

# VxServer User Manual

## **Warranty**

All products manufactured by ICP DAS are warranted against defective materials for a period of one year from the date of delivery to the original purchaser.

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## 1. Introduction

The VxServer is a virtual com middleware software. The VxServer with VxComm Driver can create virtual COM ports in Windows and maps them to the serial ports of the GT-541/M2M-710D/M2M-711D devices through the Ethernet, GPRS, 3G and Wi-Fi network. The user's RS-232 client programs need only to change to the virtual COM port to access the serial devices connected to the device servers through the network.

Features:

- Virtual Com middleware software
- Up to 128 Virtual Com devices can be managed in VxServer and VxComm driver
- Easy and quick to build a Virtual Com system
- Windows-based software

## 2. Hardware

### 2.1 System Requirements

- Software Requirements:

Operator System	Support
Windows 2000	✓
Windows XP	✓
Windows 7	✓

- Hardware Requirements:

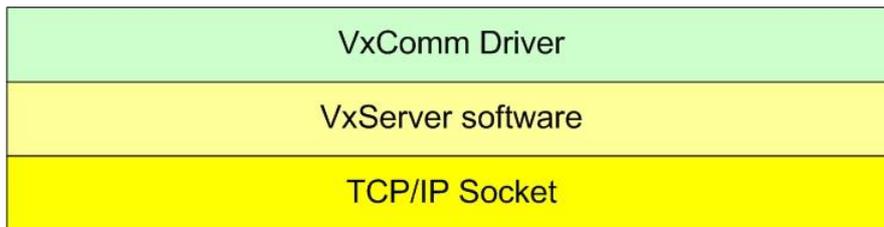
Hardware Items	Requirement
CPU	1.0 GHz or Higher
Memory	512 MB or Higher
Hardware space	100 MB or Higher
Other	CD-ROM or DVD-ROM

### Product support

Product	Description
<a href="#">GT-541</a>	Intelligent Multiport Serial to GPRS Gateway
<a href="#">M2M-710D</a>	Remote maintenance Ethernet Device Terminal Unit
<a href="#">M2M-711D</a>	Remote maintenance Wi-Fi Device Terminal Unit

## 2.2 Software architecture

Software	Description
<a href="#">VxComm driver</a>	Version 2.11.4 or Higher
<a href="#">.NET Framework</a>	Version 2.0 or Higher



**Ethernet/GPRS/3G/Wi-Fi**



**GT-541**

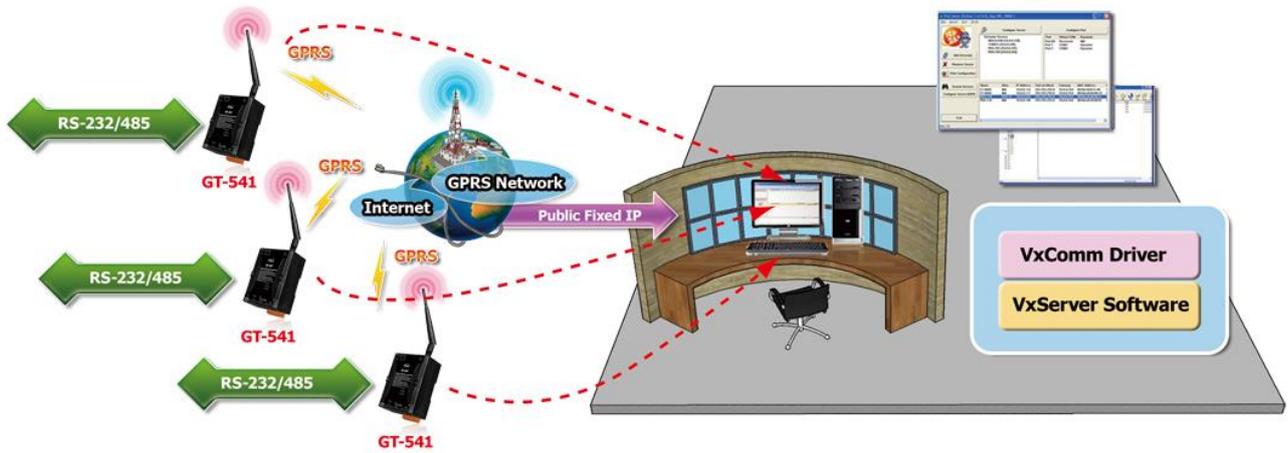


**M2M-710D**



**M2M-711D**

## 2.3 Application architecture



## 3. Installing the VxServer Software

### 3.1 Installing .NET Framework

It needs the runtime environment with .NET Framework 2.0 or above to execute the VxServer in the PC. If there has .NET Framework 2.0 or above in the PC, the section 3.1 can be omitted.

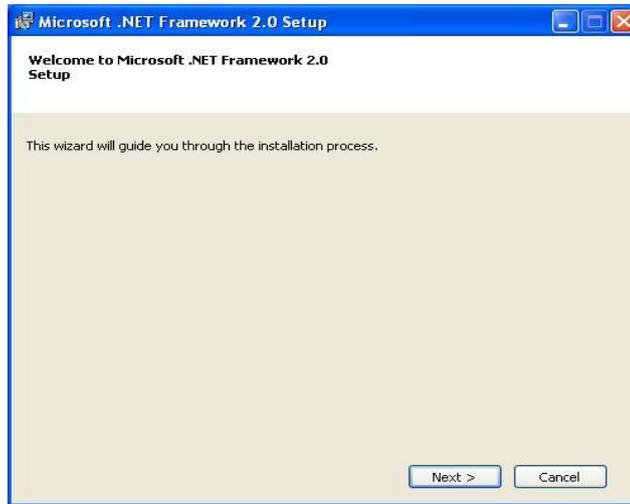
- ◆ Microsoft .Net Framework Version 2.0:

<http://www.microsoft.com/downloads/details.aspx?FamilyID=0856eacb-4362-4b0d-8edd-aab15c5e04f5&DisplayLang=en>

