PLANET
Networking & Communication

User's Manual

PCI Express 10G Ethernet Adapter

► ENW-9801

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WEEE Warning
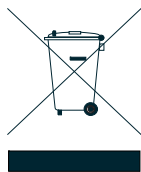
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Revision

User's Manual on PLANET 10Gbps SFP+ PCI Express Server Adapter

FOR MODEL: ENW-9801

REVISION: 2.0 (September 2013)

Part No.: EM-ENW9801_2.0 (2080-A14100-000)

Table of Contents

Chapter 1 Introduction

Thank you for purchasing PLANET ENW-9801 PCI Express 10 Gigabit Ethernet adapter. It supports x4, x8, x16 PCI Express interface. The 10 Gigabit Ethernet adapter provide a highly cost-effective solution to upgrading to the 10 Gigabit network with your existing Ethernet infrastructures.

Next Generation Server Adapter for growth and expansion of networking environments

The ENW-9801 PCI Express 10G Ethernet adapter is designed to address high-performance system application requirements. With the innovative PCI Express Bus Architecture, the ENW-9801 provides better performance than the network cards based on 32/64bit PCI architecture. It provides the best solution for one of the major issues of Server Farm Networks - communication speed. Ten times faster than the existing 1000Base-SX/LX solutions, PLANET ENW-9801, designed to connect your servers and workstations, guarantees extremely high throughput and excellent signal quality.

10 Gigabit Performance Boosts Network Traffic

PLANET ENW-9801 Single-Port 10 Gigabit Ethernet server adapter is an optimal solution for Ethernet applications by providing low-power budgets and small form factor. It offers simple integration into any PCI Express x8 server slot via one SFP+ slot. The onboard controller featured on the ENW-9801 integrates embedded technology and a 10GbE MAC into a single chip that offers up to 10Gbps of network throughput. PLANET Network solution greatly reduces the TCP/IP packet processing tasks of the server's CPU by performing enhanced data-handling algorithms, thereby providing nearly 10Gb line speed performance with the simplicity of a conventional Network Interface Card (NIC).

1.1 Package Contents

Make sure your package contains the following items:

- 1 x ENW-9801 10 Gigabit Ethernet Adapter (w/long Profile Bracket)

- 1 x Quick Installation Guide

- 1 x CD-ROM (Including this User's Manual / Quick Installation Guide / Driver)

- 1 x Low Profile Bracket

If any of these are missing or damaged, please contact your dealer immediately. If possible, retain the carton including the original packing material, and use them again to repack the product in case there is a need to return it to us for repair.

1.2 Features

- PCI Express rev 2.0 specification x4 Interface

- IP, TCP, UDP checksum offloading

- IEEE 802.1Q VLAN ID Tagged / IEEE 802.1q Qos

- 16K Jumbo Frame Size

- IEEE 802.3x Full-Duplex Flow Control

- Complies with Microsoft and Linux Platform

1.3 Gathering Tools and Documentations

To install the ENW-9801 10 Gigabit Ethernet adapter, you need the following items:

- A suitable screw driver
- Your operating system documentation
- Your system unit documentation, including any service documentation

Chapter 2 Hardware Installation

2.1 LED Definition

Below are the pictures of the faceplates of the ENW-9801, consisting of one LED: Link / ACT. Table 2-1 explains the function and state of the LED.
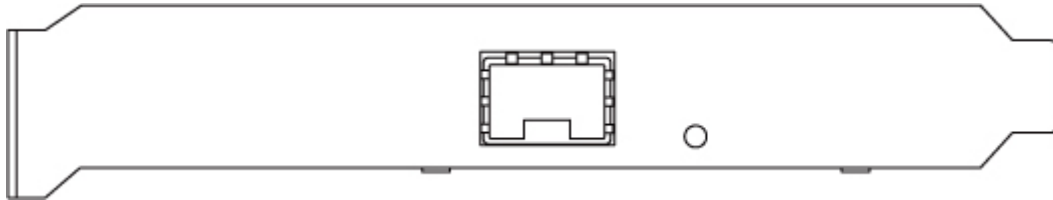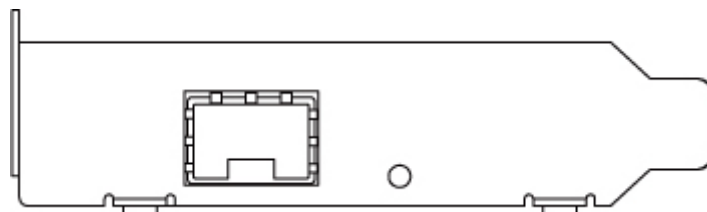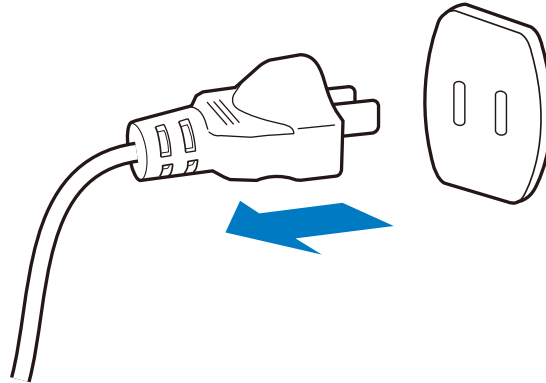
Figure 1: Long Profile Bracket of ENW-9801

Figure 2: Low Profile Bracket of ENW-9801

LED	Color	Description
LNK/ACT	**Green**	When it lights, it indicates a functional network link through the port. When it blinks fast, it indicates data transmit and receive through the port.

Table 2-1: Descriptions of the ENW-9801 LED

2.2 Hardware Installation

Step 1: Please turn off your PC.

Step 2: Remove any metal decorations from your hands and wrists.

Step 3: Remove the cover from your PC.

Step 4: Locate an empty PCI Express slot and remove the corresponding back plate. Save the screw for use in Step 6.

Step 5: Carefully insert the 10 Gigabit Ethernet Adapter into the chosen slot and press firmly with proper push to ensure it is fully seated in the slot.
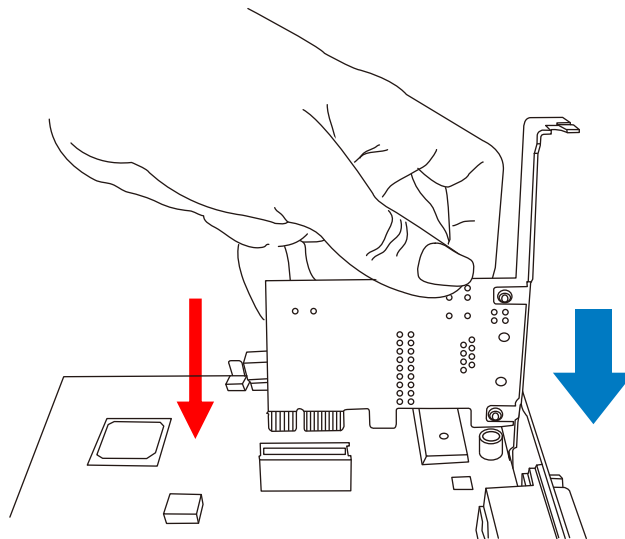
Step 6: Secure the 10 Gigabit Ethernet Adapter with the screw you saved in step 4.

