Q: How to enable write-buffer in the VxComm Driver/Utility?
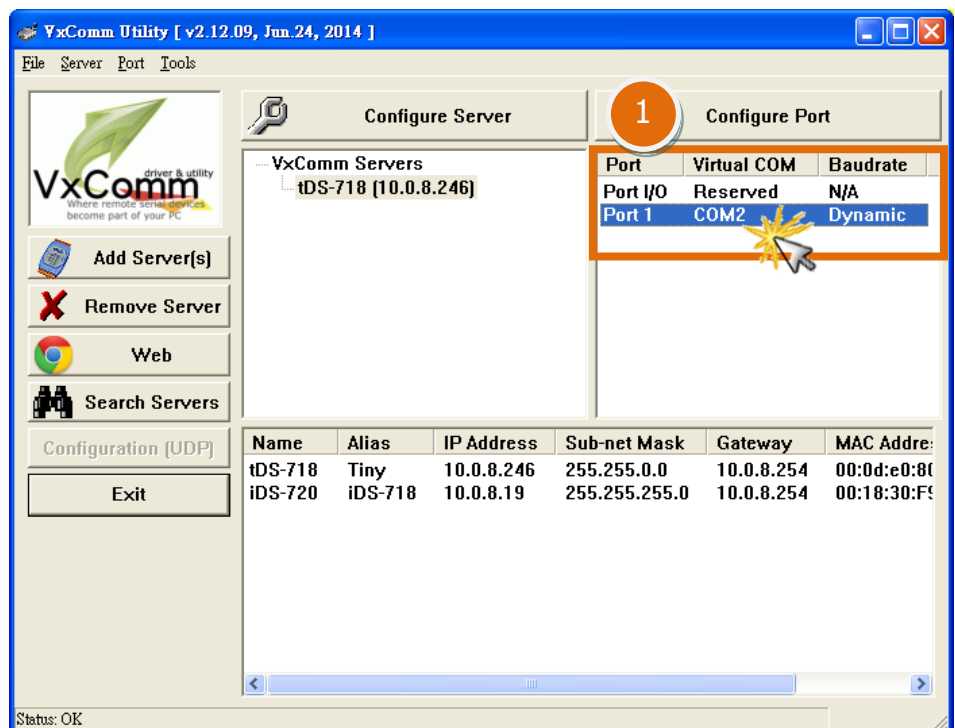
A: Some serial programs are only able to transmit one byte of data at a time, even if there is a large amount of data to be sent. This situation can cause a range of problems and leads to poor communication efficiency.

To resolve this issue, an option to "Enable Write-Buffer to collect small packets into big one" has been added to the VxComm Driver/Utility. By enabling this function, the driver will create a write-buffer for the virtual COM port, and the driver will then collect each single byte packet written from the serial program and then send it to the Ethernet in large packet, thereby improving the performance of the Ethernet communication.

The timeout value for the write-buffer can be adjusted using the Auto-Flush Interval parameter (50 ms by default), so that if no more data is transmitted from the serial program within the specified interval, the accumulated data is combined into a single packet and sent to the Ethernet.

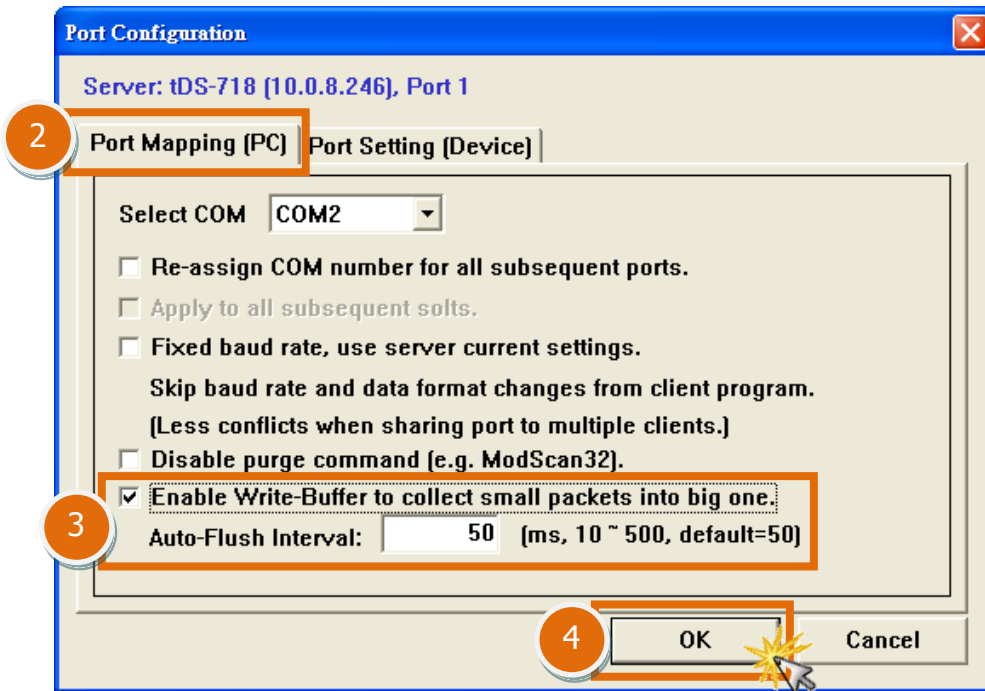To enable the write-buffer in the VxComm Utility, follow the procedure described below:

Step 1: Double-click the **Virtual COM port** of your device (e.g. the tDS-718 module) in the right-hand pane of VxComm Utility.

Step 2: In the **Port Configuration** dialog box, click the **"Port Mapping [PC]"** tab.

Step 3: Check the **"Enable Write-Buffer to collect small packets into big one"** option and set the Auto-Flush Interval time (default: 50 ms) to a suitable value depending on the requirements of your program.

Step 4: Click the **"OK"** button to complete the configuration.

Step 5: Ensure that all Virtual COM ports have been closed and then click the **"Restart Driver"** item from the **"Tools"** menu. Click **"Restart Driver"** button in the warning dialog box to restart the driver and complete the configuration process.