AVer IFP Screen Share App Frequently Asked Questions

3/1/2018

This document is intended to help the user or the network administrator to ensure that the network environment is compatible with AVer IFP Screen Share App for AirPlay, Chromecast, and Miracast protocols.

Screen Sharing FAQ

I cannot see the AirPlay icon on my iOS device

If the AirPlay mirror icon isn't displaying on your iOS device, it isn't able to see the IFP running Screen Sharing App for one reason or another.

The firewall on your computer may be preventing the devices from communicating. It's also possible that the firewall on your router is preventing internal network communication.

Microsoft has included instructions for allowing applications through the Windows firewall: http://windows.microsoft.com/en-US/windows7/Allow-a-program-to-communicate-through-Windows-Firewall

If you're using a Mac, Apple has provided similar instructions: http://support.apple.com/kb/ht1810

Corporate and school networks often block a number of ports from communicating across networks. You may need to have the school's IT department allow TCP ports 7000, 47000, 7100, 49228, 50259 and UDP 62572, 54780 to be open to communicate. The network must also be allowed to run Bonjour, MultiCast, and mDNS.

Or you must also be on the same VLAN or subnet within the network to connect, Apple's Airplay cannot cross subnets/VLANs, this is a limitation of Apple's AirPlay.

Apple has provided more instructions on this issue here: http://support.apple.com/kb/TS4215

Some Samsung device will not connect to Screen Share

Samsung devices use a slight variation of the Google Cast protocol and may need the assistance of the free Google Home app to connect to IFP Screen Share. You can install the app from Google Play Store.

For detailed instructions on how to connect the Samsung device by using the Google Home app please follow the instructions from this the “How do I cast an Android 4.4.2+ device to IFP Screen Share? FAQ

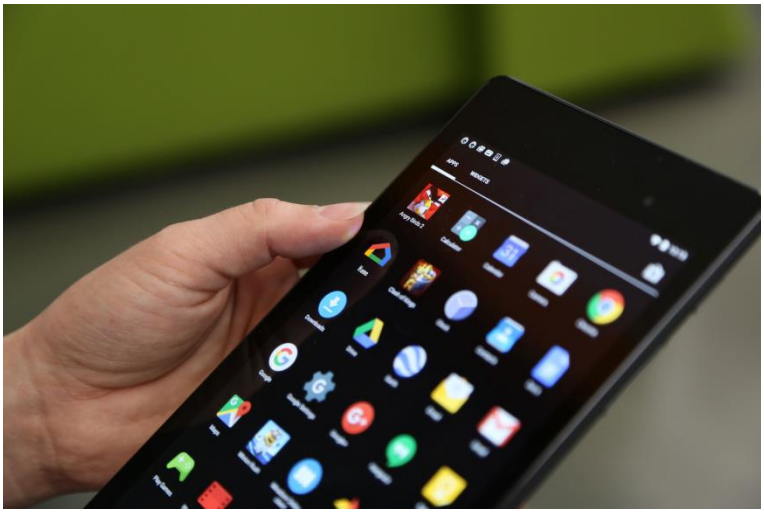
How do I cast an Android 4.4.2+ device to IFP Screen Share?

In order to cast your Android device's screen to your IFP Screen Share, the device will need to meet specific requirements. Casting your Android screen is available on devices running Android 4.4.2 and higher. Different steps may be required for mirroring Android 4.4.2 devices and Android 5.0+ devices.

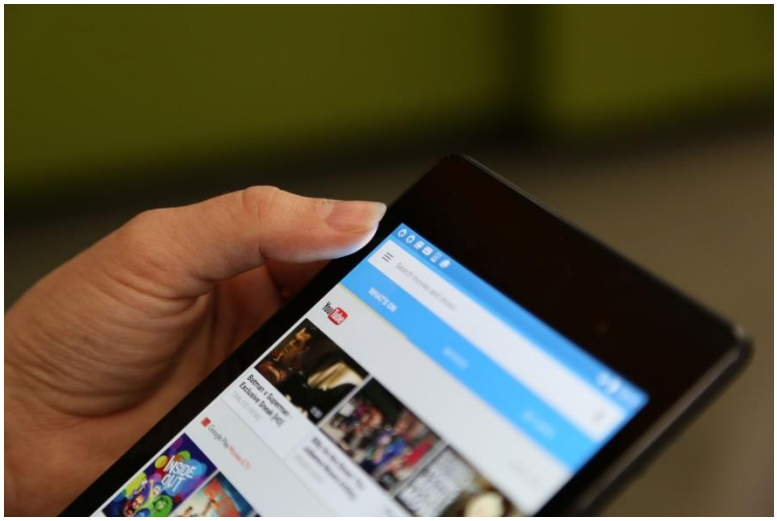
Follow the steps below to cast your Android 4.4.2+ device to your computer:

1. Be sure your device is connected to the same Wi-Fi network as the IFP.

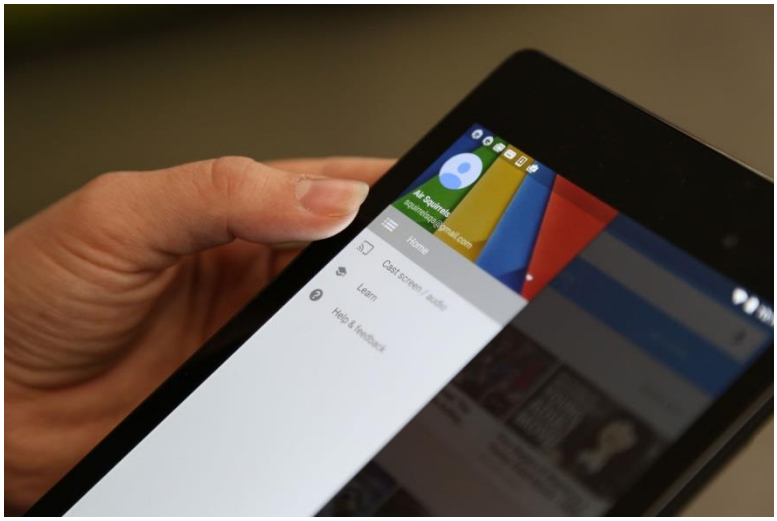
2. Launch IFP Screen Share App.
3. Launch the Google Home app on your Android device.



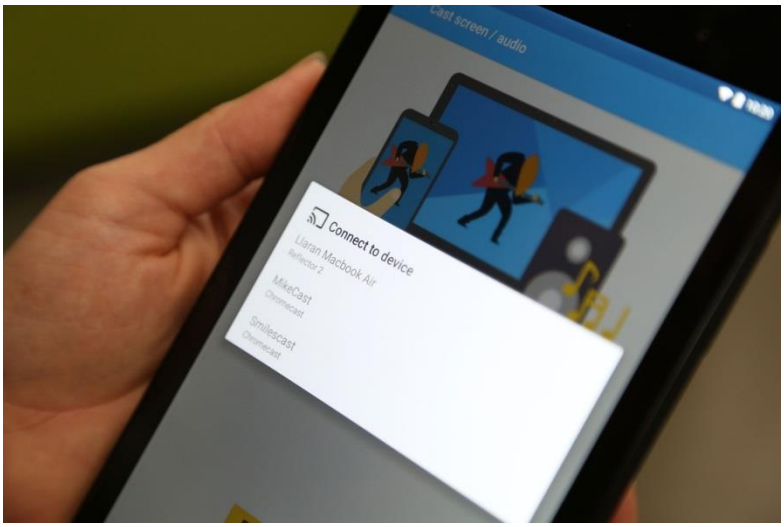
4. Open the menu at the top left of the screen.



5. Tap on "Cast Screen / Audio".



6. You will be presented with a list of available devices for casting. Tap the name of your computer from this list, and you should now see your Android device casting to your computer screen.



Android devices do not detect IFP

In many cases the firewall on your computer may be preventing the devices from communicating.

Microsoft has included instructions for allowing applications through the Windows firewall here: http://windows.microsoft.com/en-US/windows7/Allow-a-program-to-communicate-through-Windows-Firewall

If you're using a Mac, Apple has provided similar instructions here: http://support.apple.com/kb/ht1810

If you are running an anti-virus product, such as Norton, you may have to follow a similar process. This is very important as anti-virus applications often have their own firewall and network traffic blockers. It is

often easier to fully disable these applications while testing for connection and then renew and make adjustments later.

