



## Powerline Network

*Instant Networks for Internet Access...and More!*

*Solution for SOHO, SMALL OFFICE AND HOME OFFICE*

Utility Program User Guide

for

# ALL16820x

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# 1. Introduction

This Utility Program enables users to find ALL16820x 200Mbps PLC Ethernet Bridge devices on the Powerline network, measures data rate performance, ensures privacy and performs diagnostics by setting user defined secure Powerline networks.

The model-name ALL16820x is a replacement for all devices of this series, including ALL168203, ALL168205, ALL168207 etc., as they are using the same software-utility. The screenshots in this manual are valid for all types, even if they show a different model-name.

## 1.1. System Requirements

Operating System	Microsoft Windows 2000, XP or Vista
CPU	Intel Pentium III or better, clock rate faster than 2.0GHz recommended
RAM	At least 128MB
Screen Resolution	Any resolution
Free Disk Space	At least 20MB
Network Interface	At least one Fast Ethernet (10/100 Mbps) network card, and Ethernet Cord

## 1.2. Installation

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

Second step, please insert the Utility CD-ROM into the computer's CD-ROM drive. The CD will launch a browser for installation as shown in Figure 1. Click the necessary link to start installation:

# ALL168203 Installation Kit

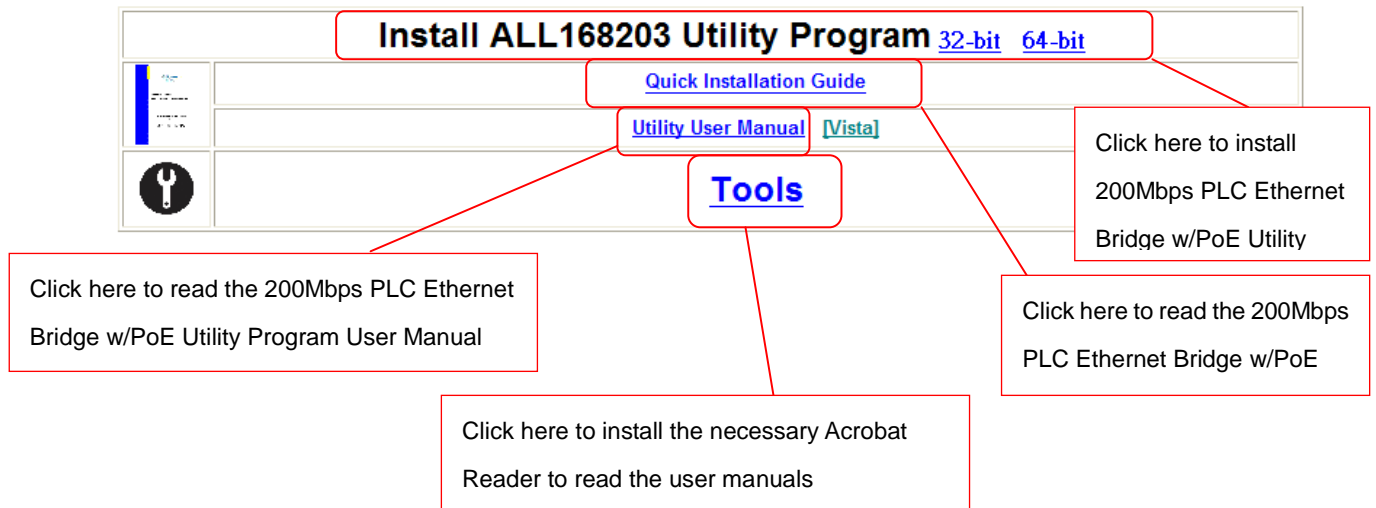


Figure 1: Installation Browser Snapshot

This dialog box will show up after the user clicks the “**Install ALL16820x Utility Program**” link.

Follow the steps to install the Utility Program. No password or CD-Key is needed.

