Contents

Click on any item to find out what it does:
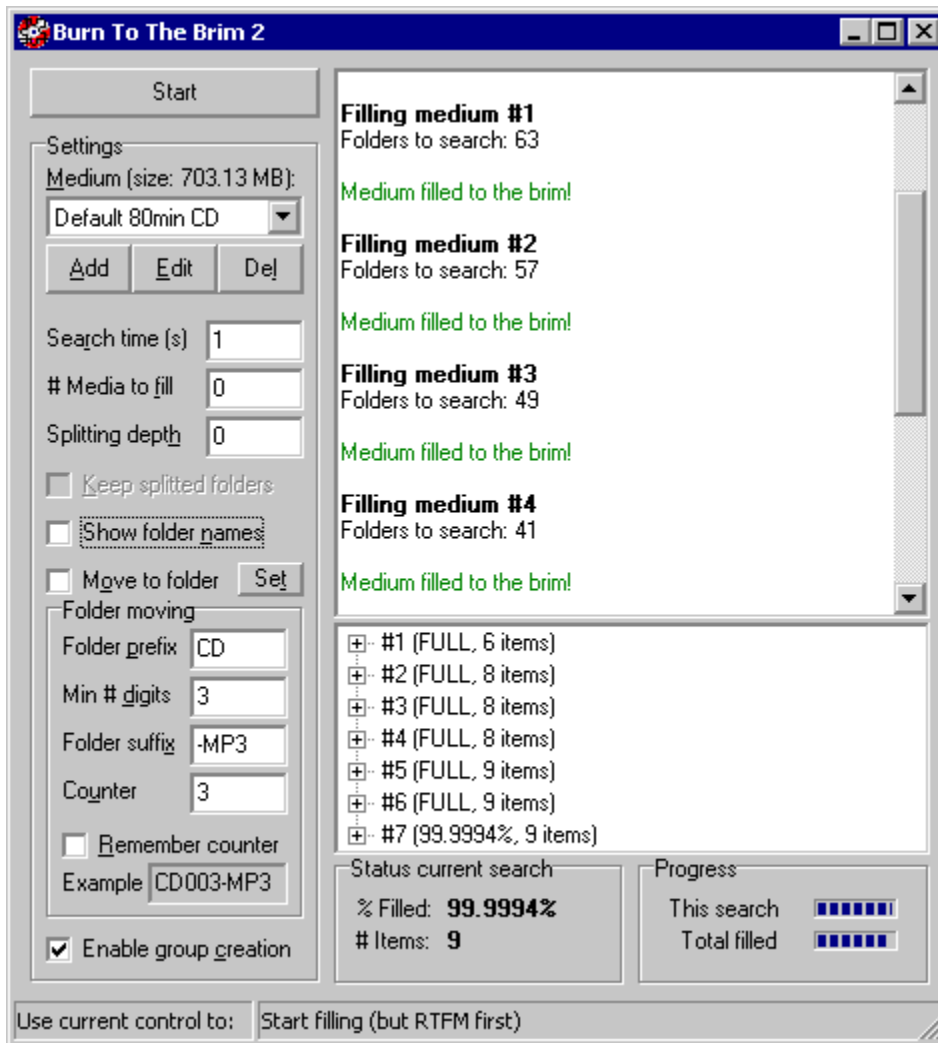
Frequently Asked Questions

- **Q: What are groups?**
- **A:** Files/folders which BTTB keeps together to be burned on 1 CD. This way you don't lose any parts of multi-part files, for example, and can keep an artists' files together.

- **Q: How does folder splitting work?**
- **A:** Please read the section on folder splitting.

- **Q: BTTB doesn't use all files!**
- **A:** If you have set a small slackspace, chances are the files left won't fill the CD as well as you have requested (say 1 MB slackspace while due to bad fitting file sizes perhaps 5 MB may be needed)

- **Q: Why would I let BTTB search longer after a perfect solution has been found?**
- **A:** BTTB tries to minimize the number of files/folders needed to fill the CD. As there will be more 'pieces of the puzzle' left, it's more likely the next CDs can also be filled.

