

Information Security Lab Digital Assignment 3

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21BCT0438



Enabling security commands

Router(config)#license boot module c2900 technology-package securityk9

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Activation of the software command line interface will be evidence of your acceptance of this agreement.

ACCEPT? [yes/no]: yes

% use 'write' command to make license boot config take effect on next boot

%LICENSE-6-EULA_ACCEPTED: EULA for feature securityk9 1.0 has been accepted.
UDI=CISCO2911/K9:FTX1524ZW80-; StoreIndex=0:Evaluation License Storage

Router(config)#: %IOS_LICENSE_IMAGE_APPLICATION-6-LICENSE_LEVEL: Module name = C2900 Next
reboot level = securityk9 and License = securityk9

Router(config)#exit

Router#

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

Router#reload

System configuration has been modified. Save? [yes/no]:yes

Building configuration...

[OK]

Proceed with reload? [confirm]

System Bootstrap, Version 15.1(4)M4, RELEASE SOFTWARE (fc1)

Technical Support: <http://www.cisco.com/techsupport>

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Total memory size = 512 MB - On-board = 512 MB, DIMM0 = 0 MB

CISCO2911/K9 platform with 524288 Kbytes of main memory

Main memory is configured to 72/-1(On-board/DIMM0) bit mode with ECC disabled

Readonly ROMMON initialized

program load complete, entry point: 0x80803000, size: 0x1b340

program load complete, entry point: 0x80803000, size: 0x1b340

IOS Image Load Test

Digitally Signed Release Software

program load complete, entry point: 0x81000000, size: 0x3bcd3d8

Self decompressing the image :

[OK]

Smart Init is enabled

smart init is sizing iomem

TYPE MEMORY_REQ

Onboard devices &

buffer pools 0x022F6000

TOTAL: 0x022F6000

Rounded IOMEM up to: 36Mb.

Using 6 percent iomem. [36Mb/512Mb]

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Cisco IOS Software, C2900 Software (C2900-UNIVERSALK9-M), Version 15.1(4)M5, RELEASE SOFTWARE (fc2) Technical Support: <http://www.cisco.com/techsupport>

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Image text-base: 0x2100F918, data-base: 0x24729040

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<http://www.cisco.com/wwl/export/crypto/tool/stqrg.html>

Configure the ZONES

```
Router(config)#zone security IN-ZONE
Router(config-sec-zone)#exit
Router(config)#zone security OUT-ZONE
Router(config-sec-zone)#exit
Router(config)#
```

Create an access list

```
Router(config)#access-list 101 permit ip 192.168.4.0 0.0.0.255 any
```

Identify a traffic using class-map

```
Router(config)#class-map type inspect match-all IN-NET-CLASS-MAP
Router(config-cmap)#match access-group 101
```

Specify firewall policies

```
Router(config)#policy-map type inspect IN-TO-OUT
Router(config-pmap)#class type inspect IN-NET-CLASS-MAP
Router(config-pmap-c)#exit
```

