

Instituto Tecnológico de Estudios Superiores Monterrey

Campus Querétaro

Actividad 03: Configuración de equipos de interconexión para un museo

Profesor:

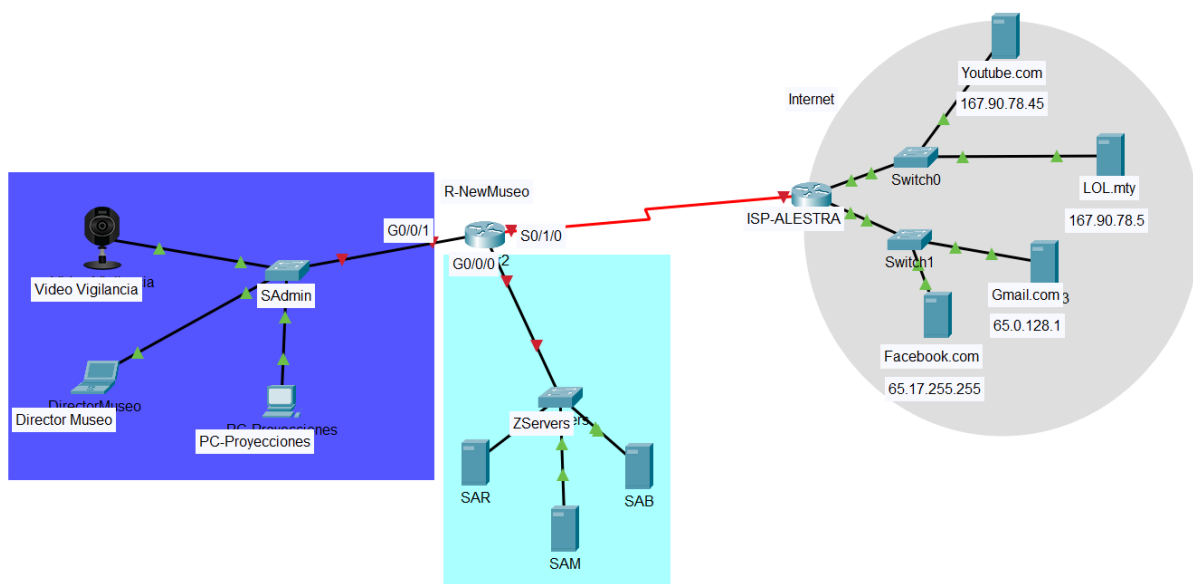
Oscar Hernandez

Presenta:

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A01703068

Fecha de entrega: 10/13/2022



Dispositivo	Interfaz	IP Address	Prefijo de red	Default Gateway
R-NewMuseo	G0/0/0	221.128.237.238	/28	N/A
	G0/0/1	221.128.237.190	/26	N/A
	S0/1/0	223.255.255.114	/30	N/A
Switch ZServers	VLAN 1	221.128.237.237	/28	221.128.237.238
Switch SAdmin	VLAN 1	221.128.237.189	/26	221.128.237.190
Director Museo	NIC	221.128.237.129	/26	221.128.237.190
PC-Proyecciones	NIC	221.128.237.130	/26	221.128.237.190
Video Vigilancia	NIC	221.128.237.131	/26	221.128.237.190
SAB	NIC	221.128.237.225	/28	221.128.237.238
SAM	NIC	221.128.237.226	/28	221.128.237.238
SAR	NIC	221.128.237.227	/28	221.128.237.238

Configuración del router

```
!=====
! Configuración del router R-NewMuseo
!=====
```

```
! Cambiar al modo privilegiado
enable
```

```
! Establecer hora y fecha
clock set 22:00:00 Oct 13 2022
```

```
! Configuración global del equipo
configure terminal
```

```
! Banner
banner motd # Estás entrando al equipo
R-NewMuseo, que está protegido. Si decides entrar
estás cometiendo un delito. #
```

```
! Nombrar el equipo
hostname R-NewMuseo
```

```
! Deshabilitar el DNS
no ip domain-lookup
```

```
! Proteger y cifrar todos los passwords
service password-encryption
```

```
! Cambiar al modo privilegiado
enable secret class
```

```
! Protección de la línea de la consola
line console 0
  password cisco
  login
  logging sync
```

```
! Protección para el acceso remoto
line vty 0 4
  password cisco
  login
  logging sync
```

```
! Configuración de interfaces
interface G0/0/0
  description Interfaz que da servicio a la red local de los servidores
  ip address 221.128.237.238 255.255.255.240
  no shutdown
```

```
interface G0/0/1
  description Interfaz que da servicio a la red local de administración
  ip address 221.128.237.190 255.255.255.192
  no shutdown
```

```
interface s0/1/0
  description Interfaz con el ISP
  ip address 223.255.255.114 255.255.255.252
  no shutdown
```

```
ip route 0.0.0.0 0.0.0.0 s0/1/0
```