It's also possible that the firewall on a wireless access point or other network configuration is preventing communication. If the above information checks out, then you may need to relay the following information to your IT or Network Administration team to adjust the network configuration: Google Cast uses SSDP multicast (UDP 1900) for advertising to Android, mDNS multicast (UDP 5353) for advertising to Windows and Mac, TCP 8008 for the second phase of SSDP, and TCP 8009. The actual Cast screen mirroring uses a randomly-selected UDP port.

Many organizations use networks made up of multiple access points connected to a single Wireless LAN Controller (WLC). In these types of environments, some special considerations may need to be taken to configure the network for Chromecast compatibility. Some additional details on this process can be found in the Cisco help documents linked below:

Cisco Chromecast Deployment Guide
https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/7-6/chromecastDG76/ChromecastDG76.html

Screen Casting with mDNS Service Configuration for WLC
https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-mobility/119017-config-chromecast-mdns-wlc-00.html

Can I use IFP Screen Share over a VPN?

Because of the highly custom nature of a VPN, we are not able to support this type of use. However we are happy to provide some guidance to assist in the setup process if this is your goal.

If you setup a VPN correctly then any remote devices will obtain an IP address within the subnet of your home/office network. As long as the following ports are open, your iOS device won't be able to tell the difference and you should be able to use your airplay connection over VPN:

Port Number	Type	Protocol	RFC	Used by
80	TCP	HTTP	2616	AirPlay
443	TCP	HTTPS	-	AirPlay
554	UDP / TCP	RTSP	2326	AirPlay
3689	TCP	DAAP	-	iTunes Music Sharing / AirPlay
5297	TCP	-	-	Bonjour
5289	TCP / UDP	-	-	Bonjour
5353	UDP	MDNS	-	Bonjour / AirPlay
49159	UDP	MDNS (Windows)	-	Bonjour / AirPlay
49163	UDP	MDNS (Windows)	-	Bonjour / AirPlay

There are a few common scenarios that we might see when dealing with using AirPlay over a VPN.

1) The AirPlay sender and receiver are in the same network, but the sending device is connected to a VPN. In this case the AirPlay sender may not see IFP. When this happens, the VPN provider should consider offering a "split VPN" which selectively routes traffic over the VPN depending on destination. If the AirPlay sender is an iOS device there are limited options for this.

2) IFP is connected to VPN, AirPlay sender is not on the VPN. This is essentially the same scenario as above in reverse, and can likely be solved with a split VPN or static route.

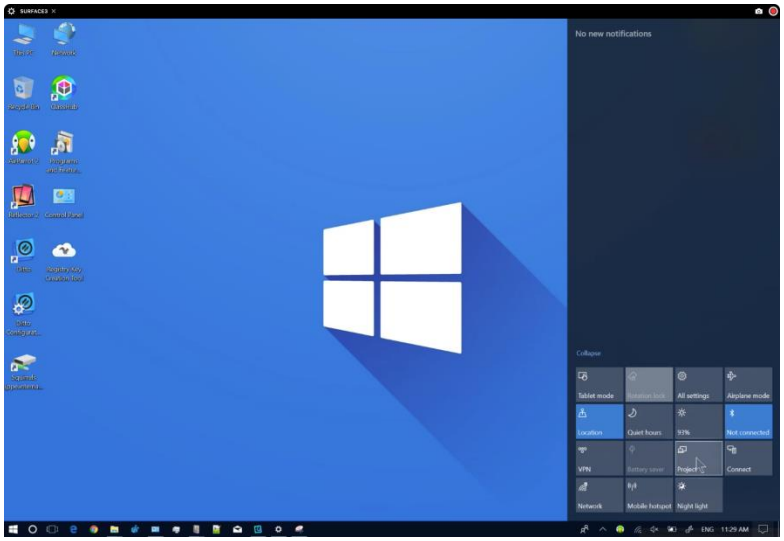
3) IFP and AirPlay sender are on different networks with a VPN between them. In this case, the VPN server would need to be configured to support Multicast traffic while using a single subnet. For this type of use your IT team should research this with your VPN vendor.

