

Optimization of Windows 8, 8.1 and 10 for better performance

Windows 10

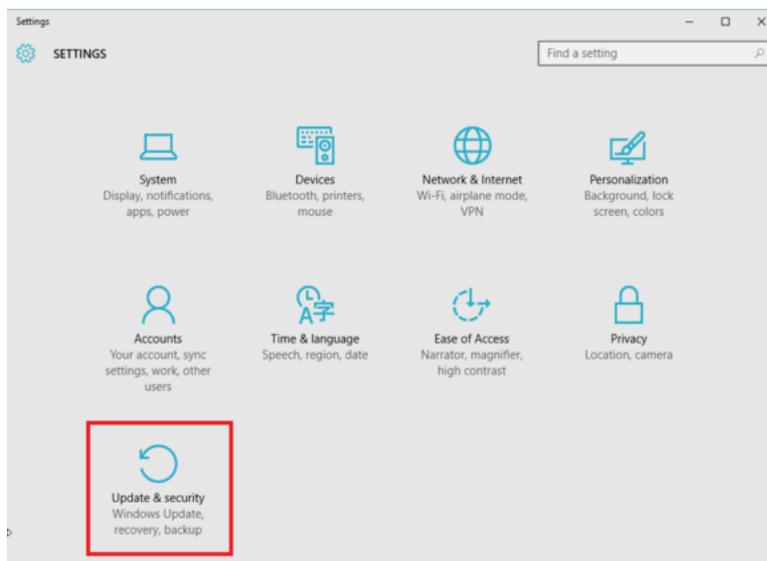
By default, Windows 10 turns your PC into a server for distributing updates to other machines. Here's how to make it stop.

One of the more intriguing changes in Windows 10 is its new peer-to-peer (P2P) delivery update mechanism. Using the P2P option, your windows 10 will by default download updates from the cloud and share them with other computers over the Internet and not just ones on your network, and this has the potential of really slowing down things. Windows 10's P2P sharing eats into your bandwidth and slows down your network connection.

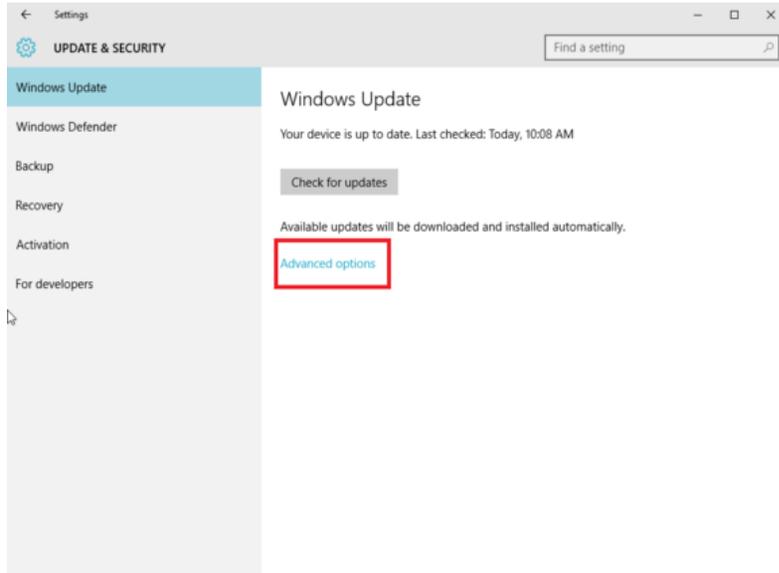
Here is how to optimize the operating system for better performance in a bandwidth constrained environment.

Disable P2P updates in Windows 10

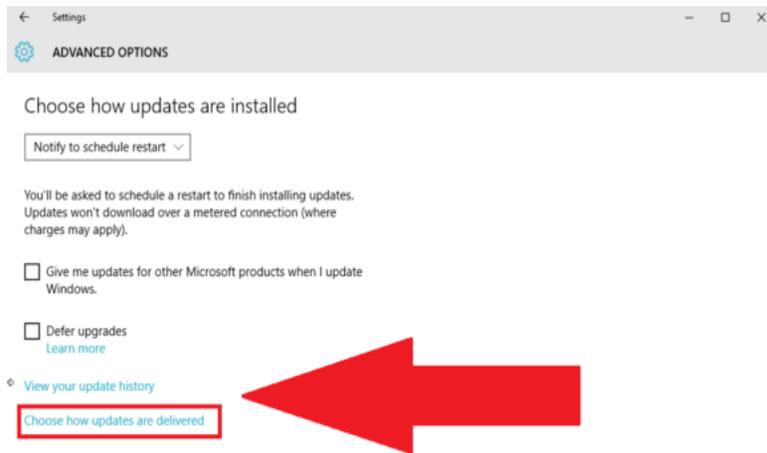
First, open the Start Menu and select *Settings*, then click *Updates & Security*.



