

2.4 (Alternative) Setup ZFM Connection Manually

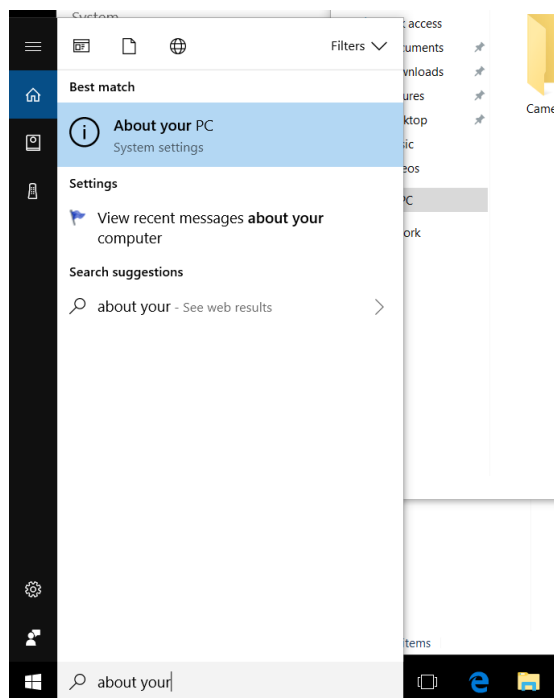
2.4.1 Verify and Update AnyConnect if Necessary

If this is a Dell Laptop running Windows 10 with Cisco AnyConnect, AnyConnect must be updated to 4.3 or higher, otherwise there is a threat the PC will error with a blue screen when connecting a ZoneFlex Manager. For all other configurations, skip to the 2.4.2 section.

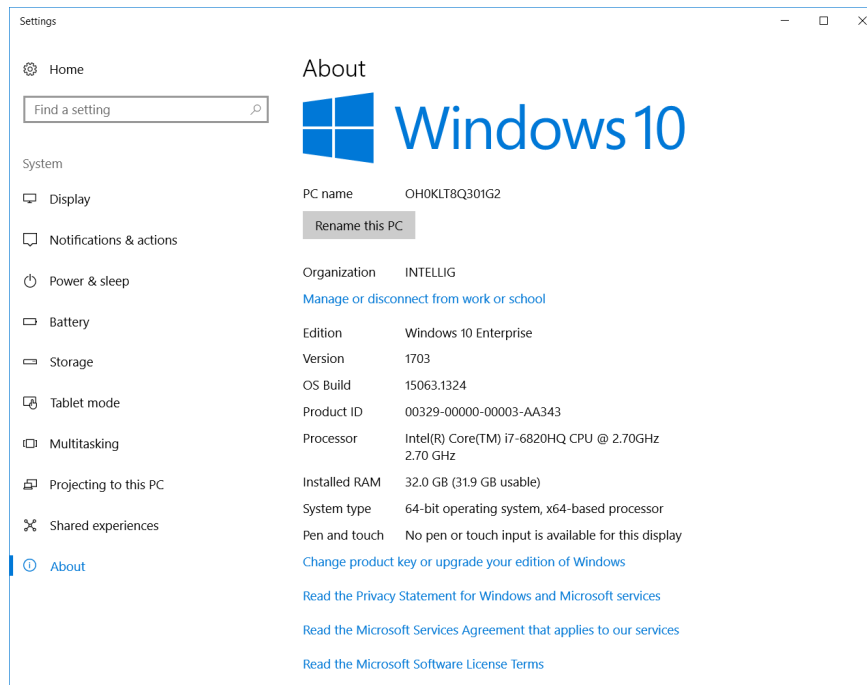
However, if you have Windows 7 or a non-Dell, then you can skip this and go onto 2.4.2.

To Check the Version of Windows

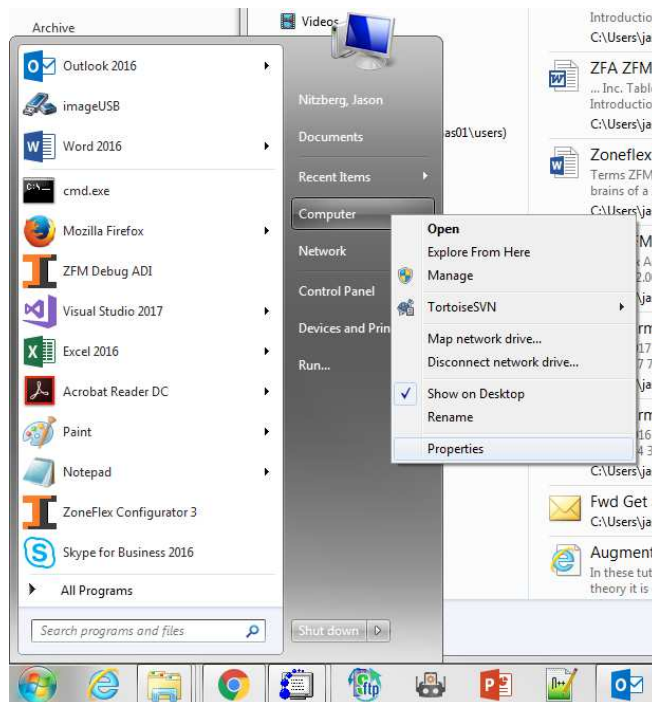
In your Search Bar, Type “About Your PC” and look for the version.



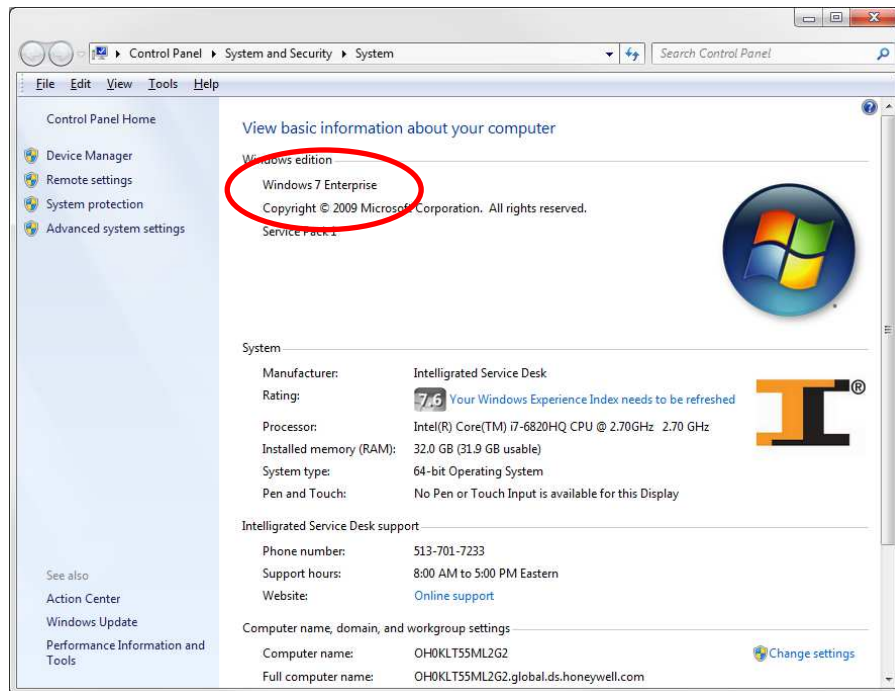
Toward the top should show the Windows version.



