Module 3 Lab 2: SNMP Operations Using MIB Browser (Workstation)

(NETLAB+)

SNMP Operations Using MIB Browser (Workstation)

Objective: To become familiar with SNMP operations by using a MIB browser

Overview: As you work through the lab, you will answer a total of nine questions using the 'Module 3 Lab 2: SNMP Operations Using MIB Browser' link in Module 3 of the online classroom. You will notice statements such as '**ANSWER QUESTION #**' and **QUESTION # [screenshot]** at the end of steps within the lab.

- Steps 11–13 and 15–16 have questions.
- No questions include screenshots.

Instructions

There are many MIB browsers available in the market. In this lab, we use iReasoning MIB Browser Personal Edition (http://www.ireasoning.com/mibbrowser.shtml), which is free. It is a GUI tool to manage SNMP enabled network devices and applications. It supports SNMPv1, SNMPv2c and SNMPv3 and allows users to load MIBs, issue SNMP requests, and receive traps.

START HERE

Step 1. Log into NetLab using a user ID and password provided by the instructor for this specific course. Create a lab reservation using the ISM4220C NetLab class > FSCJ - Network Management option. Schedule some time for the lab. Be realistic because by default, the lab time is one hour. If the time expires, you will have to start the lab from scratch. Your configuration and work are not kept.

Step 2. Access the Windows 10 computer by clicking on the Windows 10 tab at the top of the screen or by clicking once on the Windows 10 computer. Click on the desktop image and enter the password of **Password123**.

Step 3. In this step, you will configure Microsoft SNMP support for the Windows 10 computer. Access the Programs and Features Control Panel from the Windows 10 computer within NetLab. If you do not know how to access this, use a browser ON YOUR OWN COMPUTER (and not within NetLab) and search on the Internet for steps on how to do. Access the Turn Windows features on or off link > enable the Simple Network Management Protocol (SNMP) option > **OK**. You should get a message that Windows completed the requested changes. Note if you do not get this message, DO NOT PROCEED UNTIL THIS IS INSTALLED. REDO STEPS 2 & 3 UNTIL THEY WORK.

Step 4. Access the Administrative Tools Control Panel on the Windows 10 computer > double-click on the Services Control Panel.

Step 5. The services are listed in alphabetical order by default. Double-click on the **SNMP Service**. The goal is for this service to be started. If the Service status shows as "Running," click **OK**. If the Startup type is shown as anything else, change the Startup type to **Manual** using the drop-down menu. Click **OK**. Return to the SNMP Service and select the **Start** button > **OK** to start the service.

Step 6. From the **Security** tab, use the **Add** button to add a new community (in the *Community Name* textbox) called **private** (note that this is in lower case). Use the drop down *Community rights* to select **Read Write** > **Add** button. Note that the private community should be shown in the *Accepted community names* window. Click the **Apply** button > **OK** button.

Step 7. From the Services window, double-click on the **SNMP Trap** service. Set the Startup type to **Manual** > **OK**. , Return to the SNMP Trap service and select the **Start** button > **OK** to start the service. Close all windows on the Windows 10 computer.

Step 8. The iReasoning MIB browser has been installed on the Windows 10 computer in the NetLab environment. If you were to do this lab in an open lab at the Advanced Technology Center or some other location where the computer settings are allowed to be changed, then you could access this tool at http://www.ireasoning.com/mibbrowser.shtm. Double-click on the MIB Browser shortcut icon on the Windows 10 computer in the NetLab environment. The iReasoning MIB Browser window opens.

Step 9. In the *Address* textbox, type **127.0.0.1** as shown in *Figure 1*.

