

Tutorial for Automating Your TV Show Downloads – *Cut the Cord!*

By Anonymous. For #DC423. On 2016-4-27.

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SETUP.

Materials:

Windows Machine (the tutorial explains it for Windows, though you can set it up for Mac or Linux)	Sonarr	Two different bittorrent applications (utorrent, bittorrent, etc.)
Decent-sized hard drive	Scissors...to cut the cord	Plex Media Server
\$0 (it's free!)	Roku/PS3/etc with Plex Media Server Installed	1-2 hours setup time

What is this tutorial?

This tutorial introduces a method for automating the download of your favorite TV episodes through the use of torrents. The time between the show airing and it being available for viewing on your media server is only about 20 minutes; all without you having to click a thing once you set it all up. Never miss a show again!

Notes:

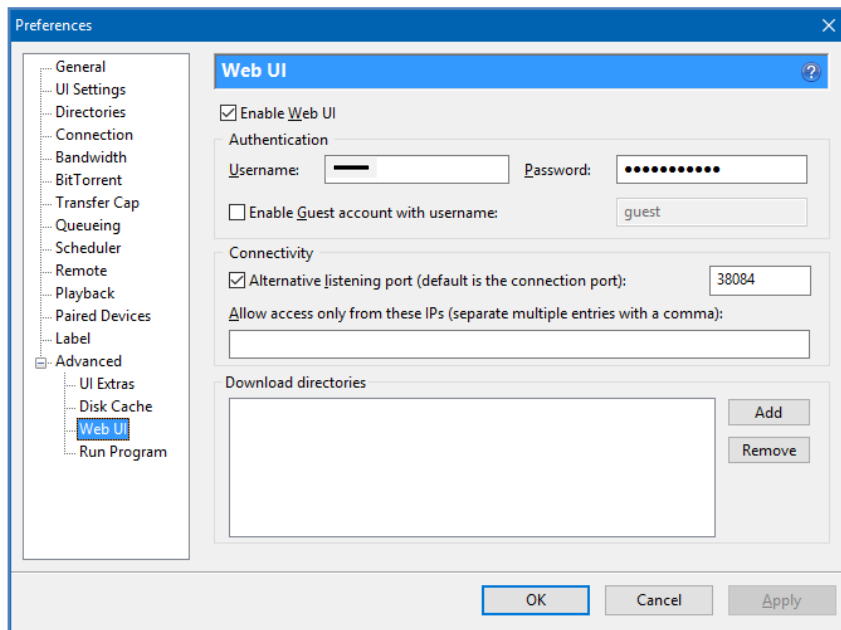
- Plex and Sonarr are to be installed on the same PC for this tutorial.
- This tutorial assumes you have setup Plex Media Server already. If you haven't, go set that up first on the PC, throw some media into it, and verify that you can stream shows to your other devices such as a Roku or PS3 using the Plex app for those devices. In the **Plex Library** settings on the PC, set it to **Update my library automatically**. This will allow newly downloaded files to be immediately detected minimizing the time between when the show airs and when you can view it on Plex.
- **Timeline:** My shows have been known to finish downloading and be watchable on Plex anywhere from 3 minutes to 1 hour after airing on TV. Factors:
 - Time until torrent appears on website
 - Download time. This depends on subfactors that can be out of your control such as:
 - How soon a torrent is uploaded
 - Connection speed of your internet
 - Connection speed of seeders (uploaders)

- Size of file
 - Mandatory seed/upload time: 1min
 - Renaming and transfer to end folder destination: <1 second
 - Plex detection and TV show available to watch: <1-20 seconds
- This tutorial assigns uTorrent to be your client for exclusively downloading your Sonarr TV show torrents. If you're like me and are confused easily, use another torrent application for those times where you are downloading other torrents on an individual basis. This is why I recommend installing a torrent application in *addition* to uTorrent
- uTorrent has ads that are very annoying because they frequently change and make noises. Follow this tutorial to learn how to disable them: <http://bitsnapper.com/disable-ads-from-utorrent/>
- This tutorial requires a total of three folders that all have a purpose:
 - Sonarr folder
 - Where the TV shows are first downloaded to. Once download is complete, uTorrent seeds/uploads for 1 minute and they are then transferred to the Sort folder
 - Sort folder
 - Where Sonarr renames the files to a consistent schema set by the user during this tutorial. They are then transferred to the final destination in the TV Shows folder
 - TV Shows folder
 - Final resting place of all the shows. This is the directory that Plex monitors for file changes so it can add any new shows to its library automatically. Shows are stored in folders by title and then by season under that.
- Some private tracker torrent websites do not have a search capability which makes automatically downloading a pain. Some private tracker torrent sites download .rar files too, which requires you to set up a way to automatically extract them. That is outside the scope of this tutorial, as I do not show how to set this up using a private tracker.
- Staying anonymous is important if you will be downloading any sort of torrent for any length of time. Protect yourself by using the following safeguards:
 - An install of Peerblocker that is kept up-to-date: <http://www.peerblock.com/releases>
 - A secure VPN
 - A proxy (there can be compatibility issues with certain torrent applications)
 - Utilize Usenet instead of torrents (would make most of this tutorial null, but Sonarr does support Usenet so you can still achieve your goals)
 - Googling how to be safe when torrenting
 - **DO NOT USE THE PIRATEBAY. I REPEAT: DO NOT USE THE PIRATEBAY.**

Good luck and happy downloading!