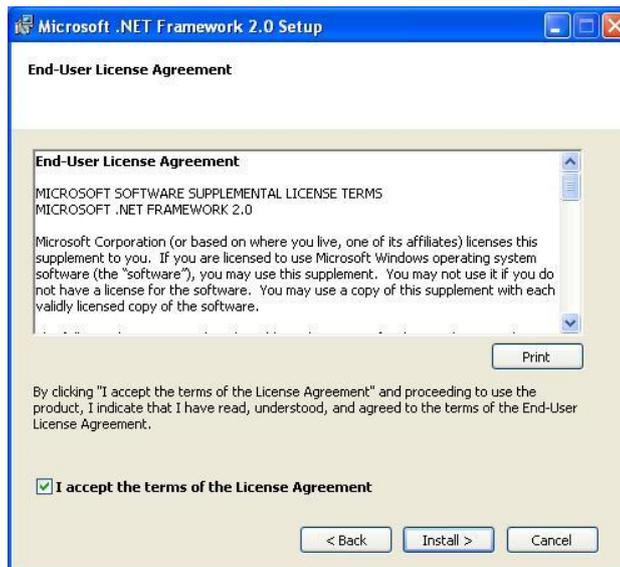
- ◆ Microsoft .Net Framework Version 3.5:

<http://www.microsoft.com/downloads/details.aspx?familyid=333325FD-AE52-4E35-B531-508D977D32A6&displaylang=en>

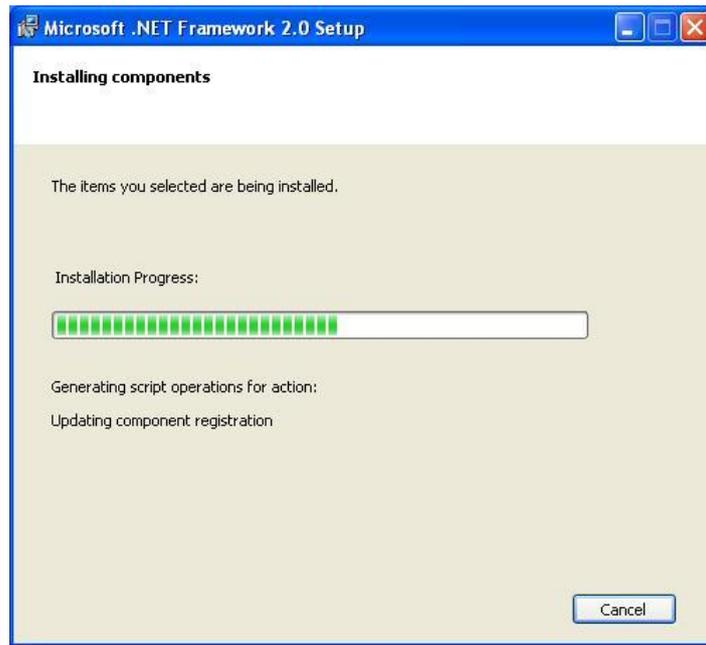
1. Press “Next” to the next step.



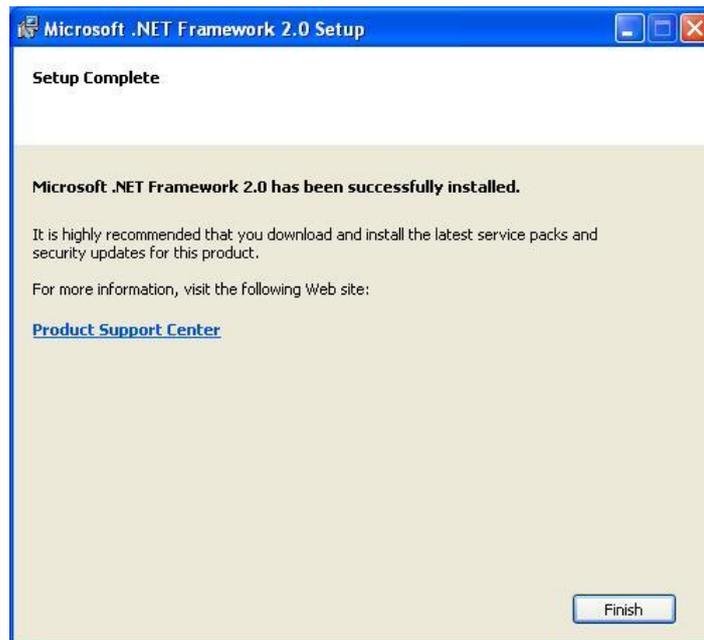
2. Select the “I accept the terms of the License Agreement” and “Install” to the next step.



3. The installation process would be going



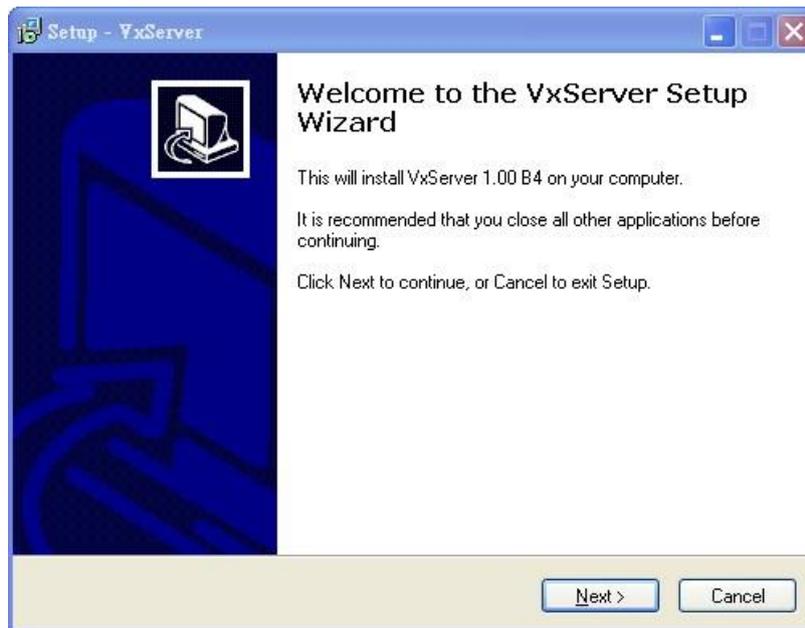
4. After finishing the installation, press "Finish" to exit the program.



