)#vlan 60
ID-SW(config-vlan)#name ID
ID-SW(config-vlan)#exit
ID-SW(config)#
ID-SW(config)#int range fa0/4-24
ID-SW(config-if-range)#switchport mode access
ID-SW(config-if-range)#switchport access vlan 60
ID-SW(config-if-range)#exit
ID-SW(config)#
ID-SW(config)#do wr
Building configuration...
[OK]
ID-SW(config)#
```

Manufacturing Production Lines Dept CLI Commands: -

```
MPD-SW(config)#int range fa0/1-3
MPD-SW(config-if-range)#switchport mode trunk
MPD-SW(config-if-range)#exit
MPD-SW(config)#
MPD-SW(config)#vlan 11
MPD-SW(config-vlan)#name MPLD
MPD-SW(config-vlan)#exit
MPD-SW(config)#
MPD-SW(config)#int range fa0/4-24
MPD-SW(config-if-range)#switchport mode access
```

```
MPD-SW(config-if-range)#switchport access vlan 11
MPD-SW(config-if-range)#exit
MPD-SW(config)#
MPD-SW(config)#do w
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
up
Building configuration...
[OK]
MPD-SW(config)#
```

Engineering Workstations Dept CLI Commands: -

```
EWD-SW(config-if-range)#exit
EWD-SW(config)#
EWD-SW(config)#vlan 20
EWD-SW(config-vlan)#name EWD
EWD-SW(config-vlan)#exit
EWD-SW(config)#
EWD-SW(config)#int range fa0/4-24
EWD-SW(config-if-range)#switchport mode access
EWD-SW(config-if-range)#switchport access vlan 20
EWD-SW(config-if-range)#exit
EWD-SW(config)#
EWD-SW(config)#do wr
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
up
Building configuration...
[OK]
EWD-SW(config)#
```

Design & Maintenance Dept CLI Commands: -

```
DMD-SW(config)#int range fa0/1-3
```

```

DMD-SW(config-if-range)#switchport mode trunk
DMD-SW(config-if-range)#exit
DMD-SW(config)#
DMD-SW(config)#vlan 21
DMD-SW(config-vlan)#name DMD
DMD-SW(config-vlan)#exit
DMD-SW(config)#
DMD-SW(config)#int range fa0/4-24
DMD-SW(config-if-range)#switchport mode access
DMD-SW(config-if-range)#switchport access vlan 21
DMD-SW(config-if-range)#exit
DMD-SW(config)#
DMD-SW(config)#do wr
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
up
Building configuration...
[OK]
DMD-SW(config)#

```

Inventory & Management Dept CLI Commands: -

```

IMD-SW(config)#int range fa0/1-3
IMD-SW(config-if-range)#switchport mode trunk
IMD-SW(config-if-range)#exit
IMD-SW(config)#
IMD-SW(config)#vlan 40
IMD-SW(config-vlan)#name DMD
IMD-SW(config-vlan)#exit
IMD-SW(config)#
IMD-SW(config)#int range fa0/4-24
IMD-SW(config-if-range)#switchport mode access
IMD-SW(config-if-range)#switchport access vlan 40
IMD-SW(config-if-range)#exit
IMD-SW(config)#
IMD-SW(config)#do wr
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down

```

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up

%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on FastEthernet0/5 (40), with ML1-SW GigabitEthernet1/0/12 (1).

%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on FastEthernet0/7 (40), with ML2-SW GigabitEthernet1/0/11 (1).

Building configuration...

[OK]

IMD-SW(config)#

Backup Storage Dept CLI Commands: -

BSD-SW(config)#int range fa0/1-3

BSD-SW(config-if-range)#switchport mode trunk

BSD-SW(config-if-range)#exit

BSD-SW(config)#

BSD-SW(config)#vlan 42

BSD-SW(config-vlan)#name BSD

BSD-SW(config-vlan)#exit

BSD-SW(config)#

BSD-SW(config)#int range fa0/4-24

BSD-SW(config-if-range)#switchport mode access

BSD-SW(config-if-range)#switchport access vlan 42

BSD-SW(config-if-range)#exit

BSD-SW(config)#

BSD-SW(config)#do wr

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up

Building configuration...

[OK]

BSD-SW(config)#

Logistics Dept CLI Commands: -

LD-SW(config)#int range fa0/1-3

LD-SW(config-if-range)#switchport mode trunk

LD-SW(config-if-range)#exit

LD-SW(config)#

LD-SW(config)#vlan 43


