USING "CHROMECAST" TO WIRELESSLY CONNECT YOUR COMPUTER TO A TV OR A MONITOR

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SUMMARY

"Chromecast" can wirelessly stream one tab or one streaming multimedia file from the "Chrome" Web browser in a computer to a TV or a monitor.

The "Chromecast" receiver at the TV or monitor end costs less than $30.

TOPICS

- "Chromecast" Fundamentals

- Casting the Entire Screen of Your Computer

- Casting a "Tab" of the "Chrome" Browser

- Stopping Casting

- Installing "Chromecast"

- Moving "Chromecast" to a Different Wireless Network

TOPICS

Using "Chromecast" With Public Internet Services

- Option 1: Use regular wireless router that is not connected to the Internet and stream local files on a laptop to "Chromecast"

- Option 2: Use a travel router that has "Wireless Internet Service Provider" (WISP) capability to stream from laptop to "Chromecast"

TOPICS

- Option 3: Use a second laptop to share it's public Internet connection with a regular wireless router which then connects to your first laptop and to Chromecast

- Using "Chromecast" In An Area With Multiple "SSIDs"

"CHROMECAST" FUNDAMENTALS

- You can use **"Chromecast"** to wirelessly stream either the enter monitor screen or specific Web pages or specific online media players or specific local media files from a "Windows.." computer or a Mac to a TV or to a (second) monitor.

"CHROMECAST" FUNDAMENTALS

- If your "Windows.." or Mac "OSX" computer only has one monitor attached to it, **"Chromecast"** cannot be used to connect that monitor to your computer.

"CHROMECAST" FUNDAMENTALS

- Minimum OS requirements are Android 2.3, iOS 7.0, Windows 7, or Mac OS X 10.7

"CHROMECAST" FUNDAMENTALS

- If you use a Windows 7 or higher computer, or a Mac OS X 10.7 or higher computer, or an Android 4.4 (or higher) tablet or phone as the source for "Chromecast", you can display its entire screen

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Google Chromecast HDMI Streaming Media Player
by Google
★★★★☆ ▾   32,930 customer reviews | 1000+ answered questions

List Price: $35.00
Price: $28.74 Free Standard Shipping (3-5 days) Details
You Save: $6.26 (18%)

In Stock.
Ships from and sold by Amazon.com.

Want it Monday, May 18? Order within 29 hrs 56 mins and choose Two-Day Shipping at checkout.
Details

· Stream online video, music, photos and more to your TV using your smartphone, tablet, or laptop
· Supports a growing number of apps including Netflix, YouTube, HBO Go, Hulu Plus, Pandora,
  ESPN, MLB.TV, Google Play Movies and Music, Plex, MLS, crackle, Vevo, Rdio. Allows to cast a
  Chrome browser tab.
· Box includes Chromecast, HDMI extender, USB power cable, and power adapter. No remote
  needed.
· Easy setup: Plug into any HDTV and connect to your home WiFi network
· Works with Android phones and tablets, iPhone, iPad, Mac, Windows, and Chromebooks
> See more product details

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Price: $28.74 Free Standard Shipping

"CHROMECAST" FUNDAMENTALS

- "Chromecast" uses an existing wireless 2.4 GHz access point in your **existing** wireless router

- However, a "Chromecast" device that is attached to a TV or monitor CANNOT communicate directly with a wireless Wi-Fi adapter in a computer.

"CHROMECAST" FUNDAMENTALS

- (Unlike "WiDi" or "EZCast",) "Chromecast" depends on an existing Wi-Fi "Wireless Access Point" from a wireless router that does NOT have "wireless isolation"

"CHROMECAST" FUNDAMENTALS

Wireless Isolation =

- AP isolation

- Access Point isolation

- Client isolation

- Station isolation

- Wireless Client isolation

"CHROMECAST" FUNDAMENTALS

There are two kinds of "wireless isolation"

- Type 1: Wireless computers cannot communicate with each other while all have access to the Internet

- Type 2: Wireless computers cannot communicate with each other but they can share files and printers with wired computers

"CHROMECAST" FUNDAMENTALS

- Both "Type 1" and "Type 2" wireless isolation will cause Chromecast to fail.

"CHROMECAST" FUNDAMENTALS

- An active external wireless router with an active 2.4 Ghz "SSID" (and without "wireless isolation") has to be available before a "Chromecast" device on a TV or monitor can communicate with a computer

"CHROMECAST" FUNDAMENTALS

"SSID" =

- "Service Set Identifier" which is broadcast by a Wireless Access Point of a wireless router

Broadband Internet

Wireless Router with broadband Internet connection (and without "wireless isolation")

Computer or tablet
or cell phone transmits
Web-based or local
content from the
"Chrome" Web browser

TV
or Flatscreen
Monitor
with
"Chromecast"
Receiver
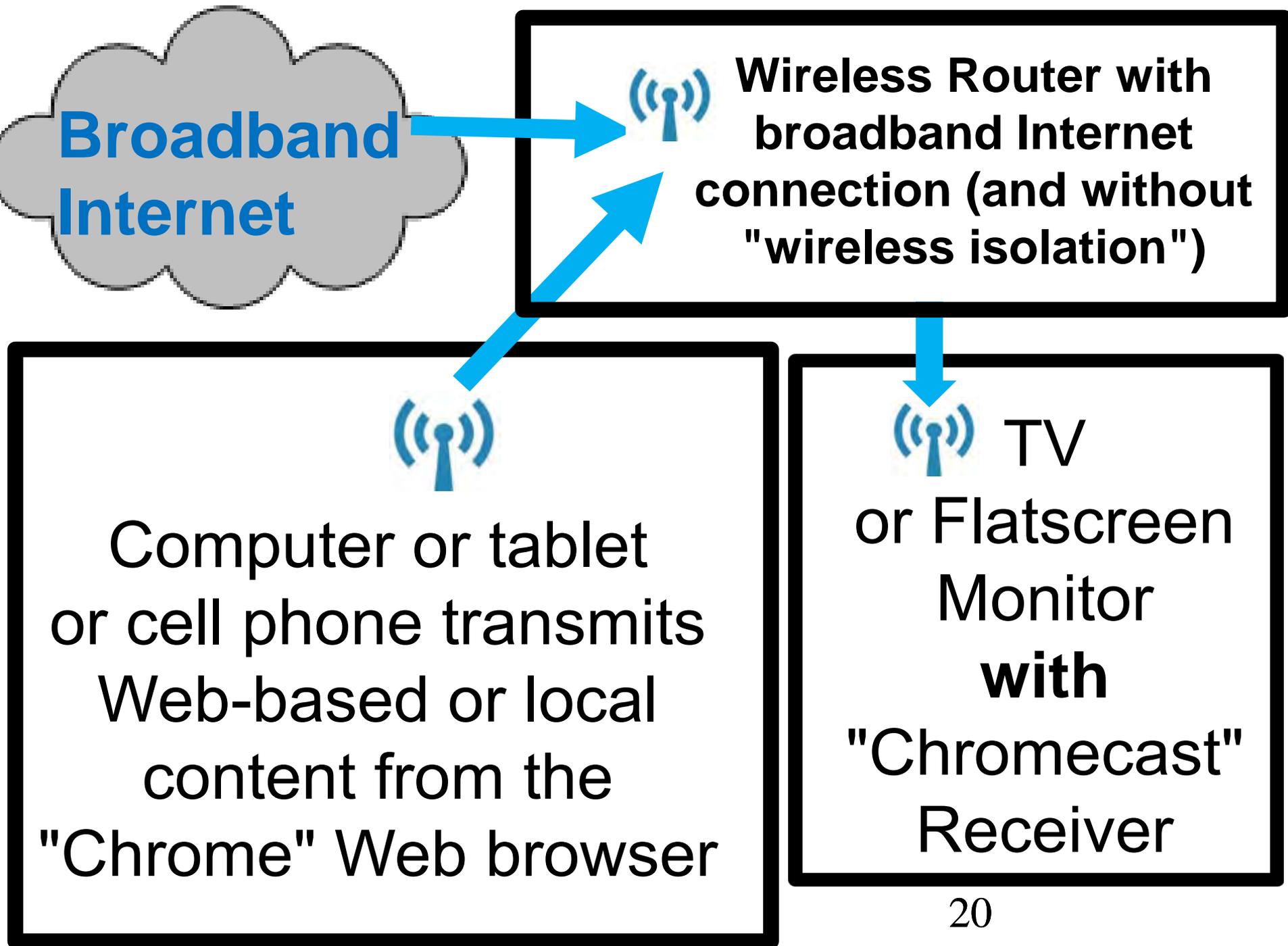
"CHROMECAST" FUNDAMENTALS

- For "Chromecast" to work, the wireless router cannot have "wireless isolation" turned on.

"WIRELESS ISOLATION" CANNOT BE TURNED ON IN THE EXISTING WIRELESS ROUTER

Wireless Router with broadband Internet connection

TV
or Flatscreen Monitor
with
"Chromecast" Receiver

...ts

...rome Web browser

"CHROMECAST" FUNDAMENTALS

- "Public Wi-Fi" has "wireless isolation"

- Home routers default to no "wireless isolation"

"CHROMECAST" FUNDAMENTALS

- This means that it is easy to use a home network for connecting a computer to a "Chromecast," if the router in a home network has wireless Wi-Fi capability on the local network side of the router.

- This means that you cannot use a public Wi-Fi service to for connecting a computer to a "Chromecast"

Typical Home Router

Internet (WAN) ⟷ **Network Address Translator and Hardware Firewall** ⟷ **Wired Ethernet Network Switch** ⟷⟷⟷⟷ Intranet (LAN)

Network Switch for the two Wireless Access Points ⟷ **2.45GHz Wi-Fi Wireless Access Point**

⟷ **5GHz Wi-Fi Wireless Access Point**
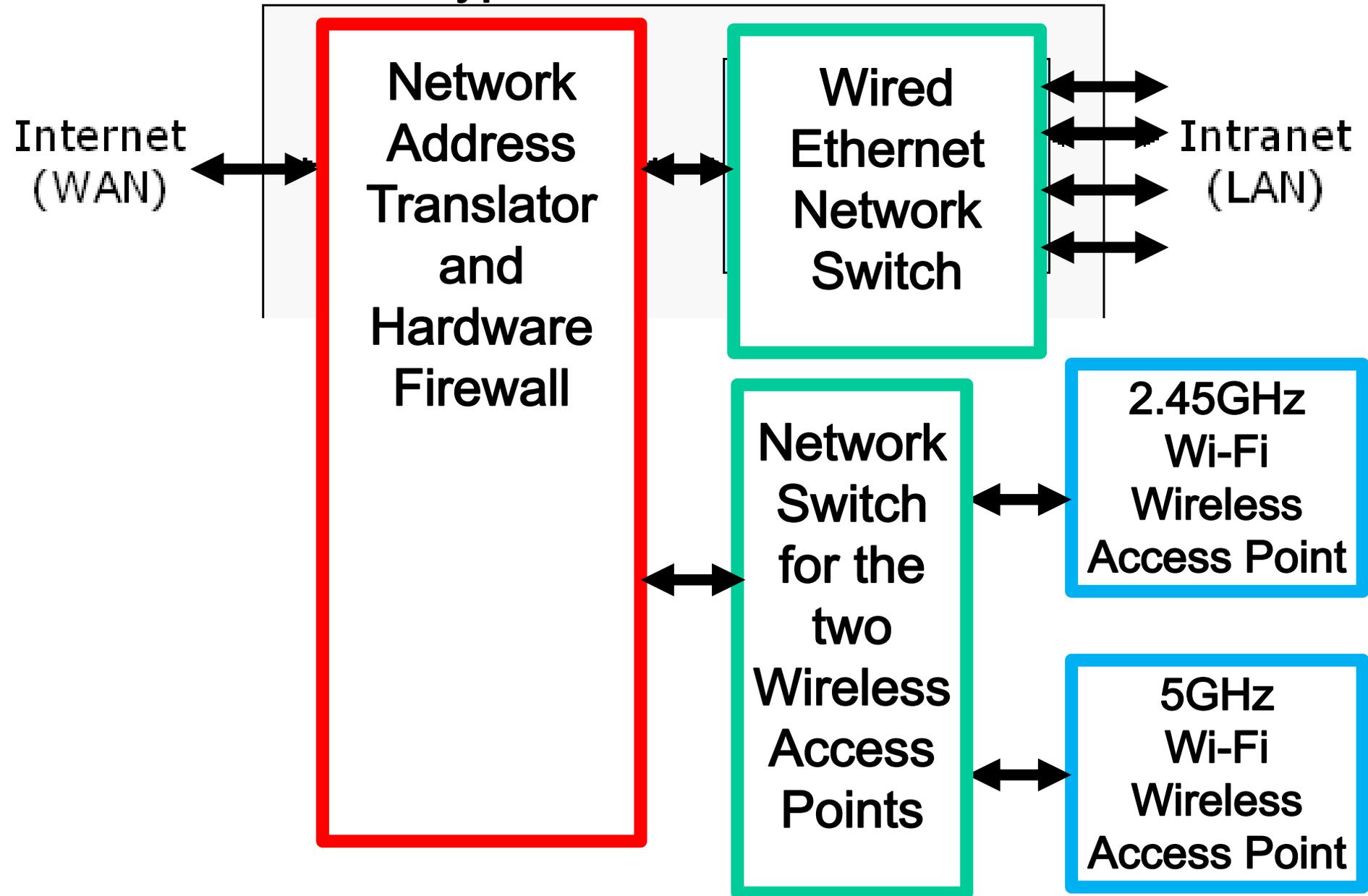
"CHROMECAST" FUNDAMENTALS

- "Wireless isolation" means that client computers cannot discover each other and they cannot share files/printers, even if "File and Printer Sharing" or "SMB" or "Samba" or "Homegroups" are enabled inside the client computers.

"CHROMECAST" FUNDAMENTALS

"Public Wi-Fi" (= "Public internet") has "wireless isolation"

- Starbucks' "ATTWiFi"
- Barnes And Noble
- Public libraries
- Panera Bread
- McDonalds
- Airports, etc.

"CHROMECAST" FUNDAMENTALS

• Home routers, by default, do not have "wireless isolation" (but some of them let you set up "wireless isolation" in their configuration screens).

"CHROMECAST" FUNDAMENTALS

At the computer end:

- "Chromecast" requires an enabled Wi-Fi adapter that is already attached to an existing wireless router.

- The "Chrome" Web browser has to be installed AND the "Google Cast" add-on has to be installed for the "Chrome Web" browser.

"CHROMECAST" FUNDAMENTALS

- At the TV or monitor end, the "Chromecast" receiver has to be either inserted into an HDMI port or the "Chromecast" receiver can be attached to an HDMI-to-DVI adapter which is then attached to a DVI port in the TV or monitor

"CHROMECAST" FUNDAMENTALS

- If you attach the "Chromecast" receiver to an HDMI-to-DVI adapter or adapter cable and then insert the adapter into a DVI port in a TV or monitor, no audio will be sent from the computer to the TV or monitor.

"CHROMECAST" FUNDAMENTALS

- An active wireless router (that does not have "wireless isolation" turned on) has to be within range of both the computer and the "Chromecast" device.

"CHROMECAST" FUNDAMENTALS

- According to https://support.google.com/chromecast/answer/6109297?hl=en: Chromecast uses ultrasonic signals to do point-to-point "Guest Mode" pairing for nearby Android and iOS tablets and cell phones.

"CHROMECAST" FUNDAMENTALS

- Warning:
  All wireless technologies have too much latency and unpredictability for serious gaming

- Must use wired HDMI or DVI cables for serious gaming

CASTING THE ENTIRE SCREEN

- For a "Windows.." or a Mac "OS X" computer, "Chromecast" can display the entire monitor.

- This feature is still considered "experimental" by Google but it has worked well for all computers that we tried it on.

CASTING THE ENTIRE SCREEN

- Step 1: Click on the gray "Google Cast" button which is near the upper-right corner of a tab inside the "Chrome" Web browser.

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CASTING THE ENTIRE SCREEN

- Step 2:

  A "Cast this tab to.." box will be displayed:

Cast this tab to... BETA

Chromecast0170

Options

Send feedback...