Step 7: Replace the PC cover.

Step 8: Power on your PC and refer to the next section to install driver.

Chapter 3 Driver Installation

A device driver must be installed before your ENW-9801 can be used with your computer. This chapter describes how to install the driver for various operating systems. Before you begin the driver installation process, make sure you have the installation disks for your computer's operation system.

## 3.1 Installing Driver on Windows 7 / Server 2008

Note	The following installation uses the ENW-9801 and operates under Windows 7; the Install procedures will be similar to the Windows Server 2008.

1. After installing the ENW-9801 on your PC and booting it up, Windows 7 will detect it and you have to install the driver.
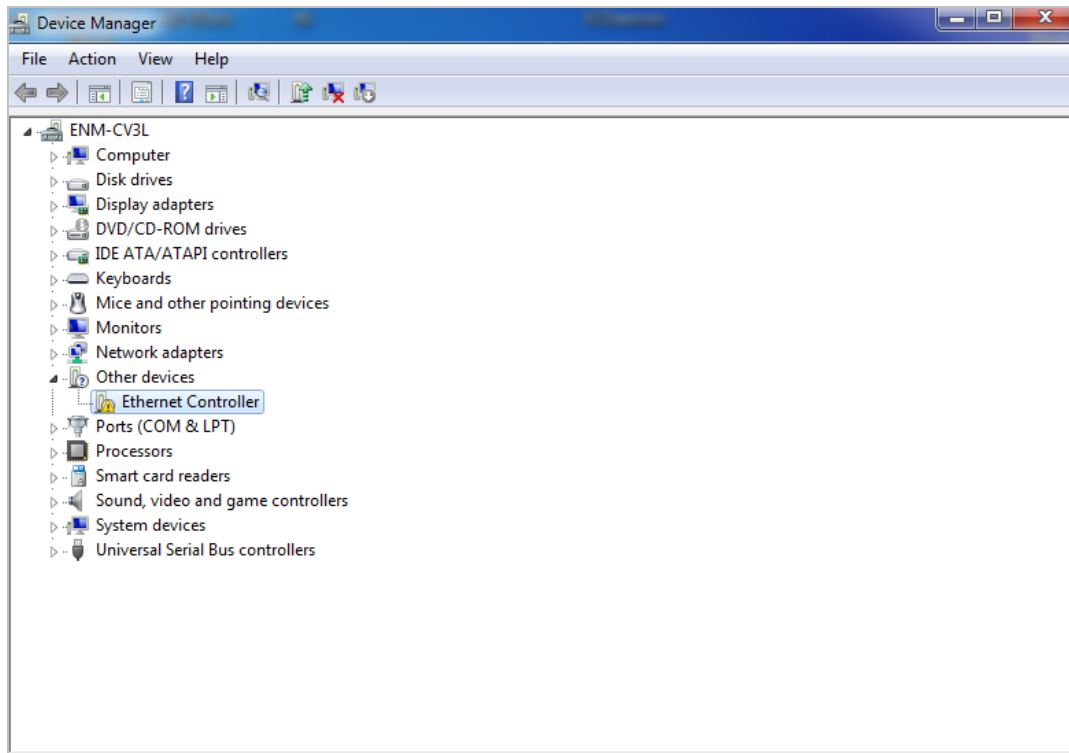
2. Please move and right-click the mouse button for Ethernet Controller item and select **"Update Driver Software"**
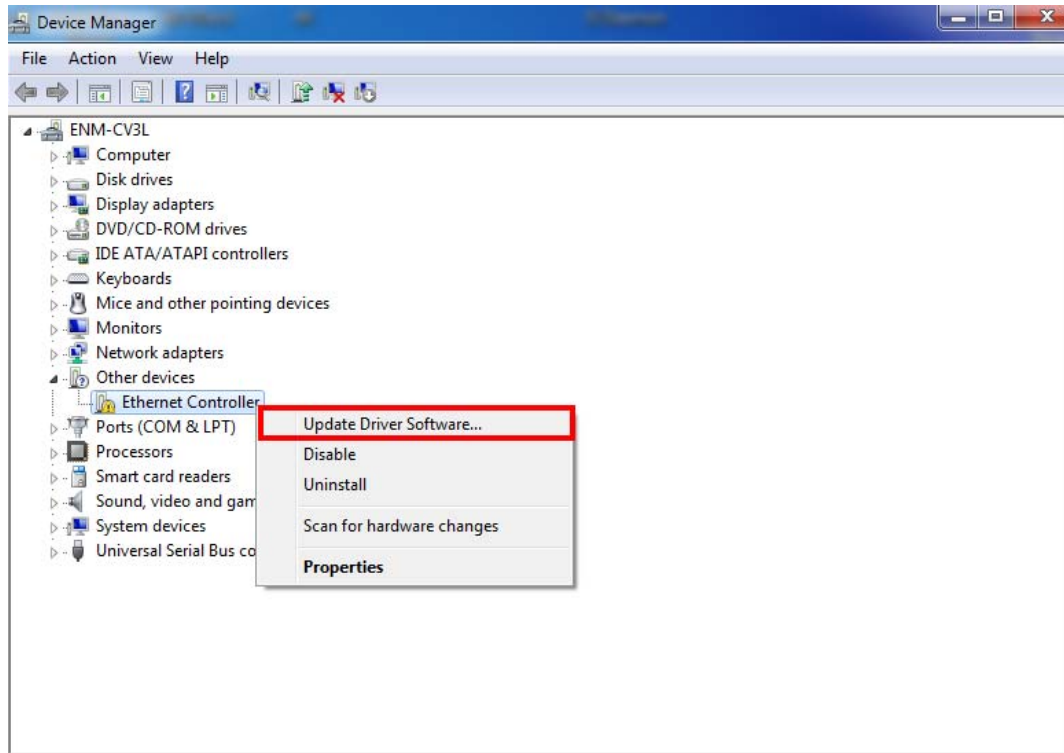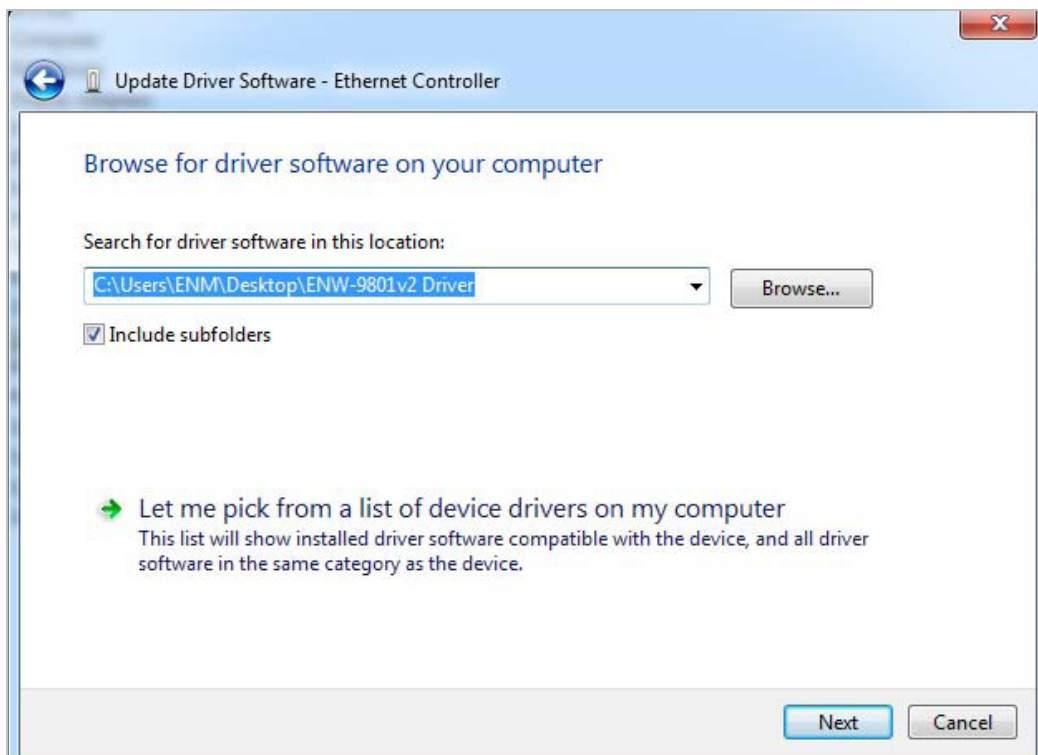

