D-Link ™ DGE-530T

32-bit Gigabit Network Adapter

Manual

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1

Introduction

Thank you for choosing the D-Link DGE-530T, the value leader among Gigabit adapters for PCI Bus personal computers. This introduction gives a general description of the newer networking technologies found on the DGE-530T.

The DGE-530T provides the bandwidth capability to support high-end servers and workstations. With Auto-negotiation, this card can run on three different speeds: 10Mbps at half and full duplex, 100Mbps at half and full duplex, and 1000Mbps at full duplex. When running at 1000Mbps, it provides a network throughput of 2Gbps in full-duplex mode.

The DGE-530T provides IEEE 802.3x Flow Control Enhancements, which are needed for a network adapter to function with a switch. In full-duplex mode, the MAC implements the PAUSE control function. This means when a switch is connected in full-duplex mode and it senses that its buffer will overflow in the near future, the switch will transmit one standard Ethernet packet that causes the DGE-530T to pause for a period, thus avoiding internal buffer overflow and packet loss.

The NIC enables simple, scalable network migration, providing the benefits of Gigabit Ethernet networking with the familiarity of Ethernet.

System Requirements

Before installing the DGE-530T, check your system for the following minimum configuration requirements.

- An open PCI bus master slot, 32-bit, operating at 33MHz.
- 32 MB of System Memory
- 150 MHz processor, or faster
- The latest BIOS for your computer
- One of the following types of twisted-pair network cabling:
  - Category 5e or better for 1000Mbps
  - Category 5 or better for 100Mbps
  - Category 3, 5 or better for 10Mbps

Features

Designed for versatility and performance, the DGE-530T Network Adapter provides the following:

- Operability in 32-bit, 33 MHz slot servers and workstations
- Universal Bus support 3.3V
- Compliance with IEEE 802.3ab 1000BASE-T Gigabit Ethernet standards, IEEE 802.3u Fast Ethernet standards.
- Plug-and-Play installation
- Supports Wake-on-LAN
- Full-duplex Gigabit Ethernet interface that delivers 2Gbps aggregate bandwidth

- Supports half and full duplex at 10Mbps, half and full-duplex at 100Mbps, and full-duplex operation at 1000Mbps
- Supports for full-duplex double network throughput
- Supports TCP/IP checksum generation and verification
- Supports SNMP V1
- Supports 802.3x flow control
- Supports 802.1Q VLAN
- Supports 802.1p Priority Tags
- Supports Cable Diagnostic Feature
- Supports ACPI 2.0
- One built-in RJ-45 connector
- Auto-negotiation to the highest available speed
- Four LED indicators: Link/Activity, Full Duplex, 1000Mbps, and 100Mbps
- Low profile bracket included
- Supports Jumbo Frame up to 9K in size†
- Driver support for:

  Microsoft Windows 98 & Microsoft Windows ME
  Microsoft Windows NT 4.0
  Microsoft Windows 2000 x86 (Microsoft WHQL Passed)
  Microsoft Windows Server 2003 x86 (Microsoft WHQL Passed)
  Microsoft Windows Server 2003 x64 (Microsoft WHQL Passed)
  Microsoft Windows XP x86 (Microsoft WHQL Passed)
  Microsoft Windows XP x64 (Microsoft WHQL Passed)
  Microsoft Windows Vista x86 (Microsoft WHQL Passed)
  Microsoft Windows Vista x64 (Microsoft WHQL Passed)
  Microsoft Windows Server 2008 x86 (Microsoft WHQL Passed)
  Microsoft Windows Server 2008 x64 (Microsoft WHQL Passed)
  Linux for Kernel 2.4.x & 2.6.x
  Client 32
  DOS.ODI
  Netware 4.x, 5.x & 6.x
  Mac OS 10.2 & 10.3
  NDIS2
  FreeBSD 5.3 & 6.0

† Check *http://www.dlink.com* for newest release of drivers.

NOTE: The D-Link Network Control Program is supported by Microsoft Windows Server 2003 x86, Microsoft Windows Server 2003 x64, Microsoft Windows XP x86, Microsoft Windows XP x64, Microsoft Windows Vista x86, Microsoft Windows Vista x64, Microsoft Windows Server 2008 x86, and Microsoft Windows Server 2008 x64.

2

Installation

Unpack and Inspect

CAUTION: *Under ordinary circumstances, a DGE-530T card will not be affected by a static charge that may be received through your body during handling of the unit. In special circumstances, the user may carry an extraordinarily high static charge and it is good practice to reduce the charge by touching a ground before handling the adapter card.*

Open the shipping carton and carefully remove all items. Ensure that the following items are included:

- One DGE-530T Gigabit Ethernet Adapter Card
- DGE-530T Drivers and Manual on CD
- One Quick Installation Guide

If any of these items are missing or damaged, please contact your local reseller for replacement.

Installing the Adapter

1. Shut down the computer, unplug its power cord, and remove the chassis cover.

(Important: Opening the case of your computer may compromise the warranty of your computer. Consult the computer manufacturer before opening the case to ensure that you adhere to warranty guidelines. In some cases, you may need to have the DGE-530T installed by your computer manufacturer.)

2. Insert the contact edge of the DGE-530T card into the connector of any available PCI Bus Master expansion slot. Press the card firmly into the connector such that the card's contacts are fully seated in the connector.
3. Install the bracket screw that secures the card to the computer chassis.
4. Replace the computer's chassis cover.
5. Reconnect the computer's power cord, and switch computer power on. If the BIOS section of your computer's boot program is Plug-and-Play compliant, then at power-up the BIOS will automatically configure any newly installed DGE-530T adapter.

NOTE: Due to a fault in some Plug-and-Play BIOS programs, occasionally a newly installed adapter is assigned an Interrupt Number which has already been assigned to another device. In such a case, the conflict of the Interrupt Number will cause faults in the behavior of both devices. Therefore, the user must run the CMOS Setup utility, and manually assign a non-conflicting Interrupt Number.

Connecting the Network Cable

1000BASE-T Gigabit Ethernet enables operation over the extensive installed base of legacy Category 5 cabling systems and, by default, the Category 5 cabling systems currently being installed.

It provides optimal full-duplex 1000Mb/s Ethernet service over Category 5e links as defined by ANSI/TIA/EIA-568-A-5. Topology rules for 1000BASE-T are the same as those used for 100BASE-T. Category 5 and 5e link lengths are limited to 100 meters.

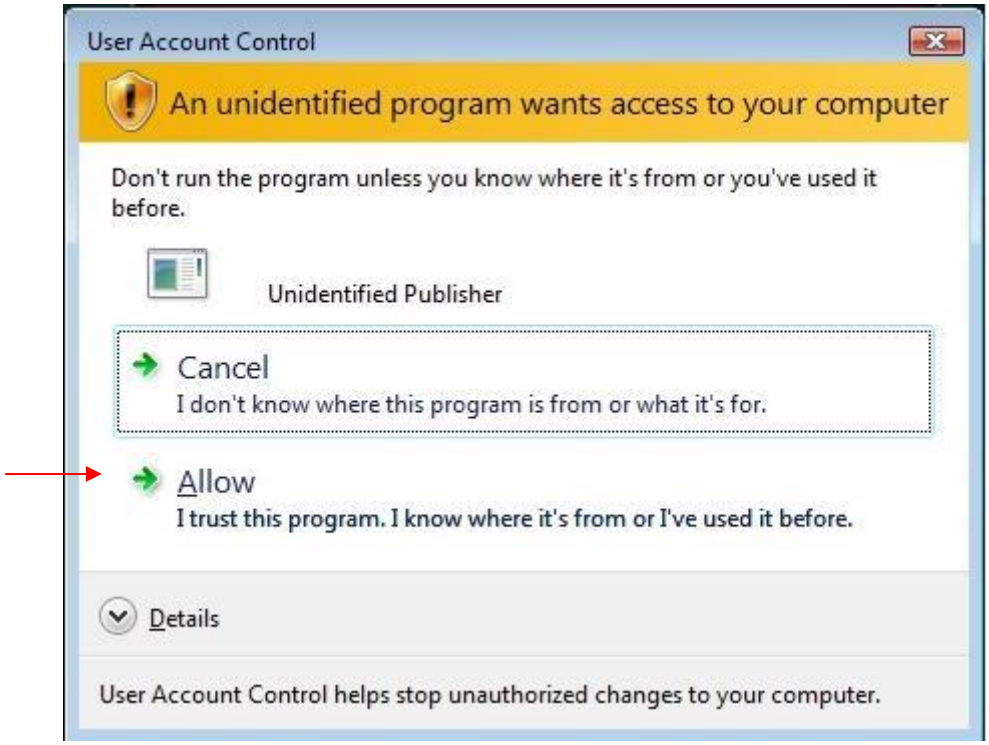
Software Installation

The CD included with your DGE-530T is designed to make installation of necessary software a painless and trouble-free process. Simply click on the "Install Drivers" link and an Installation Wizard will guide you through the process, no matter which operating system you're running. Your DGE-530T will be installed successfully in just a few moments, allowing you to enjoy the many advantages of joining an Ethernet LAN.

The included Adobe Acrobat Reader, which is needed to read or print out your user manual, is also useful for many other applications.

Uninstalling the Adapter

When uninstalling the DGE-530T in Microsoft Windows Vista x86, Windows Vista x64, Windows Server 2008 x86, and Windows Server 2008 x64, the following pop-up warning message will be displayed indicating an unidentified program wants to access your computer:



Click **Allow** to continue with the uninstall procedure. The DGE-530T drivers are WHQL-certified and should not cause any damage to your PC.

3

Advanced Features

Wake On LAN

This Wake-on-LAN function can wake up the system from the sleeping mode to the fully powered mode over the network immediately and automatically. Once the system is awake, it can be directed to run management utilities. This function increases end-user productivity by avoiding disruptions during working hours.

QoS

The QoS function allows the DGE-530T to transmit and receive tagged frames, such as 802.1p priority tagged frames and 802.1Q VLAN tagged frames. In order for the QoS to function on the DGE-530T, it must be connected to a switch that supports and is configured for QoS. These priority tagged frames will let real-time programs optimally utilize the network bandwidth. High priority packets will be processed before low priority packets.

NOTE: To implement QoS on the DGE-530T, it must be connected to a switch or other device that supports and is configured for 802.1p QoS.

Jumbo Frames

Jumbo Frames are Ethernet frames that are larger than 1518 bytes. Jumbo frames may be used to reduce server CPU utilization and improve wire efficiency.

By implementing extra data in fewer packets, jumbo frames can increase throughput and decrease CPU utilization. However, additional latency may be introduced.

End-to-end network hardware must support this capability or these packets will be dropped.

Consult your network administrator or switch manual for more information concerning configuring and understanding Jumbo Frames.