Help

Lists   Site
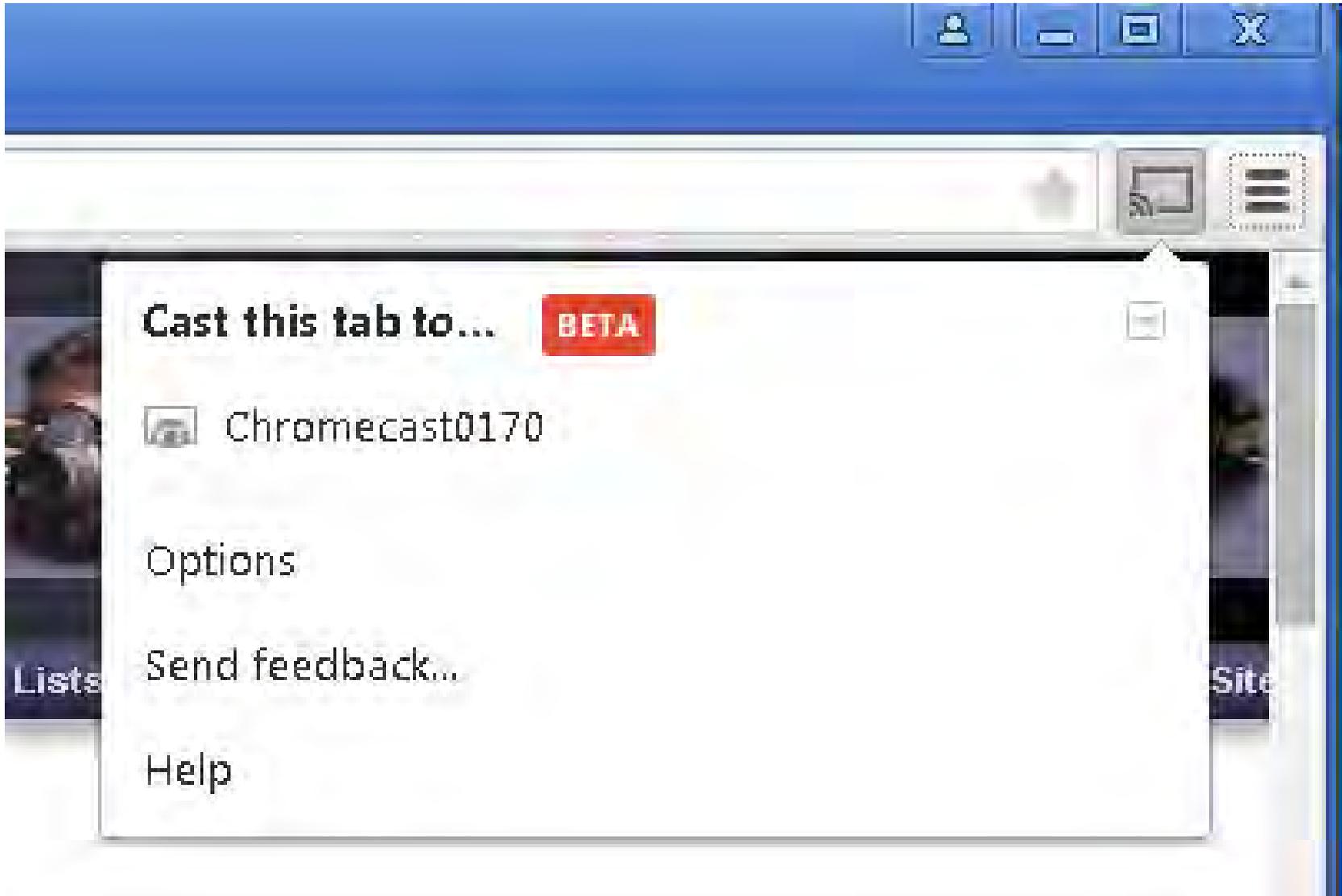
CASTING THE ENTIRE SCREEN

- Step 3:
  Click on the unnamed drop-down sub-menu button.

Cast this tab to... BETA

Chromecast0170

Options

Send feedback...

Lists

Site

Help

43
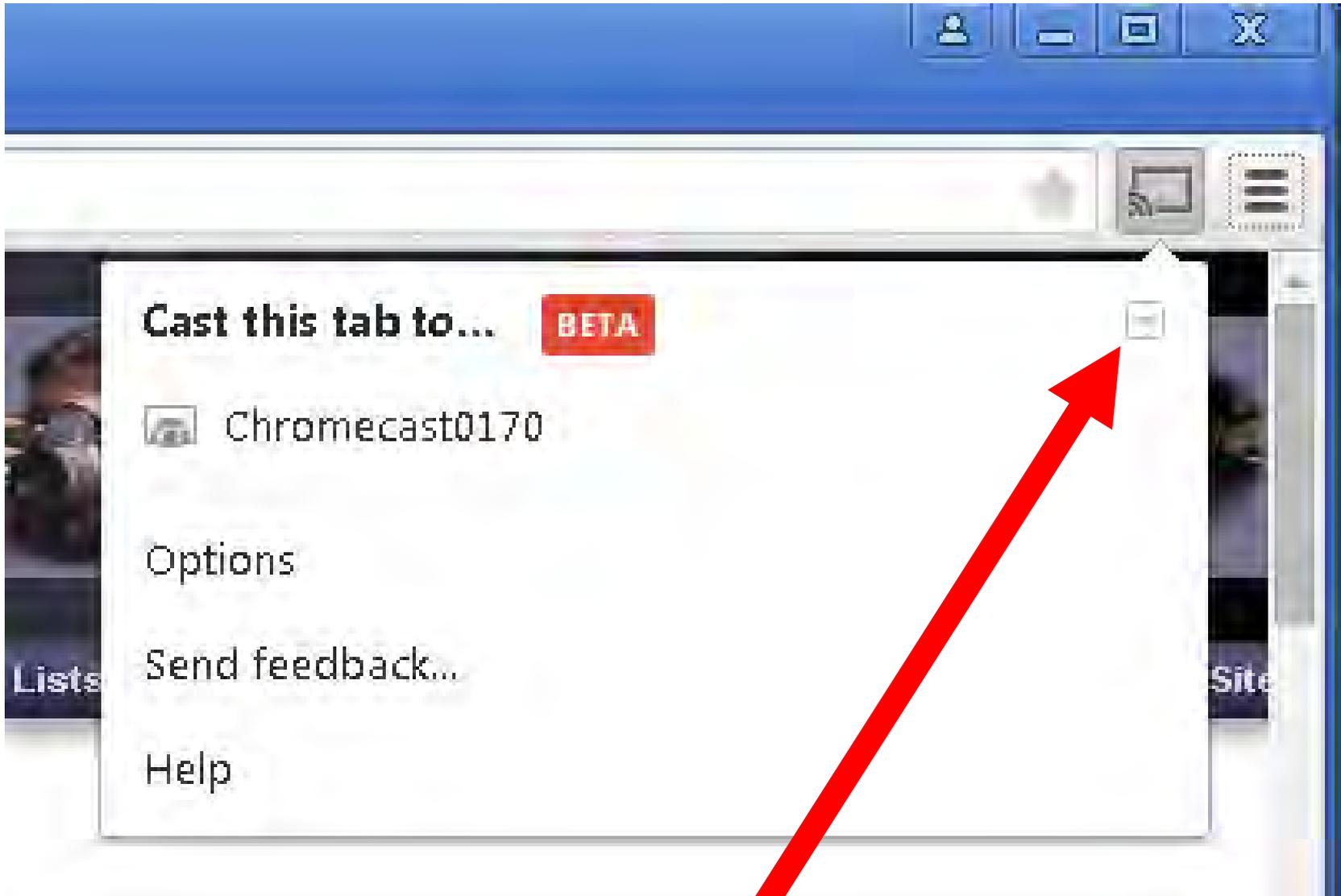
CASTING THE ENTIRE SCREEN

- Step 4:
  A second drop-down sub-menu will be displayed.

Cast this tab to...

Chrome

Options

Sent feedback

Help

Cast this tab

Cast this tab (optimize for audio)

Cast screen/window (experimental)

Lists

Sites
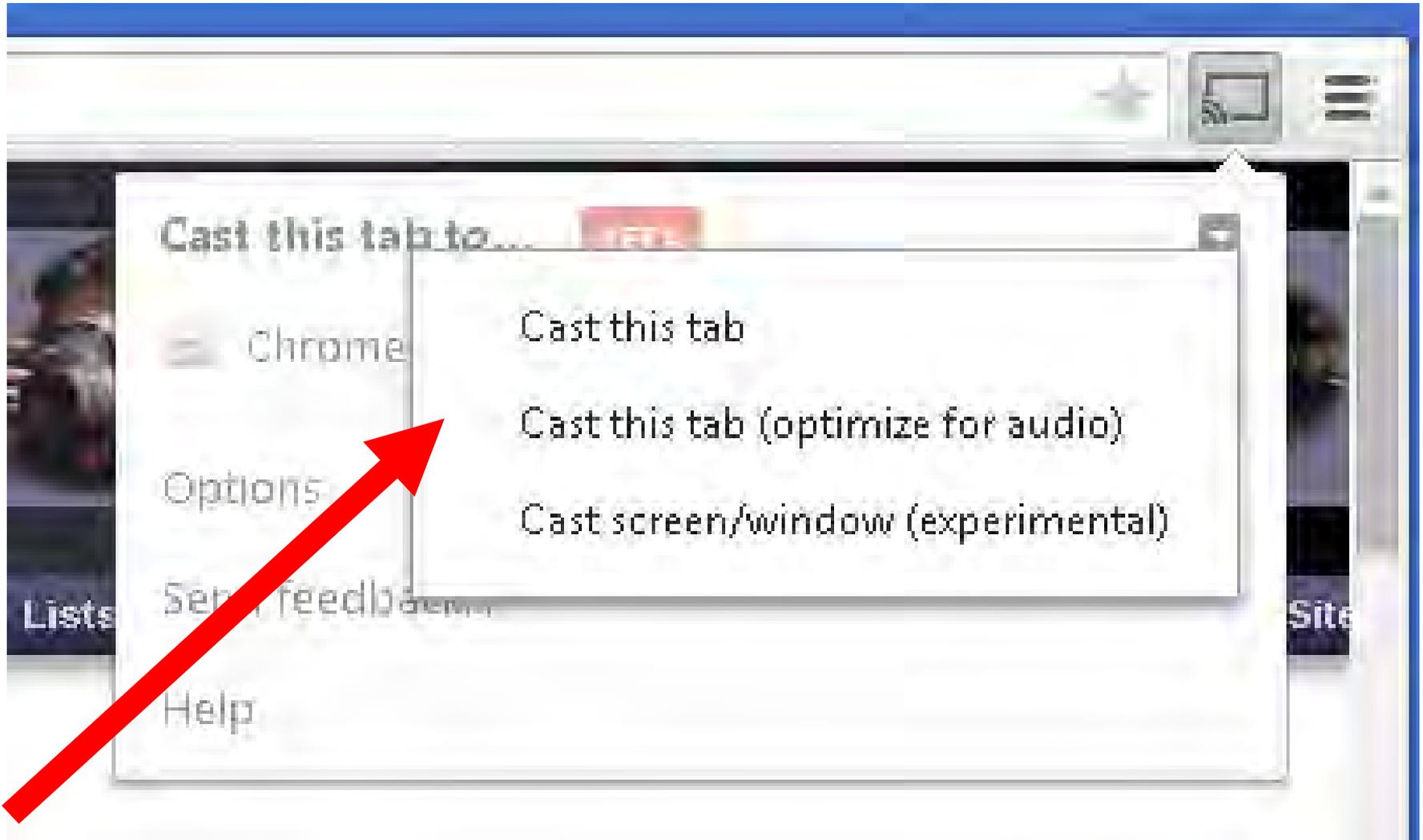
CASTING THE ENTIRE SCREEN

- Step 5:
Click on "Cast screen/window (experimental)"

Cast this tab

Cast this tab (optimize for audio)

Cast screen/window (experimental)
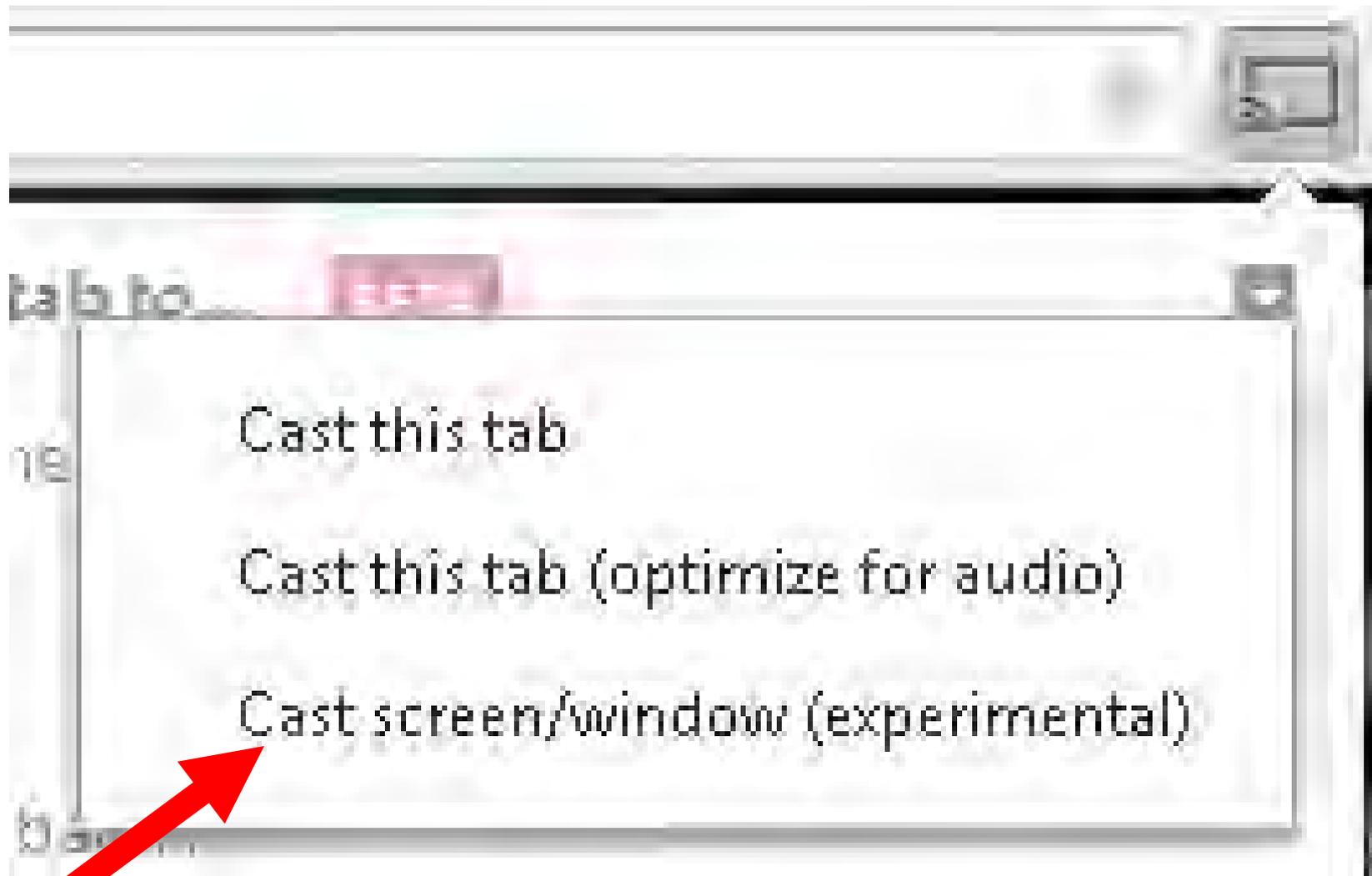
CASTING THE ENTIRE SCREEN

- Step 6:
A "Cast screen/window to.." box will be displayed.

CASTING THE ENTIRE SCREEN

- Step 7:
  Ignore the warning message:

Cast screen/window to... BETA

Resizing a window that you are casting may make your device unstable.

Dismiss

Chromecast0170

Options

Send feedback...

Help
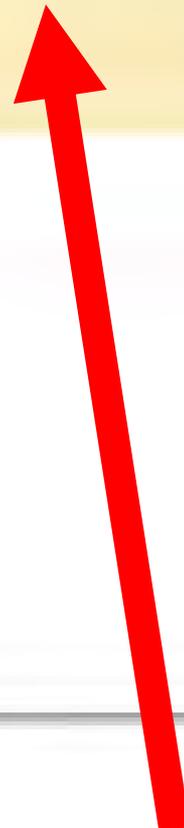
CASTING THE ENTIRE SCREEN

- Step 8:
  Click on the name of your "Chromecast" device.
  The name of your "Chromecast" device is displayed on the TV or monitor that it is connected to.

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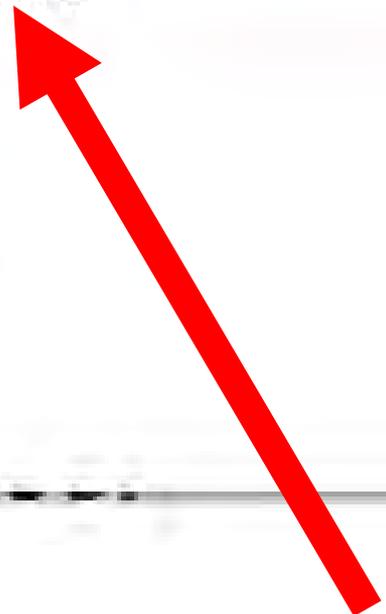
CASTING THE ENTIRE SCREEN

- Step 9:
  A pop-up "Share your screen - Google Cast" box will be displayed

56
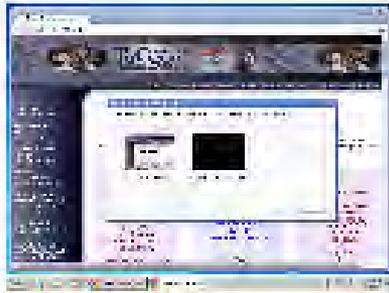
CASTING THE ENTIRE SCREEN

- Step 10:
  Click on the "Entire screen" button in order to highlight it.