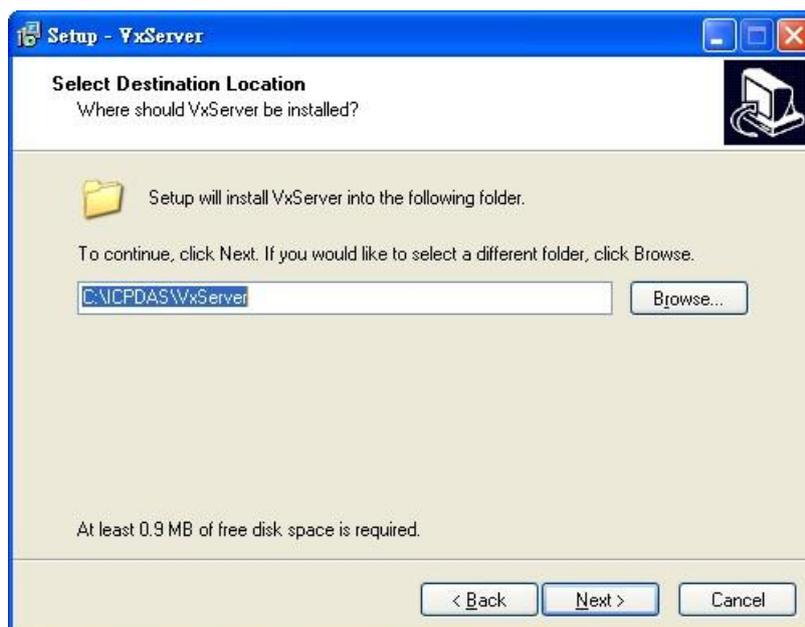
## 3.2 Installing VxServer software

Plug in the shipment CD into the PC,  
Execute \\VxServer\Software\VxServer\_Setup\_Vx.xxBx.exe The installation figure is as follows:

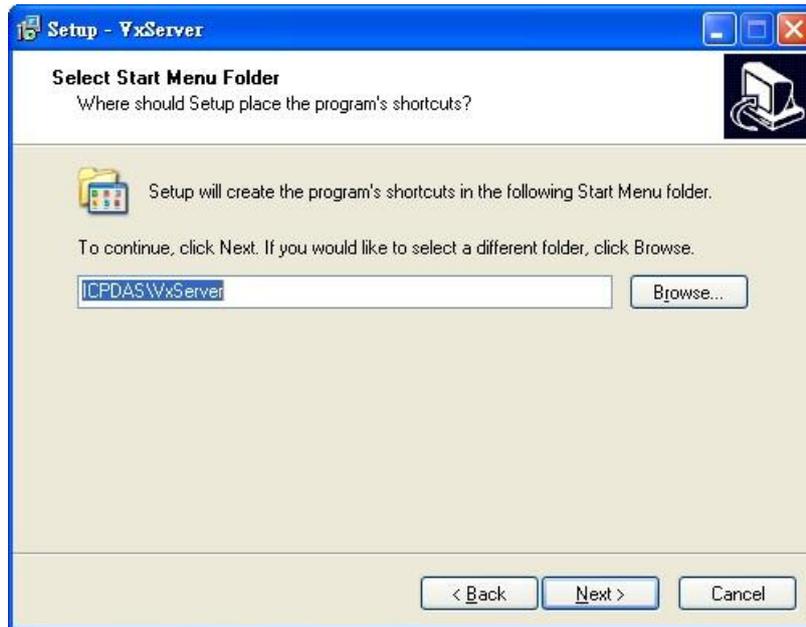
1. Press “Next” to start the installation procedure.



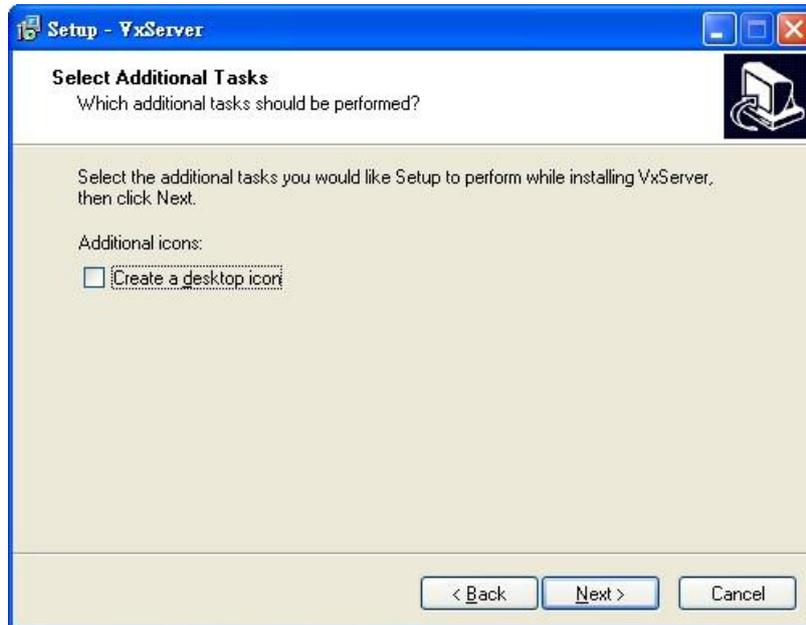
2. Select the installation path. The default path is " C:\ICPDAS\VxServer". Press “Next” to the next step.



