# What can I do if the speed is slow when the PC is connected to the unmanaged switch?

The reasons why this happens are usually as below: the router and the switch or the switch and the Ethernet card in the PC don't communicate well ; there are some special settings in the router ; the switch is not working fine ; nonstandard cables.

Please refer to the following to troubleshoot step by one step.

**Step** 1: check the '**connection speed' of local area connection** between the PC and the switch:
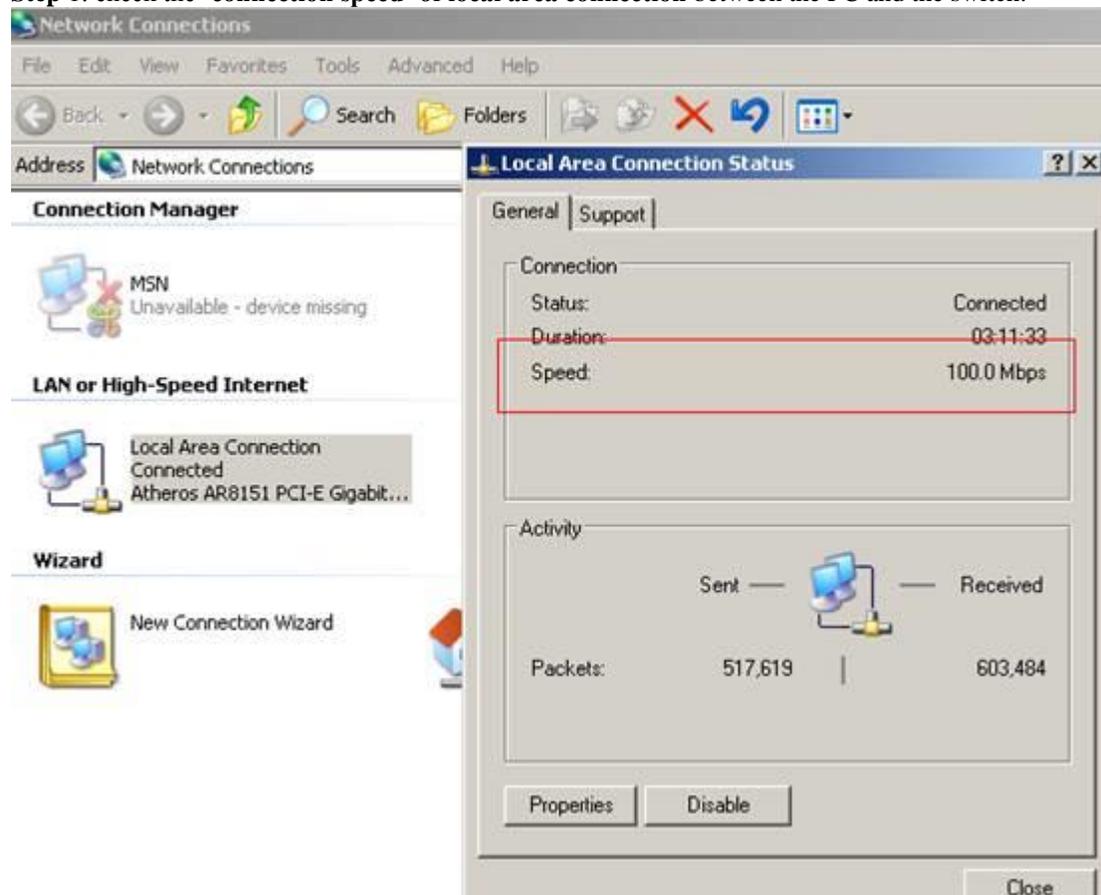
If the **'connection speed'** is quite **normal** (pretty the same compared to what the PC gets when connected to the router directly), **then please go to step 2.**

If the **'connection speed'** is **poor** (for example, it only has **100Mbps** while the Ethernet card and the switch are both **Gigabit devices**), then the switch and the router or switch and the PC are not communicating well.

Suggestion: as our unmanaged switches are auto-negotiation in speed, it's usually recommended that the router and the PC's **NIC(Network Interface Card)** are also set up 'auto-negotiation' in speed and a EIA/TIA-568EIA/TIA-568 standard cable is needed.

1) the **'connection speed'** is usually unchangeable in a router(contact the router's company to see if you can change the speed to 'auto-negotiation' or force the speed to a higher value).