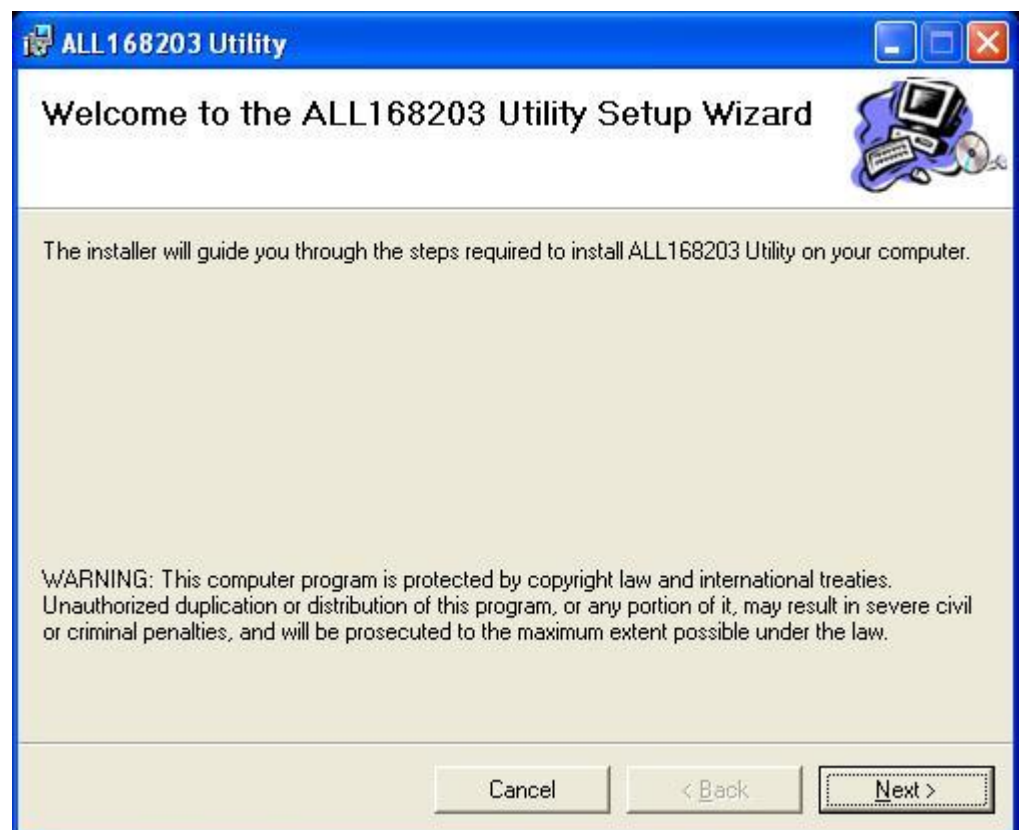
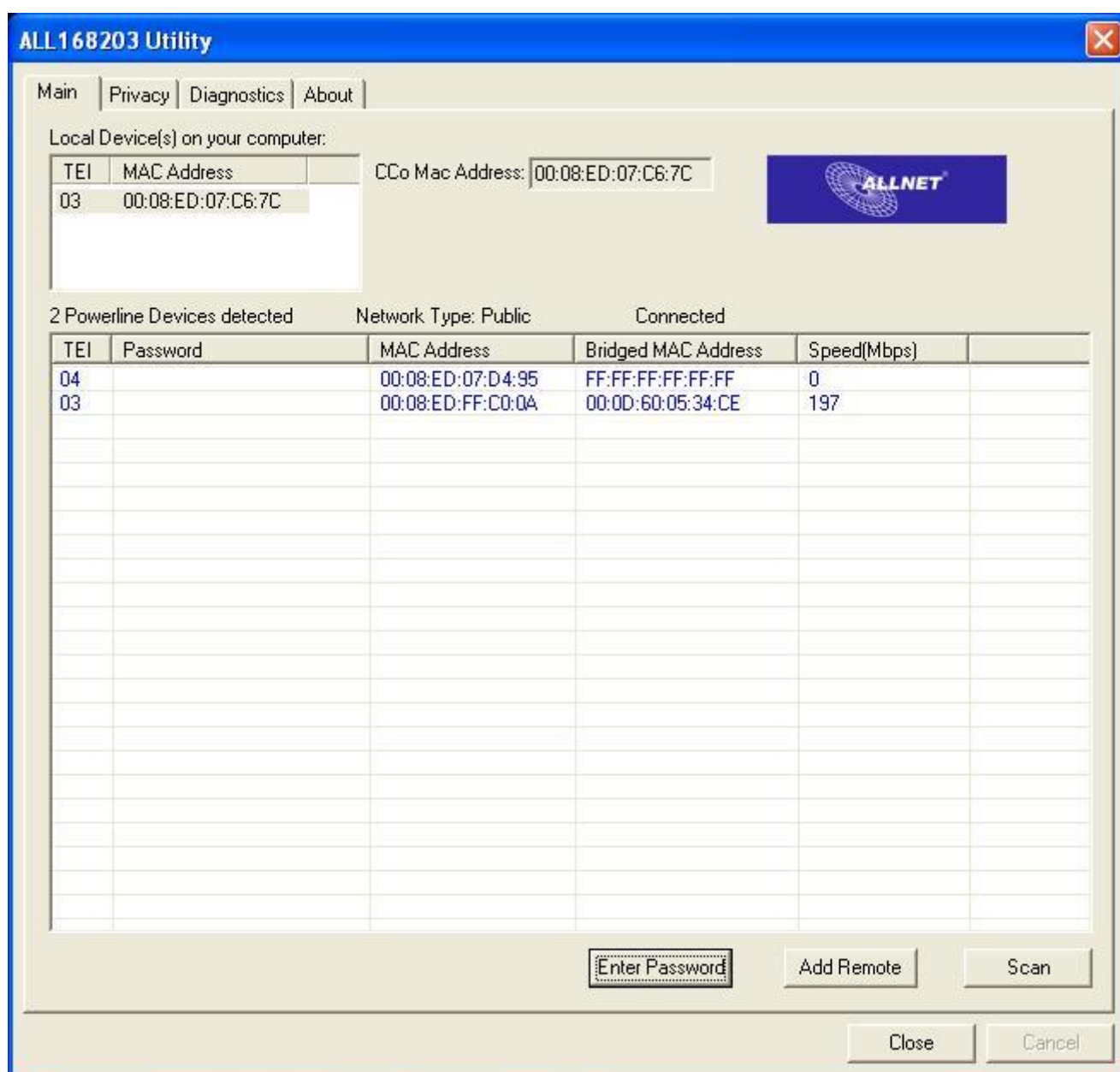