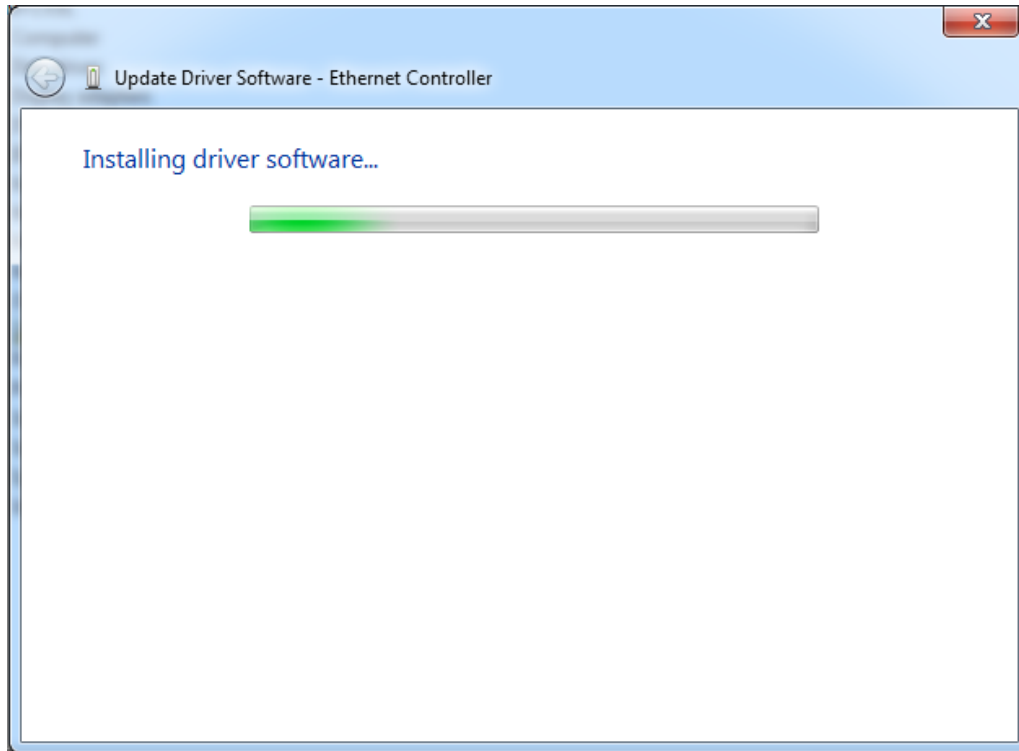3. Please select **"Browser my computer for driver software"** for the next step.
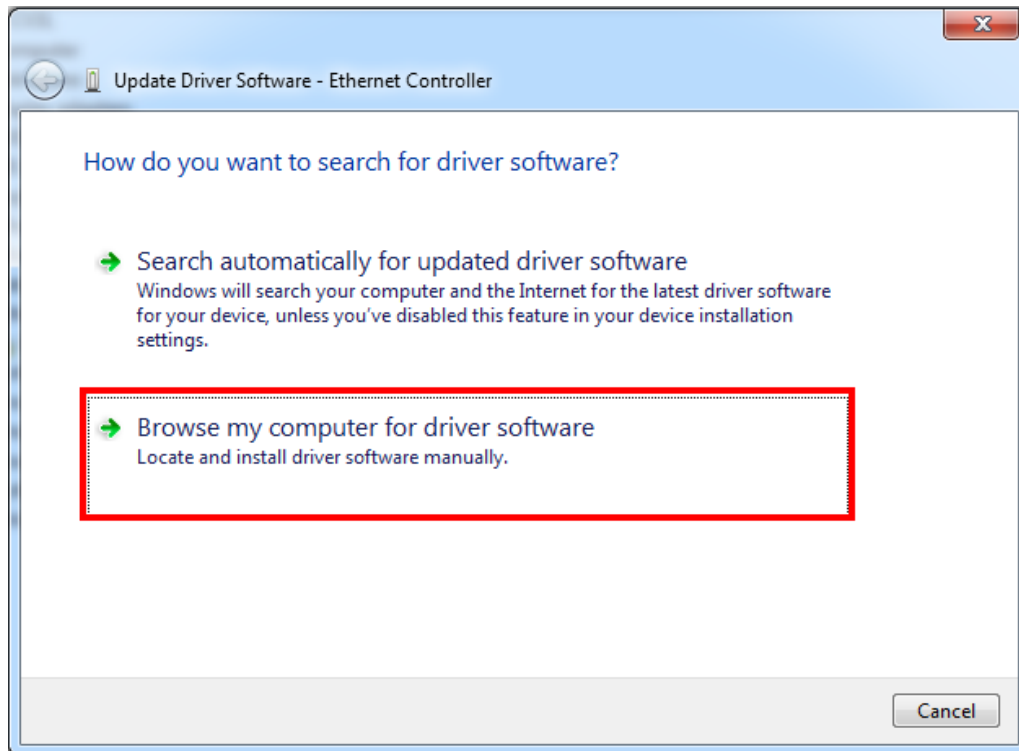
4. Insert the bundled CD into the CD-ROM driver.
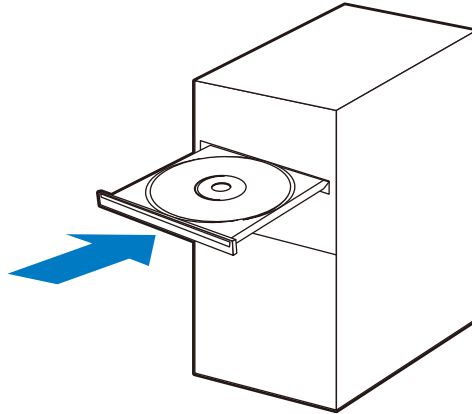
5. Please click **"Browse"** to specify the driver location to install. (Assume **"E"** is your CD-ROM drive, the driver can be found in E:\DR-ENW-9801v2 Driver). Click **"Next"** to continue.
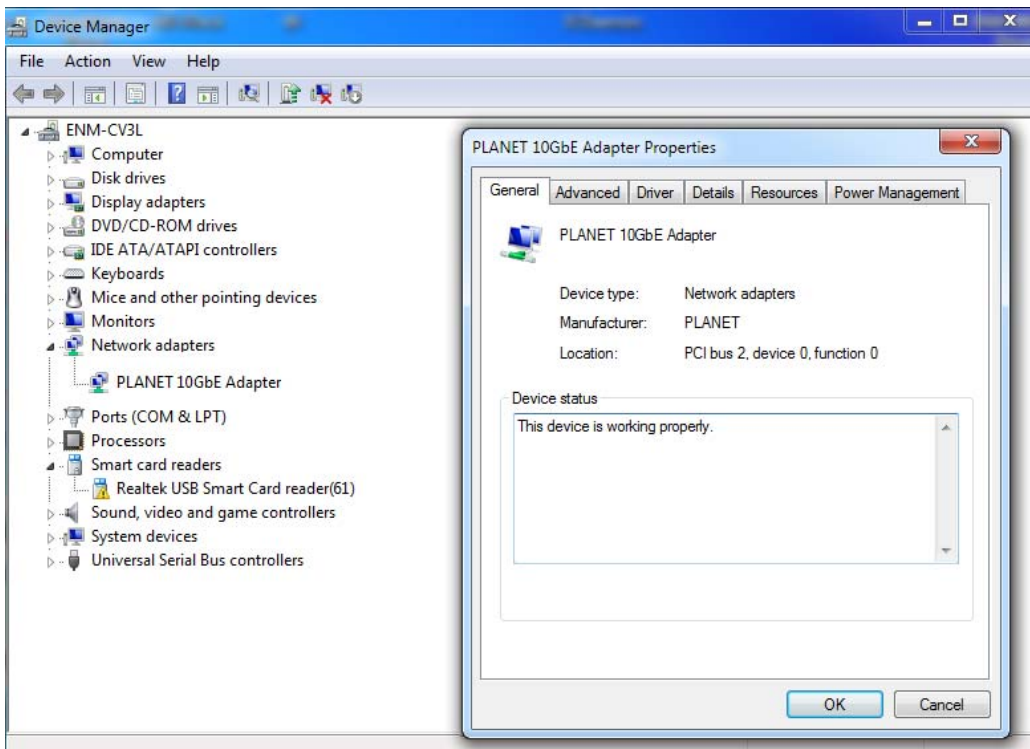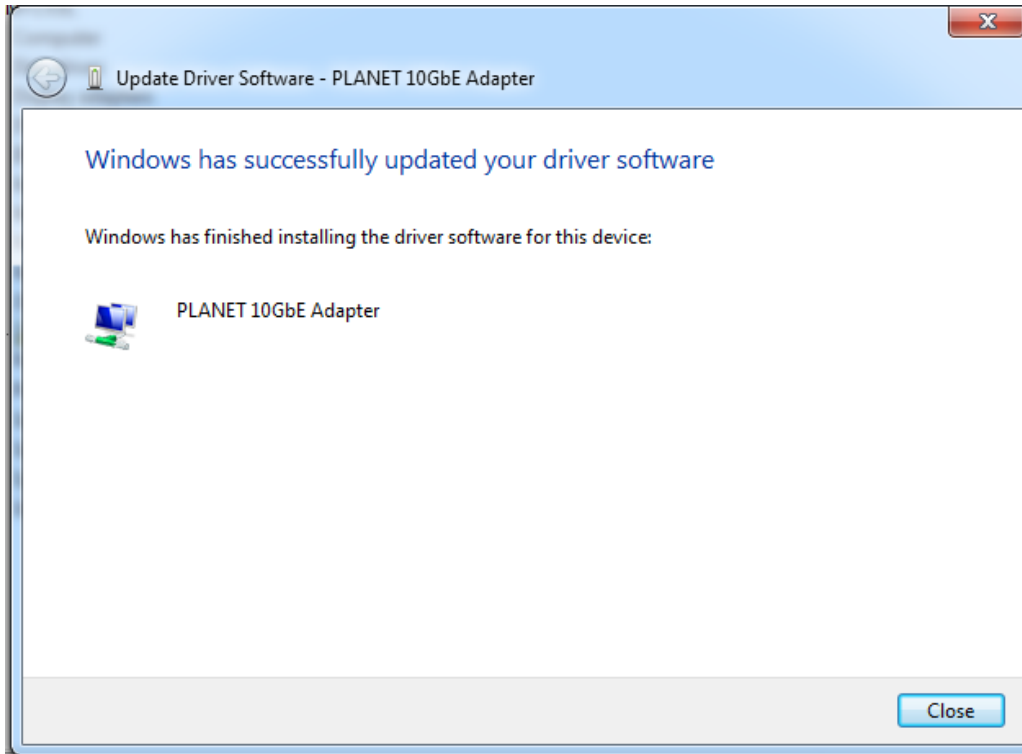
The driver is installing..

