

Vigor600

Super G Wireless Adapter User's Guide



# **Copyright Information**

Copyright Declarations	Copyright 2005 All rights reserved. This publication contains information that is protected by copyright. No part may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language without written permission from the copyright holders.
Trademarks	<ul> <li>The following trademarks are used in this document:</li> <li>Microsoft<sup>®</sup> is a registered trademark of Microsoft Corp.</li> <li>Windows<sup>®</sup>, Windows 95, 98, Me, NT, 2000, XP and Explorer are trademarks of Microsoft Corp.</li> <li>Atheros<sup>®</sup> is a registered trademark of Atheros Communications, Inc.</li> <li>Wi-Fi, WPA, WPA2 and WMM are trademarks of Wi-Fi Alliance.</li> <li>Other products may be trademarks or registered trademarks of their respective manufacturers.</li> </ul>
Safety Instructions	s and Approval
Safety Instructions	<ul> <li>Read the installation guide thoroughly before you set up the wireless adapter.</li> <li>The wireless adapter is a complicated electronic unit that may be repaired only be authorized and qualified personnel. Do not try to open or repair the wireless adapter yourself.</li> <li>Do not place the wireless adapter in a damp or humid place, e.g. a bathroom.</li> <li>The wireless adapter should be used in a sheltered area, within a temperature range of +5 to +40 Celsius.</li> <li>Do not expose the wireless adapter to direct sunlight or other heat sources. The housing and electronic components may be damaged by direct sunlight or heat sources.</li> <li>Keep the package out of reach of children.</li> <li>When you want to dispose of the wireless adapter, please follow local regulations on conservation of the environment.</li> </ul>
Warranty	We warant to the original end user (purchaser) that the wireless adapter will be free from any defects in workmanship or materials for a period of one (1) year from the date of purchase from the dealer. Please keep your purchase receipt in a safe place as it serves as proof of date of purchase. During the warranty period, and upon proof of purchase, should the product have indications of failure due to faulty workmanship and/or materials, we will, at our discretion, repair or replace the defective products or components, without charge for either parts or labor, to whatever extent we deem necessary tore-store the product to proper operating condition. Any replacement will consist of a new or re-manufactured functionally equivalent product of equal value, and will be offered solely at our discretion. This warranty will not apply if the product is modified, misused, tampered with, damaged by an act of God, or subjected to abnormal working conditions. The warranty does not cover the bundled or licensed software of other vendors. Defects which do not significantly affect the usability of the product will not be covered by the warranty. We reserve the right to revise the manual and online documentation and to make changes from time to time in the contents hereof without obligation to notify any person of such revision or changes.
Be a Registered Owner	Web registration is preferred. You can register your Vigor adapter via http://www.draytek.com. Alternatively, fill in the registration card and mail it to the address found on the reverse side of the card.
Driver & Tools Updates	Due to the continuous evolution of DrayTek technology, this model will be regularly upgraded. Please consult the DrayTek web site for more information on newest driver, tools and documents.

http://www.draytek.com

### **European Community Declarations**

Manufacturer: DrayTek Corp.

Address:No. 26, Fu Shing Road, HuKou County, HsinChu Industrial Park, Hsin-Chu, Taiwan 303Product:Vigor600 Super G Wireless Adapter

DrayTek Corp. declares that Vigor600 Super G Wireless Adapter is in compliance with the following essential requirements and other relevant provisions of R&TTE Directive 1999/5/EEC.

The product conforms to the requirements of Low Voltage (LVD) Directive 73/23/EEC by complying with the requirements set forth in EN60950.

The Vigor600 Super G Wireless USB Adapter is designed for the WLAN 2.4GHz network throughput EC region, Switzerland, and the restrictions of France.

### **Regulatory Information**

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the use is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different form that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device many not cause harmful interference, and

(2) This device may accept any interference received, including interference that may cause undesired operation.

Federal Communication Commission Radiation Exposure Statement:

- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.
- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.
- For operation within 5.15~5.25GHx frequency range, it is restricted to indoor environment, and the antenna of this device must be integral.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- This equipment has been SAR-evaluated for use in laptops (notebooks) with side slot configuration

# Table of Contents

1. Introd	uction	1
1.1 Wi	reless Networking Application	. 2
	Peer-to-Peer Network: Cooperate LAN (Local Area Networking):	. 2 . 2
1.2 Fro	ont Panel	. 3
1.3 Pa	ckage Content	. 3
2. Install	/Uninstall Your Vigor600	4
2.1 Dri	ver and Utility Installation	. 4
2.2 Sa	fely Remove Your Vigor600	12
2.3 Un	installation 1	12
3. Conne	ct to a Wireless Network1	15
3.1 Op	en the Vigor600 Super G Wireless Adapter Utility 1	15
3.2 Co	nnect to an Existing Network	16
3.3 Cr	eate an Ad-Hoc Network	20
4. Config	juration2	22
4.1 Cu	rrent Status	22
4.1 Cu 4.2 Pro	rrent Status	22 25
4.1 Cu 4.2 Pro	rrent Status	22 25 27
4.1 Cu 4.2 Pro	rrent Status	22 25 27 38
4.1 Cu 4.2 Pro	rrent Status	22 25 27 38 38 39
4.1 Cu 4.2 Pro	rrent Status	22 25 27 38 38 39 39
4.1 Cu 4.2 Pro	rrent Status	22 25 27 38 38 39 39 40
4.1 Cu 4.2 Pro 4.3 Dia	rrent Status	22 25 27 38 38 39 39 40 40
4.1 Cu 4.2 Pro 4.3 Dia 4.4 Dia	rrent Status	22 25 27 38 39 39 39 40 40 40
4.1 Cu 4.2 Pro 4.3 Dia 4.4 Dis 4.5 Ac	rrent Status	22 25 27 38 39 39 40 40 40 42 43
4.1 Cu 4.2 Pro 4.3 Dia 4.4 Dia 4.5 Ac 4.6 He	rrent Status	22 25 27 38 39 39 40 40 42 43 45
4.1 Cu 4.2 Pro 4.3 Dia 4.4 Dia 4.5 Ac 4.6 He	rrent Status	22 25 27 38 39 40 42 43 45 45 45
4.1 Cu 4.2 Pro 4.3 Dia 4.4 Dis 4.5 Ac 4.6 He 4.7 Co	rrent Status	22 25 27 38 39 39 40 42 43 45 45 45 46 47
4.1 Cu 4.2 Pro 4.3 Dia 4.4 Dia 4.5 Ac 4.6 He 4.7 Co	rrent Status	22 25 27 38 39 39 40 42 43 45 45 45 46 47 47 48
4.1 Cu 4.2 Pro 4.3 Dia 4.4 Dis 4.5 Ac 4.6 He 4.7 Co 4.8 TC	rrent Status	22 25 27 38 39 40 42 43 45 46 47 48 47 48 48

# **1. Introduction**

The Vigor600 Super G Wireless Adapter is a convenient wireless connectivity solution for desktop or notebook PCs. The Vigor600 can enable 802.11g wireless connectivity by simply utilizing your desktop or notebook PC's USB port without stringing Ethernet cables to your PC.

It can deliver unparalleled performance and industry-wide compatibility. With a maximum wireless signal rate of up to 108Mbps\*, Vigor600 can transfer large files or view streaming video quickly and easily.

The Vigor600 Super G Wireless Adapter includes an intuitive configuration utility that allows you to discover and connect to other wireless networks in neighboring regions. Besides, such utility is able to create detailed connectivity profiles for the networks that you frequently access. Moreover, you can also enable support of WPA2 & 802.1x for enhanced data encryption and user authentication.

The Vigor600 Super G Wireless Adapter can be used in peer-to-peer mode (ad-hoc) to connect directly to other 802.11b/g wirelessly enabled computers or in client mode (infrastructure) to communicate with other users through an access point or router.

With the advantages in short size and sturdy speed, Vigor600 Super G Wireless Adapter is suitable for travel. It is a convenient solution for providing high performance wireless connectivity to your desktop or notebook PC.