Configuración del switch ZServers

```
!=====
! Configuración del switch ZServers
!=====
```

```
! Cambiar al modo privilegiado
enable
```

```
! Establecer hora y fecha
clock set 22:00:00 Oct 13 2022
```

```
! Configuración global del equipo
configure terminal
```

```
! Banner
banner motd # Estás entrando al equipo
ZServers, que está protegido. Si decides entrar
estás cometiendo un delito. #
```

```
! Nombrar el equipo
hostname ZServers
```

```
! Deshabilitar el DNS
no ip domain-lookup
```

```
! Proteger y cifrar todos los passwords
service password-encryption
```

```
! Establecer el modo de seguridad
! Cambiar al modo privilegiado
enable secret class
```

```
! Protección de la línea de la consola
line console 0
  password cisco
  login
  logging sync
```

```
! Protección para el acceso remoto
line vty 0 15
  password cisco
  login
  logging sync
```

```
! Asignación de IP a la VLAN 1 (SVI)
interface vlan 1
ip address 221.128.237.237 255.255.255.240
description Dirección IP para el equipo ZServers
no shutdown
```

```
ip default-gateway 221.128.237.238
```

Configuración del switch SAdmin

```
!=====
! Configuración del switch SAdmin
!=====
```

```
! Cambiar al modo privilegiado
enable
```

```
! Establecer hora y fecha
clock set 22:00:00 Oct 13 2022
```

```
! Configuración global del equipo
configure terminal
```

```
! Banner
banner motd # Estás entrando al equipo
SAdmin, que está protegido. Si decides entrar
estás cometiendo un delito. #
```

```
! Nombrar el equipo
hostname SAdmin
```

```
! Deshabilitar el DNS
no ip domain-lookup
```

```
! Proteger y cifrar todos los passwords
service password-encryption
```

```
! Establecer el modo de seguridad
! Cambiar al modo privilegiado
enable secret class
```

```
! Protección de la línea de la consola
line console 0
  password cisco
  login
  logging sync
```

```
! Protección para el acceso remoto
line vty 0 15
  password cisco
  login
  logging sync
```

```
! Asignación de IP a la VLAN 1 (SVI)
interface vlan 1
ip address 221.128.237.189 255.255.255.192
  description Dirección IP para el equipo SAdmin
  no shutdown
```

```
ip default-gateway 221.128.237.190
```

Prueba de configuración (show running)

ZServers

```
ZServers
Physical Config CLI Attributes

ZServers(config-if)#do show run
Building configuration...

Current configuration : 1513 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname ZServers
!
enable secret 5 $1$mERr$9cTjUIEqNGurQiFU.ZeCi1
!
!
!
no ip domain-lookup
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1
!
interface FastEthernet0/2
!
interface FastEthernet0/3
!
interface FastEthernet0/4
!
interface FastEthernet0/5
!
interface FastEthernet0/6
!
interface FastEthernet0/7
!
interface FastEthernet0/8
!
interface FastEthernet0/9
!
interface FastEthernet0/10
```

SAdmin

```
SAdmin
Physical Config CLI Attributes

SAdmin#show running
Building configuration...

Current configuration : 1506 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname SAdmin
!
enable secret 5 $1$mERr$9cTjUIEqNGurQiFU.ZeCi1
!
!
!
no ip domain-lookup
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1
!
interface FastEthernet0/2
!
interface FastEthernet0/3
!
interface FastEthernet0/4
!
interface FastEthernet0/5
!
interface FastEthernet0/6
!
interface FastEthernet0/7
!
interface FastEthernet0/8
!
interface FastEthernet0/9
!
interface FastEthernet0/10
```

R-NewMuseo

```
Router2
Physical Config CLI Attributes

R-NewMuseo(config)#do show running
Building configuration...

Current configuration : 1237 bytes
!
version 15.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname R-NewMuseo
!
!
!
enable secret 5 $1$mERr$9cTjUIEqNGurQiFU.2eCi1
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
--More--
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1/0, changed state to up
!
!
!
!
!
!
!
no ip domain-lookup
!
!
spanning-tree mode pvst
!
!
```