6. During the Driver installation, it will pop up one Windows Security message. Please Click **"Install this driver software anyway"** button to continue the installation.
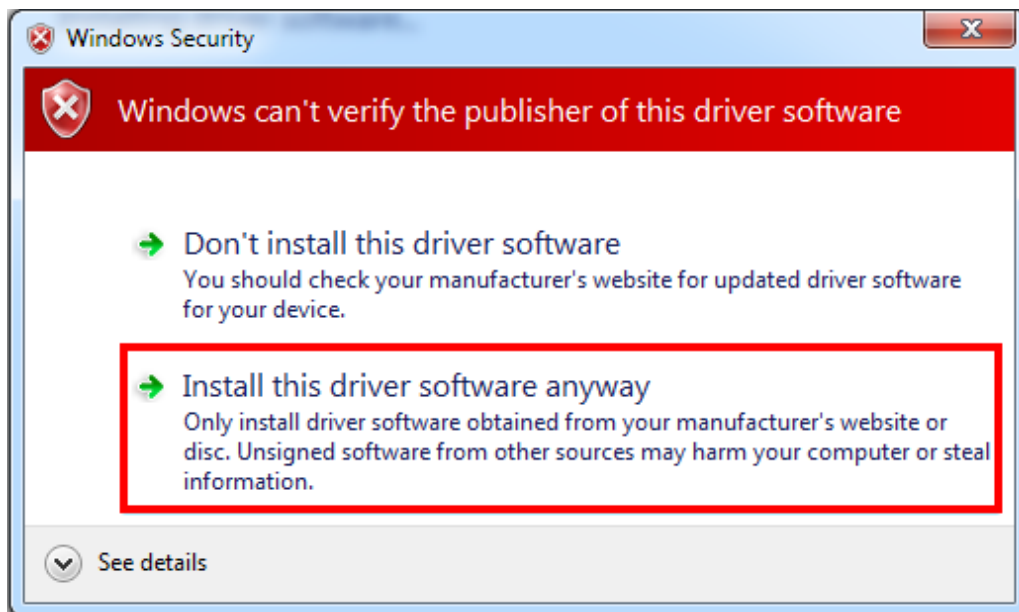
7. Click **"Close"** button to complete the driver installation.