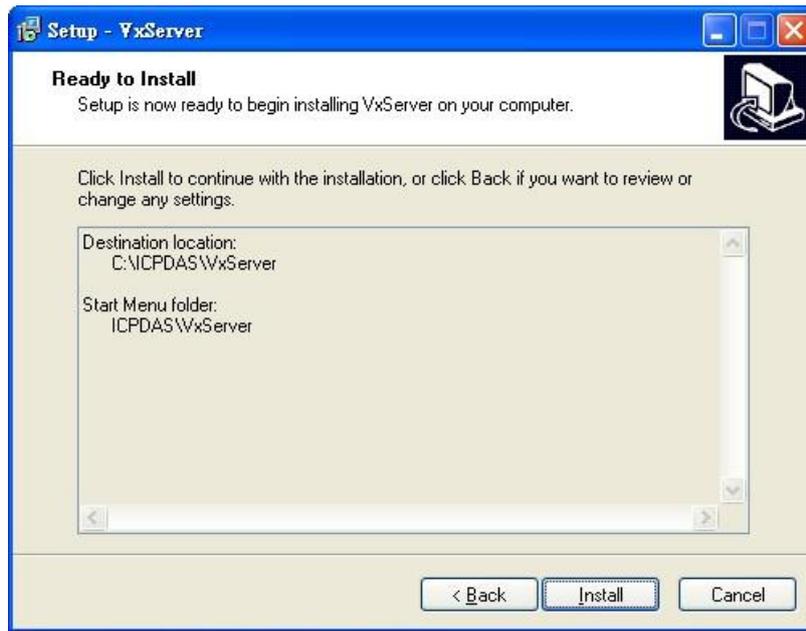
3. Select the “Start Menu Folder”, Press “Next” to the next step.



4. Select additional tasks. Press “Next” to the next step



5. Click "Install" to start to install the GT-541 Utility



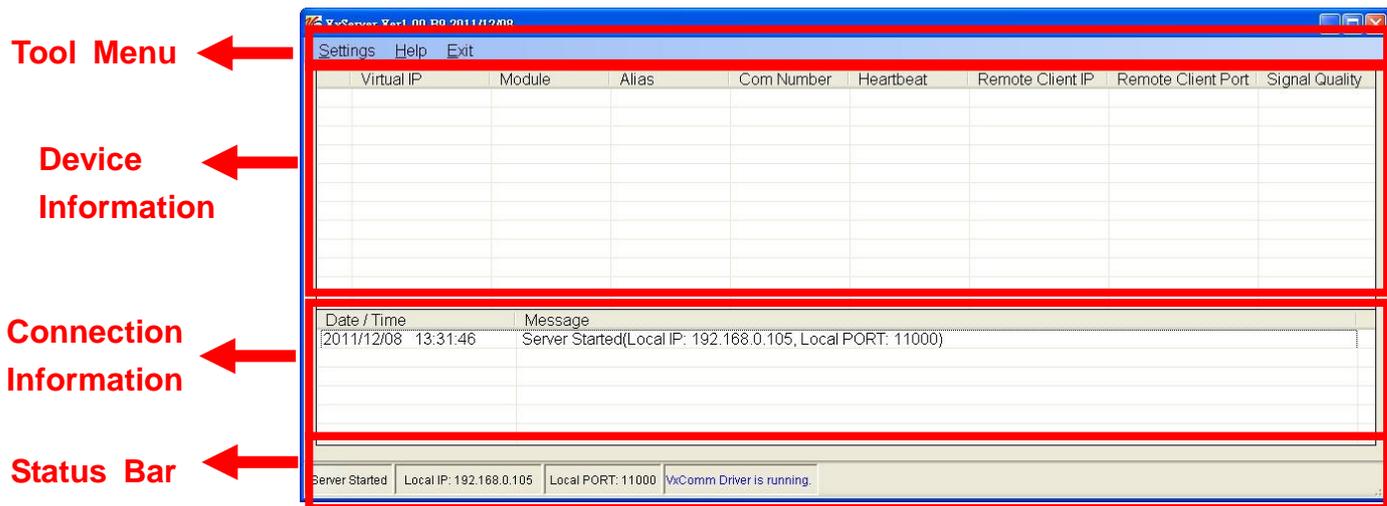
6. Click "Finish" to finish installing VxServer



## 4. The VxServer operation description

### 4.1 Main menu

The main menu of VxServer includes the following sections:



(1) Tool menu:

1. Settings:

Adjust the parameters of system as "Modify local IP", "Modify local Port", "Options", "System Information" and "Restart VxComm Driver"

2. Help:

The version of the VxServer

3. Exit:

Exit the VxServer

(2) Device:

Display information about remote devices as "Virtual IP", "Module", "Alias", "Com Number", "Heartbeat", "Remote Client IP", "Remote Client Port", "Signal Quality"

(3) Connection Information:

Record device connection information

(4) Status bar:

Display status of the VxServer:

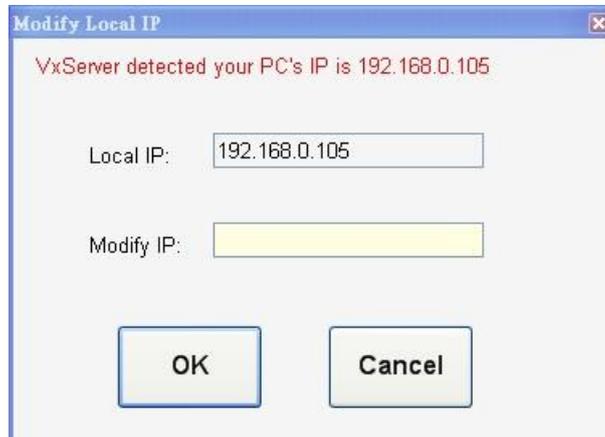
1. VxServer Server status
2. Display Local IP
3. Display Local Port
4. Display VxComm Driver status

