WinTV Extend
Stream live TV over Wi-Fi or the Internet

Quick Installation Guide

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Overview

WinTV Extend is an Internet streaming server which is part of the WinTV v8 application. WinTV Extend makes a connection with a remote device such as an iPad or iPhone, takes the live video from WinTV v8, formats it and then transmits it over the Internet to the remote device.

Currently, WinTV Extend will send live TV to the following devices:

- Apple iPad, iPhone and iPod touch
- Apple Mac with Safari and a Flash 10-1 player
- Windows 7 based PCs with any Internet browser and Flash 10.1
- Android phones and tablets running Android version 2.2 or later

How does WinTV Extend work

To send live TV from a WinTV-HVR TV tuner over the Internet to a remote device such as an iPad or iPhone, the WinTV v8 software has a built in component called WinTV Extend.

Here are the steps WinTV Extend uses to send TV to a remote device:

1. A PC at home (or in the office) has a WinTV-HVR and WinTV v8 installed. WinTV v8 does not have to be running on the PC. Until WinTV Extend starts to send video to the remote device, WinTV v8 can be used to watch TV on the PC screen.
2. WinTV Extend receives a connection request over the Internet (or over a local Wi-Fi connection) from the remote device (iPad, iPhone, etc.).
3. WinTV Extend asks the user of the remote device for a PIN number.
4. If the PIN number is correct, WinTV Extend sends the remote device a TV channel list (all of the channels the WinTV-HVR can tune to). The default channel is your home, unless you have changed the Start channel.
5. The user of the remote device can click on the channel name or number they want to watch, and the channel number is sent to WinTV Extend. WinTV v8 stops displaying live video on the PC, and begins receiving the video stream from WinTV Extend and plays the video to the user.

What is needed to use WinTV Extend

If you are using WinTV Extend to watch live TV on your iPad or other device in the home over Wi-Fi, you will need a computer running WinTV v8. The installation on the remote device should be pretty simple.

If you are using WinTV Extend to watch live TV from outside your home, besides a PC and an installed WinTV-HVR, you need to have a Port number to open in your firewall (the default port number is 7799). This Port number can be changed.

Most home and office routers block all network connections except for standard web browser connections which flow through Port 80. To use WinTV Extend, you need to have your router allow Internet communication through Port 7799 (the default port used by WinTV Extend, but this port number can be changed).

Configuring WinTV Extend

Once WinTV v8 is installed, you can run the WinTV application. Set up your channels as instructed in the WinTV v8 Quick Install Guide. Click the Configuration button on WinTV v8 (the gear icon) and then click the WinTV Extend tab. This is where you will configure WinTV Extend.

Note: if you want to watch live TV over the Internet with WinTV Extend, you need to open a Port on your router for WinTV Extend. See the section below called Configuring WinTV Extend for more information. For the default WinTV Extend Port you will use (the default port used by WinTV Extend is 7799), but this port number can be changed). This Extend Port is used for both Wi-Fi and Internet TV.

Step 1:
Click the button Enable streaming to remote iPhone or PC clients.

Step 2:
Click the Test Remote Connection button. This sends a message to Hauppauge requesting that a check be done on your WinTV Extend configuration.

When the message “Local connection test succeeded” appears, it means your home network is properly configured to watch WinTV Extend over your home Wi-Fi network.

If you want to watch TV from outside your home, look for the message “Remote connection test succeeded”. If you get a red error message, your firewall is blocking the connection for WinTV Extend. See the section below Opening a Port on Your Router for some tips.

Step 3:
An IP address is an Internet address. The result of Test Remote Connection in Step 2 are two Internet addresses which you should注意:

- WinTV Extend in your home (from a iPad, iPhone or iPod over Wi-Fi or a computer on your home network): Use the Internet address which is listed as From your home Wi-Fi connection. In this example, this address is:
  http://172.16.177.799

- WinTV Extend from outside of your home over the Internet: Next to the message “Remote connection test succeeded” there is the IP address of your PC as seen from outside your home or office. In the example above, this address is:
  http://68.195.226.130:7799

To connect to WinTV Extend from outside the home over the Internet, on your iPad or other Apple device, open the Safari browser and enter this address. On a PC, open your web browser and enter this address. You should see the WinTV channel list on your remote device.

Step 4:
The PIN number is used when accessing WinTV Extend over the Internet from outside your home. If you would like to use WinTV Extend from outside your home, click Allow remote access from the Internet. The default Pin is 0000. You can change it if you like.

Watching TV on your iPhone, iPad or other remote device

On your iPhone, iPad or Mac, you can see the WinTV channel list next to the video window.

- On an iPad, iPhone or Mac you will see the WinTV channel list next to the video window.

Note: when using Safari on the iPad, to scroll the channel list, use two fingers. Touch a channel number once to select the channel. Click once on the TV picture to see the video controls: 30 second replay, pause, play, full screen, audio volume adjust.

You will then see a message on the screen which says:

Buffering
After the WinTV Extend buffer on the PC is full, you will see a message: Transcoding stream length

Data rate configuration

You can adjust the data rate for the transmission of video. On your remote device click the Settings tab and you will see a list of possible data rates. For most 3G connections, you should keep the Internet bitrate at a value below 128kbps.

Note: If you want to watch live TV over the Internet with WinTV Extend, you need to open a Port on your router for WinTV Extend. See the section below called Configuring WinTV Extend for more information.

Opening a Port on Your Router

In order for WinTV Extend to establish an Internet connection from a remote device such as an iPad or iPhone, there needs to be an open Port on your Internet router.

Each Internet router is different, but they all have settings which allow a user to specify:

- A Port number to open and
- A local Internet address to assign this Port to WinTV Extend uses 7799 as the default Port number to open. But you can change this port number (see step 2 above).

The local Internet address will be the address of the PC which is running Extend (the Internet address which is listed as From your home Wi-Fi connection in step 3 above).

We have a few router examples below from D-Link and Netgear.

Configuring a port on your D-link router

First, open a browser window on your PC. Then enter the local Internet address of your router. Most routers use the address: http://192.168.0.1

You will need to enter a Password. Most routers have the password on a label on the bottom of the router. Once you have entered your password, you will see the main router menu:

In most routers, the setting of the Port is done in an Advanced menu.
After you log in to the router, click the Advanced tab.

In the Advanced tab, click on Virtual Server.

In the spot for IP Address, enter the IP address of the PC which is running WinTV Extend can be found next to From your home Wi-Fi connection in Step 4 above. In this example, the local Internet address is: 192.168.0.193

Set your selected Port (WinTV Extend uses port 7799 as the default).

Then click Save Settings.

You will now see WinTV Extend listed in the list of Services which has Port Forwarding supported by your router.

In Ports - Custom Services:
- the Starting and Ending Port (the default is 7799 and they should both be the same since WinTV Extend only uses one port)
- the Server IP address (the local IP address of your PC which is running WinTV Extend).
- Service Type should be TCP/IP
- You can also set the Service Name to WinTV Extend.

Then click Apply.

The local Internet address will be the address of the PC which is running WinTV Extend can be found next to From your home Wi-Fi connection in Step 4 above.

In this example:
- set Enabled
- set the Private IP to 192.168.0.69
- set Protocol type to TCP
- set the Private and Public port to 7799

Therefore, the complete local address of WinTV Extend on this PC is:

http://192.168.0.69:7799

When you have finished setting the Port for WinTV Extend, you will see it listed with the other open ports on your PC (ports 80 and 443 are needed for all web browsers like Firefox or Internet Explorer).