



**Powerline embedded Notching Tool User Guide.**

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# PowerGrid Direct Access Tool

## *Downloading the PowerGrid DAT*

The PowerGrid DAT allows you to access your Powerline browser based graphical user interface.

You can download a copy of the PowerGrid DAT at Comtrend's website [www.comtrend.com](http://www.comtrend.com).

Remember the folder where you have downloaded the file as you will need to access it later.

## *Installing the PowerGrid DAT*

The Comtrend PowerGrid DAT will run automatically after double-clicking the .exe file extension.

See the "Getting started with the PowerGrid DAT" section.

## *Check List for using the PowerGrid DAT*

Before you can start using the PowerGrid DAT, make sure:

- Your Powerline (PLC) is connected to your PC/Laptop via an Ethernet cable
- Your other Powerline is connected to your modem/router
- Your modem/router is on and connected to the World Wide Web (WWW)

This ensures that your router will provide an IP address to your Powerlines.

## Getting started with the PowerGrid DAT

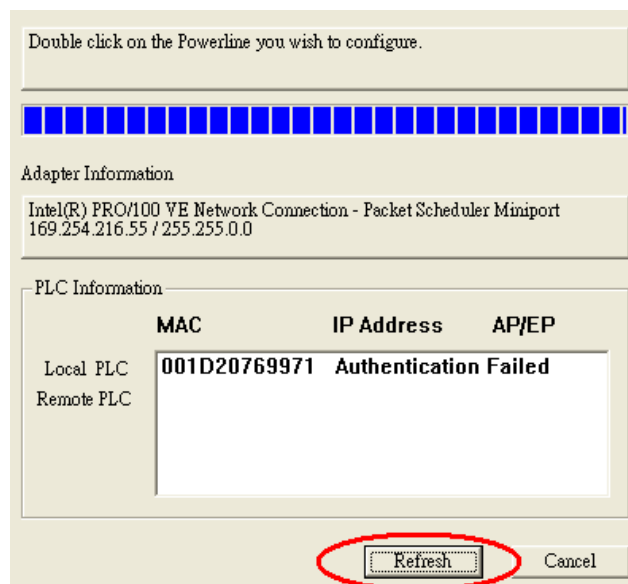
### Open the PowerGrid DAT

Open the folder where the PowerGrid DAT zip file is located and extract all the files using software such as WinRAR or WinZip.

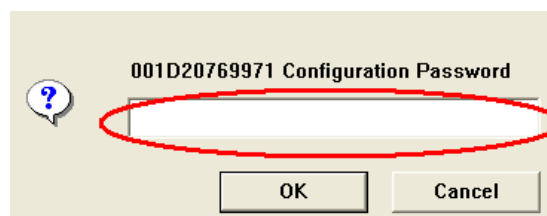
Locate the “PowerGrid DAT.exe” file and double-click on it.



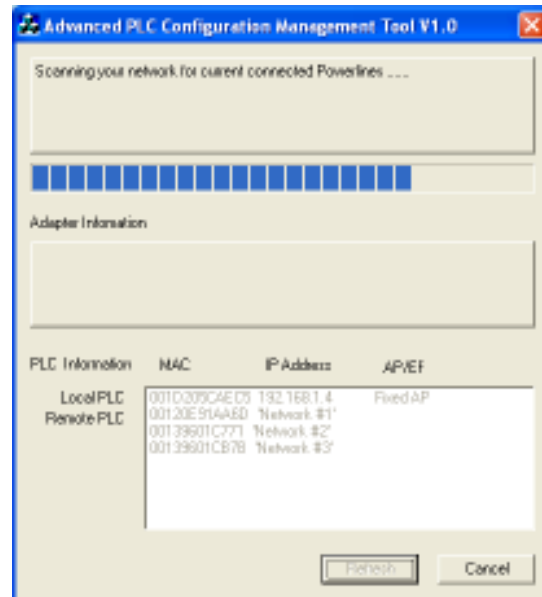
If you see the words “**Authentication Failed**”, as shown below, please click the **Refresh** button.



Input the Network Password and then click the **OK** button.



The PowerGrid DAT tool will open and start scanning your network for existing Powerlines:



After scanning your network the tool will display all existing Powerlines.



## Understanding the information displayed by the PowerGrid DAT

Adapter Information

Broadcom NetXtreme 57xx Gigabit Controller - Packet Scheduler Miniport  
192.168.1.7, 255.255.255.0

PLC Information	MAC	IP Address	AP/EF
Local PLC	001D205CAEC5	192.168.1.4	Fixed AP
Remote PLC	00139601C771	192.168.1.9	EP
Remote PLC	001D205CAEC6	192.168.1.3	EP

This is the Powerline connected to your PC/Laptop.