Figure 2: Installation Dialog Box

### 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. Figure 3 is the main frame screen of the utility program. This screen shows a ALL16820x 200Mbps PLC Ethernet Bridge device connected as a local device and another two ALL16820x 200Mbps PLC Ethernet Bridge devices as remote devices.



### Figure 3: Utility Program Main Screen

## 2. How to use

There are four Tabs (Main, Privacy, Diagnostics, About) in the Utility program layout. Each Tab will launch a different frame and provide different functions. Sec. 2.1~2.4 explains each frame's functions:

### 2.1. Main Frame

The "Main" frame will list all the ALL16820x 200Mbps PLC Ethernet Bridge devices logically connected in current available Powerline networks.

#### Upper Window

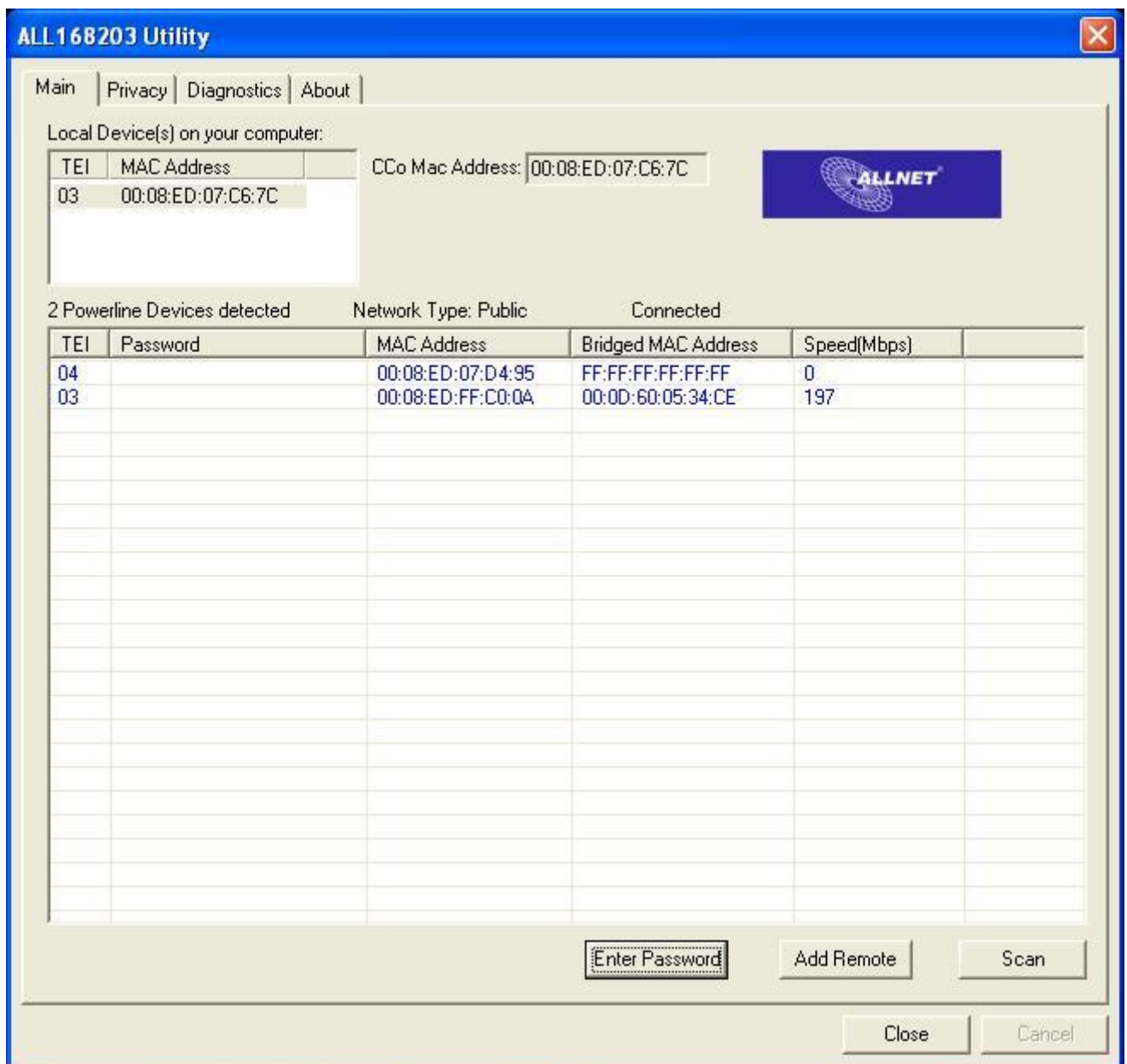
The upper window, entitled "Local Device(s) on your computer", shows all the local ALL16820x 200Mbps PLC Ethernet Bridge devices directly connected to your computer via Ethernet. In most cases, there is only one device shown in the window. If you have more than one NIC (Network Interface Card) on your computer and each of them connects ALL16820x 200Mbps PLC Ethernet Bridge devices, you will find more than one local ALL16820x 200Mbps PLC Ethernet Bridge devices shown in the upper window. The Utility will scan the Powerline network periodically to search for all the ALL16820x 200Mbps PLC Ethernet Bridge devices, and keep the information updated.

#### CCo MAC Address

This window shows the MAC Address of the "CCo"(Central Coordinator) inside this Powerline network. The CCo is automatically appointed by the Powerline network and cannot be changed unless the original CCo is unplugged.