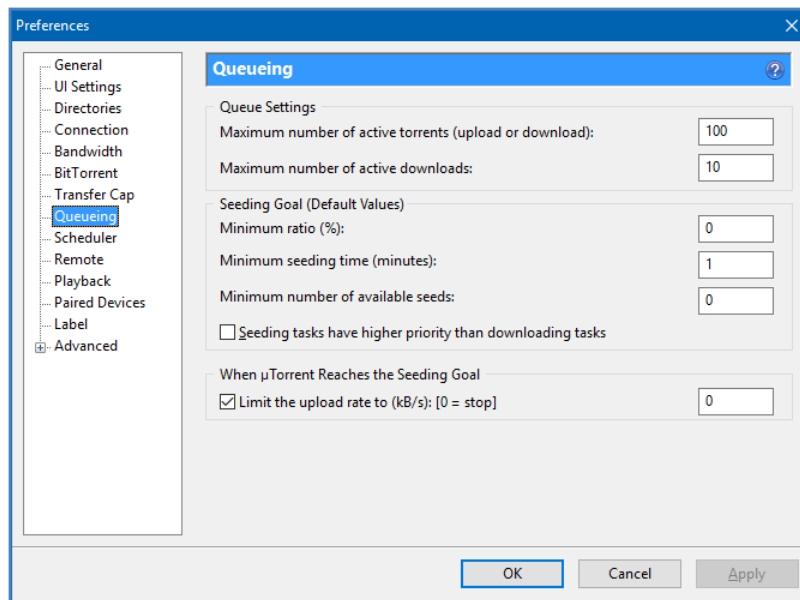
Tutorial:

- 1) Download Sonarr: <https://sonarr.tv/#download>
- 2) Run installer and check the **Install as a Windows service** checkbox.
- 3) Download the latest stable version of a Bittorrent (this will be used for downloading non-TV show torrents manually...if you already have a torrent app like this, then just use it instead; this hardly has any configuration): <http://www.bittorrent.com/bittorrent-free>
- 4) Download the latest stable version of uTorrent (or your preferred torrent application, though we will use uTorrent for this tutorial): <http://www.utorrent.com/intl/en/downloads>
- 5) Set uTorrent to start up automatically (important in case your machine ever loses power).
- 6) In uTorrent, go to **Options -> Preferences**
- 7) Set identical settings to these, but make your own secure username and password.

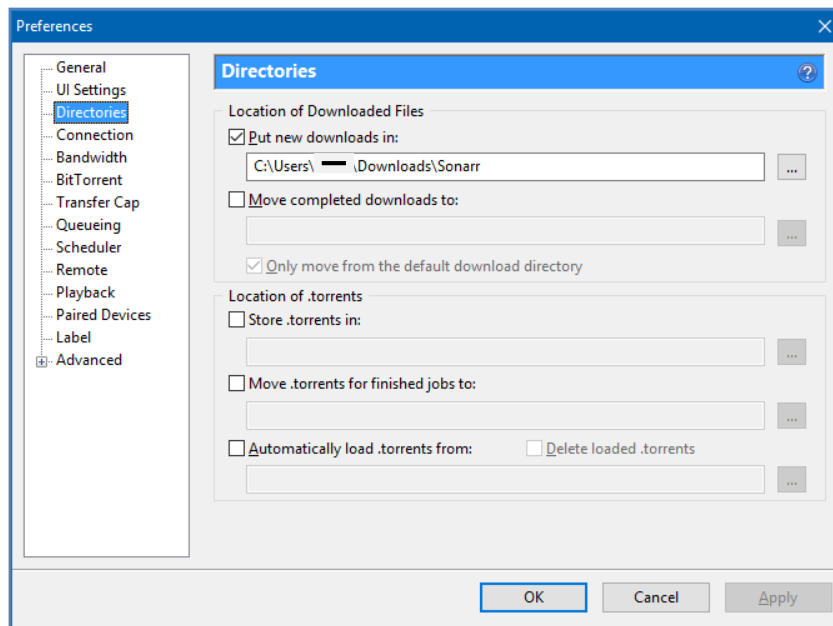


- 8) Duplicate these settings too.

Note: The **Minimum seeding time** here is the lowest time you can set your torrent to seed. It's set to 1 minute because if you are using *public trackers* (more on that later) you will want to *minimize* the amount of time your files are uploading to other users. Once the file download is complete, this setting requires the torrent to seed (upload) for only 1 minute. It then continues its journey and is removed from uTorrent (but not your hard drive).



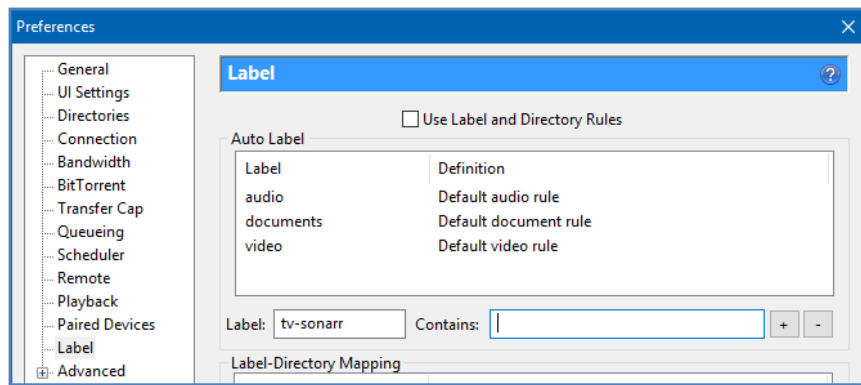
- 9) Create a new folder in Windows and name it what you want, in my case I called mine **Sonarr**. This is where files are initially downloaded to. They will later go into a sorting directory, then off to a final resting directory. More on that later.



- 10) Create a folder named **Sort** in Windows. This is where downloaded files will go to quickly be sorted before they arrive at their final destination.

Go to the **Label** section in the uTorrent preferences.

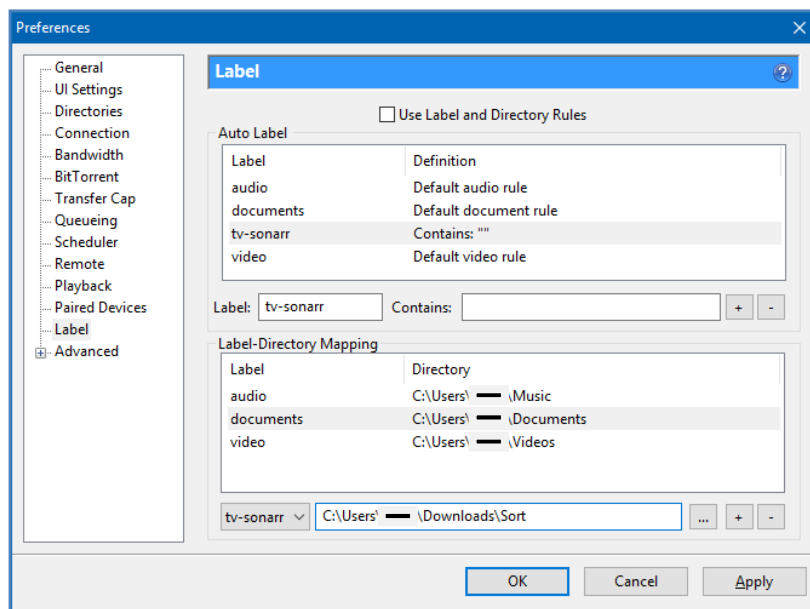
In the **Label** text box at the top, type **tv-sonarr**, leave the **Contains** field blank, then click the **+** button.