PING a los servidores

Desde PC Proyecciones

```
PC-Proyecciones
Physical Config Desktop Programming Attributes

Command Prompt
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
  Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 221.128.237.225

Pinging 221.128.237.225 with 32 bytes of data:

Reply from 221.128.237.225: bytes=32 time<1ms TTL=127
Reply from 221.128.237.225: bytes=32 time<1ms TTL=127
Reply from 221.128.237.225: bytes=32 time=7ms TTL=127
Reply from 221.128.237.225: bytes=32 time<1ms TTL=127

Ping statistics for 221.128.237.225:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 7ms, Average = 1ms

C:\>ping 221.128.237.226

Pinging 221.128.237.226 with 32 bytes of data:

Reply from 221.128.237.226: bytes=32 time=12ms TTL=127
Reply from 221.128.237.226: bytes=32 time<1ms TTL=127
Reply from 221.128.237.226: bytes=32 time=7ms TTL=127
Reply from 221.128.237.226: bytes=32 time<1ms TTL=127

Ping statistics for 221.128.237.226:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 12ms, Average = 4ms

C:\>ping 221.128.237.227

Pinging 221.128.237.227 with 32 bytes of data:

Reply from 221.128.237.227: bytes=32 time<1ms TTL=127
Reply from 221.128.237.227: bytes=32 time=7ms TTL=127
Reply from 221.128.237.227: bytes=32 time<1ms TTL=127
Reply from 221.128.237.227: bytes=32 time<1ms TTL=127

Ping statistics for 221.128.237.227:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 7ms, Average = 1ms
```

Desde DirectorMuseum

```
DirectorMuseum
Physical  Config  Desktop  Programming  Attributes

Command Prompt
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 221.128.237.225

Pinging 221.128.237.225 with 32 bytes of data:

Reply from 221.128.237.225: bytes=32 time<1ms TTL=127
Reply from 221.128.237.225: bytes=32 time<1ms TTL=127
Reply from 221.128.237.225: bytes=32 time<1ms TTL=127
Reply from 221.128.237.225: bytes=32 time<1ms TTL=127

Ping statistics for 221.128.237.225:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 221.128.237.226

Pinging 221.128.237.226 with 32 bytes of data:

Reply from 221.128.237.226: bytes=32 time=11ms TTL=127
Reply from 221.128.237.226: bytes=32 time=1ms TTL=127
Reply from 221.128.237.226: bytes=32 time<1ms TTL=127
Reply from 221.128.237.226: bytes=32 time=7ms TTL=127

Ping statistics for 221.128.237.226:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 11ms, Average = 4ms

C:\>ping 221.128.237.227

Pinging 221.128.237.227 with 32 bytes of data:

Reply from 221.128.237.227: bytes=32 time<1ms TTL=127
Reply from 221.128.237.227: bytes=32 time<1ms TTL=127
Reply from 221.128.237.227: bytes=32 time<1ms TTL=127
Reply from 221.128.237.227: bytes=32 time<1ms TTL=127

Ping statistics for 221.128.237.227:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Desde Video Vigilancia

```
Video Vigilancia
Specifications  I/O Config  Physical  Config  Desktop  Thing Editor  Progra

Command Prompt
Cisco Packet Tracer Thing Command Line 1.0
root@Thing:>ping 221.128.237.225

Pinging 221.128.237.225 with 32 bytes of data:

Reply from 221.128.237.225: bytes=32 time<1ms TTL=127
Reply from 221.128.237.225: bytes=32 time<1ms TTL=127
Reply from 221.128.237.225: bytes=32 time<1ms TTL=127
Reply from 221.128.237.225: bytes=32 time<1ms TTL=127

Ping statistics for 221.128.237.225:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

root@Thing:>ping 221.128.237.226

Pinging 221.128.237.226 with 32 bytes of data:

Reply from 221.128.237.226: bytes=32 time<1ms TTL=127
Reply from 221.128.237.226: bytes=32 time<1ms TTL=127
Reply from 221.128.237.226: bytes=32 time<1ms TTL=127
Reply from 221.128.237.226: bytes=32 time<1ms TTL=127

Ping statistics for 221.128.237.226:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

root@Thing:>ping 221.128.237.227

Pinging 221.128.237.227 with 32 bytes of data:

Reply from 221.128.237.227: bytes=32 time<1ms TTL=127
Reply from 221.128.237.227: bytes=32 time<1ms TTL=127
Reply from 221.128.237.227: bytes=32 time<1ms TTL=127
Reply from 221.128.237.227: bytes=32 time<1ms TTL=127

Ping statistics for 221.128.237.227:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

root@Thing:>|
```


PING a los switches y al router

Desde Video Vigilancia

```
Video Vigilancia
Specifications Physical Config Desktop Attributes
Command Prompt
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

root@Thing:/>ping 221.128.237.189

Pinging 221.128.237.189 with 32 bytes of data:

Reply from 221.128.237.189: bytes=32 time<1ms TTL=255
Reply from 221.128.237.189: bytes=32 time<1ms TTL=255
Reply from 221.128.237.189: bytes=32 time<1ms TTL=255
Reply from 221.128.237.189: bytes=32 time<1ms TTL=255

Ping statistics for 221.128.237.189:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

root@Thing:/>ping 221.128.237.190

Pinging 221.128.237.190 with 32 bytes of data:

Reply from 221.128.237.190: bytes=32 time<1ms TTL=255
Reply from 221.128.237.190: bytes=32 time<1ms TTL=255
Reply from 221.128.237.190: bytes=32 time<1ms TTL=255
Reply from 221.128.237.190: bytes=32 time<1ms TTL=255

Ping statistics for 221.128.237.190:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

root@Thing:/>ping 221.128.237.237

Pinging 221.128.237.237 with 32 bytes of data:

Reply from 221.128.237.237: bytes=32 time<1ms TTL=254
Reply from 221.128.237.237: bytes=32 time<1ms TTL=254
Reply from 221.128.237.237: bytes=32 time<1ms TTL=254
Reply from 221.128.237.237: bytes=32 time<1ms TTL=254

Ping statistics for 221.128.237.237:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Desde Director Museo

```
DirectorMuseo
Physical Config Desktop Programming Attributes
Command Prompt
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 221.128.237.237

Pinging 221.128.237.237 with 32 bytes of data:

Reply from 221.128.237.237: bytes=32 time<1ms TTL=254
Reply from 221.128.237.237: bytes=32 time<1ms TTL=254
Reply from 221.128.237.237: bytes=32 time<1ms TTL=254
Reply from 221.128.237.237: bytes=32 time<1ms TTL=254

Ping statistics for 221.128.237.237:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 221.128.237.189

Pinging 221.128.237.189 with 32 bytes of data:

Request timed out.
Reply from 221.128.237.189: bytes=32 time<1ms TTL=255
Reply from 221.128.237.189: bytes=32 time<1ms TTL=255
Reply from 221.128.237.189: bytes=32 time<1ms TTL=255

Ping statistics for 221.128.237.189:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 221.128.237.190

Pinging 221.128.237.190 with 32 bytes of data:

Reply from 221.128.237.190: bytes=32 time<1ms TTL=255
Reply from 221.128.237.190: bytes=32 time<1ms TTL=255
Reply from 221.128.237.190: bytes=32 time<1ms TTL=255
Reply from 221.128.237.190: bytes=32 time<1ms TTL=255

Ping statistics for 221.128.237.190:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Desde PC Proyecciones

```
PC-Proyecciones
Physical Config Desktop Programming Attributes
Command Prompt
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
  Minimum = 0ms, Maximum = 7ms, Average = 1ms

C:\>ping 221.128.237.237

Pinging 221.128.237.237 with 32 bytes of data:

Reply from 221.128.237.237: bytes=32 time<1ms TTL=254
Reply from 221.128.237.237: bytes=32 time<1ms TTL=254
Reply from 221.128.237.237: bytes=32 time<1ms TTL=254
Reply from 221.128.237.237: bytes=32 time<1ms TTL=254

Ping statistics for 221.128.237.237:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
      Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 221.128.237.189

Pinging 221.128.237.189 with 32 bytes of data:

Request timed out.
Reply from 221.128.237.189: bytes=32 time<1ms TTL=255
Reply from 221.128.237.189: bytes=32 time<1ms TTL=255
Reply from 221.128.237.189: bytes=32 time<1ms TTL=255

Ping statistics for 221.128.237.189:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
      Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 221.128.237.190

Pinging 221.128.237.190 with 32 bytes of data:

Reply from 221.128.237.190: bytes=32 time<1ms TTL=255
Reply from 221.128.237.190: bytes=32 time<1ms TTL=255
Reply from 221.128.237.190: bytes=32 time<1ms TTL=255
Reply from 221.128.237.190: bytes=32 time<1ms TTL=255

