

Configuring uTorrent

Well since there is such high demand of tutorials and or FAQ's on how to setup a torrent client, I am going to write my own tutorial as I write this Wednesday, March 01, 2006 the current build for uTorrent is Beta 431 which is what I'm going to be writing this tutorial for.

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Section 1

a. Downloading uTorrent

To download uTorrent please visit <http://www.utorrent.com> and click the Download link, for this particular tutorial we are going to be using uTorrent Beta 431 and higher.

b. Installing uTorrent

Since uTorrent is a standalone .exe I suggest that you create a folder such as \Program Files\utorrent and place the .exe in there, and create a shortcut to your desktop.

After installing uTorrent run the .exe you will be greeted with whether or not you want to add it to the Start Menu and Create a Shortcut, if you haven't already created the shortcut you can do this now.

Section 2

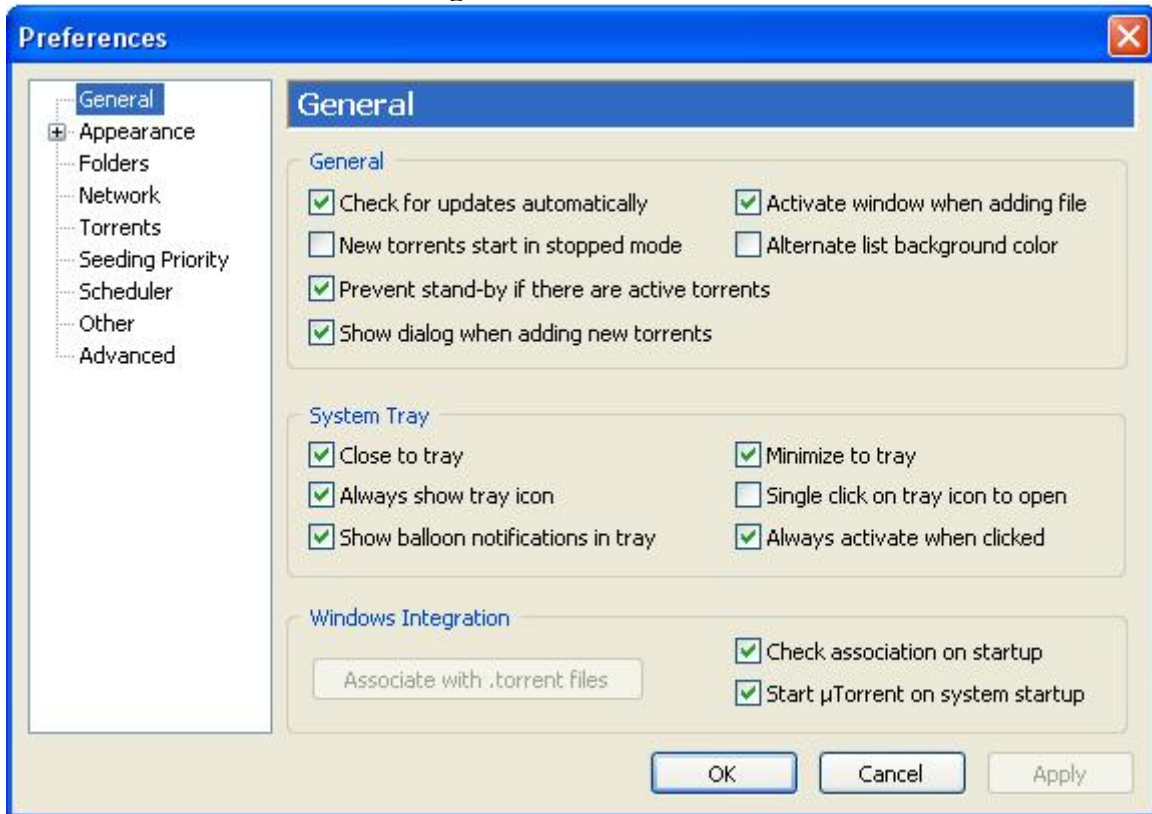
a. Configuring uTorrent

1. General Settings

First of all I would suggest that you go to Options > Preferences > Network > And make sure that the box Randomize port each time uTorrent starts is unchecked, this will become especially important later on if you are behind a firewall or a router. Also while we are under the Network settings unless you are using Windows Firewall you can go ahead and uncheck Add uTorrent to Windows Firewall Exceptions.

Okay well I'm going to just go through all of the settings and hopefully explain what each use is, and whether or not it should be used, most of these settings are User Optional.

Section 2a General Settings



Check for updates automatically

I suggest that you leave this checked, as it will check for newer updates from <http://www.utorrent.com>

New torrents start in stopped mode

I have this unchecked, and unless you want to start each torrent manually I suggest that you uncheck it, if it's not already.

Prevent stand-by if there are active torrents

Prevents your computer from going to sleep on you if your downloading, I would leave this checked.

Show Dialog when adding new torrents

This will bring up the dialog and ask you where you want to save it, which files you would like to download etc, each time you add a new torrents, Leave this checked.

Activate Window when adding file

Activates the uTorrent window when you add a new torrent, Optional, but as you can see I have it enabled.

Alternate list background color

Completely optional, I like white, so I leave this unchecked.

Section 2b System Tray Settings (All of these are completely optional)

Close to tray

When you close uTorrent i.e. Press the X it minimizes to system tray, I like that feature, doesn't take up my start bar so enabled for me.