#### **Main features**

- High-speed wireless connection
- Standard compliance 802.11b/g
- Super  $G^{\mathbb{M}}$  (up to 108 Mbps data rate) and eXtended Range (XR) Technology
- Innovative design focus on simplicity and functionality

\*Actual data throughput will vary according to the network conditions and environmental factors, including volume of network traffic network overhead and building materials.

# **1.1 Wireless Networking Application**

As Vigor600 Super G Wireless Adapter is interoperable and compatible with other IEEE 802.11g compliant products, you are free to establish your ideal wireless network and share Internet access, printers and other peripheral devices. All the wireless devices in the network can share data and image files, play multi-player games, and use other network enabled sharing resources.

There are two kinds of wireless network and you can connect to any of them using Vigor600 Super G Wireless Adapter:

### **Peer-to-Peer Network:**

An **Ad Hoc Network** could be easily set up with several wireless devices those are in the form of a desktop PC or notebook with Vigor600 Super G Wireless Adapter or other WLAN devices. This is a common wireless networking application to construct a temporary network, such as for demonstration in exhibition, for new sales point/branch use and alike.



## Cooperate LAN (Local Area Networking):

A Wireless LAN is usually referred as an **Infrastructure Network** and constructed with an Access Point and other 802.11b/g compliant devices. As soon as the AP is set up within the proper range, Vigor600 Super G Wireless Adapter will scan the neighborhood and connect to the wireless network via at the most suitable frequency automatically.



# **1.2 Front Panel**



Connector

#### LED

Status	Explanation
Off	The wireless adapter is powered off.
Blinking	The wireless adapter is powered on. There is no wireless connection.
Steady Green	The wireless adapter is power on. There is a linked wireless connection.

### Connector

Interface	Description
USB 2.0	Connect to the PC or notebook.

# **1.3 Package Content**







B Extension cable

**Q**uick Start Guide

**2**<sub>CD</sub>

# 2. Install/Uninstall Your Vigor600

This section will guide you to install/uninstall Vigor600 Super G Wireless Adapter ( the Wireless Adapter) through hardware connection and configure the Wireless Adapter's settings through the Vigor600 Super G Wireless Adapter Utility (the Utility).

# **2.1 Driver and Utility Installation**

Before connecting the Wireless Adapter to your desktop PC or notebook, you have to install the driver from the CD in the package.

Follow the steps below.

- 1. Insert the installation CD. It starts an index window automatically. Select **Install Windows 2000/XP Driver and Utility** or **Install Windows 98SE/Me Driver and Utility**.
- 2. Follow the installation wizard to complete the software installation process.

Notice:

- For detailed step-by-step instruction, please refer to the later section.
- Select "Cancel" when Found New Hardware window appears.
- Select "Continue Anyway" when Software Installation window appears.
- If your operation system is Windows XP, it is recommended that you install and use the Utility.
- 3. Connect the Wireless Adapter to your desktop PC or notebook.
- 4. Restart your desktop PC or notebook.
- 5. Check the LED of the adapter to assure network connections.

(For the detailed information of LED status, please refer to section 1.1.)



This section will guide you to install the driver step by step.

1. Insert the installation CD. It starts an index window automatically. Select **Install Windows 2000/XP Driver and Utility** or **Install Windows 98SE/Me Driver and Utility**.



2. The installation program window will pop-up. Click Next.



3. Select I accept the terms of the license agreement and click Next.

gor600 Super G Wireless Adapter Installation Program	
License Agreement Please read the following license agreement carefully.	
All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of this company	
<ul> <li>I accept the terms of the license agreement</li> <li>☐ I do not accept the terms of the license agreement</li> </ul>	j
allShield <u>Back</u> <u>N</u> ext > Cancel	

4. Highlight the items you prefer to install. When finish, click **Next**.



5. The system will remind you to connect the Wireless Adapter to your desktop PC or notebook. Insert the adapter as instructed and click **OK**.





Click Cancel when Found New Hardware Wizard window appears.



6. The system will remind you the reboot step. Click **Yes** to continue.



7. Accept the default installation folder location. Otherwise click **Browse** to select the destination folder you prefer. Click **Next** to continue.

Vigor600 Super G Wireless Adapter Installation Program	
Choose Destination Location Select the folder where the installation program will install the files.	
The installation program will install the client utilities in the following location:	
Destination Folder C:\Program Files\DrayTek Vigor600 Browse	
InstallShield <u>Kancel</u> Cancel	

8. Use the default program folder name, or edit the program folder name. Click **Next**.

Vigor600 Super G Wireless Adapter Installation Program	×
Select Program Folder Select a program folder.	
The installation program will add program icons to the Program Folder listed below. You may enter a new folder name or select one from the Existing Folders list.	
Program Folder:	
Vigor600 Super G Wireless Adapter	
Existing Folders:	
Acer ePM	
Acer Glidvista	
CuberLink PowerDVD	
GDC Router Tools V2.5.4	
Google Desktop	
Intel PROSet Wireless	
Launch Manager	
InstallShield	
mount man	10
<pre><back next=""> Cancel</back></pre>	ר

9. Read the notice and click **Next**.



10. Select the tool you will use to configure the Wireless Adapter after installation. We recommend for you to select the **Vigor600 Super G Wireless Adapter Utility**. Click **Next**.



11. The system will remind that the following process will install the item you selected automatically. Check if the Wireless Adapter is inserted to your desktop PC or notebook now. Click **OK** when finish.

Vigor 60	0 Super G Wireless Adapter Installation Program
1	The installation program starts to install the driver automatically. Insert the adapter now and proceed with the installation. Cancel the Found New Wizard if it appears. Select Continue Anyway when Hardware Installation message appears. Click OK to continue.
	OK

12. The installation process is ongoing.





 Select Continue Anyway when Software Installation window appears. This window may hide behind other windows if you have lots of open windows. Be sure to find it if you find the status progress bar has stopped for a certain period.



13. When the installation process ends, the system requires to reboot your desktop PC or notebook. Click **OK**.



14. After system reboot, the Utility will starts automatically. The Wireless Adapter connects to an unsecured network that has the best signal strength (if there's any) automatically. You can find an icon in the system tray and also a short-cut icon on the desktop as shown below.

Tray icon:



# 2.2 Safely Remove Your Vigor600

When you want to remove (eject/unplug) the Wireless Adapter, please follow the safe removal procedure.



- By removing the Wireless Adapter, you will lose the wireless connection to the network. Make sure you have closed all the related windows or network applications before removing the Wireless Adapter.
- 1. Find the safe removal icon in the system tray as shown below and double click it.



2. The **Safely Remove Hardware** window will pop up. Select the Wireless Adapter and click the **Stop** button. A message will pop up to inform you that now it is safe to remove the device.

## **2.3 Uninstallation**

For some reason, you may need to uninstall the driver of the Wireless Adapter or the utility. Follow the uninstallation procedure below.



Notice:

- By uninstalling the driver of the Wireless Adapter, you will lose the wireless connection to the network. Make sure you have closed all the related windows or network applications before removing the Wireless Adapter.
- 1. Go to Start menu on the left down corner. Select Start > Programs > Vigor600 Super G Wireless Adapter > Uninstall Utility.

2. The Installation Program window pops up. Click **Uninstall the previous installation** and click **Next**.

Vigor600 Super G Wireless Adapter Installation Program	×
Previous installation detected	
The installation program has detected that a previous installation exists. What do you want to do?	
O Update the previous installation	
Uninstall the previous installation	
InstallShield	)

3. The system will remind you the reboot step. Click **Yes** to continue.



4. The system will confirm the removal process with you. Click **OK** to continue.



5. The system will double confirm the removal process with you. Click **Yes** to continue.



6. Now the program starts to uninstall. And you will see a process bar of uninstalling on the screen. When the process ends, a message pops up to ask you restarting the desktop or laptop. Click **OK** to finish the uninstallation process.