## 4.2 Modify Local IP

1. Tool Menu -> Settings -> Modify local IP



2. Type new IP address into "Modify IP Field", then click "OK"

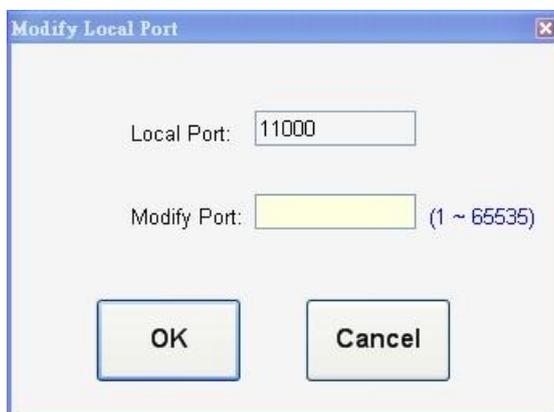


## 4.3 Modify Local Port

1. Tools Menu -> Settings -> Modify local Port

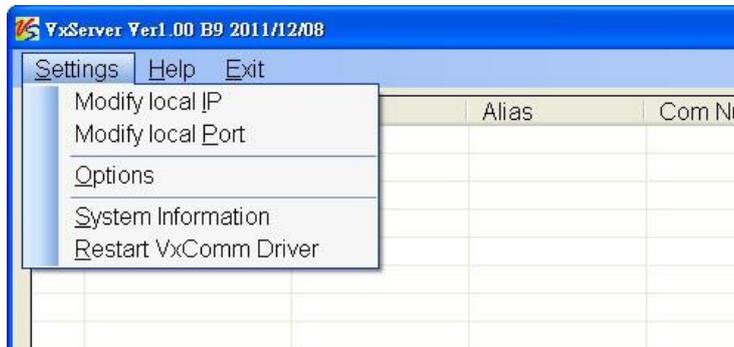


2. Type new port into "Modify Port Field" , Press "OK" to finish



## 4.4 Modify VxServer parameters

1. Tools Menu -> Settings -> Options

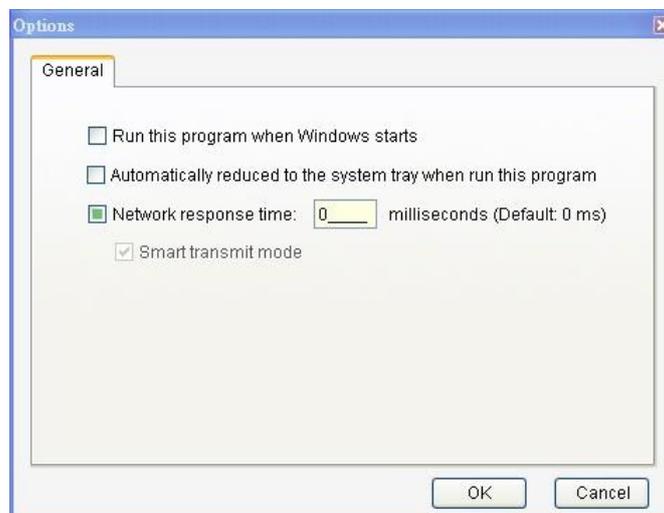


2. VxServer provides user-friendly options, allowing users to more easily use.

- (1) Run this program when Windows starts: Whether execute the VxServer when windows start.
- (2) Automatically reduced to the system tray when run this program: Whether automatically reduced to the system tray when execute the VxServer.
- (3) Network response time: **You must set network response time When the VxServer applies for the PLC edited software like the STEP7 of Siemens. You can set the network response time as 0 if you don't use the PLC software.**

Network response time	
Transmit mode	Recommend Value (ms)
Ethernet	100
Wi-Fi	500
3G	1000
GPRS	5000