Always show tray icon

Always leaves a icon in the system tray

Show balloon notifications in tray

This will popup a balloon when a torrent is done downloading, I like this feature, but optional.

Minimize to tray

When you minimize uTorrent it goes to the tray rather than just on your start bar.

Single click on tray to open

Maximizes uTorrent on single click, I generally mess up and click the wrong one, so I leave this unchecked.

Always Activate When Clicked

Activates uTorrent when tray icon is clicked

Section 2c Windows Integration

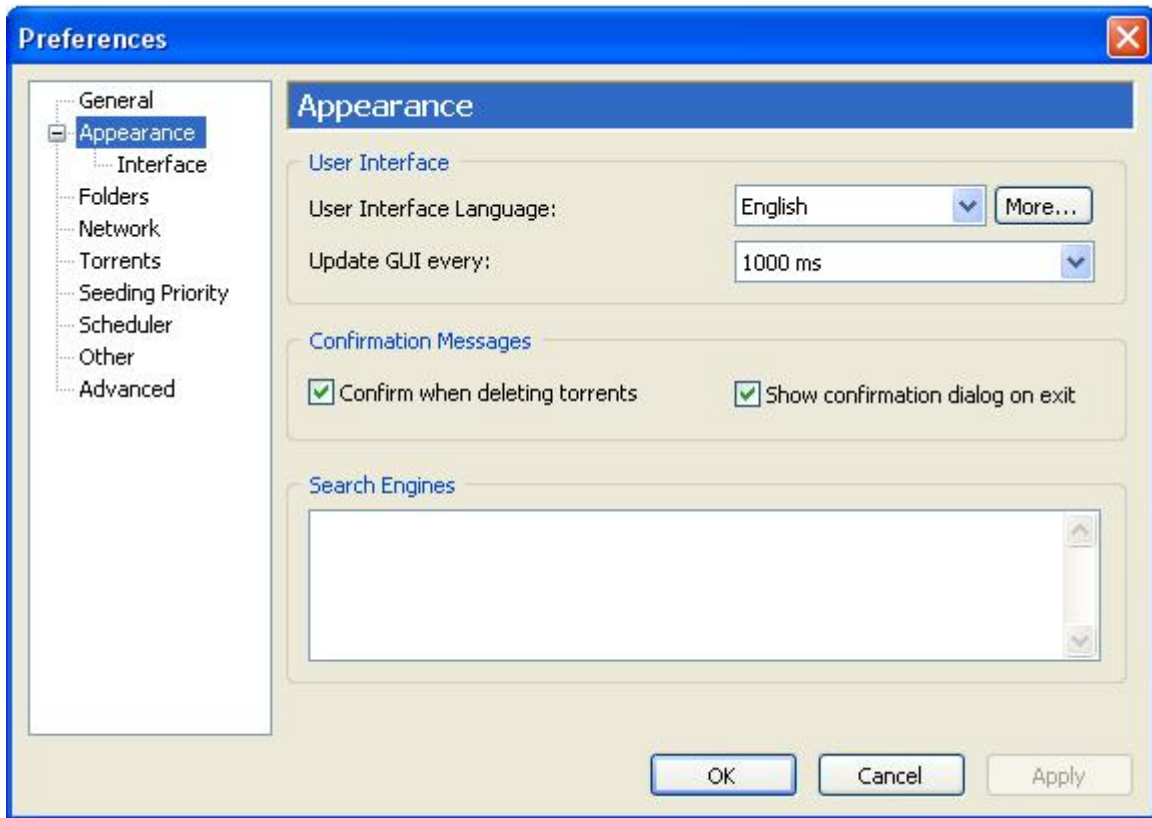
Check association on startup

Checks to see if uTorrent is the default torrent handler, good option if you only use one torrent client

Start uTorrent on system startup

Start uTorrent with windows, I don't restart much, but when I do, I'd like uTorrent to start, once again optional.

Section 2d Appearance



User interface Language

Choose what language you want uTorrent to use

Update GUI Every ...

How often you would like the GUI to update, I just leave this as default 1000ms or 1 second

Confirm when deleting torrents

Good option to leave enabled, gives you extra protection from deleting torrents you didn't want to.