Vigor 60	0 Super G Wireless Adapter Installation Program 🛛 🛛 🔀
♪	The Installation Program has successfully performed the selected operations, but the system needs to be rebooted before all of the changes will take effect. Click OK to reboot the system.
	ОК

# **3. Connect to a Wireless Network**

This section will guide you to connect to a wireless network through Vigor600 Super G Wireless Adapter (the Wireless Adapter) and configure the settings using Vigor600 Super G Wireless Adapter Utility(the Utility).

## 3.1 Open the Vigor600 Super G Wireless Adapter Utility

✓ Go to Start menu on the left down corner. Select Start > Programs > Vigor600 Super G Wireless Adapter > Vigor600 Super G Wireless Adapter Utility.

or

Right click on the utility icon in the system tray. Select Open Vigor600 Super G
 Wireless Adapter Utility.

Exit	
Open Vigor600 Super G Wireless Adapter Uti	lity
Preferences	
Disable <u>R</u> adio	
Manual <u>L</u> ogin	
Reauthenticate	
Select Profile	)
Show Connection Status	

You will find the main window as shown below. If you did not connect to any network yet, the **Profile Name** would show **Default**.

Vigor600 Super G Wirele	ss Adapter Utility - C	urrent Profile: Default	? 🗙
<u>Action</u> Options <u>H</u> elp			
Current Status Profile Managem	ent Diagnostics		
Profile Name:	Default		
Link Status:	Associated	DrayTek ATHER	05.
Wireless Mode:	2.4 GHz 54 Mbps	IP Address: 172.16.3.47	
Network Type:	Infrastructure	Current Channel: 11	
Server Based Authentication:	None	Data Encryption: WEP	
Signal Strength:		Excellent	
		Ad <u>v</u> anced	

## **3.2 Connect to an Existing Network**

To connect to an existing network, an Infrastructure or an Ad-Hoc network, you should manually create a profile and assign the information of the network.

Follow the steps below.

- 1. Click **Profile Management** tab.
- 2. Click Scan. The Available Infrastructure and Ad Hoc Networks list will show all available wireless networks (identified by SSID) in the neighborhood. On this list, click **Refresh** to refresh the list at any time.
- 3. Highlight a **Network Name (SSID)** and click the **Activate** button to connect an available network.
- 4. If no configuration profile exists for that network, the **Profile Management** window will open the **General** tab. Fill in the profile name and the information for this network settings in **General**, **Security** and **Advanced** tabs. Click **OK** to create the configuration profile for that network. Contact the network administrator if necessary.



- For detailed information of connecting, please read the following step-by-step instruction.
- For details of each tab in Vigor600 Super G Wireless Adapter Utility, please refer to Chapter 4.
- 5. Once connected, the tray icon will become III. You can click **Current Status** tab to check the connection status.

This section will guide you to connect to an existing network step by step.

1. Open the main window of the utility, and click **Profile Management** tab.

🎯 Yigor600 Super G Wireless Adapter Utility - Current Profile: Default	? 🛛
<u>A</u> ction <u>O</u> ptions <u>H</u> elp	
Current Status Profile Management Diagnostics	
Default	<u>N</u> ew
	Modify
	Remove
	Acțivate
Details	
Network Type:	Import
Security Mode:	
Network Name 1 (SSID1):	<u>Export</u>
Network Name 2 (SSID2):	Scan
Network Name 3 (SSID3):	
Auto Select Profiles	Order <u>P</u> rofiles

 Click Scan. Wait for several seconds. You will see a list of Available Infrastructure and Ad Hoc Networks. On this list, click Refresh to refresh the list at any time.

Network Name (SSII	D) 👘 🛛	Super XR Si	gnal Strength	Channel	Wireles 🗠
11111		11	48 %	1	2.4 GHz
123		11	88 %	6	2.4 GHz
<b>i</b> 194		վլ	82 %	8	2.4 GHz
1 21 v-pga function		վլ	78 %	3	2.4 GHz
1 2600Gi202		J.	77 %	2	2.4 GHz
1 2600V-Jerry-BT			56 %	11	2.4 GHz
1 2600VGI		11	84 %	3	2.4 GHz
1 2600VGI202		11	81 %	3	2.4 GHz
1 2900G		11	76 %	6	2.4 GHz
1 000		<del>ر آر</del>	00 v	<u> </u>	- 1 A CU-

3. Highlight a **Network Name (SSID)** and click the **Activate** button to connect an available network.

vailable Infrastr	ucture and Ad I	Hoc Networks		?
Network Name (	SSID) 🕅 Supe	er XR Signal Strength	Channel	Wireles 🔨
1 2900G		1 24 dB	6	2.4 GHz
\$ 5566		12 dB	1	2.4 GHz
👗 default		28 dB	6	2.4 GHz
👗 default		10 dB	6	2.4 GHz
👗 default		27 dB	6	2.4 GHz
👗 default		15 dB	6	2.4 GHz 💼
👗 default		1]] 8 dB	6	2.4 GHz
👗 mmmmm		16 dB	9	2.4 GHz
₽ NK	ಷತಿ	11 42 dB	11	2.4 GHz 🧹
<			)	>
		Activate		
		Activate		

4. If no configuration profile exists for that network, the **Profile Management** window will open the **General** tab. Fill in the profile name and the information of this network settings in **General**, **Security** and **Advanced** tabs. Click **OK** to create the configuration profile for that network. Contact the network administrator if necessary.

General Tab: Enter a Profi	le Name and at least one SSID.
----------------------------	--------------------------------

Profile Management	? 🛛
General Security Advance	ad
Profile Settings	
Profile Name:	Default
Client Name:	PEGGIE-XP
Network Names	
SSID1:	NK
SSID2:	
SSID3:	
	OK Cancel

**Security Tab**: If you are going to connect to a secure network, you have to select the security option and/or WPA/WPA2 EAP Type or 802.1x EAP Type. Click **Configure** to set passphrase (or encryption keys) or authentication information. Check with your IT manager if necessary.

Profile Management			<b>?</b> ×
General Security Advanced			
Set Security Options		]	
	PA/WPA2 EAP Type:	LEAP	
◯ WPA/WPA2 Passphrase			
◯ 802.1x	802.1x EAP Type:	LEAP	
Pre-Shared Key (Static WEP)			
◯ None			
Configure	Allow Association to Mi	ixed Cells	
Group Policy Delay: 0	sec		
		ОК Са	ancel

Advanced Tab: In Network Type, the utility will show if the network is Infrastructure or Ad-Hoc automatically. Change it if necessary. You can further set Transmit Power Level, Power Save Mode (if connecting to an Infrastructure network), 802.11b Preamble (if connecting with 802.11b wireless devices) and Wireless Mode, including Super G function.

Transmit Power Level	Power Save Mode:	Normal	~
802.11b/g: 100 mW 💌	Network Type:	Infrastructure	
802.11a: 40 mW	802.11b Preamble:	💿 Short & Long	🔘 Long Only
Wireless Mode	~ Wireless Mode Whe	n Starting Ad Hoc Net	work
🔽 2.4 GHz 11 Mbps	◯ 2.4 GHz 54/1	1 Mbps Channe	: Auto 💉
Super G			
802.11 Authentication Mode			ha (ann a' A Da

5. If successfully connected, you will find a tray icon in the right down corner. You can click **Current Status** tab in the utility to check the connection status.