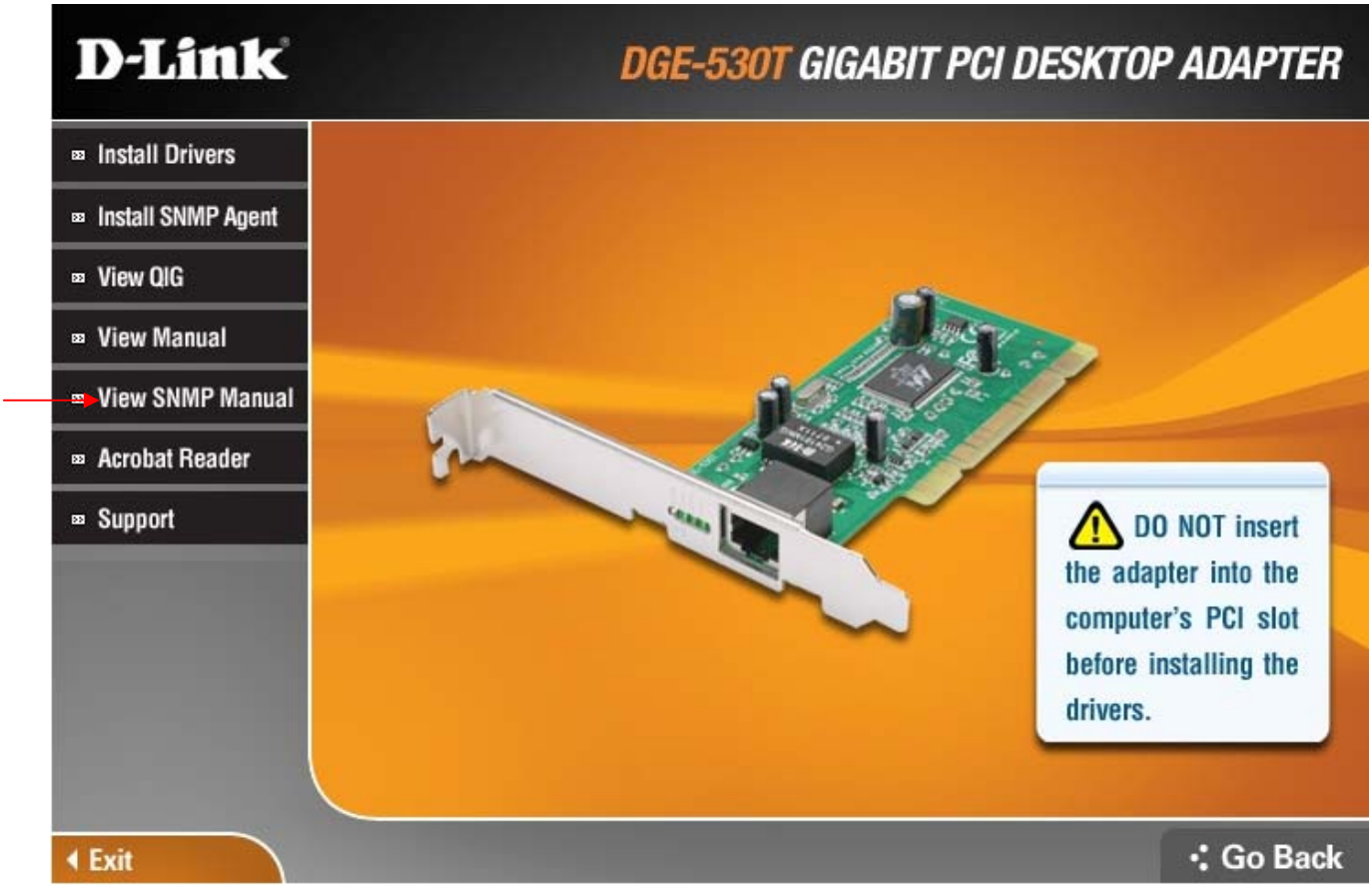
- Supported protocols are limited to IP (TCP, UDP).
- Jumbo frames require compatible switch connections that forward jumbo frames. Contact your switch vendor or manual for additional information.
- There is no benefit to configure jumbo frames if standard size Ethernet frames (64 to1518 bytes) are used.
- Jumbo frames may be simultaneously used with VLANs.

NOTE: Jumbo frames settings on a switch must be set to 8 bytes or larger than the adapter settings for Windows operating systems, and at least 22 bytes larger for all other operating systems.

D-Link SNMP Agent Utility

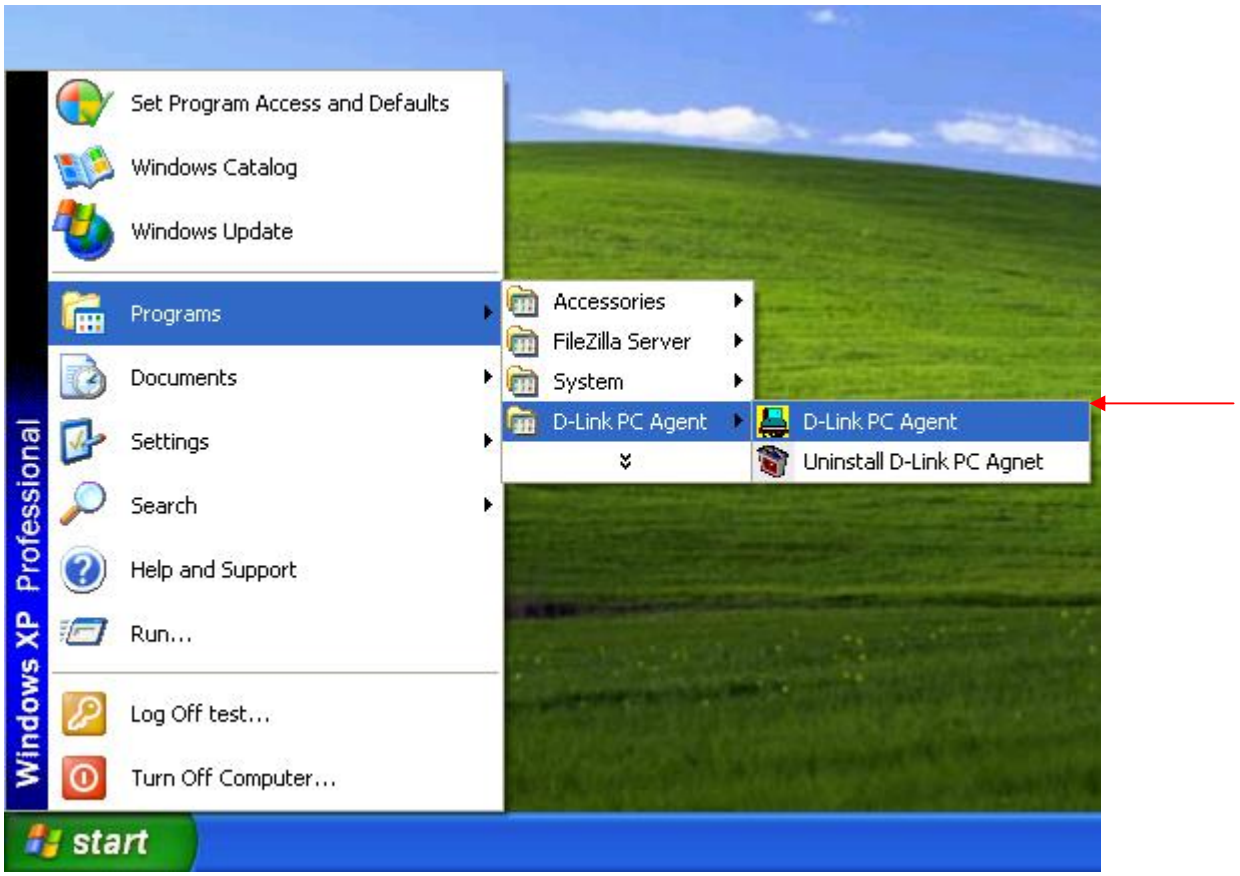
Included on the installation CD is a program for viewing and configuring the DGE-530T, known as the D-Link SNMP Agent Utility. This agent will allow the user to view error packets, set passwords, and choose NIC card options on your computer. Make sure that you have already clicked **Install Driver** on the introduction page and completed the Installation Wizard. Then, click **Install SNMP Agent Utility** (also on the introduction page), and follow the steps of the Installation Wizard.

The D-Link SNMP Agent Utility supports the following Microsoft operating systems: Windows 2000 x86, Windows Server 2003 x86, Windows Server 2003 x64, Windows XP x86, and Windows XP x64.

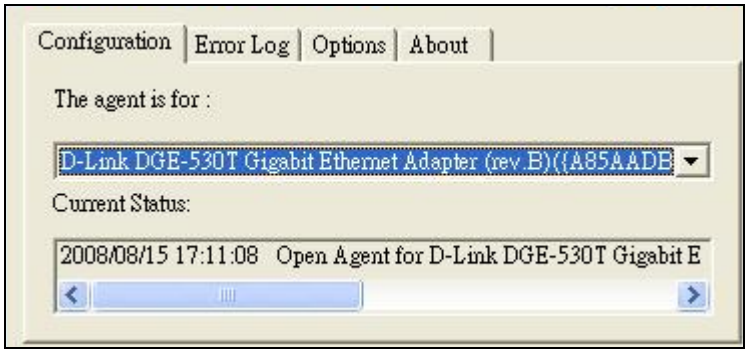


After successfully installing the D-Link Ethernet Adapter Agent and restarting your computer, the following pop-up window appears, prompting you to choose the default NIC card to be used with your system. If more than one NIC card appears in the list, please choose the **D-Link DGE-530T Gigabit Ethernet** adapter and then click **OK**.

To use the D-Link PC agent, click **Start > Programs > D-Link PC Agent > D-Link PC Agent**.

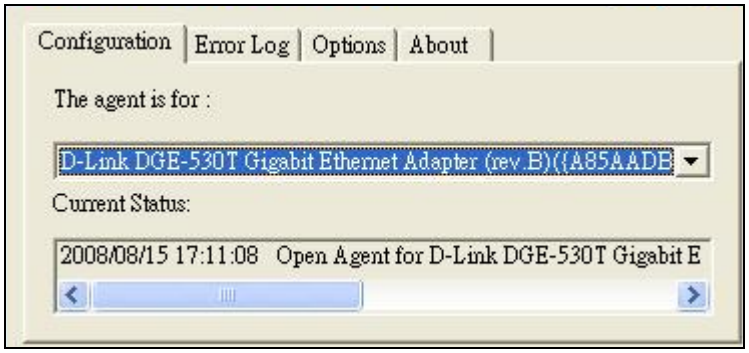


The following window will appear for the user to configure.



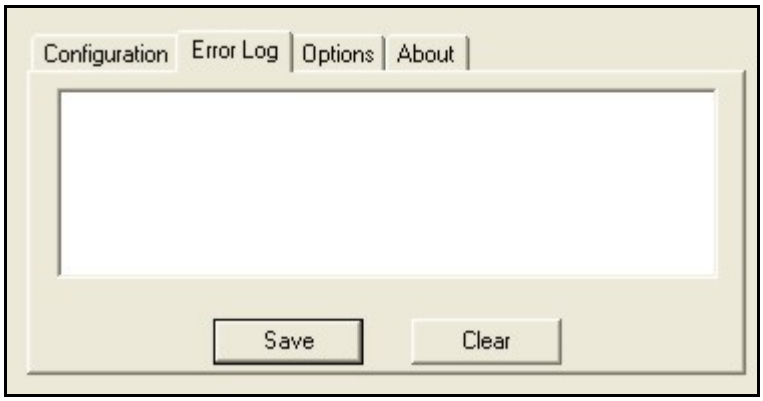
This window is used to input some personal information. You may input this information now or to set this information later, simply click **OK**. A brief explanation of this window may also be configured under the Option tab, which will be discussed later in this chapter. After clicking **OK**, the D-Link Ethernet Adapter icon, shown below, should appear in the bottom right hand tool bar of your computer screen.

Double-clicking the icon will open the Agent window, as shown below.

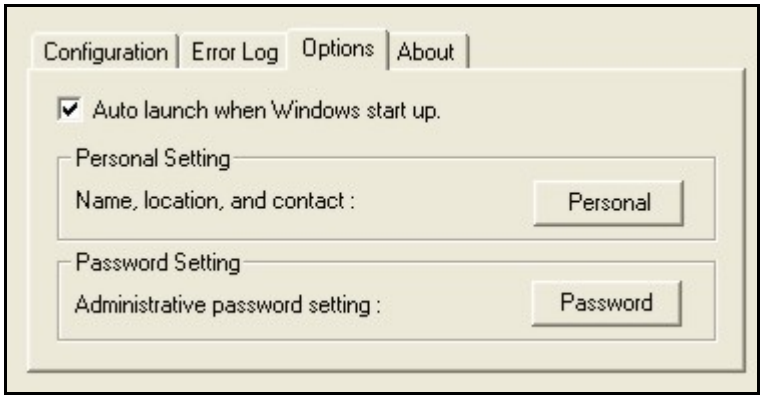


The Configuration tab has two fields. The first field, "The agent is for:", allows the user to choose an Ethernet card to configure, from a pull down menu. The "Current Status" is a read-only field which displays the most recent action made by the Ethernet card.