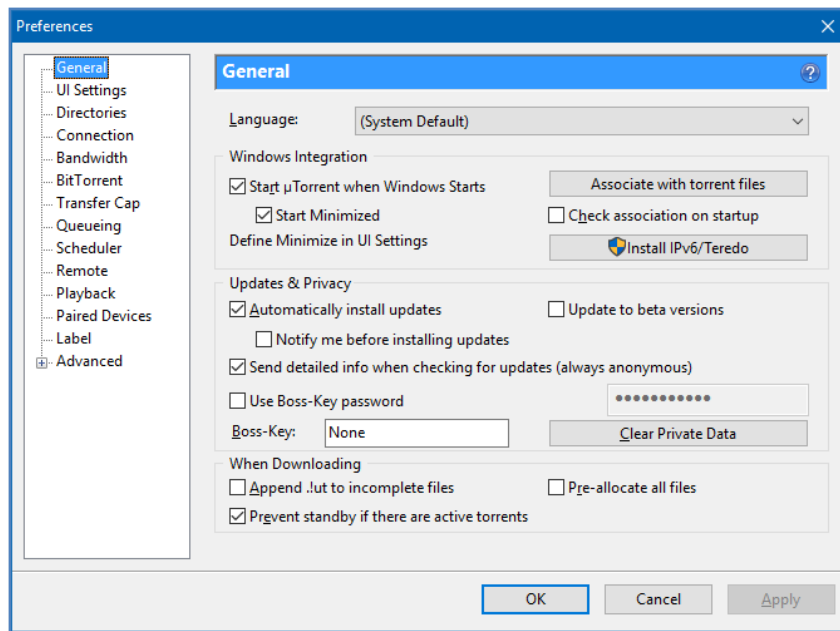
It should add that new label under the top **Auto Label** section. Click this new label so its selected, then using the drop down at the very bottom of the screen, click it and select **tv-sonarr**.

Now click the button with the three dots to choose the directory. Point this to the **Sort** folder you just made.

Finally, click the + button and it will add the label under the bottom **Label-Directory Mapping** section. Click Apply.



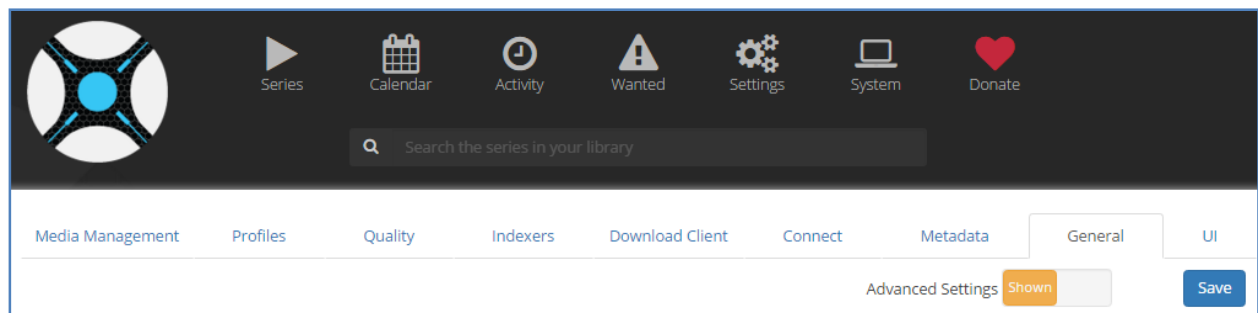
11) Set the following settings on the **General** tab.



12) Open up Sonarr by clicking the shortcut in your start menu or desktop.

13) **Settings -> General** tab.

14) Click the sliding button next to **Advanced Settings** so that advanced settings are set to be shown (this will keep the Advanced Settings enabled regardless of what tab you go to from here on out so keep it set this way because you'll need the advanced settings).



15) Set the following settings:

Note: I set my **Authentication** to **None** because my server is only accessible from within my network. If you would like to forward the port on your router so that you can access this from anywhere on the web at anytime, then choose **Forms (Login page)** from the dropdown under **Authentication** and create a secure username and password.

If you change the port number, don't forget what it is because you'll need it in a minute.

Start-Up

Bind Address

*

⚠️ ?

Port Number

38082

⚠️

URL Base

⚠️ ?

Enable SSL

No

⚠️

Open browser on start

Yes

?

Security

Authentication

None

⚠️ ?

API Key

7deb865e612e4bf2941063309933340

📄 ↺ ⚠️

Logging

Log Level

Info

⚠️

Analytics

Enable

Yes

⚠️ ?

Updates

Branch

develop

16) Now save your settings by clicking the blue **Save** button at the top right.

17) Reboot your host machine.

18) To load Sonarr again, go into a browser and type <http://localhost:38082/gui>. I suggest you bookmark this link. If this doesn't load, look for the Nzbdrone service in Windows Services and mess around with it.

19) Go to **Settings -> Media Management** tab. Set the following.

Note: you can set these to your complete preference by clicking the **+** buttons next to them, **but** this is the **recommended settings** for using Plex so you should probably set it this way.

I **strongly** recommend that if you change anything else here, you still duplicate how I have the **Season Folder Format** because it's just cleaner for keeping those folders consistent. Change that by clicking the **+** button -> **Season -> 01**.

