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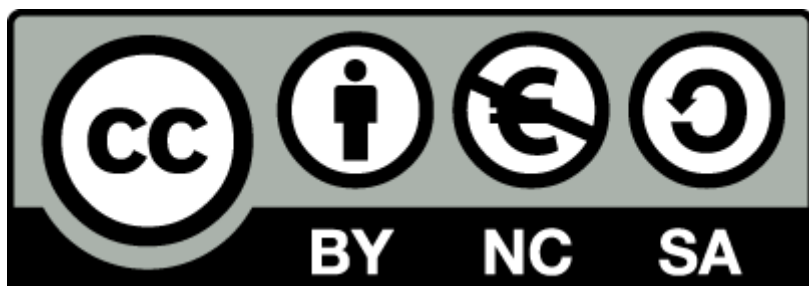
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## 1 Intro

Hi. I am Panteleimon Sarantos (You can call me Pantelis) and I made this list of commands for the Cisco Routers and Switches. This document is version 1.0.

## 2 License

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## 3 Save Progress

To save the following commands to the startup-config run:

```
en
conf t
wr
```

```
#or
do wr
```

## 4 Router

### 4.1 Security

#### 4.1.1 Management Security

##### 4.1.1.1 Enable CLI Password

```
en
conf t
line con 0
password conpass
```

##### 4.1.1.2 Enable Password after enable – EXEC – Global Configuration

```
en
conf t
enable secret password
```

##### 4.1.1.3 Enable Telnet Password

```
en
conf t
line vty 0 15
password telnetpass
login
```

##### 4.1.1.4 SSH

###### 4.1.1.4.1 SSH Configuration

```
en
conf t
ip domain-name isp.gr
username admin privilege 15 secret sshpass
line vty 0 15
transport input ssh
login local
exit
crypto key generate rsa
end
show ip ssh
```

#### **4.1.1.4.2 More SSH Settings**

```
en
conf t
ip ssh time-out 75
ip ssh authentication-retries 2
```

### **4.1.2 Access Lists Security**

#### **4.1.2.1 Standard ACLs**

##### **4.1.2.1.1 Numbered Standard ACLs**

```
en
conf t
access-list 1 remark Allow R1 LANs Access
access-list 1 permit 192.168.10.0 0.0.0.255
access-list 1 permit 192.168.20.0 0.0.0.255
access-list 1 deny any
```

```
en
conf t
interface g0/1
ip access-group 1 out
```

##### **4.1.2.1.2 Named Standard ACLs**

```
en
conf t
ip access-list standard BRANCH-OFFICE-POLICY
permit host 192.168.30.3
permit 192.168.40.0 0.0.0.255
end
```

```
en
conf t
int g0/1
ip access-group BRANCH-OFFICE-POLICY out
```

##### **4.1.2.1.3 Modify Named ACLs**

```
en
conf t
ip access-list standard BRANCH-OFFICE-POLICY
30 permit 209.165.200.224 0.0.0.31
40 deny any
end
```

#### **4.1.2.2 Extended ACLs**

##### **4.1.2.2.1 Numbered Extended ACLs**

```
en
conf t
access-list 100 remark Allow Web & SSH Access
access-list 100 permit tcp host 192.168.10.3 host 10.2.2.1 eq 22
access-list 100 permit tcp any any eq 80
```

```
en
conf t
interface g0/1
ip access-group 100 out
```

#### **4.1.2.2.2 Named Extended ACLs**

```
en
conf t
ip access-list extended WEB-POLICY
permit tcp 192.168.30.0 0.0.0.255 host 10.1.1.1 eq 80
permit tcp 192.168.30.0 0.0.0.255 209.165.200.224 0.0.0.31 eq 80
```

```
en
conf t
interface S0/0/1
ip access-group WEB-POLICY out
```

#### **4.1.2.2.3 Modify Numbered Extended ACLs**

```
en
conf t
ip access-list extended 100
30 permit ip 192.168.10.0 0.0.0.255 192.168.30.0 0.0.0.255
end
```

#### **4.1.2.2.4 Modify Named Extended ACLs**

```
en
conf t
ip access-list extended WEB-POLICY
30 permit ip 192.168.30.0 0.0.0.255 192.168.10.0 0.0.0.255
end
```