Entire screen

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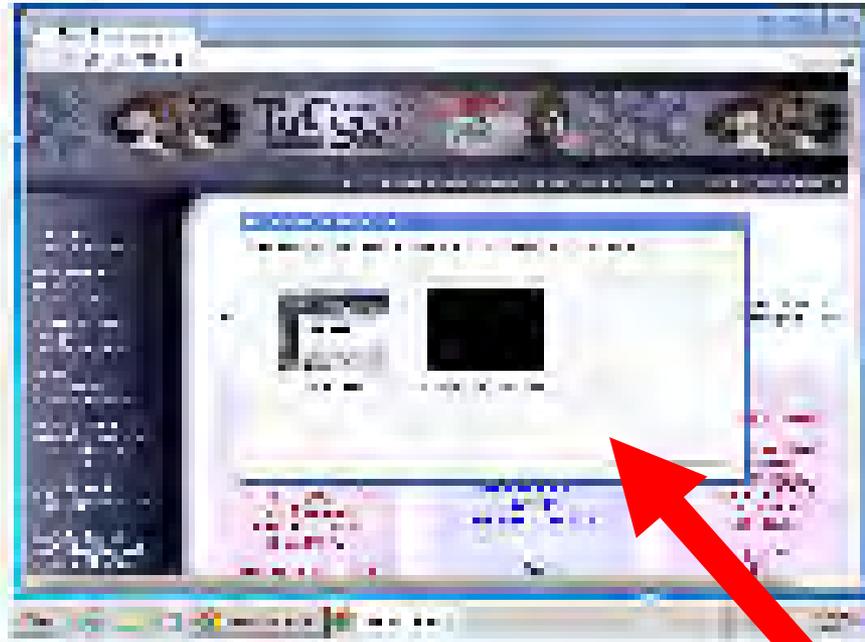
CASTING THE ENTIRE SCREEN

- Step 11:
  Click on the "Share" button of the "Share your screen - Google Cast" box.

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Share Cancel

61
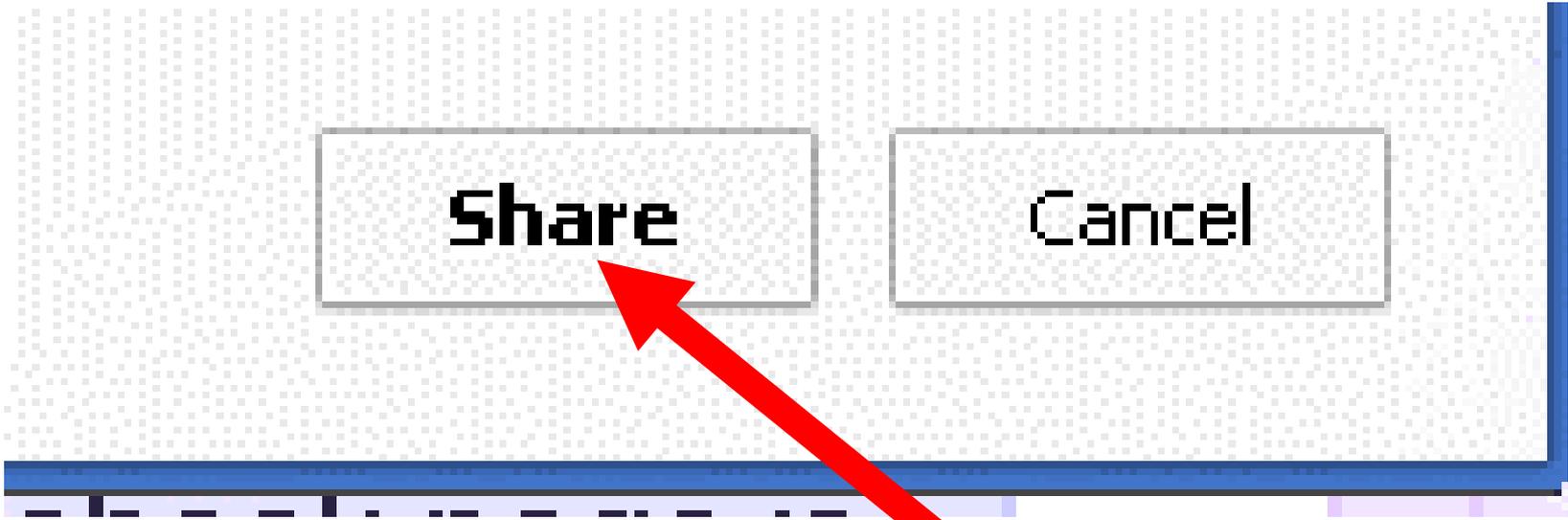
CASTING THE ENTIRE SCREEN

- Step 12
  The "Share your screen" box will disappear and the entire monitor screen of your computer will be "cast" to the TV or monitor that the "Chromecast" receiver is attached to.

CASTING THE ENTIRE SCREEN

- Step 13:
  A "Google Cast is sharing your screen" box will be displayed at the bottom of both your original monitor screen and the TV or monitor that the "Chromecast" device is attached to.

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CASTING THE ENTIRE SCREEN

- Step 14:
  Click on the "Hide" button to hide the "Google Cast is sharing your screen" box.

at 6:00pm.

P

Google Cast is sharing your screen.   Stop sharing   Hide

Tucson Computer Soc…   Google Cast is shar…

CASTING THE ENTIRE SCREEN

- See http://allaboutchromecast.com/chromecast-how-to-guide/how-to-use-chromecast-to-share-desktop-screen-and-audio-to-tv/

CASTING THE ENTIRE SCREEN

- See http://www.howtogeek.com/199565/mirror-anything-from-your-computer-to-your-tv-using-google-chromecast/

CASTING A "TAB" OF THE "CHROME" BROWSER

- For a "Windows.." or a Mac "OS X" computer, "Chromecast" can display a single tab of the "Chrome" browser.

- If your computer is not "casting" anything to the "Chromecast" receiver, the TV or monitor that is connected to the "Chromecast" receiver will look like this:

CASTING A "TAB" OF THE "CHROME" BROWSER

- Step 1:
Click on the gray "Google Cast" button which is near the upper-right corner of a tab inside the "Chrome" Web browser:

CASTING A "TAB" OF THE "CHROME" BROWSER

- Step 2:
Double-click on the name of the "Chromecast" receiver
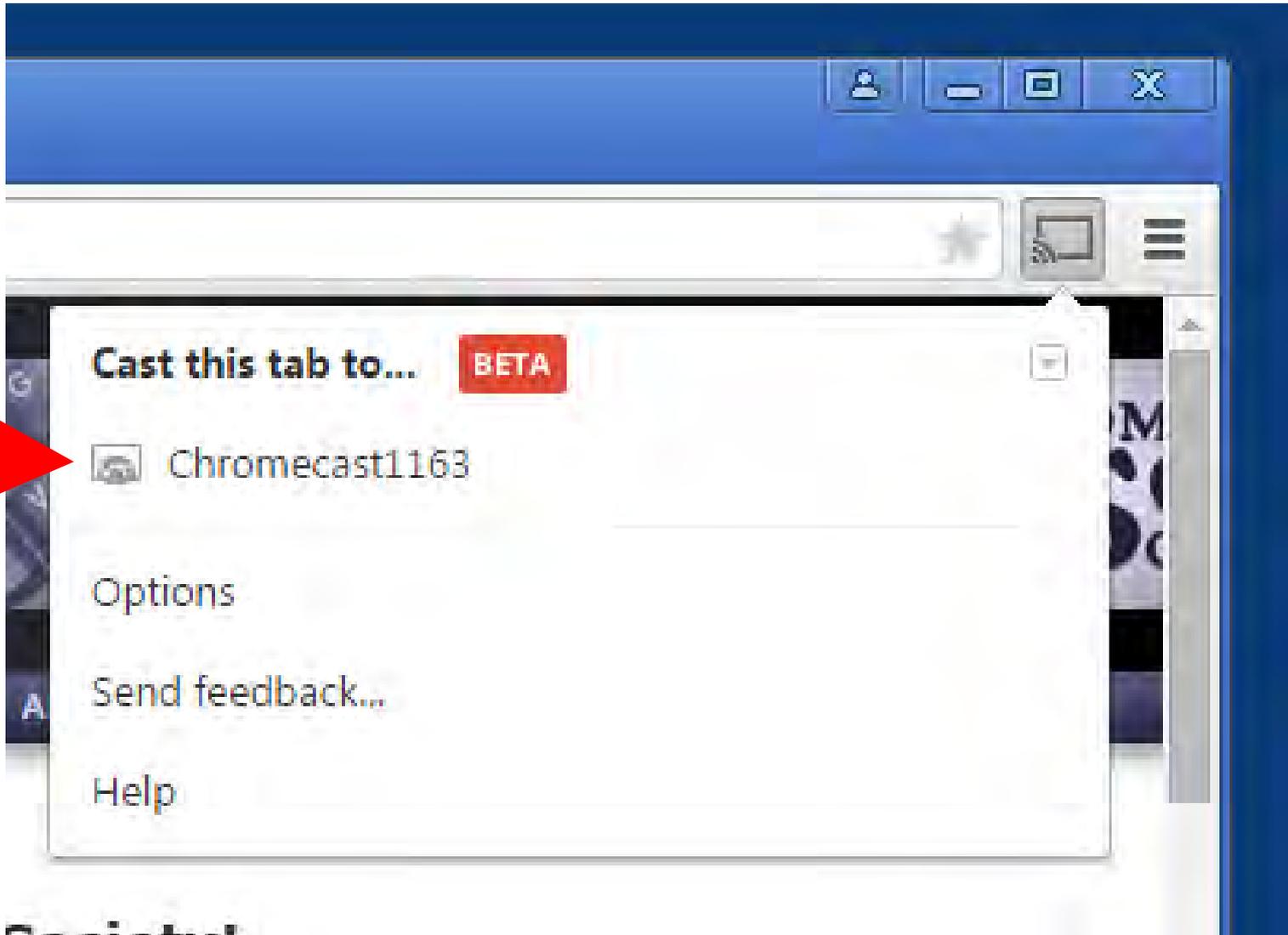
CASTING A "TAB" OF THE "CHROME" BROWSER

- Step 3:
  The drop-down menu will disappear and the entire "tab" of the Chrome browser will be "cast" to the TV or monitor that the "Chromecast" receiver is attached to

CASTING A "TAB" OF THE "CHROME" BROWSER

- If you click on a hyperlink or button on a Web page and it takes you to a new Chrome browser "tab," the "Chromecast" will continue to display the original Chrome browser "tab" so you will have to click on the "Google Cast" button in order to "cast" the new Chrome browser "tab" to the television set.

CASTING A "TAB" OF THE "CHROME" BROWSER

- When running a video or audio, you **sometimes** cannot control the level of the audio from your source computer. (You sometimes have to control the level of the audio from the TV end.)
  For example, play the video at http://www.google.com/intl/en/chrome/devices/chromecast/learn.html

CASTING A "TAB" OF THE "CHROME" BROWSER

- Method 1 to open up a local video, audio, or document file from inside the Chrome browser:
Use your keyboard to press Ctrl + o. Then navigate to the desired video, audio, or document file and "Open" it. After the file opens up in a new tab in the Chrome browser, click on the Google Cast" button to send to the TV.

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CASTING A "TAB" OF THE "CHROME" BROWSER

- Method 2 to open up a local video, audio, or document file from inside the Chrome browser:
Drag a local video, audio, or document file from either the "Desktop" or "File Explorer" (="Windows Explorer") and drop the file into a Chrome browser tab

CASTING A "TAB" OF THE "CHROME" BROWSER

- Not all of the local video, audio, or document files on the hard drives of your computer will open in a Chrome browser tab.
  In some cases, you might have to add in a "browser helper object" in order to get the Chrome browser to open a specific type of video, audio, or document file.

STOPPING CASTING

- Step 1:
  When you wish to stop casting, click on the blue "Google Cast" button that is near the upper-right corner of the "Chrome" browser:
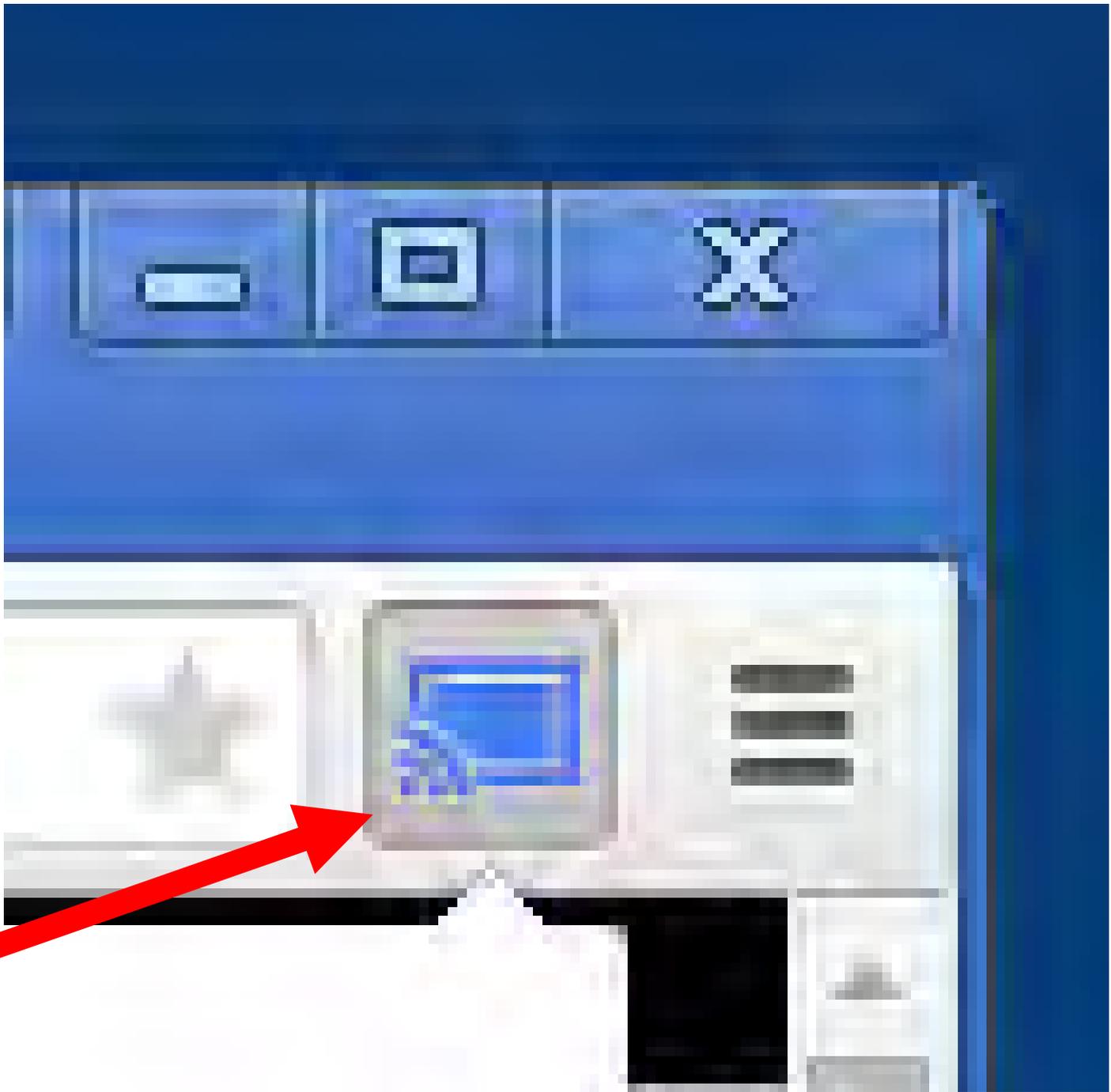
STOPPING CASTING