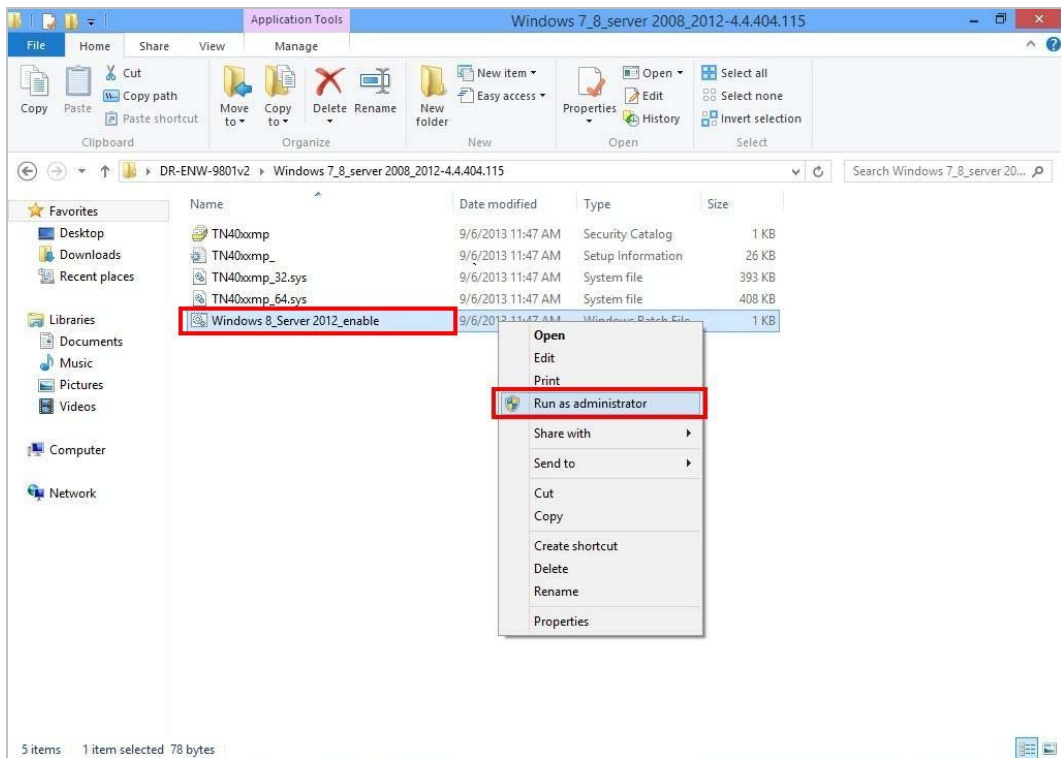## 3.2 Installing Driver on Windows 8 / Server 2012

> **Note**
>
> The following installation uses the ENW-9801 and operates under Windows 8; the Install procedures will be similar to the Windows Server 2012.