#### Lower Window

The lower window lists all the ALL16820x 200Mbps PLC Ethernet Bridge devices discovered in the current logical Powerline networks. This window will report each ALL16820x 200Mbps PLC Ethernet Bridge device's connection status, as shown in Figure 4:



**Figure 4: The main frame screen**

The “**TEI**” column shows the unique “**T**erminal **E**quipment **I**dentifier” of each ALL16820x 200Mbps PLC Ethernet bridge inside the Powerline network. This TEI value is automatically appointed by the Powerline network and cannot be changed unless the device is unplugged.

The “**Password**” column shows each previously entered ALL16820x 200Mbps PLC Ethernet Bridge ‘s password. You can input the password by clicking the “Enter Password” button.

The “**MAC Address**” column shows the ALL16820x 200Mbps PLC Ethernet Bridge ’s MAC address.

The “**Bridged MAC Address**” column shows the NIC (Network Interface Card) this ALL16820x 200Mbps PLC Ethernet bridge connects to. If no NIC is connected, its default value is “ff:ff:ff:ff:ff:ff”.

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 device password first. Please click on the intended device to make it highlighted then click the “Enter Password” button(Figure 5), and the “Set Device Password” dialog box will show up(Figure 6). The selected device’s TEI and MAC address are shown in the dialog box. After entering the password, click “OK” button. If the input password does not match the device’s real password, error message will be shown and please retry again.

