

PC

1. Nume: PC-ITALIA
2. Placa de rețea: PT-HOST-NM-1CGE
3. IP Configuration
4. Email

Your Name: PC-ITALIA

Email Address: PC-ITALIA@INFO.RO

Incoming Mail Server: DNS-ul

Outcoming Mail Server: DNS-ul

Username: PC-ITALIA

Password: 123456

SWITCH

1. Tip: 2960
2. Nume: SwITALIA
3. Legăm un Laptop (Nume: SERVICE) de Switch cu un cablu Console:
RS 232 (laptop) ----- Console (Switch)

```
Switch> en
```

```
Switch# conf t
```

```
Switch(config)# no ip domain-l
```

```
Switch(config)# hostn SwITALIA
```

```
SwITALIA(config)# no cdp run
```

```
SwITALIA(config)# ser p (service password-encryption)
```

```
SwITALIA(config)# ena s ciscosecpa55
```

```
SwITALIA(config)# ena p ciscoenapa55
```

```
SwITALIA(config)# banner motd *Luni la ora 8:00 sedinta L.T*
```

```
SwITALIA(config)# line con 0
```

```
SwITALIA(config-line)# pass ciscoconpa55
```

```
SwITALIA(config-line)# login
```

```
SwITALIA(config-line)# logg s
```

```
SwITALIA(config-line)# exe 15 15
```

```
SwITALIA(config)# line vty 0 15
SwITALIA(config-line)# pass ciscovtpa55
SwITALIA(config-line)# login
SwITALIA(config-line)# logg s
SwITALIA(config-line)# exe 15 15
SwITALIA(config-line)# end
```

```
SwITALIA# clock set 10:22:00 16 Mar 2023
SwITALIA# conf t
```

```
SwITALIA(config)# ip domain-n info.ro
SwITALIA(config)# usern Admin01 priv 15 sec Admin01pa55
```

```
SwITALIA(config)# line vty 0 15
SwITALIA(config-line)# t i ssh
SwITALIA(config-line)# login local
SwITALIA(config-line)# exit
```

```
SwITALIA(config)# log host DNS
SwITALIA(config)# ser t l d m (service timestamps log datetime msec)
SwITALIA(config)# ser t d d m (service timestamps debug datetime msec)
SwITALIA(config)# cr k g r - 2048 (crypto key generate rsa)
```

```
SwITALIA(config)# int vlan 1
SwITALIA(config-if)# d Legatura cu ramura Italia
SwITALIA(config-if)# ip add al-doilea-ip-din-range masca-lui
SwITALIA(config-if)# no shut
SwITALIA(config-if)# exit
```

```
SwITALIA(config)# ip de default-gateway (cel mai mic ip din range)
SwITALIA(config)# int r fa 0/1 - 24
SwITALIA(config-if-range)# shut
SwITALIA# copy run start - Enter
```

HOST (GigabitEthernet0) ----- Copper Straight-Through ----- SWITCH (GigabitEthernet0/2)

----- HOST - DESKTOP - COMMAND PROMPT

C: \> ping 173.34.16.2

C: \> ssh -l Admin01 173.34.16.2 - Password: Admin01pa55

ROUTER

1. Tip: 2911
2. Nume: RITALIA
3. Placa de rețea: HWIC-2T (in slotul cel mai din dreapta)

Router> en

Router# conf t

Router(config)# no ip domain-l

Router(config)# hostn RITALIA

RITALIA(config)# no cdp run

RITALIA(config)# login b 50 a 3 w 10 (login block-for 50 attempts 3 within 10)

RITALIA(config)# security p m 10 (security passwords min-length 10)

RITALIA(config)# ser p (service password-encryption)

RITALIA(config)# enab sec ciscosecpa55

RITALIA(config)# enab pass ciscoenapa55

RITALIA(config)# banner login *Accesul persoanelor neautorizate este strict interzis!*

