

Q. How to disable TCP ACK Delay time on Windows XP/7?

A: The TCP delayed acknowledgment is a technique used by some implementations of the Transmission Control Protocol in an effort to improve network performance. In essence, several ACK responses may be combined together into a single response to reduce the protocol overhead. However, the TCP layer does not know if the application will send ACK immediately or not, so it will delay sending an ACK response by up to 500 ms, and the remain data will be queued by the sender until an ACK is received. It will reduce the user's application performance. If you would like to enhance the application performance, to transfer data without the ACK delay, the following instructions guide you to disable the delayed ACK.

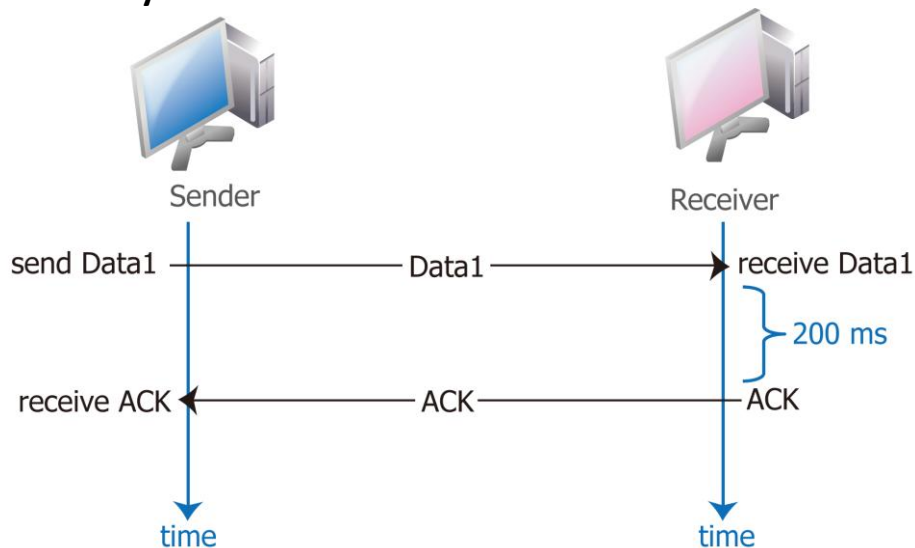


Figure 1-1

For Windows XP configuration

Step 1: Click the **"Start"** button and then click **"Run"** to open the **"Run Command"** dialog box. (If you wish to use keyboard shortcuts, press the [Windows logo key] + [R] to open the Run Command dialog box.)

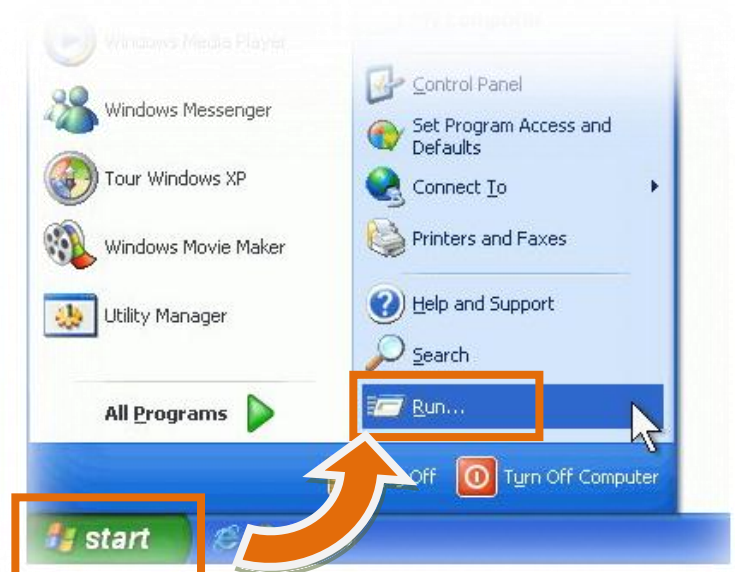


Figure 1-2

Step 2: In the “**Run Command**” dialog box, type “**regedit**” in the “**Open:**” field and then click the “**OK**” button to open a “Registry Editor” window, as indicated in Figure 1-3.