How to screen mirror from Windows 10 with Miracast

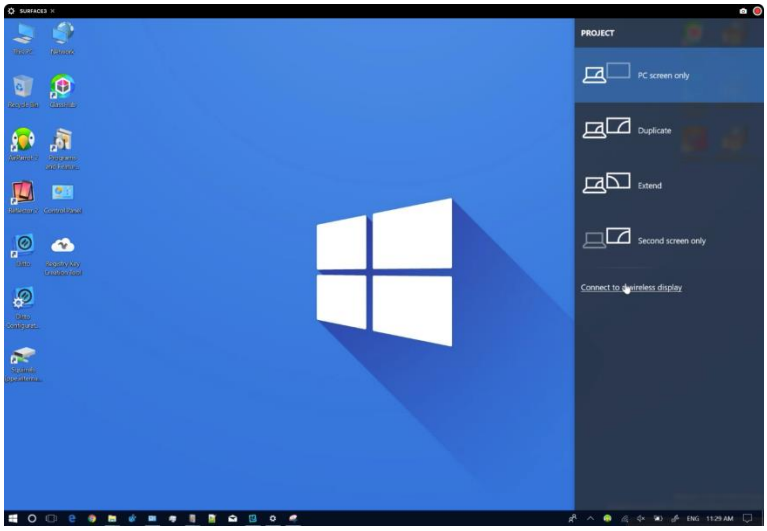
To connect a Windows 10 computer with Miracast, follow the instructions below.

1. Launch IFP Screen Share app.

2. Swipe right from the right side of your screen, and then select 'Project'. If you are using a mouse, click on the Action Center icon to the right of the Windows clock, in the lower right corner of the screen.

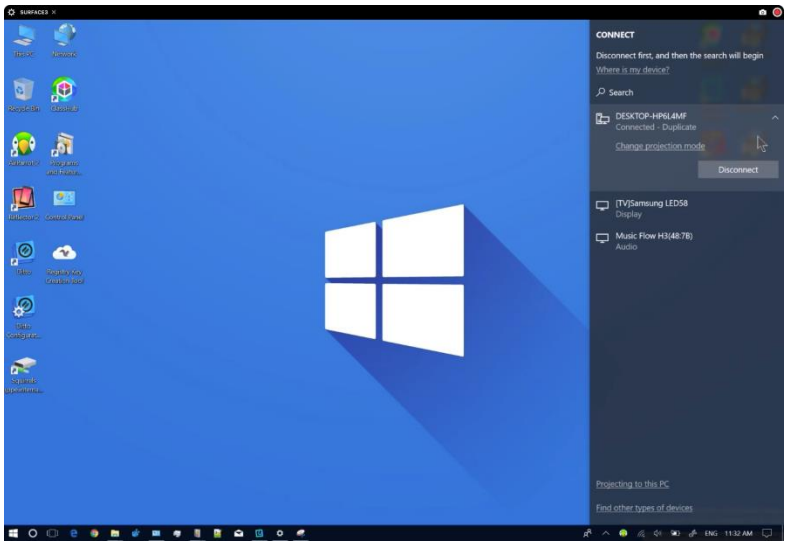


3. Choose an option that you would like to send, for example to mirror your primary display, select 'Duplicate', to use IFP as a separate monitor, choose the 'Extend' option.



4. Tap or click on Connect to a wireless display

5. Choose the name of your IFP enabled computer from the list when it appears, and your computer will be mirroring to IFP.



How do I cast my Android 5+ screen to IFP Screen Share?

To cast your Android device's screen to your computer, the device will need to meet specific requirements. Casting your Android screen is currently available on most devices running Android 4.4.2 and higher. Different steps are required for mirroring Android 4.4.2 devices and Android 5.0+ devices.