If your computer does not have About Your PC, right click on the Computer or My Computer icon found in your Start menu or on your desktop, and click Properties.

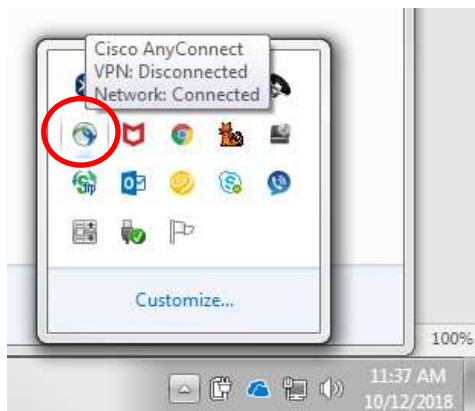


Look toward the top of your screen. The below example shows “Windows 7”.

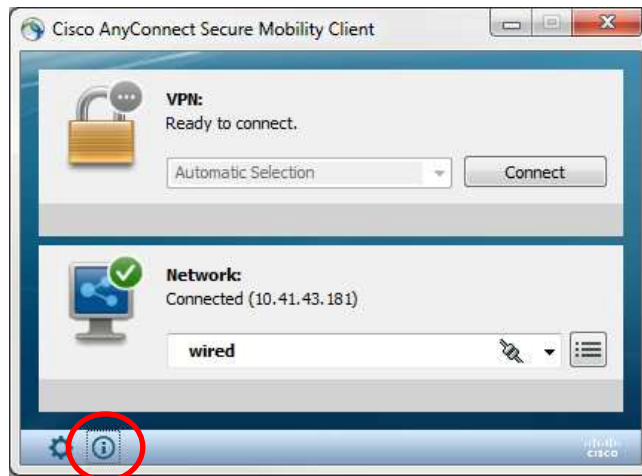


To Check the Version of Cisco AnyConnect

Expand your taskbar, usually found in the lower right of the screen near the time, and look for the AnyConnect logo and click it to open the menu.



Click the 'i' with a circle around it to get the version.



If you have Windows 10, a Dell Precision 75xx Laptop, and AnyConnect 4.2 or below, then please update AnyConnect to 4.4 or higher.



To Update Cisco AnyConnect

From ZFC 3.x

Open ZFC 3 and go to Help -> Configure ZFM Connection

Follow the prompts to upgrade your AnyConnect.

Manual Install

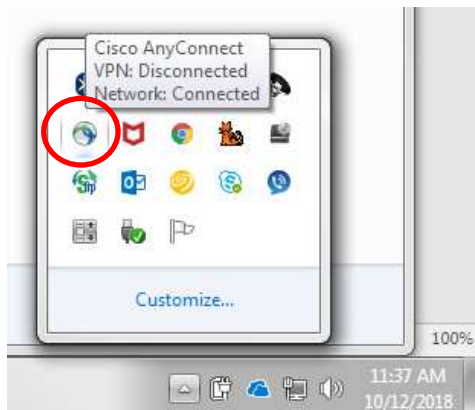
Note: It is highly recommended to be wired into a Honeywell Intelligrated network while doing this – otherwise, there is a chance your ability to connect to the internet will be limited.

1. Copy the AnyConnect 4.4 install files to your Desktop from here:
<\\wcnas01\Intelligrated\Dept\IT\1admin\Applications\Cisco\>
2. Run the AnyConnect install file from your desktop
3. After the install, confirm you can connect to the VPN via AnyConnect.
4. If you need to reinstall the PKI certificate for VPN access, then follow the directions found here:
<https://honeywellprod.sharepoint.com/teams/IntelligratedSPO/email-skype/Shared%20Documents/Symantec%20PKI%20Client.pdf>

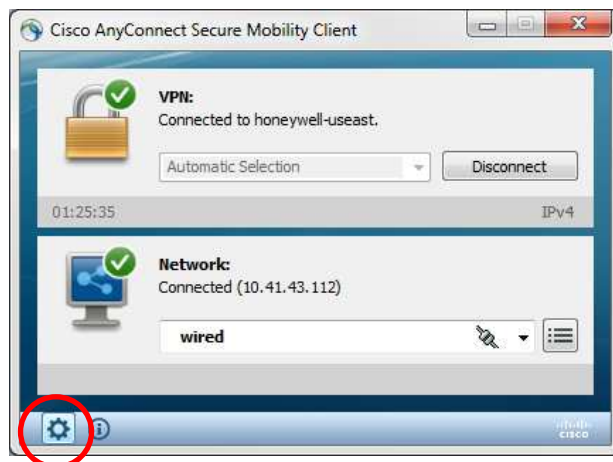
2.4.2 Configure AnyConnect's VPN

Honeywell Intelligrated employee's machines that use Cisco AnyConnect for their VPN have the ability to be on the VPN and configure a ZFM simultaneously, but only after following the below steps in AnyConnect to enable the Split-Tunneling policy.