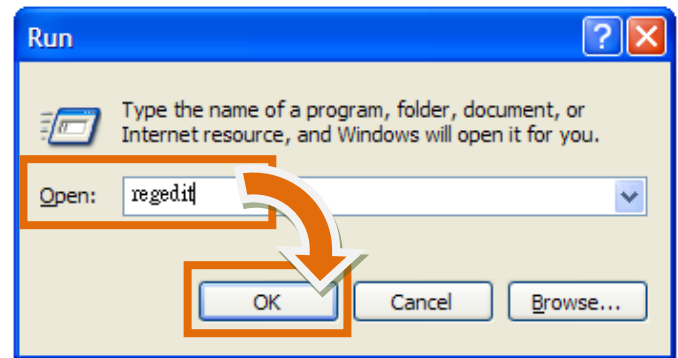


Figure 1-3

Step 3: In the left Pane of the “**Registry Editor**” window, click the **HKEY_LOCAL_MACHINE** → **SYSTEM** → **CurrentControlSet** → **services** → **Tcpip** → **Parameters** → **Interfaces** → {NIC-id}.

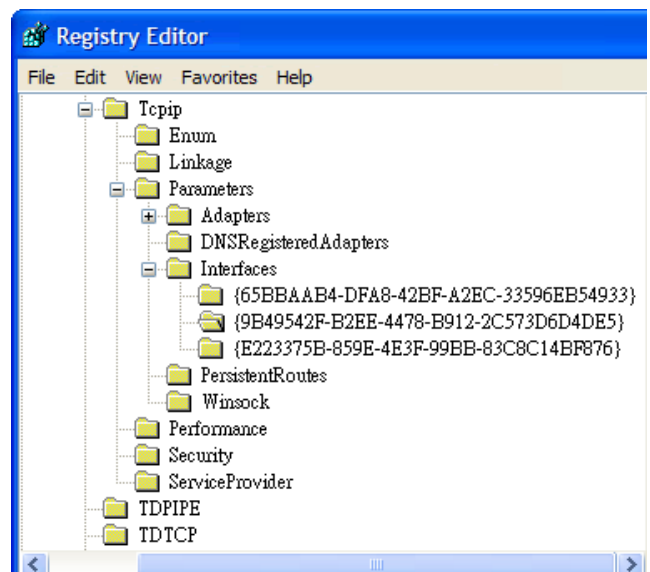


Figure 1-4

Step 4: Create “**DWORD Value**” registry keys called **TCPAckFrequency**, and double-click on new registry name and change the value from “**0**” to “**1**”.