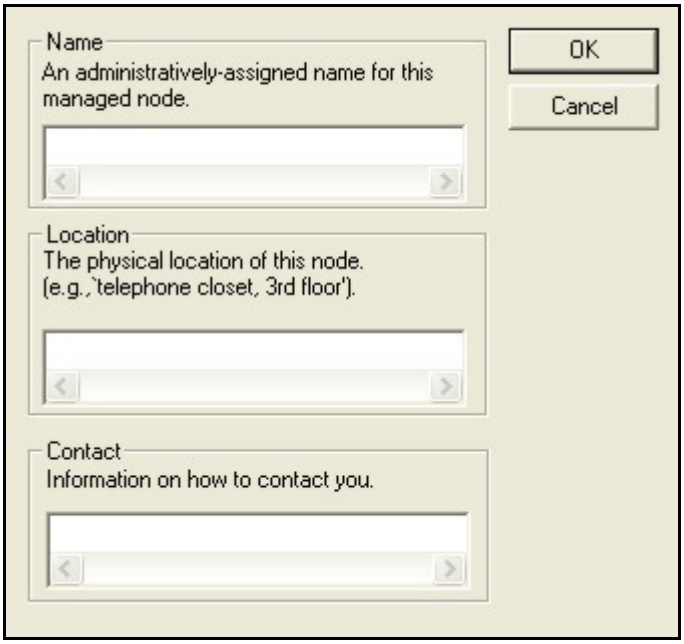
Clicking the Error Log tab will open the following window. The Error Log will display packets received by the DGE-530T, which were discarded due to an error. The user may choose to save these messages or clear them, using the appropriate buttons.



Clicking the Options tab will display the following window. Here the user may check the "Auto launch when Windows starts up." box to ensure the D-Link Ethernet Adapter Agent will automatically start when the Windows operating system commences.



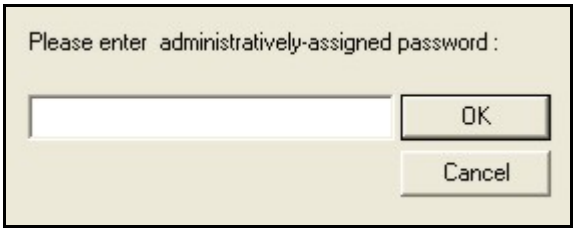
To adjust your personal settings, click the **Personal** button, which will open the following window.



The user may set the following fields.

- **Name**: A name chosen to identify the user when configuring the DGE-530T.
- **Location**: The user may identify the physical location of the computer where the Ethernet card is installed.
- **Contact**: Information on how to contact the user, such as a telephone number or an e-mail address.

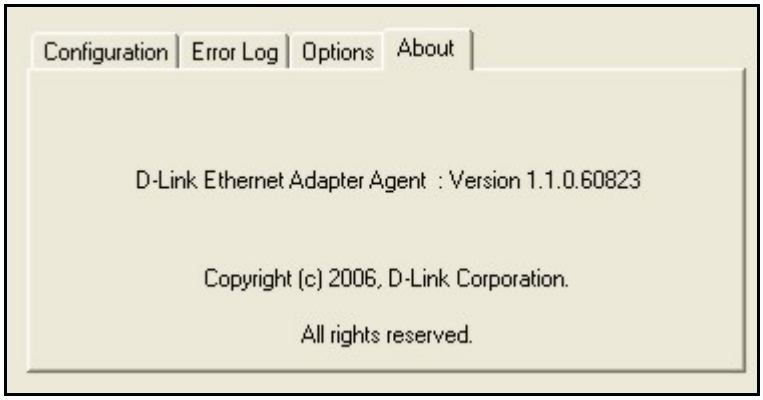
The user may also set a password to protect the configuration settings previously set. Click the **Password** button under the options tab to open the following window.



Enter a password into the space provided and click **OK** to set your new password. If no password is set by the user, the default password of "private" is used and may need to be entered to configure the D-Link SNMP Agent.

NOTE: The default password for this utility is "private".

Clicking the About tab will show the current version of the adapter and the copyright information.



SNMP

SNMP is an acronym for Simple Network Management Protocol. This network protocol is used to manage TCP/IP networks by using "Traps" sent from devices compliant with SNMP and collected by one or more servers. Devices that comply with SNMP correspond with management applications by sending alerts and updates, as well as allowing configuration changes.

The DGE-530T's SNMP agent will take event notices from the adapter, translate and then forward them to specified SNMP management stations.

Before installing the SNMP agent, you must install SNMP on your computer. Consult the operating system documentation of your computer for additional information.

To install SNMP on the DGE–530T, simply click **Install SNMP Agent** on the Introduction page and complete the steps of the Installation Wizard.

This utility should only be used by experienced network administrators. Additional software or services may need to be previously installed or configured prior to installation of the SNMP protocol.

D-Link Corporation Network Control

Installed automatically with the driver is the D-Link Network Control program, which may be opened on the Control Panel of your computer. The configuration and settings information for this program may be found by clicking the **Help** button of the current screen. This should provide you with any information you should need.

The D-Link Network Control Program is supported by Microsoft Windows Server 2003 x86, Microsoft Windows Server 2003 x64, Microsoft Windows XP x86, Microsoft Windows XP x64, Microsoft Windows Vista x86, Microsoft Windows Vista x64, Microsoft Windows Server 2008 x86, and Microsoft Windows Server 2008 x64.

IEEE802.1p Priority Tagging

With the growing number of network applications, local area networks (LANs) must deliver data for a wide variety of applications. Email, file transfers, database queries, voice over IP (VoIP), video-conferencing and multimedia must all be delivered to the end-users. Some of the traffic, such as video-conferencing, is of a higher priority, with a slight delay of packets resulting in noticeable degeneration of video and audio quality, while other traffic, such as email will not be noticeably affected by tiny delays. The large number of programs that run over today's networks serves to impede the ability to deliver time-critical data. Even if bandwidth is not usually a problem on your network, during peak hours bursts in network traffic can result in the delay of time-critical traffic.

IEEE802.1p defines seven levels of prioritization for Ethernet packets. High priority packets will be sent through a network using 802.1p-compliant switches first. Lower priority packets will be

transferred whenever bandwidth is available. When properly setup, this ensures that time-critical data arrives on time and is not affected by other traffic.

IEEE802.1Q VLANs

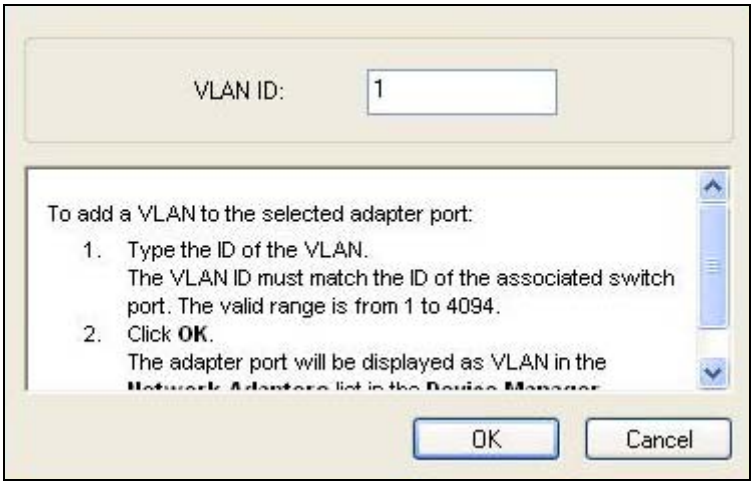
The IEEE802.1Q VLAN can help improve network performance and security by segmenting the network into VLANs. IEEE802.1Q VLANs can limit broadcast and node-to-node (unicast) traffic to a single VLAN. This limits the effects of broadcast storms and provides additional security for your network.

For VLANs to function, the computer in which this NIC is installed must be using Windows 2000, XP, 2003 or later as its operating system.

Configuring the VLAN Settings

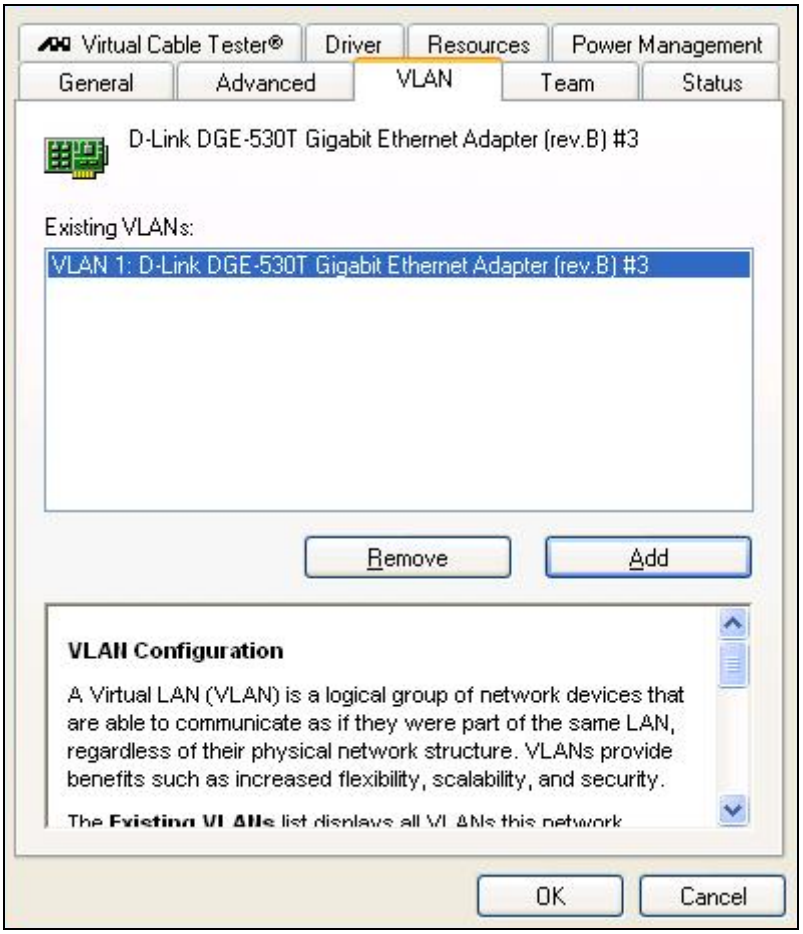
To configure the VLAN settings for your DGE-530T, first open the D-Link Network Control utility located in the control panel of your computer. Once opened, click the **VLAN** tab at the top of the window, which will display the following window. Click the **D-Link DGE-530T Gigabit Ethernet Adapter** link, which will display the settings in the bottom half of the window.

To add a VLAN setting to this window, click the **Add** button at the bottom of this window, which will open the following configuration window.



To set the VLAN, first enter a VLAN ID and then click **OK**. Available VLAN IDs are usually between 1 and 4094. The user can configure up to 64 VLAN settings for this device.

Once completed, the new settings will appear in the Virtual LAN window, marked by its VLAN, as shown in the following example.