These are the Powerlines you can access through your LAN.

This column shows the unique MAC address of each connected Powerline

This column will show the IP address given to your Powerline by your router. If you have set a fixed address the name of the network will be displayed.

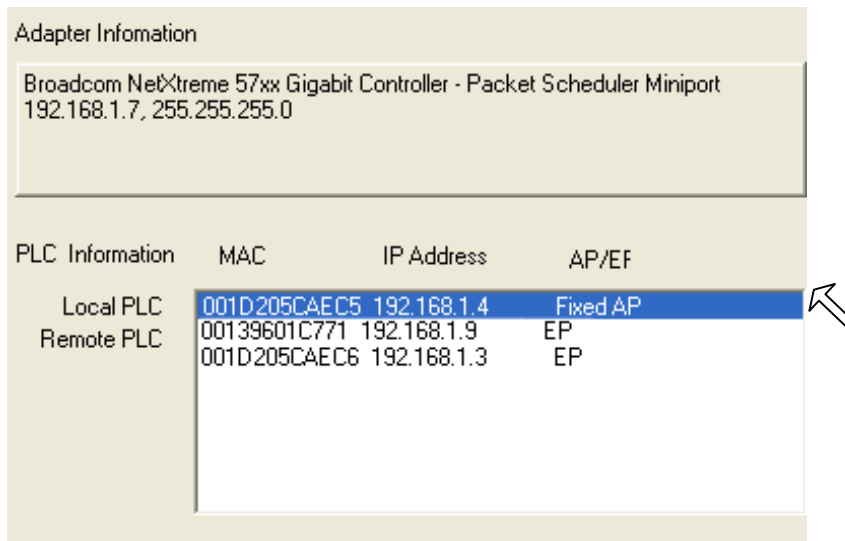
This column shows whether each Powerline is either an Access Point (AP) or End Point (EP).

# PG902 Graphical User Interface (GUI)

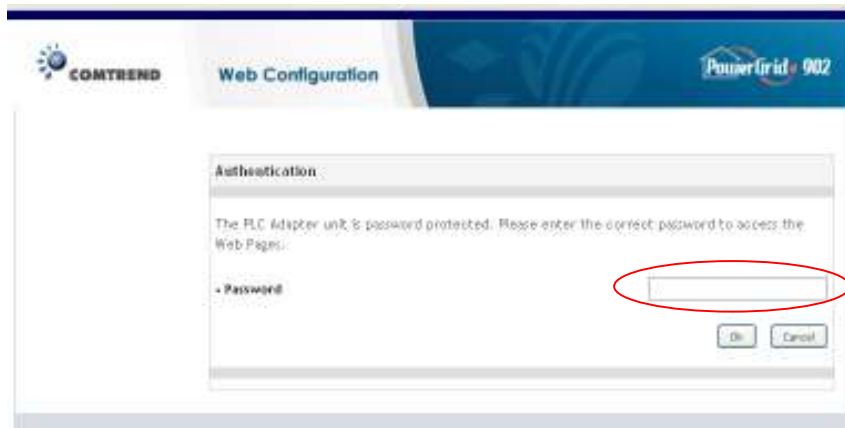
## Accessing the PG902 GUI

Your Comtrend PG902 has a browser based GUI.

To access the interface simply double click on the Powerline you want to configure:



- The PowerGrid DAT will open your browser displaying the Graphical User Interface (GUI) main page and request that you to enter a password. Type the word “admin” into the password box.



- A new page will be displayed: click on the “Change Configuration” link on the left side menu.



- On the new page click the “Phy” link to access the Notching Tool



A new page is displayed showing the PHY (Physical) current configuration. By default, the notches are enabled. Some frequencies will be notched from factory settings, some of these notches cannot be changed as these frequencies could interfere with other devices; while some others are enabled by default but can be disabled. This is the case with the 26.5 to 28 MHz frequencies, this particular range is used by some old wireless keyboards and mice, if you suspect you have one of these we recommend you don't disable this notch.