(4) Smart transmit mode: whether enable the smart transmit mode

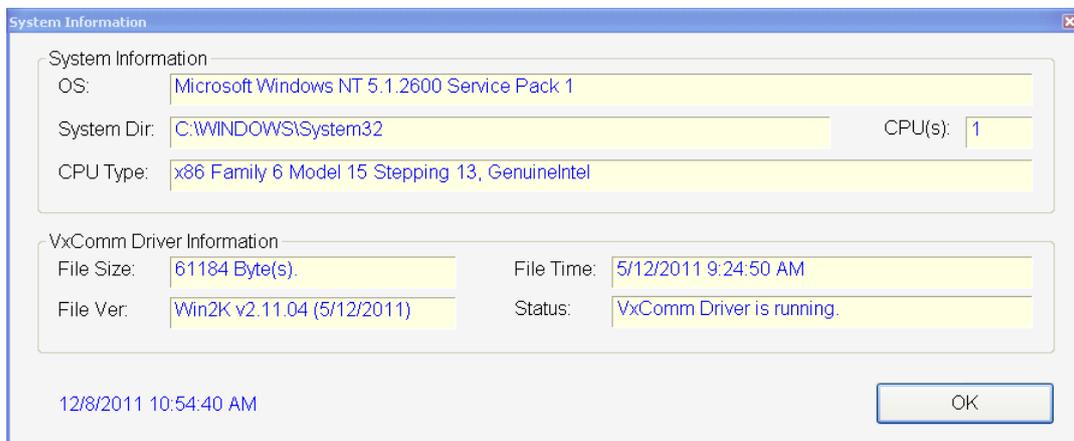


## 4.5 System Information

1. Tools Menu -> Settings -> System Information

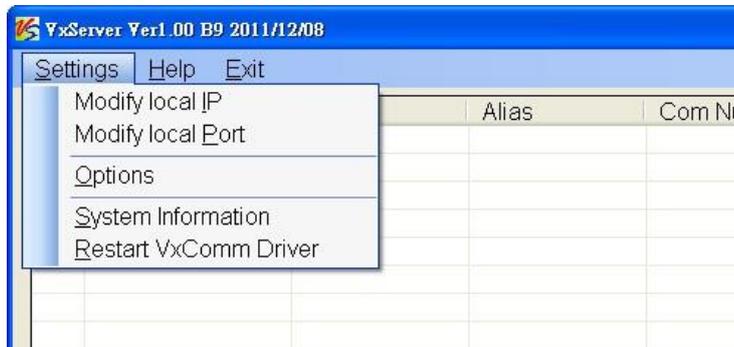


2. Get the system information of the Host

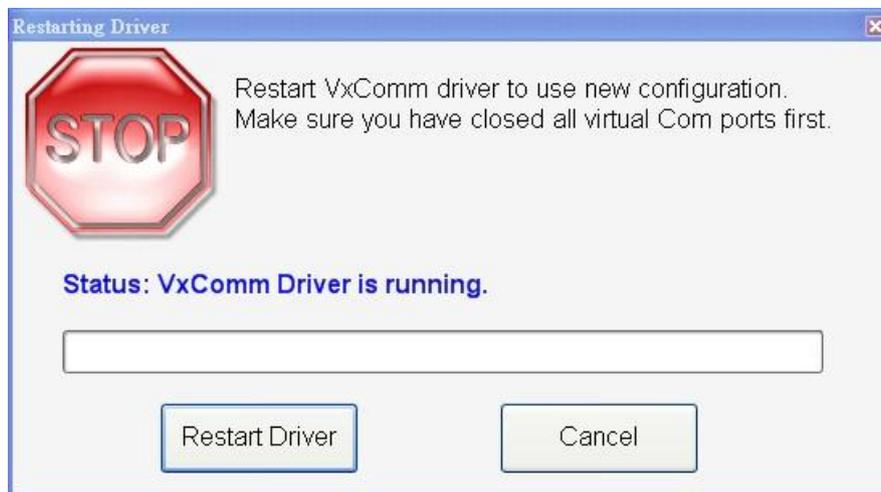


## 4.6 Restart VxComm Driver

1. Tools -> Settings -> Restart VxComm Driver

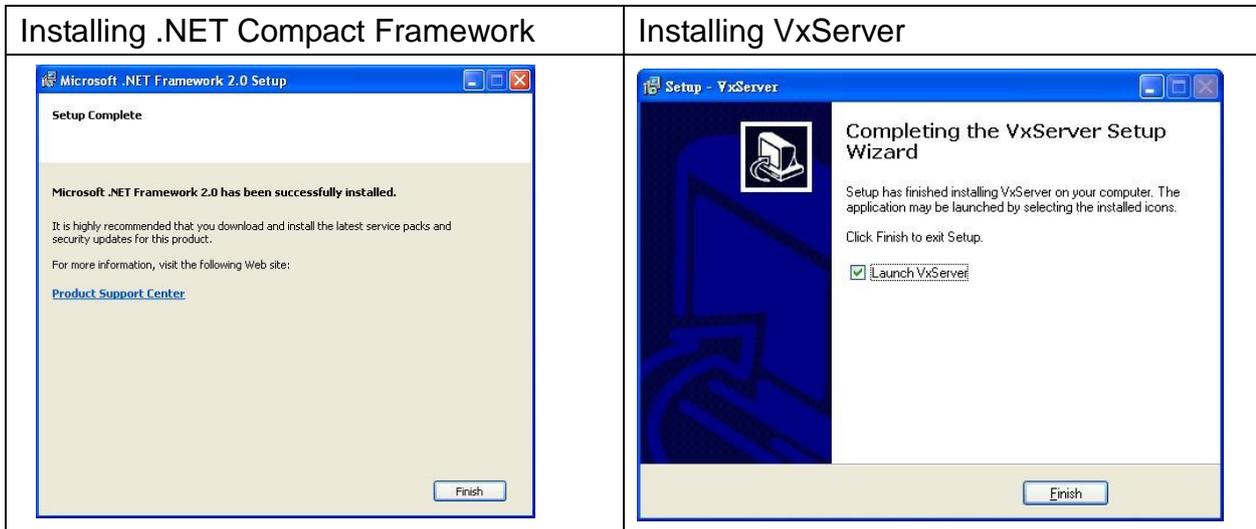


2. Be sure restart VxComm driver when you modify the parameters of options



## 5. How to quickly set up VxServer and VxComm Driver of the software

### 5.1 The necessary software installed



- ◆ Download Microsoft .Net Framework Version 2.0:

<http://www.microsoft.com/downloads/details.aspx?FamilyID=0856eacb-4362-4b0d-8edd-ab15c5e04f5&DisplayLang=en>

- ◆ Download VxServer software:

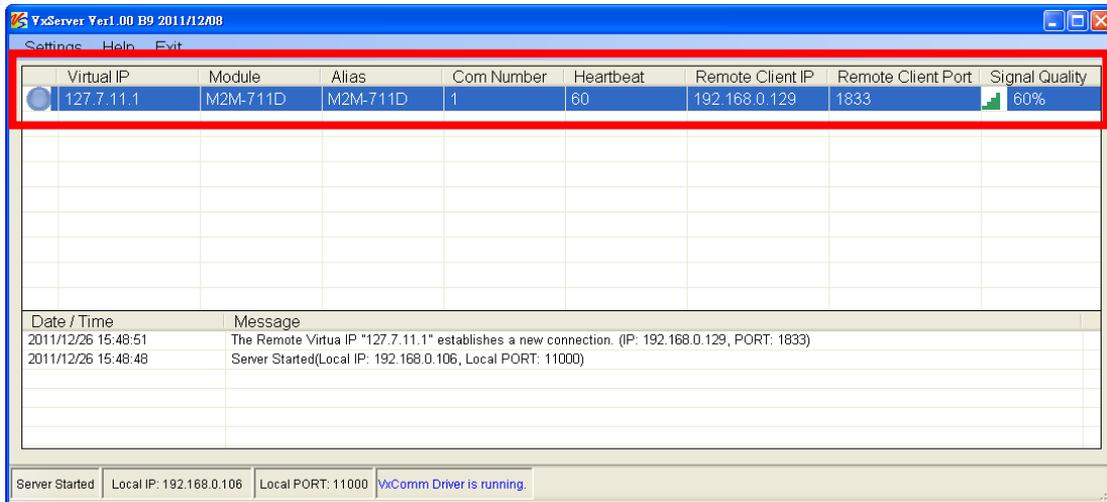
<http://m2m.icpdas.com/VxServer.html>

- ◆ Download VxComm Driver software:

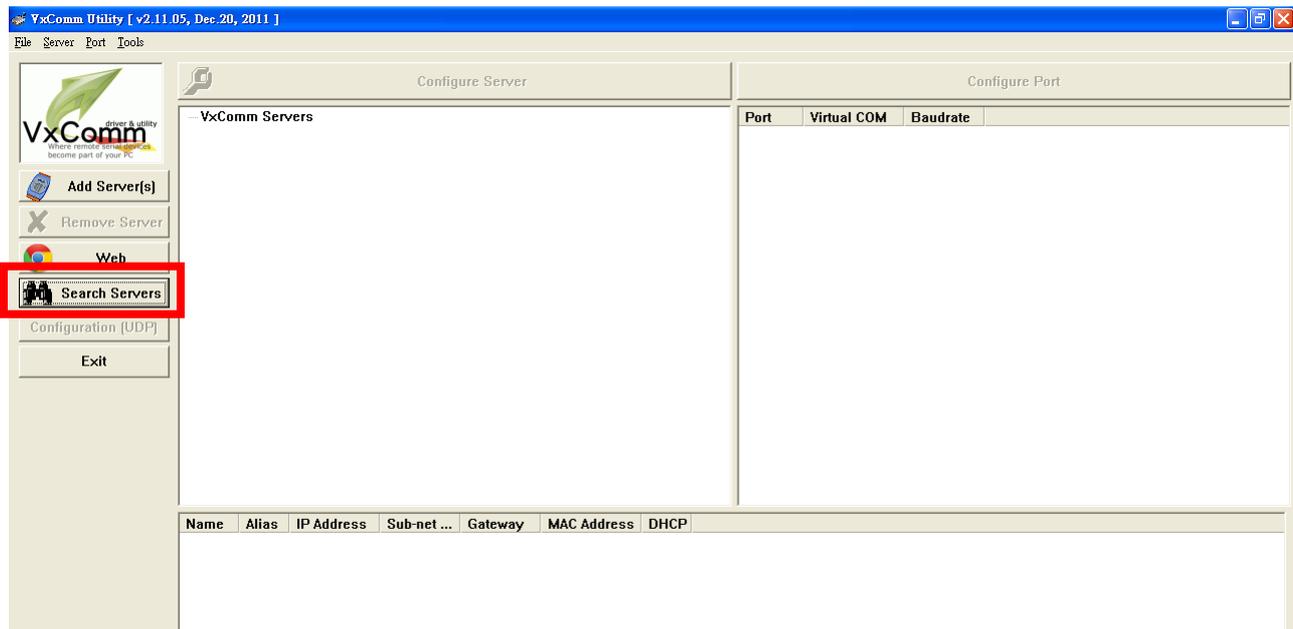
[http://ftp.icpdas.com/pub/cd/8000cd/napdos/driver/vxcomm\\_driver/2k/](http://ftp.icpdas.com/pub/cd/8000cd/napdos/driver/vxcomm_driver/2k/)

## 5.2 Setting the VxServer and VxComm Driver

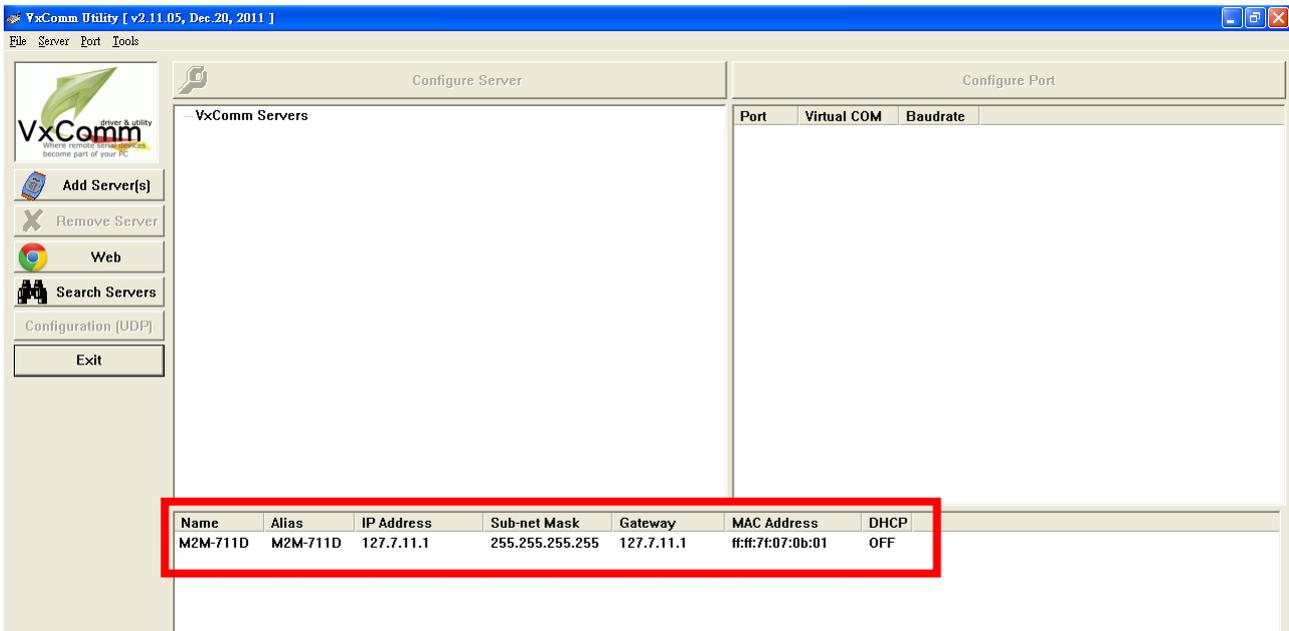
1. Verify that the device has been connected up



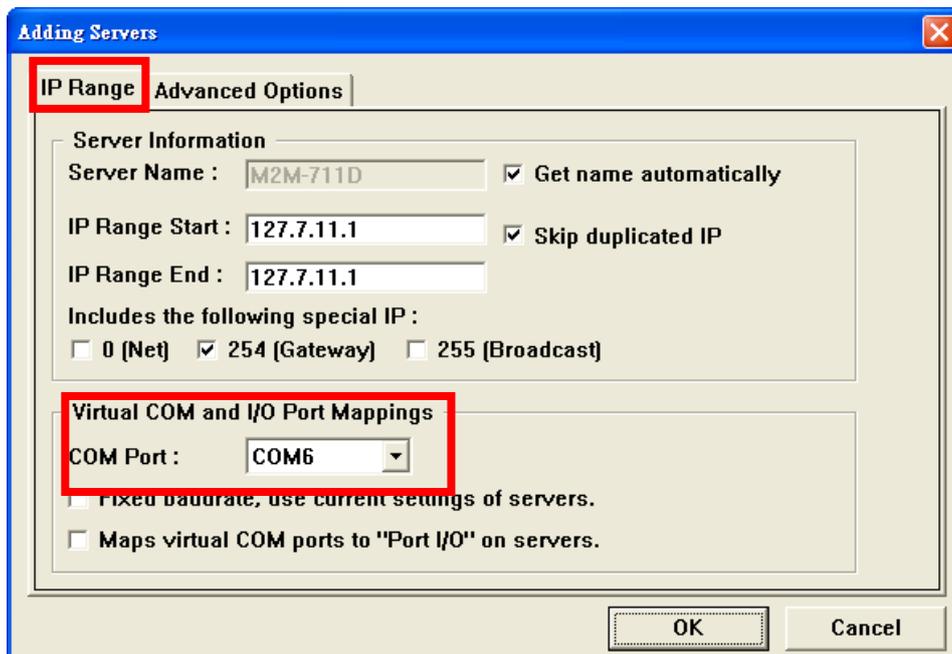
2. Execute VxComm Utility, then click "Search Servers"