Media Management
Profiles
Quality
Indexers
Download Client
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Advanced Settings
Shown
Save

Episode Naming

Rename Episodes

Yes

Replace Illegal Characters

Yes

Standard Episode Format

{Series Title} - S{season:00}E{episode:00} - {Episode Title}

+

Daily Episode Format

{Series Title} - {Air-Date} - {Episode Title}

+

Anime Episode Format

{Series Title} - S{season:00}E{episode:00} - {Episode Title} {Quality Full}

+

Series Folder Format

{Series Title}

+

Season Folder Format

Season {season:00}

+

Multi-Episode Style

Prefixed Range

Single Episode Example

Series Title (2010) - S01E01 - Episode Title (1)

Multi-Episode Example

Series Title (2010) - S01E01-E03 - Episode Title

Daily-Episode Example

Series Title (2010) - 2013-10-30 - Episode Title (1)

Anime Episode Example

Series Title (2010) - S01E01 - Episode Title (1) HDTV-720p v2

Anime Multi-Episode Example

Series Title (2010) - S01E01-E03 - Episode Title HDTV-720p v2

Series Folder Example

Series Title (2010)

Season Folder Example

Season 01

Folders

Create empty series folders

Yes

Importing

Use Hardlinks instead of Copy

Yes

File Management

Ignore Deleted Episodes

Yes

Download Propers

Yes

Analyse video files

Yes

Change File Date

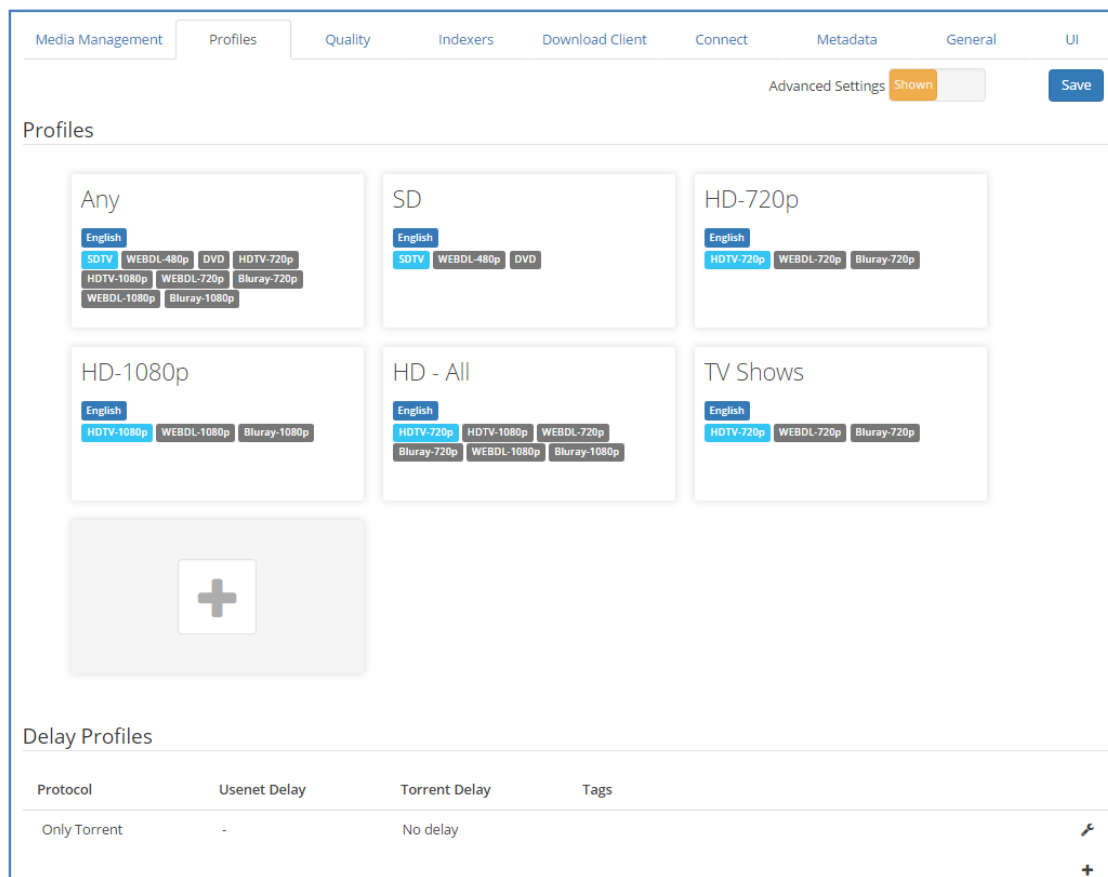
None

Recycling Bin

20) Click the **Save** button on the main page.

21) Now go to the **Profiles** tab.

This is where you set the *quality* of the TV show files you want to download. You can see that I added a profile boringly called **TV Shows** (I ended up putting the exact same settings in as the one named **HD-720p**, but that's beside the point).



22) Click the giant + button under the **Profiles**. We are going to create one.

23) Here is how I have my **TV Shows** one setup.

Note: By clicking the hamburger icon (the three horizontal lines) on each setting, you can drag and drop them around. This matters because Sonarr will prioritize searching for your shows depending on the order you have these in. **But**, the order is upsidedown. So set your most preferred search at the bottom of the list.

Sonarr is cool in that it will keep downloading higher and higher quality versions of the torrent and replacing it if it finds better a quality torrent. So in the **Cutoff** setting it basically means *Stop downloading better quality once I reach x quality*.

Remember: the higher the quality, the more space the files will take up on your computer, so choose wisely.

Edit

Name

TV Shows

Language

English

?

Cutoff

HDTV-720p

?

Qualities

☐ Bluray-2160p
☐ WEBDL-2160p
☐ HDTV-2160p
☐ Bluray-1080p
☐ WEBDL-1080p
☒ Bluray-720p
☒ WEBDL-720p
☒ HDTV-720p
☐ Raw-HD
☐ HDTV-1080p
☐ DVD
☐ WEBDL-480p
☐ SDTV
☐ Unknown

?

Delete

Cancel

Save

24) Back on the **Profiles** tab, set it for the following settings. This will cause Sonarr to grab a torrent as soon as it finds one matching your criteria.