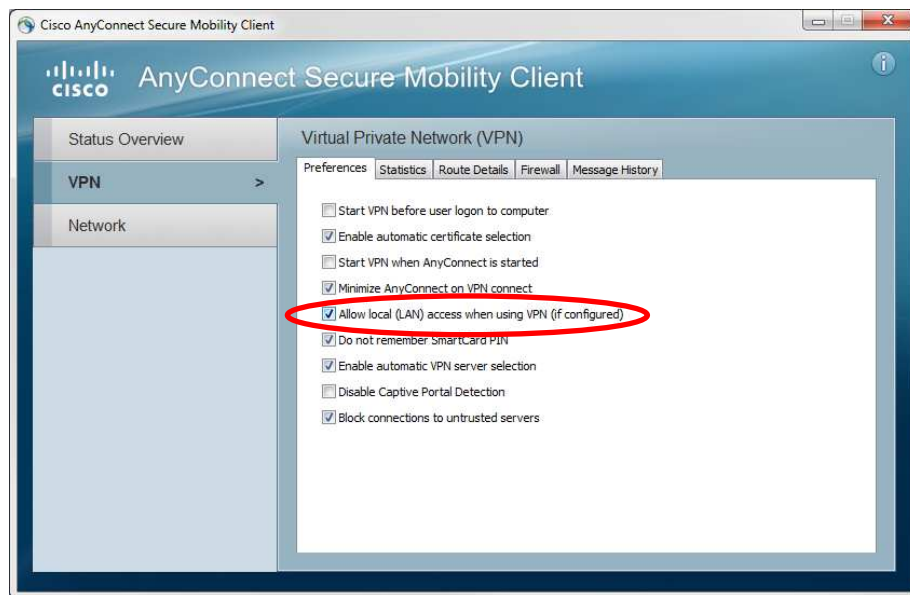
Expand your taskbar, usually found in the lower right of the screen near the time, and look for the AnyConnect logo and click it to open the menu.



Click the gear icon to open AnyConnect Settings.



Click the VPN tab on the left, and put a check next to “Allow local (LAN) access when using VPN (if configured)”



Close out of AnyConnect. On your next VPN connection, it will now allow you to use both the VPN and ZFM communication.

2.4.3 Connecting a PC to a ZFM

To connect a PC to a ZFM, complete the following steps.

Important: If this is the first time a ZFM is being connected to the PC, complete the steps below. If, however, a ZFM has been connected to the PC before, you should keep the following in mind:

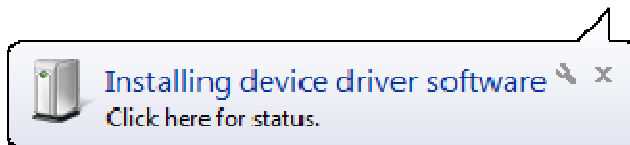
- Use the same USB port that was used previously to connect the ZFM to the PC. If you do so, the driver will still be configured for the ZFM. If you use a different USB port, a driver will need to be configured for the new port.
 - If you are connecting a different ZFM to the PC but using the same USB port, the driver will notice that the ZFM has a different ID. A prompt will appear asking if want to continue. Select **Yes** to use the new ZFM.
-

Note: A PC communicates with a ZFM using a special Ethernet over USB driver, creating another network specifically for this link.

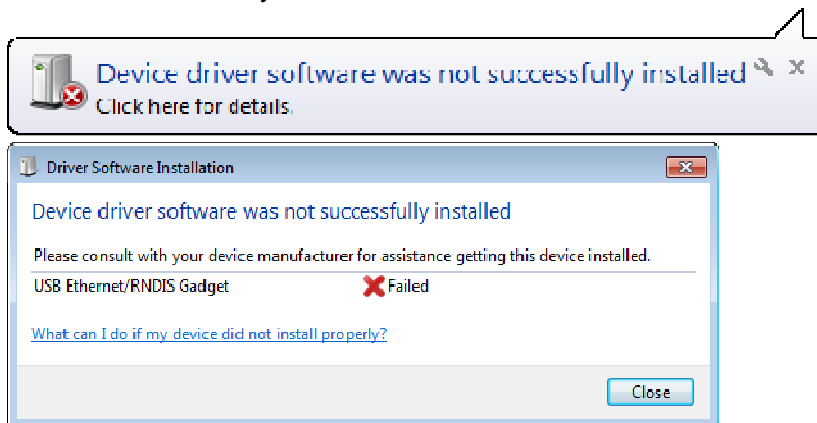
1. Plug the B side of the USB cable into the ZFM USB port.



2. Plug the A side of the USB cable into a USB port on the PC. Windows will automatically detect the device and attempt to install the USB EtherNET/RNDIS Gadget. This is the driver that is needed for the ZFM.

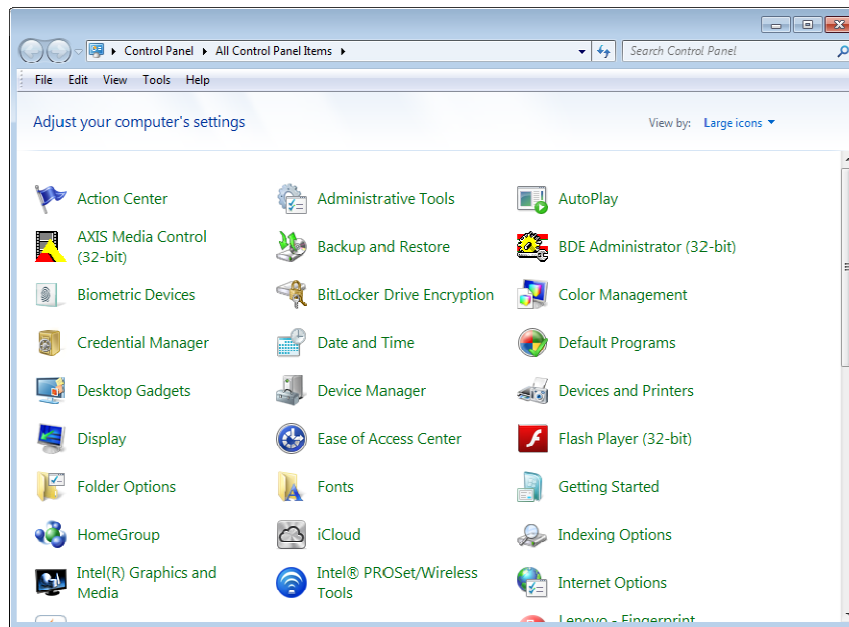


Note: You might receive an error message indicating that the device driver software was not successfully installed.