RITALIA(config)# banner motd *Luni la 14:00 serverul va fi oprit!*

RITALIA(config)# line con 0

RITALIA(config-line)# pass ciscoconnpa55

RITALIA(config-line)# login

RITALIA(config-line)# logg synch

RITALIA(config-line)# exec-ti 10 10

RITALIA(config-line)# exit

RITALIA(config)# line vty 0 15

RITALIA(config-line)# pass ciscovtypa55

RITALIA(config-line)# login

RITALIA(config-line)# logg synch

RITALIA(config-line)# exec-ti 10 15

RITALIA(config-line)# end

RITALIA# clock set 14:24:00 15 Mar 2023

RITALIA# conf t

```
RITALIA(config)# ip domain-n info.ro
RITALIA(config)# usern Admin01 priv 15 sec Admin01pa55
```

```
RITALIA(config)# line vty 0 15
RITALIA(config-line)# t i ssh
RITALIA(config-line)# login local
RITALIA(config-line)# exit
```

```
RITALIA(config)# logg host DNS
RITALIA(config)# ser t l d m (service timestamps log datetime msec)
RITALIA(config)# ser t d d m (service timestamps debug datetime msec)
RITALIA(config)# cr k g r - 2048 (crypto key generate rsa)
```

```
RITALIA(config)# int ser 0/0/0
RITALIA(config-if)# desc Legatura cu routerul Y
RITALIA(config-if)# ip add unul-dintre-ip-urile-de-legatura 255.255.255.252
RITALIA(config-if)# no shut
RITALIA(config-if)# end
```

```
RITALIA(config)# int gig0/0
RITALIA(config-if)# desc Legatura cu ramura ITALIA
RITALIA(config-if)# ip add Default-Gateway Masca
RITALIA(config-if)# ip helper-address ip-router-cu-dhcp (In routerele fara DHCP)
RITALIA(config-if)# no shut
RITALIA(config-if)# exit
```

```
RITALIA(config)# int gig0/1 (Pentru routerele din ramuri cu WiFi)
RITALIA(config-if)# desc Legatura cu WiFi-ITALIA
RITALIA(config-if)# ip add Primul-ip-din-legatura-cu-wifi-ul 255.255.255.252
RITALIA(config-if)# no shut
RITALIA(config-if)# exit
```

```
RITALIA(config)# ip dhcp e Default-Gateway ultimul-ip-rezervat-pt-switch-uri
RITALIA(config)# ip dhcp p Numele-Ramurii
RITALIA(dhcp-config)# net Network-Address Masca
RITALIA(dhcp-config)# def Default-Gateway
RITALIA(dhcp-config)# dns DNS
RITALIA(dhcp-config)# dom info.ro
(pentru fiecare ramură, înafară de cea în care se află Serverul)
```

RITALIA(config)# ip route **NA-Destinatie** **Masca-Destinatie** s 0/0/0
(pentru absolut tot ce s-a calculat la pasul 2 și nu a fost legat direct)

RITALIA# copy run start - Enter

SWITCH (GigabitEthernet0/1) ---- Copper Straight-Through ---- ROUTER (GigabitEthernet0/0)
ROUTER (GigabitEthernet0/1) ---- Copper Cross-Over ---- WiFi (Internet)
ROUTER (Serial0/0/0) ---- Serial DTE ---- ROUTER (Serial0/0/0)

WiFi

1. Tip: WRT300N
2. Nume: WiFi-ITALIA

Setup | Setup | Wireless | Security | Access Restrictions | Applications & Gaming | Adminis

Basic Setup | DDNS | MAC Address Clone

Internet Setup

Internet Connection type: Static IP

Internet IP Address: Al doilea ip din legătura cu WiFi-ul

Subnet Mask: 255 . 255 . 255 . 252

Default Gateway: Primul ip din legătura cu WiFi-ul

DNS 1: DNS-ul

DNS 2 (Optional): 0 . 0 . 0 . 0

DNS 3 (Optional): 0 . 0 . 0 . 0

Host Name:

Domain Name:

Optional Settings (required by some internet service providers)

MTU: Size: 1500

Network Setup

IP Address: 192 . 168 . random . random

Subnet Mask: random

3.

4.

Wireless	Setup	Wireless	Security	Access Restrictions	Applications & Gaming	Adminis
Basic Wireless Settings		Wireless Security	Guest Network	Wireless MAC Filter		
Basic Wireless Settings						
Network Mode:		Mixed				
Network Name (SSID):		Numele WiFi-ului				
Radio Band:		Auto				
Wide Channel:		Auto				
Standard Channel:		11 - 2.462GHz				
SSID Broadcast:		<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled				

5.

Wireless	Setup	Wireless	Security	Access Restrictions	Applications & Gaming	Adminis
Basic Wireless Settings		Wireless Security	Guest Network	Wireless MAC Filter		
Wireless Security						
Security Mode:		WPA Personal				
Encryption:		AES				
Passphrase:		o parola (ItaliaPa55)				

6. Wireless MAC Filter

SERVER

1. Nume: SERVER
2. Placa de rețea: PT-HOST-NM-1CGE (în slotul cel mai de sus)
3. Email
 - Your Name: SERVER
 - Email Address: SERVER@INFO.RO
 - Incoming Mail Server: DNS-ul
 - Outcoming Mail Server: DNS-ul
 - Username: SERVER
 - Password: 123456

4.

Physical	Config	Services	Desktop	Programming	Attributes
SERVICES					
HTTP					
DHCP					
DHCPv6					
TFTP					

HTTP

☐ On
 ☒ Off

HTTPS
 ☒ On
 ☐ Off

Physical Config **Services** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS**
- SYSLOG
- AAA
- NTP
- EMAIL

DNS

DNS Service ☒ On ☐ Off

Resource Records

Name Type

Address

Add **Save** **Remove**

5.

Physical Config **Services** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG**

Syslog

Syslog Service ☒ On ☐ Off

Time	HostName	Message
------	----------	---------

6.

Physical Config **Services** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL**
- FTP
- IoT
- VM Management
- Radius EAP

EMAIL

SMTP Service ☒ ON ☐ OFF

POP3 Service ☒ ON ☐ OFF

Domain Name: **Set**

User Setup

User Password

Se adaugă, pe rând, toate host-urile (SERVER + PC-URI)

+

7.

Physical Config **Services** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP**

FTP

Service ☒ On ☐ Off

User Setup

Username Password

☒ Write ☒ Read ☒ Delete ☒ Rename ☒ List

Se adaugă, ca mai devreme, toate host-urile

Add

8.