**GNS3 Lab**

**\*IF YOU HAVE ANY ISSUE ACCESSING OR DOING THE LAB, REFER TO BELOW TROUBLESHOOTING TECHNIQUES.**

Chrome is the supported browser and should be used.  There is a known issue with Firefox that will cause double typing.

**How to use our labs**

**Browsers**

Infosec learning supports Google Chrome. There are many complex functions that occur behind the scenes in our virtual environment and we want to make sure you have the best possible experience. Using Google Chrome as the browser will ensure this.

**Starting the Environment**

Every lab is different and you should familiarize yourself with it first. By clicking the "Start" button we begin creating your virtual environment. While this is happening you can begin looking through any of the information in this pane.

***Once your environment is started, the actual virtual machines (VM) might need another few minutes to finish starting up. You can think about starting our environment just like starting any computer in person, it takes a few minutes to fully power on.***

**Everything is HTML 5**

Our entire environment is built in HTML 5 and doesn't require any plugins. You will notice the left-hand side of the screen has an information panel that can be moved in and out to make the content larger or smaller. In fact, it can actually be closed to make the virtual topology on the right as large as possible.

**Clicking on a VM in the Topology**

When asked to access a specific VM in the network topology on the right- hand side of the screen, **click** on the needed VM and a window will pop up with that computer's desktop. Again, make sure you give the VMs time to fully start up.

**How our Design Helps You**

In each of our lab manuals there are a few things that you should keep in mind which will help you navigate through the labs.

1. Every action such as click, right-click, drag, open, etc., are in **bold type**.
2. Any time you have to type something (such as a command) we have highlighted the code in this font.

**Common Problems**

1. **I can't see my mouse.**

Are you using Google Chrome? If not, there are known issues with Firefox where the mouse continues to disappear. Once Firefox fixes this issue, we will all be much happier! In the meantime, you should download Google Chrome. We have also found that moving your mouse around quickly, many times brings the mouse back.

1. **The lab is broken because I can't get it to work.**

Although the lab environments are computers, we are human and sometimes mistakes happen. With that said, 9 out of 10 times we find something is being typed wrong or a step was missed by the user. Make sure you are typing exactly what you are supposed to type. Even the slightest error will cause a command not to work.

1. **Is there a Help Desk?**

Yes! Our help desk is here to provide you with technical support to make sure you can access your labs. What they can't do is take anything away from your instructor by answering questions about the content. With one click you can create a ticket with the help desk. The Help Desk section is located at the end of every lab. It is always helpful to include a screenshot with any issue.

1. **I am completely stuck and I can't find what I did wrong.​**

At the end of each lab there is a Help Desk Section, where you can submit a ticket.  Once a ticket is submitted, we will perform the lab from front to back to assure it is working as it should, and report back to you.  If the lab is not working, we will escalate the ticket to the engineering team to fix any problems.  The labs can be tricky at times and each time you start a lab, the steps must be performed front to back for all sections.

1. **My Windows VM is saying there are updates.**

Microsoft will periodically push updates and you might see a message regarding these updates. It's okay to disregard the message by closing the update window and completing the lab.