The following Notches are enabled by default and cannot be changed:

- 1.8 - 2 MHz
- 3.5 - 4 MHz
- 7 - 7.3 MHz
- 10.1 - 10.15 MHz
- 14 - 14.35 MHz
- 18.068 - 18.168 MHz
- 21 - 21.45 MHz
- 24.89 - 24.99 MHz
- 28 - 29.7 MHz

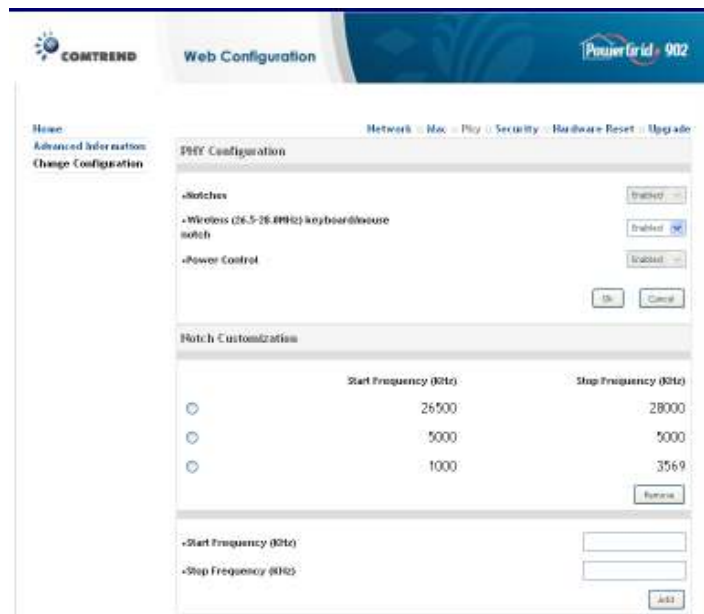
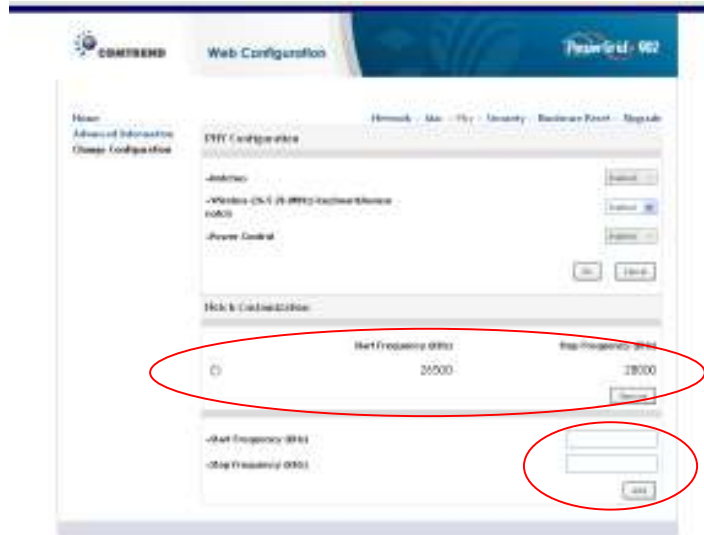
The 26.5 to 28MHz notched frequencies are enabled by default but can be changed.

### *Notching a frequency or a range of frequencies*



- At the bottom of this page you can add either a specific frequency to a notch or a range of frequencies. These will be listed under “Notch Customization”. To notch a particular frequency you need to add the same frequency on to both the “Start Frequency (KHz)” and the “Stop Frequency (KHz)”.

After clicking on the **Add** button, the page will refresh and list the new notched frequencies.



You can add up to a maximum of 5 notches using the same procedure. Once you finish adding notches you can simply close your browser.

## De-Notching

If you ever need to de-notch your Powerline, just follow the same steps you followed to get your Powerline IP address, open the GUI and go to the same “Change Configuration” page. Each notched frequency has a radio button on the left hand side. Select the radio button of the frequency you would like to de-notch. Bear in mind that only one frequency or range of frequencies can be de-notched at a time. After selecting the notch, click the **Remove** button.

These frequencies are now active again.

See the screenshots below as an example.

The image displays two screenshots of a web-based configuration interface for PHY Configuration. The left screenshot shows the "Notch Customization" section with a table of notch entries. The middle entry, with a start frequency of 5000 and a stop frequency of 5000, is selected with a radio button and circled in red. The right screenshot shows the same interface after the selected notch has been removed, leaving only two entries in the table.

	Start Frequency (kHz)	Stop Frequency (kHz)
<input type="radio"/>	26500	28000
<input checked="" type="radio"/>	5000	5000
<input type="radio"/>	1000	3569

	Start Frequency (kHz)	Stop Frequency (kHz)
<input type="radio"/>	26500	28000
<input type="radio"/>	1000	3569