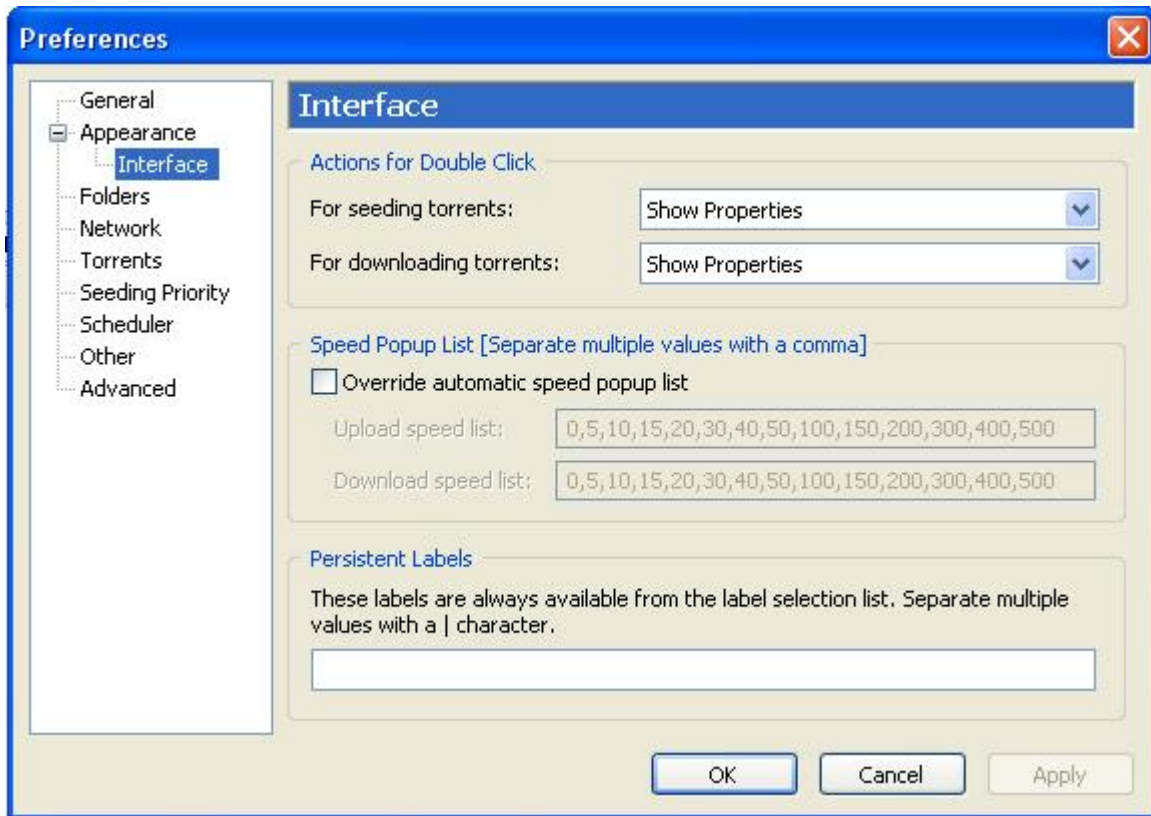
Show confirmation dialog on exit

Asks you whether or not you really want to close uTorrent, another good option to protect you from accidentally closing uTorrent

Search Engines

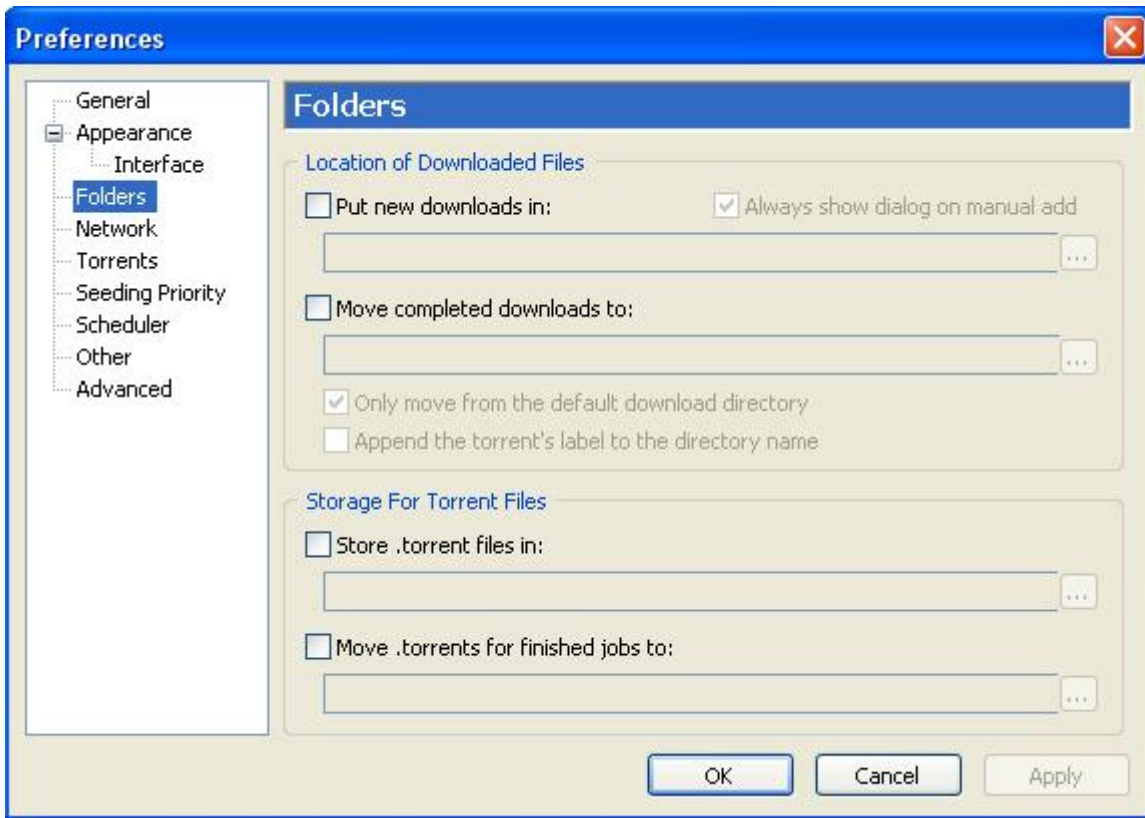
The default list has a bunch of them, but I don't use the feature so no need for it to be there.