1. Please install the ENW-9801 on your PC and boot it up. Windows 8 will detect it and you have to install driver.

2. Before installing the ENW-9801 driver under Windows 8 / Server 2012 operation system, please find the **"Windows 8_Server 2012_enable.bat"** from Windows 7_8_Server 2008_2012-4.4.404.115 folder of the ENW-9801driver.
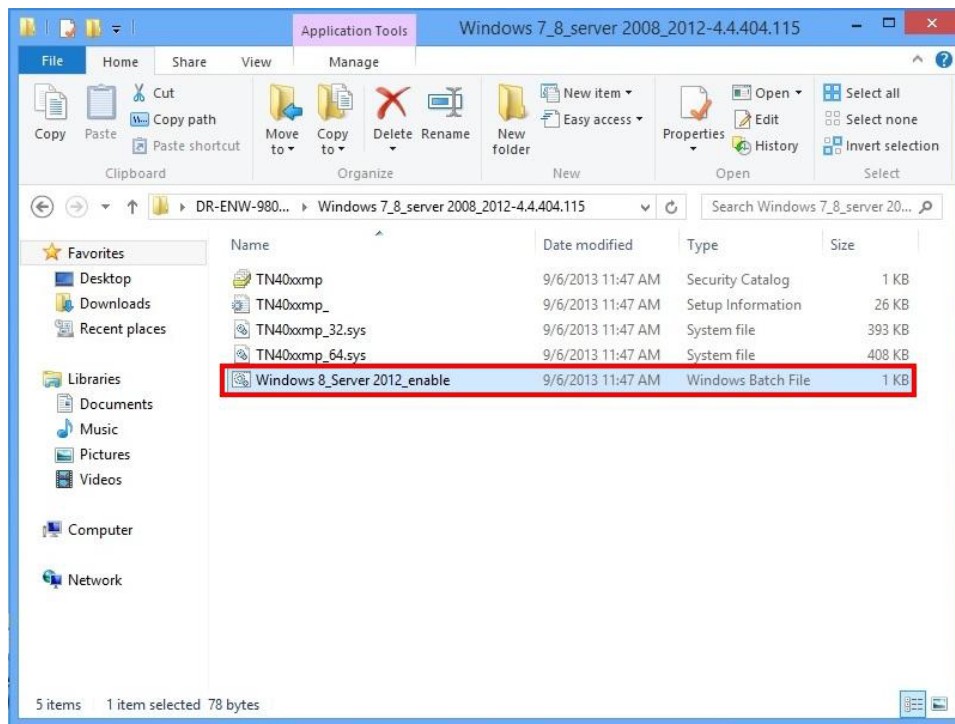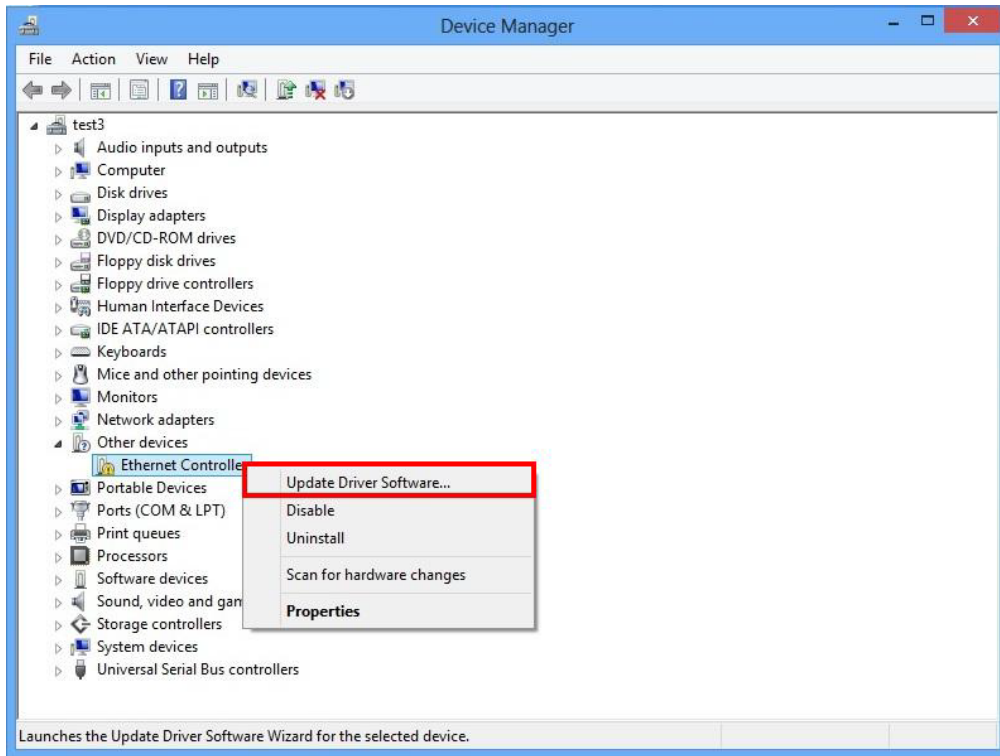
3.   Please right-click the file and select **"Run as administrator "** and then reboot the PC.
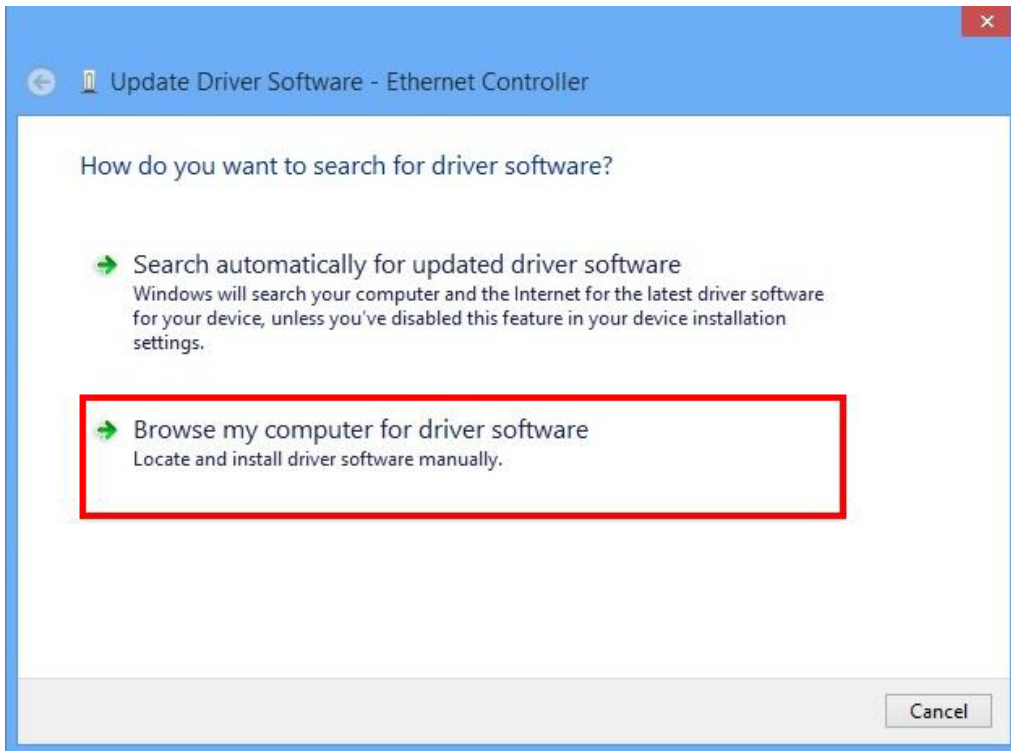