Follow the steps below to cast your Android 5 device to your computer:

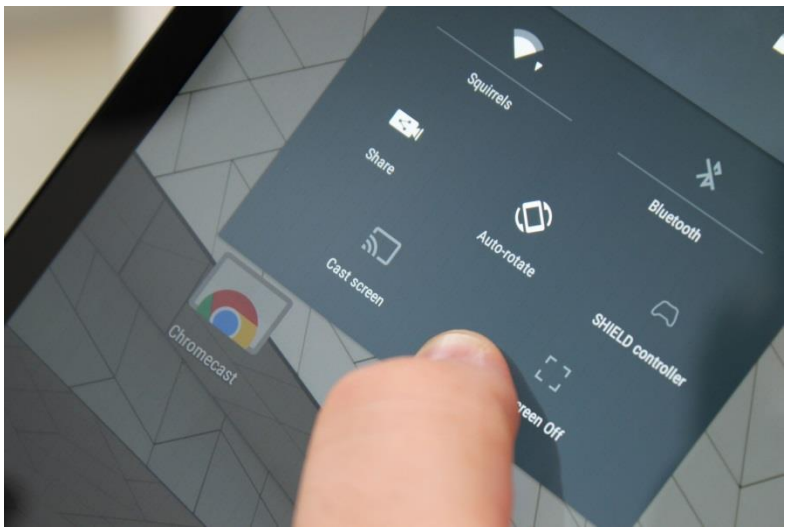
1. Be sure your device is connected to the same WiFi network as the computer that is running IFP.

2. Launch Screen Share App on your IFP.

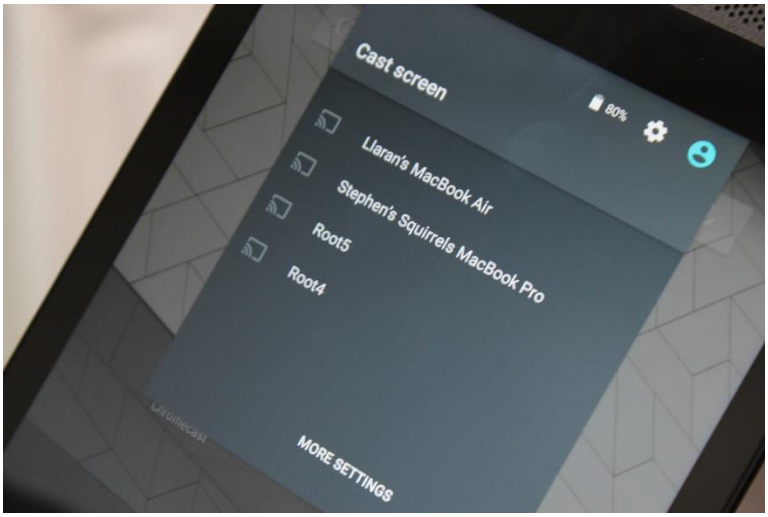
3. Pull down from the top of your Android phone or tablet screen to open the notification tray and reveal quick settings.

4. Tap the "Cast screen" option.

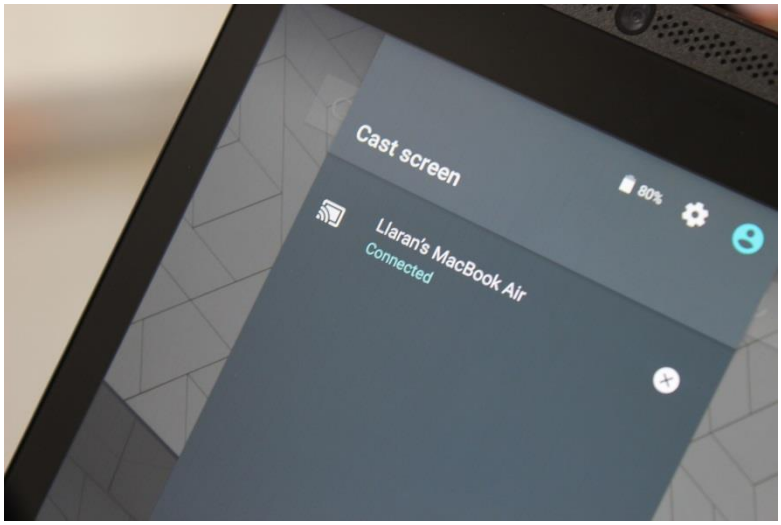
(Note: Some devices may require this setting to be added to the tray. The Cast screen option may also be named differently.)