- **Q: Shouldn't the program be called Burn to the Rim?**
- **A:** Although its current main focus is CDs (as you can tell by the language in the program and helpfile), BTTB can be used for any media, not just flat CDs.

Introduction

Burn To The Brim CD/Media Filler (c) 2001 Elwin Oost

Some important BTTB links:

- For general information, you can visit the <u>BTTB Homepage</u>;
- By subscribing to the <u>announcement list</u> you'll hear first about new versions (no chat, just announcements);
- On the <u>BTTB Forum</u> you can discuss the program, ask fellow users for help, report bugs and propose features;
- Finally, though I'd rather not receive general usage questions, I enjoy your comments by <u>mail</u>.

Please read this helpfile completely. Feedback and bug reports (of which you are extremely certain and which are not listed on the homepage or forum) are very welcome! But, please don't mail me with questions answered here. Thanks!

This program quickly finds a [near] perfect solution for filling your media (CD, Zip...) completely with files and folders.

BTTB is freeware for personal use. However, if you still like it after a month, it would be much appreciated if you would either donate (the equivalent of) $10 or more to an organization protecting nature (on top of anything you might already give) or take some other real action (like writing letters to senators) against those screwing up our planet for short-term profits (Bush rejecting the Kyoto Protocol, commerce destroying the rainforests). For ideas, visit for example the <u>Green House Network</u>.

You can contact me for details on pricing for commercial use.

My thanks to John, Tostie and Robert for beta-testing, and the UPX team for further decreasing BTTB's footprint.

Quick start

To quickly show you how BTTB works, set:

Medium: Default 74min CD
Search time: 1
Media to fill: 0
Splitting depth: 0
Move to folder: Unchecked (**important!**)
Show folder names: Unchecked

Next, press start and go into the folder you have all files and folders you want to burn in

As soon as you press 'Open', BTTB will look for combinations of the files/subfolders found in this folder to fill up a CD (or other medium you select) as much as possible. Each subfolder will be kept undivided.

The first priority is to fill the media to the brim, second is to minimize the number of items (so the larger, harder to fit items have preference and more items to choose from are left for the next burn).

BTTB is optimized for quick performance and considers the most promising options first. It also minimizes the search length by fast detection of dead ends.

As you can figure from the speed, the program cuts corners whenever possible (without missing anything). Unless you have a very huge amount of files and folders within the selected folder, or a very slow computer, BTTB will have found solutions in seconds.

Now you can try changing the options, which are all explained through the Contents page. I would recommend leaving Move to folder unchecked until you know exactly what all options do.

The only option which may require some study is Folder splitting.

Folder splitting

With folder splitting, you can instruct BTTB to split up folders to a certain level, on which the folders are kept complete. Let's take a typical FTP server as example, including the following folders:

```
c:\upload\tinkywinky\decss\(file1,2..)
c:\upload\tinkywinky\hack_sdmi\...
c:\upload\tinkywinky\somefile.txt
c:\upload\dipsy\metallica-somealbum\...
c:\upload\dipsy\metallica-otheralbum\...
c:\upload\laalaa\dr_dre-some_album\...
c:\upload\laalaa\dr_dre-barkbark\...
c:\upload\po\phrack\01\...
c:\upload\po\phrack\02\(etc.)
c:\upload\anotherfile.zip
```

Say you want to burn all uploads If you'd start from folder `upload` (so you're inside it and press open) BTTB will take each file/folder inside it (`tinkywinky`, `dipsy`, `laalaa`, `po`, `anotherfile.zip`) as a whole (it always recurses, to find out the total size of the folder) and will try to fit each of these blocks on the CD. Of course, chances are this won't fit.