- Step 2:
  Then click on the "Stop casting" button.
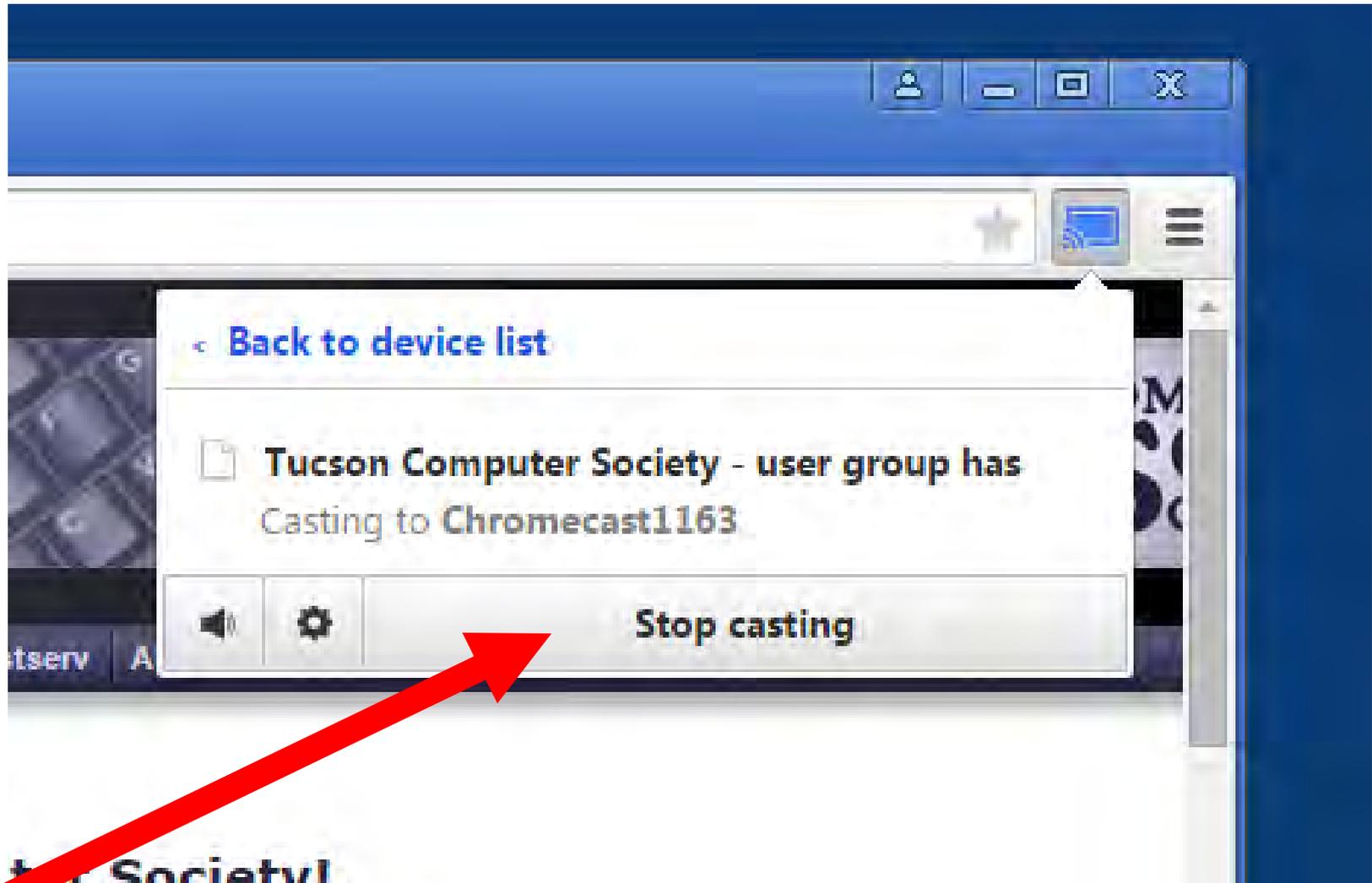
INSTALLING "CHROMECAST"

- "Chromecast" only works if you have the latest versions of the "Chrome" Web browser so it is best to start off by upgrading the "Chrome" Web browser in your computer to the latest non-beta version.

USB A plug of cable plugs into USB A port of power adapter

power adapter plugs into power outlet

USB mini plug of cable plugs into USB mini port of Chromecast receiver

HDMI plug of Chromecast receiver plugs into TV or monitor
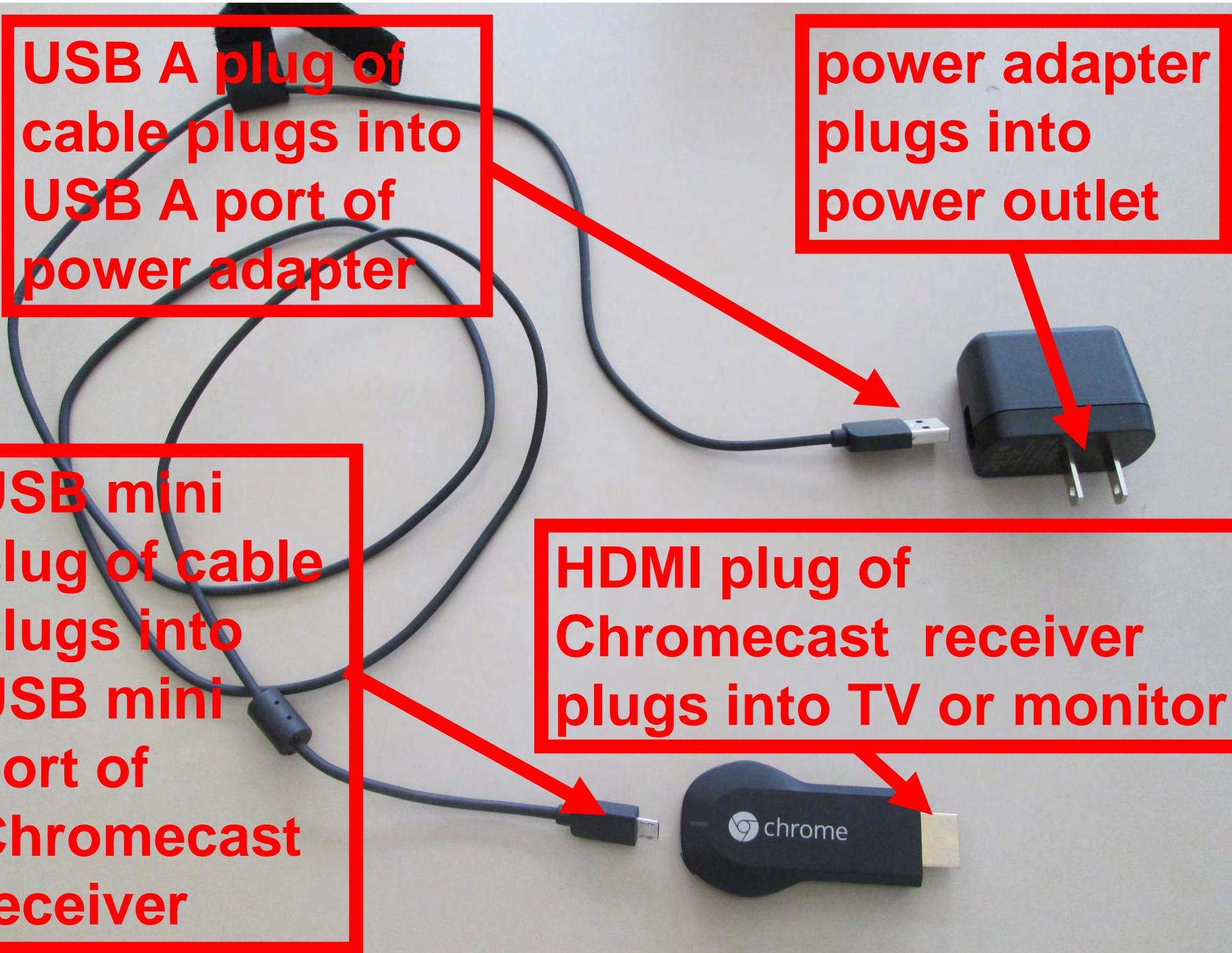
INSTALLING "CHROMECAST"

- "Chromecast" configuration in a home or small business environment:
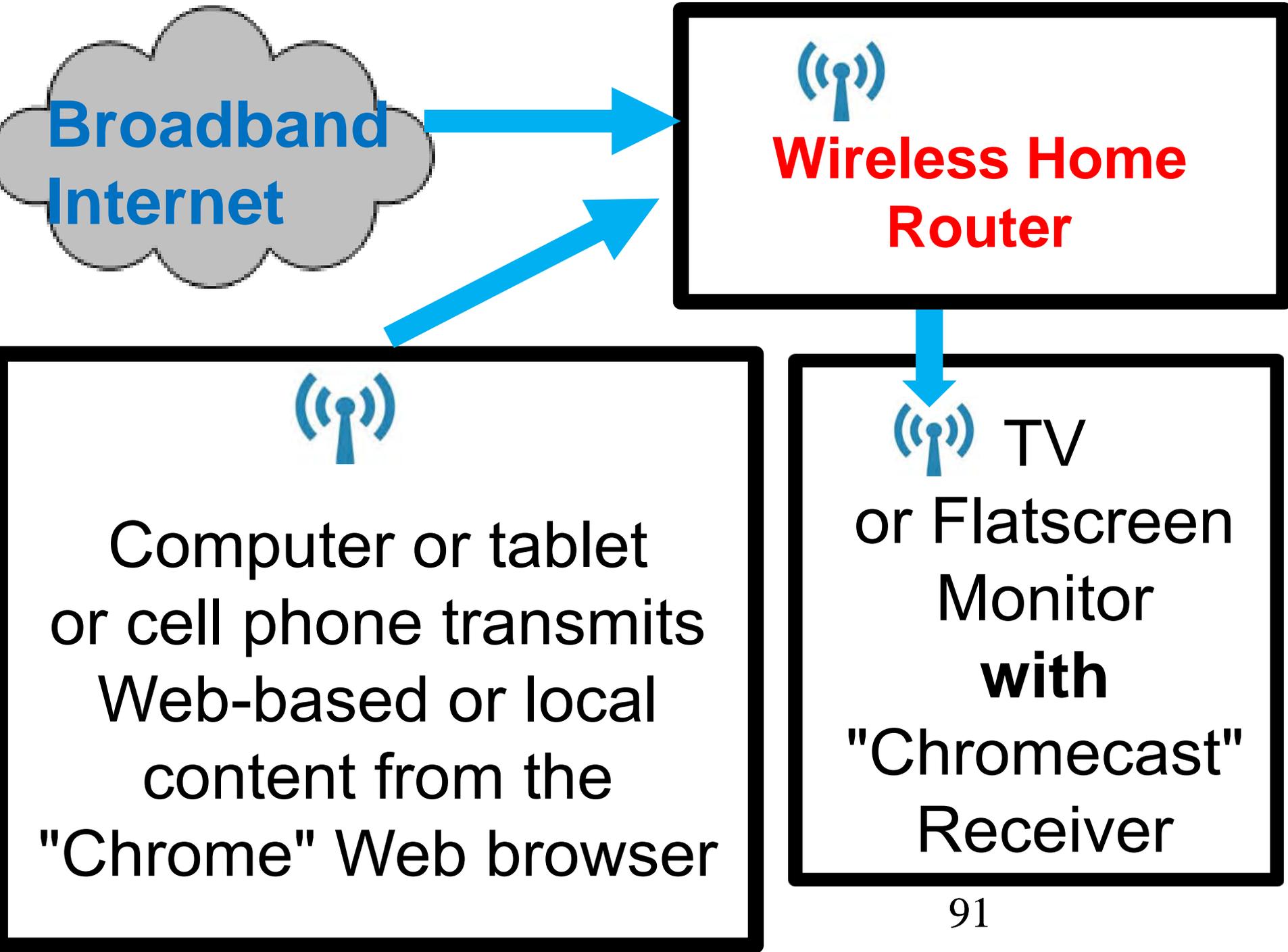
Broadband Internet

Wireless Home Router

Computer or tablet or cell phone transmits Web-based or local content from the "Chrome" Web browser

TV or Flatscreen Monitor **with** "Chromecast" Receiver

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INSTALLING "CHROMECAST"

- After you hook up your "Chromecast" receiver, it will display a "set me up" screen on the TV or monitor that the "Chromecast" receive is attached to:

INSTALLING "CHROMECAST"

- "Chromecast" works when you use an HDMI-to-DVI adapter to connect it to an DVI port on a flat screen monitor.

- However, no audio is transmitted to the monitor when you use an HDMI-to-DVI adapter.

INSTALLING "CHROMECAST"

- Not all routers, cable modems, DSL modems, or satellite modems work with "Chromecast"

- Google has a list at https://support.google.com/chromecast/table/6207416?rd=1

INSTALLING "CHROMECAST"

- To install the Chromecast add-on to the Chrome browser in a "Windows.." computer, download the chromecastinstaller.exe file from http://chromecast.com/setup.

- Then double-click on the file to start the installation process.

set me up

From a phone, tablet or laptop, visit: chromecast.com/setup

chromecast.com/setup

Chromecast9118

Chromecast App

Set Up "Chromecast9118"

Change the input on your TV.
Until you see a set up screen with this code on it:

E3Z6

I Don't See That Code   That's My Code

101
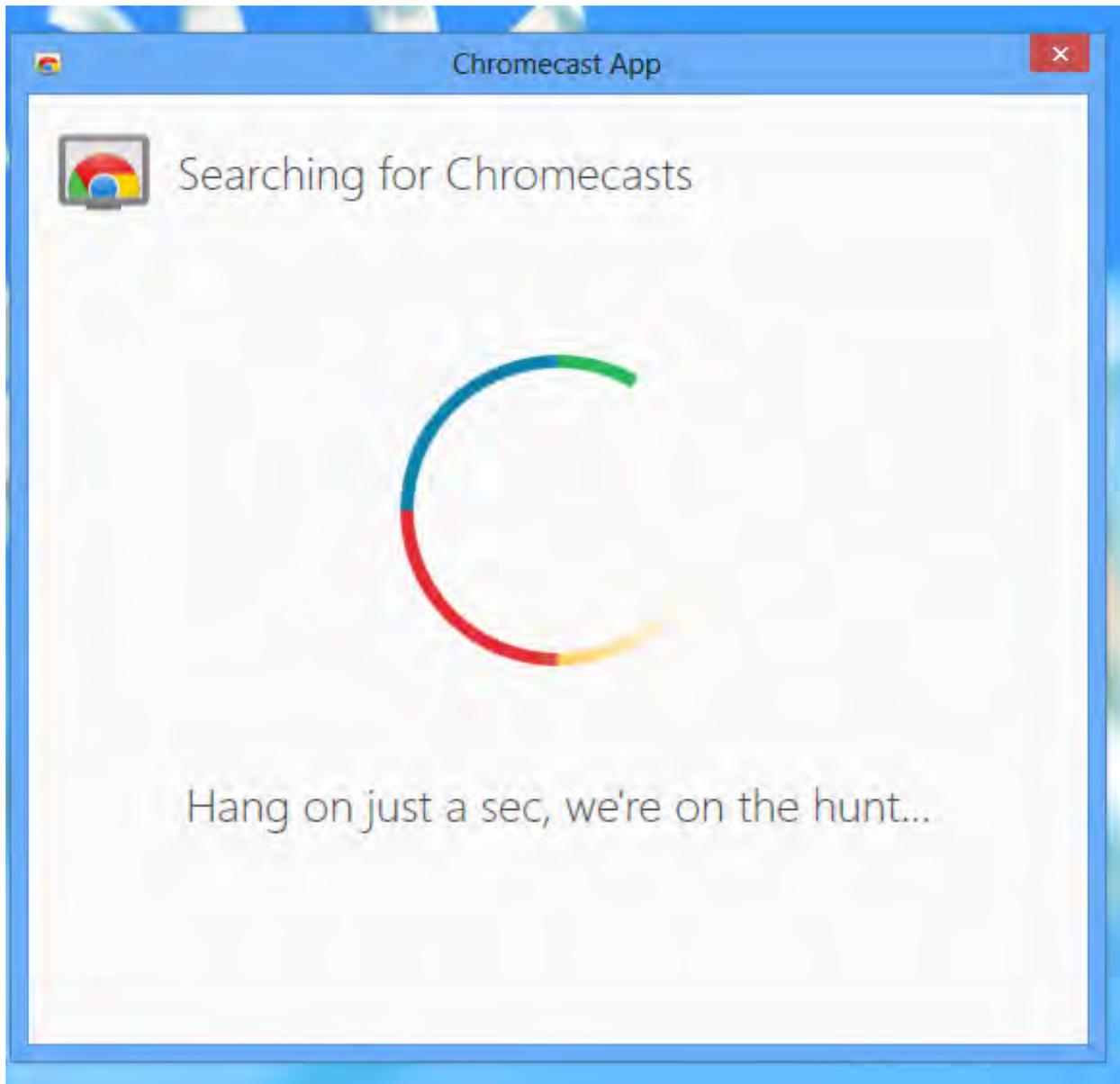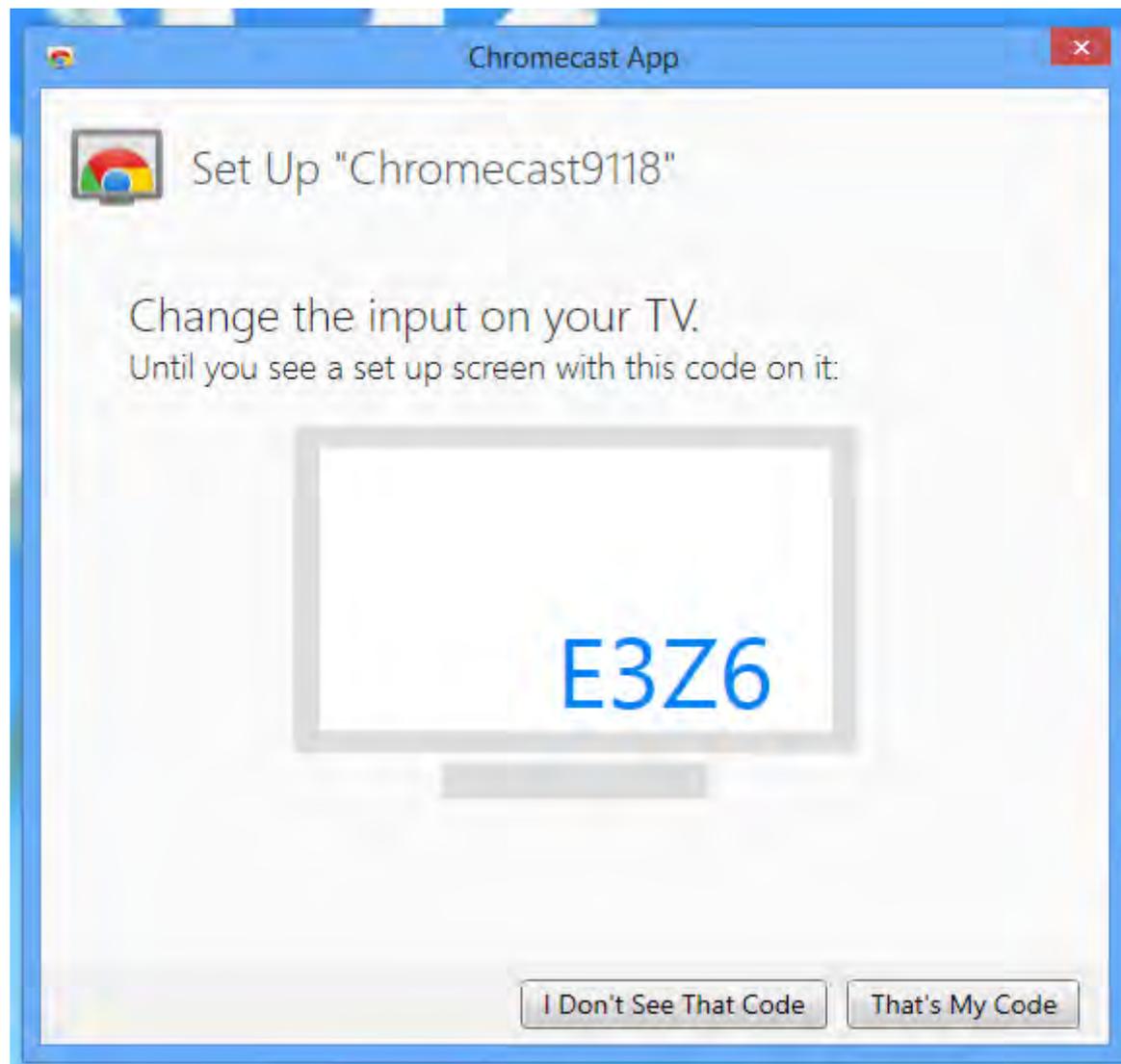
Chromecast App ✕