2)As to the **'connection speed'** in the **NIC** of the PC, usually you can change the speed by changing the '**media type**' (**'media type' or 'speed and duplex' or 'link speed and duplex'**): go to 'local area connection'---right click it and go to 'properties'---'configure'--'advanced'----**'**media type' or 'speed and duplex' or 'link speed and duplex'**---**try **'auto-detect' or 'auto-mode'** first; if no difference, try **different speeds with different duplexes** until it gives best connection speed.
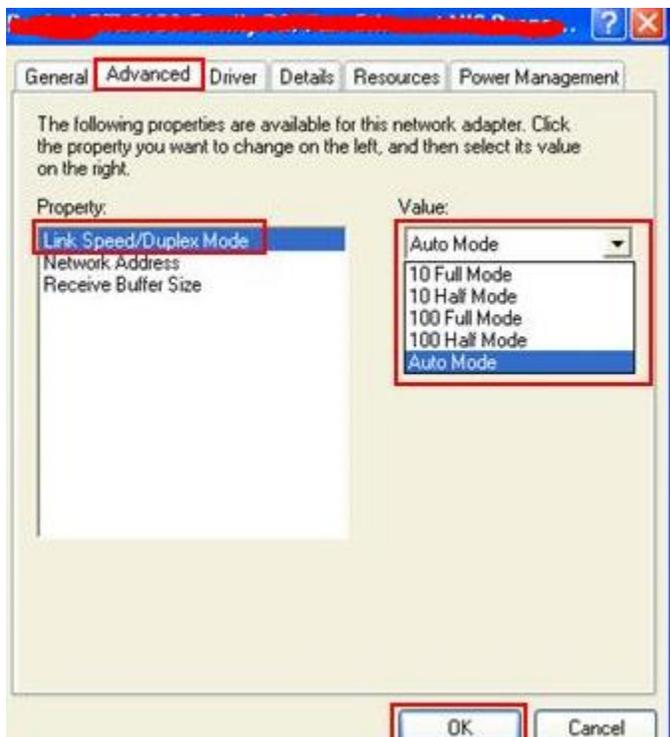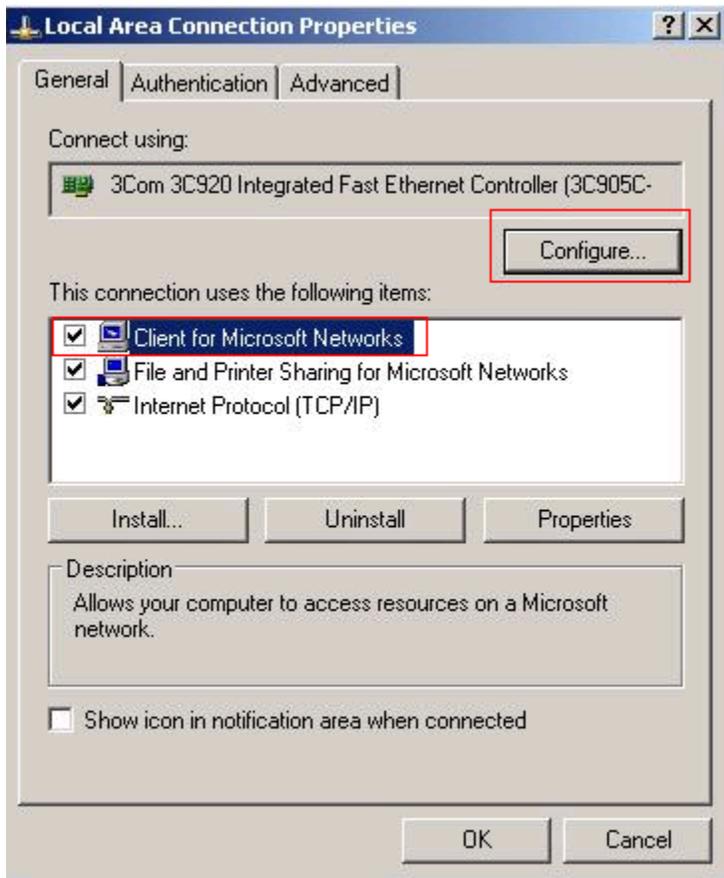
3) A **EIA/TIA-568EIA/TIA-568 standard** cable with the crystal plug and the wire cords tightly clamped is needed.

Step 2 If the **'connection speed '** of your PC's NIC is normal---then please do the following test:

1)Connect two PCs to our switch by cable and disconnect anything else from the switch.

2)Download a **file transfer software** (such as Dukto R6) on both PCs---run this software and begin to transfer a video or file between two PCs---**check the transfer speed.**

Suggestion:

If the **transfer speed** is faster than the **download speed** when the PC is connected to the router directly----then the switch is working normal----and you will need to check some info **in your main router.**

If the transfer speed is **much slower** compared with the speed when the PC is connected to the router directly, something might be wrong with the switch, pleasecontact support@tp-link.com.