## **3.3 Create an Ad-Hoc Network**

To create a wireless network without an access point, simply create an Ad-Hoc network with the Wireless Adapter and welcome other wireless peers to join in. Follow the steps below:

1. In **Profile Management** tab, click **New** to create a profile.

Vigor600 Super G Wirele ion <u>O</u> ptions <u>H</u> elp	ss Adapter Utility - Current P	rofile: Default 🛛 ?
urrent Status Profile Managem	ent Diagnostics	
🐚 Default		<u>N</u> ew
		Modify
		Remove
		Activate
- Details		
Network Type:	Infrastructure	Import
Security Mode:	Pre Shared Key	
Network Name 1 (SSID1):	NK	<u>E</u> xport
Network Name 2 (SSID2):	<empty></empty>	- Soon
Network Name 3 (SSID3):	<empty></empty>	<u> </u>
Auto Select Profiles		Order Profiles

2. In General tab, edit the Profile Name and SSID1.

Profile Settings		
Profile Name:	Ad Hoc Network	
Client Name:	PEGGIE-XP	
Network Names		
SSID1:	ad_hoc	
SSID2:		
SSID3:		

3. In **Security** tab, configure security options.

WPA/WPA2		WPA/WPA2 EAP Type:	LEAP	~
) WPA/WPA2 Pa	issphrase			
) 802.1x		802.1x EAP Type:	LEAP	~
None Configure		Allow Association to M	ixed Cells	

4. In Advanced tab, switch Network Type to Ad Hoc. Select Wireless Mode to define the network use 2.4GHz 54Mbps(802.11g), or 2.4GHz 11Mbps(802.11b) or Super G (2.4GHz 54Mbps).

- Transmit Power Level	Power Save Mode: Off
802.11b/g: 100 mW 🔽	Network Type: Ad Hoc
802.11a: 40 mW	802.11b Preamble: 🔘 Short & Long 💿 Long Only
✓ Wireless Mode ✓ 2.4 GHz 54 Mbps	Wireless Mode When Starting Ad Hoc Network
🗹 2.4 GHz 11 Mbps	2.4 GHz 11 Mbps
✓ Super G ✓ eXtended Range (XR) TM	◯ 2.4 GHz 54 Mbps Channel: Auto
	802.11 Authentication Mode

5. Click **OK** button.

# 4. Configuration

This section will introduce all configurations using **Vigor600 Super G Wireless Adapter Utility** (the Utility) in detail, including common operations, function explanation in each tab and status icons meaning. Also it will introduce **Windows XP Zero Configuration Service (WZCS)** if you choose it as configuration tool.

# **4.1 Current Status**

The **Current Status** tab contains general information about the program and its operations. The **Current Status** tab does not require any configuration. The following table describes the items found on the **Current Status** screen.

Vigor600 Super G Wirele	ss Adapter Utility -	Current Profile: Default 🛛 🛛 🛛 🔀
Action Options Help		
Current Status Profile Managem	ent Diagnostics	
Profile Name:	Default	
Link Status:	Associated	Dray Tek ATHEROS
Wireless Mode:	2.4 GHz 54 Mbps	IP Address: 172.16.3.47
Network Type:	Infrastructure	Current Channel: 11
Server Based Authentication:	None	Data Encryption: WEP
Signal Strength:		Excellent
		Advanced
Profile Name	The name of Set up the con	the current selected configuration profile figuration name on the General tab.
Link Status	Shows wheth network.	er the station is associated to the wireles
Wireless Mode	Displays the with the mode on the A	vireless mode. Configure the wireless Advanced tab.
IP Address	Displays the o	computer's IP address.
Network Type	The type of n The options in AdHoc.	etwork that the station is connected to. nclude: Infrastructure (access point) and
Current Channel	Shows the cur	rrent connected channel.
Server Based Authentication	Shows whether	er server based authentication is used.

Data Elici yptiol	Data	En	crv	pti	on
-------------------	------	----	-----	-----	----

Displays the encryption type the driver is using. Configure the encryption type on the **Security** tab.

Signal Strength

Advanced

Shows the strength of the signal.

Press Advanced button to see the window below.

Network Name (SSID):	NK	Current Signal Strength:	-54 dBm
Server Based Authentication:	None	Current Noise Level:	-96 dBm
Data Encryption:	WEP	Up Time:	00:06:33
Authentication Type:		802.11b Preamble:	Short & Long
Message Integrity Check:	None	Current Receive Rate:	1.0 Mbps
QoS:	None	Current Transmit Rate:	36.0 Mbps
Associated AP Name:	Unavailable	Channel:	11
Associated AP IP Address:	Unavailable	Frequency:	2.462 GHz
Associated AP MAC Address:	00-0C-76-C8-FD-1E	Channel Set:	NA
Power Save Mode:	Normal		
Current Power Level:	30 mW		
Available Power Levels (802.11b/g):	100, 63, 50, 30, 20, 10 m	W	0

**Network Name (SSID):** Displays the wireless network name. Configure the network name on the **General** tab.

**Server Based Authentication:** Shows whether the server that based on the authentication is used.

**Data Encryption:** Displays the encryption type the driver is using. Configure the encryption type on the **Security** tab.

Authentication Type: Displays the authentication mode. Configure the authentication mode on the General tab.

**Message Integrity Check:** Shows whether MIC is enabled. MIC prevents bit-flip attacks on encrypted packets.

**Associated AP Name:** Displays the name of the access point that the Wireless Adapter is associated to.

Associated AP IP Address: Shows the IP address of the access point that the Wireless Adapter is associated to.

Associated AP MAC Address: Displays the MAC address of the access point that the Wireless Adapter is associated to.

**Power Save Mode**: Shows the power save mode. Power management is disabled in ad hoc mode. Configure the power save mode on the **Advanced tab**.

**Current Power Level:** Displays the transmit power level rate in mW. Configure the transmit power level on the **Advanced** tab.

**Available Power Levels:** Shows the 802.11a and/or 802.11b/g available power levels.

Current Signal Strength: Shows the current signal

strength in dBm.

**Current Noise Level:** Displays the current noise level in dBm.

**Up Time:** Shows how long the client adapter has been receiving power (in hours:minutes:seconds). If the adapter runs for more than 24 hours, the display will show in days:hours:minutes:seconds.

**802.11b Preamble:** Displays the 802.11b preamble format. Configure the preamble format on the **Advanced** tab.

**Current Receive Rate:** Shows the current receive rate in Mbps.

**Current Transmit Rate:** Displays the current transmit rate in Mbps..

Channel: Shows the currently connected channel.

Frequency: Displays frequency the station used.

Channel Set: Shows the current channel set.

## **4.2 Profile Management**

Configure the Vigor600 Super G Wireless Adapter ( the Wireless Adapter) from the **Profile Management** tab. The Wireless Adapter works in either infrastructure mode (which uses an access point) or ad hoc mode (a group of stations participating in the wireless LAN). Highlight a configuration profile in the profile list to find out details for that profile including network type, security mode, and the SSIDs (network names) associated with that profile.

Vigor600 Super G Wirele ion Options <u>H</u> elp	ss Adapter Utility - Current Pr	ofile: Default 🛛 ?
urrent Status Profile Manageme	ent Diagnostics	
Default		<u>N</u> ew
Ad Hoc Network		<u>M</u> odify
		Remo <u>v</u> e
		Activate
Details		
Network Type:	Infrastructure	Import
Security Mode:	Pre Shared Key	
Network Name 1 (SSID1):	NK	<u>E</u> xport
Network Name 2 (SSID2):	<empty></empty>	Scon
Network Name 3 (SSID3):	<empty></empty>	J <u>u</u> an
Auto Select Profiles		Order Profiles

Sec. 1	Profile Activated.
Details Field	Network Type: Indicates whether the current activated network type is Infrastructure or Ad Hoc mode. Security Mode: Indicates current connected network's security mode. Network Name: Indicates current connected network's name.
New	To create a new profile.
Modify	To edit settings of the chosen profile.
Remove	To remove the chosen profile from the list.
Activate	To activate the chosen profile.
Import	To import a pre-set profile (pre-saved as a Config File *.prf).
Export	To export the chosen profile. So you can save the profile as a Config File (*.prf) for future use.
Scan	To scan all available network in vicinity.