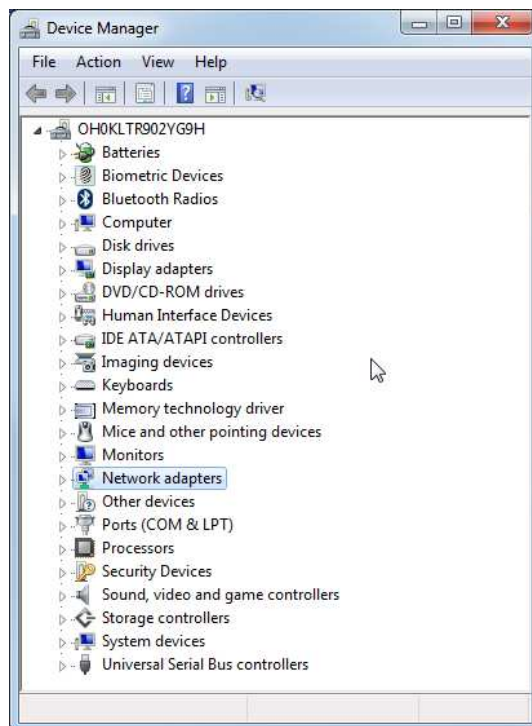


Windows displays this message because it does not yet have an IP address for the ZFM. However, it is possible that the driver was installed anyway. Proceed with the steps below to determine if it was properly installed.

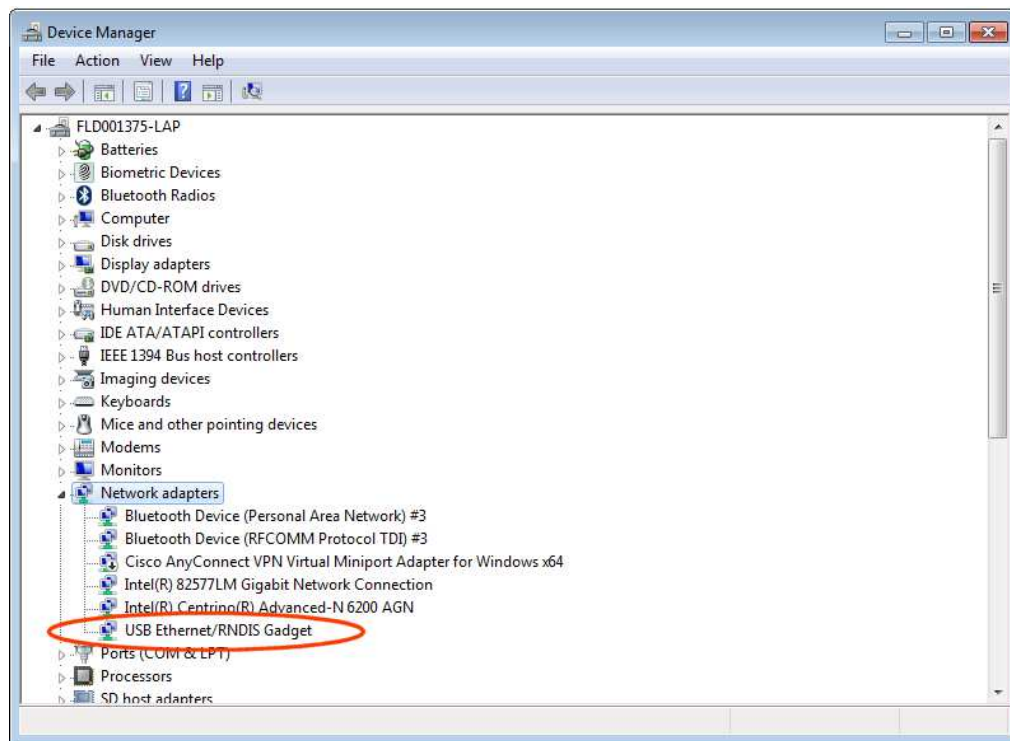
- Click on the Windows **Start** button and select the **Control Panel** option. The Control Panel window is displayed. Select **Device Manager**.



- The Device Manager window is displayed. Expand the **Network Adapters** group.



5. Look for the **USB Ethernet/RNDIS Gadget**. If it appears in the list, the driver has been properly installed.

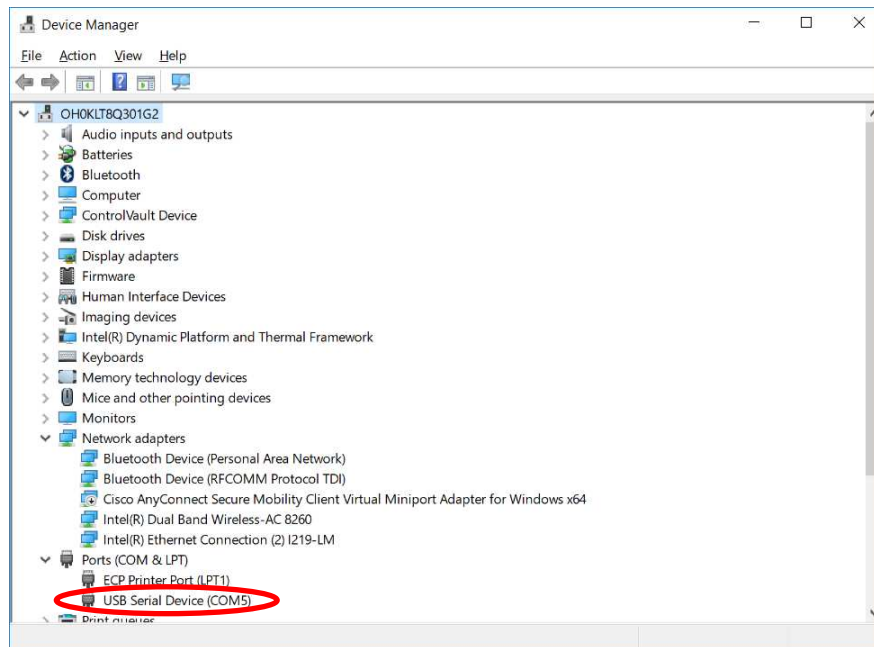


If the driver does not appear in the list, you will need to install it manually. Refer to the next section for additional information.