Appearance > Interface



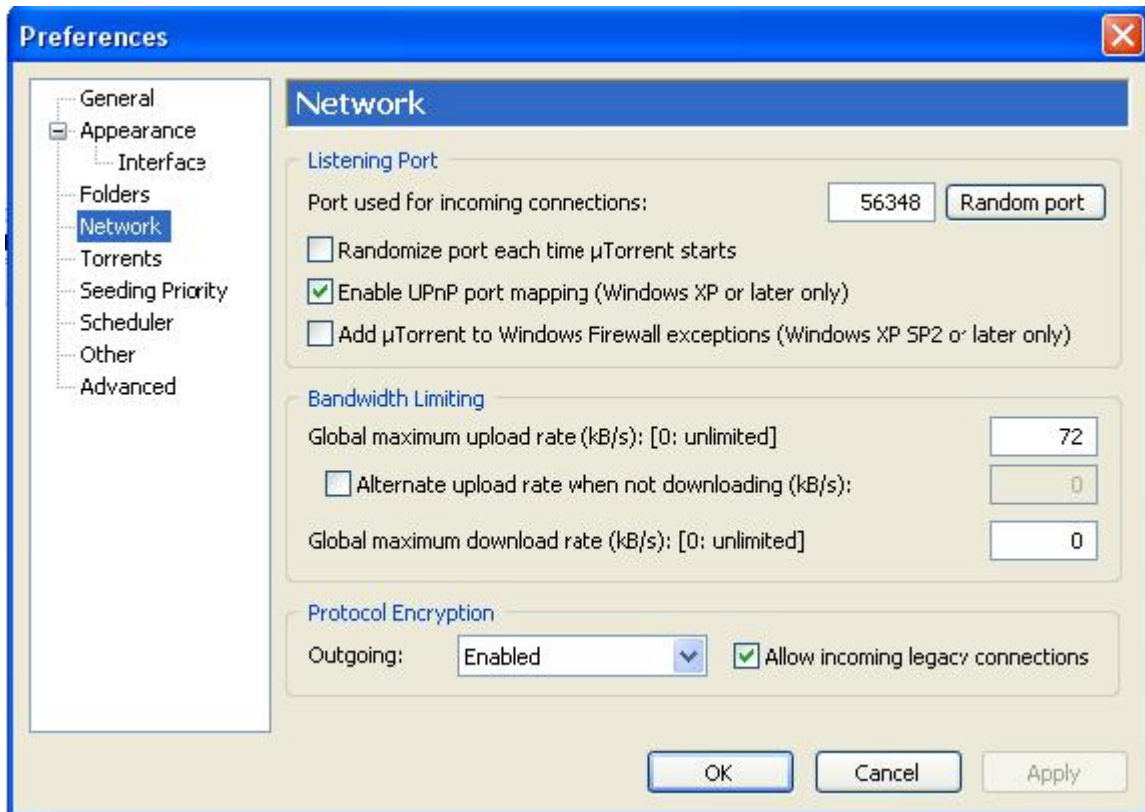
I basically didn't even touch these particular settings as they are good as the default, if you would like to change go ahead

Section 2e Folders



This whole section is pretty self explanatory, this section is all optional if you have a specific need for certain files to be put in a certain place go ahead and use this, but seeing as how I save different file types to different locations, and always just open .torrent files rather than saving them, there is no need for me to keep them. Once again this section is based on personal preference.

Section 2f Network



Randomize port each time uTorrent starts

If you are behind a firewall or a router, you are going to want to disable this, otherwise it will change the port every time you start uTorrent

Enable UPnP port mapping (Windows XP or later only)

If you are using Windows XP or higher I suggest leaving this option enabled.

Add uTorrent to Windows Firewall Exceptions (Windows XP SP2 or later only)

Unless you use the windows firewall, this option is not really necessary

Global maximum upload rate

This setting is the maximum amount of bandwidth that all torrents can use. Do not use the setting that I have, this setting is purely user specific; I would also suggest not using more than 80% of your upload speed.

Alternate upload rate when not downloading

If you prefer to use more or less bandwidth when your not downloading anything set this option.