Ping statistics for 221.128.237.190:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
      Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Acceso a ZServers por medio de Telnet

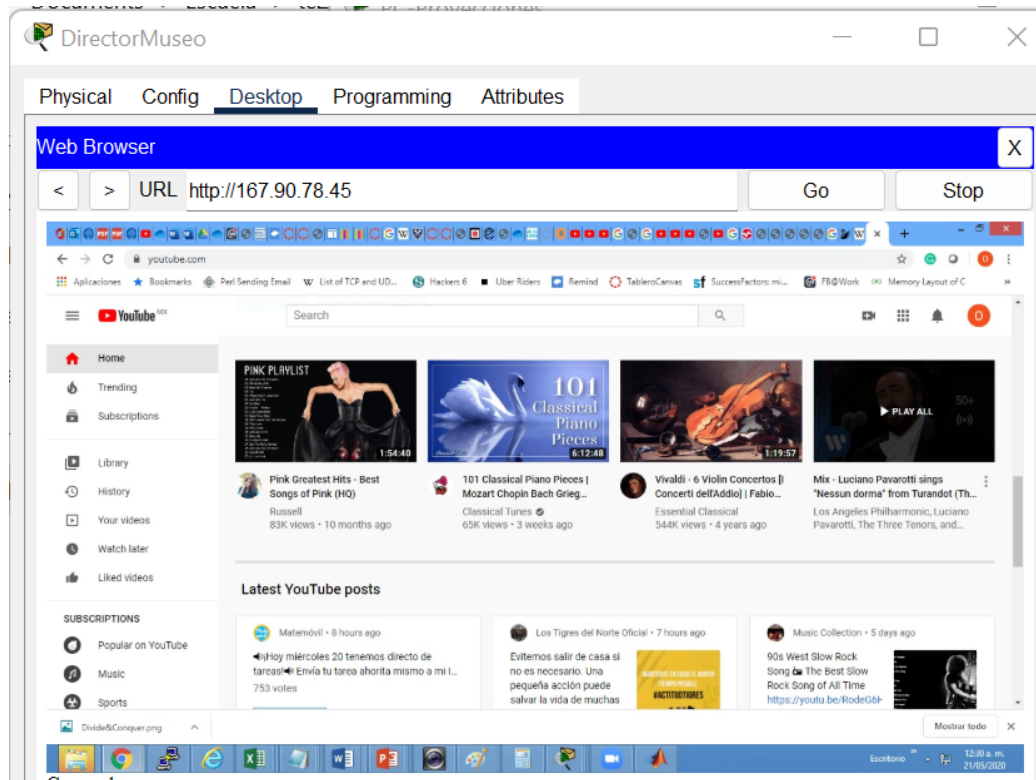
```
PC-Proyecciones
Physical Config Desktop Programming Attributes
Command Prompt
[Connection to 221.128.237.237 closed by foreign host]
C:\>telnet 221.128.237.237
Trying 221.128.237.237 ...Open Estds entrando al equipo
ZServers, que est protegido. Si decides entrar
estd cometiendo un delito.

User Access Verification

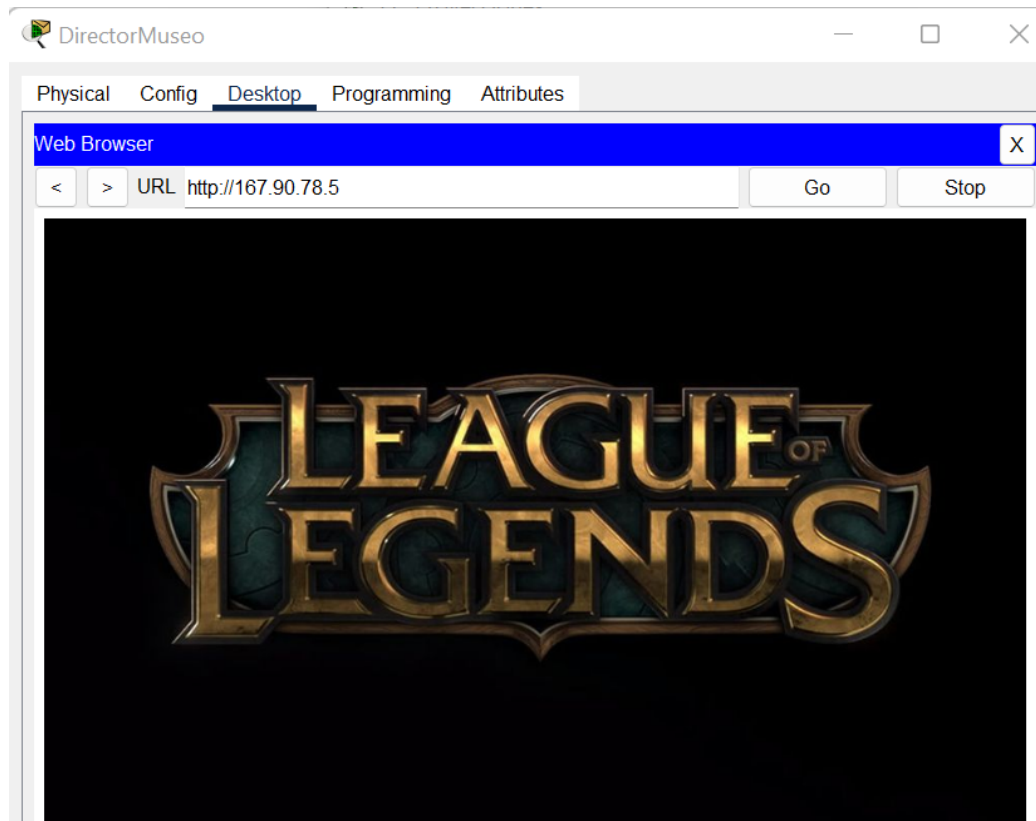
Password:
ZServers>enable
Password:
ZServers#
```