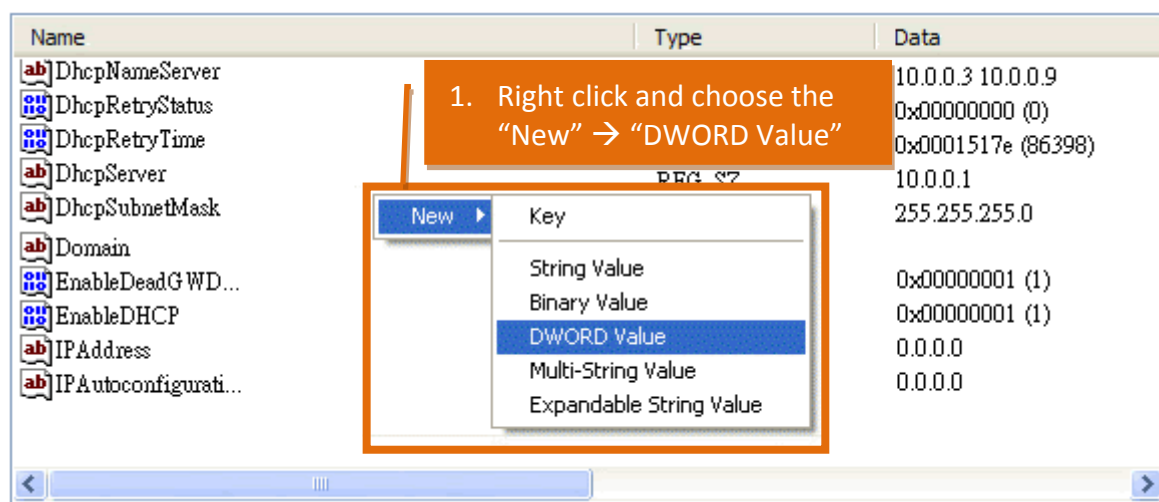


Figure 1-5

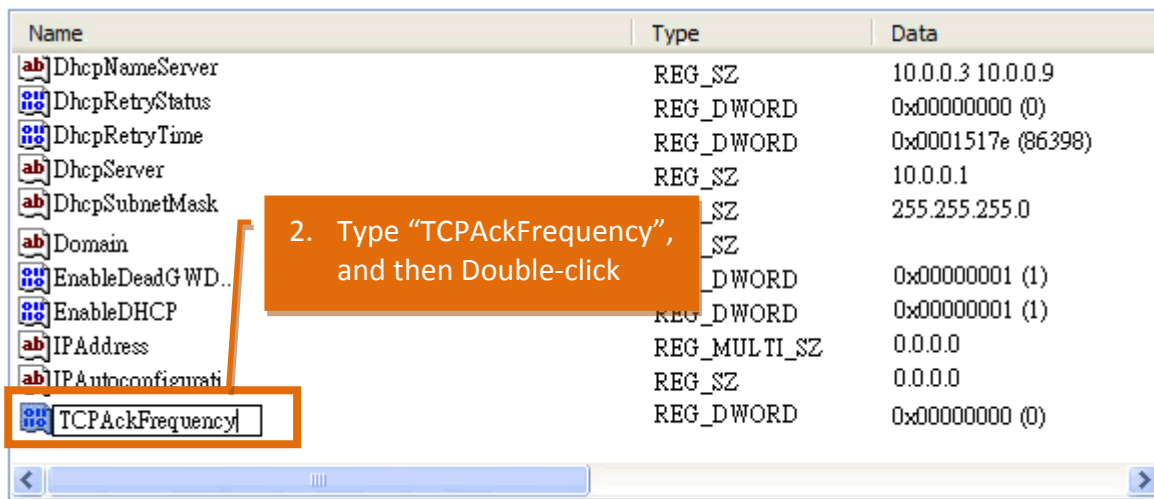


Figure 1-6

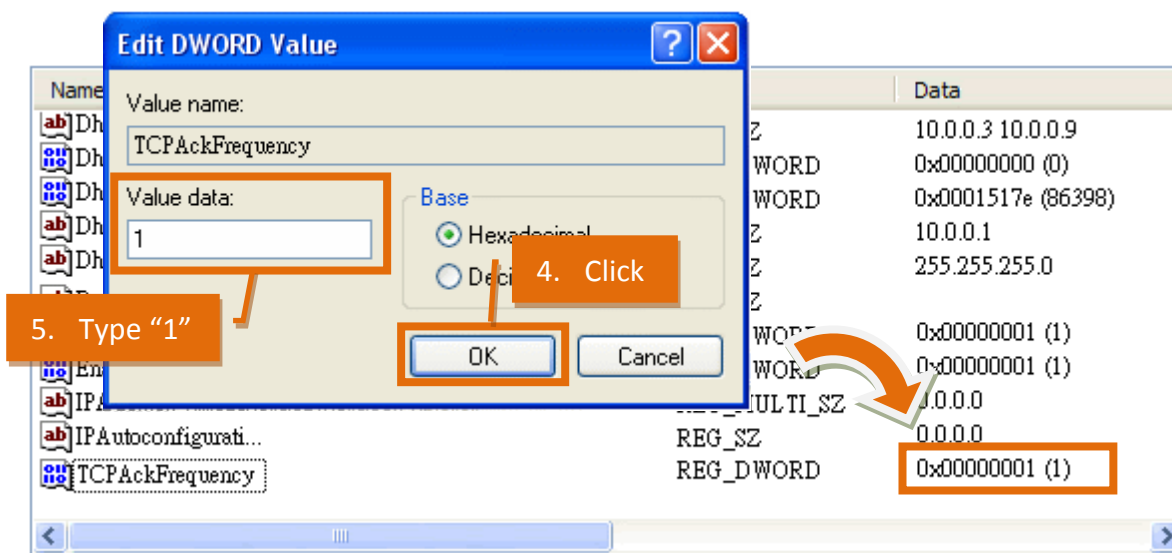


Figure 1-7

Step 5: In the left Pane of the “Registry Editor” window, click the **HKEY_LOCAL_MACHINE** → **SOFTWARE** → **Microsoft** → **MSMQ** → **Parameters**.