Global maximum download rate

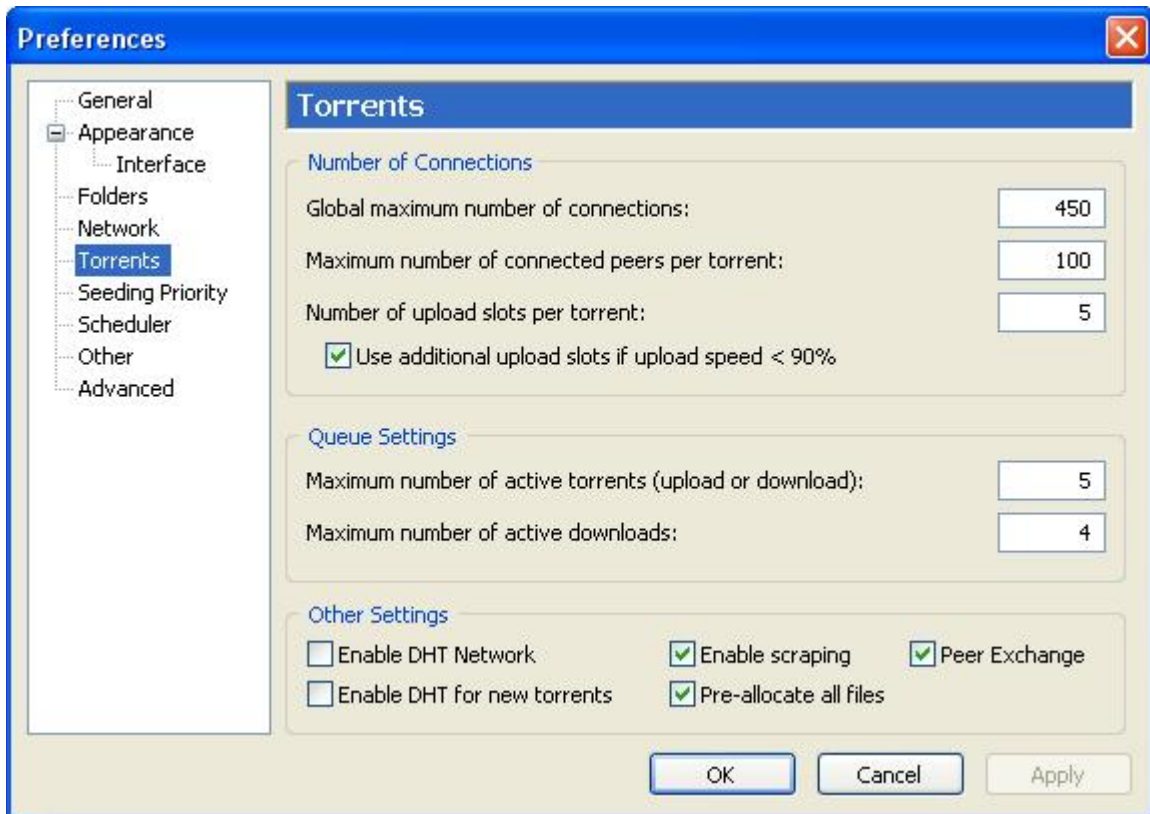
This allows you to limit the global download speed, which is how fast you can download all torrents combined, unless you have a reason for wanting to do this, you can just leave in at 0 which is unlimited

Protocol Encryption

Okay, now this is an important setting, I suggest using the settings that I have selected, Enabling encryption will allow you to connect to both encrypted and unencrypted people, and for some users this helps them a lot, because certain ISP's are throttling torrents and this will help those people achieve better speeds, because an ISP can't see what data is being sent when it is encrypted some users have also reported

increase download speeds by using this setting, make sure you check the box Allow incoming legacy connections!

Section 2g Torrents



Note: These settings are dependant on what your connection speed is.

Global maximum number of connections

This setting is the maximum number of connections you can have, with all torrents, This setting can be changed to your preferences but I have left it as the default

Maximum number of connected peers per torrent

The maximum number of connected peers per torrent, once again I personally have left this setting unchanged as it seems to work the best for me.

Number of upload slots per torrent

This is how many people you allow connect to you, to upload to, I have left this at 5, it works well for me, and you may need more or less depending on your connection.

Maximum number of active torrents (upload or download)

The maximum amount of torrents you can be downloading and uploading at one time, this setting is also dependant on your connection speed.

Maximum number of active downloads

The maximum number of torrents you can download at once, purely user specific.

Enable DHT Network

Please **DISABLE** this setting especially if you are on private trackers, this setting must be disabled, because otherwise it allows people to download from private trackers, and that's not good.

Enable DHT for new torrents

Once again please **DISABLE** this feature for the same reasons as above.

Scraping

Scraping regularly checks the health of a torrent (how many seeders/peers there are etc.), so I suggest enabling it.

