

Increase Performance of Your WiFi Network

What

Instructions to change your WiFi adapter's hardware settings to increase the stability and performance of your WiFi network.

Why

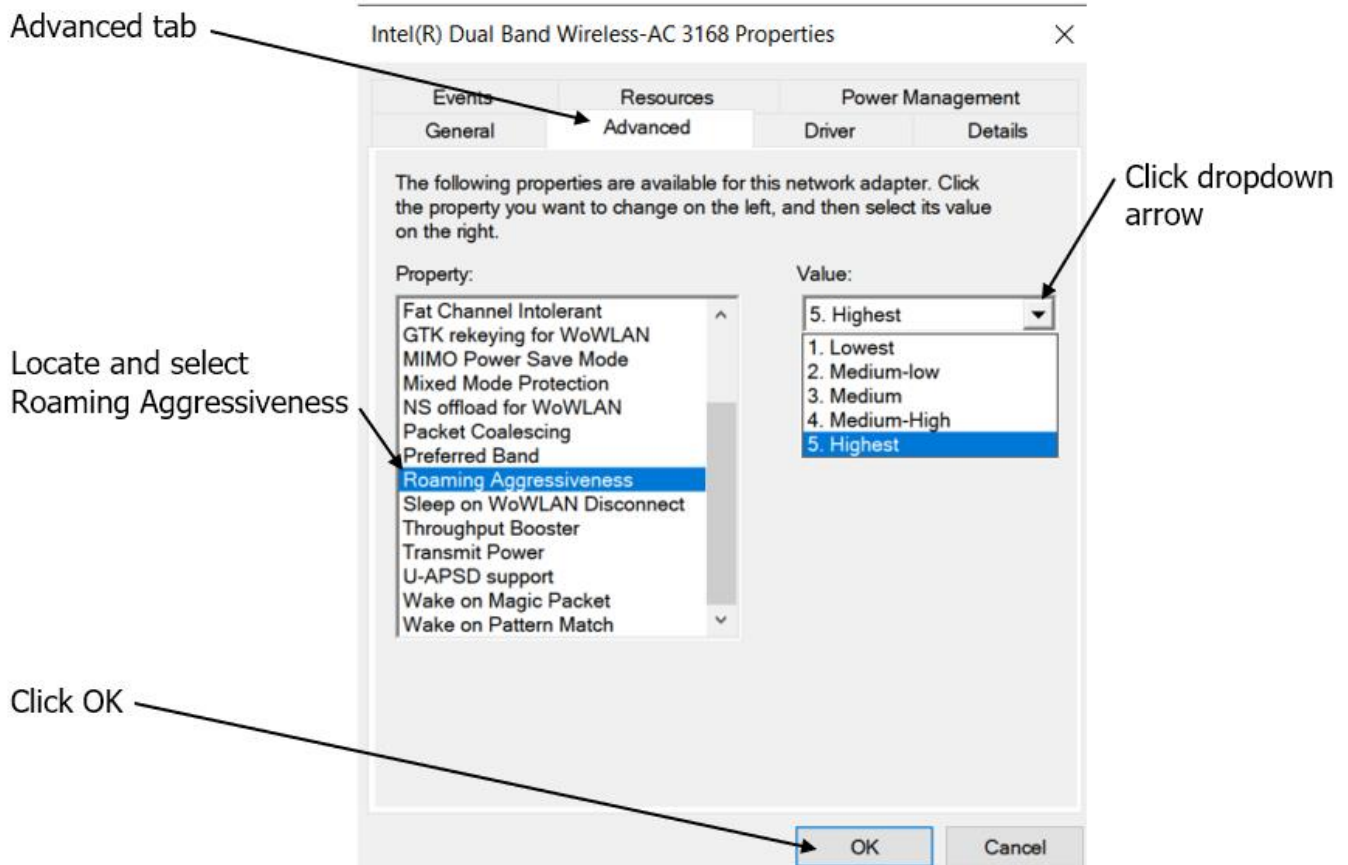
The WiFi adapter hardware on your system has settings to adjust the performance of that adapter. Manufacturers set these settings to the mid or low range because of energy required to run the adapter at the high or highest level decreases the "on battery time" for those systems on battery power (mostly laptops and tablets). If you have a situation where staying connected to a weak signal or the network bogging down for larger amounts of data to handle (such as streaming) then increasing the WiFi adapter's settings could help. Increasing the WiFi adapter's signal reception sensitivity can make a weak connection stable and increasing the WiFi adapter's processing performance can make handling large amounts of data smoother and less bogged down. The instructions that follow explain how to adjust these two WiFi adapter settings.

Note: The following instructions and screenshots apply to Windows 10 but should be similar for other Windows versions (I made these same type changes long ago to Windows 7).

How

Increase WiFi Signal Reception

- Right click the Start Menu icon and select *Device Manager* to open the Device Manager.
- Locate *Network adapters* and click the > to expand that section.
- Select your WiFi adapter to highlight it. Right click and select *Properties* to open the Properties window for that WiFi adapter.
- In the Properties window select the *Advanced* tab as shown below.
- Look in the *Property:* box for either *Roaming Sensitivity level* or *Roaming Aggressiveness* in the list of Properties (different names on some setups) and select to highlight that property.
- With *Roaming Sensitivity level* or *Roaming Aggressiveness* highlighted, the current setting will be in the *Value* box. Click the down arrow to the right of the current setting to see a list of settings. Select the Highest setting.
- Click OK to save your changes and close the Property window.
- Close Device Manager and reboot for the changes to take effect.



Increase WiFi Adapter's Performance

- Open a Run box (WinKey + R), copy and paste the following command and press the Enter key to open the Power Options window as shown below.

control.exe powercfg.cpl,,3

- Click the + next to Wireless Adapter Settings to expand those settings and click the + to expand the Power Savings Mode settings. For laptops there will be two settings – On battery: and Plugged in: with the current setting for each displayed by that setting.
- To change the setting, click the current setting to display a list of setting choices. Click the current setting and select Maximum Performance. Note: Maximum Performance for On battery: will use more battery power and thus shorten the on battery time.
- Click Apply to save your changes and close the Power Options window.
- A reboot is required for change to take effect.

Click + to expand
Wireless Adapter Settings
Click + to expand

Click setting to change setting

Click Apply
and OK