```
LD-SW(config-vlan)#name LD
LD-SW(config-vlan)#exit
LD-SW(config)#
LD-SW(config)#int range fa0/4-24
LD-SW(config-if-range)#switchport mode access
LD-SW(config-if-range)#switchport access vlan 43
LD-SW(config-if-range)#exit
LD-SW(config)#
LD-SW(config)#do wr
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
up
Building configuration...
[OK]
LD-SW(config)#
```

Human Resources Dept CLI Commands: -

```
HRD-SW(config)#int range fa0/1-3
HRD-SW(config-if-range)#switchport mode trunk
HRD-SW(config-if-range)#exit
HRD-SW(config)#
HRD-SW(config)#vlan 31
HRD-SW(config-vlan)#name HR
HRD-SW(config-vlan)#exit
HRD-SW(config)#
HRD-SW(config)#int range fa0/4-24
HRD-SW(config-if-range)#switchport mode access
HRD-SW(config-if-range)#switchport access vlan 31
HRD-SW(config-if-range)#exit
HRD-SW(config)#
HRD-SW(config)#do wr
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
down
```

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up

Building configuration...

[OK]

HRD-SW(config)#

Finance & Accounts Dept CLI Commands: -

FAD-SW(config)#int range fa0/1-3

FAD-SW(config-if-range)#switchport mode trunk

FAD-SW(config-if-range)#exit

FAD-SW(config)#

FAD-SW(config)#vlan 32

FAD-SW(config-vlan)#name FAD

FAD-SW(config-vlan)#exit

FAD-SW(config)#

FAD-SW(config)#int range fa0/4-24

FAD-SW(config-if-range)#switchport mode access

FAD-SW(config-if-range)#switchport access vlan 32

FAD-SW(config-if-range)#exit

FAD-SW(config)#

FAD-SW(config)#do wr

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up

Building configuration...

[OK]

FAD-SW(config)#

Sales & Marketing Dept CLI Commands: -

SMD-SW(config)#int range fa0/1-3

SMD-SW(config-if-range)#switchport mode trunk

SMD-SW(config-if-range)#exit

SMD-SW(config)#

SMD-SW(config)#vlan 30

SMD-SW(config-vlan)#name SMD

SMD-SW(config-vlan)#exit

SMD-SW(config)#

SMD-SW(config)#int range fa0/4-24

SMD-SW(config-if-range)#switchport mode access

SMD-SW(config-if-range)#switchport access vlan 30

SMD-SW(config-if-range)#exit

SMD-SW(config)#

```
SMD-SW(config)#do wr
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
up
Building configuration...
[OK]
SMD-SW(config)#
```

Administration & Public Relations Dept CLI Commands: -

```
APR-SW(config)#int range fa0/1-3
APR-SW(config-if-range)#switchport mode trunk
APR-SW(config-if-range)#exit
APR-SW(config)#
APR-SW(config)#vlan 33
APR-SW(config-vlan)#name APRD
APR-SW(config-vlan)#exit
APR-SW(config)#
APR-SW(config)#int range fa0/4-24
APR-SW(config-if-range)#switchport mode access
APR-SW(config-if-range)#switchport access vlan 33
APR-SW(config-if-range)#exit
APR-SW(config)#
APR-SW(config)#do wr
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
up
Building configuration...
[OK]
APR-SW(config)#
```

IT Dept CLI Commands: -