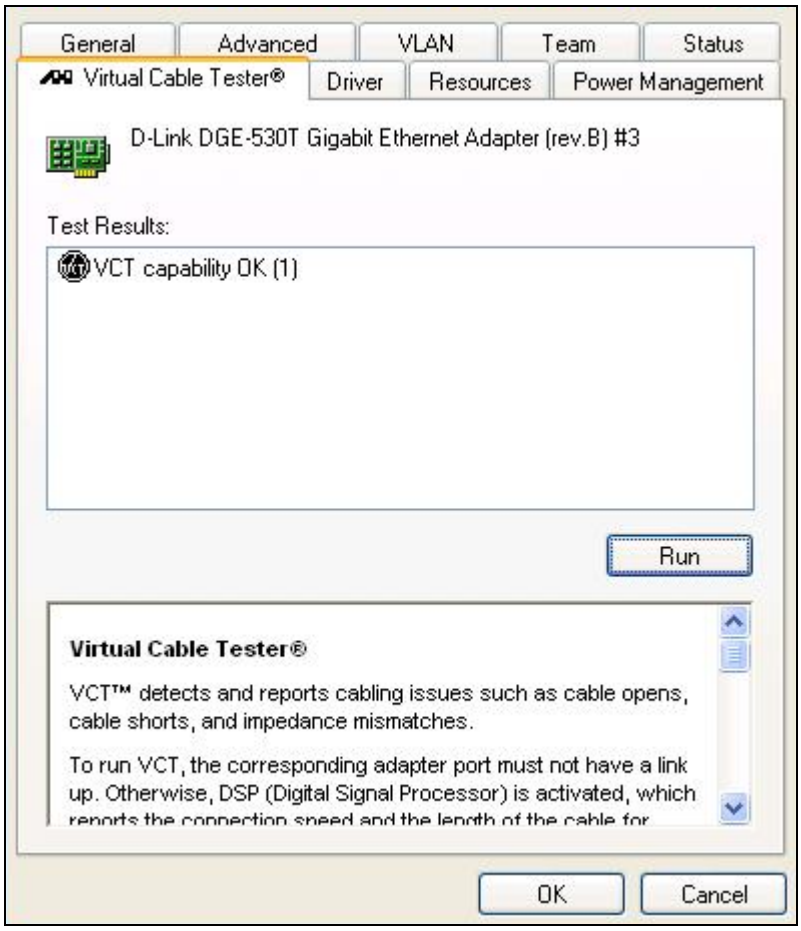


Click **OK** when your settings are complete.

Cable Diagnostic Feature

The Virtual Cable Tester (VCT) is a feature for examining the quality and the characteristics of a network cable that has been connected to the DGE-530T. This feature will make it possible for the user to detect and report potential cabling issues such as cable opens, cable shorts and impedance mismatches. The distance of the fault can be reported to within one meter. To install this feature, go to the directory of the CD provided with this device, and click the Setup VCT execute file which will launch the installation program for the VCT.

To view the VCT settings for your DGE-530T, first open the D-Link Network Control utility located in the control panel of your computer. Once opened, click the Virtual Cable Tester tab, which will display the folloing window:



To start the diagnostic, first disconnect the cable from the remote end node so there is just an open cable connected to the DGE-530T. Click the appropriate adapter from the tree view above and then click the **Run** button. The results which will appear in the table adjacent to the corresponding cable pairs, displays the status of the corresponding cable and the distance to the fault. The status of the test will be presented upon completion of the diagnostic. If the selected adapter is connected and has an uplink, the Digital Signal Processor (DSP) will be activated and will report the speed of the connection (10, 100, 1000Mbps) and the length of the cable.

4

Troubleshooting

If you experience any problems with the adapter, check to see that:

- the appropriate driver is loaded;
- the proper grade of cable is employed for the network connection;
- the supporting hub is properly qualified for the application.

The DGE-530T Adapter features four LED indicators:

- **Link/Activity** – Steady green indicates good linkage between the DGE-530T and its supporting server or switch. Flashing green indicates activity (transmitting or receiving) within the adapter.
- **Full** – Steady green indicates the adapter is operating in full-duplex mode.
- **1000M** – The LED indicator lights green when a 1000 Mbps device is connected to the adapter.
- **100M** – The LED indicator lights green when a 100 Mbps device is connected to the adapter.

5

Technical Specifications

Specifications	
Network Media	Category 5e/5 cable
Connector	RJ45
Controller	Marvell 88E8001
Bus Architecture	32 bit PCI Bus Interface
Memory	512 Kb
Diagnostic LEDs	Link/Activity, Full, 100M, and 1000M
Network Data Transfer	Gigabit Ethernet: 2000Mbps (Full-duplex)
Dimensions	120 mm (L) x 51 mm (H)
Management	VLAN support, D-Link Network Control Program, SNMP Agent

Specifications	
Compliance	• IEEE 802.3ab, 802.3T, 802.3u, 802.3z • IEEE 802.1Q VLAN • IEEE 802.3x Flow-Control • IEEE 802.1p Quality of Service • WoL Power Management • ACPI 2.0
Protocol	CSMA/CD

Specifications	
Driver Support	• Microsoft Windows 98 • Microsoft ME • Microsoft Windows NT4.0 • Microsoft Windows 2000 x86 (Microsoft WHQL Passed) • Microsoft Windows Server 2003 x86 (Microsoft WHQL Passed) • Microsoft Windows Server 2003 x64 (Microsoft WHQL Passed) • Microsoft Windows XP x86 (Microsoft WHQL Passed) • Microsoft Windows XP x64 (Microsoft WHQL Passed) • Microsoft Windows Vista x86 (Microsoft WHQL Passed) • Microsoft Windows Vista x64 (Microsoft WHQL Passed) • Microsoft Windows Server 2008 x86 (Microsoft WHQL Passed) • Microsoft Windows Server 2008 x64 (Microsoft WHQL Passed) • Linux for Kernel 2.4.x, 2.6.x • Client 32 • DOS.ODI • Netware 4.x, 5.x, 6.x • Mac OS 10.2, 10.3 • NDIS2 • FreeBSD 5.3 • FreeBSD 6.0
Power Consumption	3.5W
Temperature	• Operating: 0~40°C (32~122°F) • Storage: -25~55°C (-4~158°F)
Humidity	• 5%~90% non-condensing
EMI Certification	• FCC Class B • CE Mark Class B • BSMI Class B • C-Tick

FCC Certifications

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 user is encouraged to try to correct the interference by one or more 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 from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables must be used in order to comply with emission limits.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

D-Link®
Building Networks for People

Limited Warranty
(USA Only)

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. ("D-Link") provides this Limited warranty for its product only to the person or entity that originally purchased the product from:

- D-Link or its authorized reseller or distributor and
- Products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, addresses with an APO or FPO.

Limited Warranty: D-Link warrants that the hardware portion of the D-Link products described below will be free from material defects in workmanship and materials from the date of original retail purchase of the product, for the period set forth below applicable to the product type ("Warranty Period"), except as otherwise stated herein.

1-Year Limited Warranty for the Product(s) is defined as follows:

- Hardware (excluding power supplies and fans) One (1) Year
- Power Supplies and Fans One (1) Year
- Spare parts and spare kits Ninety (90) days

D-Link's sole obligation shall be to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund at D-Link's sole discretion. Such repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement Hardware need not be new or have an identical make, model or part. D-Link may in its sole discretion replace the defective Hardware (or any part thereof) with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement Hardware will be warranted for the remainder of the original Warranty Period from the date of original retail purchase. If a material defect is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to repair or replace the defective Hardware, the price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware (or part thereof) that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty: D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days ("Warranty Period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. D-Link's sole obligation shall be to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software or to refund at D-Link's sole discretion. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Software will be warranted for the remainder of the original Warranty Period from the date or original retail purchase. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty: The Limited Warranty provided hereunder for hardware and software of D-Link's products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold "As-Is" without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim: The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same.
- The original product owner must obtain a Return Material Authorization ("RMA") number from the Authorized D-Link Service Office and, if requested, provide written proof of purchase of the product (such as a copy of the dated purchase invoice for the product) before the warranty service is provided.
- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the Product and will not ship back any accessories.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA92708. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link, with shipping charges prepaid. Expedited shipping is available if shipping charges are prepaid by the customer and upon request.

D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

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Governing Law: This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This limited warranty provides specific legal rights and the product owner may also have other rights which vary from state to state.

For detailed warranty outside the United States, please contact corresponding local D-Link office.

Register online your D-Link product at http://support.dlink.com/register/

Information in this document is subject to change without notice.

D-Link ™ DGE-530T

Carte réseau 32 bits Gigabit

Manuel

Version B2G
(Décembre 2008)

651GE530T0A5G
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RECYCLABLE

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1

Introduction

Merci d'avoir choisi la DGE-530T de D-Link, le meuilleur fournisseur parmi les cartes Gigabit pour les PC équipés de bus PCI. Cette introduction fournit une description générale des plus récentes technologies de mise en réseau proposées par la DGE-530T.

La DGE-530T fournit une capacité de bande passante pouvant prendre en charge les serveurs et les stations de travail haut de gamme. Avec l'auto négociation, cette carte peut fonctionner à trois vitesses différentes : 10 Mbits/s en duplex intégral et semi-duplex, 100 Mbits/s en duplex intégral et semi-duplex et 1 000 Mbits/s en full duplex. À 1 000 Mbits/s, elle fournit un débit réseau de 2 Gbits/s en mode full duplex.

La DGE-530T fournit des améliorations au contrôle de flux IEEE 802.3x, nécessaires afin qu'un adaptateur réseau fonctionne avec un commutateur. En mode duplex intégral, le MAC met en œuvre la fonction de contrôle PAUSE. Ainsi, quand un commutateur est connecté en mode duplex intégral et qu'il détecte que son buffer sera bientôt surchargé, il transmettra un paquet Ethernet standard qui mettra la DGE-530T en pause momentanée, évitant la surcharge du amortisseur interne et les pertes de paquets.

La carte réseau permet une migration réseau simple et évolutive, fournissant les avantages d'une mise en réseau Gigabit Ethernet tout en préservant la familiarité de l'Ethernet.

Configuration système requise

Avant d'installer la DGE-530T, vérifiez que votre système possède la configuration minimale suivante.

- Un slot PCI bus master disponible de 32 bits, fonctionnant à 33 MHz.
- Mémoire vive de 32 Mo
- Processeur de 150 MHz ou plus rapide
- Le BIOS le plus récent pour votre ordinateur
- Un des types suivants de câblage réseau à paire torsadée :
  - Catégorie 5e ou mieux pour 1 000 Mbits/s
  - Catégorie 5 ou mieux pour 100 Mbits/s
  - Catégorie 3, 5 ou mieux pour 10 Mbits/s

Caractéristiques

Conçue pour l'adaptabilité et la performance, la carte réseau DGE-530T présente les caractéristiques suivantes :

- Fonctionnement dans les serveurs et les stations de travail équipés de slots 32 bits, 33 Mhz
- Prise en charge de Bus universel 3,3 V

- Conformité aux normes Gigabit Ethernet IEEE 802.3ab 1000BASE-T et Ethernet rapide IEEE 802.3u.
- Installation Plug-and-Play
- Prise en charge du Wake On LAN
- Interface Gigabit Ethernet duplex intégral fournissant une bande passante totale de 2 Gbits/s
- Prise en charge des vitesses suivantes : 10 Mbits/s en half et duplex intégral, 100 Mbits/s en half et full duplex et 1 000 Mbits/s en full duplex.
- Prise en charge du mode full-duplex doublant le débit du réseau
- Prise en charge de la génération et la vérification TCP/IP de la somme de contrôle
- Prise en charge de la fonction SNMP V1
- Prise en charge du contrôle de flux IEEE 802.3x
- Prise en charge du VLAN (Réseau local virtuel) 802.1Q
- Prise en charge des étiquettes de priorité 802.1p
- Prise en charge de la fonction de diagnostic des câbles
- Prise en charge de l'ACPI 2.0
- Un connecteur RJ-45 intégré
- L'auto négociation pour atteindre la plus grande vitesse disponible
- Quatre voyants lumineux : Liaison/Activité, duplex intégral, 1 000 Mbits/s et 100 Mbits/s
- Support de fixation extra-plat inclus
- Prise en charge des trames jumbo jusqu'à 9K[1]
- Pilotes pris en charge pour :

  Microsoft Windows 98 & Microsoft Windows ME
  Microsoft Windows NT 4.0
  Microsoft Windows 2000 x86 (Certifié Microsoft WHQL)
  Microsoft Windows Server 2003 x86 (Certifié Microsoft WHQL)
  Microsoft Windows Server 2003 x64 (Certifié Microsoft WHQL)
  Microsoft Windows XP x86 (Certifié Microsoft WHQL)
  Microsoft Windows XP x64 (Certifié Microsoft WHQL)
  Microsoft Windows Vista x86 (Certifié Microsoft WHQL)
  Microsoft Windows Vista x64 (Certifié Microsoft WHQL)
  Microsoft Windows Server 2008 x86 (Certifié Microsoft WHQL)
  Microsoft Windows Server 2008 x64 (Certifié Microsoft WHQL)
  Linux pour noyau 2.4.x & 2.6.x

[1] Visitez *http://www.dlink.com* pour les dernières versions des pilotes.