Network Name (SSID	) 🕅	Super XF	R Si	gnal Strength	Channel	Wireles 🔨
🗼 default			al	26 dB	6	2.4 GHz
i default			al	21 dB	6	2.4 GHz
i default			all	35 dB	9	2.4 GHz
1 mmmmm			al	25 dB	9	2.4 GHz
👗 NK			al	59 dB	11	2.4 GHz
1 PRO 100			all	18 dB	12	2.4 GHz
Super G AP		5	al	55 dB	6	2.4 GHz
1 v26_wds2			11	8 dB	1	2.4 GHz
VDS-5			ıll	6 dB	11	2.4 GHz
(						>

Network Name (SSID) icons :



### Create or Modify a profile

- 1. To add a new configuration profile, click **New** on the **Profile Management** tab. To modify a configuration profile, select the configuration from the Profile list and click the **Modify** button.
- 2. The **Profile Management** dialog box displays the **General** tab.
- 3. Edit the **General** tab.

Profile Management	2 🛛
General Security Advanc	ed
Profile Settings	
Profile Name:	Default
Client Name:	PEGGIEXP
Network Names	
SSID1:	NK
SSID2:	
SSID3:	
	OK Cancel
Profile Settings	<b>Profile Name:</b> Identifies the configuration profile. This name should be unique. Profile names are not case sensitive. <b>Client Name:</b> Identifies the client machine.
Network Names SSIDs)	The IEEE 802.11 wireless network name. This field ha a maximum limit of 32 characters. Configure up to thr SSIDs (SSID1, SSID2, SSID3).

4. Edit the **Security** tab.

Profile Management		?	×
General Security Advanced			
- Set Security Options			
O WPA/WPA2	WPA/WPA2 EAP Type:	LEAP	
WPA/WPA2 Passphras	e		
○ 802.1×	802.1x EAP Type:	LEAP	
● Pre-Shared Key (Static \	wEP]		
O None			
Configure	Allow Association to M	lixed Cells	
Group	Policy Delay: 0 🔅 sec		
		DK Cancel	5
VV 1 AJ VV F AZ	Opens the WPA/WPA/ options include: EAP- (EAP-GTC), PEAP (I EAP-FAST.	2 EAP drop-down menu. The TLS, EAP-TTLS, PEAP EAP-MSCHAP V2), LEAP ,a	nd
	Click on the <b>Configur</b> Refer to later section for	e button to fill in other informator detail.	tior
WPA Passphrase	Enables WPA Passphra button to fill in the WF ASCII or 64 hexadecir	ase security. Click the <b>Configu</b> A Passphrase. Enter 8 to 63 nal characters.	ire
802.1x	Enables 802.1x securit administration. Opens menu. The options incl PEAP (EAP-GTC), P LEAP ,EAP-FAST an	y. This option requires IT the <b>802.1x EAP type</b> drop-dov lude: EAP-TLS, EAP-TTLS, EAP (EAP-MSCHAP V2), nd Host Based EAP.	vn
	Click on the <b>Configur</b> Refer to later section f	e button to fill in other informator detail.	tior
	If the access point that associating to has set o WEP enabled, the item <b>Cells</b> must be set to all	the Wireless Adapter is ptional for WEP and the client of <b>Allow Association to Mixe</b> low association.	has <b>ed</b>
Pre-Shared Key (Static WEP)	Enables the use of pre both the access point a	-shared keys that are defined or and the station.	n
	Click on the <b>Configur</b> key. For WEP key size hexadecimal character enter 13 ASCII or 26 l	<b>•e</b> button to fill in the encryptio e 64 bits, enter 5 ASCII or 10 rs. For WEP key size 128 bits, hexadecimal characters. For W	n EP

key size 152 bits, enter 16 ASCII or 32 hexadecimal characters. If the access point that the Wireless Adapter is associating to has set optional for WEP and the client has WEP enabled, the item of Allow Association to Mixed Cells must be set to allow association. None No security (not recommended). Configure If you click **WPA/WPA2** or **802.1x** as the security option, you should choose a proper WAP/WPA2 EAP Type or 802.1x EAP Type. Then click Configure for configuring advanced settings. **EAP-TLS**: Check Use Machine Information For **Domain Logon** to use the Windows user name as the EAP user name. Select the appropriate certificate authority from the list. The Server/Domain Name and the Login Name are filled in automatically from the

Define Certificate	? 🛛
Use Machine Information For Domair	n Logon
Select a Certificate	
aga [Issued 2005/11/16]	✓
Trusted Root Certification Authorities	
Microsoft Root Certificate Authority	~
Server/Domain Name	
Login Name	
Niki	
	OK Cancel

**EAP-TTLS:** Select the appropriate certificate from the drop-down list.

Specify user name and password for EAP authentication:

Check Use Machine Information For Domain Logon to use the Windows user name as the EAP user name and password.

or

In Use Information for EAP-TTLS
 Authentication, enter a EAP user name and password in the User Name field and Password

field to use a separate user name and password to start the EAP authentication process.

Define EAP-ITLS Configuration	?×
✓ Use Machine Information For Domain Logon Trusted Root Certification Authorities	
Microsoft Root Certificate Authority	~
User Information for EAP-TTLS Authentication User Name: Niki	
Password:	
Confirm Password:	
Settings OK Cance	

Click Settings to edit advanced configuration:

- Leave the Specific Server Name or Domain field blank for the client to accept a certificate from any server with a certificate signed by the authority listed in the Network Certificate Authority drop-down list. (recommended)
  - or
- Enter the domain name of the server from which the client will accept a certificate in the Specific Server Name or Domain field.
- ✓ Change the **Login Name** if needed.

Configuration Settings	? 🛛
Specific Server or Domain:	
Login Name:	Niki
	OK Cancel

**PEAP(EAP-GTC):** Select the appropriate network certificate authority from the drop-down list.

Specify a user name for inner PEAP tunnel authentication:

 Check Use Machine Information For Domain Logon to use the Windows user name as the PEAP user name. or

In User Information for PEAP(EAP-GTC)
 Authentication, enter a PEAP user name in the
 User Name field to use a separate user name and
 start the PEAP authentication process.

Set password by selecting **Token** or **Static Password** radio box depending on the user database.

 Token uses a hardware token device or the Secure Computing SofToken program (version 1.3 or later) to obtain and enter a one-time password during authentication.

or

✓ Static Password

Define PEAP (EAP-GTC) C	onfiguration	?×
Use Machine Information F	or Domain Logon	
Trusted Root Certification Auth	norities	
Microsoft Root Certificate Aut	hority	~
- Set Password		
💽 Token		
O Static Password		
User Information for PEAP (G	TC) Authentication	
User Name:	Niki	
Password:		2.5
Confirm Password:	XXXX	
	Settings OK Can	cel

Click **Settings** to edit advanced configuration:

Leave the Specific Server or Domain field blank for the client to accept a certificate from any server with a certificate signed by the authority listed in the Network Certificate Authority drop-down list. (recommended)

or

- Enter the domain name of the server from which the client will accept a certificate in the Specific Server or Domain field.

is the computer's MAC address. Change the **Login** Name if needed.

Advanced Configuration		?×
Specific Server or Domain:		
Login Name:	PEAP-00037F056001	
	OK Cancel	

**PEAP(EAP-MSCHAP V2):** Select the appropriate network certificate authority from the drop-down list.

Specify a user name and password for inner PEAP tunnel authentication:

 Check Use Machine Information For Domain Logon to use the Windows user name and password as the PEAP user name and password.

or

In User Information for PEAP(EAP-MSCHAP V2) Authentication, enter a PEAP user name and password in the User Name and Password fields to use a separate user name and password to start the PEAP authentication process.

Define PEAP (EAP-MSCHAP V2) Configuration	? 🗙
Use Machine Information For Domain Logon Trusted Root Certification Authorities	
<any></any>	~
User Information for PEAP (EAP-MSCHAP V2) Authentication User Name: Niki	
Password:	
Confirm Password:	
Settings OK Canc	.el

Click **Settings** to edit advanced configuration:

Leave the Specific Server or Domain field blank for the client to accept a certificate from any server with a certificate signed by the authority listed in the Network Certificate Authority drop-down list. (recommended)

- Enter the domain name of the server from which the client will accept a certificate in the Specific Server or Domain field.
- The Login Name used for PEAP tunnel authentication fills in automatically as PEAP-XXXXXXXXX, where XXXXXXXXXX is the computer's MAC address. Change the Login Name if needed.