Set Up "Chromecast9118"

Select a Wi-Fi network to use with your Chromecast:

Wireless Network: belkin.97c ▼   Refresh

Password: ●●●●●●●●●   Get Password

☐ Show password

Enter a name to identify your Chromecast:

Chromecast Name: Chromecast9118

Example: "Living Room"

MAC Address: A4:77:33:05:B8:DF

Help   Cancel   Continue
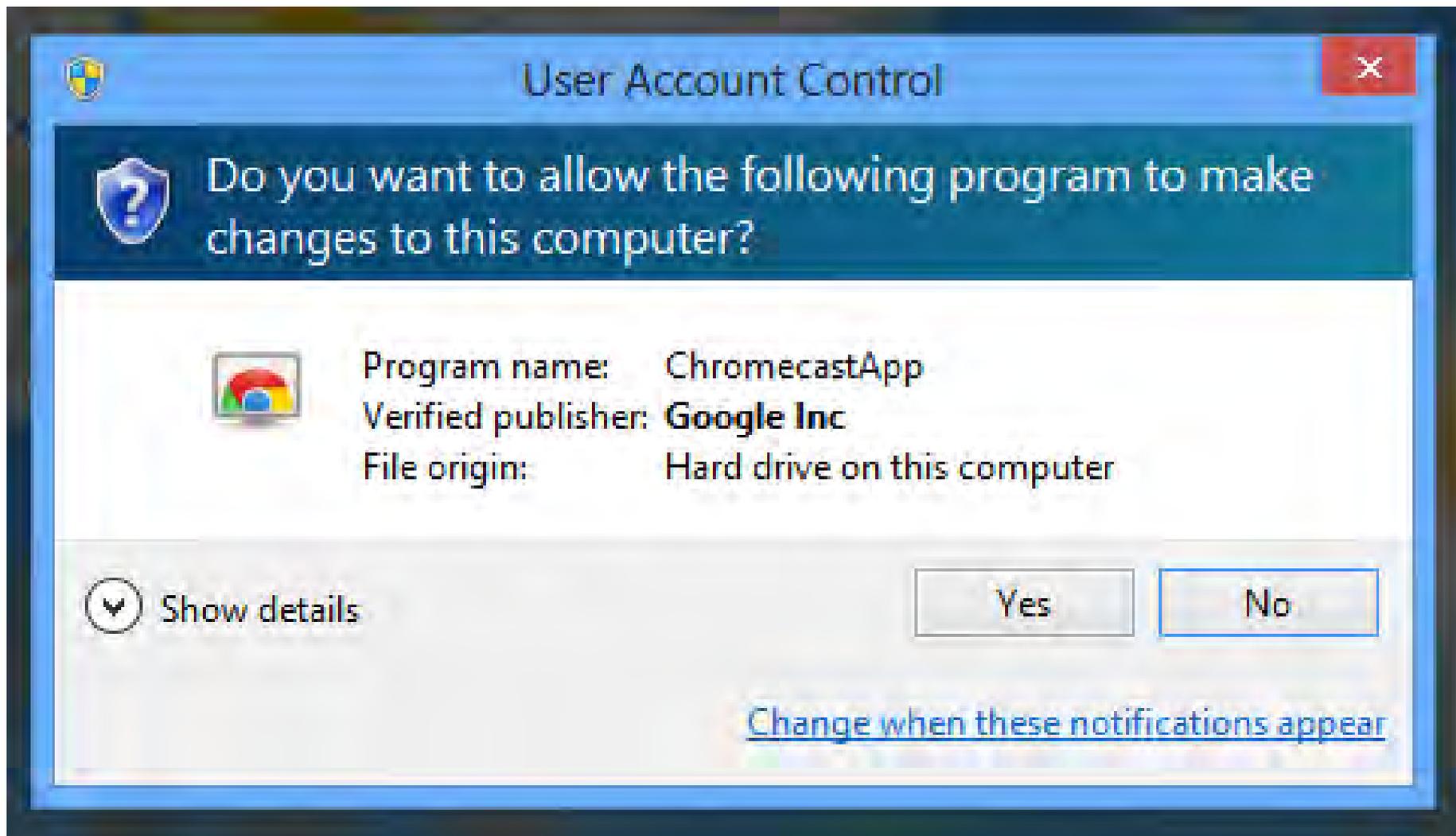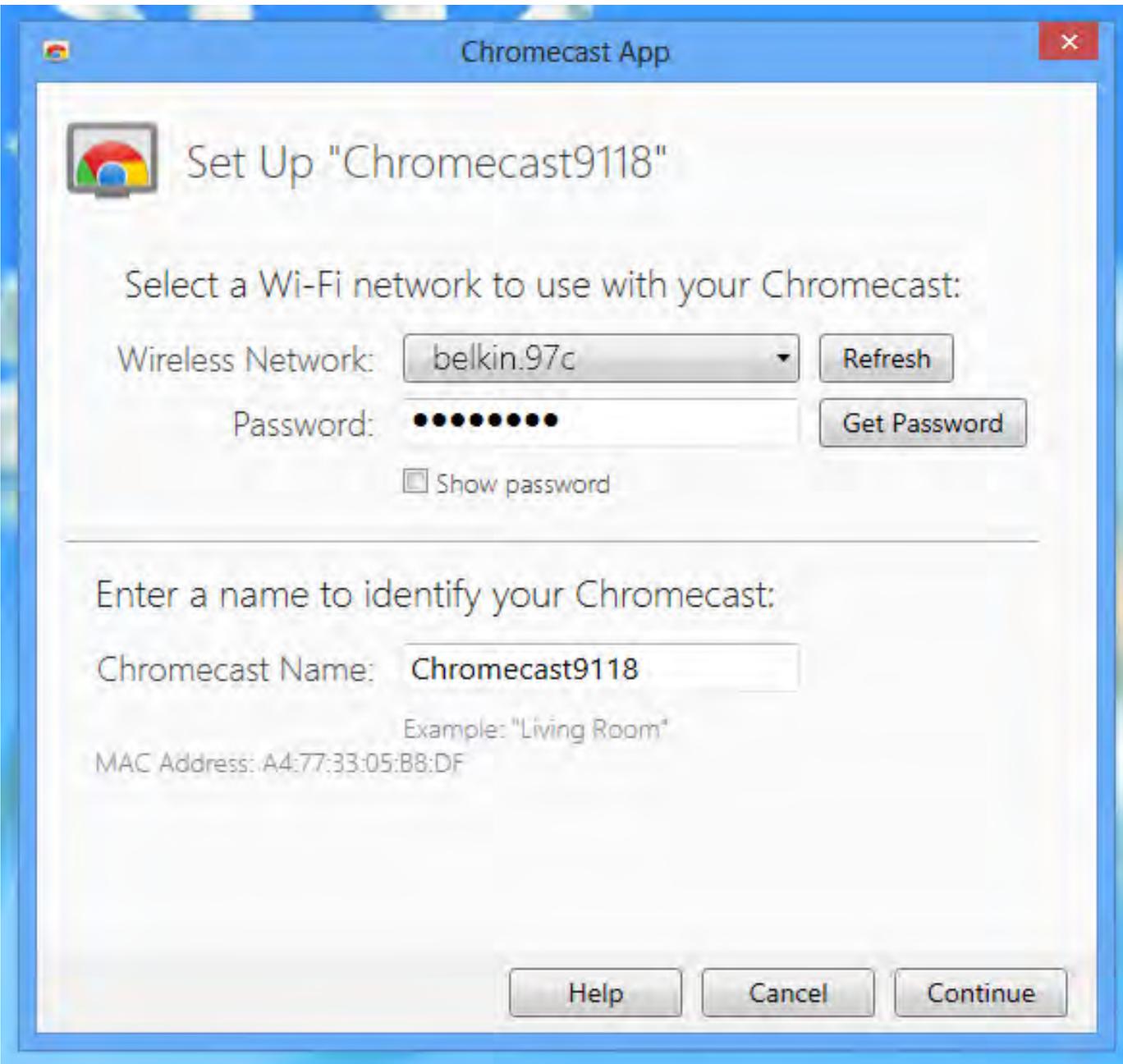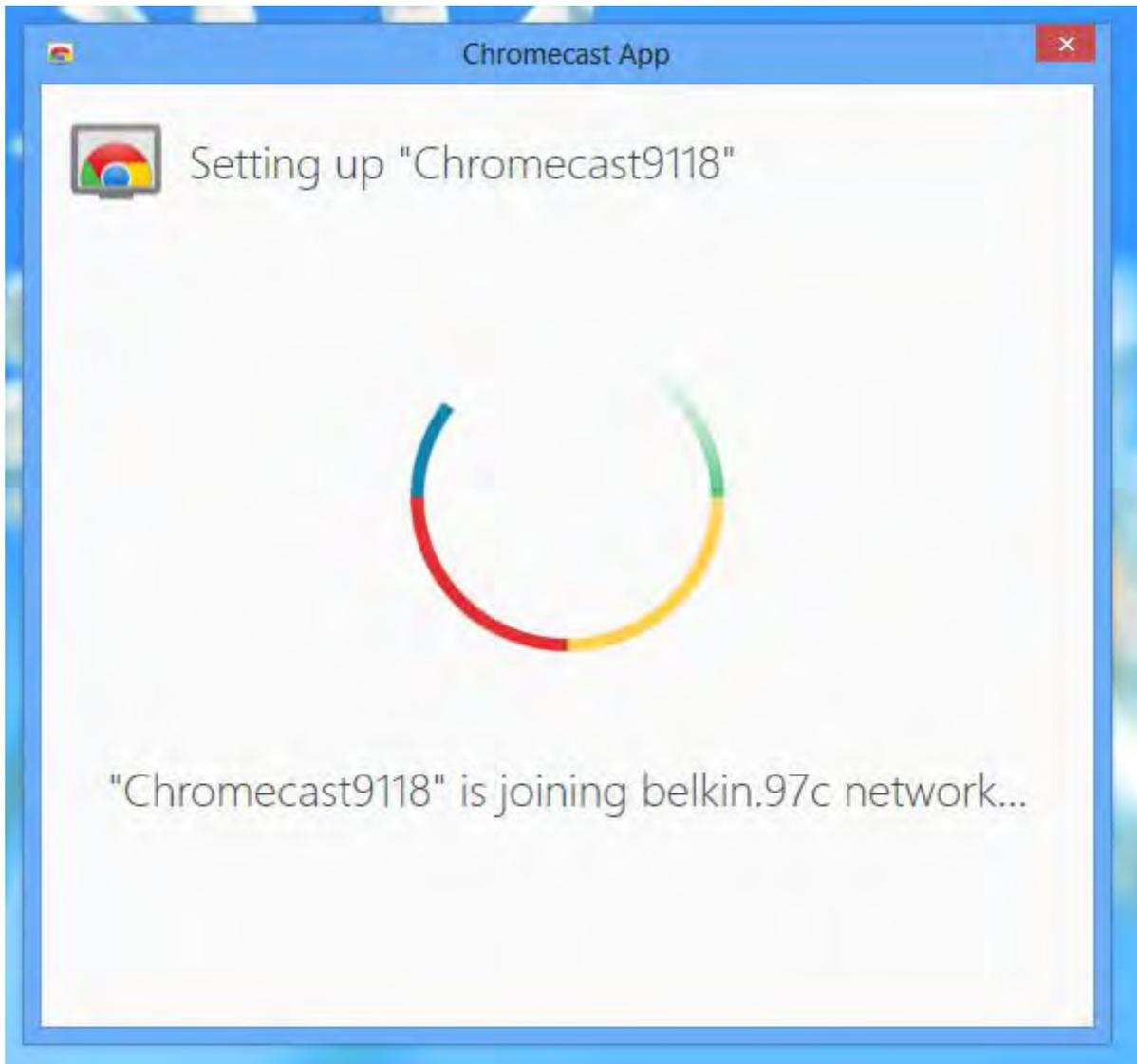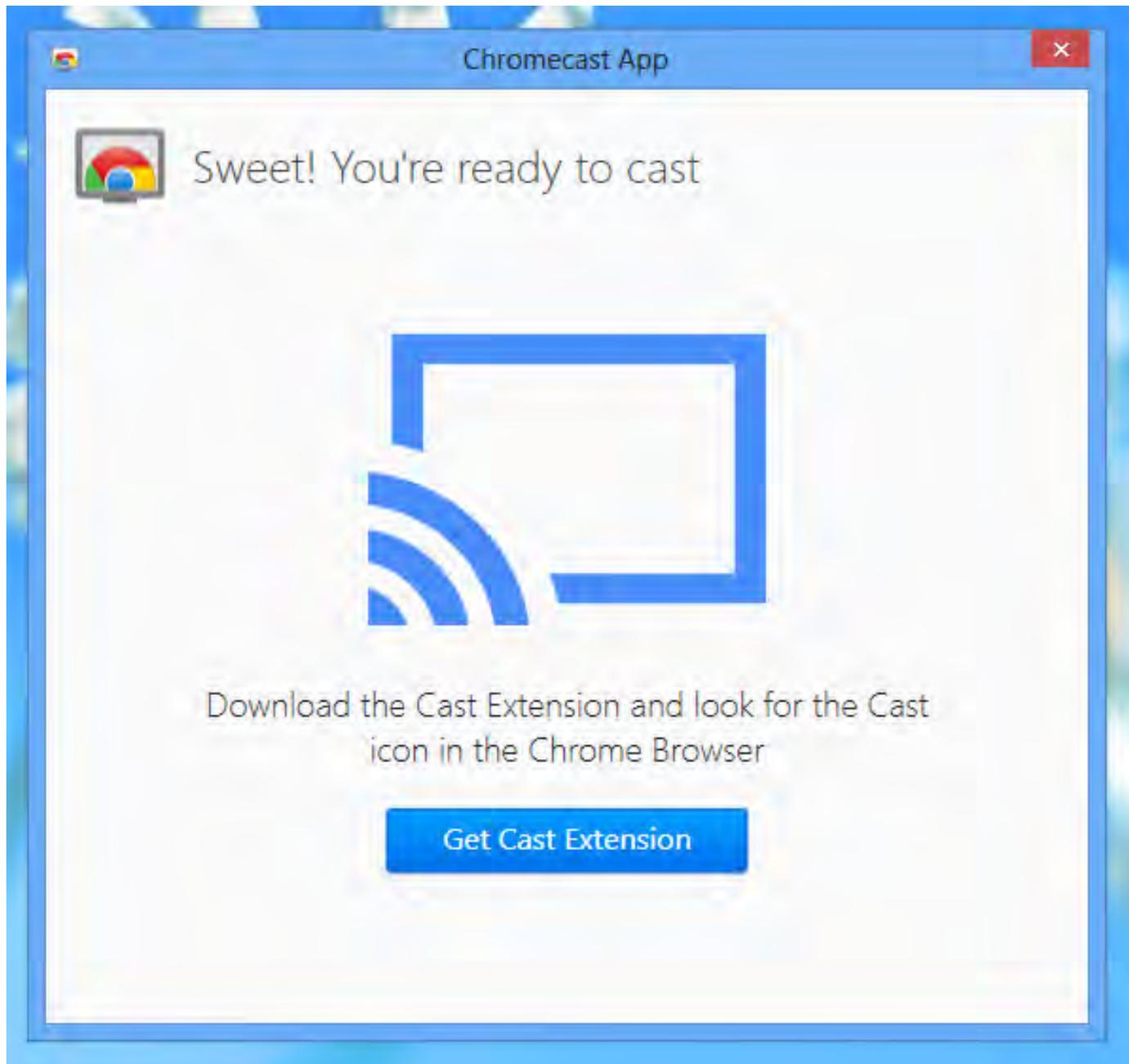
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Chromecast App

Sweet! You're ready to cast

Download the Cast Extension and look for the Cast icon in the Chrome Browser

Get Cast Extension

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Google Cast has been added to Chrome.

