



**UNIVERSIDAD AUTÓNOMA DE CHIAPAS**

**LICENCIATURA EN INGENIERIA EN DESARROLLO  
Y TECNOLOGIAS DE SOFTWARE**



# **CONMUTADORES Y REDES INALAMBRICAS**

## **Actividad 2.4**

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Semestre: 7

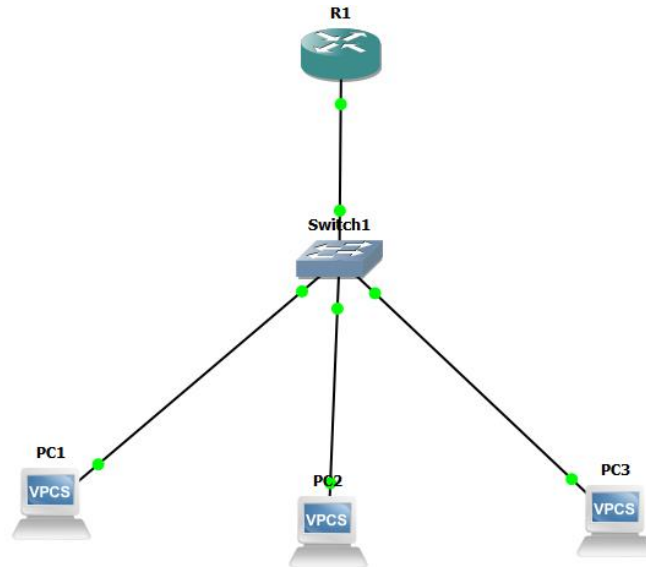
Grupo: M

Fecha de entrega: 18/11/23

## Configuración de DHCP en Router Cisco usando GNS3

Configurar dhcp con tres dispositivos de pc, un switch y un router.  
El router debe enviar dhcp

### TOPOLOGIA:



### Configuración del Router (c7200) usando la red 192.15.5.0

```
R1
*Mar 1 00:00:00.303: %C1700-3-BADIMAGE: The IOS image loaded supports voice. The platform you are running is not voice cap
able.
*Mar 1 00:00:00.303: %C1700-3-BADIMAGE: The IOS image loaded supports voice. The platform you are running is not voice cap
able.
*Mar 1 00:00:01.739: %LINEPROTO-5-UPDOWN: Line protocol on Interface VoIP-Null0, changed state to up
*Mar 1 00:00:01.915: %SYS-5-CONFIG_I: Configured from memory by console
*Mar 1 00:00:02.139: %SYS-5-RESTART: System restarted --
Cisco IOS Software, C1700 Software (C1700-ADVENTERPRISEK9-M), Version 12.4(25d), RELEASE SOFTWARE (fc1)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2010 by Cisco Systems, Inc.
Compiled Wed 18-Aug-10 03:53 by prod_rel_team
*Mar 1 00:00:02.151: %SNMP-5-COLDSTART: SNMP agent on host R1 is undergoing a cold start
*Mar 1 00:00:02.303: %LINK-5-CHANGED: Interface FastEthernet0, changed state to administratively down
*Mar 1 00:00:03.303: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0, changed state to down
R1#ena
R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#hostname Routerp
Routerp(config)#ip address 192.15.5.1 255.255.255.0
^
% Invalid input detected at '^' marker.
Routerp(config)#interface fa0
Routerp(config-if)#ip address 192.15.5.1 255.255.255.0
Routerp(config-if)#no shutdown
Routerp(config-if)#exit
Routerp(config)#
*Mar 1 00:03:43.139: %LINK-3-UPDOWN: Interface FastEthernet0, changed state to up
*Mar 1 00:03:44.139: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0, changed state to up
Routerp(config)#ip dhcp pool LGMG
Routerp(dhcp-config)#network 192.15.5.0 255.255.255.0
Routerp(dhcp-config)#default-router 192.15.5.1
Routerp(dhcp-config)#dns-server 8.8.8.8
Routerp(dhcp-config)#exit
Routerp(config)#
```

## Solicitud de DHCP a las PC's



The screenshot shows a terminal window titled 'Virtual PC Simulator, version 0.6.2'. The window has tabs for 'R1', 'PC1', 'PC2', and 'PC3'. The 'PC1' tab is active. The terminal output shows the simulator's welcome message, version information, and license details. It then shows the execution of a startup file. The prompt 'PC1>' is followed by the command 'dhcp', which results in the output 'DDORA IP 192.15.5.2/24 GW 192.15.5.1'. The prompt 'PC1>' is followed by a green cursor. The bottom of the window shows the 'solarwinds' logo and the text 'Solar-PuTTY free tool' and '© 2019-2023 SolarWinds Worldwide, LLC. All rights reserved.'

```
Welcome to Virtual PC Simulator, version 0.6.2
Dedicated to Daling.
Build time: Apr 10 2019 02:42:20
Copyright (c) 2007-2014, Paul Meng (mirnshi@gmail.com)
All rights reserved.

VPCS is free software, distributed under the terms of the "BSD" licence.
Source code and license can be found at vpcs.sf.net.
For more information, please visit wiki.freecode.com.cn.

Press '?' to get help.

Executing the startup file

PC1> dhcp
DDORA IP 192.15.5.2/24 GW 192.15.5.1

PC1> █
```

solarwinds | Solar-PuTTY free tool © 2019-2023 SolarWinds Worldwide, LLC. All rights reserved.

**PC1: 192.15.5.2**



The screenshot shows a terminal window titled 'Virtual PC Simulator, version 0.6.2'. The window has tabs for 'R1', 'PC1', 'PC2', and 'PC3'. The 'PC2' tab is active. The terminal output shows the simulator's welcome message, version information, and license details. It then shows the execution of a startup file. The prompt 'PC2>' is followed by the command 'dhcp', which results in the output 'DDORRA IP 192.15.5.3/24 GW 192.15.5.1'. The prompt 'PC2>' is followed by a green cursor. The bottom of the window shows the 'solarwinds' logo and the text 'Solar-PuTTY free tool' and '© 2019-2023 SolarWinds Worldwide, LLC. All rights reserved.'

```
Welcome to Virtual PC Simulator, version 0.6.2
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For more information, please visit wiki.freecode.com.cn.

Press '?' to get help.

Executing the startup file

PC2> dhcp
DDORRA IP 192.15.5.3/24 GW 192.15.5.1

PC2> █
```

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**PC2: 192.15.5.3**



```
Welcome to Virtual PC Simulator, version 0.6.2
Dedicated to Daling.
Build time: Apr 10 2019 02:42:20
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Source code and license can be found at vpcs.sf.net.
For more information, please visit wiki.freecode.com.cn.

Press '?' to get help.

Executing the startup file

PC3> dhcp
DDORA IP 192.15.5.4/24 GW 192.15.5.1

PC3> █
```

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**PC3: 192.15.5.4**

**El router realiza el dhcp correctamente.**