Configuration Settings	? 🔀
Specific Server or Domain:	
Login Name:	
	OK Cancel

#### LEAP:

Specify a user name and password:

- Click Use Temporary User Name and Password radio button. Select Automatically Prompt for User Name and Password or select Manually Prompt for LEAP User Name and Password radio button to manually login and start the LEAP authentication process. This will result a prompt window when the profile is activate asking user to input user name and password.
- or
- Click Use Saved User Name and Password by choosing the radio button. Specify the LEAP user name, password, and domain to save and use.

If desired, check **No Network Connection Unless User Is Logged In** to force the Wireless Adapter to disassociate after logging off (default). Enter the LEAP **Authentication Timeout Value** (between 30 and 500 seconds) to specify how long LEAP should wait before declaring authentication failed, and sending an error message. The default is 30 seconds.

#### EAP-FAST:

Specify a user name for EAP authentication:

- Click Use Temporary User Name and Password radio button. Select Automatically Prompt for User Name and Password or select Manually Prompt for EAP User Name and Password radio button to manually login and start the EAP authentication process
  - or
- Click Use Saved User Name and Password by choosing the radio button. Specify the EAP User Name, Password, and Domain to save and use.

EAP-FAST Settings		?×			
Username and Password Settings					
<ul> <li>⊘ Automatically Promp</li> <li>○ Manually Promp</li> </ul>	rompt for User Name and Password t for User Name and Password				
O Use Saved User Nam	ne and Password				
User Name:		]			
Password:		]			
Confirm Password:		]			
Domain:		]			
Include Windows Lo	<ul> <li>Include Windows Logon Domain with User Name</li> <li>No Network Connection Unless User Is Logged In</li> <li>Authentication Timeout Value (in seconds)</li> </ul>				
Protected Access Credentials (PAC) Allow Automatic PAC Provisioning for this Profile Select a PAC Authority to use with this profile Select More					
OK Cancel					

If desired, check **No Network Connection Unless User Is Logged In** to force the Wireless Adapter to disassociate after logging off.

Enter the EAP-FAST **Authentication Timeout Value** (between 30 and 500 seconds) to specify how long EAP-FAST should wait before declaring authentication failed and sending an error message. The default is 30 seconds.

In the **Protected Access Credentials (PAC)** authority provisioning,

- Check the Allow Automatic PAC Provisioning for this Profile checkbox to have the system automatically provide the PAC for this profile.
- To set a PAC authority, choose a PAC Authority from the drop-down list. Click the Select More button to import or delete a new PAC authority:
  - Click Global to view global PAC files, or click
     Private to see a list of private files only.
  - Click Import to import a new PAC file.
     Browse to the new file and click Open to import.
  - Highlight a PAC file and click **Delete** to delete that file.

Select EAP-FAST PAC	? 🛛
Select the PAC Store           Select the PAC Store           Select the PAC Store	
Select the PAC	Import
	OK Cancel

5. Edit the **Advanced** tab.

Transmit Power Level	Power Save Mode:	Normal	
802.11b/g: 100 mW 🔽	Network Type:	Infrastructure	1
802.11a: 40 mW 🗸	802.11b Preamble:	💿 Short & Long	🚫 Long Only
Wireless Mode 2.4 GHz 54 Mbps	Wireless Mode When Starting	g Ad Hoc Network —	
🔽 2.4 GHz 11 Mbps	02.4 GHz 11 Mbps		
☑ Super G ☑ eXtended Range (XR) <sup>TM</sup>	0 2.4 GHz 54 Mbps	Channel:	Auto
	802.11 Authentication Mode		
	Auto 💿 O	lpen 🔿	Shared

Transmit PowerSelects the transmit power level for 80211b/g in mW.LevelActual transmit power may be limited by regulatorydemain or headware limitations

domain or hardware limitations. **Power Save Mode** Maximum: causes the access point to buffer incoming messages for the Wireless Adapter. The Wireless Adapter periodically polls the access point to see if any messages are waiting. **Normal:** uses maximum when retrieving a large number of packets, then switches back to power save mode after retrieving the packets. **Off:** turns power saving off, thus powering up the Wireless Adapter continuously for a short message response time. **Network Type** Specifies the network as either Infrastructure (access point mode) or Ad Hoc. 802.11b Preamble Specifies the preamble setting in 802.11b. The default setting is Short & Long (access point mode), which allows both short and long headers in the 802.11b frames. The Wireless Adapter can only use short radio headers if the access point supports and uses them. Set to Long **Only** to override allowing short frames. Wireless Mode Select what mode the Wireless Adapter uses to connect to an access point when **Network Type** is set as Infrastructure. The Wireless Adapter must match its wireless mode to the mode of the access point it associates to. **2.4GHz 54Mbps:** Check this to comply to IEEE 802.11g standard and the Wireless Adapter is capable to connect to any 802.11g network. **2.4GHz 11Mbps:** Check this to comply to IEEE 802.11b standard and the Wireless Adapter is capable to connect to any 802.11b network. Super G: When 2.4GHz 54Mbps is selected above, check this to apply special feature Super  $G^{TM}$  to lift up data rate to 108Mbps. Super G<sup>TM</sup> technology, powered by Atheros<sup>®</sup> Communications, combines four latest mechanisms to achieve high throughput: Packet Bursting, Compression, Fast Frames, and Dynamic Turbo. To build a Super  $G^{TM}$  connection successfully, the access point that the Wireless Adapter associated to must set in Super G<sup>TM</sup> wireless mode, too. **eXtended Range (XR)**<sup>TM</sup>**:** Check to apply special feature eXtended Range (XR)<sup>TM</sup> to link with 3x range of standard WLAN technologies in outdoor and 2x range of standard WLAN technologies in indoor. To build a XR link, the access point that the Wireless Adapter

associated to must set in XR mode, too.

	<b>QoS:</b> Check to apply special feature QoS (Quality of Service) technology to comply to WMM <sup>TM</sup> (Wi-Fi Multimedia) defined by Wi-Fi Alliance <sup>®</sup> . WMM <sup>TM</sup> , based on a subset of the IEEE 802.11e WLAN QoS draft standard, features that improve the user experience for audio, video and voice applications over a wireless network.
Wireless Mode when Starting Ad Hoc Network	Specifies wireless mode when starting an Ad Hoc network if no matching network name is found after scanning all available modes.
	<b>2.4GHz 54Mbps:</b> Check this to comply to IEEE 802.11g standard and the Wireless Adapter is capable to connect to any 802.11g network.
	<b>2.4GHz 11Mbps:</b> Check this to comply to IEEE 802.11b standard and the Wireless Adapter is capable to connect to any 802.11b network.
	<b>Channels:</b> Select the channel the Wireless Adapter uses. The channels available depend on the regulatory domain. If the Wireless Adapter finds no other ad hoc adapters, this selection specifies which channel with the Wireless Adapter starts the Ad Hoc network with.
802.11 Authentication Mode	<ul> <li>Select what mode the Wireless Adapter uses to authenticate to an access point when Network Type is set as Infrastructure:</li> <li>Auto: causes the Wireless Adapter to attempt authentication using shared, but switches it to open authentication if shared fails.</li> <li>Open: enables an adapter to attempt authentication regardless of its WEP settings. It will only associate with the access point if the WEP keys on both the Wireless Adapter and the access point match.</li> <li>Shared: only allows the Wireless Adapter to associate with access points that have the same WEP key.</li> </ul>
Preferred APs	Specify up to four access points to which the client adapter should attempt to associate when <b>Network Type</b> is set as <b>Infrastructure</b> .
<ul><li>Notice:</li><li>At least one</li></ul>	checkbox should be checked in <b>Wireless Mode</b> when

- Network Type is set as Infrastructure.
  At least one radio box should be clicked in Wireless Mode When Starting Ad Hoc Network when Network Type is set as Ad Hoc.
- 6. The Utility only allows the creation of 16 configuration profiles. After the creation of 16 profiles, clicking the **New** button displays an error message. Remove an old profile or modify an existing profile for a new use.

