Powerline Network

Instant Network for Internet Access…and More!

Solution for SOHO, SMALL OFFICE AND HOME OFFICE

Utility Program User Guide

For

PLC-ETHERNET BRIDGE

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1. Introduction

This Utility Program enables users to find PLC-Ethernet Bridge devices on the Powerline network, measures data rate performance, ensures privacy and performs diagnostics by setting user defined secure Powerline networks.

1.1. System Requirements

Operating System	Microsoft Windows XP, Vista, 7
Browser	Microsoft Internet Explorer 5.0 or later.
CPU	Intel Pentium III or better, clock rate faster than 2.0GHz recommended
RAM	At least 128MB
Free Disk Space	At least 20MB
Network Interface	At least one Fast Ethernet (100 Mbps) network card, and Ethernet Cord

1.2. Installation

First, you need to verify that there is no other Powerline utility installed on your computer before installing this utility. If there is another utility installed, please uninstall it.

Then, please insert the Utility CD-ROM into the computer's CD-ROM drive. The CD will launch an IE browser. Click the necessary link to start installation. Please install WinPcap v4.1.1 (you can download it from http://www.winpcap.org) before install the Powerline utility. If IE browser is not your default browser, please run **WinPcap_4_1_1.exe** at D:\Software\WinPcap\, and then run **setup.exe** at D:\Software\Setup\. (Please change D: to your CD-ROM drive).

Follow the installation wizard through the installation process.

1.3. Run the Utility

After installing the Utility Program, please run the Utility Program from the Start / All Programs or double-click the utility icon on the desktop.

2. How to use

There are three tabs (Main, Diagnostics, About) in the Utility program layout. Each tab will provide different functions. Sec. 2.1~2.3 explains each tab's functions:

2.1. Main Tab

As shown in Figure 1, the "Main" tab will list all the PLC-Ethernet Bridge devices logically connected in current available Powerline networks.
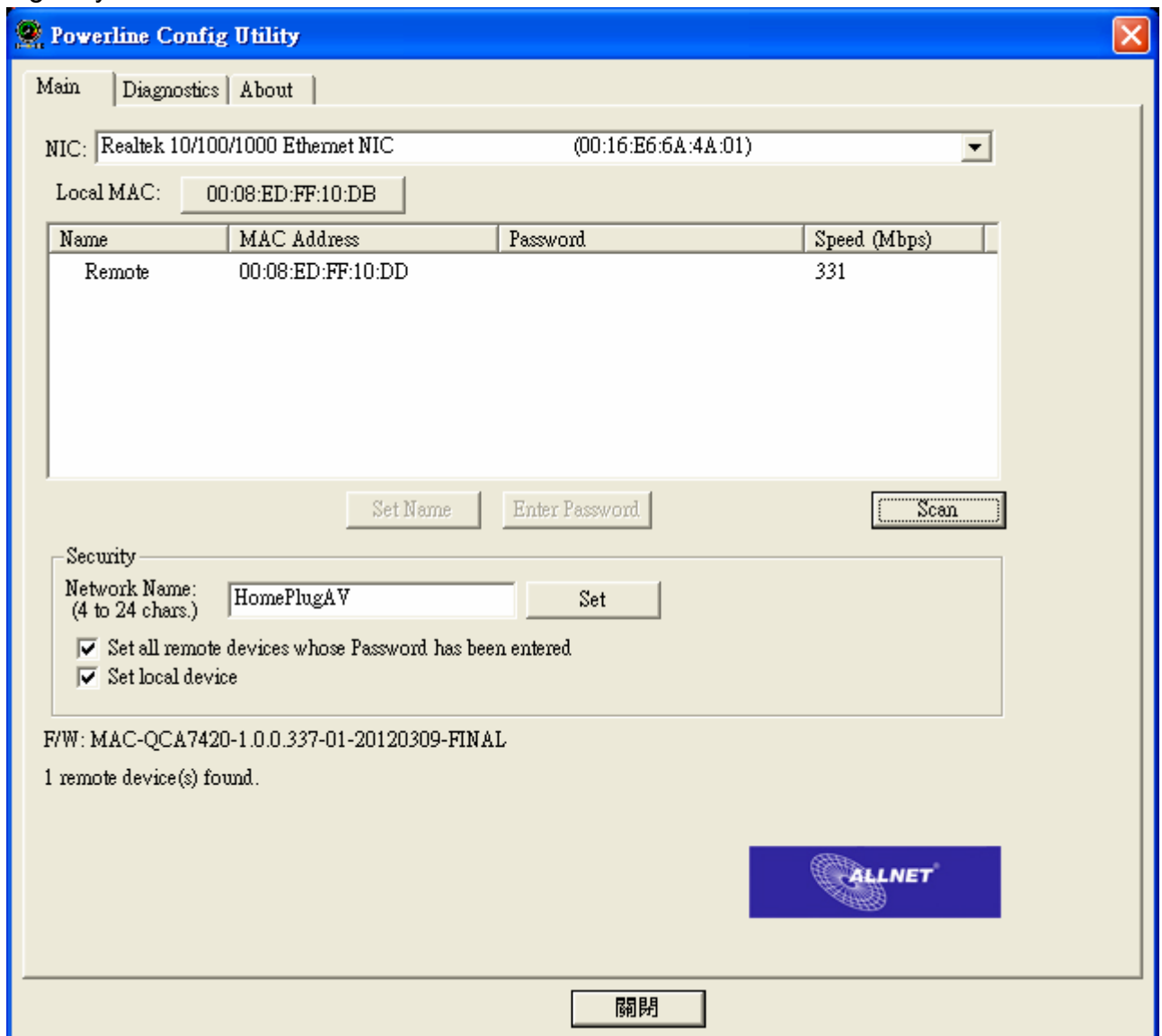

