#### N10-008 labs errata

Green font indicates that CompTIA has corrected the issue Blue font indicates content in this document that has not been submitted to CompTIA

## **Lab 00: Exploring the Lab Environment**

Section: Explore Windows VMs

Comment: In the paragraph about DC10 (JOIN) it says it has an IP address of 10.1.0.1. The

actual IP address is 10.1.16.1/24

In paragraph about MS10 (JOIN) it says it has an IP address of 10.1.0.2. The actual IP address is 10.1.16.2/24

## Lab 01: Configure a SOHO Router

Section: Use Diagnostics to review IP address information Step 2: Instructions say: Select **Overview > Network > eth1** 

It should say: Select Status > Overview > Scroll down to Network > eth1

Lower down still in step 2:

Lab says:

- Reserved Class A 10.0.0.0
- Reserved Class B 172.16.0.0
- Reserved Class C 192.168.0.0

Comment: Definition of Private (RFC 1918) addresses is incomplete. It should say (for completeness):

- Reserved Class A 10.0.0.0/8
- Reserved Class B 172.16.0.0/12
- Reserved Class C 192.168.0.0/16

For example, the way it is shown makes it seem that ONLY 172.16.0.0 comprises the Class B private address range. The actual range is 172.16.0.0 through 172.31.255.255. The /12 mask clarifies that.

James actually changed it to:

- Reserved Class A 10.x.y.z
- Reserved Class B 172.16.x.y 172.31.x.y
- Reserved Class C 192.168.x.y

#### Lab 03: Configure Interface Settings

Section: Configure managed switch

Step 5: typo - "supported" is written as "supporteded"

# Lab 04: Configure IPv4 Static Addressing

Section: Change IP address

```
Step 3 asks what error message. Comment: My lab showed:

C:\Windows\system32>ping 10.1.16.1

Pinging 10.1.16.1 with 32 bytes of data:
Reply from 10.1.254.2: Destination host unreachable.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 10.1.16.1:
    Packets: Sent = 4, Received = 1, Lost = 3 (75% loss),

C:\Windows\system32>ping 10.1.16.1

Pinging 10.1.16.1 with 32 bytes of data:
Reply from 10.1.254.2: Destination host unreachable.
```

Comment: Selecting "Destination host unreachable" is scored as incorrect. A second attempt resulted in all four responses being "Destination host unreachable." The scoring will only accept "Request timed out" as the correct answer.

## Changed to:

What error message is displayed?

- Transmit failed general failure
- Request timed out
- Reply from DC10
- Reply from 10.1.16.1

#### Correct

Section: Use another subnet mask

Step 3 asks what message appeared. Comment: My lab showed both "Destination net unreachable" AND "Request timed out." Only "Destination net unreachable" is accepted as the correct answer.

```
PS C:\Windows\system32> ping 10.1.254.2

Pinging 10.1.254.2 with 32 bytes of data:

Reply from 10.1.16.254: Destination net unreachable.

Request timed out.

Reply from 10.1.16.254: Destination net unreachable.

Request timed out.
```

## Changed to:

What message is displayed for this ping?

- Reply from MS10
- Destination host unavailable
- Reply from 10.1.16.2
- Destination net unreachable

Correct

## Lab 05: Analyze Arp Traffic

Section: Investigate ARP

Step 1: Comment: Says to run the command in a command prompt, yet the previous section said to leave PowerShell open. If the goal is to see if the student knows how to launch the command prompt, then the next screenshot is incorrect, as it shows the command being executed in PowerShell.

Step 13: Comment: The correct answer [ff:ff:ff:ff:ff] has an extra colon at the end [ff:ff:ff:ff:ff:].

#### Lab 06: Use Tools to Test IP Configuration

Comment: When accessing DC10 for the first time, an error appeared regarding bginfo.ini file (I didn't get a screenshot - sorry). Restarted, error did not recur.

Section: Configure a network interface in Windows

Step 9 says Right-click on the **dc10.corp.515support.com** node, select **All Tasks**, and then select **Stop** to stop the DHCP service.

