

## APPLICATION NOTE

Wireless Display Adapter Used for Monitoring

### Objective

In some cases, you may wish to have a computer connected to a larger display on the wall nearer to where you will need to see the monitoring screen. However, it may not be practical to place the computer nearby or run a long cord from the computer to the external display. For this you may wish to take advantage of a technology called Miracast. The Miracast technology allows a Windows 8.1 or Windows 10 computer to wirelessly display to an external TV or display screen that has the Miracast technology built in or attached to it. You can make use of this with a Wireless Display Adapter connected to your TV or display and a Miracast enabled computer for the purpose of displaying your Vmed wireless monitoring screen. The following application note will describe the simple process of putting this together.

### Required Equipment

1. Miracast Adapter such as Microsoft Wireless Display Adapter (<https://www.microsoft.com/accessories/en-us/products/adapters/wireless-display-adapter-2/p3q-00001>)
2. Television or Computer Display with a spare HDMI input
3. Miracast capable computer such as ASUS Transformer Book T100TAF
4. (Conditional) USB wall adapter for TVs or monitors without a USB port for charging

### Setup Instructions

#### TV or Display

1. Insert the Wireless Display Adapter's HDMI plug into an available HDMI Port of your TV or external display.



2. If you have an available USB port in the back of your TV or external display then plug the USB end of Wireless Display Adapter into this port



3. Otherwise, you may need to find a USB wall adapter such as what might come with a smart phone. Plug the USB end of the Wireless Display Adapter into the USB wall adapter and then plug that adapter into a wall outlet.



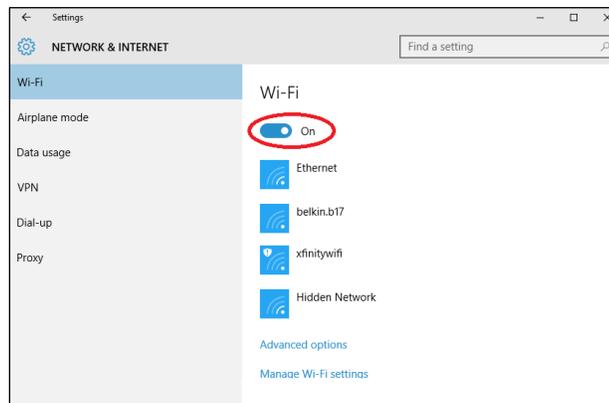
4. Once connected, then turn on your TV or external display and make sure that this HDMI input is selected as the current input source (usually done from an input button on the display's remote control). The TV or external display should now show the Wireless Display Adapter ready screen letting you know that it is waiting for your computer to connect to it.



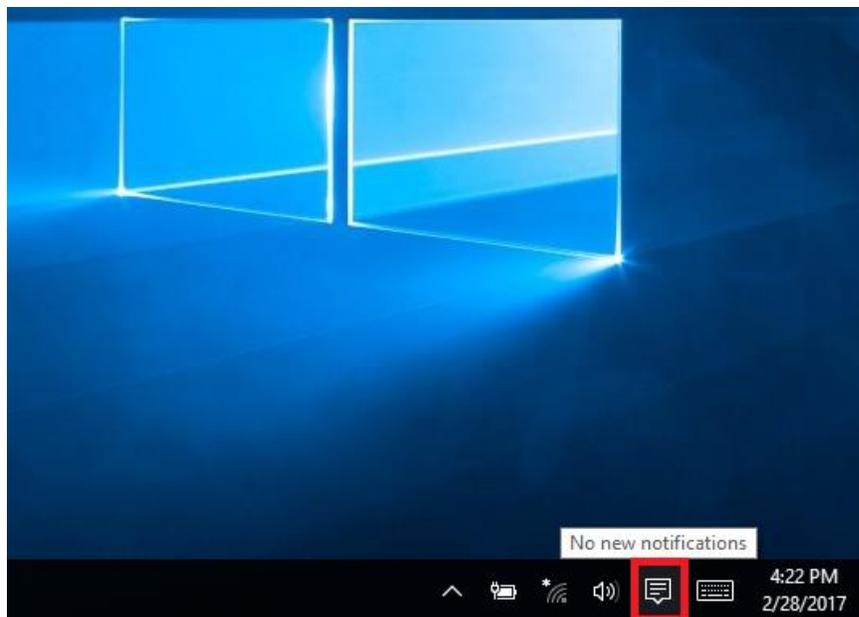
## Tablet/Computer

The tablet or computer that you can use with this must support the Miracast technology. You may consult the Wi-Fi Alliance website to see if your computer model is supported (<http://www.wi-fi.org/product-finder-results?capabilities=2>). But, for the purposes of this application note we will use the ASUS Transformer Book (model T100TAF) with Windows 10.

