GNS3 uses an Idle PC value for the routers. This value controls the sample rate that is simulated by GNS3, by default this value is somewhat random and will cause your Instance to use 100% CPU and make working on your assignments slow and painful. Below is a guide to setting the right Idle PC value for GNS3.

1. First and foremost, login to your Instance (covered here based on your OS: Starting Instance, RDP for Macs, RDP for Windows, RDP for Linux)
2. We will need to start off by running Window’s Task Manager. We will need Task Manager in order to guage how well our Idle PC value has been set. Open the Start Menu and search for “taskmgr” select enter to open Task Manager.

3. Once Task Manager is open select the performance tab. We will want to make sure that CPU hovers around 50% MAX, and Memory 20-40% MAX.

4. Now open GNS3. This can be located in one of many place, although it should always be located in the Start Menu if not on the desktop or bar.
5. You will get a pop-up for loading a project. Go ahead and select cancel for now.

6. For now we will want to create a small topology. On the left hand side of GNS3 are the selections of equipment to add to our topology. You will only be able to use Router 2600, Ethernet Switch, and Virtualbox Guest. Go ahead and select Router 2600 and drag it into the center area. You will only need a router in the center location in order to apply the Idle PC value.

7. Your Middle section should now simple be a single router. In my topology I have added another router and two PCs. However, select the green play button atop the middle section.
8. Pay attention after starting the simulation to the Task Manager and the CPU usage. If the CPU usage goes above 60% then you can basically guarantee that it is your Idle PC value.

9. To modify the Idle PC value, right click on your 2600 Router. Select Idle PC.

10. A box will ask you if you would like to change the Idle PC value, select Yes. After a short load screen a new window will appear with a selection of different memory addresses, here I selected the first one in the list and applied it. It made no difference, so remember to check the Task Manager after selecting apply.
11. That's all there is to setting the Idle PC Value. Generally you should not need to change this value again, but if you find that your Instance is slowing down or sluggish, it is a good idea to check the Task Manager for the CPU Usage. If you go through each of the Idle PC values and the CPU still does not change, the problem is elsewhere.