Comment: You must expand the node in the left column at least once. If the node has never been expanded, the options (including **Stop**) in All Tasks> are grayed out. {This same issue occurs in Lab 12 as well.}

Changed to:

Select and then right-click the **dc10.corp.515support.com** node, select **All Tasks**, and then select **Stop** to stop the DHCP service.

Section: Analyze NetworkManager configuration

Step 1 Currently says: On the PC10 VM, and then use the Firefox web browser...

Comment: Grammatical construction - better wording suggestion: Return to the PC10 VM, ... or On the PC10 VM, use the Firefox...

## Lab 07: Configure IPv6 Static Addressing

Section: Observe IPv6 configuration on DC10

Step 6 explanation says: The address uses the fd::/8 prefix defined in RFC 4192 for unique local addressing (ULA). This is the equivalent of RFC 1918 private addressing for IPv4.

Comment: The RFC number is incorrect. It should say RFC 4193. RFC 4192 does not mention ULA. Additionally, RFC 4193 defines ULA in this way (verbatim quote):

"Prefix FC00::/7 prefix to identify Local IPv6 unicast addresses."

Comment: Therefore, fd::/8 as mentioned in the lab explanation is incorrect.

Added note - this exact same error existed in the N10-007 labs.

Section: Analyze IPv6 Packets

Step 5 says: Stop the capture in Wireshark and the view the output. You should see ICMPv6 reply packets from **fd0:2413:6d1c:20::1**.

Comment: The first hexadecimal quartet should be **fdf0**:, not **fd0**:.

#### **Lab 08: Configure Static Routing**

Step 8: Asks: What IP address and mask **must** be configured on the other interface? [Bold added]

The dropdown hint says:

Identifying the IP

Router A is connected to Router B via the subnet 10.0.2.0/24. As shown in the label, use the host part 254 for eth1, making its IP address 10.0.2.254.

Comment: Based on the /24 mask, the IP address on the interface can be *any* address between 10.0.2.1 - 10.0.2.254 inclusive, except for 10.0.2.253, which is in use by RouterB. If the goal is to limit the address to ONLY .254, then the mask must be /30. Yet it will only accept one answer - .254. CompTIA explained that the goal was to configure the router to match the topology diagram, which IS .254, so all is well.

Comment: At the conclusion of the lab, routing in the topology is incomplete. From RouterA or PC1, attempt to ping the 10.0.3.0/24 network (at either address: 10.0.3.253 or 10.0.3.254), the ping(s) will fail because RouterA does not have a path to the 10.0.3.0/24 network. This is not really an error, but if the point of the lab is to have a completely configured network, then

enabling RouterA to reach RouterC should be part of the lab. It could be accomplished with a default route or a specific route to the 10.0.3.0/24 network.

Possible fixes:

On RouterA - configure a specific static route:

conf

set protocols static route 10.0.3.0/24 next-hop 10.0.2.253 commit && save && exit

Or, it can be accomplished with a default route on RouterA:

conf

set protocols static route 0.0.0.0/24 next-hop 10.0.2.253

commit && save && exit

Either solution will allow the aforementioned ping(s) to succeed.

CompTIA's comment on this is: the useful function of the network is for PC1 and PC2 to be able to communicate.

So you are welcome to adjust the configuration using either method noted above, or just consider the lab complete if PC1 and PC2 can communicate.

#### Lab 10A: Troubleshoot IP Networks

Section: Explore network address configurations

Which of the following represent the class A, B, and C reserved IP address ranges?

169.254.0.0/16

127.0.0.0/8

192.168.0.0/24 Corrected to 192.168.0.0/16

127.0.0.1

172.16.0/12

10.0.0.0/8

Step 1, choice of answer for Class C Private Address range is incorrect. It should say 192.168.0.0/16. Class B answer is incorrect. It should be 172.16.0.0/12

#### **Lab 10B: Troubleshoot IP Networks**

Section: Configure a managed switch

Step 8 explanation: In this configuration, there is no fowarding between the ports.