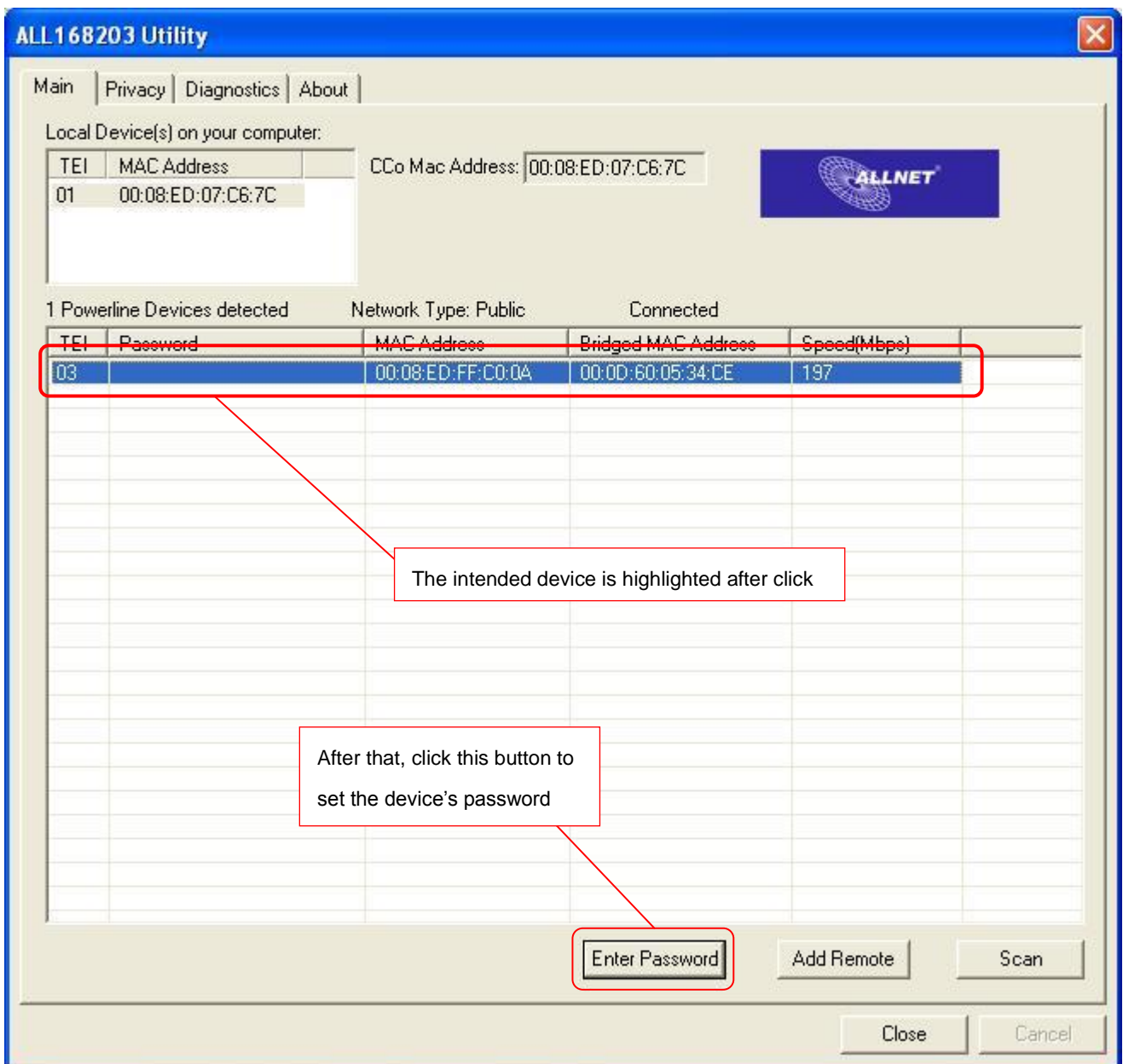


Figure 5: Click on the intended device



**Figure 6: Set Device Password**

### **“Add Remote” button**

The “Add Remote” button is used to add a remote device which is not listed in the lower window to your logical network (for example, a device is currently in another logical network). You can click the “Add” button to add the device to your logical network. The dialog box in Figure 7 is shown after clicking the “Add” button, and it allows you to enter both the Network name and the password. The device will be added to your logical network only if the Network name and passwords are both correct. Like the “Enter Password” function, incorrect passwords will be warned and denied.



**Figure 7: Add Remote Device**

### “Scan” button

The “Scan” button is used to search for the ALL16820x 200Mbps 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.

## 2.2. Privacy Frame

When rolling out of factory, every ALL16820x 200Mbps PLC Ethernet bridge device carries a default logical network name: “**HomePlugAV**”. The “Privacy” frame provides functions to manage this logical network name and create private network.