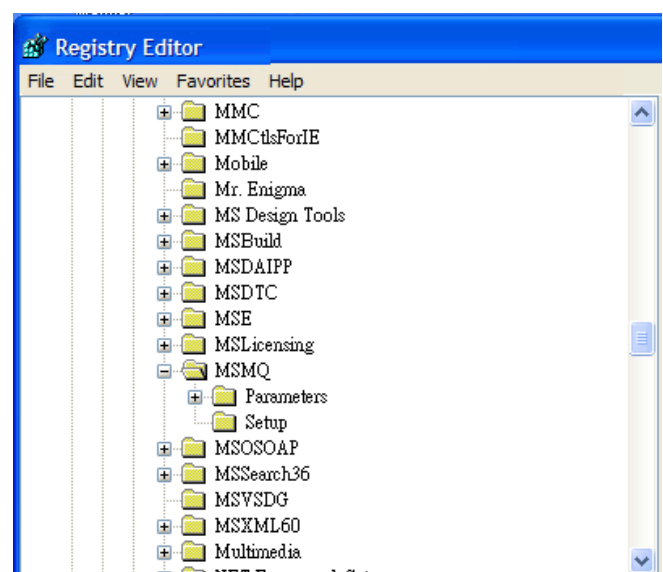


Figure 1-8

Step 6: Create **“DWORD Value”** registry keys called **TCPNoDelay**, and double-click on new registry key and change the value from **“0”** to **“1”**.