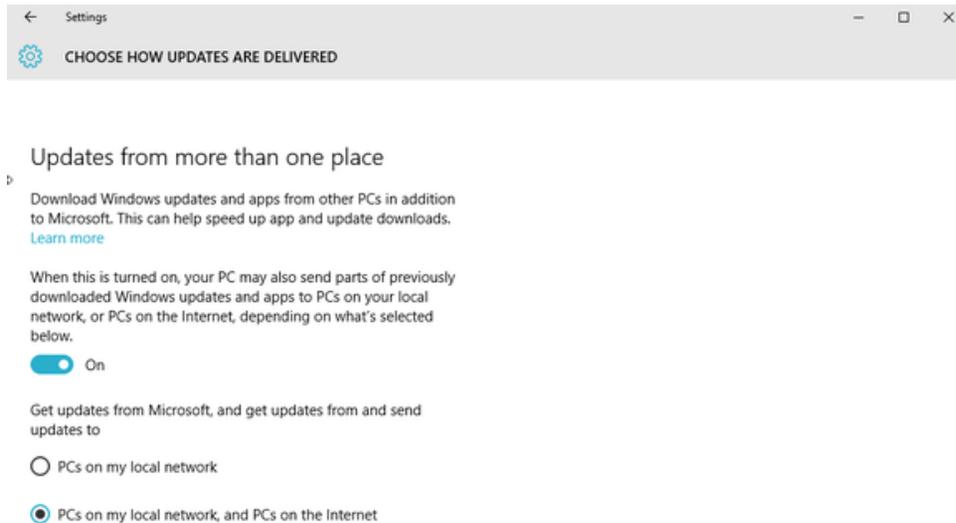
Make sure *Windows Update* is selected in the left-hand navigation pane (it's the default when you open Updates & Security) and then click *Advanced Options* in the main pane.



You'll see a lot of options and checkboxes. Peruse them if you'd like, but for today's task, you'll want to click on *Choose how updates are delivered*.



Now you're on the page with the options that legislate how Windows 10 handles P2P updates. By default, Windows 10 will both send and receive updates from devices on your network *and* the Internet at large.



It's the latter option that's the potential data cap destroyer. Using the options on this page, you can opt to only allow P2P updates among machines on your local network, or disable them completely and rely on Microsoft's servers alone—just like the good old days.

Windows 8.1 and 8

The following can be done to improve the internet experience and mostly apply to post-2000 Windows operating systems. The services below “eat” up most of your bandwidth and need to be managed for a better experience.

1. Windows 8 and 10 Live Apps

Live tiles and apps in Windows 8 are designed to deliver real-time and periodic updates of weather, mail, social feeds, news etc direct to your desktop. Unknown to you, these tiles and apps are eating a big chunk of data/bandwidth as they fetch the latest news from internet. To disable metro updates, unpin an app from Start or simply uninstall it and the app will no longer receive updates. Of course, you may want to maintain live tiles that serve your needs.



2. Torrent Download and Upload

The practice of downloading torrents turns your computer into a seed server, thereby uploading the files you downloaded, for the benefit of others. In order to prevent your computer from uploading files, pause seeding or delete your downloads (transfer them to locations other than the download folder). But remember that your failure to seed goes against the spirit of sharing,

which is the reason why torrents exist in the first place. Therefore to better manage bandwidth, avoid installing and using torrent applications on your PC.

	Progress	#	Size	Seeders	Peers	Down Speed	Up Speed	ETA
[itto RG]	Seeding		16.8 MiB	0	0			
[Multilingua]	3.41%	1	60.4 MiB	0	0	0.0 KiB/s		33w 5d
[7) [kk]	Seeding		11.8 MiB	0	0			
[TorDigger]	0.00%	2	3.7 MiB	0	0			

Seeding increases the amount of data being downloaded

3. Sync Services

A host of sync applications are notorious for eating away your precious data. Popular sync services include:

>**Mail Client Sync:** Microsoft Outlook, Mozilla Thunderbird *etc.* Mail clients continuously synchronize your mails between your computer and the client application server, and with every additional data to sync, your data is gobbled up.