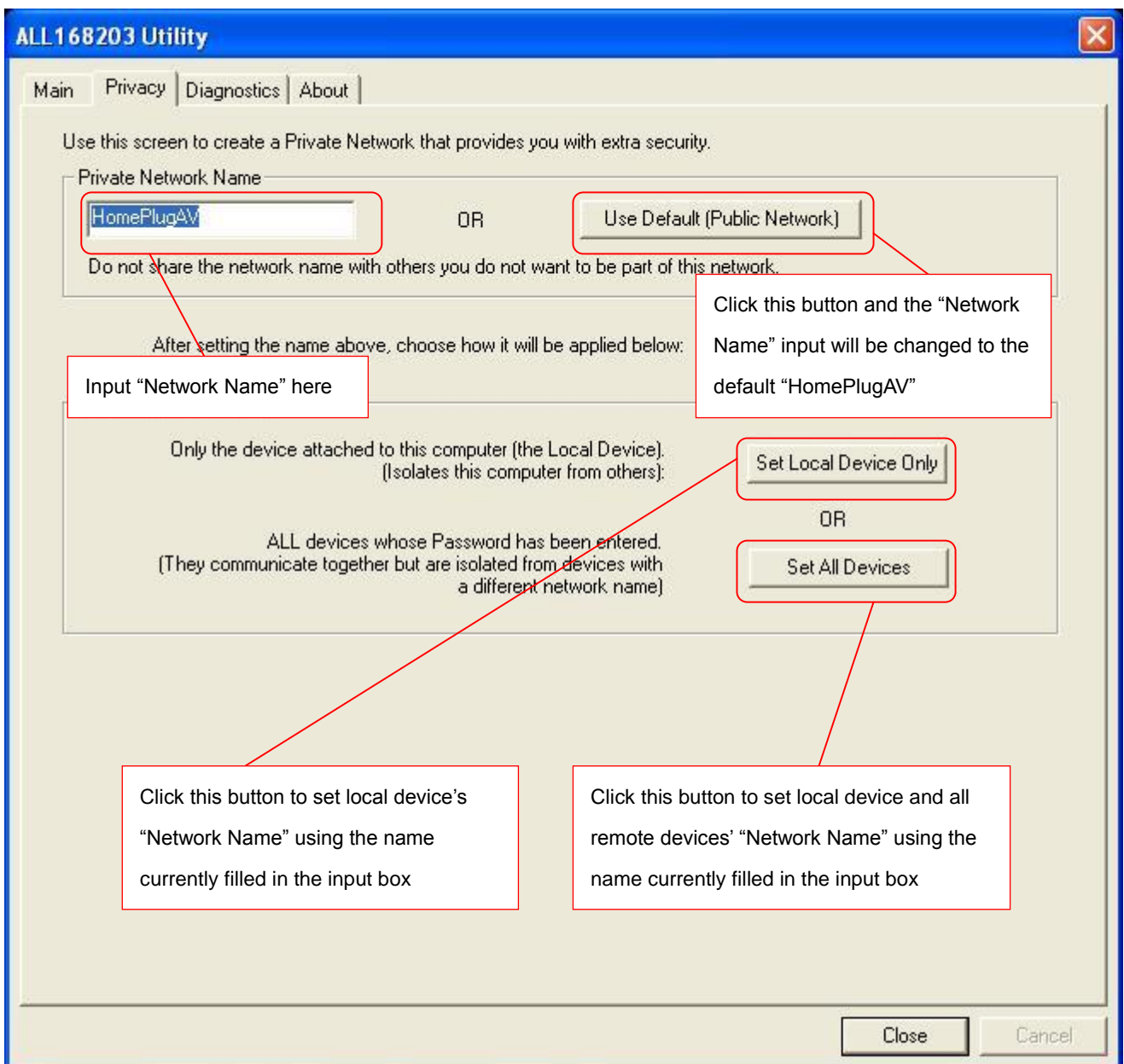


Figure 8: Privacy Frame Screen

**“Use Default (Public Network)” button**

You can directly set the network name back to the default “HomePlugAV” by clicking the “Use Default (Public Network)” button first, then press the “Set Local Device Only” button.

**“Set Local Device Only” button**

The “Set Local Device Only” button is used to change the network name of the local device only. After changing the network name to a new one, all the devices existing in the same network before will no longer be able to communicate or respond to you, because they will not have the same network name with the local device.