Client 32

DOS.ODI

Netware 4.x, 5.x & 6.x

Mac OS 10.2 & 10.3

NDIS2

FreeBSD 5.3 & 6.0

REMARQUE : Le D-Link Network Control Program (Programme de contrôle réseau de D-Link) est pris en charge par Microsoft Windows Server 2003 x86, Microsoft Windows Server 2003 x64, Microsoft Windows XP x86, Microsoft Windows XP x64, Microsoft Windows Vista x86, Microsoft Windows Vista x64, Microsoft Windows Server 2008 x86 et Microsoft Windows Server 2008 x64.

2

Installation

Déballage et Inspection

ATTENTION : *Généralement la carte DGE-530T ne sera pas affectée par une charge statique qu'elle pourrait recevoir à travers votre corps durant la manipulation. Cependant, l'utilisateur pourrait être porteur d'une charge statique exceptionnellement élevée et c'est une bonne pratique de réduire la charge en touchant une masse avant de manipuler la carte.*

Ouvrez le carton d'emballage, puis enlevez soigneusement tous les articles. Assurez-vous que les articles suivants soient inclus :

- Une carte Gigabit Ethernet DGE-530T
- Pilotes du DGE-530T et manuel sur CD
- Un guide d'installation rapide

Si un de ces éléments est manquant ou endommagé, veuillez contacter votre revendeur local pour obtenir un remplacement.

Installation de la carte

1. Éteignez l'ordinateur, débranchez le cordon d'alimentation et enlevez le couvercle du châssis.

(**Important** : L'ouverture du boîtier de votre ordinateur pourrait en annuler la garantie. Consultez le fabricant de l'ordinateur avant d'ouvrir le boîtier afin de vous assurer que vous vous conformez aux recommandations de la garantie. Dans certains cas, il se pourrait que votre DGE-530T doive être installée par le fabricant de l'ordinateur.)

2. Insérez l'extrémité munie de contacts de la DGE-530T dans le connecteur d'un slot PCI Bus Master disponible. Enfoncez fermement la carte dans le connecteur afin que ses contacts s'y insèrent complètement.
3. Installez et serrez les vis de support qui fixent la carte au châssis de l'ordinateur.
4. Remettez en place le couvercle du châssis de l'ordinateur.
5. Rebranchez le cordon d'alimentation de l'ordinateur et allumez-le. Si la section BIOS du programme de démarrage de votre ordinateur est compatible Plug-and-Play, alors le BIOS configurera automatiquement votre nouvelle carte DGE-530T au démarrage.

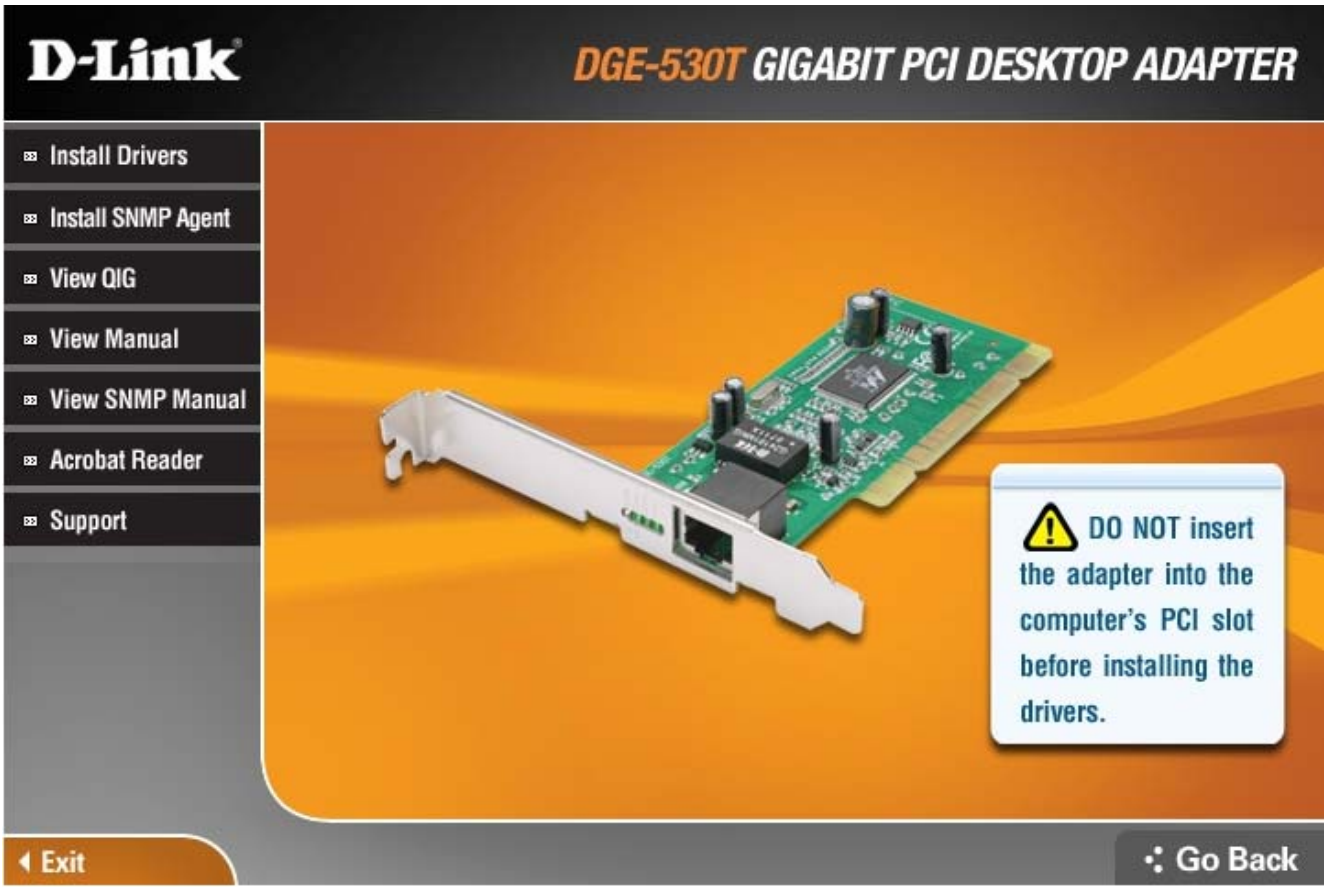
REMARQUE : Suite à une erreur de certains programmes BIOS Plug-and-Play, il peut arriver que le numéro d'interruption IRQ attribué à une nouvelle carte soit le même que celui attribué à un autre périphérique déjà installé. Dans ce cas, le conflit de numéro d'interruption IRQ provoquera des erreurs dans le fonctionnement des deux périphériques. L'utilisateur doit donc exécuter l'utilitaire de configuration CMOS et attribuer manuellement un numéro d'interruption IRQ non conflictuel.

Branchement du câble réseau

Le Gigabit Ethernet 1000BASE-T permet un fonctionnement sur la vaste base déjà installée des systèmes de câblage d'ancienne génération de catégorie 5 et, par défaut, sur le système de câblage de catégorie 5 en cours d'installation.

Il fournit un service Ethernet 1 000 Mbits/s optimal en duplex intégral sur des liaisons de catégorie 5e comme défini par la norme ANSI/TIA/EIA-568-A-5. Les règles de topologie du 1000BASE-T sont les mêmes que celles du 100BASE-T. La longueur des liaisons de catégorie 5 et 5e est limitée à 100 mètres.

Installation du logiciel

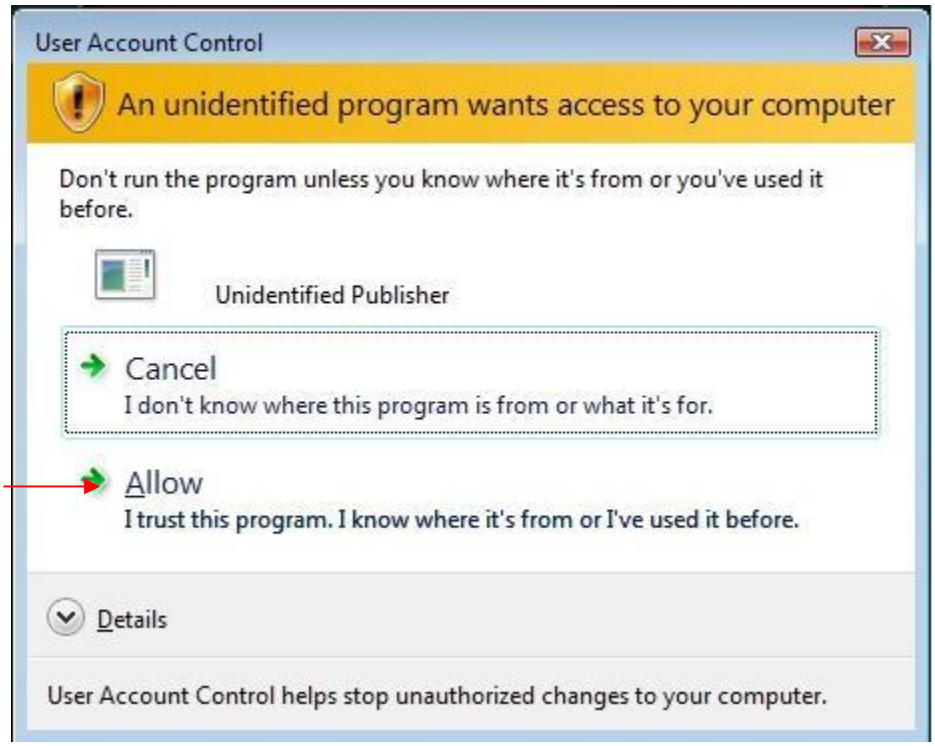


Le CD inclus avec votre DGE-530T est conçu pour que l'installation des logiciels nécessaires soit un processus sans peine ni problème. Cliquez simplement sur le lien "Install Drivers" (Installer les pilotes) et un assistant d'installation vous guidera à travers le processus, quel que soit le système d'exploitation que vous utilisez. Votre DGE-530T sera rapidement installée avec succès, vous permettant de profiter des multiples avantages d'un réseau local Ethernet.

Le logiciel Adobe Acrobat Reader inclus, qui est requis pour lire ou imprimer votre manuel d'utilisation, est également utile pour beaucoup d'autres applications.

Désinstallation de la carte

Lors de la désinstallation de la DGE-530T sous Microsoft Windows Vista x86, Windows Vista x64, Windows Server 2008 x86 et Windows Server 2008 x64, le message d'avertissement contextuel suivant s'affichera indiquant qu'un programme non identifié veut accéder à votre ordinateur :



Cliquez sur **Allow (Autoriser)** pour poursuivre la procédure de désinstallation. Les pilotes de la DGE-530T sont certifiés WHQL et ne devraient causer aucun dommage à votre PC.

3

Caractéristiques avancées

Wake On LAN

Cette fonction Wake On LAN peut faire passer le système immédiatement et automatiquement du mode veille au mode totalement éveillé à distance sur le réseau. Une fois le système réveillé, il peut recevoir des commandes pour exécuter des utilitaires de gestion. Cette fonction augmente la productivité de l'utilisateur en évitant des perturbations durant les heures de travail.