Use this extension by clicking on this icon.

Manage your extensions by clicking Extensions in the Tools menu.

Sign in to Chrome to get this extension, your history, and other Chrome settings on all your devices.

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INSTALLING "CHROMECAST"

- If you are setting up a Chromecast device for the first time OR if you have reset the Chromecast device by pressing on its Reset button, the Chromecast device will not have an existing wireless access point stored in its firmware. In this state, the Chromecast will generate it's own SSID with its internal wireless router:

Networks

Connections

Network 2   Connected

Wi-Fi 2

belkin.97c

DG1670AD2

NETGEAR27

belkin.97c.guests

Chromecast5344

BS689

pebble

Amped_2.4GHz

KDN5B

ORGV5

Pierview

Hidden network

110

Chromecast5344

INSTALLING "CHROMECAST"

- After the internal wireless router inside the "Chromecast" device wirelessly connects to a external wireless router, the internal wireless router will stop broadcasting it's own SSID:

Networks

Wi-Fi 2

DG1670AD2

NETGEAR27

belkin.97c

belkin.97c.guests

BS689

pebble

Amped_2.4GHz

KDN5B

Pierview

Hidden network

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MOVING "CHROMECAST" TO A DIFFERENT WIRELESS NETWORK

- If you have stopped casting but the Chromecast device is still within range of the original wireless SSID that it was previously connected to, your Chromecast receiver will NOT display the SSID that it expects you to connect it to again (since no news is good news):
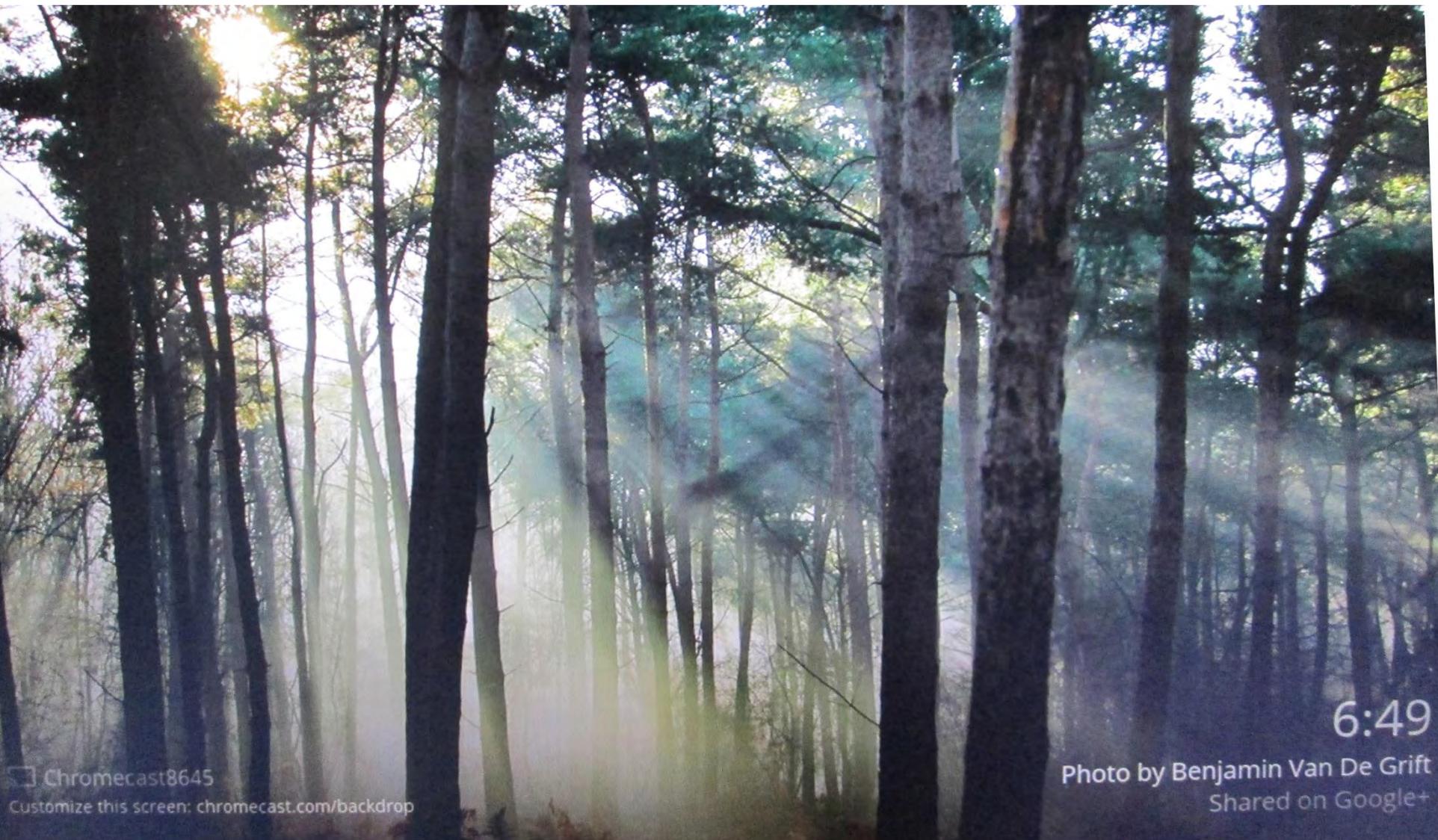
6:49

Chromecast8645
Customize this screen: chromecast.com/backdrop

Photo by Benjamin Van De Grift
Shared on Google+

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Chromecast8645

Customize this screen: chromecast.com/backdrop

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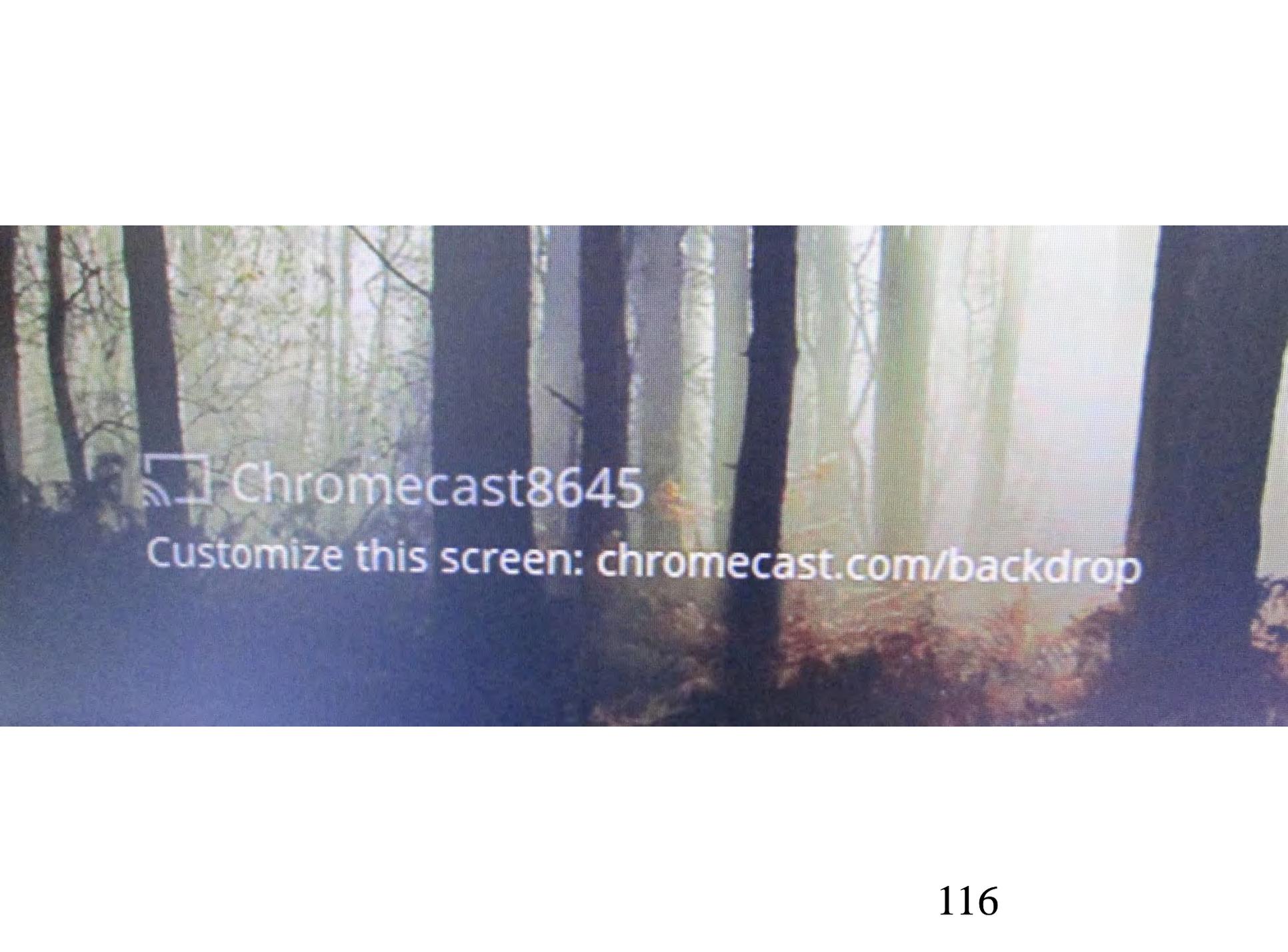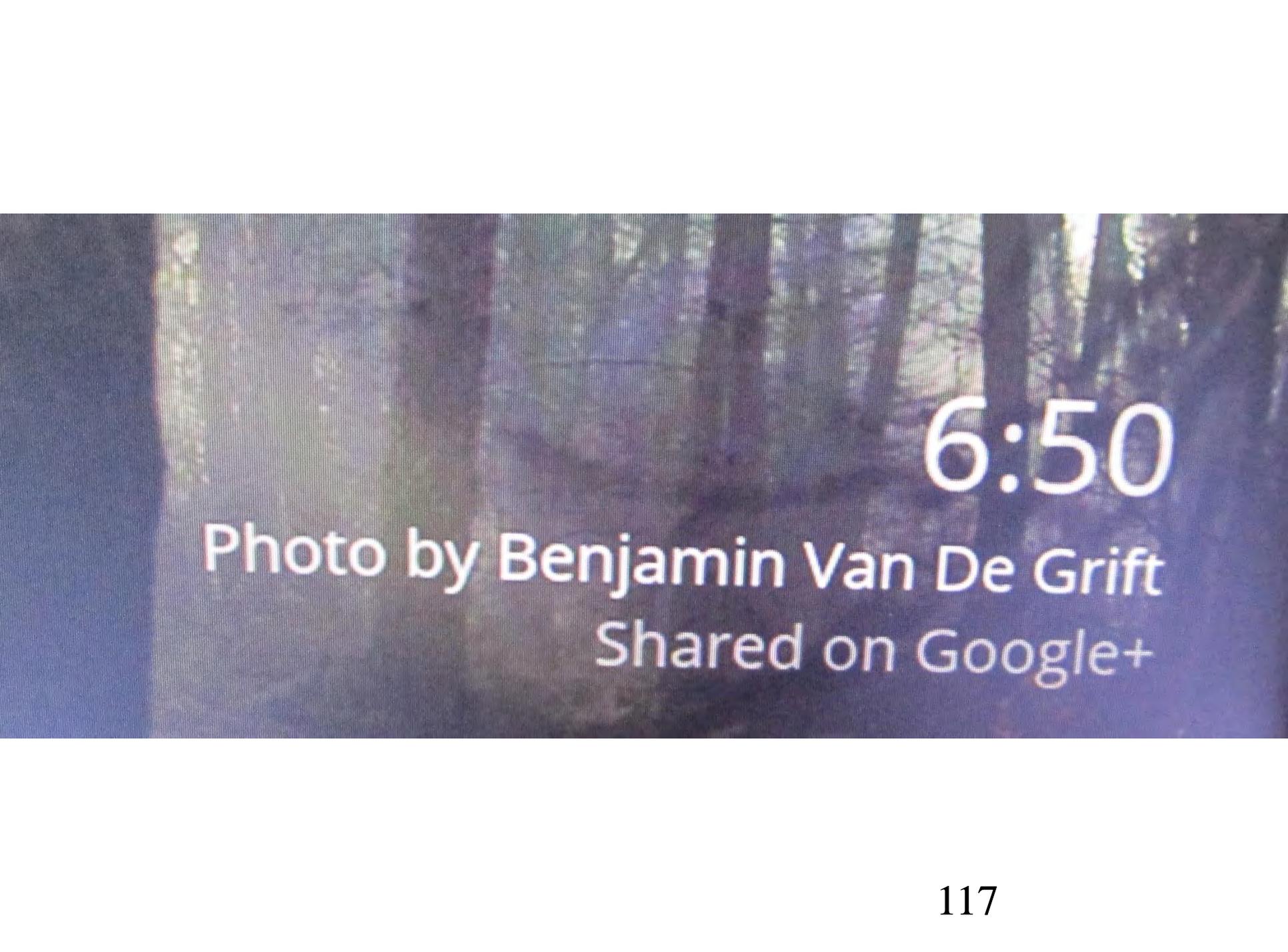
6:50

Photo by Benjamin Van De Grift
Shared on Google+

MOVING "CHROMECAST" TO A DIFFERENT WIRELESS NETWORK

- If you have stopped casting and the Chromecast device is no longer within range of the original wireless SSID that it was previously connected to, your Chromecast receiver will display the SSID that it expects you to connect it to again:

reconnect me

'Chromecast8645' can't find the 'TP-LINK_0269' Wi-Fi network

Run the Chromecast app to connect to a new network
Otherwise, check your 'TP-LINK_0269' network

Chromecast8645
TP-LINK_0269

E3Z6

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reconnect me

'Chromecast8645' can't find the 'TP-LINK_0269' Wi-Fi network

Run the Chromecast app to connect to a new network
Otherwise, check your 'TP-LINK_0269' network

120
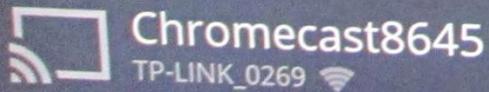
MOVING "CHROMECAST" TO A DIFFERENT WIRELESS NETWORK

- If the Chromecast device is no longer within range of the original wireless SSID that it was previously connected to, run the "Chromecast" app or program in your computer and it will guide you through the process of re-connecting "Chromecast" to an active SSID in an active wireless router.

MOVING "CHROMECAST" TO A DIFFERENT WIRELESS NETWORK

- If the Chromecast device is still within range of the original wireless SSID that it was previously connected to, you will have to reset the Chromecast device as follows:

MOVING "CHROMECAST" TO A DIFFERENT WIRELESS NETWORK

- Leaving the "micro USB" power attached to the "Chromecast" device so that the "Chromecast" device remains powered on, press the reset button of the Chromecast device until the green LED turns white and then to a solid red color.