**“Set All Devices” button**

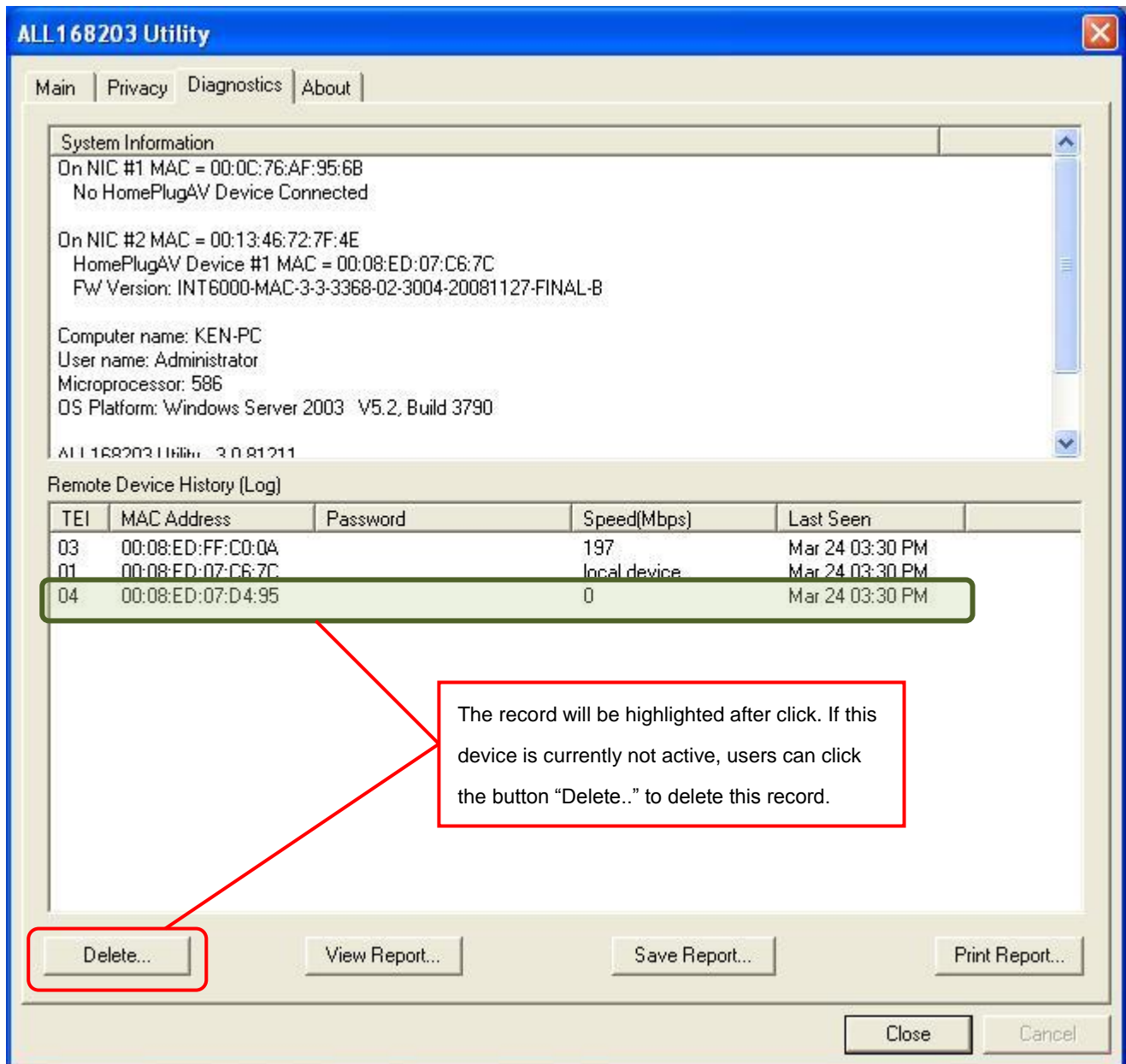
The “Set All Devices” button is used to change the whole logical network’s devices, both local and remote, that showed in the Main frame. Please fill in each remote device’s password in advance following the instructions in Sec 3.1(“Enter Password” button) so that this function can proceed normally.

## 2.3. Diagnostics Frame

The “Diagnostics” frame shows the system information and the history of all the devices that have been found before (Figure 9).

The **upper window** of Diagnostics frame 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 ALL16820x 200Mbps 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



**Figure 9: Diagnostics Frame Screen**

The **lower window** of Diagnostics frame 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:

- TEI
- 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.