You may be thinking *why would it give me the option for a delay?* The reason is because some people may want to wait until a higher quality torrent is available.

Delay Profiles			
Protocol	Usenet Delay	Torrent Delay	Tags
Only Torrent	-	No delay	<div>⚙</div> <div>+</div>

25) Click the **Save** button on the main page.

26) Go to the **Quality** tab. This is where you can set the range of file size to download. So let's say you had a profile for 1080p files and forget to set the range to a max size and suddenly you have a ton of 40GB TV shows. Oops. This is why you need to set these, especially if you are hard for space on your hard drive. If you are unsure of what to put, keep the defaults, you can always tweak this later.

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Quality Definitions

Quality	Title	Size Limit ⓘ
Unknown	Unknown	0 B 0 B 2.93 GB 5.86 GB
SDTV	SDTV	0 B 0 B 2.93 GB 5.86 GB
WEBDL-480p	WEBDL-480p	0 B 0 B 2.93 GB 5.86 GB
DVD	DVD	0 B 0 B 2.93 GB 5.86 GB
HDTV-720p	HDTV-720p	195.00 MB 390.00 MB 3.50 GB 7.01 GB
HDTV-1080p	HDTV-1080p	0 B 0 B 2.93 GB 5.86 GB
Raw-HD	Raw-HD	0 B 0 B Unlimited Unlimited
WEBDL-720p	WEBDL-720p	195.00 MB 390.00 MB 3.50 GB 7.00 GB
Bluray-720p	Bluray-720p	195.00 MB 390.00 MB 3.50 GB 7.00 GB
WEBDL-1080p	WEBDL-1080p	0 B 0 B 2.93 GB 5.86 GB
Bluray-1080p	Bluray-1080p	0 B 0 B 2.93 GB 5.86 GB
HDTV-2160p	HDTV-2160p	0 B 0 B Unlimited Unlimited
WEBDL-2160p	WEBDL-2160p	0 B 0 B Unlimited Unlimited
Bluray-2160p	Bluray-2160p	0 B 0 B Unlimited Unlimited

27) Click the **Save** button on the main page.

28) Go to the **Indexers** tab. This is where you set the websites that Sonarr will actually search for your torrents.

You can change the RSS Sync interval to something like 1 minute instead of 10. At the time of this tutorial I was lazy and kept it default. Depends how quick you want your shows.

I only have two Indexers added and they are both **public** trackers. And to be honest, so far they have been able to find all the shows that I watch. So start with these two sites and maybe add some more later if they aren't finding your shows. See difference between public and private trackers below.

Public Tracker

-No accounts/logs

-No requirement for seeding, so we can stop seeding immediately after downloading the torrent to reduce the risk of getting caught by some corporation watching the downloads

--No .rar files to figure out how to extract (at least with the two sites you will add below, Kickass Torrents and Rarbg despite the name)

-The general public can see your IP when you download if you are not protecting yourself

-May have slightly slower download speeds than private trackers

Private Tracker:

-Built around exclusive invite-only accounts

-Privacy (invite-only accounts lowers the chance that law enforcement or copyright lawyers are watching your downloads)

- Most require a minimum seeding (uploading) ratio which requires you to keep torrents in your torrent application longer)
- Frequently downloads the shows in .rar files which are a pain to extract automatically and is past the scope of this tutorial

Media Management Profiles Quality **Indexers** Download Client Connect Metadata General UI

Advanced Settings **Shown** Save

Indexers

KickassTorrents
RSS Search

Rarbg
RSS Search

+

Options

Minimum Age ?

Retention ?

RSS Sync Interval ⚠ ?

Restrictions

Must Contain	Must Not Contain	Tags
	<div>suffix nfofix Deleted.Scenes DVDR DVDR-EXTRAS</div> <div>xRed ReEnc FUNNY BIT Hevc x265</div>	

29) Click the giant + button and we will set a couple of them up.

Add Indexer

Sonarr supports any indexer that uses the Newznab standard, as well as other indexers listed below. For more information on the individual indexers, click on the info buttons.

Usenet

Newznab
Custom Presets

Fanzub

omgwtfnzbs

Womble's

Torrent

BitMeTV

Torznab
Custom Presets

BroadcastheNet

HDBits

IP Torrents

Kickass Torrents

Nyaa

Rarbg

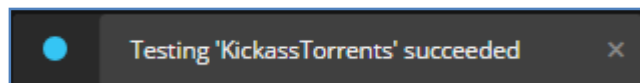
TorrentLeech

Torrent RSS Feed

Close

30) Click the **Kickass Torrents** tile.

31) Click the **Test** button. When it completes, you should see this notification on the bottom right corner of your browser:



32) Now don't just click **Save**, click the arrow on that button and select **Save and Add**.

33) Click the giant **+** button again.

34) This time, add **Rarbg**.

35) **Test** it before you click the arrow next to **Save** and select **Save and Add**.

36) Back under the **Indexers** tab, add the following keywords to avoid getting crappy torrents. Feel free to customize this if you've had bad experiences in the past. **Hevc** and **x265** are important because **Plex** doesn't support them anyway.

Restrictions		
Must Contain	Must Not Contain	Tags
	<div> <div>subfix</div> <div>nfofix</div> <div>Deleted.Scenes</div> <div>DVDR</div> <div>DVDR-EXTRAS</div> </div> <div> <div>xRed</div> <div>ReEnc</div> <div>FUNNY</div> <div>BIT</div> <div>Hevc</div> <div>x265</div> </div>	

37) Click the **Save** button on the main page.

38) Go to the **Download Client** tab.

The **Drone Factory** setting here is the second step in the torrent process. The first was a folder you set up earlier called **Sonarr** (or whatever you called it) which is where the initial files are downloaded. Once they are finished downloading they stop by this **Sort** folder (can be named anything you want, same with that earlier **Sonarr** folder but whatever it is, make sure it is identical to the Sort folder location you created in uTorrent under the **Labels** section) where the filenames are changed to abide by the naming rules you set earlier. Make sure you create this folder before you assign its location.