4.   After the PC is rebooted, please install the driver on the ENW-9801v2 under Windows 8 / Server 2012 operating system.
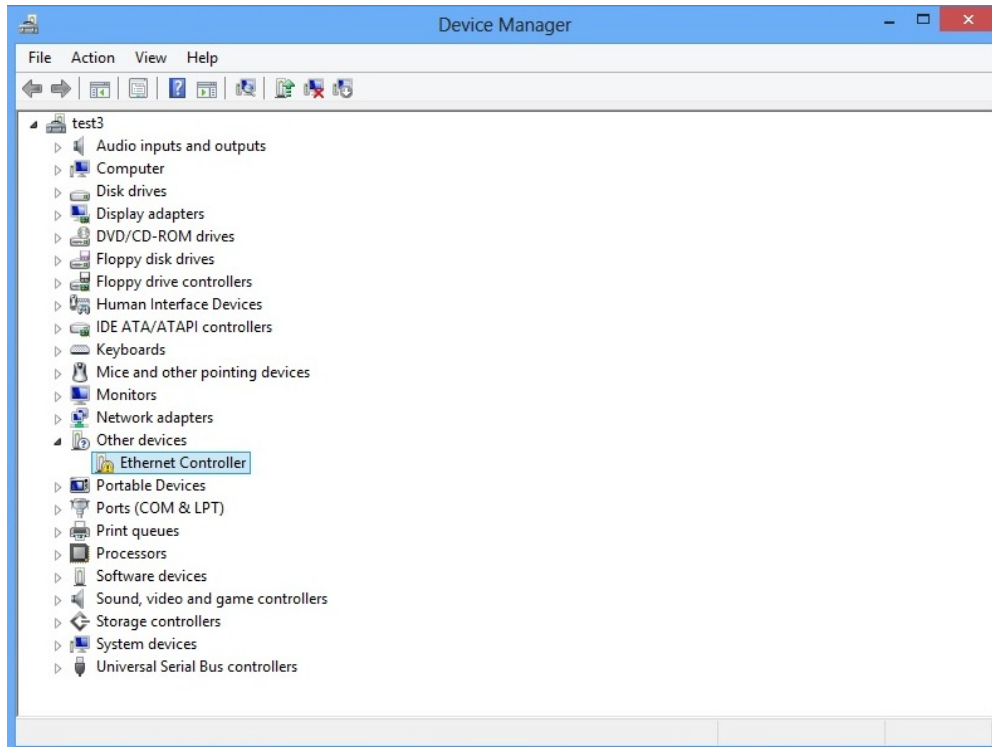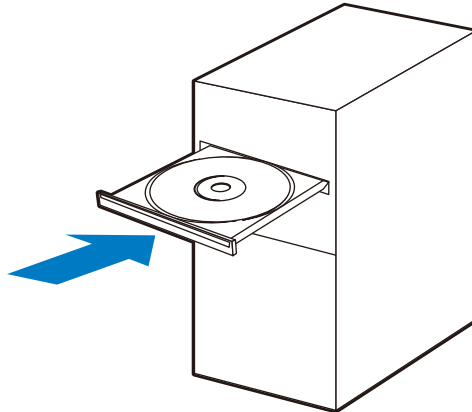
5. Please move and right-click the mouse button for Ethernet Controller item and select **"Update Driver Software"**
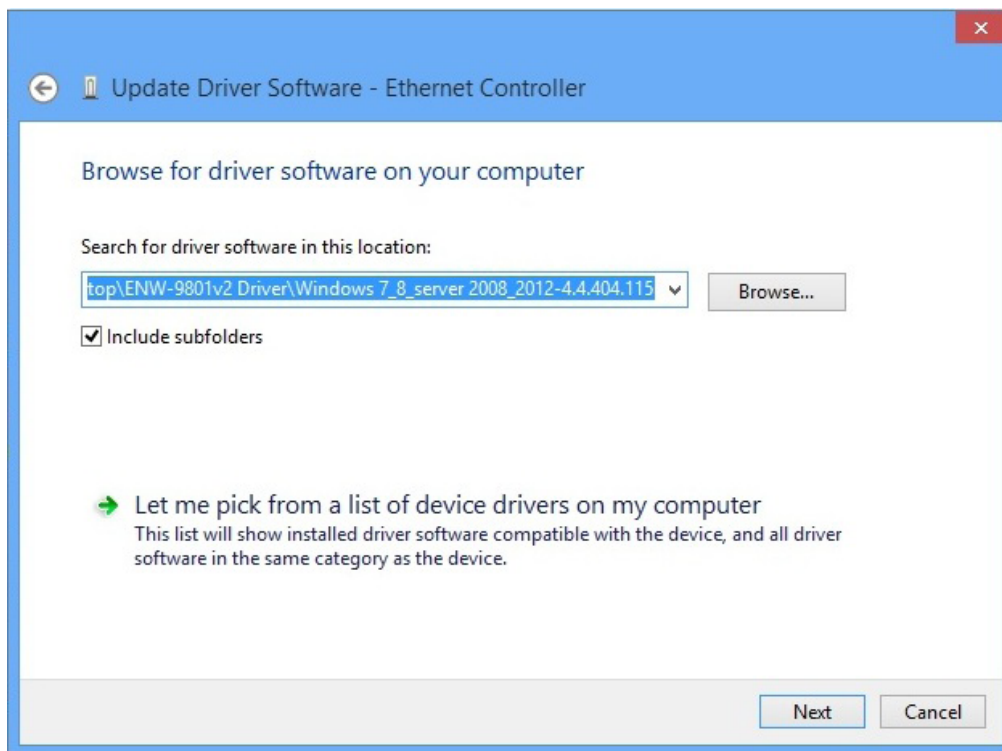

