

**Using**  
**"wireless Hosted Network"**  
**in**  
**Windows 7 or 8 or 8.1 or 10**

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Web location for this  
presentation:

<http://aztcs.org>

Click on

“Meeting Notes”

# SUMMARY

If you already have a real WiFi adapter in a Windows 7 or 8 or 8.1 computer, the "wireless Hosted Network" feature lets you create a virtual WiFi adapter, that you can use for attaching a wireless printer, sharing an Internet connection, sharing files between computers, or creating a "Wireless Access Point" to extend the range of your existing WiFi network.

# TOPICS

- Three ways to configure the "wireless Hosted Network" Feature of "Windows 7", "Windows 8", and "Windows 8.1"

# TOPICS (continued)

- **Command Line Method For Configuring "wireless Hosted Network"**

In "Windows 7", "Windows 8" and "Windows 8.1"

- **"Wi-Host" Program For Configuring "wireless Hosted Network"**

In "Windows 7", "Windows 8" and "Windows 8.1"

# TOPICS (continued)

- **"Wireless Router Plus" Program**  
For Configuring "wireless Hosted Network"  
In "Windows 7", "Windows 8" and "Windows 8.1"

# "WIRELESS HOSTED NETWORK" FEATURE OF "WINDOWS 7\_8\_8.1"

- In "Windows 7", "Windows 8", and "Windows 8.1", there is a feature called "**wireless Hosted Network**":

# **"WIRELESS HOSTED NETWORK" FEATURE..(continued)**

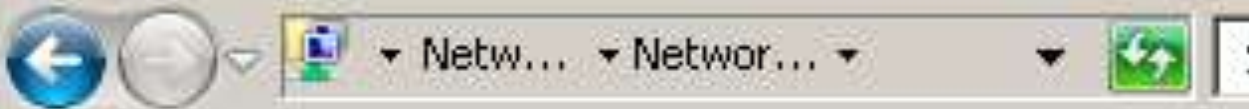
- If your computer already has a physical WiFi adapter in it, the "wireless Hosted Network" feature lets you create a virtual WiFi adapter.



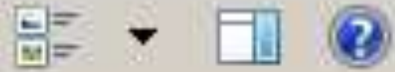
# **"WIRELESS HOSTED NETWORK" FEATURE..(continued)**

- In "Windows 7", the virtual WiFi adapter shows up in "Network Connections" as a "Microsoft Virtual WiFi Miniport Adapter":

# Network Connections



Organize ▾



Local Area Connection  
Network 13, Shared  
Intel(R) PRO/1000 MT Network Conn...



Wireless Network Connection 3  
DG860A62  
Belkin USB Wireless Adaptor #2



Wireless Network Connection 4  
virtualrouterplus.com  
Microsoft Virtual WiFi Miniport Adapter



Wireless Network Connection 4

[virtualrouterplus.com](http://virtualrouterplus.com)

Microsoft Virtual WiFi Miniport Adapter

# "WIRELESS HOSTED NETWORK" FEATURE..(continued)

- In "Windows 8" and "Windows 8.1", the virtual WiFi adapter shows up in "Network Connections" as a **"Microsoft Hosted Network Virtual Adapter"**:



Local Area Connection\* 13

natty

Microsoft Hosted Network Virtual ...

# "WIRELESS HOSTED NETWORK" FEATURE..(continued)

- In "Windows 8" and "Windows 8.1", the word "wireless" does not appear in the description of the virtual WiFi adapter that is created by the "wireless Hosted Network" feature:



## Local Area Connection\* 13 Properties



Networking **Sharing**

Connect using:



Microsoft Hosted Network Virtual Adapter

Configure...

This connection uses the following items:

- Client for Microsoft Networks
- Hotspot Shield Routing Driver 6
- QoS Packet Scheduler
- File and Printer Sharing for Microsoft Networks
- Microsoft Network Adapter Multiplexor Protocol
- Microsoft LLDP Protocol Driver
- Link-Layer Topology Discovery Mapper I/O Driver

Install...

Uninstall

Properties

Description

Allows your computer to access resources on a Microsoft network.

OK

Cancel



## Local Area Connection\* 13 Pr

Networking

Sharing

Connect using:



Microsoft Hosted Network Virtual Adapter



# "WIRELESS HOSTED NETWORK" FEATURE..(continued)

- In "Windows 10" the word "wireless" does not appear in the description of the virtual WiFi adapter that is created by the "wireless Hosted Network" feature and it called a "Microsoft Virtual Network Adapter"

# "WIRELESS HOSTED NETWORK" FEATURE..(continued)

- In other words, in Windows 8 or 8.1 or 10, the WiFi adapter that you use for attaching other WiFi-capable devices including wireless printers must be a virtual one that is generated by the "Windows.." operating system.