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Download Clients

uTorrent
Enabled

+

Completed Download Handling

Enable
Yes
?

Remove
Yes
?

Failed Download Handling

Redownload
No
?

Drone Factory Options

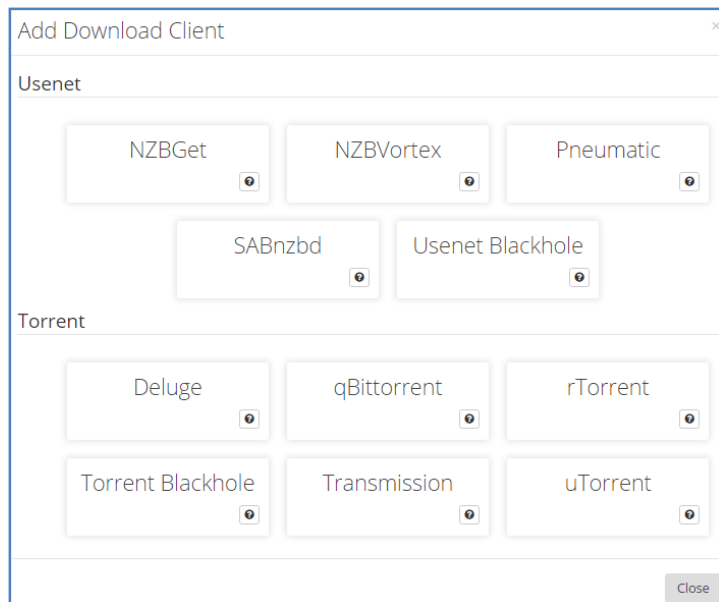
Drone Factory
C:\Users\...\Downloads\Sort\
? ? ?

Drone Factory Interval
1
? ?

Remote Path Mappings

Host	Remote Path	Local Path

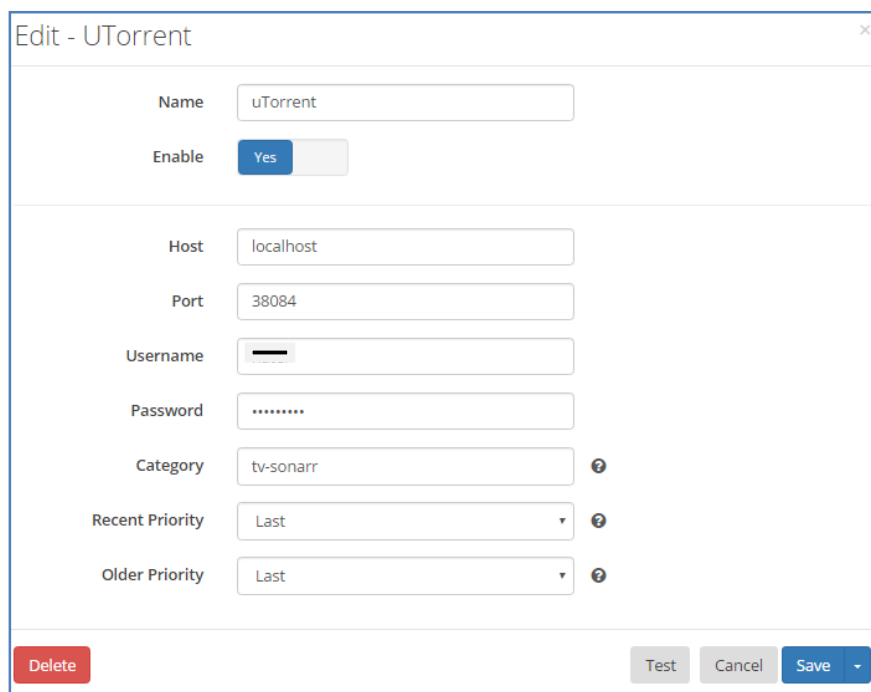
39) We are going to add **uTorrent** so click the giant **+** button.



40) Set the following settings.

Make sure the **Port** is set to the same port you set up in uTorrent earlier under the **WebUI** settings.

Make sure the **Username** and **Password** match what you set in uTorrent earlier under its Web UI settings.



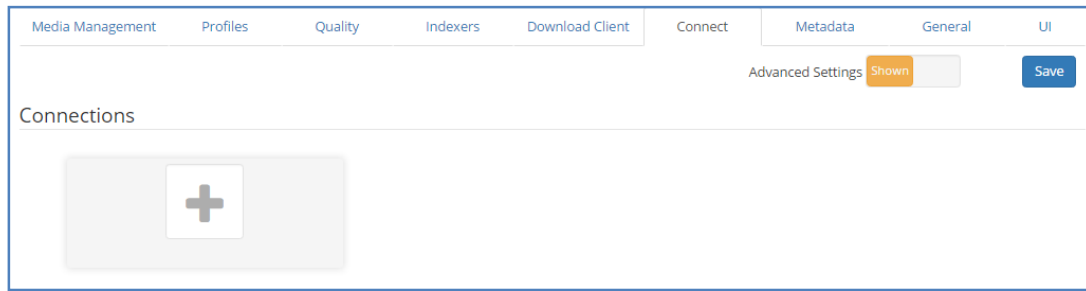
41) Click the **Test** button, wait till you see the successful notification in the bottom-right of your browser, then click **Save**.

42) Click **Save** on the main page.

43) Go to the **Connections** tab.