MOVING "CHROMECAST" TO A DIFFERENT WIRELESS NETWORK

- Then go to the http://chromecast.com/setup Web site and download "chromecastinstaller.exe

- Double-click on "chromecastinstaller.exe" and re-install the entire Chromecast system.

MOVING "CHROMECAST" TO A DIFFERENT WIRELESS NETWORK

- When the Chromecast installation wizard asks you to select a wireless network, you usually will use the drop-down list button to select the wireless access point (= SSID) that your computer is currently connected to.

MOVING "CHROMECAST" TO A DIFFERENT WIRELESS NETWORK

- If you select a different SSID from the one that your computer is currently connected to, the Chromecast installation wizard will do three things:

MOVING "CHROMECAST" TO A DIFFERENT WIRELESS NETWORK

1. Connect the internal wireless device of the Chromecast device to the different SSID

2. Disconnect your computer from the SSID that it is currently connected to

3. Connect your computer to the different SSID

MOVING "CHROMECAST" TO A DIFFERENT WIRELESS NETWORK

- Never select a 5 Gigahertz Wi-Fi SSID since Chromecast only works with 2.4 Gigahertz Wi-Fi SSIDs.

REPAIRING A FAILED "CHROMECAST" INSTALLATION

- If the "Chromecast" system fails to project to a TV:
Go to "Settings" inside the Chrome browser and remove the "Google Cast" extension.

REPAIRING A FAILED "CHROMECAST" INSTALLATION

- Leaving the "micro USB" power attached to the "Chromecast" device so that the "Chromecast" device remains powered on, press the reset button of the Chromecast device until the green LED turns white and then to solid red.

REPAIRING A FAILED "CHROMECAST" INSTALLATION

- Then go to the http://chromecast.com/setup Web site and download "chromecastinstaller.exe

REPAIRING A FAILED "CHROMECAST" INSTALLATION

- After you complete this repair procedure, your "Chromecast" receiver will show the following screen on your TV or monitor":

REPAIRING A FAILED "CHROMECAST" INSTALLATION

- Double-click on "chromecastinstaller.exe" and re-install the entire Chromecast system.

USING A "CHROMECAST" WITH PUBLIC INTERNET SERVICES

- Chromecast's requirements for an external wireless router without "wireless isolation" presents significant technical challenges because public Internet services almost always have "wireless isolation":

USING A "CHROMECAST" WITH PUBLIC INTERNET SERVICES

"wireless isolation" =

- "AP isolation"

- "Access Point isolation"

- "client isolation"

- "station isolation"

- "wireless client isolation"

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USING A "CHROMECAST" WITH PUBLIC INTERNET SERVICES

*   "Wireless isolation" means that even if "File and Printer Sharing" is explicitly turned on in a connected client computer, no data is transmitted from the connected client computer to any other computer on the same local network

USING A "CHROMECAST" WITH PUBLIC INTERNET SERVICES

- Wireless routers used for public Internet almost always has "wireless isolation" turned on

- Home routers never have "wireless isolation" turned on

- Some home routers have "wireless isolation" capability that you can activate

USING A "CHROMECAST" WITH PUBLIC INTERNET SERVICES

There are two kinds of "wireless isolation":

- Type 1:
  Wireless client computers cannot communicate with each other (and all wireless client computers have access to the Internet)

- Type 2:
  Wireless client computers cannot communicate with each other but they can share files and printers with wired computers on the same local network

USING A "CHROMECAST" WITH PUBLIC INTERNET SERVICES

- Both "Type 1" and "Type 2" wireless isolation will cause Chromecast to fail.

USING A "CHROMECAST" WITH PUBLIC INTERNET SERVICES

You have three options:

- **Option 1:**
  Use a "travel router" that is not connected to the Internet and stream video, audio, or document files that are located on a local hard drive

USING A "CHROMECAST" WITH PUBLIC INTERNET SERVICES

- **Option 2:**
  Use a "travel router" that has "Wireless Internet Service Provider" (WISP) capability to connect between the public Wi-Fi Internet service, your laptop, and the Chromecast device

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USING A "CHROMECAST" WITH PUBLIC INTERNET SERVICES

- **Option 3:**
  Use a "travel router" that does not have "Wireless Internet Service Provider capability.
  Laptop 2" shares a public Internet connection with this "travel router". This "travel router" then connects "Laptop 1" to the Chromecast receiver.

Option 1:
Use a "travel router" that is not connected to the Internet and stream video, audio, or document files that are located on a local hard drive

OPTION 1: USE A "TRAVEL ROUTER" THAT IS NOT CONNECTED TO THE INTERNET

- If you are travelling and you have only 1 laptop, you can use it to stream video, audio, and document files from your local hard drive to the hotel room's TV by means of "Google Cast" running inside the "Chrome" Web browser of your laptop:

Wireless Travel Router with no Internet connection

Laptop 1 or tablet or cell phone transmits local content files from the "Chrome" Web browser

Chromecast Receiver

HDMI connection

TV or monitor

145
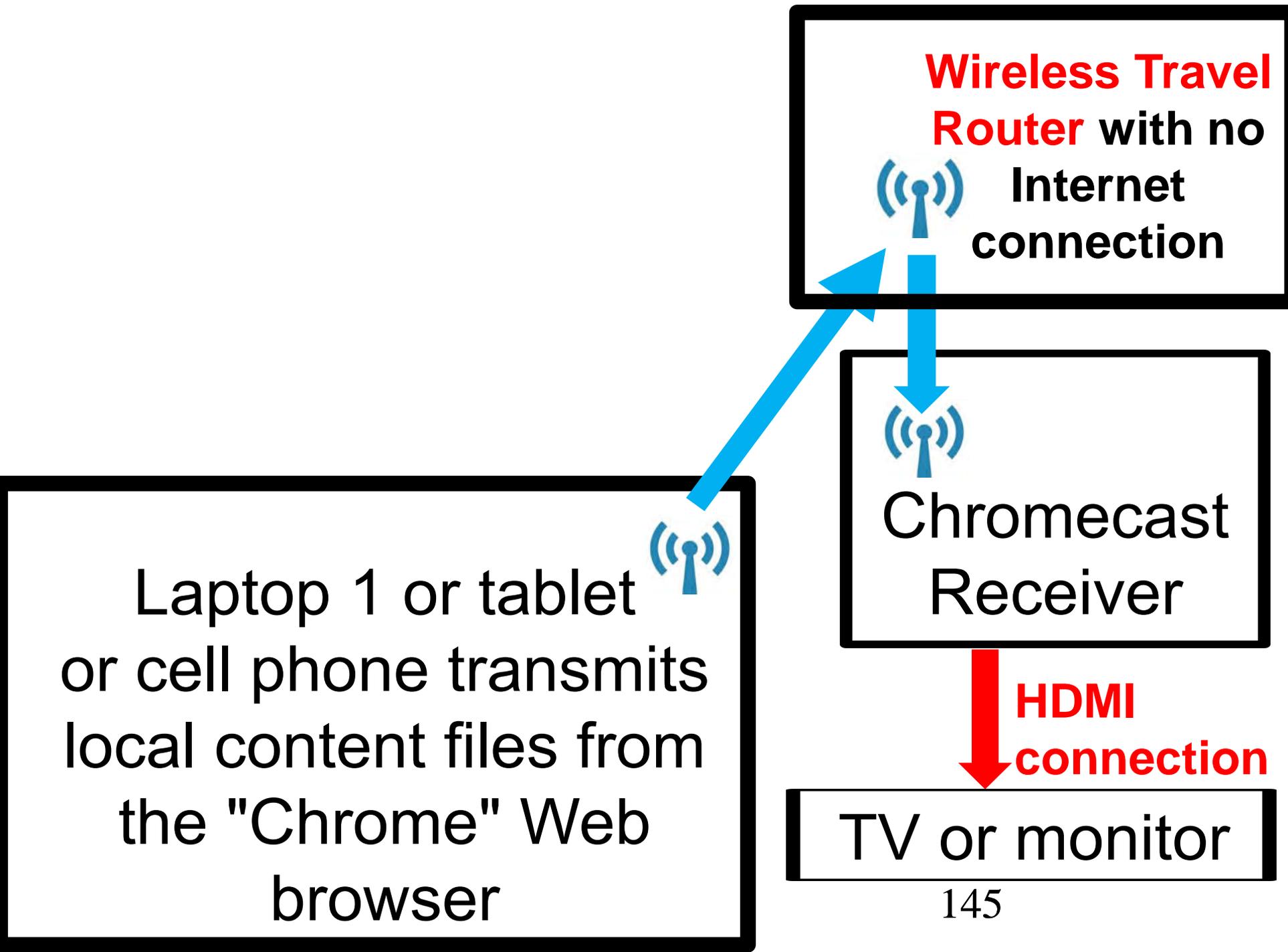
OPTION 1: USE A "TRAVEL ROUTER" THAT IS NOT CONNECTED TO THE INTERNET

- **METHOD ONE to open up a local video, audio, or document file from inside the Chrome browser:**
Use your keyboard to press Ctrl + o. Then navigate to the desired video, audio, or document file and "Open" it. After the file opens up in a new tab in the Chrome browser, click on the Google Cast" button to send to the TV.

OPTION 1: USE A "TRAVEL ROUTER" THAT IS NOT CONNECTED TO THE INTERNET

- **METHOD TWO to open up a local video, audio, or document file from inside the Chrome browser:**
  Drag a local video, audio, or document file from either the "Desktop" or "File Explorer" (="Windows Explorer") and drop the file into a Chrome browser tab

Option 2:
Use a "travel router" that has "Wireless Internet Service Provider" (WISP) capability to connect between public Wi-Fi Internet, your laptop, and the Chromecast receiver

OPTION 2: USE A "TRAVEL ROUTER" THAT HAS "WISP" CAPABILITY

* According to
  http://www.pcworld.com/article/2150741/tested-6-new-travel-routers-that-can-deploy-a-secure-wifi-network-almost-anywhere.html
  In WISP (Wireless Internet Service Provider) mode, the router becomes a client to a wireless Internet service (such as a Wi-Fi hotspot). The router shares that connection with its wireless clients.

OPTION 2: USE A "TRAVEL ROUTER" THAT HAS "WISP" CAPABILITY

"WISP" =

- "Wireless Internet Service

- Provider""WISP Mode"

- "WISP Client" (Fry's ad)

- "WISP Client Mode" (Fry's ad)

- "WISP Client Router"

- "AP Client Router Mode" (TP-Link)

- "WISP User Internet Sharing" (TP-Link)

- "WISP Repeater" (D-Link)

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OPTION 2: USE A "TRAVEL ROUTER" THAT HAS "WISP" CAPABILITY

- Some of the older models of WISP-capable routers cannot connect wirelessly to client computers on the local network side.

wireless
or
cable

TRAVEL ROUTER WITH "WIRELESS INTERNET SERVICE PROVIDER" ("WISP)

Wireless Internet Service Provider

Wi-Fi Wireless Adapter for connecting to Wireless Internet Service Provider

Network Address Translator and Hardware Firewall

Wired Ethernet Network Switch

Intranet (LAN)

Network Switch for the two Wireless Access Points

2.45GHz Wi-Fi Wireless Access Point

5GHz Wi-Fi Wireless Access Point

OPTION 2: USE A "TRAVEL ROUTER" THAT HAS "WISP" CAPABILITY

- Some of the older models of WISP-capable routers cannot connect wirelessly to client computers on the local network side. These older models of routers can only connect by means of wired Ethernet cablers to client computers on the local network side. These older models are useless for "Chromecast" because "Chromecast" cannot connect by means of an Ethernet wire to a router:

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OLDER MODELS OF ROUTERS WITH "WISP" LACK Wi-Fi CAPABILITY ON THE CLIENT SIDE AND THEY NOT WORK WITH "CHROMECAST"

Wireless Internet Service Provider

Wi-Fi Wireless Adapter for connecting to Wireless Internet Service Provider

Network Address Translator and Hardware Firewall

Wired Ethernet Network Switch

Intranet (LAN)

Network Switch for the raw Wireless Access Points

2,45GHz Wi-Fi Wireless Access Point

5GHz Wi-Fi Wireless Access Point
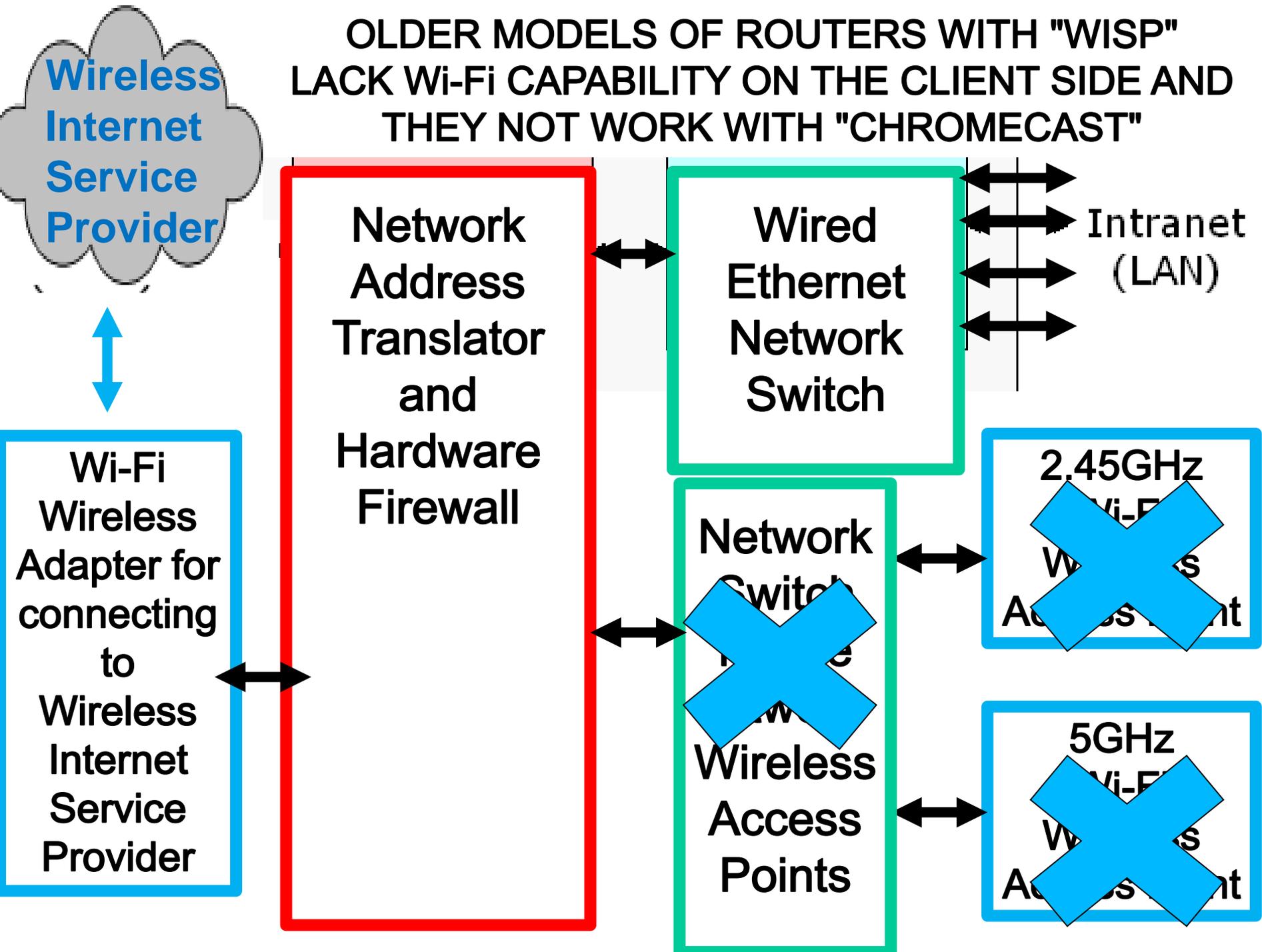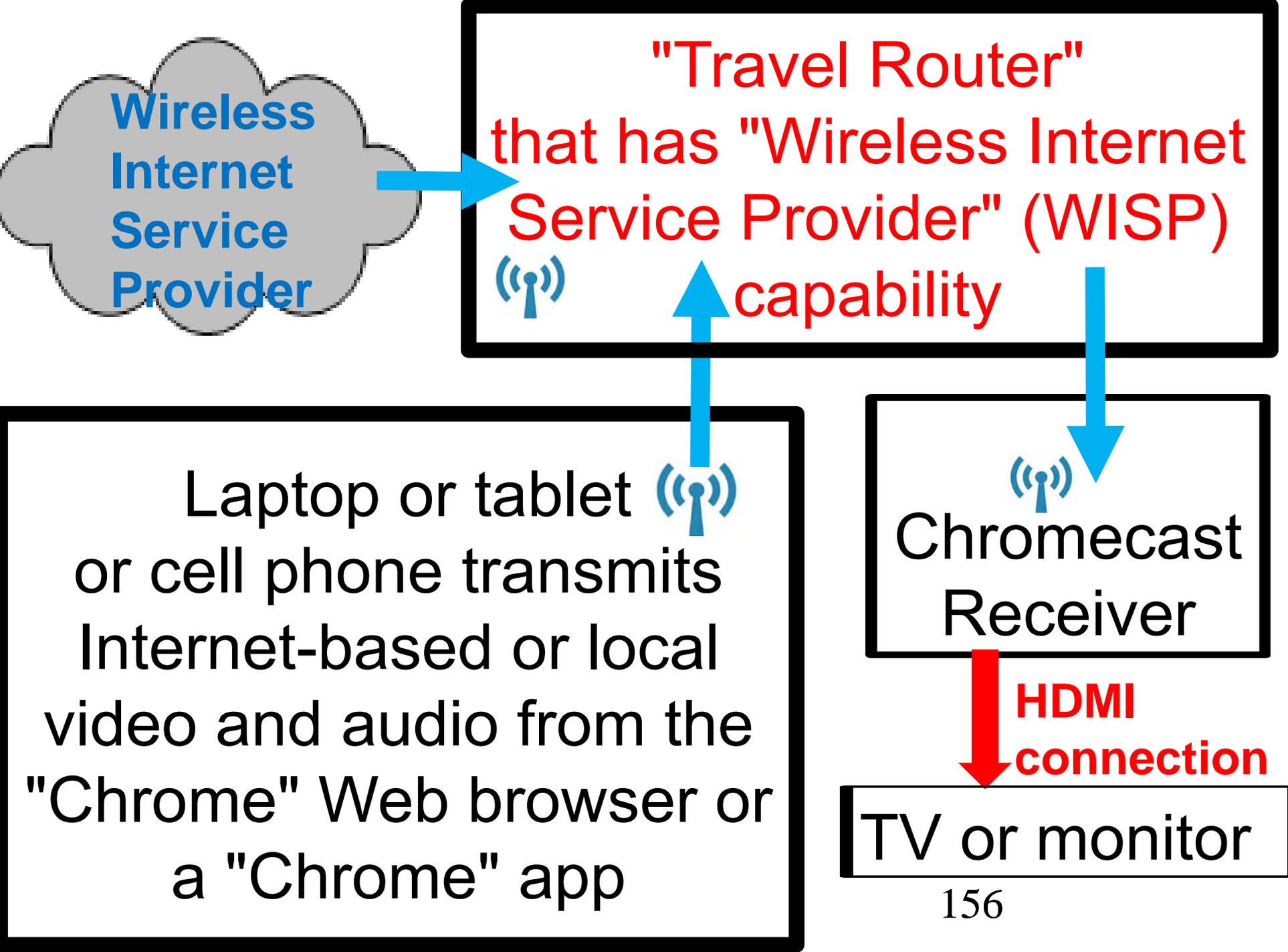
Wireless Internet Service Provider