Comments: typo - forwarding is misspelled

Section: Configure RIP

Step 6 says: ... run the following commands to configure RIP to advertise connected routers over

the eth1 interace (the interface connected to RouterB):

Comments: typo - interface is misspelled

#### **Lab 11: Use Network Scanners**

Section: Scenario

It says: You will use two different network scanners (nmap and Netdicover) to investigate

Comment: typo - Netdiscover is misspelled

Section: Scan targets with Nmap

Step 8: In a snippet of the explanatory note in section: Target: rLAN10 router

You know that open port 3389 is a Remote Deskto Protocol (RDP) server - a service commonly used

by Windows.

Comment: typo - desktop is misspelled

Section: Wireshark capture and analyze TCP and UDP

#### Step 7, second question

Which Destination Port is displayed in the User Datagram Protocol section of the middle pane?

080

○ 53

0 443

A randomly-selected port number



It's marked as incorrect. Here is a screenshot of the UDP information in the middle pane:

> User Datagram Protocol, Src Port: 53, Dst Port: 46714
> Domain Name System (response)

It shows the randomly selected port (46714, in this case).

The instructions merely say to select the first DNS packet in the upper pane. To guarantee the destination port will be 53, which is clearly the intent, the instructions should say to select a DNS packet in the top pane where the Info column shows "Standard query" but not "Standard query response." *CompTIA clarified: In the upper pane, select the first DNS packet where the type is query (listed as "Standard query" in the Info field).* 

### **Lab 12: Analyze a DHCP Server Configuration**

Section: Scenario says, You will examine an existing DHCP implemenation for two subnets,

including reserved addresses

Comment: typo - implementation is misspelled

Section: Examine DHCP configuration

Step 4 says: This shows which hosts have an active lease. You should be able to see the SMB10 and LAMP10 hosts.

## Comment: What I actually see:

Client IP Address	Name	Lease Expiration
<b>10.1.16.10</b>		Reservation (inactive)
<b>10.1.16.11</b>		Reservation (inactive)
<b>10.1.16.12</b>	lamp10.corp.515suppor	Reservation (active)
10.1.16.20		Reservation (inactive)
<b>I</b> 10.1.16.192	kali.corp.515support.com	Reservation (active)

SMB10 (by name) does not appear as indicated.

Step 5 says: For example, a reservation has been configured for SMB10 so that we can be confident it will be reachable on 10.1.16.11, even if a name record has not been configured.

There is no explanation about how this confidence is achieved. Since SMB10 does not appear here either (by name), adding these instructions would be helpful:

Right-click on [10.1.16.11]. Click Properties. Observe that SMB10 is listed in the Description field. When finished, click Cancel to close the properties sheet.

This would provide the reasoning for why lab users can be confident that SMB10 is reachable. CompTIA made no changes to the text, but now the address leases screen looks like this:

	Client IP Address	Name	Lease Expiration
	<b>10.1.16.10</b>	lx10.corp.515suppo	Reservation (inactive)
	<b>₹</b> 10.1.16.11	smb10.corp.515sup	Reservation (inactive)
1	<b>5</b> 10.1.16.12	lamp10.corp.515su	Reservation (active)
1	₹ 10.1.16.20		Reservation (inactive)
	<b>E</b> 10.1.16.192	kali.corp.515suppor	Reservation (active)

So SMB10 shows on the list.

Section: Configure DHCP replication

Step 6 says: On the **Authorization** screen, select **Use alternate credentials**, **Specify** and then

enter 515support\Administrator and Pa\$\$w0rd.

Comment: Once the credentials are specified, click OK.

Step 8 says: Right-click **MS10.corp.515support.com**, select **All Tasks** and then select **Restart**. Comment: First, expand the node **ms10.corp.515support.com**. If the node has never been expanded, the Restart option is grayed out.

If this is implemented, there is no need to expand the node in step 9.

CompTIA adjusted the instructions: Select MS10.corp.515support.com and then right-click and select All Tasks and then select Restart.

Lab 15: The Resources tab has an incorrect password for the kali box. It shows Password! The Procedures tab still mentions the correct password, and you can't paste into the kali box anyway, so just be aware of it.