Acceso a la Web

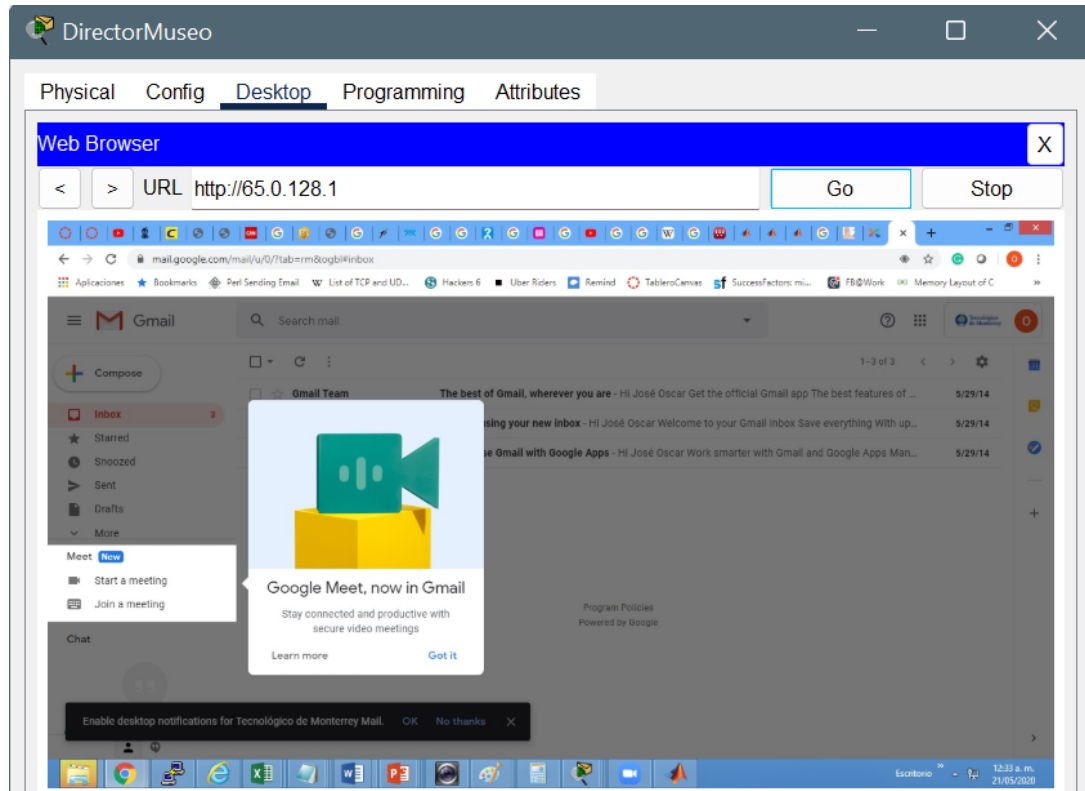
Youtube



LOL



Gmail



Facebook