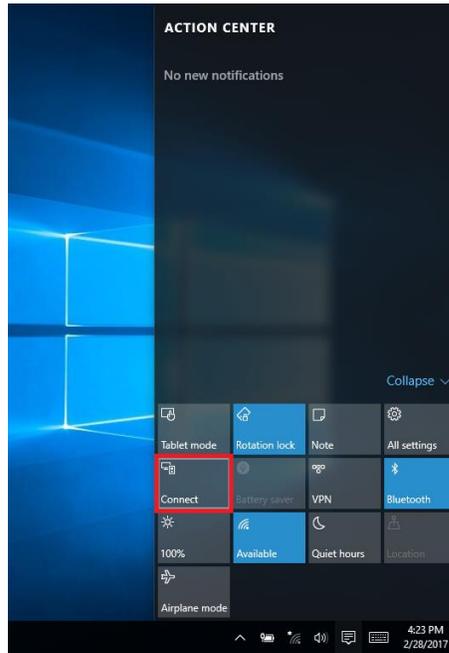
1. Make sure that your computer has Wi-Fi enabled. *Note: it does not need to be connected to a wireless network for this to function, but the Wi-Fi should at least be enabled.*



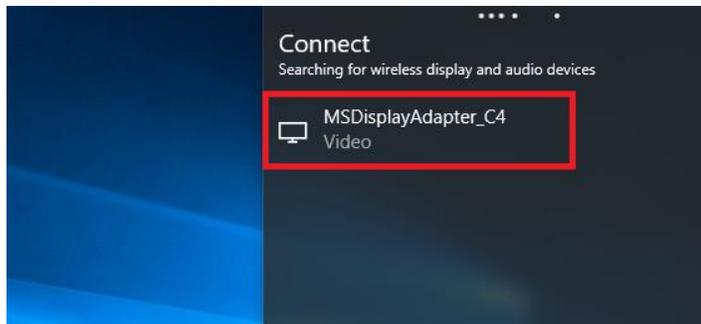
2. Open the Windows 10 Action Center by clicking the notification icon in the System Tray.



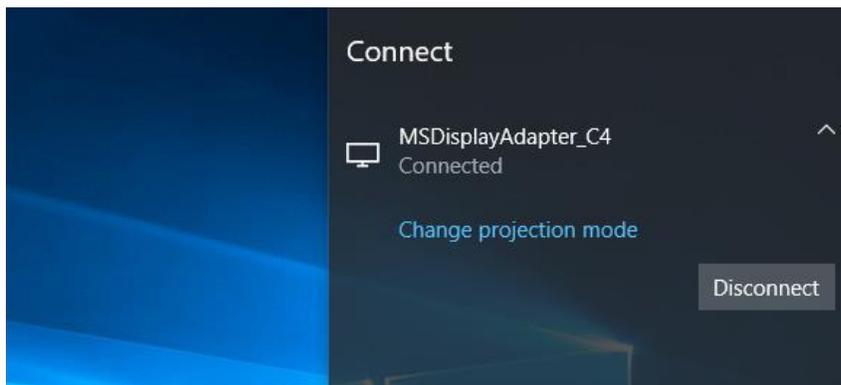
3. Click the tile labeled "Connect".



4. You should soon see the name of the Wireless Display Adapter that you are using (also shown on the screen in #4 of the previous section). In this case it is "MSDisplayAdapter\_C4".



5. Select this item to connect to your TV or external display.



## Duplicate vs. Extended Desktop

By default, Windows will show a duplicate of the desktop screen from the tablet onto the external display once connected to the Wireless Display Adapter. However, if you wish then you can instead choose to display an extended desktop on your external display. But, because of limitations with certain display hardware you may wish to limit the screen resolution of the external display to that of the computer or tablet that is driving it.

You can get to the display settings by right-clicking anywhere on the desktop and selecting “Display Settings”. Then scroll down to the bottom of that screen and under Multiple Displays, select “Extend these displays” followed by clicking the Apply button. Click “Advanced display settings” to change the resolution settings for each display.