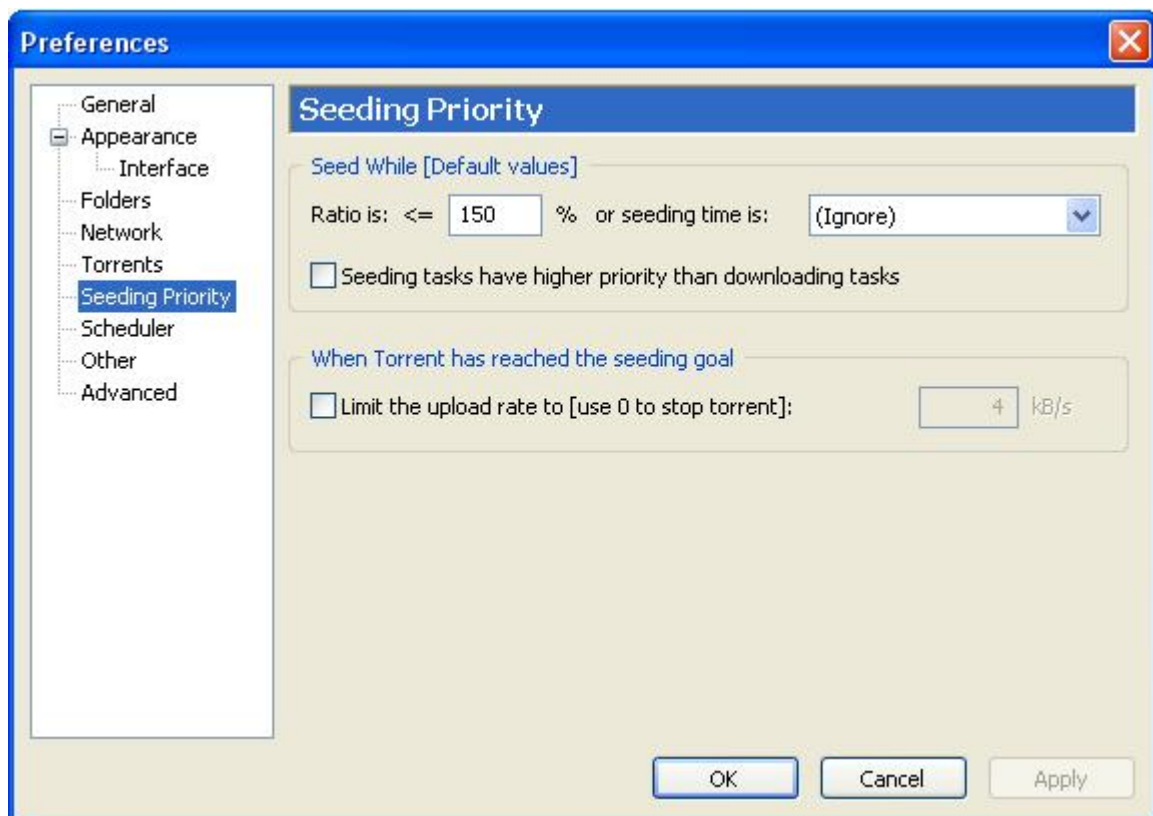
Pre-allocate all files

Unless you have disk space problems, it's better to pre-allocate the space to the torrent. It also reduces constant disc writing.

Peer exchange

To my understanding this new feature Peer Exchange grabs an updated peer list from people who join the swarm, This is a good feature considering normally it only grabs a new peer list when it updates to the tracker

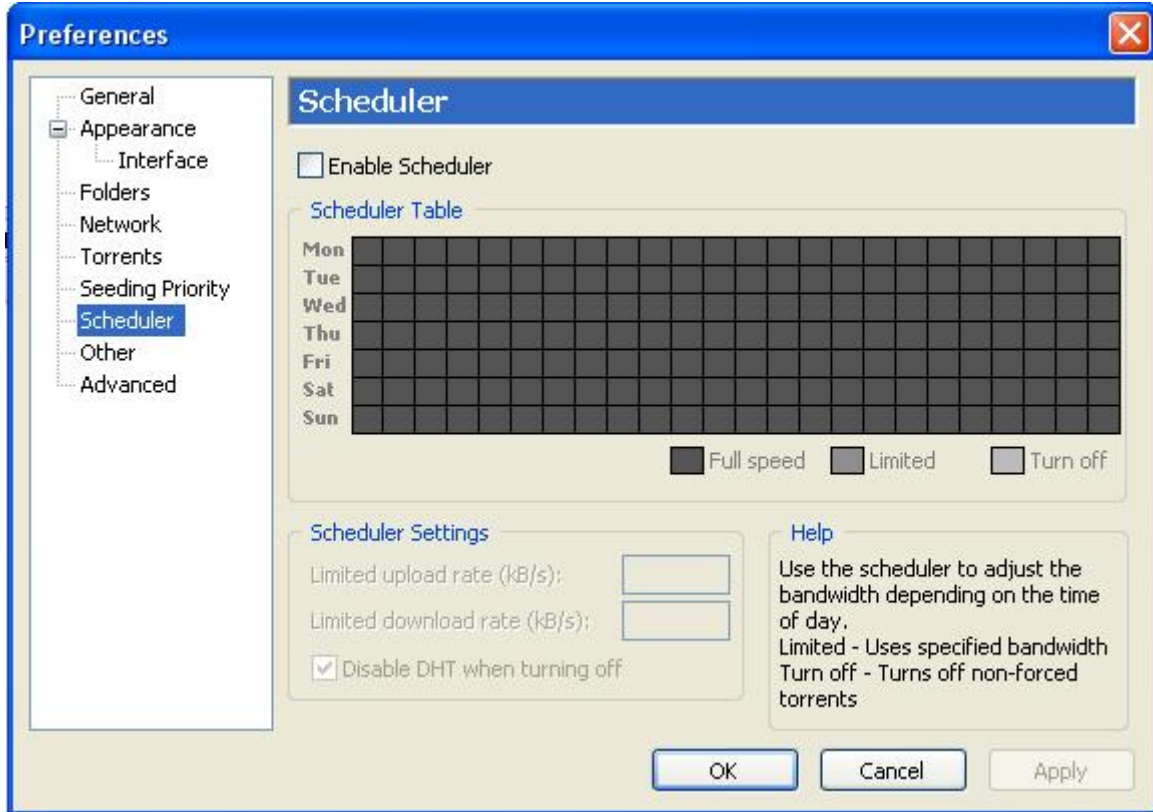
Section 2h Seeding Priority



Note these settings are optional.

These settings are solely user dependant if your having ratio issues you may want to check the box Seeding tasks have higher priority than downloading tasks, other than that, these are all user dependant.