# "WIRELESS HOSTED NETWORK" FEATURE..(continued)

- The net result is that your computer's software "sees" both the original real WiFi adapter AND the virtual WiFi adapter that is created by the "wireless Hosted Network" feature of "Windows.." <sub>19</sub>

# "WIRELESS HOSTED NETWORK" FEATURE..(continued)

- Since "Windows 8" and "Windows 8.1" does not have "ad hoc mode" for WiFi adapters, the use of "wireless Hosted Network" configuration for WiFi adapters is the only way for you to connect a WiFi-capable printer directly to a "Windows 8" or "Windows 8.1" computer.

COMPUTER WITH A REAL  
WiFi ADAPTER THAT IS  
CONNECTED TO A  
WIRELESS ACCESS  
POINT OF A REAL  
WIRELESS ROUTER:

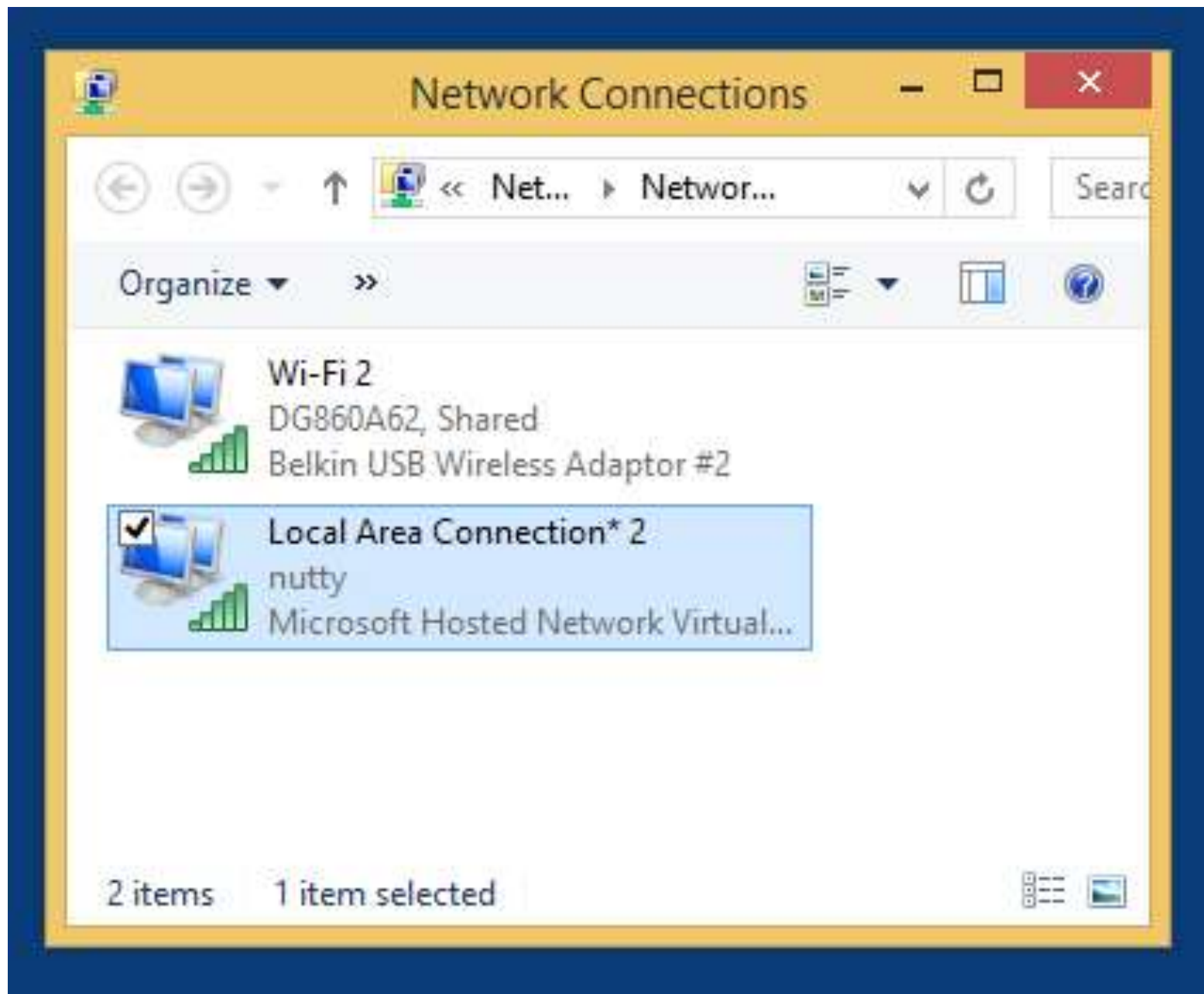


Wi-Fi 2

DG860A62

Belkin USB Wireless Adaptor #2

COMPUTER WITH A REAL WiFi  
ADAPTER THAT IS CONNECTED TO  
A WIRELESS ACCESS POINT OF A  
REAL WIRELESS ROUTER  
AND  
A VIRTUAL "wireless HOSTED  
NETWORK" THAT IS  
BROADCASTING A SEPARATE  
VIRTUAL "WIRELESS ACCESS  
POINT":







Wi-Fi 2

DG860A62, Shared

Belkin USB Wireless Adaptor #2



Local Area Connection\* 2

natty

Microsoft Hosted Network Virtual...




## Wi-Fi 2 Status



### General



#### Connection


IPv4 Connectivity:	Internet
IPv6 Connectivity:	No Internet access
Media State:	Enabled
SSID:	DG860A62
Duration:	00:05:16
Speed:	144.5 Mbps
Signal Quality:	


Details...

Wireless Properties

#### Activity

	Sent		Received
Bytes:	368,555		437,459

 Properties

 Disable

Diagnose

Close



## Wi-Fi 2 Status



### General

#### Connection

IPv4 Connectivity: Internet

IPv6 Connectivity: No Internet access

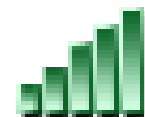
Media State: Enabled

SSID: DG860A62

Duration: 00:05:16

Speed: 144.5 Mbps

Signal Quality:



Details...

Wireless Properties



## Local Area Connection\* 2 Properties



### Networking








Connect using:



Microsoft Hosted Network Virtual Adapter

Configure...

This connection uses the following items:

-  Client for Microsoft Networks
-  File and Printer Sharing for Microsoft Networks
-  QoS Packet Scheduler
-  Microsoft Network Adapter Multiplexor Protocol
-  Microsoft LLDP Protocol Driver
-  Link-Layer Topology Discovery Mapper I/O Driver
-  Link-Layer Topology Discovery Responder

Install...

Uninstall

Properties

### Description

Allows your computer to access resources on a Microsoft network.

OK

Cancel

Currently connected to:

 **nutty**  
Internet access

Wireless Network Connection 3

<b>nutty</b>	<b>Connected</b>	
DG860A62		
OJL22		
pebble		
Pierview		
ORGV5		
KPFDL		
Other Network		

[Open Network and Sharing Center](#)

4:09 PM  
4/18/2014

Currently connected to:



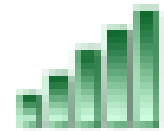
**nutty**  
Internet access

Wireless Network Connection 3

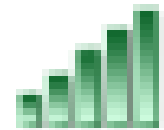


**nutty**

**Connected**



DG860A62



**THREE WAYS TO  
CONFIGURE "WIRELESS  
HOSTED NETWORK"  
FOR A WIFI ADAPTER  
IN "WINDOWS 7",  
"WINDOWS 8", OR  
"WINDOWS 8.1"**

# **THREE WAYS TO CONFIGURE "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1"**

- **Command Line Method**
- **"Wi-Host" Program**
- **"Wireless Router Plus" Program**



**COMMAND LINE METHOD  
FOR CONFIGURING  
"WIRELESS HOSTED  
NETWORK"  
FOR A WIFI ADAPTER  
IN "WINDOWS 7",  
"WINDOWS 8", OR  
"WINDOWS 8.1"**

# COMMAND LINE METHOD FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10" (continued)

- See <http://blog.tommywck.com/2012/10/tutorial-use-your-windows-7-to-create.html>

# COMMAND LINE METHOD FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10" (continued)

- See [http://www.practicallynetworked.com/networking/create\\_a\\_virtual\\_wireless\\_router\\_with\\_windows.htm](http://www.practicallynetworked.com/networking/create_a_virtual_wireless_router_with_windows.htm)

# COMMAND LINE METHOD FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10" (continued)

- See <http://www.thewindowsclub.com/enable-internet-sharing-wifi-hotspot-windows-8>