### **Remove a profile**

- 1. Go to the **Profile Management** tab.
- 2. Select the profile to remove from the list of configuration profiles.
- 3. Click the **Remove** button.

#### Auto Profile Selection Management

#### **Including a profile in auto profile selection:**

- 1. On the **Profile Management** tab, click the **Order Profiles** button.
- 2. The **Auto Profile Selection Management** window appears, with a list of all created profiles in the **Available Profiles** box.

Auto Profile Selection Management	? 🛛
Available Profiles: Default Office R&D	Add
Auto Selected Profiles:	Move up
	Move down Remove
	OK Cancel

3. Highlight the profiles to add to auto profile selection, then click **Add**. The profiles appear in the **Auto Selected Profiles** box.

Auto Profile Selection Management	? 🛛
← Available Profiles: Office	Add
Auto Selected Profiles:	
R&D Default	Move up
	Move down
	Remove
	OK Cancel

4. Click **OK** to leave.

#### **Ordering the auto selected profiles:**

- 1. Highlight a profile in the Auto Selected Profiles box.
- 2. Click Move Up, Move Down, or Remove as appropriate.

Notice:

- The first profile in the **Auto Selected Profiles** box has highest priority, and the last profile has lowest priority.
- 3. Click OK.
- 4. Check the Auto Select Profiles box.

ı <u>O</u> ptions <u>H</u> elp		
rent Status Profile Manag	ement Diagnostics	
Default		<u>N</u> ew
Office Fectory		<u>M</u> odify
R&D		Remove
		Acțivate
Details		
Network Type:	Infrastructure	Import
Security Mode: Network Name 1 (SSID)	Disabled ): asdf	Export
Network Name 2 (SSID2	): <empty></empty>	Coon
Notwork Name 2 (SSID)	): <empty></empty>	<u>be</u> di

5. Save the modified configuration file.

With **Auto Select Profiles** function enabled, the Wireless Adapter scans for available networks. The highest priority profile with the matching SSID as a found network is used to connect to the network. On a failed connection, the Wireless Adapter tries with the next highest priority profile.

#### **Import a Profile**

- 1. From the **Profile Management** tab, click the **Import** button. The **Import Profile** window appears.
- 2. Browse to the directory where the profile is located.
- 3. Highlight the profile name.
- 4. Click **Open**. The imported profile appears in the profiles list.

#### **Export a Profile**

1. From the **Profile Management** tab, highlight the profile to export.

- 2. Click the **Export** button. The **Export Profile** window appears.
- 3. Browse to the directory to export the profile to.
- 4. Click **Save**. The profile is exported to the specified location.



### Switch to a different configuration profile

- 1. To switch to a different profile, go to the **Profile Management** tab.
- 2. Click on the profile name in the Profile List.
- 3. Click the Activate button.

### **4.3 Diagnostics**

The **Diagnostics** tab of the Utility provides buttons used to retrieve receive and transmit statistics. The Diagnostics tab does not require any configuration.

The **Diagnostics** tab lists the following receive and transmit diagnostics for frames received by or transmitted by the wireless network adapter:

- ✓ Multicast packets transmitted and received
- ✓ Broadcast packets transmitted and received
- ✓ Unicast packets transmitted and received
- ✓ Total bytes transmitted and received

💩 Vigor600 Super G Wi	reless Adapter Utility - Current P	rofile: Default 🛛 🛛 🛛
Action Options Help		
Current Status Profile Mana	gement Diagnostics	
- Transmit		
Multicast Packets:	5	Adapter Information
Broadcast Packets:	871	Advanced Statistics
Unicast Packets:	262	
Total Bytes:	60605	
Receive		
Multicast Packets:	0	
Broadcast Packets:	8	
Unicast Packets:	0	
Total Bytes:	537	

Adapter Information More general information about the Wireless Adapter and the network driver interface specification (NDIS) driver.



Card Name: The name of the wireless network adapter.

MAC Address: The MAC address of the wireless network adapter.

**Driver:** The driver name and path of the wireless network adapter driver.

**Driver Version:** The version of the wireless network adapter driver.

**Driver Date:** The creation date of the wireless network adapter driver.

Client Name: The name of the client computer.

Advanced Statistics Shows receive and transmit statistical information for the following receive and transmit diagnostics of frames received by or transmitted to the wireless network adapter:

Fransmit			
Frames Transmitted OK:	1190	RTS Frames:	10
Frames Retried:	138	CTS Frames:	8
Frames Dropped:	637	No CTS Frames:	2
No ACK Frames:	57	Retried RTS Frames:	2
ACK Frames:	1190	Retried Data Frames:	138
Receive			
Beacons Received:	3450	Authentication Time-Out:	0
Frames Received OK:	8	Authentication Rejects:	0
Frames Received with Errors:	62003	Association Time-Out:	0
CRC Errors:	2534	Association Rejects:	0
Encryption Errors:	0	Standard MIC OK:	0
Duplicate Frames:	0	Standard MIC Errors:	0
AP Mismatches:	0	CKIP MIC OK:	0
Data Rate Mismatches:	0	CKIP MIC Errors:	0

# **4.4 Display Settings**

To change the display settings, choose **Options > Display Settings** from the menu.

🎯 Vigor600 Super G Wireless Adapter Utility - Current Profile	: ? 🛛
Action Options Help	
Curren Display Settings	
Default	<u>N</u> ew
Office	Modify
Factory	
R&D	Remove
	Acțivate
Details	
Network Type: Infrastructure	Import
Security Mode: Disabled	
Network Name 1 (SSID1): asdf	<u>Export</u>
Network Name 2 (SSID2): <empty></empty>	Scan
Network Name 3 (SSID3): <empty></empty>	
Auto Select Profiles	Order Profiles

The Display Settings dialog box contains tools to set the Signal Strength Display Units, Refresh Interval and Data Display.

Display Settings	? 🔀
Signal Strength Display Units:	⊙% ⊙dBm
Refresh Interval (seconds):	3 📚
Data Display:	○ Relative
	OK Cancel

Signal Strength Display Units	Sets the units used when displaying signal strength: percentage (%) or dBm.	
Refresh Interval	Use the up/down arrows to set the display refresh interval in seconds.	
Data Display	Sets the display to cumulative or relative. Relative displays the change in statistical data since the last update. Cumulative displays statistical data collected since opening the profile.	

## **4.5 Actions Tools**

Click **Action** from the menu to access the tools.

🥮 Vigor600 Super G Wireless Adapter Utility - Current Profile: O	ffice 🛛 🛛 🔀
Action Options Help	
Disable <u>R</u> adio Management Diagnostics Disable <u>Tray</u> Icon	
Manual Login	<u>N</u> ew
Resuthenticate	Modify
Fuit	Remo <u>v</u> e
	Activate
~ Details	
Network Type: Infrastructure	Import
Security Mode: LEAP	
Network Name 1 (SSID1): Super	Export
Network Name 2 (SSID2): <empty></empty>	Scan
Network Name 3 (SSID3): <empty></empty>	
Auto Select Profiles	Order <u>P</u> rofiles

Disable Radio	Click to disable the RF signal. The message will pop up.
	Vigor600 Super G Wireless Adapter Utility       Image: Comparison of the following network card(s) have been successfully disabled:         Vigor600 Super G Wireless Adapter       OK
Enable Radio	Click to enable the RF signal. The message will pop up.
	Vigor600 Super G Wireless Adapter Utility The RF signals for the following network card(s) have been successfully enabled: Vigor600 Super G Wireless Adapter OK
Disable Tray Icon	Click to hide the tray icon.
Enable Tray Icon	Click to show the tray icon.