QoS (Qualité de service)

La fonction **QoS (Qualité de service)** permet à la DGE-530T de transmettre et de recevoir des trames étiquetées, comme celles à priorité 802.1p et celles du VLAN (Réseau local virtuel) 802.1Q. Afin que la QoS (Qualité de service) fonctionne sur la DGE-530T, elle doit être connectée à un commutateur qui prend en charge et est configuré pour la QoS (Qualité de service). Ces trames étiquetées à priorité permettront au programmes en temps réel d'utiliser la bande passante du réseau de façon optimale. Les paquets à priorité élevée seront traités avant ceux à basse priorité.

REMARQUE : Pour mettre en œuvre la QoS (Qualité de service) sur la DGE-530T, elle doit être connectée à un commutateur ou un autre périphérique qui prend en charge et est configuré pour la QoS (Qualité de service) 802.1p.

Trames jumbo

Les trames jumbo sont des trames Ethernet dont la taille est supérieure à 1 518 octets. Les trames jumbo peuvent servir à réduire l'utilisation du processeur du serveur et à améliorer l'efficacité filaire.

Par la mise en œuvre de données supplémentaires dans moins de paquets, les trames jumbo peuvent augmenter le débit et réduire l'utilisation du processeur. Cependant, une latence additionnelle pourrait être introduite.

Le matériel réseau doit prendre en charge cette capacité de bout en bout, sinon ces paquets seront rejetés.

Consultez votre administrateur réseau ou le manuel du commutateur pour obtenir plus d'informations concernant la configuration et la compréhension des trames jumbo.

- Les protocoles pris en charge se limitent au IP (TCP, UDP).

- Les trames jumbo requièrent des connexions de commutateurs compatibles capables de transmettre des trames jumbo. Contactez votre revendeur de commutateur ou consultez le manuel pour des informations supplémentaires.
- Il n'y a aucun avantage à configurer les trames jumbo si des trames Ethernet de taille standard (64 à 1 518 octets) sont utilisées.
- Les trames jumbo peuvent être utilisées en même temps que les VLAN (Réseaux locaux virtuels).

REMARQUE : Les paramètres des trames jumbo d'un commutateur doivent être au moins 8 octets plus grand que les paramètres de la carte pour les systèmes d'exploitation Windows, et au moins 22 octets plus grand pour tous les autres systèmes d'exploitation.

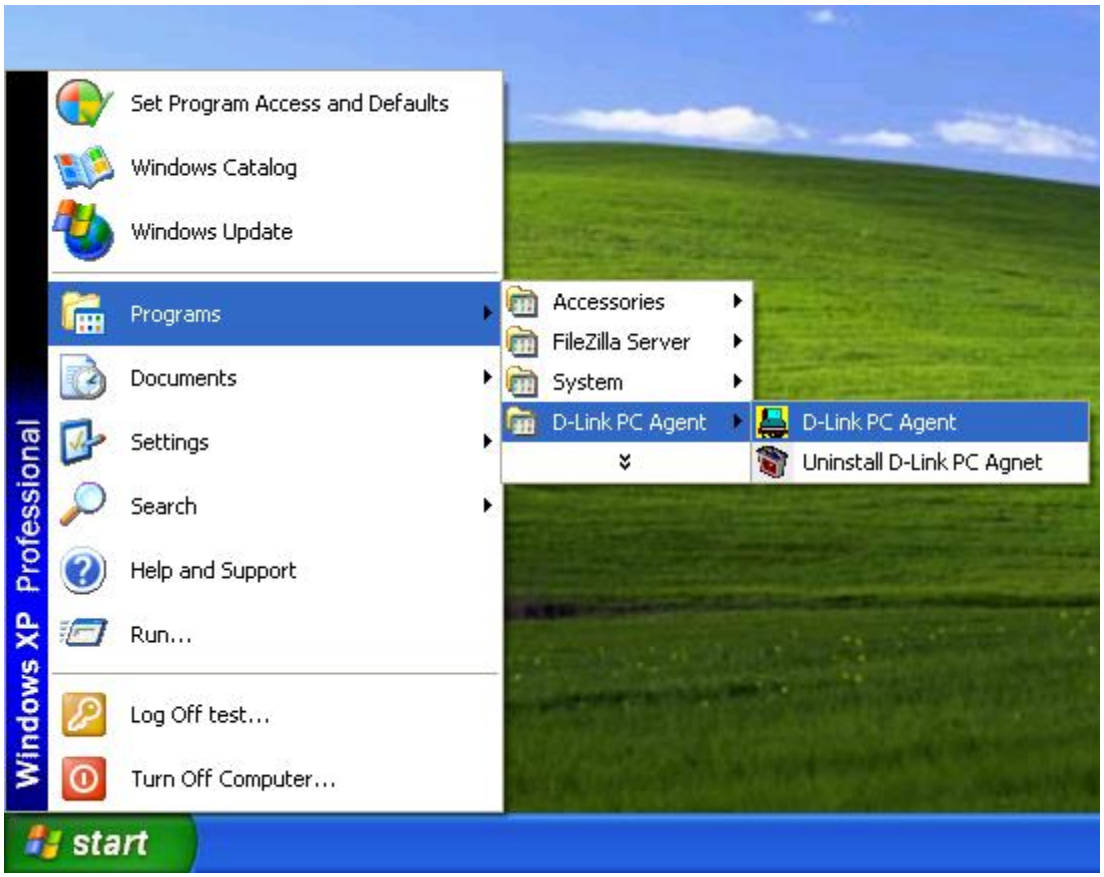
Utilitaire SNMP Agent (Agent SNMP) de D-Link

Inclus sur le CD d'installation se trouve un programme pour afficher et configurer la DGE-530T, appelé l'utilitaire SNMP Agent (Agent SNMP) de D-Link. Cet agent vous permettra d'afficher les paquets erronés, de définir les mots de passe et de choisir les options de la carte réseau sur votre ordinateur. Vérifiez que vous avez déjà cliqué sur **Install Driver (Installer les pilotes)** sur la page d'introduction et complété l'assistant d'installation. Puis, cliquez sur **Install SNMP Agent Utility (Installer l'agent SNMP)** (également sur la page d'introduction), et suivez les étapes de l'assistant d'installation.

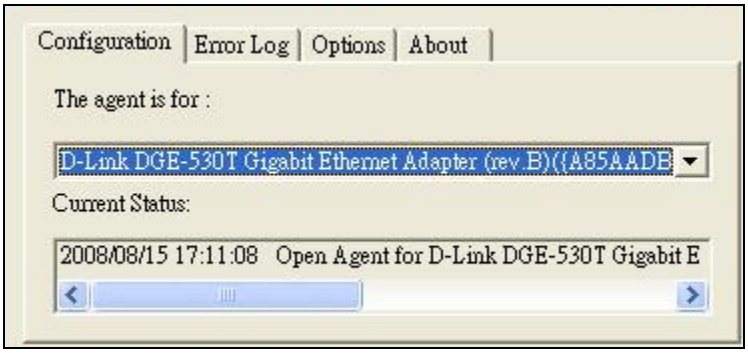
L'utilitaire SNMP Agent (Agent SNMP) de D-Link prend en charge les systèmes d'exploitation Microsoft suivants : Windows 2000 x86, Windows Server 2003 x86, Windows Server 2003 x64, Windows XP x86 et Windows XP x64.

Après avoir installé avec succès l'agent de la carte Ethernet de D-Link et redémarré votre ordinateur, la fenêtre contextuelle suivante s'affichera, vous invitant à choisir la carte réseau par défaut à utiliser avec votre système. Si plus d'une carte réseau apparaît dans la liste, veuillez choisir la carte **D-Link DGE-530T Gigabit Ethernet** et cliquez ensuite sur **OK**.

Pour utiliser l'agent PC de D-Link, cliquez sur **Start > Programs > D-Link PC Agent > D-Link PC Agent (Démarrer > Tous les programmes > D-Link PC Agent > D-Link PC Agent)**.

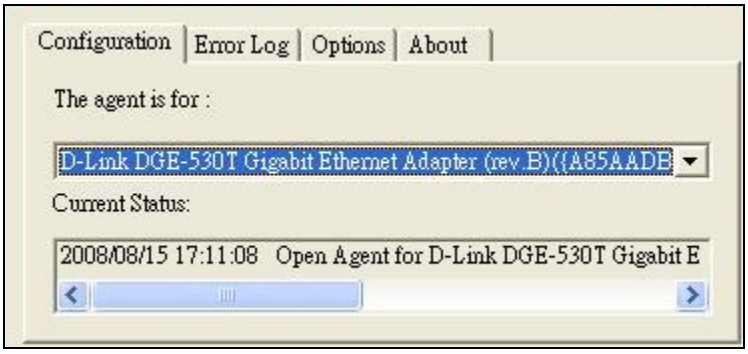


La fenêtre de configuration suivante apparaît.



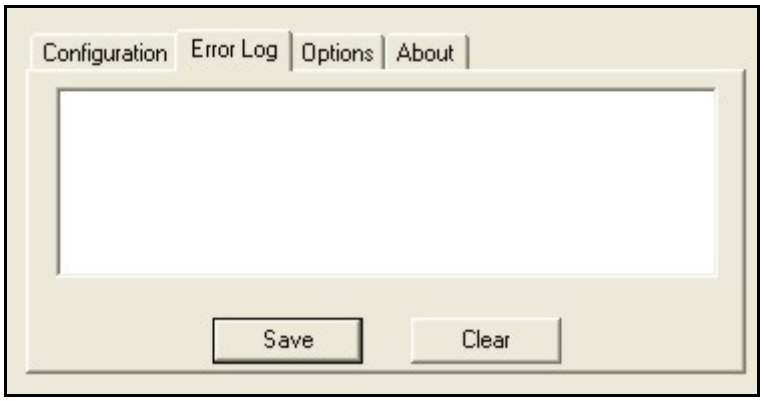
Cette fenêtre sert à saisir quelques informations personnelles. Vous pouvez saisir ces informations maintenant ou plus tard, cliquez simplement sur **OK**. Cette fenêtre peut également être configurée sous l'onglet Options qui sera décrite plus loin dans ce chapitre. Après avoir cliqué sur **OK**, l'icône de la carte Ethernet de D-Link, montrée ci-dessous, devrait s'afficher dans la barre d'outils en bas à droite de l'écran de votre ordinateur.

Double-cliquer sur l'icône ouvrira la fenêtre de l'agent, comme ci-dessous.

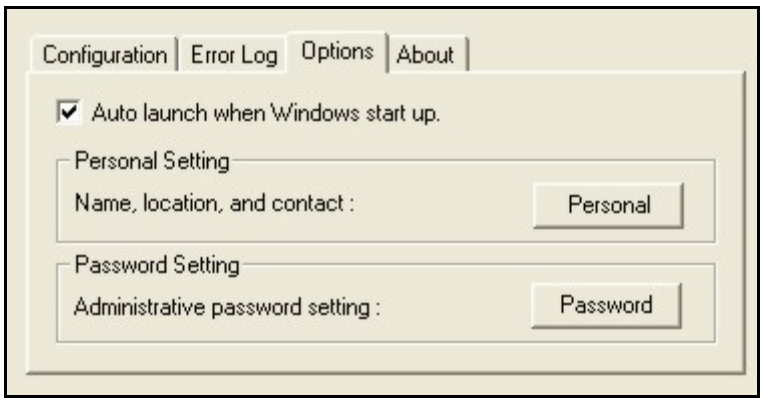


L'onglet Configuration possède deux champs. Le premier champ, "The agent is for:" (Cet agent est pour :), permet à l'utilisateur de choisir dans un menu déroulant une carte Ethernet à configurer. Le champ "Current Status (État actuel)" est un champ en lecture seule qui affiche l'action la plus récente effectuée par la carte Ethernet.