5. You will be presented with a list of available devices for mirroring. Tap the name of your IFP in the list.



6. Your device should begin mirroring. Your phone or tablet will display a connected message.



How to screen mirror to IFP with iOS 8, 9, or 10

To mirror your iOS device to your IFP, you must be using an iPhone 4s or newer, iPad 2 or newer or iPod 5th generation. AirPlay mirroring is built in on these devices. No software, other than IFP Screen Share, is required.

Follow the steps below to mirror your iPad, iPhone or iPod:

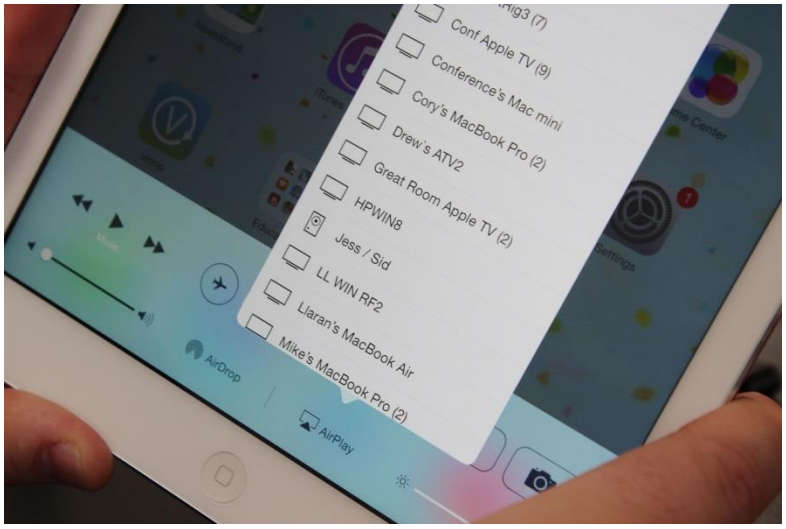
1. Be sure your iOS device is on the same network as the computer that has IFP installed.

2. Launch Screen Share on your IFP.

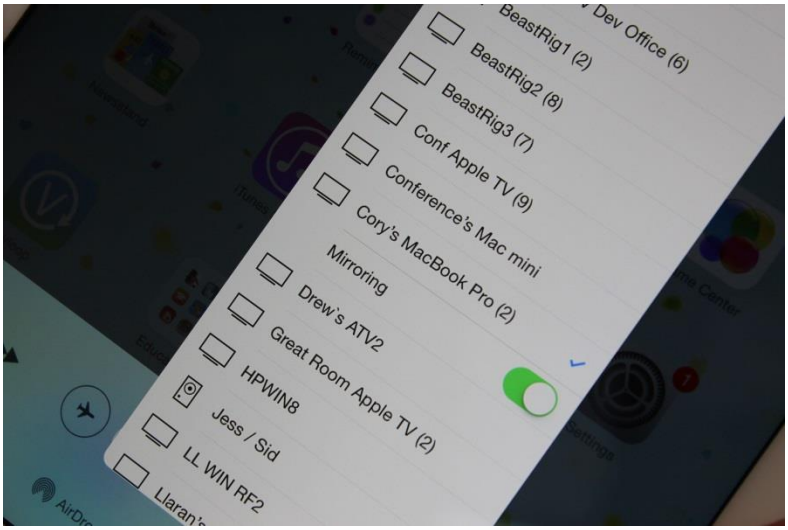
3. On your iOS device, swipe up from the bottom of the screen to bring up Control Center.

4. Tap on the AirPlay menu, and you should see a list of available devices.

If you don't see the AirPlay icon please refer to this help topic: I do not see my AirPlay icon.



5. Tap on your computer's name, then swipe the mirroring toggle switch found underneath the name of your computer.



6. Your iOS device should now be mirroring successfully to your computer.

These steps are the same for both iPad, iPhone and iPod using iOS 7, iOS 8, iOS 9, and iOS 10.