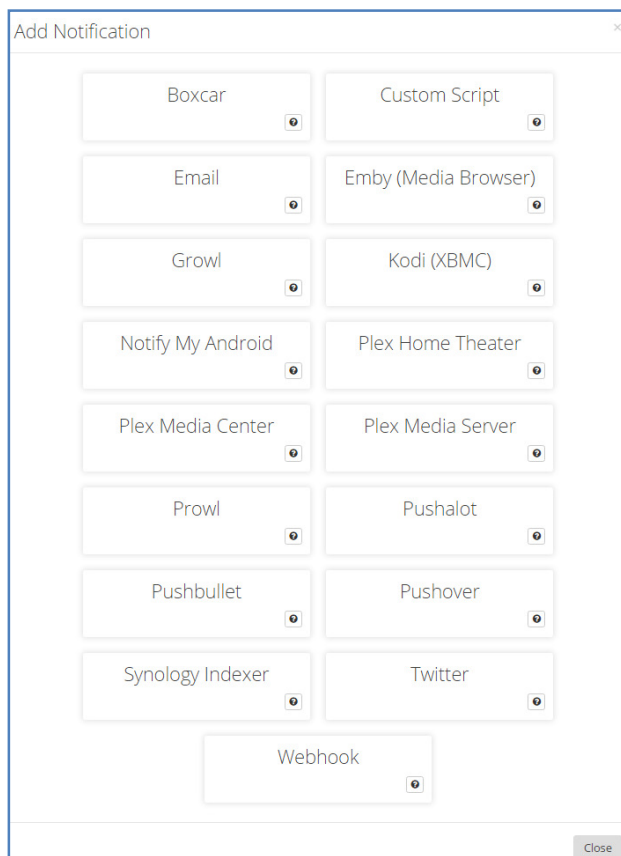
Now I don't have anything set here so feel free to skip these few steps, but this is where different stages of your

downloads will trigger a notification to a service of your choice.



44) The following are services you can set up to be notified on. I figured this might get annoying so I don't have it on, but you may find it plenty useful!

Note #1: you do **not** have to add Plex in here for Plex to update with your new downloads. That is separate.



45) If you click on one of those tiles, such as **Email**, you can see the options.

A cool use case for Email that I hadn't thought of until now is to inevitably receive a text every time a download finishes.

You can do this by sending an email to your number 5555555555@vzwpix.com or the equivalent on your cell network. You see, if you want to send a text to someone on Verizon but don't have a phone on you (???) then anyone use this method. But in this case, you could have it send a notification every time it **Downloads** a new file. Because then you know that you are only <5 minutes from it showing up on your Plex server and be ready

to watch (depending on how frequent you have Plex check for new media).

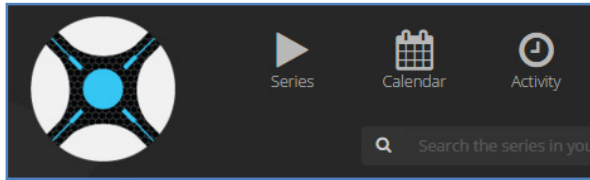
- 46) Skip the **Metadata** tab. This content is auto-populated from other steps you did.
- 47) Briefly check out the **UI** tab, but you probably don't need to change anything here.
- 48) Now we have to open the ports on your router so torrents will actually download. Open uTorrent again. Go to **Options -> Preferences -> Connection**. Copy that port number down.

- 49) Logon to your router and go to the firewall/port settings. Add an exception for your media servers internal IP for uTorrent and the port number you just copied down from uTorrent.

Note: If you want to allow remote management for uTorrent or Sonarr you can add those ports here too.

Application Name	External Port	Internal Port	Protocol	To IP Address	Enabled
utorrent	29975	29975	Both ▼	192 . 168 . 1. 100	<input checked="" type="checkbox"/>

50) Go back to Sonarr and click **Series**.



51) **IMPORTANT:** If you **already have shows download on your machine that you want to import into this whole process**, you need to stop and set them up now before you add new shows.

All you need to do in order to prepare your current TV shows to be imported is create a nice folder schema in Windows that Plex likes, such as the following. Below is an example from mine:

C:\Users\-----\Downloads\TV Shows\The Blacklist\Season 03\

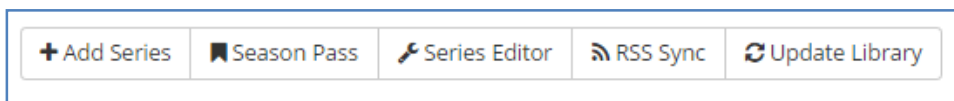
And then I have all of my raw TV show files in that root directory for that season of that show.

Take your time manually putting your current media into that folder schema. You can ignore the file names, they are less important than getting stuff in their designated folders.

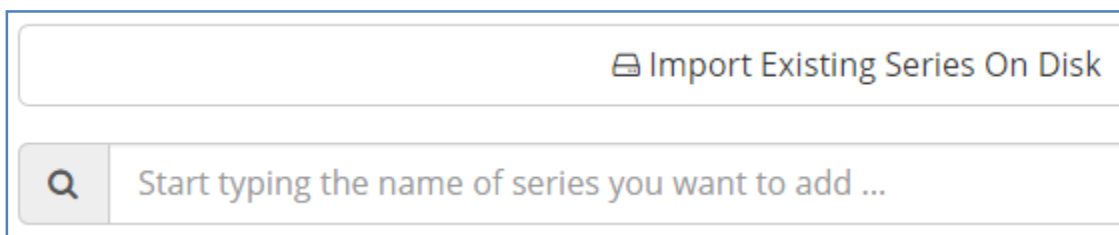
Don't forget to point Plex to the TV Shows folder once you this step or it will never see your shows no matter what you do.

52) Once you have your old media in their proper Windows folders, go back to Sonarr to the **Series** section.

53) Click **Add Series**.



54) If you just spent time organizing your current media into folders, go ahead and click **Import Existing Series on Disk**.



55) Select the folder you named **TV Shows** that is at the root of where all your newly organized media files are.

Select Folder

Enter the path that contains some or all of your TV series, you will be able to choose which series you want to import

Enter path to folder that contains your shows

Recent Folders

Path	Free Space
C:\Users\ — \Downloads\TV Shows\	137.9 GB

Close

56) Wait for everything to import. Once imported, you can go back to the **Series** page and you *should* see your TV shows in there. This may take a few minutes and you should see sonarr working in the bottom right corner of your browser.

57) Now we are going to add a brand new TV series. Click **Add Series** again but this time just starting typing in the field instead of clicking **Import Existing Series on Disk**.

Import Existing Series On Disk

Add New Series

Start typing the name of series you want to add ...

58) Type a show name in here such as **Breaking Bad**.