"Travel Router" that has "Wireless Internet Service Provider" (WISP) capability

Laptop or tablet or cell phone transmits Internet-based or local video and audio from the "Chrome" Web browser or a "Chrome" app

Chromecast Receiver

HDMI connection

TV or monitor

156

For Home   For Business   Support & Services   Where to buy   Partner

Model no. or keywords

BR-6208AC

Features   Specifications   FAQ   Download   Where to buy

AC750 WiFi Concurrent Dual-band Router, 3*High Gain Antennas for Better Range, Easy Install as Router /AP/Range Extender/Wi-Fi Bridge/WISP Multi-mode

BR-6208AC

- Next generation 802.11ac Wi-Fi standard
- 5-in-1 Router, Access Point, Range Extender, Wireless Bridge and WISP
- Backward compatible with 802.11a/b/g/n standards
- Concurrent dual-band wireless connectivity for 2.4GHz and 5GHz
- High gain fixed antennas for better Wi-Fi performance
- Supports up to 8 Multi-SSID (2.4GHz x 4 and 5GHz x 4) & VLAN (AP mode only)
- Supports guest network (router mode only)
- Revolutionary iQoS for efficient and effective internet bandwidth management

157

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Edimax BR-6208AC Wireless Concurrent Dual-band Router, 3 * High
Gain Antennas for Better Range, Easy Install as Router/Access Point/
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AC1200	AC750
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- Next generation 802.11ac Wi-Fi standard
- 5-in-1 Mode: Router, Access Point, Range Extender, Wireless Bridge and WISP
- High gain antennas for better Wi-Fi Range
- Supports up to 8 Multi-SSID (2.4GHz x 4 and 5GHz x 4) & VLAN (AP mode only)
- Supports guest network (router mode only)
- Revolutionary iQoS for efficient and effective internet bandwidth management
- Backward compatible with 802.11a/b/g/n standards

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- Next generation 802.11ac Wi-Fi standard
- 5-in-1 Mode: Router, Access Point, Range Extender, Wireless Bridge and WISP
- High gain antennas for better Wi-Fi Range
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- Supports guest network (router mode only)
- Revolutionary iQoS for efficient and effective internet bandwidth management
- Backward compatible with 802.11a/b/g/n standards

OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- According to http://www.amazon.com/Edimax-Wireless-Personal-Hotspot-BR-6258nL/product-reviews/B00ADHPP6Y, the smaller Edimax BR-6258nL router:
  It works fine with hotel systems that require authentication through a web interface. All you do is 1) connect to the router; 2) through the configuration screen, tell the router to connect to the hotel's Wi-Fi network in WISP mode; 3) you'll see the hotel's login screen popup in your browser. Once you authenticate, all your devices will have internet.

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OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- All models of Edimax's wireless routers can connect you to the authentication "splash" Web page of a hotel's Wi-Fi Internet service during the setup of "WISP".

OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- If your "travel router" cannot do this, you will have to use a laptop or a virtual machine to "spoof" the MAC address of your "travel router" during the setup process for "WISP":

OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- SPOOFING A "MAC ADDRESS" STEP 1: Determine the MAC address for the WAN or Internet (RJ45) port of the travel router.

OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- SPOOFING A "MAC ADDRESS" STEP 2: Use the appropriate tool or settings menu on your computer's network adapter to change it's MAC address to the MAC address of the router.

OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- SPOOFING A "MAC ADDRESS" STEP 3: Using your computer, log into a Web browser and complete the authentication process.

OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- SPOOFING A "MAC ADDRESS" STEP 4: Change your computer's MAC address back to it's default MAC address and then reboot your computer.

OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- SPOOFING A "MAC ADDRESS" STEP 5: Power on your router and then complete the "WISP" setup

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OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- SPOOFING A "MAC ADDRESS"
  See
  http://www.howtogeek.com/195762/ask-htg-how-can-i-use-my-google-chromecast-in-a-hotel-room/

OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- SPOOFING A "MAC ADDRESS" Reference for the steps for spoofing a "MAC address": https://plus.google.com/+MoritzTolxdorff/posts/4pKyBEr2sMK:

OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- SPOOFING A "MAC ADDRESS"
  See also
  http://vignesh.foamsnet.com/2014/06/use-your-chromecastroku-on-hotel-wifi.html

TP-LINK TL-WR702N Wireless N150 Travel Router, Nano Size, Router/AP/Client/Bridge/Repeater Modes, 150Mbps, USB Powered

OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- ADDITIONAL ROUTERS THAT HAVE "WISP" CAPABILITY:

All ⌄ travel router 🔍

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by TP-LINK

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Capacity: **N150 Nano Router**   174

Price: $16.24

HooToo TripMate Nano Wireless N Pocket Travel Router

Price: $18.99

OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- http://www.worksmartandtravel.com/2015/use-chromecast-in-your-hotel-room/

OPTION 2: USE A TRAVEL ROUTER THAT HAS "WISP" CAPABILITY

- The D-Link DIR-510L travel router has "Wireless Internet Service Provider" capability. See http://www.pcworld.com/article/2150802/d-link-dir-510l-travel-router-review-fast-and-flexible-this-ones-a-winner-all-around.html

D-Link Systems Wi-Fi AC750 Portable Router and Charger (DIR-510L)

D-Link Systems Wi-Fi AC750 Portable Router and Charger (DIR-510L)

by D-Link

⭐⭐⭐☆☆ ▾   106 customer reviews

| 31 answered questions

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- Interchangeable power plugs: North America, Euro, and UK
- Pre-encrypted WiFi for your convenience

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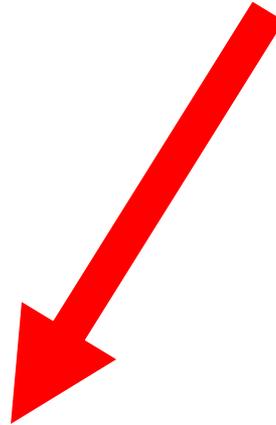
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Router, Wireless ISP (WISP), Access Point, and Repeater mode

Interchangeable power plugs: North America, Euro, and UK

Pre-encrypted WiFi for your convenience

TRENDnet AC750 Wireless Travel Router, WISP, Router, AP, Repeater Mode, North America/Euro/UK plugs, simultaneous dual band

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by TRENDnet

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Edimax BR-6208AC Wireless Concurrent Dual-band Router, 3 * High Gain Antennas for Better Range, Easy Install as Router/Access Point/ Range Extender/Wi-Fi Bridge/WISP Multi-mode (White)

Option 3:
Use a "travel router" that does not have "Wireless Internet Service Provider" (WISP) capability.
"Laptop 2" shares a public Internet connection with this "travel router". This "travel router" then connects "Laptop 1" to the Chromecast receiver

OPTION 3: USE A "TRAVEL ROUTER" THAT DOES NOT HAVE "WISP"

- If you are travelling and you have 2 laptops OR 1 laptop and an Android or iOS tablet or cell phone, you can use "Internet Connection Sharing" on one laptop and a "travel router" to the Internet. Then you can use the other device to stream both local and Web-based content from the other device:

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Wireless Internet Service Provider

"Laptop 2" with Internet Connection Sharing

Cat 5/5a/6 Ethernet

Wireless Travel Router (without WISP)

"Laptop 1" or tablet or cell phone transmits Internet-based or local video and audio from the "Chrome" Web browser or "Chrome" app

Chromecast Receiver

HDMI connection

TV or monitor
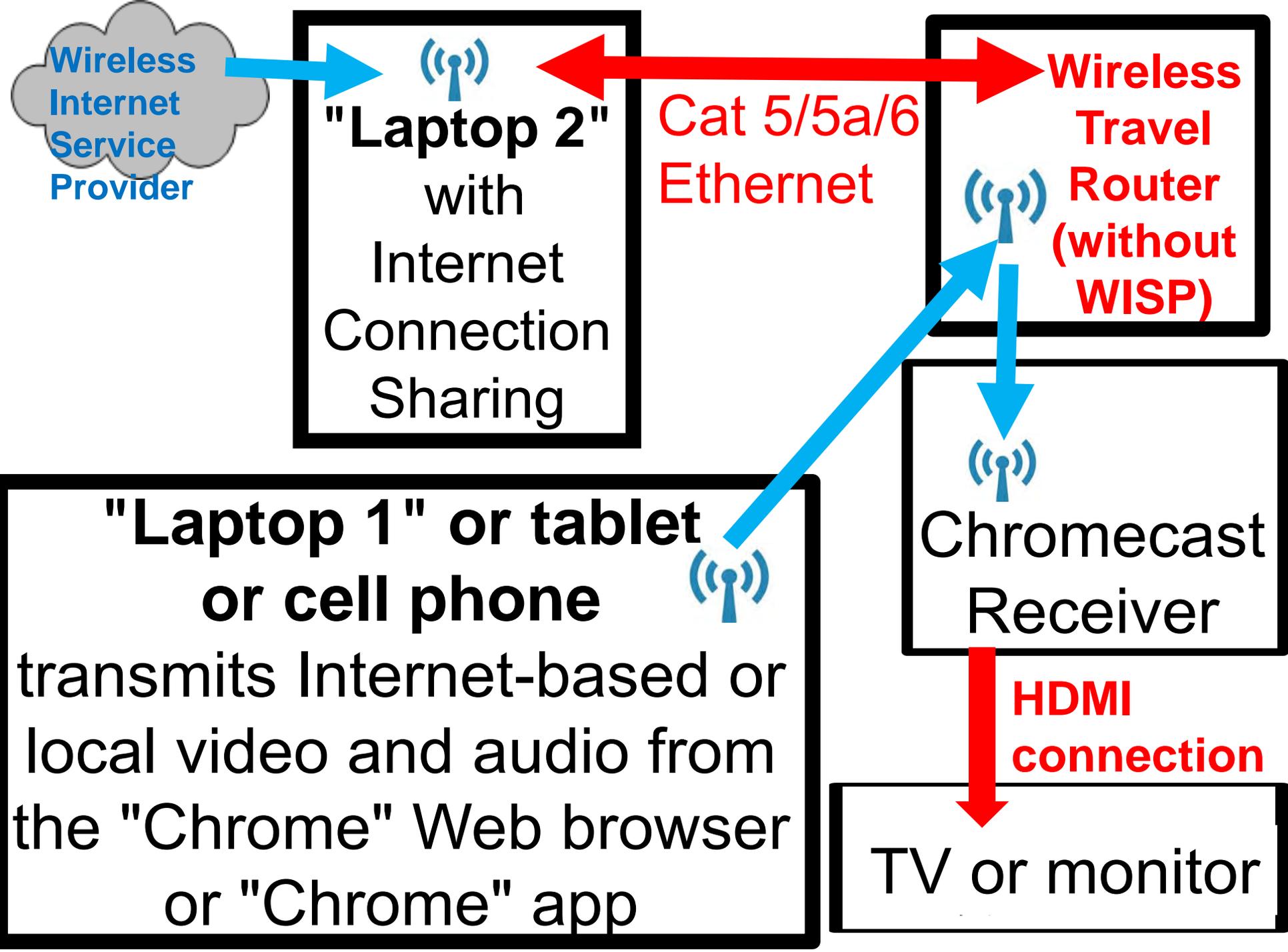
OPTION 3: USE A "TRAVEL ROUTER" THAT DOES NOT HAVE "WISP"

- In other words, to use "Option 3", you need to have:

  ✓ Chromecast device for connecting to TV in hotel room

  ✓ Laptop 1 for running the Chrome browser

  ✓ Laptop 2 for connecting to public Wi-Fi and doing "Internet Connection Sharing"

  ✓ "Travel Router" wirelessly connected to the Laptop 1 and connected to Laptop 2 by means of wired Ethernet

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OPTION 3: USE A "TRAVEL ROUTER" THAT DOES NOT HAVE "WISP"

- For advice on setting up "Internet Connection Sharing" in the second laptop, see http://aztcs.org/meeting_notes/winhardsig/wireless/InternetConnectionSharing.pdf

USING A "CHROMECAST" IN AN AREA WITH MULTIPLE ACTIVE SSIDs

- If you have multiple active SSIDs in an area, your computer will jump from one SSID to another SSID, depending on which one has the best radio signal strength or available bandwidth.
  This will happen if and when you move your computer around or when one SSID is busy with someone else using up all of its bandwidth.

USING A "CHROMECAST" IN AN AREA WITH MULTIPLE ACTIVE SSIDs

- However, your Chromecast device will stubbornly continue to connect to the specific SSID of wireless access point of the wireless router that you originally set it up with.

- When your computer jumps to a different SSID, the streaming of video/audio to "Chromecast" will end.

USING A "CHROMECAST" IN AN AREA WITH MULTIPLE ACTIVE SSIDs

- To stop your computer from jumping to another SSID:

- ✓ Make sure that the SSID that Chromecast is connected to has a checkmark for "Connect automatically"

- ✓ Make sure that all other SSIDs that your computer "sees" have" no checkmark for "Connect automatically"

USING A "CHROMECAST" IN AN AREA WITH MULTIPLE ACTIVE SSIDs

- For a "Windows 7" computer, see http://freewindowsvistatutorials.com/prevent-windows-7-from-automatically-reconnecting-to-wireless-network-connections.php
or
http://answers.microsoft.com/en-us/windows/forum/windows_7-networking/how-to-disable-auto-wireless-connect-in-windows-7/52d33896-f356-4f9f-8390-79a686900cab

USING A "CHROMECAST" IN AN AREA WITH MULTIPLE ACTIVE SSIDs

- For a "Windows 8" or "Windows 8.1" computer, see http://www.eightforums.com/tutorials/52906-wireless-network-connect-automatically-start-stop.html

USING A "CHROMECAST" IN AN AREA WITH MULTIPLE ACTIVE SSIDs

- You might also wish to set the priority for the various SSIDs that your computer "sees":
  See
  http://blog.laptopmag.com/change-connection-priority-windows

REFERENCES

- http://allaboutchromecast.com/chromecast-how-to-guide/comparison-of-5-methods-for-streaming-local-media-files-to-chromecast/

- http://zipso.net/chromecast-video-quality/

Questions