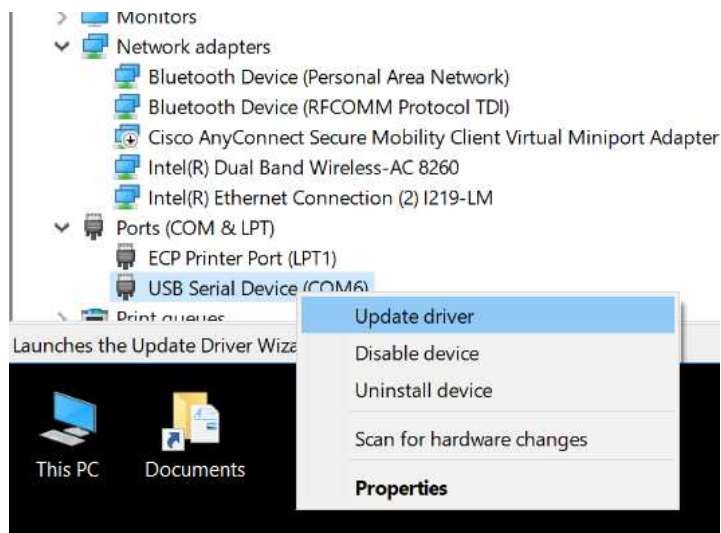
2.4.4 Manually Installing the Device Driver

If Windows does not automatically install a driver for the ZFM or installs the ZFM as a COM Port, you can manually install the USB Ethernet/RNDIS Gadget by completing the following steps:

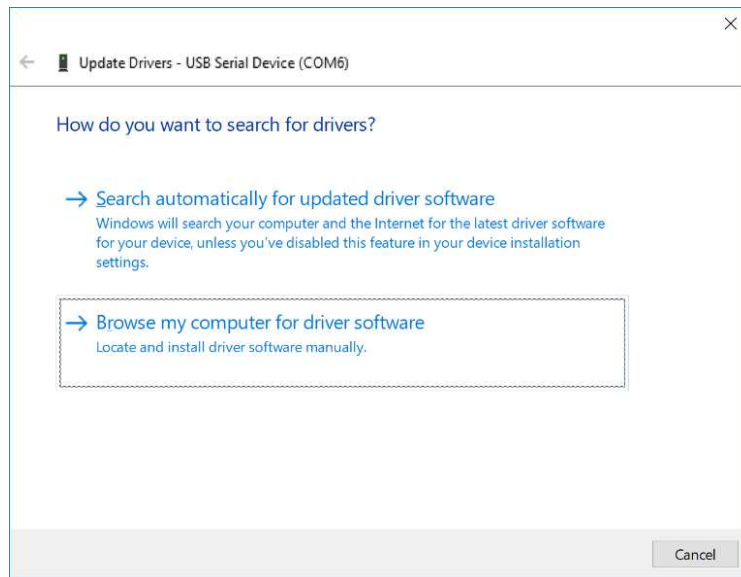
1. Find the 'Unknown Device' or 'USB Serial Device (COMx)' in Device Manager. To confirm it is the ZFM, you can unplug and re-plug-in the ZFM to see what device disappears and reappears, respectively.



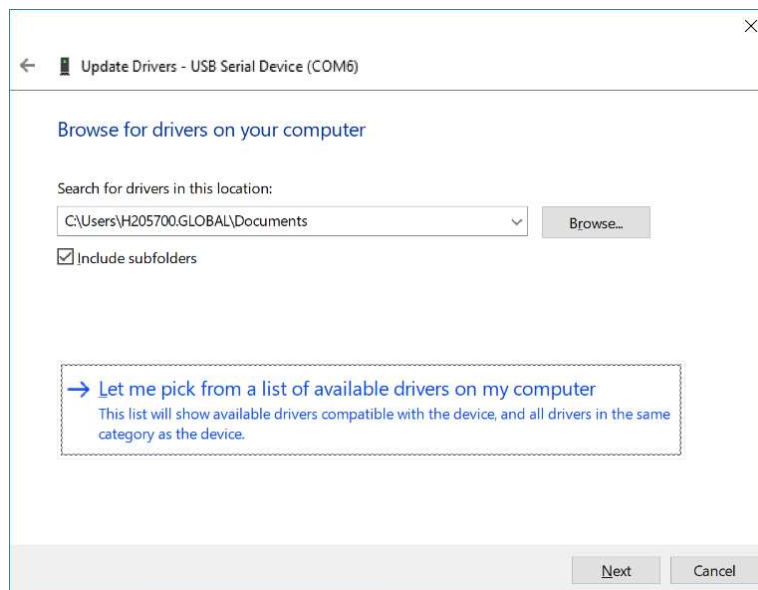
2. Right click the ZFM device, and click 'Update Driver'



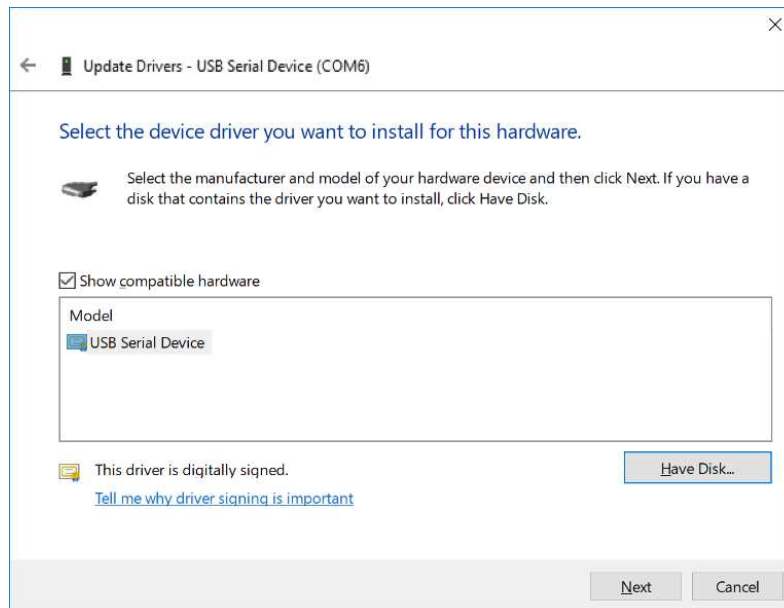
3. Click 'Browse my computer for driver software'. Do NOT let Windows search for drivers.