#### **4.1.2.3 Access Lists Info**

```
en
show access-lists
```

#### **4.1.2.3.1 More SSH Settings**

```
en
conf t
ip ssh time-out 75
ip ssh authentication-retries 2
```

## **4.2 IP**

### **4.2.1 Assign IP to Interface**

#### **4.2.1.1 IPv4**

```
En
conf t
int g0/0
ip add 192.168.1.1 255.255.255.0
no shut
```

#### **4.2.1.2 IPv6**

```
en
conf t
ipv6 unicast-routing
int g0/0
ipv6 add 2001:db8:1:1::1/64
ipv6 add fe80::1 link-local
no shut
```

### **4.3 DHCP**

```
en
conf t
ip dhcp excluded-address 100.100.100.1
ip dhcp pool KATOSTARI
network 100.100.100.0 255.255.255.0
default-router 100.100.100.1
```

## **4.4 Routing**

### **4.4.1 OSPF**

```
en
conf t
router ospf 1
network 192.168.1.0 0.0.0.255 area 0
network 10.0.0.0 0.0.0.3 area 0
network 10.1.1.0 0.0.0.3 area 0
```

### **4.4.2 EIGRP**

```
en
conf t
router eigrp 1
network 200.200.200.0 0.0.0.3
network 100.100.100.0 0.0.0.255
auto-summary
```

### **4.4.3 RIPv2**

```
en
conf t
router rip
version 2
network 192.168.10.0
network 192.168.20.0
network 192.168.30.0
no auto-summary
```

## **4.5 InterVLAN Routing**

```
interface g0/1.1
encapsulation dot1Q 1
ip add 192.168.1.1 255.255.255.0
```

```
interface g0/1.10
encapsulation dot1Q 10
ip add 192.168.10.1 255.255.255.0
interface g0/1.20
encapsulation dot1Q 20
ip add 192.168.20.1 255.255.255.0
exit
interface g0/1
no shut
```

## **4.6 General Settings**

### **4.6.1 Date and Time Settings**

```
Set clock settings
clock set 16:45:00 Dec 8 2016
```

## **5 Switch**

### **5.1 Security**

#### **5.1.1 Management Security**

##### **5.1.1.1 Enable CLI Password**

```
en
conf t
line con 0
password compass
login
logging synchronous
```

##### **5.1.1.2 Enable Encrypted Password after enable – EXEC – Global Configuration**

```
en
conf t
enable password-encryption
enable secret pass
```

##### **5.1.1.3 Enable Telnet Password**

```
en
conf t
line vty 0 15
password telnetpass
login
```

##### **5.1.1.3.1 SSH**

###### **5.1.1.3.1.1 SSH Configuration**

```
en
```

```
conf t
ip domain-name isp.gr
username admin privilege 15 secret sshpass
line vty 0 15
transport input ssh
login local
exit
crypto key generate rsa
end
show ip ssh
```

#### **5.1.1.3.1.2 More SSH Settings**

```
en
conf t
ip ssh time-out 75
ip ssh authentication-retries 2
```

### **5.1.2 Port Security**

#### **5.1.2.1 Close unused physical ports**

```
en
conf t
int f0/0 | int range f0/0 – 4
shut
do sh ip interface brief
```

#### **5.1.2.2 Configure Basic Port Security**

```
en
conf t
int f0/5
shut
switchport mode access
switchport port-security
switchport port-security mac-address xxxx.xxxx.xxxx
(switchport port-security mac-address sticky)
no shut
end
sh port-security int f0/5
```

## **5.2 VLAN**

### **5.2.1 Create a VLAN**

```
en
conf t
vlan 10
name Students
exit
```



## 5.2.2 Assign Physical Access Ports to VLAN

```
en
conf t
int range f0/1 – 24, g0/1 – 2
switchport access vlan 10
```

## 5.2.3 Set Physical Ports to Trunk

```
en
conf t
int g0/1
switchport mode trunk
```

## 5.2.4 Set Physical Ports to Native Trunking

```
en
conf t
int g0/1
switchport mode trunk
switchport trunk native vlan 99
```

## 5.2.5 Assign IP to VLAN

```
int vlan99
ip add 192.168.1.2 255.255.255.0
no shut
```

## 5.2.6 Verify VLAN

```
en
sh vlan brief
```

## 5.3 Ρυθμίσεις IP

### 5.3.1 Prevent unwanted DNS Lookups

```
en
conf t
no ip domain-lookup
```

### 5.3.2 Default Gateway

```
en
conf t
ip default-gateway 192.168.1.1
```

## 5.4 General Settings

### 5.4.1 Date and Time Settings

```
show clock detail
clock set 16:30:00 Mar 27 2017
do wr
```

## 5.4.2 Log In Banner Message

en

conf t

banner motd #

Some message #