**“View Report...” button**

Click this button to view all the device information displayed on the upper and lower window by the default text editor.

**“Save Report...” button**

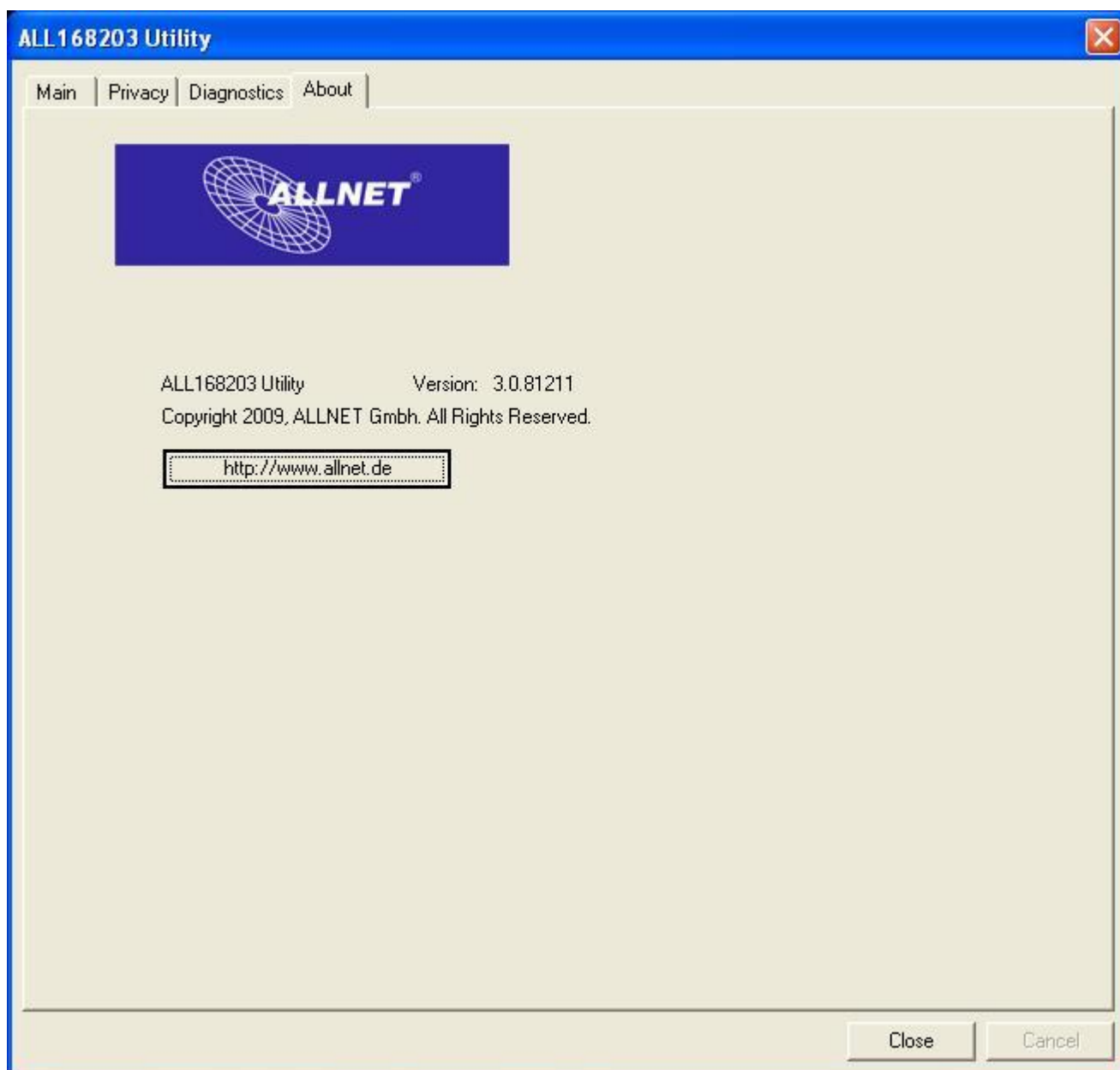
Click this button to save all the device information displayed on the upper and lower window to a text file directly.

**“Print Report...” button**

Click on this button to print the all diagnostics information to your default printer directly.

## 2.4. About Frame

The “About” Frame shows the software version, and manufacturer information.



**Figure 10: About Frame Screen**