Figure 1: Main Tab window

NIC (Network Interface Cards) Selector

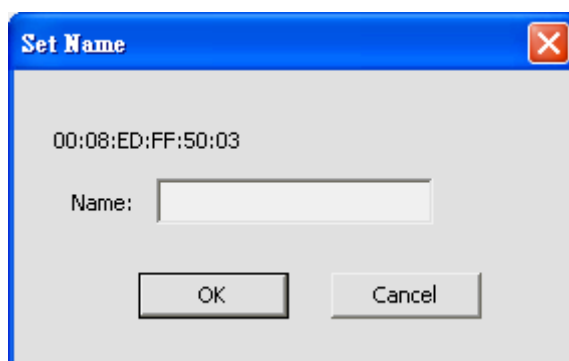First, please select the Network Interface Card (NIC) connected to PLC-Ethernet Bridge device directly.

Local MAC

It shows the local PLC-Ethernet Bridge device directly connected to your computer via Ethernet. The Utility will scan the Powerline network periodically to search for all the PLC-Ethernet Bridge devices, and keep the information updated. You can click this button, and it will show the device's f/w at bottom.

Upper Window

The upper window lists all the remote PLC-Ethernet Bridge devices found in the current logical Powerline networks. This window displays information such as Device Name, MAC Address, Device Password, and Speed (Mbps) for the remote devices.

The "**Name"** column shows the nickname of each remote device inside the Powerline network. The default name is "Remote". You can change it by clicking the item first, and then click the "**Set Name**" button. It will pop-up "Set Name" dialog box as shown in Figure 2. You can input the new name for the device.

Figure 2: Set Name Dialog

The "**MAC Address"** column shows remote device's MAC address.

The **"Password"** column shows remote device's password. You can input the password by clicking the "**Enter Password**" button.

The "**Speed (Mbps)"** column shows the remote device's mutual transmit speed with the local device, in Mbps (Million bits per second).

"Enter Password" button

    If you want to create a private network, you need to enter the remote device's password first. Please click on the intended device to make it highlighted then click the "Enter Password" button, and the "Enter Password" dialog box will show up (Figure 3). The selected device's MAC address is shown in the dialog box. After entering the password, click "OK" button.

Figure 3: Set Device's Password

"Scan" button

    The "Scan" button is used to search for the PLC-Ethernet Bridge devices connected to your logical network immediately. By default setting, it will automatically scan every 10 seconds and updates the display lists.

"Security"

When rolling out of factory, every PLC-Ethernet Bridge device carries a default logical network name: **"HomePlugAV"**. The "Security" group provides functions to manage this logical network name and create private network.

You can change the local device's network name by check the "Set local device" box. And/Or change the remote device's network name by check the "Set all remote devices whose Password has been entered" box. Please fill in each remote device's password in advance following the instructions in "Enter Password" button.

"Set" button

After input the new "Network Name" and check the options, please click "Set" button to change the network name of selected device. After changed the network name to a new one, all the devices with different network name will no longer be able to communicate or respond to you.

2.2. Diagnostics Tab

The "Diagnostics" tab shows the system information and the history of all the devices that have been found before (Figure 4).