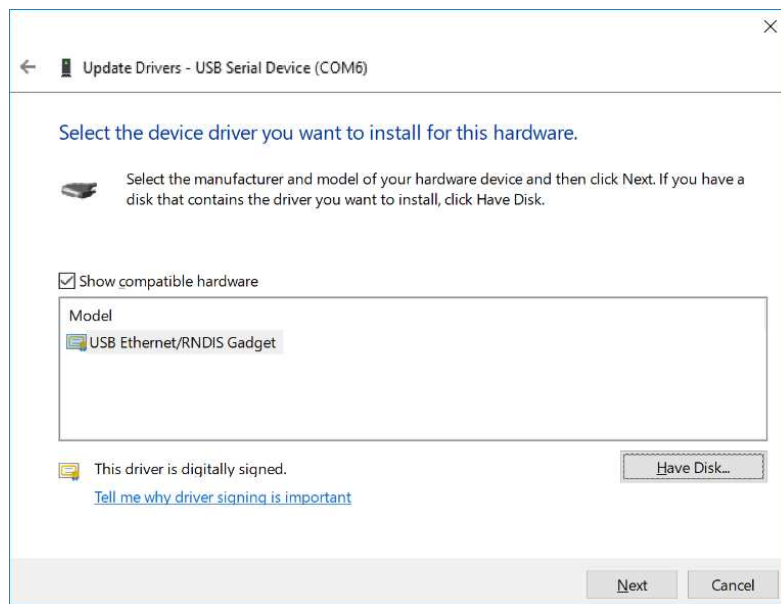
4. Click 'Let me pick from a list'



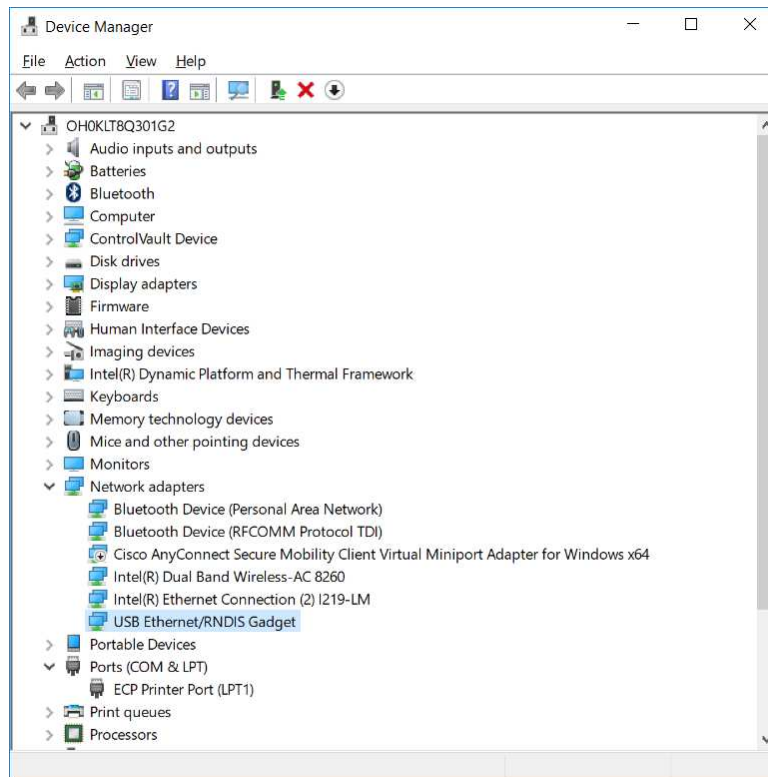
5. Click 'Have Disk', browse to the directory C:\ProgramData\Honeywell
Intelligent\ZoneFlex Configurator\Defaults\Data where the file RNDIS.inf should
be highlighted, and click OK. (Note: This directory and files are created
specifically by installing ZFC 3)



6. Click Next, while the 'USB Ethernet/RNDIS Gadget' should now be highlighted. It should state that "Windows has successfully updated your drivers".