Manual LEAP Login An Enter Wireless Network Password window prompt for user to input information to log in to LEAP manually.

inter Wireless Net	work Password 🗙
Please enter your LE network	AP username and password to log on to the wireless
User Name :	
Password :	
Log on to :	
Card Name :	Vigor600 Super G Wireless Adapter
Profile Name :	Office
	OK Cancel

This option is ONLY available when the Wireless Adapter is connecting to a profile with LEAP settings. In **Profile Management tab > Security > Configure >LEAP settings**, **Manually Prompt for User Name and Password** should be set for each login.

<ul> <li>Use Temporary User</li> </ul>	Name and Password
<ul> <li>Automatically P</li> <li>Manually Promp</li> </ul>	rompt for User Name and Password ot for User Name and Password
O Use Saved User Nar	ne and Password
User Name:	
Password:	
Confirm Password:	
Domain:	
☐ Include Windows Lo ✓ No Network Connec A	ogon Domain with User Name stion Unless User Is Logged In suthentication Timeout Value (in seconds)
	ОК

ReauthenticateReauthenticate to a LEAP-configured access point. This<br/>option is ONLY available when the Wireless Adapter is<br/>connecting to a profile with LEAP settings. LEAP<br/>settings can be found in Profile Management tab ><br/>Security > Configure >LEAP settings.ExitExit the Utility application.

# 4.6 Help and Utility Version

### **Electronic Help**

✓ In the Utility, click **Help > Help**.

ion Obrouz usio		
urrent Status Vigor600 S	uper G Wireless Adapter Utility <u>H</u> elp	
Default <u>A</u> bout Vigo	r600 Super G Wireless Adapter Utility	<u>N</u> ew
Sectorar		<u>M</u> odify
R&D		Remove
		Activate
Details		
Network Type:	Infrastructure	Import
Network Type: Security Mode: Network Name 1 (SSID1):	Infrastructure LEAP Super	Import Export
Network Type: Security Mode: Network Name 1 (SSID1): Network Name 2 (SSID2):	Infrastructure LEAP Super <empty></empty>	Import Export Scan

or

✓ Right click on the tray icon in the system tray. Select **Help**.

<u>H</u> elp	
Exit	
Open Vigor600 Super G Wireles	s Adapter Utility
Preferences	
Disable <u>R</u> adio	
Manual <u>L</u> ogin	
Rea <u>u</u> thenticate	
Select Profile	
Show Connection Status	
	····· ? · · (

You will find an electronic help for your reference.

Besides, in the Utility window, click on the right up corner. Move the mouse to place pointing to the word or picture that you want help.

🎯 Vigor600 Super G Wirele	ss Adapter Utility - Current Profile: Office	? 🛛
<u>A</u> ction <u>O</u> ptions <u>H</u> elp		
Current Status Profile Manager	nent Diagnostics	
Default		New
Office		Modify
Factory		<u>m</u> oury
R&D		Remo <u>v</u> e
		Activate
Details		
Network Type:	Infrastructure	Import
Security Mode:	LEAP	
Network Name 1 (SSID1):	Super	<u>E</u> xport
Network Name 2 (SSID2):	<empty></empty>	Scan
Network Name 3 (SSID3):	<empty></empty>	
🔲 Auto Select Profiles		Order <u>P</u> rofiles

A short help will show for your reference.

rrent Status Profile Manageme	nt Diagnostics	
Default		Nou
Se Office	Click on this I	button to create a new configuration pro
Factory	and add its general, security, and advanced informati	
R&D		Remoye
9 - 504 U COLAGO		Acțivate
Details		
NT / 1 m	Infrastructure	Import
Network Type:		
Network Type: Security Mode:	LEAP	Treast
Network Type: Security Mode: Network Name 1 (SSID1):	LEAP Super	<u>E</u> xport
Network Type: Security Mode: Network Name 1 (SSID1): Network Name 2 (SSID2):	LEAP Super <empty></empty>	Export

# **Utility Version**

Click **Help > About Vigor600 Super G Wireless Adapter Utility** to check Utility version.

About			×
	Vigor600	Super G Wireless Adapter Utility	ОК
	Version:	4.1.2.75	Help

# 4.7 Configure Windows XP Zero Configuration

This section describes the operation of the Vigor600 Super G Wireless Adapter Utility and Windows XP Wireless Zero Configuration Service (WZCS). The Windows WZCS is a service that manages the wireless connection in a largely dynamic way. Only minimal connection information must be identified and configured.

## Set Zero Configuration on Windows XP

Take the following steps:

- 1. Close **Vigor600 Super G Wireless Adapter Utility** by click **Exit** on the main window menu.
- 2. In Windows XP, go to **Control Panel >Administrative Tools>Services**. Find **Atheros Configuration Service** and click Stop. Find **Wireless Zero Configuration** and click **Restart**.
- 3. Open the **Network Connection**. Right click on the **Wireless Network** of the Wireless Adapter and select the **Properties** dialog box.
- 4. Select the check box Use Windows to configure my wireless network settings to set Zero Configuration.

When this check box is selected, Windows XP takes control of these settings for all configuration profiles:

- ✓ SSID
- ✓ Security keys
- ✓ Ad-Hoc settings



 Windows XP takes control of these settings for all configuration profiles, thus users cannot (for example) create new profiles with different settings while using Windows Zero Configuration. The **Zero Configuration** settings override all configuration profiles, even when you select other options. However, the **Vigor600 Super G Wireless Utility** does still control the following settings when **Zero Configuration** is set:

- ✓ Power settings
- ✓ Active/Passive scanning (where applicable)
- ✓ Transmit power
- ✓ Wireless band
- ✓ Short/Long preamble (802.11b)

### **Turn Zero Configuration off on Windows XP**

Take the following steps:

- 1. In Windows XP, open the **Network Connection**. Right click on the **Wireless Network** of the Wireless Adapter and select **Properties** dialog box.
- 2. Select the check box Use Windows to configure my wireless network settings to set Zero Configuration.

When this check box is cleared, all profile settings are controlled by the configuration profile which is set up from the **Profile Management** tab of the Wireless Adapter.

## **4.8 TCP/IP Configuration**

Configuring the TCP/IP Address for the network device:

- 1. After configuring the wireless network adapter properties, open the **Control Panel** and open **Network and Dial-up Connections**.
- 2. Find the Local Area Connection associated with the wireless network adapter. Right-click that connection, and click **Properties**.
- 3. Select Internet Protocol (TCP/IP) and click Properties.
- 4. Click the radio button **Use the following IP address**, then enter an IP address and Subnet mask. Assigning an IP address and Subnet mask allows stations to operate in access point mode (infrastructure mode) or in ad hoc mode and to have Internet access. Default gateway and DNS server information are also required.

IP configuration information (DHCP to assign the IP address, gateway and DNS server IP addresses) is usually obtained from the corporate IT staff.

5. Click **OK** to finish.

# 4.9 Tray Icons

You will find a tray icon in the right corner of system tray.



Right-click on the tray icon to access the following options:

<u>H</u> elp	
Exit	
Open WLAN 802.11g USB2.0 A	lapter Utility
Preferences	
Disable <u>R</u> adio	
Manual <u>L</u> ogin	
Reauthenticate	
Select Profile	• • •
Show Connection Status	1

Help	Opens the online help.
Exit	Exits the Utility application.
<b>Open Adapter Utility</b>	Launches the Utility.
Preferences	Sets the startup options and menu options for the Utility. Check whether the program should start automatically when Windows starts, and check the menu items that should appear on the popup menu.
Enable/Disable Radio	Enables or disables the RF Signal.
Manual LEAP Login	Logs in to LEAP manually, if LEAP is set to manually prompt for user name and password on each login. See Chapter 4 Security for enabling LEAP.
Reauthenticate	Reauthenticates to a LEAP-configured access point.
Select Profile	Clicks a configuration profile name to switch to it. If no configuration profile exists for a connection, see Chapter 3 Profile Management to add a profile first.
Show Connection Status	Displays the Connection Status window.