>**Cloud Service Sync:** Dropbox, Microsoft Drive, iCloud, Google Drive *etc.* Just like mail clients, cloud services are equally notorious for gobbling up internet data. Make it a point to watch over cloud services and the files you add onto them. Where necessary, save only important files to the cloud if data cap is your problem.

>**Chrome Sync:** If sync is turned on in your browser, Chrome will automatically synchronize apps, extensions and other settings. You can choose to control what items to and not to synchronize under Settings. (**Settings -> Accounts -> click on your account -> uncheck browser**)

4. Task Manager Services

There are times when you believe you have done everything possible, including the steps listed above, and yet your internet experience remains poor. At this point, you are probably a victim of hidden activities that are running under the hood within Windows operating system.

You will need a good tool to help pinpoint and stop hidden resources from eating up bandwidth.

You can use Windows Task Manager to spot offending services and processes.

To access Windows services, type Msconfig in Run or access Task Manager by pressing Ctrl+Alt+Del in Windows 7. Click on the Services tab in Msconfig or Task Manager.

In Windows 8 and 10, open Task Manager and click Services tab.

Stopping Windows services must be done with caution since disabling a wrong but crucial service can lead to system instability.

Services that may contribute to excessive data consumption may include:

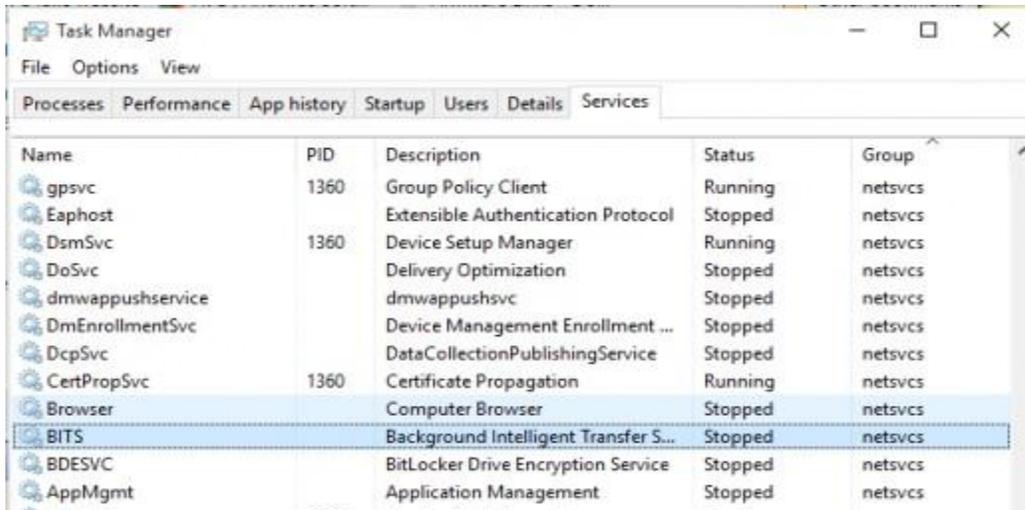
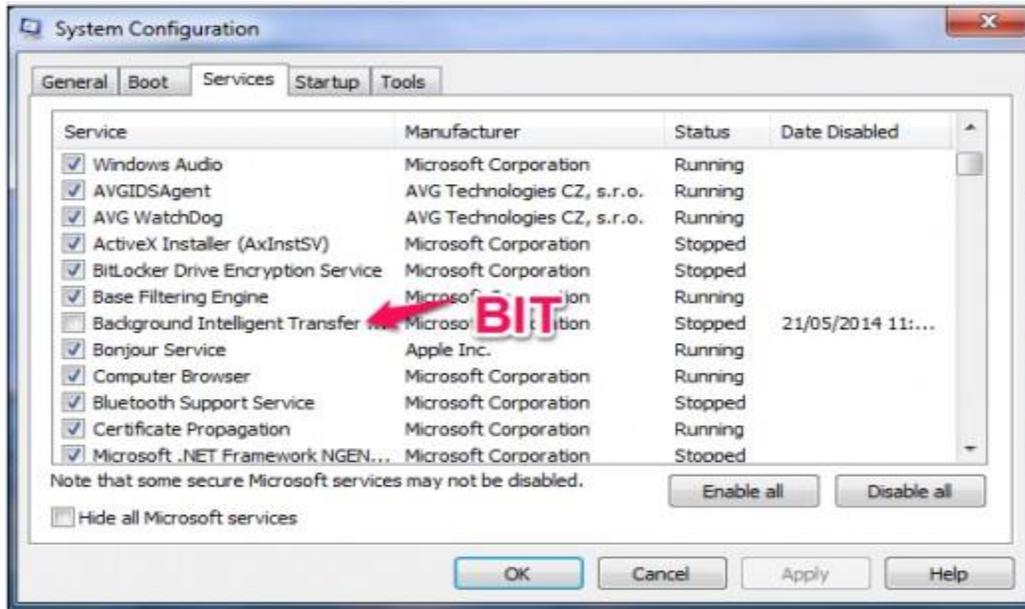
>Background Intelligent Transfer service (BITS), which works in-tandem with Windows update. Disable it where necessary, but always enable it when you need to run Windows update.