Section 2h Scheduler

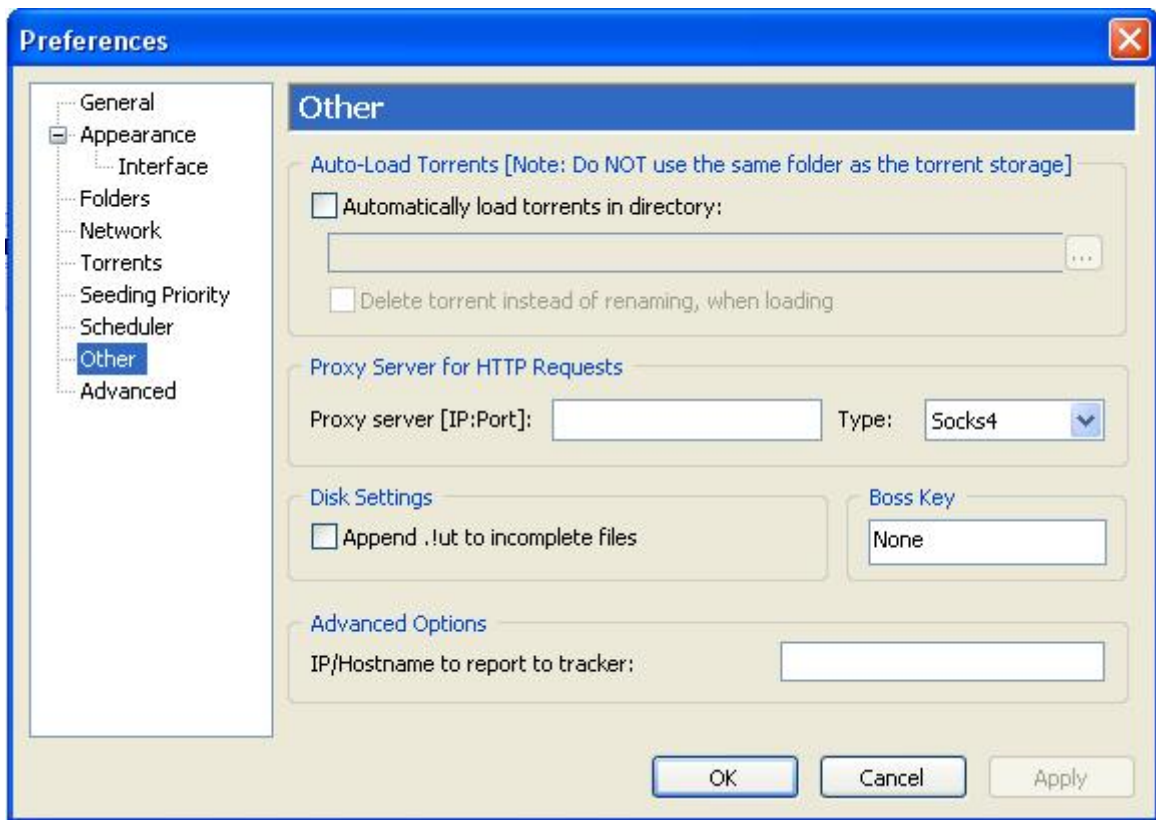


Note: This setting is user optional

Scheduler

This option is useful if you're in danger of being capped because you use too much bandwidth during peak times you can set this up to use only so much bandwidth during certain times of the day, and more during other times, this setting is purely dependant on what your situation is.