Import Existing Series On Disk

Add New Series

breaking bad

Breaking Bad

Breaking Bad (2008)

AMC

Ended

Walter White, a struggling high school chemistry teacher, is diagnosed with advanced lung cancer. He turns to a life of crime, producing and selling methamphetamine accompanied by a former student, Jesse Pinkman, with the aim of securing his family's financial future before he dies.

Path

C:\Users\Nater\Downloads\TV Show

Monitor

None

Profile

TV Shows

Series Type

Standard

Season Folders

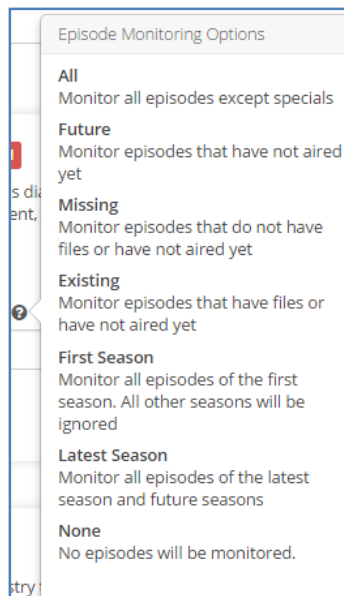
Yes

+

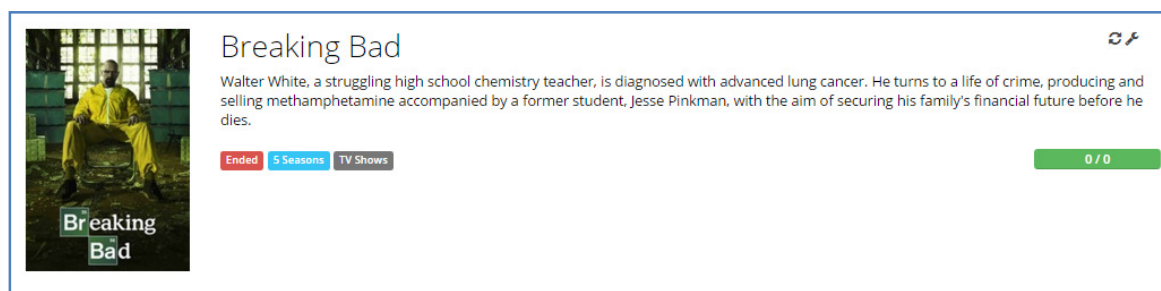
Q

59) The **Path** should auto populate to your **TV Shows** folder (or whatever you named it).

60) The **Monitor** setting is pretty important. Now pay attention.



- 61) This is where you choose what episodes/seasons you want to begin searching for with the season. For example, if you're already caught up on a show then select **Future**. Don't worry though – you can tweak these later and at any given time and you will likely do that when you first add shows until you get it to your liking.
- 62) The **Profile** should be set to that **Profile** you made earlier that designated the quality of downloads you wanted (720p, 1080p, etc.).
- 63) Once set correctly, click the green + button.
- 64) Go back to **Series**.
- 65) You should now see this show in your list of TV shows. For this tutorial I set **Monitor** to none so it wouldn't start auto-downloading any episodes. You will see the green bar that indicates how many episodes have downloaded that are available within your Monitor settings. If you had 5 episodes downloaded out of a total of 10 it would be red instead of green and show 5/10.



- 66) Click on the title of the show and it will bring you to a screen like this:



67) On one of the seasons, click **Show Episodes**. You will get a full list of episodes from that season. Breaking Bad is a bad example since it was over when I wrote this tutorial. The below screenshot is from a show called **The 100** and this is all autopopulated.

Under the **Status** column, the clock indicates that the episode **has not aired yet**.

The **HDTV-720p** label indicates that it successfully downloaded that episode with that specific quality of a file.

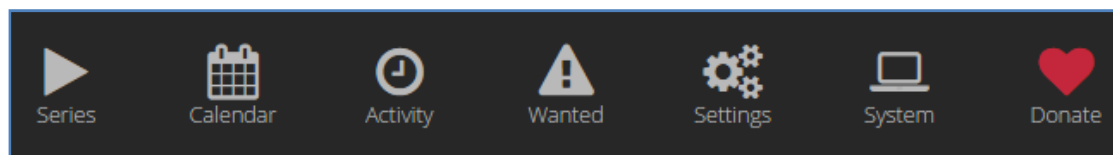
At the bottom you'll notice I don't have the first episode downloaded, indicated by the triangle icon with the exclamation symbol in it. (note – if you mouse over any of these icons it tells you what they mean).

Let's say I want to download the missing file. It's as **easy as clicking the magnifying glass**. Within seconds sonarr will begin searching for the episode. Once it finds it using one of your torrent sites, the triangle icon will change into a loading bar showing the progress of the download.

Season 3 11 / 12 Hide Episodes

#	Title	Air Date	Status
16	Perverse Instantiation (2)	in 23 days	
15	Perverse Instantiation (1)	in 16 days	
14	Red Sky at Morning	in 9 days	
13	Join or Die	Thursday	
12	Demons	Last Thursday	
11	Nevermore	12 days ago	
10	Fallen	19 days ago	
9	Stealing Fire	a month ago	
8	Terms and Conditions	2 months ago	
7	Thirteen	2 months ago	
6	Bitter Harvest	2 months ago	
5	Hakeldama	2 months ago	
4	Watch the Thrones	2 months ago	
3	Ye Who Enter Here	3 months ago	
2	Wanheda (2)	3 months ago	
1	Wanheda (1)	3 months ago	

68) Play around with the other buttons in Sonarr.



69) The most handy feature is the **Calendar** which is populated automatically.

Upcoming Get iCal Link Apr 24 — 30 2016 month week day

Sun 4/24	Mon 4/25	Tue 4/26	Wed 4/27	Thu 4/28	Fri 4/29	Sat 4/30
9pm The Good Wife	8pm Dancing with the ...		10pm Nashville (2012)	8pm Grey's Anatomy		
				9pm The 100		
				9pm The Blacklist		
				10pm Lip Sync Battle		

70) Use the color key at the bottom to easily distinguish between the status of your episodes.

Unaired Premiere	Unaired	On Air
Downloading	Missing	Downloaded
Unmonitored		

The End! I hope you enjoyed this tutorial!