3. Select your device, then click "Add Server(s)"

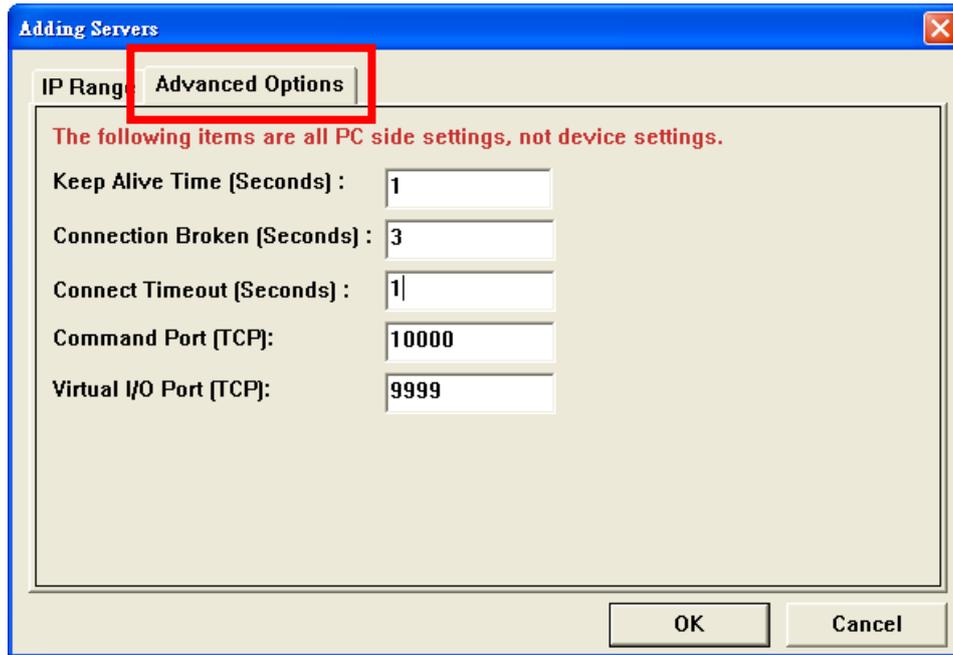


4. IP Range=> COM Port, Select virtual com

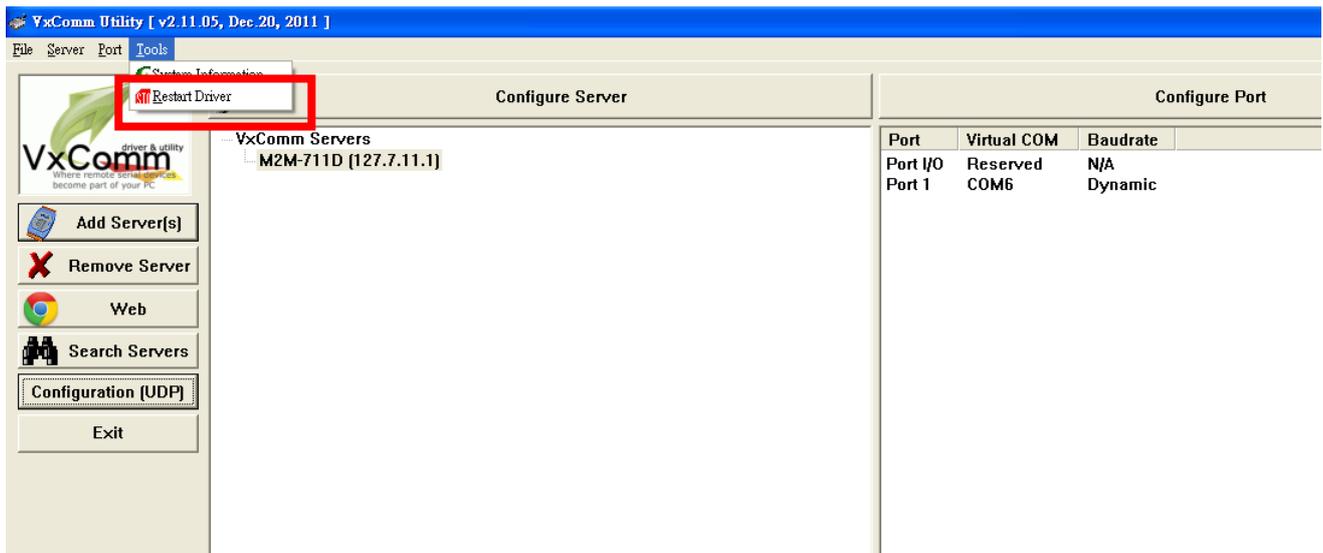


5. Advanced Options, please follow the below parameter settings

Parameters	Fixed value
Keep Alive Time	1
Connection Broken	3
Connect Timeout	1
Command Port	10000
Virtual I/O Port	9999



## 6. Tools =&gt; Restart Driver



## 7. Click "Restart Driver" to finish setting



## Version Record

Version	By	Date	Description
1.00	Yide	2011/12/13	
1.01	Yide	2011/12/26	
1.02	Kane	2012/03/21	