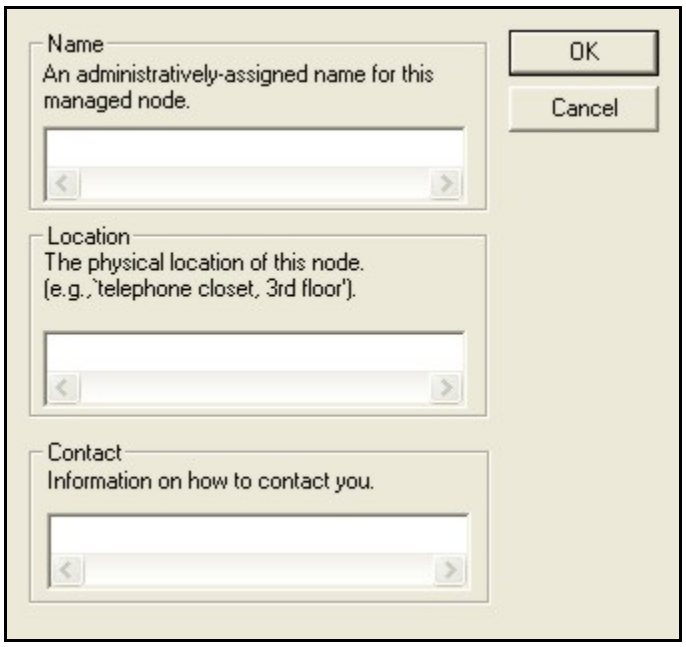
Cliquer sur l'onglet Error Log (Journal des erreurs) ouvrira la fenêtre suivante. Le journal des erreurs affichera les paquets reçus par la DGE-530T qui ont été rejetés en raison d'une erreur. L'utilisateur peut choisir d'enregistrer ou d'effacer ces messages à l'aide des boutons appropriés.



Cliquer sur l'onglet Options ouvrira la fenêtre suivante. Ici l'utilisateur peut cocher la case "Auto launch when Windows starts up (Lancer automatiquement au démarrage de Windows)." pour s'assurer que l'agent de la carte Ethernet de D-Link démarrera automatiquement lors du démarrage du système d'exploitation Windows.



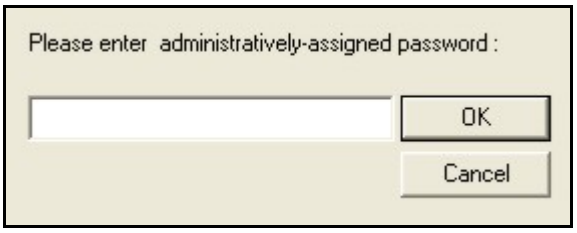
Pour ajuster vous paramètres personnels, cliquez sur le bouton **Personal (Personnel)** qui ouvrira la fenêtre suivante.



L'utilisateur peut définir les champs suivants.

- **Name (Nom)** : Un nom choisi pour identifier l'utilisateur lors de la configuration de la DGE-530T.
- **Location (Emplacement)** : L'utilisateur peut identifier l'emplacement physique de l'ordinateur où est installée la carte Ethernet.
- **Contact** : Des informations sur la façon de contacter l'utilisateur, comme un numéro de téléphone ou une adresse électronique.

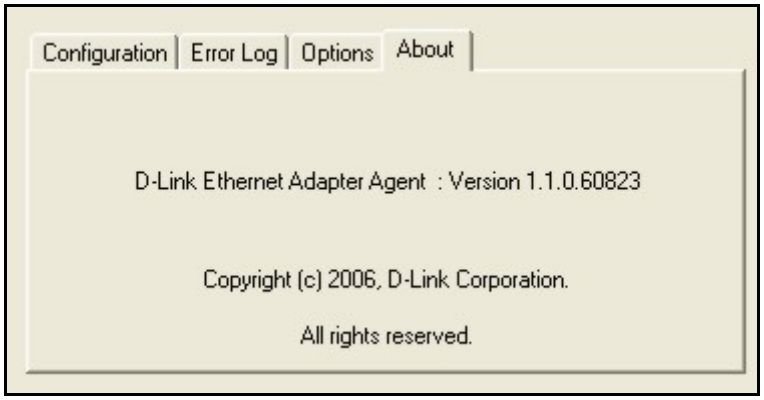
L'utilisateur peut aussi définir un mot de passe pour protéger les paramètres de configuration précédemment définis. Cliquez sur le bouton **Password (Mot de passe)** sous l'onglet Options pour ouvrir la fenêtre suivante.



Saisissez un mot de passe dans l'espace fourni et cliquez sur **OK** pour définir votre nouveau mot de passe. Si aucun mot de passe n'est défini par l'utilisateur, le mot de passe par défaut, "private", est utilisé et pourrait être requis pour configurer le D-Link SNMP Agent (L'agent SNMP de D-Link).

REMARQUE : Le mot de passe par défaut de cet utilitaire est "private".

Cliquer sur l'onglet About (À propos) affichera la version actuelle de la carte et les informations de copyright.



SNMP

SNMP est un acronyme de Simple Network Management Protocol (Protocole simple de gestion de réseau). Ce protocole réseau sert à gérer les réseaux TCP/IP à l'aide d'alertes envoyées depuis des périphériques compatibles avec le SNMP et recueillies par un ou plusieurs serveurs. Les périphériques conformes au SNMP communiquent avec les applications de gestion en envoyant des alertes et des mises à jour, et en permettant des modifications de la configuration.

L'agent SNMP de la DGE-530T recueillera les avis d'événements de la carte, les traduira et les transmettra ensuite vers des stations de gestion SNMP spécifiées.

Avant d'installer l'agent SNMP, vous devez installer le SNMP sur votre ordinateur. Pour plus d'informations, consultez la documentation du système d'exploitation de votre ordinateur.

Pour installer le SNMP sur la DGE–530T, cliquez simplement sur **Install SNMP Agent (Installer l'agent SNMP)** sur la page d'introduction et complétez les étapes de l'assistant d'installation.

Cet utilitaire ne doit être utilisé que par des administrateurs réseau expérimentés. Il se pourrait que des logiciels ou services supplémentaires doivent être précédemment installés ou configurés avant l'installation du protocole SNMP.

D-Link Corporation Network Control (Contrôle réseau de D-Link)

Le D-Link Network Control Program (Programme de contrôle réseau de D-Link) est installé automatiquement avec le pilote et peut être ouvert dans le panneau de configuration de votre ordinateur. Les informations sur la configuration et les paramètres de ce programme peuvent être obtenues en cliquant sur le bouton **Help (Aide)** de l'écran actuel. Vous obtiendrez ainsi toutes les informations nécessaires.

Le D-Link Network Control Program (Programme de contrôle réseau de D-Link) est pris en charge par Microsoft Windows Server 2003 x86, Microsoft Windows Server 2003 x64, Microsoft Windows XP x86, Microsoft Windows XP x64, Microsoft Windows Vista x86, Microsoft Windows Vista x64, Microsoft Windows Server 2008 x86 et Microsoft Windows Server 2008 x64.

Étiquetage prioritaire IEEE 802.1p

Avec le nombre grandissant d'applications réseau, les réseaux locaux doivent transmettre des données pour une grande variété d'applications. Le courrier électronique, les transferts de fichiers, les interrogations de bases de données, la voix sur IP (VoIP), la visioconférence et le multimédia doivent tous être transmis aux utilisateurs. Une partie du trafic, comme la visioconférence, demande une plus grande priorité car un léger retard des paquets provoque une dégradation remarquable de la qualité vidéo et audio, alors qu'un autre trafic comme le courrier électronique ne sera pas visiblement affecté par des petits retards. Le grand nombre de programmes qui sont exécutés sur les réseaux d'aujourd'hui nuit à la capacité de transmettre des données urgentes. Même si la bande passante n'est généralement pas un problème sur votre réseau, les pics de trafic réseau durant les heures de pointe peuvent provoquer des retards dans le trafic urgent.

L'IEEE 802.1p définit sept niveaux de priorité pour les paquets Ethernet. Les paquets à priorité élevée seront transmis en premier à travers un réseau à l'aide de commutateurs compatibles 802.1p. Les paquets à plus basse priorité seront transmis à chaque fois que la bande passante est disponible. Quand il est correctement configuré, cela garantit que les données urgentes arrivent à temps et ne sont pas affectées par d'autres trafics.

IEEE802.1Q VLANs (Réseaux locaux virtuels IEEE 802.1Q)

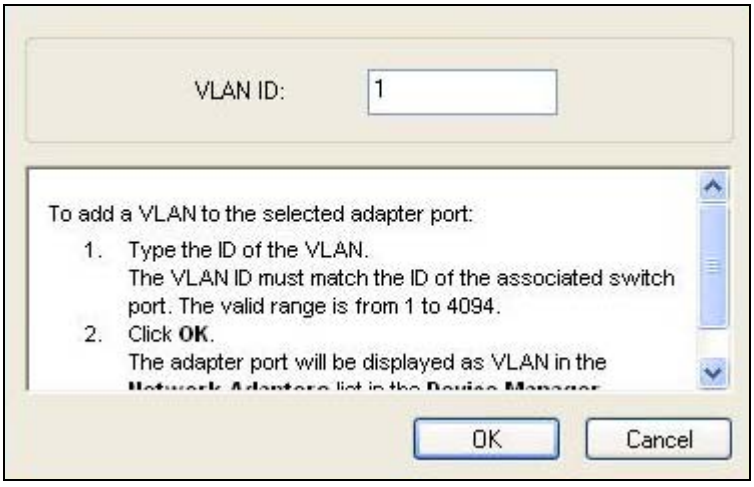
Le VLAN IEEE 802.1Q peut aider à améliorer la performance et la sécurité du réseau en le segmentant en réseaux locaux virtuels. Les réseaux locaux virtuels IEEE 802.1Q peuvent limiter le trafic de diffusion et le trafic nœud à nœud (monodiffusion) à un seul réseau local virtuel. Cela limite les effets des avalanches de diffusion et fournit une sécurité supplémentaire à votre réseau.

Pour que les réseaux locaux virtuels fonctionnent, l'ordinateur où est installée cette carte réseau doit utiliser Windows 2000, XP, 2003 ou une version ultérieure comme système d'exploitation.

Configuration des paramètres VLAN (Réseau local virtuel)

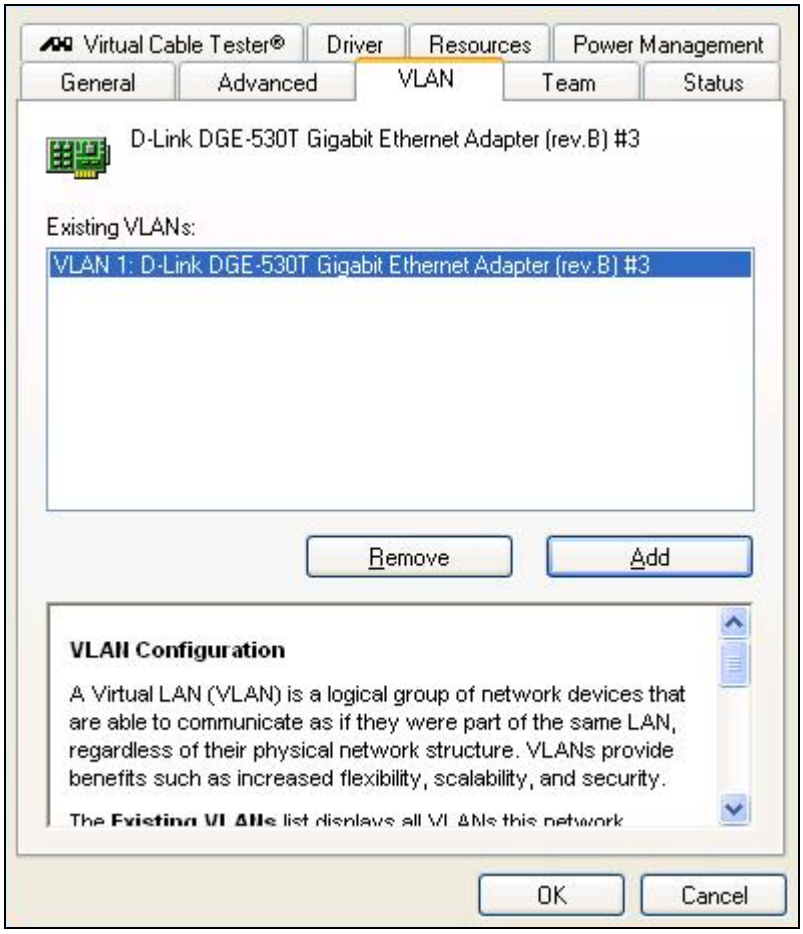
Pour configurer les paramètres VLAN (Réseau local virtuel) de votre DGE-530T, ouvrez d'abord l'utilitaire D-Link Network Control (Contrôle réseau de D-Link) qui se trouve dans le panneau de configuration de votre ordinateur. Une fois ouvert, cliquez sur l'onglet **VLAN (Réseau local virtuel)** en haut de la fenêtre, ce qui affichera la fenêtre suivante. Cliquez sur le lien **D-Link DGE-530T Gigabit Ethernet Adapter** qui affichera les paramètres dans la moitié inférieure de la fenêtre.