Labs 15, 16 & 18 (any lab that uses gedit on Ubuntu) Error messages appear when saving changes to files as root:

```
labadmin@Udesktop:~$ sudo gedit /etc/rsyslog.conf

** (gedit:2133): WARNING **: 14:33:29.900: Set document metadata failed: Setting attribute metadata::gedit-spell-language not supported

** (gedit:2133): WARNING **: 14:33:29.901: Set document metadata failed: Setting attribute metadata::gedit-encoding not supported

** (gedit:2133): WARNING **: 14:37:45.500: Set document metadata failed: Setting attribute metadata::gedit-spell-language not supported

** (gedit:2133): WARNING **: 14:37:45.500: Set document metadata failed: Setting attribute metadata::gedit-encoding not supported

** (gedit:2133): WARNING **: 14:37:48.962: Set document metadata failed: Setting attribute metadata::gedit-position not supported
labadmin@Udesktop:~$
```

This appears to be a known bug. Avoid the issue by launching gedit (Text Editor) from the GUI, or just use nano from the command line to edit files, or instruct lab users to ignore the errors as inconsequential.

James (CompTIA) added this comment regarding gedit (in lab 15, section Configure the SSH server, step 6 gray box):

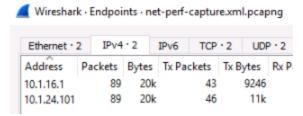
After saving the file and closing the editor, you might notice some warning messages about metadata in the console. You can ignore those.

# **Lab 17: Analyze Network Performance**

Section: Display network performance metrics

Step 3 says Observe that you can organize the results by protocols. Select **IPv4 - 4**.

Comment: My lab showed IPv4 - 2, not IPv4 - 4. To avoid this issue, the instructions could say to select the IPv4 tab without mentioning another number.



CompTIA adjusted by changing the instruction step to reference only IPv4 - no number after it. The also added this in a gray box in step 3: The number value after the dot on the tab is the count of endpoints for that protocol.

## **Lab 18: Verify Service and Application Configuration**

Section: Scan targets with Nmap Step 3 - expanded nmap options

shows: -sP pin sweep scan

Comment: typo - should say ping sweep scan

Section: Reserve an IP address in the DHCP service

Step 3: The [T] method of inserting the MAC address inserts colon separators. This will cause

an error. Either remove the colons after [T], or just manually type the MAC address.

## **Lab 19: Configure Remote Access**

Section: Review certificate templates Step 3, gray box typos in red font:

To see more detailed information about these certificates, right-click **Certificate Templates** and select **Manage**. For example, Domain Computers and Domain Controllers have been configured with different validity periods and security permissions.

Section: Review certificate templates

After step 8, there is an explanatory paragraph about IPSec. I'm not sure why it is there. The steps that were just performed have no bearing on IPSec. It says:

Verify that the network is functional and that all services are operating normally before applying the IPSsec policy.

Comment: I suggested to remove this note.

CompTIA explanation: The explanatory paragraph involves the next few steps of the lab, steps 9 - 11.

## **Lab 20: Develop Network Documentation**

Section: Scan the client network

Step 2, in the explanatory note about the spreadsheet it says: The idea is to learn what tools provide what infomrmation and what kind of settings might be considered part of network documentation.

Comment - typo: information is misspelled

Step 4 explanatory comment says You will gather more information thoughtout the lab to populate the spreadsheet.

Comment: typo - throughout is misspelled

Step 7 says Set the IP ranges to: 10.1.24.0 to 10.1.24.255 and then select **Scan**.

Comment: There is no need to select **Scan**. Just continue the instructions.

Step 11, after the question and possible answers, says Add the MAC address associated with 10.1.24.254 to the *Network devicest* page of the spreadsheet.

Comment: typo - that should say "devices to the appropriate"

Section: Scan the server segment

Step 5 says Select **Scan > Save Scan** to save the scan results. Whem prompted,

Comment: typo - should say "when"

Step 8, after the question, has explanatory note that says You know that open port 3389 is a Remote Deskto Protocol (RDP) server - a service commonly used by Windows.

Comment: typo - Desktop is misspelled

Section: Gather operating system details

Step 1 says On PC10, select the Start menu and then launch Server Manager. Use the Local

**Server** page to fill in the spreadsheet with the following informmation:

Comment: typo - information is misspelled

CompTIA corrected this one.