7. Device Manager should now show a 'USB Ethernet/RNDIS Gadget' under Network Adapters.

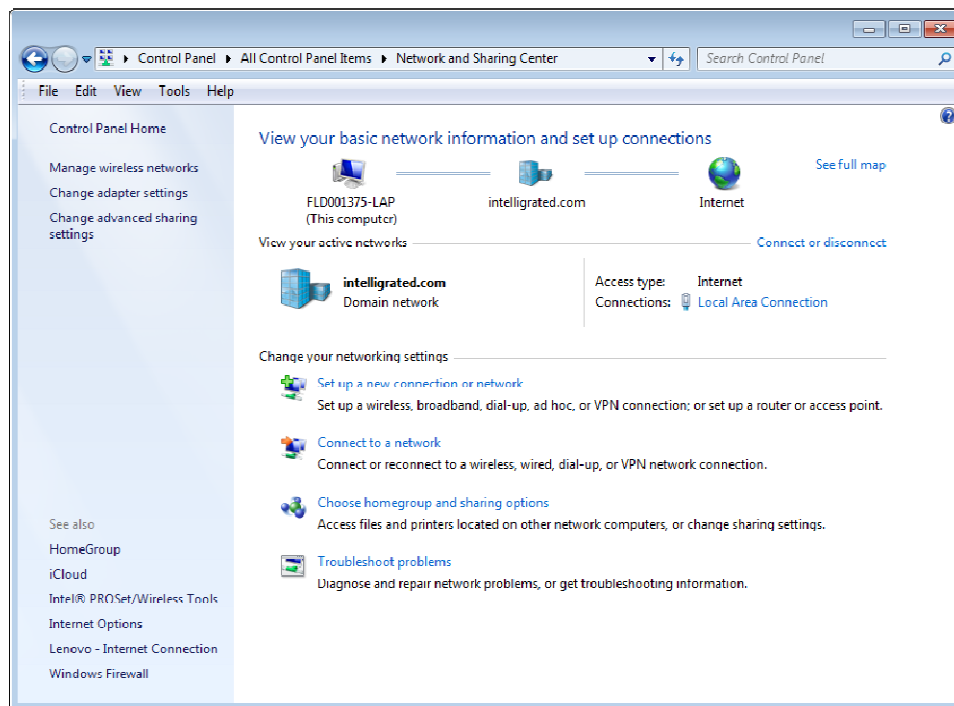


8. Continue now to the next section to configure the secondary network.

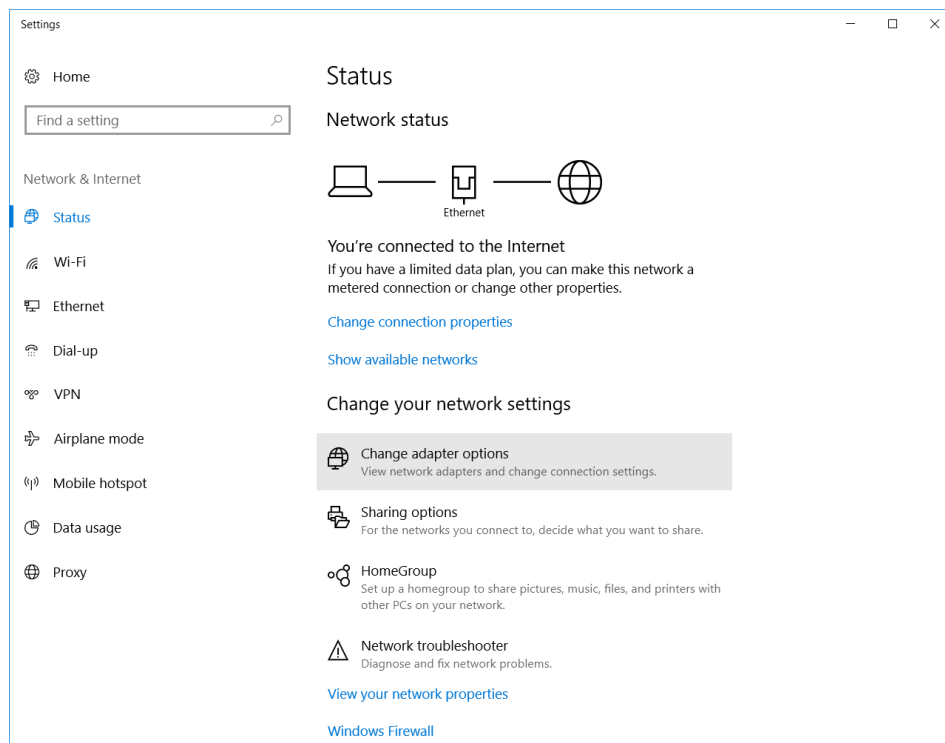
2.4.5 Configuring a Secondary Network for the ZFM

You will need to configure a secondary network to correctly communicate to the ZFM. To do so, complete the following steps:

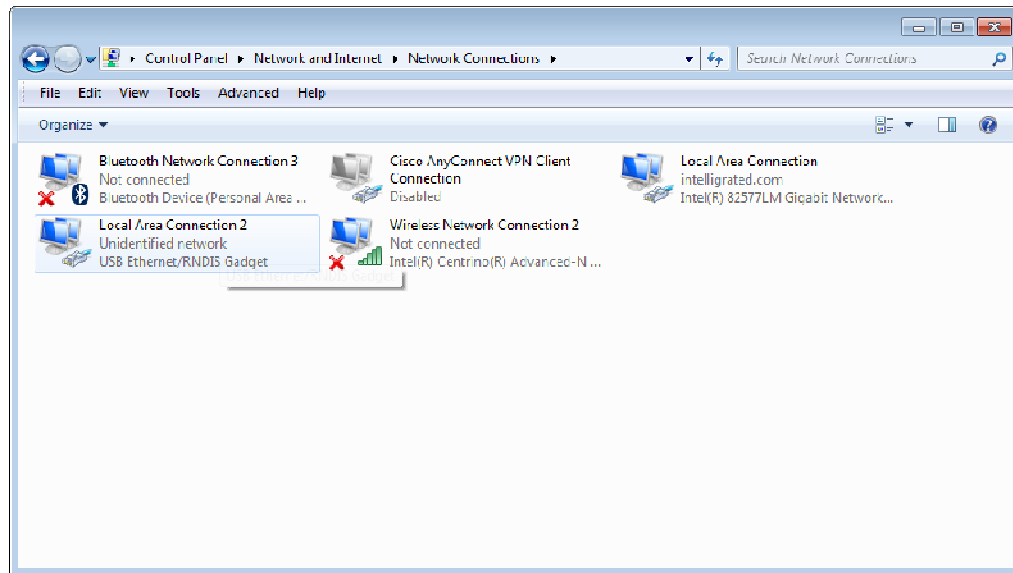
1. Click on the Windows **Start** button and select the **Control Panel** option. The Control Panel window is displayed.
2. Select **Network and Sharing Center**. The basic network information for the PC is displayed on the right side of the window.



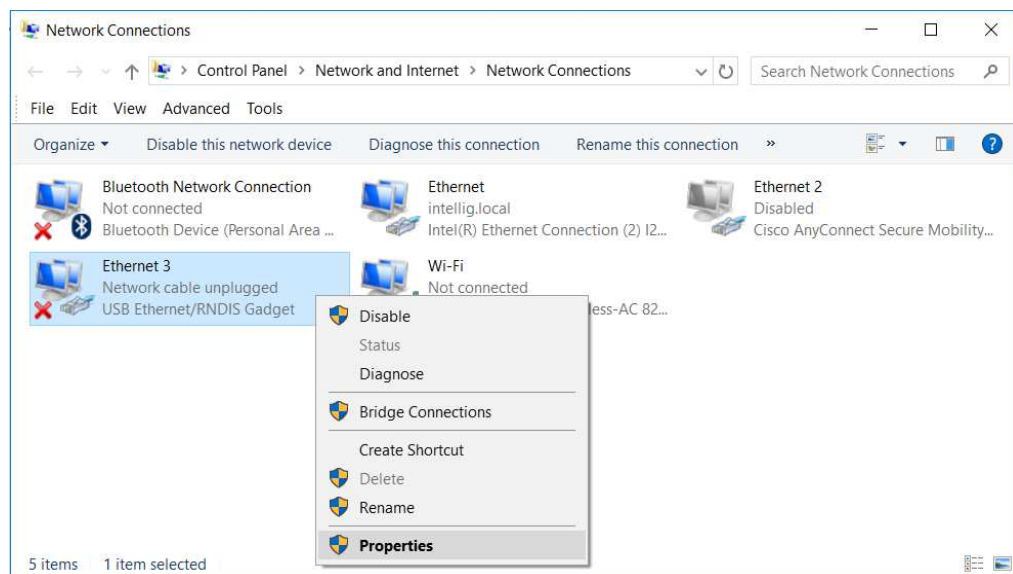
In Windows 10, this window has changed to be Network Status



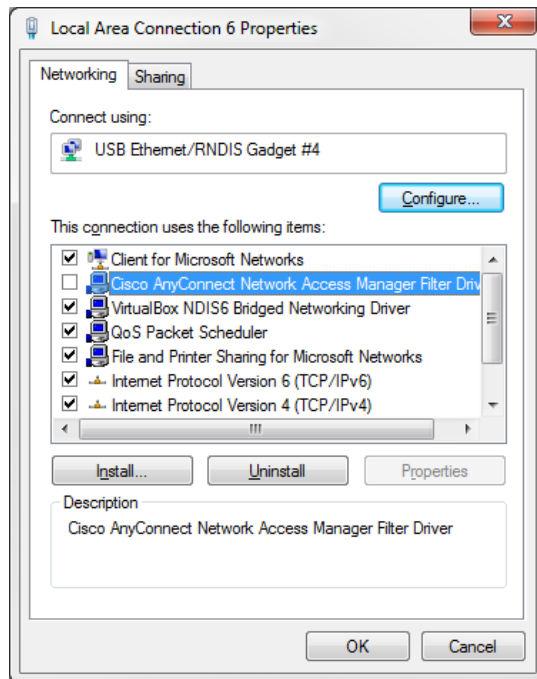
3. Select **Change Adapter Settings (or Options)**, depending on OS. A list of networks associated with each network adapter is displayed. Look for the Network associated with the USB Ethernet/RNDIS Gadget – in this example Local Area Connection 2 was created when the ZFM was detected.