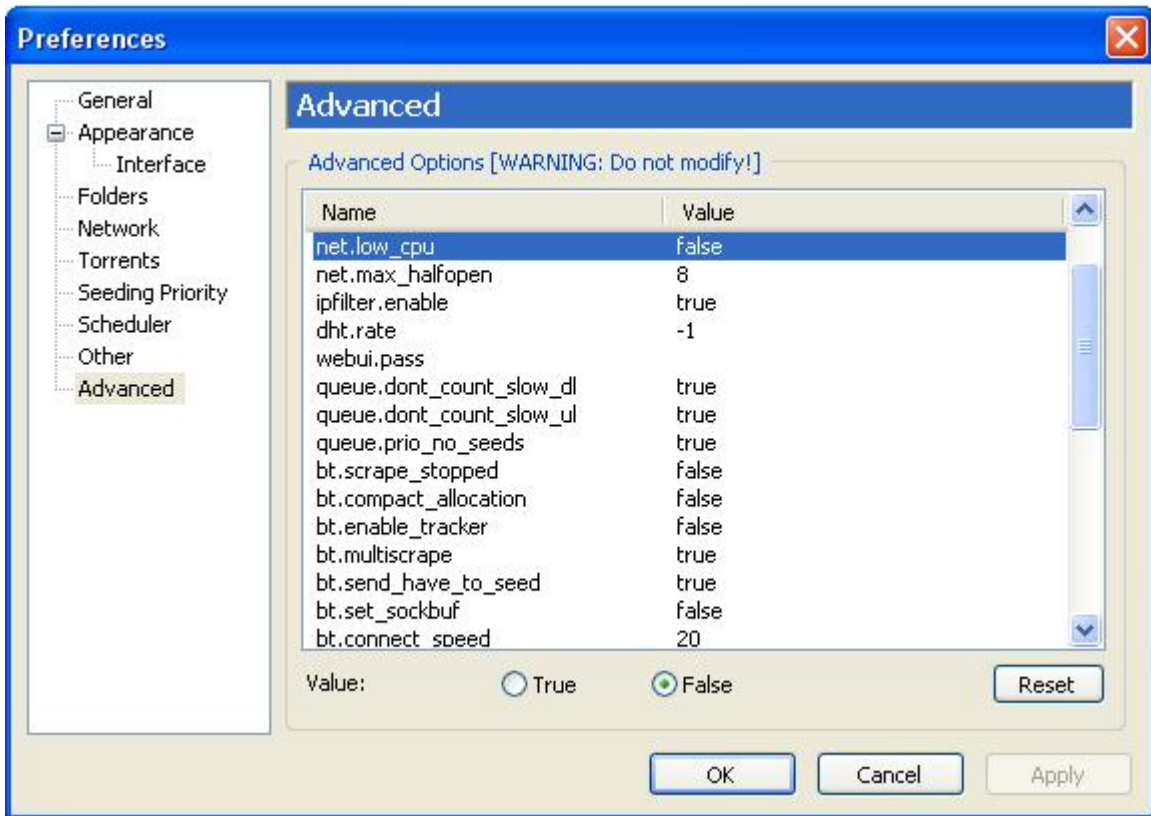
Section 2i Other



Note: These options are all user specific

If you have a specific use for these, then you know which ones you need to enable, other than that, you probably don't need to mess with these settings, As you can see I haven't edited any of them. So once again, if you need to use one of these settings, you should already know what its for.

Section 2i Advanced Settings



Note: I did not know the specifics about these setting, these were posted on a forum so all credit goes out to CyberPhantom or wherever they came from, I don't take any credit for the following information.

gui.ulrate/dlrate_menu allows you to change the values in the right click menu for Upload and Download values on the status bar. You can use ,, to make a separator in the list.

gui.persistent_labels makes labels that don't disappear when they are unused by any torrent. Use | as a separator for more than one label.

gui.compat_diropen This enables a different directory open window for those having problems seeing directories with the default directory browser.

net.bind_ip makes µTorrent use a specific LAN adapter.

net.low_cpu reduces CPU use slightly. If you download very fast, you might get better speeds by turning this off.

net.max_halfopen is how many connection attempts µTorrent will make at any one time. This value must NEVER be higher than 8 for unpatched

Windows XP SP2 systems!

ipfilter.enable enables or disables the use of ipfilter.dat

queue.dont_count_slow_dl/ul makes μ Torrent not count torrents going less than 1KiB/s up or down towards your active torrents.

queue.prio_no_seeds prioritizes torrents that have no seeds when seeding.

queue.min_speed This is a function designed to prevent users from running too many torrents with limited upload. It prevents the upload bandwidth from getting spread too thin (ie you have 20 KiB/s upload and try to run 15 torrents with 3 upload slots set). It divides your upload cap by the numerical value here (6 by default) to set how many max active torrents can run. `queue.dont_count_slow_dl/ul` still functions properly. You should generally NOT change this option.

bt.scrape_stopped This enables/disables scraping the tracker for torrents that have been stopped (not queued).

bt.compact_allocation This allows μ Torrent to create files in a Python-like manner to save space. This option will override `pre-allocate`. You should generally avoid using this with `diskio.use_partfile`.

bt.enable_tracker This enables or disables the embedded tracker. The tracker URL is <http://your.ip:port/announce> (domains do work). It does allow external torrents.

bt.multiscrape This turns on/off multi-scrape, which is sending multiple hashes per scrape. You should not have to change this option, since μ Torrent automatically detects when a tracker doesn't support it.

peer.lazy_bitfield helps bypass some ISPs that interfere with seeding. This may not always work.

peer.resolve_country makes μ Torrent use a DNSBL service to resolve flags. This CANNOT be used in conjunction with a `flags.conf`!

peer.disconnect_inactive This enables or disables disconnecting from inactive peers after a set period of time (default being 5 minutes). However, it will NOT disconnect if the number of peers in the swarm is lower than the value set for maximum number of connections per torrent.

peer.disconnect_inactive_interval This sets the time that a peer is allowed to be inactive before being disconnected, except for small swarms. μ Torrent ignores values below 300.

diskio.flush_files makes µTorrent close file handles every minute. This helps reduce the effect of Windows managing the system cache badly.

diskio.sparse_files is a function available only on drives partitioned as NTFS (2k/XP/2003). When this is turned on, files will only allocate what data they have written. However, this does increase fragmentation, but it will save space while you are downloading files. It doesn't work with pre-allocate.

diskio.write_queue_size defaults to -1, which is automatic cache management. µTorrent will automatically adjust the cache size based on your download speed. If you would like to adjust this value manually, set it 2 to 4 times your maximum download speed in kilobytes, but never going below 1000, or above 32768.

diskio.use_partfile is used to store data that is downloaded of files that you marked as "Do not download." This is necessary to prevent the file from being allocated. It stores the parts of the files that come with a piece, since µTorrent must download and save the entire piece, which can include data for files you didn't want to download. Generally, you should avoid using this in conjunction with compact allocation.

diskio.coalesce_writes tries to minimize the number of calls to WriteFile. It doesn't have any effect at all on download speed, but it might cause marginally less disk writes (at the expense of more memory / CPU).

Section 3 Configuring your Firewall/Router

Since it would be nearly impossible without making this tutorial thousands of pages long by giving information to every router/firewall there is, a great website that I recommend highly, so for this configuration part please visit:

<http://www.portforward.com>

Author's Notes

Hopefully by the time you get here, you have everything you need to start using uTorrent, if there is any errors or you would like to technically correct me please forward all of that information to ghost@xzon.net . This tutorial was wrote to the best of my knowledge, and I'm hoping that this solves a lot of your issues when starting out with uTorrent, Please if you plan to rip this apart, At least give credit where deserved, I spent a lot of time on this.