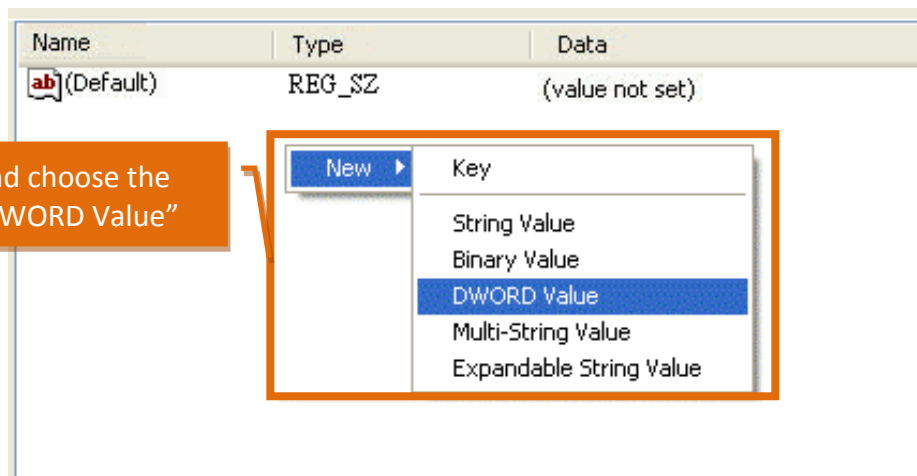


Figure 1-9

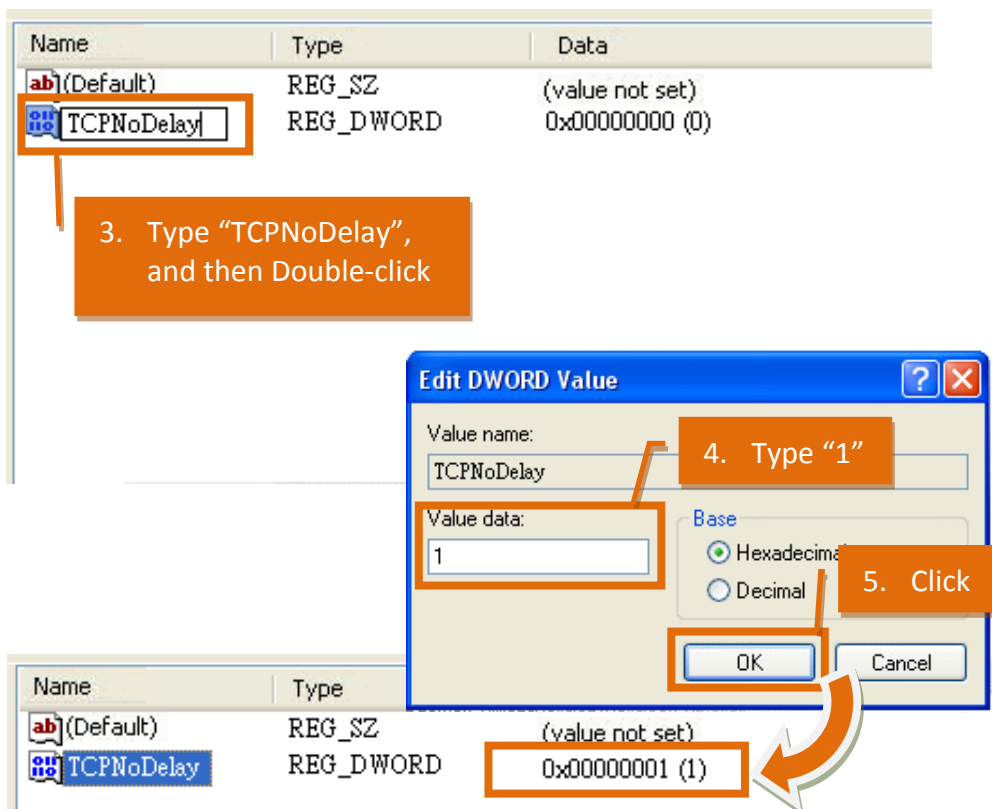


Figure 1-10

Figure 1-11

Step 7: Close **Registry Editor** window and **restart** the system to complete the configuration.

(Finish)

For Windows 7 configuration

Step 1: Click the **"Start"** button and then In the **Start Search box type "regedit"** and then press enters.

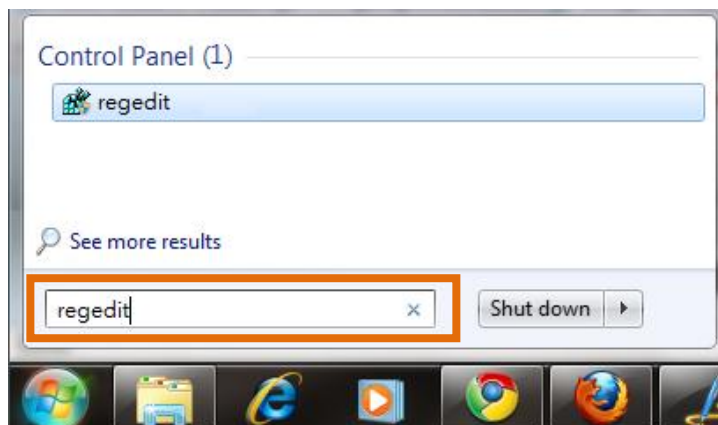


Figure 1-12

Step 2: In the left Pane of the **"Registry Editor"** window, click the **HKEY_LOCAL_MACHINE → SYSTEM → CurrentControlSet → services → Tcpip → Parameters → Interfaces → {NIC-id}**.

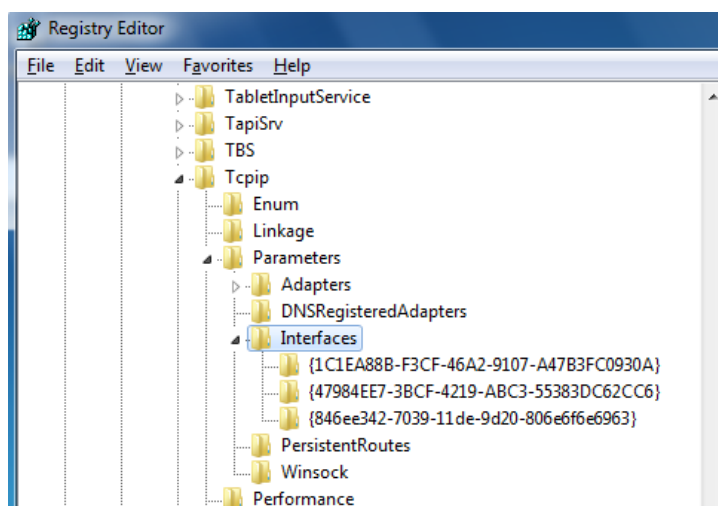


Figure 1-13

Step 3: Create two **"DWORD Value"** registry keys called **TCPAckFrequency** and **TCPNoDelay**, and double-click on new registry key and change the value from **"0"** to **"1"**.