Pour ajouter un paramètre VLAN à cette fenêtre, cliquez sur le bouton **Add (Ajouter)** au bas de la fenêtre, ce qui ouvrira la fenêtre de configuration suivante.



Pour définir le VLAN, saisissez d'abord un VLAN ID (ID du réseau local virtuel) et cliquez ensuite sur **OK**. Les VLAN IDs (ID du réseau local virtuel) disponibles sont généralement entre 1 et 4094. L'utilisateur peut configurer jusqu'à 64 paramètres VLAN pour ce périphérique.

Une fois la configuration complétée, les nouveaux paramètres s'afficheront dans la fenêtre VLAN comme illustré dans l'exemple suivant.

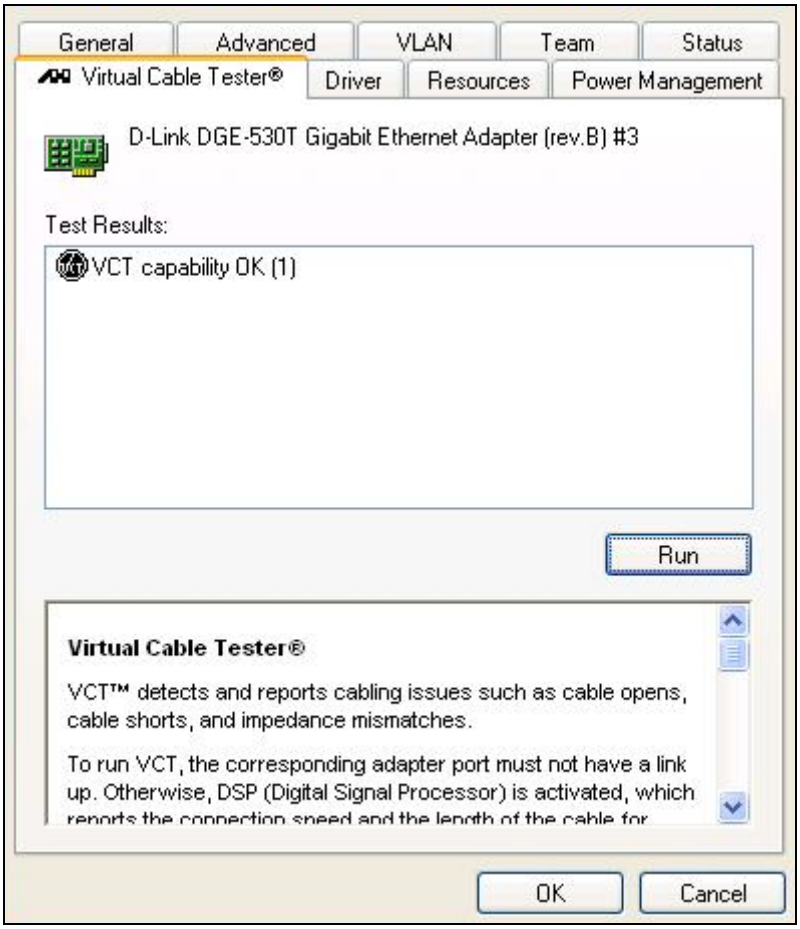


Cliquez sur **OK** après avoir terminé la configuration de vos paramètres.

Fonction de diagnostic des câbles

Le VCT, Virtual Cable Tester (Testeur de câble virtuel) est une fonction qui examine la qualité et les caractéristiques d'un câble réseau qui a été connecté à la DGE-530T. Cette fonction permettra à l'utilisateur de détecter et d'afficher des problèmes potentiels de câbles comme des circuits ouverts, des courts-circuits et des discordances d'impédance. La distance de la faute peut être située avec une précision d'environ un mètre. Pour installer cette fonction, allez dans le répertoire du CD fourni avec ce périphérique et cliquez sur le fichier exécutable Setup VCT qui lancera le programme d'installation du VCT.

Pour afficher les paramètres VCT de votre DGE-530T, ouvrez d'abord l'utilitaire D-Link Network Control (Contrôle réseau de D-Link) qui se trouve dans le panneau de configuration de votre ordinateur. Une fois ouvert, cliquez sur l'onglet Virtual Cable Tester (Testeur de câble virtuel) , ce qui affichera la fenêtre suivante :



Pour démarrer le diagnostic, déconnectez d'abord le câble de son nœud final distant afin qu'il y ait juste un câble ouvert connecté à la DGE-530T. Cliquez sur la carte appropriée dans l'arborescence affichée ci-dessus et cliquez ensuite sur le bouton **Run (Exécuter)**. Les résultats qui apparaîtront dans le tableau à côté du câble correspondant afficheront l'état de ce câble et la distance jusqu'à la faute. L'état du test sera présenté à la fin du diagnostic. Si la carte sélectionnée est connectée et a une liaison montante, le DSP, Digital Signal Processor (Processeur de signal numérique) sera activé et affichera la vitesse de la connexion (10, 100, 1000 Mbits/s) et la longueur du câble.

4

Résolution des problèmes

Si vous rencontrez des problèmes avec la carte, veuillez vérifier si :

- le pilote approprié est chargé,
- la catégorie correcte de câble est utilisée pour la connexion réseau,
- le concentrateur correspondant est correctement qualifié pour l'application.

La carte DGE-530T présente 4 voyants lumineux :

- **Liaison/Activité** – Une lumière verte fixe indique une bonne liaison entre la DGE-530T et son serveur ou commutateur correspondant. Une lumière verte clignotante indique de l'activité à l'intérieur de la carte (transmission ou réception).
- **Full** – Une lumière verte fixe indique que la carte fonctionne en mode duplex intégral
- **1000M** – Le voyant s'allume en vert quand un périphérique fonctionnant à 1 000 Mbits/s est connecté à la carte.
- **100M** – Le voyant s'allume en vert quand un périphérique fonctionnant à 100 Mbits/s est connecté à la carte.

5

Caractéristiques techniques

Spécifications	
Support réseau	Câble de catégorie 5e/5
Connecteur	RJ45
Contrôleur	Marvell 88E8001
Architecture de bus	Interface de bus PCI 32 bits
Mémoire	512 Ko
Voyants de diagnostic	Liaison/Activité, Full, 100M et 1000M
Transfert des données réseau	Gigabit Ethernet : 2 000 Mbits/s (duplex integral)
Dimensions	120 mm (L) x 51 mm (H)
Gestion	Prise en charge VLAN, D-Link Network Control Program (Programme de contrôle réseau de D-Link), SNMP Agent (Agent SNMP)

Spécifications	
Conformité	• IEEE 802.3ab, 802.3T, 802.3u, 802.3z • VLAN IEEE 802.1Q • Contrôle de flux IEEE 802.3x • Qualité de service IEEE 802.1p • Gestion de l'alimentation WoL • ACPI 2.0
Protocole	CSMA/CD

Spécifications	
Pilotes pris en charge	• Microsoft Windows 98 • Microsoft ME • Microsoft Windows NT4.0 • Microsoft Windows 2000 x86 (Certifié Microsoft WHQL) • Microsoft Windows Server 2003 x86 (Certifié Microsoft WHQL) • Microsoft Windows Server 2003 x64 (Certifié Microsoft WHQL) • Microsoft Windows XP x86 (Certifié Microsoft WHQL) • Microsoft Windows XP x64 (Certifié Microsoft WHQL) • Microsoft Windows Vista x86 (Certifié Microsoft WHQL) • Microsoft Windows Vista x64 (Certifié Microsoft WHQL) • Microsoft Windows Server 2008 x86 (Certifié Microsoft WHQL) • Microsoft Windows Server 2008 x64 (Certifié Microsoft WHQL) • Linux pour noyau 2.4.x, 2.6.x • Client 32 • DOS.ODI • Netware 4.x, 5.x, 6.x • Mac OS 10.2, 10.3 • NDIS2 • FreeBSD 5.3 • FreeBSD 6.0
Consommation électrique	3,5 W
Température	• En fonctionnement : 0 à 40°C • En stockage : -25 à 55°C
Humidité	• 5 % à 90% sans condensation
Certification d'émission	• FCC Classe B • CE Mark Classe B • BSMI Classe B • C-Tick

FCC Certifications

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 user is encouraged to try to correct the interference by one or more 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 from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables must be used in order to comply with emission limits.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

D-Link®
Building Networks for People

Limited Warranty
(USA Only)

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. ("D-Link") provides this Limited warranty for its product only to the person or entity that originally purchased the product from:

- D-Link or its authorized reseller or distributor and
- Products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, addresses with an APO or FPO.

Limited Warranty: D-Link warrants that the hardware portion of the D-Link products described below will be free from material defects in workmanship and materials from the date of original retail purchase of the product, for the period set forth below applicable to the product type ("Warranty Period"), except as otherwise stated herein.

1-Year Limited Warranty for the Product(s) is defined as follows:

- Hardware (excluding power supplies and fans) One (1) Year
- Power Supplies and Fans One (1) Year
- Spare parts and spare kits Ninety (90) days

D-Link's sole obligation shall be to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund at D-Link's sole discretion. Such repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement Hardware need not be new or have an identical make, model or part. D-Link may in its sole discretion replace the defective Hardware (or any part thereof) with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement Hardware will be warranted for the remainder of the original Warranty Period from the date of original retail purchase. If a material defect is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to repair or replace the defective Hardware, the price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware (or part thereof) that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty: D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days ("Warranty Period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. D-Link's sole obligation shall be to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software or to refund at D-Link's sole discretion. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Software will be warranted for the remainder of the original Warranty Period from the date or original retail purchase. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty: The Limited Warranty provided hereunder for hardware and software of D-Link's products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold "As-Is" without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim: The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same.
- The original product owner must obtain a Return Material Authorization ("RMA") number from the Authorized D-Link Service Office and, if requested, provide written proof of purchase of the product (such as a copy of the dated purchase invoice for the product) before the warranty service is provided.
- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the Product and will not ship back any accessories.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA92708. D-

Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link, with shipping charges prepaid. Expedited shipping is available if shipping charges are prepaid by the customer and upon request.

D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

What Is Not Covered: This limited warranty provided by D-Link does not cover: Products, if in D-Link's judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product. Repair by anyone other than D-Link or an Authorized D-Link Service Office will void this Warranty.

Disclaimer of Other Warranties: EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED "AS-IS" WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO NINETY (90) DAYS. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

Limitation of Liability: TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK'S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NON-CONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY

Governing Law: This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This limited warranty provides specific legal rights and the product owner may also have other rights which vary from state to state.

For detailed warranty outside the United States, please contact corresponding local D-Link office.

Register online your D-Link product at http://support.dlink.com/register/

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