The **upper window** of Diagnostics tab shows the host computer's system data and it shows:

- MAC Address of all NICs (network interface card)
- MAC Address and the firmware version of the PLC-Ethernet Bridge device which is connected to each NIC
- Computer name
- User name
- Processor and operating system information
- Utility program version
- Versions of all the driver DLLs and libraries used

The **lower window** of Diagnostics tab contains the history of all remote devices which have been found by the computer previously. All the devices will be shown here, regardless of they are currently active or not. The following information is available from the list:

- Name
- MAC Address
- Password
- Speed(Mbps)
- Last Seen

The diagnostics information displayed on the upper and lower window could be saved to text file or print out by printers. Devices which no longer existed in the network can be deleted using the "Delete..." button.

"Delete…" button

Select the device which is no longer existed in the network by clicking its record first, then click this button to delete the record.

"Save Report…" button

Click this button to save all the device information displayed on the upper and lower window to a text file directly.
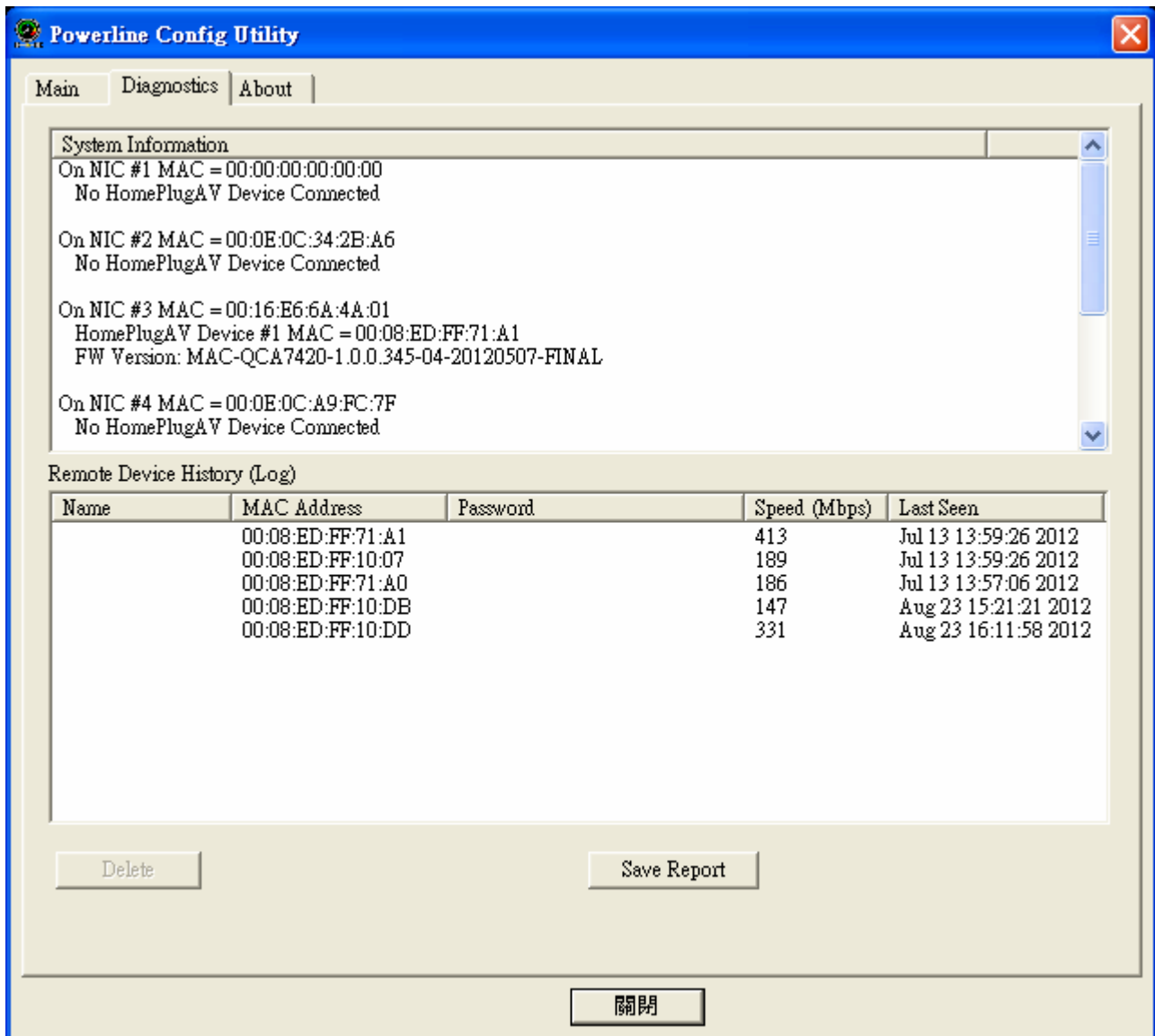
Figure 4: Diagnostics Tab

2.3. About Tab

The "About" Tab shows the software version and manufacturer information.