## Lab 21: Backup and Restore Network Device Configuration

Section: Connect to pfSense

Step 4 says The **pfSense Status\Dashboard** page opens automatically. Observe the current system version and the uptime information.

Comment: This instruction should include the words "maximize the pfSense window."

If it is not maximized, then in step 5, **Diagnostics likely** will not be visible, the user must click the navigation (hamburger) icon to see it.

Section: Back up data on a Windows server

Step 8, the last part of the instruction: Select **Custom**, **Add Items**, and then browse drive **C**:. Tick

the box for **Users\iamie** to back up that user's files. Select **OK**.

Comment: typo - username is Jaime

CompTIA corrected this one.

Section: Back up a web site on a Linux server

Step 3 says While storing a backup job on the same server where the actual configuration files reside is not a good disaster recovery practice, it does make restorals based on accidental file changes or delections much quicker.

Comment: typo - deletions is misspelled. I do like the use of restoral throughout these labs.

Nice to see a word from the year 1605 still being used. :)

CompTIA corrected this one.

Section: Comprehensive questions

Question 1, one possible answer is:

Backups help ensure data is not lost and is therefore still accessible.

Comment: Pet peeve - 'data' - plural, 'is' - singular verb. Example: "Those tables is nice" versus "those tables are nice." That should say "data are" to be technically correct.

CompTIA changed the potential answer to: Backups help ensure data files are not lost and are therefore still accessible.

### Lab 22: Analyze an On-path Attack

Section: Run sniffing attack

Initial instructions say: With the attack in place, perform an action for the Kali host to intercept. You will make two different attempt to connect to the router at 10.1.16.254.

Comment: typo - that should say attempts

Section: Check ARP cache again

says: Type arp -a to display the cached ARP mappings.

The MAC address is displayed is associated with which network device?

Comment: First use of "is" should be deleted.

CompTIA corrected this one. It now says "The MAC address displayed is associated with which network device?"

## **Lab 23: Configure Port Security**

Comment: Why is this lab entitled port security? It should be named something to do with firewall configuration. Port Security typically refers to configuring allowed MAC addresses on switchports.

Section: Configure a router firewall rule

Step 4 says: Launch the Firefox web browser and type 10.1.16.254 in the address bar.

The pfSense login page appears.

Type admin for the Username and Pa\$\$w0rd for the Password.

Comment: Instructions could say:

Type admin for the Username and Pa\$\$w0rd for the Password and select login.

## Lab 24: Troubleshoot Service and Security Issues

Section: Document static DNS records

Step 3 says: Save the zone file as DNS-records.txt to the desktop of the Jaime account. Be sure you save the file to the Desktop folder and not the Documents folder.

Comment: The folder structure for the Jaime account does not exist on DC10. The instructions should mention the Administrator account, not the Jaime account.

In the absence of a Jaime > Desktop destination, save the file to the Desktop of the Administrator account. When graded, this is marked as correct.

Another (failed) method: As the lab begins, while logged in as Administrator, use ADUC to add the Jaime account to the Administrators group (if this is not done, Jaime can't log in to DC10), then sign out as Administrator and log in as Jaime. This will create the necessary directory structure. Once the profile creation is complete, sign out as Jaime, sign back in as Administrator, and perform the steps in "Document static DNS records" section of the lab as noted. If you do all this work and save the file to Jaime's Desktop, then Confirm that the DNS-records.txt file exists, it will be graded as incorrect.

Conclusion: Simply save the file to the Administrator's Desktop (and change the instructions to reflect this).

CompTIA corrected this by adjusting the instructions to mention the Administrator account, not the Jaime account.

Section: Document reserved DHCP clients

Step 2 says Select the **dc10.corp.515support.com** node and back up the entire DHCP configuration to Jaime's desktop.

Comment: Same as above, there is no directory structure for the Jaime user. As above, saving the file to the Administrator Desktop is graded as correct.

CompTIA corrected this by adjusting the instructions to mention the Administrator account, not

the Jaime account.