>Adobe services update.

>Windows update.

>Any one of the applications you have installed may just be the source of your troubles.

> In Windows 8 and 10, right click BIT as shown in the image and select Stop.

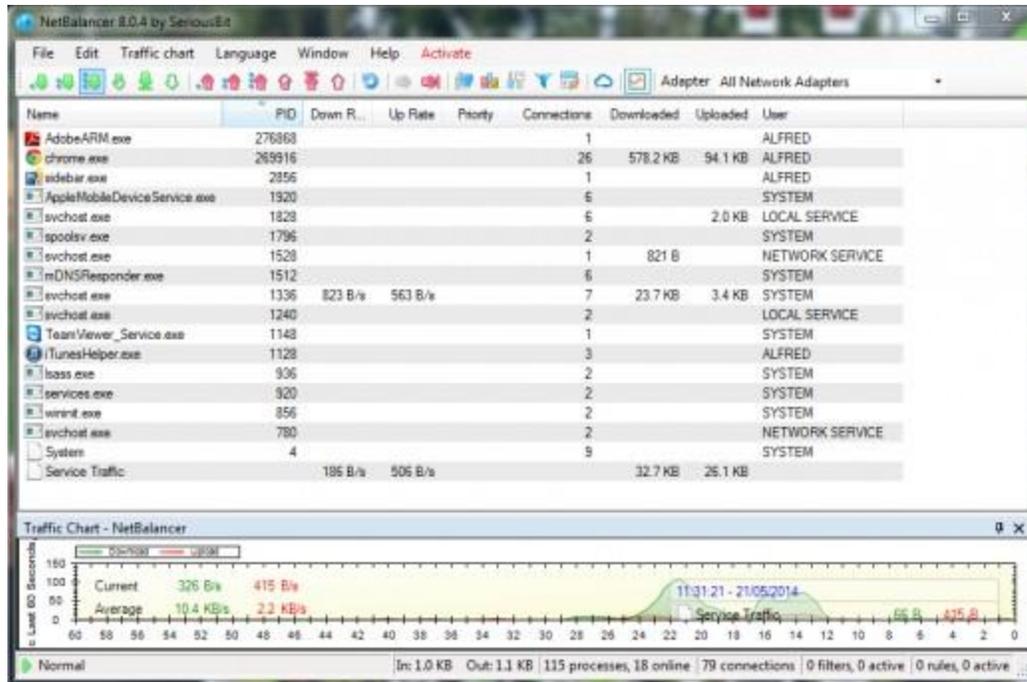


Task Manager Services in Windows 8 and 10

5. Net-Balancer

Besides Task Manager, third-party tools exist to help you control internet services that run under the hood. One good tool with simple to use interface is called NetBalancer. Net Balancer will show you all network activities in the computer and is configurable to show online activities only.

- >Download and install NetBalancer from Seriousbit website.
- >Run the application.
- >Head over to Edit in the menu bar, and choose Setting.
- >Under the Traffic, Bandwidth and System Traffic tab, place a tick in the Show only online processes check box.
- >You will then have a window similar to the one below:



Net Balancer

The upper pane lists running processes and the lower Traffic pane shows different data flow settings. Right click the lower pane to configure various settings.

>Let Net Balancer program run for a couple of minutes or an hour, and during this time, observe the amount of data being downloaded and uploaded by different processes.

>Thereafter you can begin tweaking Net Balancer.

>To configure download and upload processes, right click and select Download Priority and Upload Priority.

>The Download and Upload menu options can be set to priorities ranging from Low to Ignore.

>One such priority is Blocked which directs Net Balancer to stop the download or upload activity.

>The Limit priority allows you to control the amount of data flow in a process.

>Remember that Blocked priority will stop the download or upload activity for your chosen process.

>Experiment Blocked and Limit on processes you believe are gobbling your data

>Proceed with caution though on svchost.exe processes since blocking critical processes may lead to Windows instability.

>If svchost.exe is your source of download and upload headaches, you will now want to switch to another tool: Process Explorer or Process Hacker.