```
ITD-SW(config)#int range fa0/1-3
```

```
ITD-SW(config-if-range)#switchport mode trunk
ITD-SW(config-if-range)#exit
ITD-SW(config)#
ITD-SW(config)#vlan 34
ITD-SW(config-vlan)#name ITD
ITD-SW(config-vlan)#exit
ITD-SW(config)#
ITD-SW(config)#int range fa0/4-24
ITD-SW(config-if-range)#switchport mode access
ITD-SW(config-if-range)#switchport access vlan 34
ITD-SW(config-if-range)#exit
ITD-SW(config)#
ITD-SW(config)#do wr
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
up
Building configuration...
[OK]
ITD-SW(config)#
```

Vendor Portals & Communication System Dept CLI Commands: -

```
VPC-SW(config)#int range fa0/1-3
VPC-SW(config-if-range)#switchport mode trunk
VPC-SW(config-if-range)#exit
VPC-SW(config)#
VPC-SW(config)#vlan 50
VPC-SW(config-vlan)#name VPCD
VPC-SW(config-vlan)#exit
VPC-SW(config)#
VPC-SW(config)#int range fa0/4-24
VPC-SW(config-if-range)#switchport mode access
VPC-SW(config-if-range)#switchport access vlan 50
VPC-SW(config-if-range)#exit
VPC-SW(config)#
VPC-SW(config)#do wr
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down
```

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up

Building configuration...

[OK]

VPC-SW(config)#

Security Dept CLI Commands: -

SD-SW(config)#int range fa0/1-3

SD-SW(config-if-range)#switchport mode trunk

SD-SW(config-if-range)#exit

SD-SW(config)#

SD-SW(config)#vlan 52

SD-SW(config-vlan)#name SD

SD-SW(config-vlan)#exit

SD-SW(config)#

SD-SW(config)#int range fa0/4-24

SD-SW(config-if-range)#switchport mode access

SD-SW(config-if-range)#switchport access vlan 52

SD-SW(config-if-range)#exit

SD-SW(config)#

SD-SW(config)#do wr

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up

Building configuration...

[OK]

SD-SW(config)

Server Room CLI Commands: -

SR-SW(config)#int range fa0/1-3

SR-SW(config-if-range)#switchport mode trunk

SR-SW(config-if-range)#exit

SR-SW(config)#

SR-SW(config)#vlan 51

SR-SW(config-vlan)#name SR

SR-SW(config-vlan)#exit

SR-SW(config)#

SR-SW(config)#int range fa0/4-24

```
SR-SW(config-if-range)#switchport mode access
SR-SW(config-if-range)#switchport access vlan 51
SR-SW(config-if-range)#exit
SR-SW(config)#
SR-SW(config)#do wr
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
up
Building configuration...
[OK]
SR-SW(config)#
```

Switchport security to all departments.

Cafeteria CLI Commands: -

```
Cafeteria-SW(config)#int range fa0/4-24
Cafeteria-SW(config-if-range)#switchport port-security maximum 1
Cafeteria-SW(config-if-range)#switchport port-security mac-address sticky
Cafeteria-SW(config-if-range)#switchport port-security violation shutdown
Cafeteria-SW(config-if-range)#ex
Cafeteria-SW(config)#do wr
Building configuration...
[OK]
```

Receptions CLI Commands: -

```
Reception-SW(config)#int range fa0/4-24
Reception-SW(config-if-range)#switchport port-security maximum 1
Reception-SW(config-if-range)#switchport port-security mac-address sticky
Reception-SW(config-if-range)#switchport port-security violation shutdown
Reception-SW(config-if-range)#ex
Reception-SW(config)#do wr
Building configuration...
[OK]
Reception-SW(config)#
```

Industrial Devices CLI Commands: -

ID-SW(config)#int range fa0/4-24

ID-SW(config-if-range)#switchport port-security maximum 1

ID-SW(config-if-range)#switchport port-security mac-address sticky

ID-SW(config-if-range)#switchport port-security violation shutdown

ID-SW(config-if-range)#ex

ID-SW(config)#do wr

Building configuration...

[OK]

ID-SW(config)#