Apply Firewall Policies

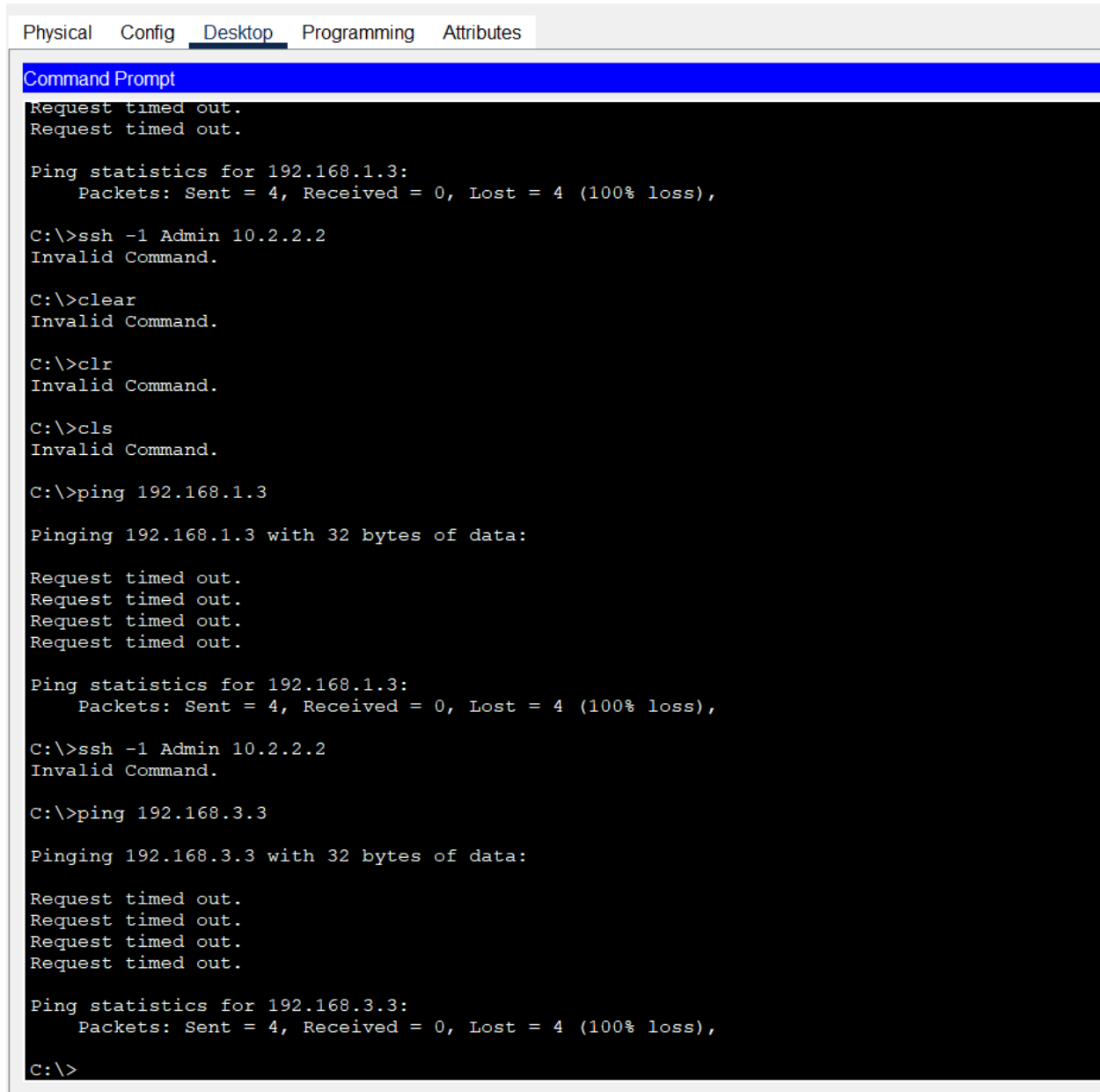
```
Router(config)#zone-pair security in-to-out-zpair source IN-ZONE destination OUT-ZONE
Router(config-sec-zone-pair)#service-policy type inspect IN-TO-OUT
```

Assign the interfaces to the correct zone

```
Router(config)#int g0/1
```

```
Router(config-if)#zone-member security IN-ZONE
Router(config-if)#exit
Router(config)#int g0/0
Router(config-if)#zone-member security OUT-ZONE
Router(config-if)#exit
```

Final Output



```
Physical  Config  Desktop  Programming  Attributes
Command Prompt
Request timed out.
Request timed out.

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ssh -l Admin 10.2.2.2
Invalid Command.

C:\>clear
Invalid Command.

C:\>clr
Invalid Command.

C:\>cls
Invalid Command.

C:\>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ssh -l Admin 10.2.2.2
Invalid Command.

C:\>ping 192.168.3.3

Pinging 192.168.3.3 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.3.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```