# COMMAND LINE METHOD FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10" (continued)

- See <http://geekswithblogs.net/BrentCasky/archive/2011/06/09/re-installing-wan-miniport-devices.aspx>

# COMMAND LINE METHOD FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10" (continued)

- See <http://www.redmondpie.com/how-to-set-up-wireless-ad-hoc-internet-connection-in-windows-8/>

# COMMAND LINE METHOD FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10" (continued)

- See <http://winaero.com/blog/where-is-the-ad-hoc-wireless-connection-feature-in-windows-8-and-windows-8-1/>

# COMMAND LINE METHOD FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10" (continued)

- See [http://answers.microsoft.com/en-us/windows/forum/windows8\\_1-networking/windows-81-ad-hoc-not-showing/5d75d887-ff59-425e-a480-9f80ada63627](http://answers.microsoft.com/en-us/windows/forum/windows8_1-networking/windows-81-ad-hoc-not-showing/5d75d887-ff59-425e-a480-9f80ada63627)



# COMMAND LINE METHOD FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10" (continued)

- See <http://superuser.com/questions/593336/how-to-create-an-open-unencrypted-adhoc-wifi-network-in-windows8>

# COMMAND LINE METHOD FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10" (continued)

- See <http://mycompgab.blogspot.com/2013/06/how-to-create-wireless-hosted-networks.html>

# COMMAND LINE METHOD FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10" (continued)

- See [http://msdn.microsoft.com/en-us/library/windows/desktop/dd815243\(v=vs.85\).aspx](http://msdn.microsoft.com/en-us/library/windows/desktop/dd815243(v=vs.85).aspx)

# COMMAND LINE METHOD FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10" (continued)

- See <http://www.windows8core.com/how-to-create-virtual-wi-fi-hotspot-router-using-your-windows-8-pctablet/>

# TWO FREE PROGRAMS FOR CONFIGURING "WIRELESS HOSTED NETWORK"

- **"Wi-Host"** is a portable software application that does not install itself into your "Windows.." computer
- **"Virtual Router Plus"** is a regular software program that you install into your "Windows.." computer.

**"Wi-HOST" PROGRAM  
FOR CONFIGURING  
"WIRELESS HOSTED  
NETWORK"  
FOR A WIFI ADAPTER  
IN "WINDOWS 7", "WINDOWS  
8", OR "WINDOWS 8.1"**

# "Wi-HOST" PROGRAM FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10"

- "Wi-Host" is a portable software program that runs as a stand-alone .exe file.

You cannot install "Wi-Host" into your computer.

"Wi-Host" is never displayed in "Programs and Features" in the Windows "Control Panel". 47

# "Wi-HOST" PROGRAM FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10" (continued)

- See <http://www.askvg.com/wi-host-freeware-to-turn-your-windows-pc-or-laptop-into-wi-fi-host-spot-to-share-internet-connection/>



# "Wi-HOST" PROGRAM FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10" (continued)

- See <http://www.ilovefreesoftware.com/22/windows/internet/network/create-wi-fi-hotspot-on-pc-or-laptop-to-share-internet-connection.html>

**"VIRTUAL ROUTER PLUS"  
PROGRAM  
FOR CONFIGURING  
"WIRELESS HOSTED  
NETWORK"  
FOR A WIFI ADAPTER  
IN WINDOWS 7 OR 8 OR 8.1  
OR 10**

# "VIRTUAL ROUTER PLUS" PROGRAM FOR CONFIGURING "WIRELESS HOSTED NETWORK" IN "WINDOWS 7\_8\_8.1\_10"

- **"Virtual Router Plus"** is a free software program that you install into your computer. After you install it, **"Virtual Router Plus"** is displayed in "Programs and Features" of the Windows "Control Panel".

# "VIRTUAL ROUTER PLUS" PROGRAM FOR CREATING A WIRELESS ACCESS POINT IN "WINDOWS 7\_8\_8.1\_10" (continued)

- "Virtual Router Plus" works in Windows 7 or 8 or 8.1 or 10:

To get the program, click on the "United States" hyperlink at

<http://virtualrouterplus.com/download1/>

or go to

<http://sourceforge.net/projects/virtualrouterpl/files/latest/download>

# "VIRTUAL ROUTER PLUS" PROGRAM FOR CREATING A WIRELESS ACCESS POINT IN "WINDOWS 7\_8\_8.1\_10" (continued)

- To learn more about "Virtual Router Plus" do not use the download link at the bottom of the page but read the information at <http://lifehacker.com/5983161/virtual-router-plus-turns-your-windows-8-pc-into-a-wi-fi-hotspot>