In Windows 10, the other Connection may be referred to as Ethernet X, again associated with the RNDIS Gadget.

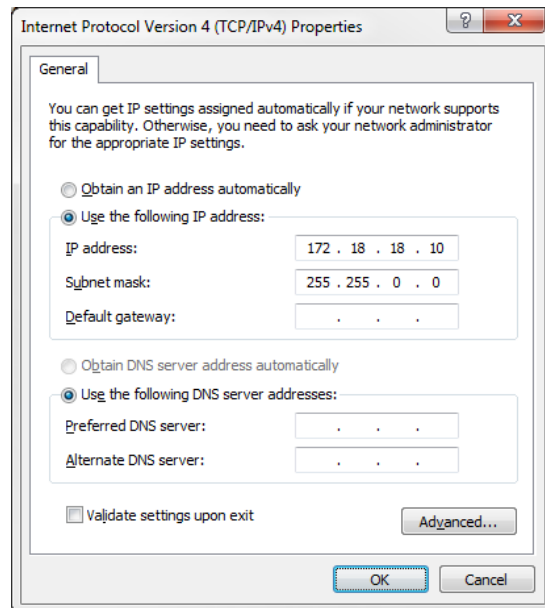


4. Right click on the **RNDIS Network** and select **Properties**. A dialog box appears.



If present, uncheck 'Cisco AnyConnect Network Access Manager Filter Driver' from the list. – Note: If you leave this checked, you will not be able to communicate to the ZFM while connected to the wired or wireless networks.

5. Click on the **Internet Protocol Version 4 (TCP/IPv4)** option and select the **Properties** button. A dialog box appears.



6. Enable the **Use the following IP address** radio button.
7. Enter the following IP address:

```
172.18.18.X
```

where X is any number except for 3. ZFM's always use 172.18.18.3.

8. Use the default **Subnet mask** (255.255.0.0) and the **Default gateway** (blank).
9. Click **OK** to save your changes.
10. Click **OK** to close the dialog box.

2.4.6 Testing PC Communication with the ZFM

Now that the driver has been installed and the ZFM network has been configured, you can test communication with the ZFM. To do so, complete the following steps:

1. Click on the Windows **Start** button and select **Command Prompt**.
2. Type

```
ping 172.18.18.3
```

and press **Enter**. If the PC is communicating with the ZFM, you will receive the following message:

```

Administrator: Command Prompt
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

U:\>ping 172.18.18.3

Pinging 172.18.18.3 with 32 bytes of data:
Reply from 172.18.18.3: bytes=32 time=1ms TTL=64
Reply from 172.18.18.3: bytes=32 time<1ms TTL=64
Reply from 172.18.18.3: bytes=32 time<1ms TTL=64
Reply from 172.18.18.3: bytes=32 time<1ms TTL=64

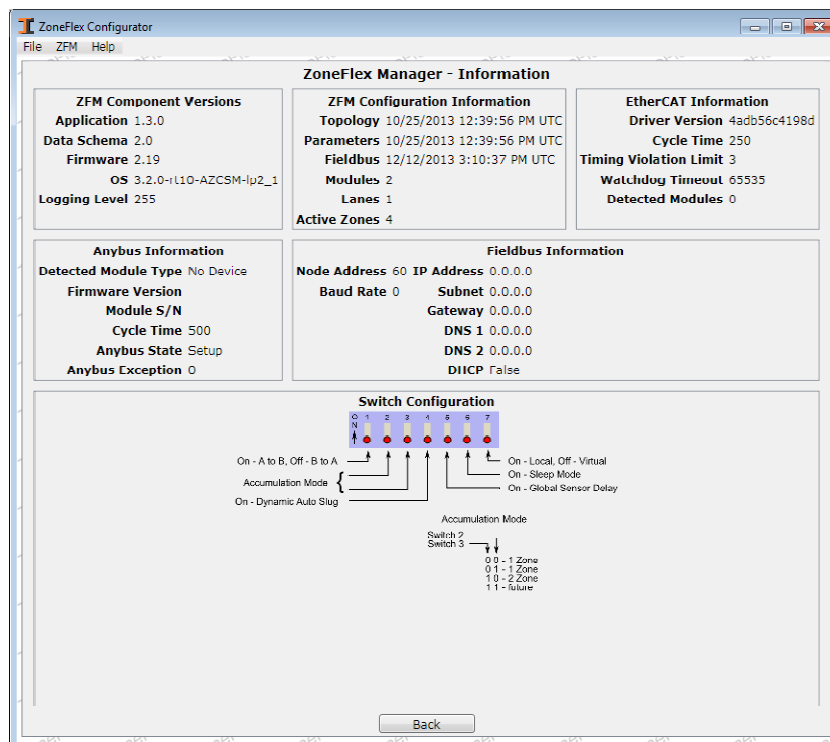
Ping statistics for 172.18.18.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

U:\>

```

2.4.7 Testing the Software/ZFM Connection

You can test that the software is communicating properly with the ZFM by starting the ZFC and selecting **ZFM | ZFM Information**. The software will read the information from the ZFM and display it on the screen.



If ZFM Information is grayed out or you receive a GetADI() Exception error, check the following:

- Make sure the ZFM is powered up and connected using a USB.
- Be sure you are using the same USB port you used when you first set up the driver. Each port is independent.
- Check the driver installation again and be sure the RNDIS gadget appears in Device Manager as described earlier in this chapter.
- Check the network installation again and be sure you can ping the ZFM as described earlier in this chapter.
- Check the LAN settings by opening **Internet Options** and selecting the **Connections** tab. The LAN Settings button is at the bottom of the dialog box. Click the button and make sure none of the settings are enabled.

2.5 Repairing the Configurator

If you need to repair the ZFC, complete the following steps:

1. Locate the Setup.msi file on the computer.
2. Double-click the Setup.msi file. The Setup Wizard is displayed.
3. Make sure the **Repair ZoneFlex Configurator** option is selected.