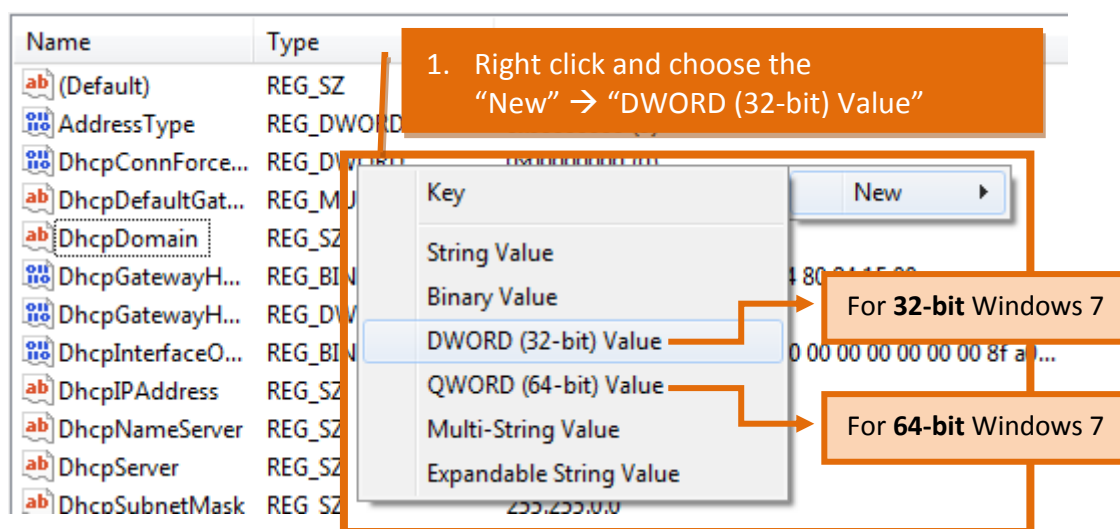


Figure 1-14

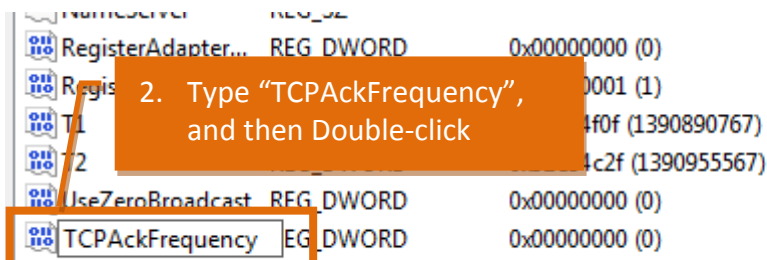


Figure 1-15

Figure 1-16

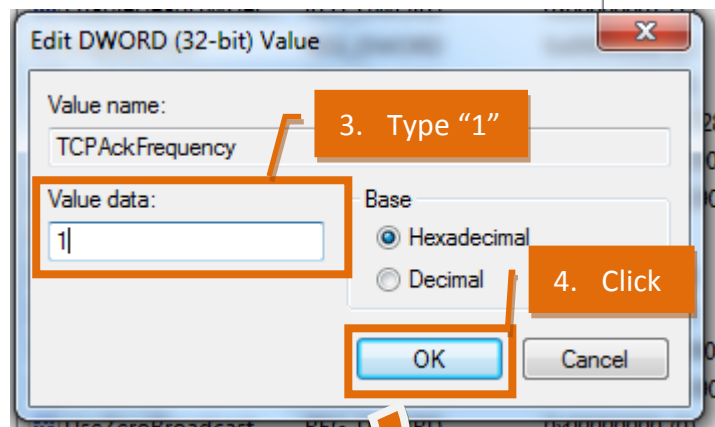


Figure 1-17

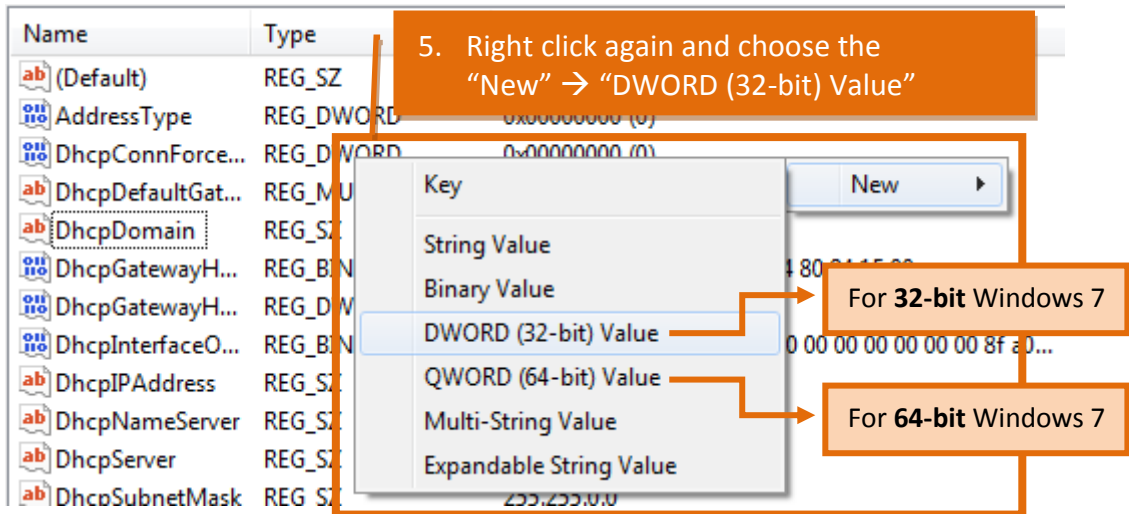
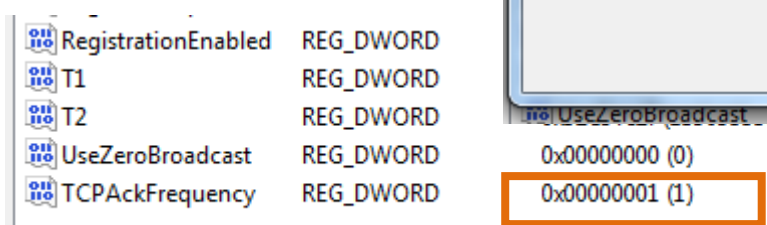