6. Please select **"Browser my computer for driver software"** for the next step.

7. Insert the bundled CD into the CD-ROM driver.

8. Please click **"Browse"** to specify the driver location to install. (Assume **"E"** is your CD-ROM drive, the driver can be found in E:\DR-ENW-9801v2 Driver). Click **"Next"** to continue.
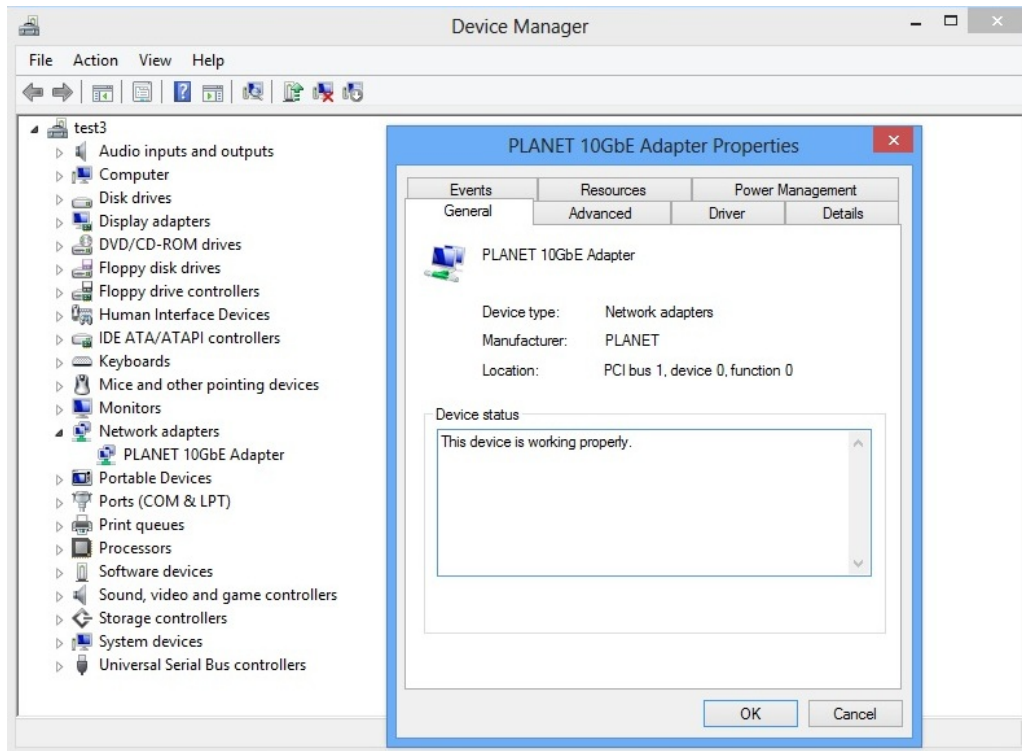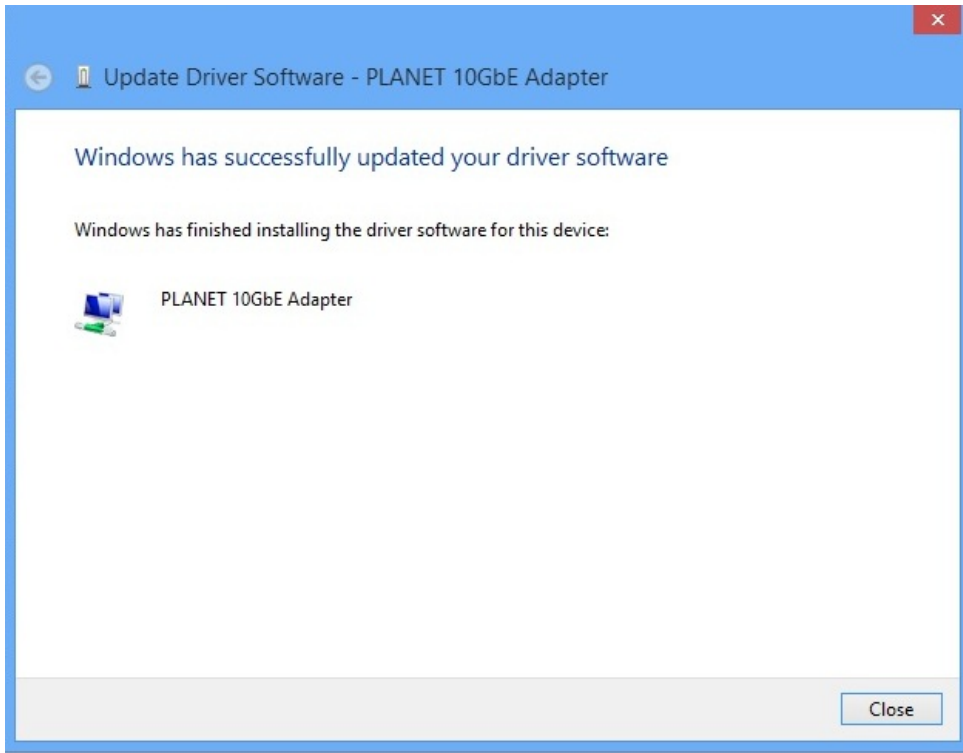
9. During the Driver installation, it will pop up one Windows Security message. Please Click **"Install this driver software anyway"** button to continue the installation.

The driver is installing..
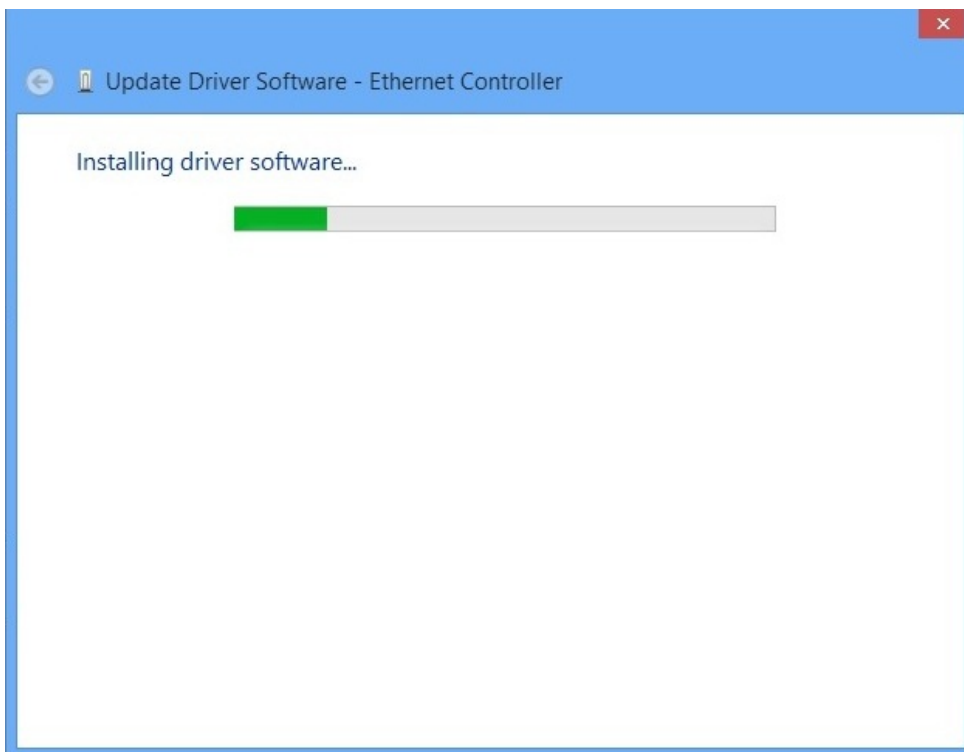
10. Click **"Close"** button to complete the driver installation.

Chapter 4 Specifications

Product	ENW-9801
	10Gbps SFP+ PCI Express Server Adapter
Hardware Specifications	
Hardware Version	2
Attachment Interface	PCI Express rev 2.0 specification x4 Interface
Media Interface	SFP+ Connector
Optical Module Options	LRM, LR, SR
Memory	1Mbit internal memory
Jumbo Frame	9K / 16K Bytes
LED Indicators	LNK / ACT per port
Dimensions (W x D x H)	62 x 83 x 22 mm
Weight	47g
Typical Power Consumption	4 watts
Advanced Functions	
Layer 2 Features	IEEE 802.3x Flow Control support
	IEEE 802.1Q VLAN support
Operating System Support	Windows Server 2008R2 64bits
	Windows Server 2012 64bits
	Windows 7 32 / 64bits
	Windows 8 32 / 64bits
	Linux (2.6x to 3.8.0)
Standards Conformance	
Regulation Compliance	FCC Part 15 Class B, CE
Standards Compliance	IEEE 802.3ae 10Gbps Ethernet
	IEEE 802.3x Flow Control and Back Pressure
	IEEE 802.1Q VLAN Tagging
Environment	
Operating	Temperature: 0 ~ 50 degrees C
	Relative Humidity: 5 ~ 95% (non-condensing)
Storage	Temperature: -10 ~ 85 degrees C
	Relative Humidity: 5 ~ 95% (non-condensing)