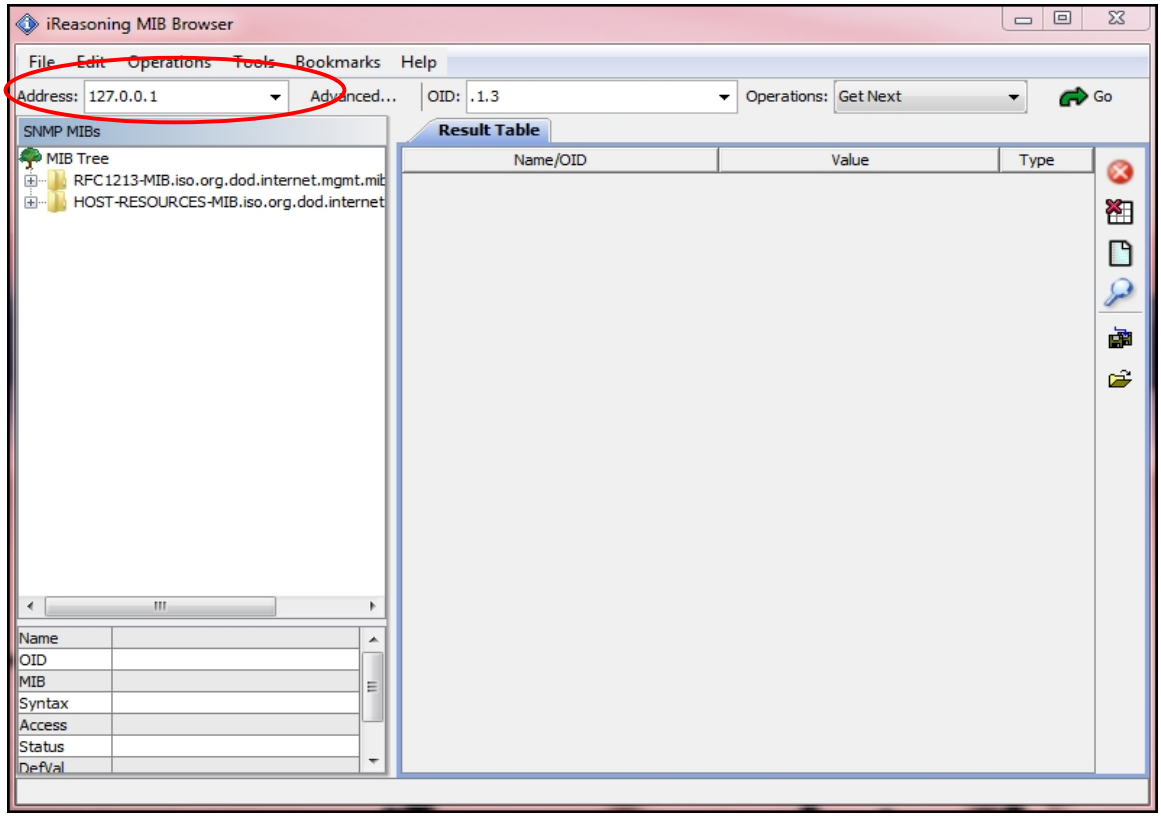

Figure 1. iReasoning MIB Browser address

Step 10. Access **Advanced** (the option to the immediate right of where you typed the address in). In the *Read Community* textbox, type **private** (note the lower case must match what we configured on the SNMP settings). Type **private** in the *Write Community* textbox > OK

Step 11. Notice how the MIB tree shows in the left window. You can expand the nodes by clicking on the plus (+) sign by each one. Expand the iso.org.dod.internet.mgmt.mib-2 and expand system. Click on system. **ANSWER QUESTION 1**.

Step 12. Click on the sysContact node. Notice the information in the bottom left of the screen. **ANSWER QUESTIONS 2–4**. Please write in your own words using complete sentences.

Note: Zero points are awarded for the entire lab if you copy the answer for Question 4.

Step 13. Use the *Operations* drop down menu to select the **Get** option. Notice how the information appears in the right window. Click the **Go** button. Notice how the same informational appears below the first line that you obtained. Notice how the value is blank. Note that in future questions, you may need to use various *Operations* options in order to **ANSWER QUESTIONS 5 and 6**.

Step 14. Select the sysContact.0 row in the right window. Use the *Operations* drop down menu to select Set. An SNMP SET window appears.

Step 15. In the Value textbox, type your own name > OK**. ANSWER QUESTIONS 7–10**.

Notes: Any time you want to start over and clear out the Result Table, use the **Clear Table** icon on the right. You might have to scroll through the entries to be able to answer the questions.

Step 16. Use the Get Next, Get, Get Bulk, Get Subtree, Walk, or Set Operations options to retrieve information of two OIDs you select. **Provide the textual and numeric names, data types and results in ANSWER QUESTION 11 that is worth 10 points.**