Figure 1-18

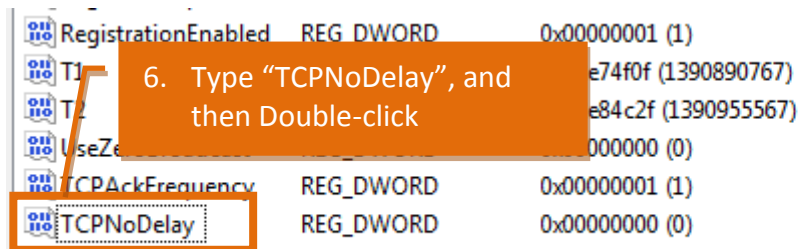


Figure 1-19

Figure 1-20

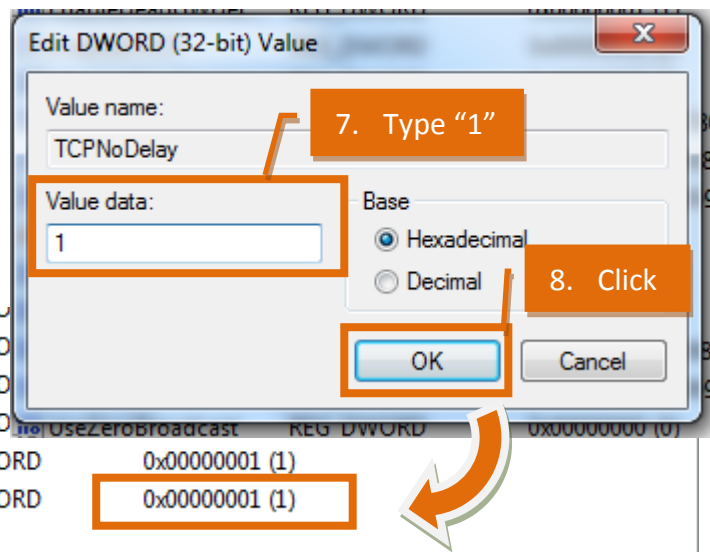


Figure 1-21

Step 4: Close **Registry Editor** window and **restart** the system to complete the configuration.

(Finish)