When you enter a splitting depth of 1, BTTB will split up the `tinkywinky`, `dipsy` etc folders and only keep the files/folders within `decss`, `hack_sdmi` etc together. Thus, the `decss` folder can for example end up on a different CD than `hack_sdmi`, together with the `phrack` folder, but all files/folders inside `decss` will stay together.

Note that `anotherfile.zip` will never be selected with splitting depths above 0 as it is below the splitting level, just like `somefile.txt` will not be selected with depths above 1.

Example selection depth 1:

```
tinkywinky\decss\(all decss files)
laalaa\dr_dre-barkbark\(all files...)
po\phrack\(all files and folders)
```

If you enter a splitting depth of 2, these files/folders will also be split.

Example selection depth 2:

```
tinkywinky\decss\file3
dipsy\metallica-somealbum\track8
po\phrack\02\(all files and folders)
```

The splitted folder names are normally thrown away, so that the folder you moved the files to will simply look like:

```
decss
phrack
etc.
```

By selecting Keep splitted folders the folders are kept in their original splitted root folders, thus the burn folder will contain:

```
tinkywinky\decss
po\phrack
```

etc.

I strongly recommend to first play with this to make sure you understand it, making sure <u>Move to folder</u> is not checked.

Media type

Here you select the type of medium you want to fill. New in version 2, you can enter as many different sizes as you wish, and let BTTB detect the amount of space on CDs.

Add, **Edit** and **Del** work as you'd expect. The first 2 bring up the Disk size selection dialog.

What's new?

+: New feature -: Bug fixed *: Improved feature

v2.0 - Drag to burn, powerful file grouping, cd autodetection, much more
- + Drag and drop found selections from the results window directly to your burn program, so usually no more need for moving folders, just BTTB and burn!
- + Group items based on filename matching and/or MP3 tag Genre, as well as by hand. Now you can keep artist files together, as well as multi-part files!
- + Enter as many custom disk sizes as you wish, and let BTTB autodetect the space available on any CD. No more safe-guessing, really burn until the outer edge!
- + Ability to select items you immediately would like to burn
- + Ability to remove items from the BTTB list in memory which you don't want to include
- + Ability to delete found selections after you have burned them
- + Keyboard accellerators throughout the entire program
- * Easier directory selection dialog
- * The update I least enjoyed though you probably will, is the improved help file :-)
- * Web addresses changed slightly, *webmasters please update!*
- - Bug in uninstall fixed which left registry keys. All installed keys are removed now on uninstall, also any left by an old 1.x version.

v1.3 - Splitting, Win9x fix
- + Folder splitting, enabling you more control on what to select
- * Still faster search
- - Folder moving on Win9x systems now works as it should

v1.2 - GUI, file moving
- + Switched from basic text screen to a nice GUI
- + Added file moving option, to set apart found selections for burning
- + Option to change the seach duration and its requirements
- + Possibility to fill not just 1 but several media

v1.1 - Media type selection
- + Possibility to select different media types and define one custom type

v1.0 - How it all started
- + Initial published version. Basic buttons and textscreen, just 1 search, no file moving, only 74min cd media allowed.

Move to folder

If you wish, BTTB can move the found solutions to a folder for easy copying/burning. If you select this option BTTB will put them each in their own subfolder within the folder you can select with **Set**. Each group will be put in a numbered folder, starting with 1 (already existing folders will always be left untouched). Folders are named **<Prefix><Counter><Suffix>**, where counter has at least **Min # Digits** digits. An example of your selection is always shown.

Search time (s)

As considering all options can take considerable time with larger folders, you can instruct BTTB to stop the search after this many seconds. After this time BTTB will keep the currently best solution and go on to divide the remaining folders.

Show folder names

This is a cosmetic setting, which determines whether the solutions view will default to showing just one line per solution containing the found fill percentage, or a list with all folders (and files) in this solution. You can always expand the brief view by clicking on the + in front of the solution line.

Media to fill

If you do not want to completely empty the folder but just burn one or few CDs, you can limit the number of CDs BTTB fills by setting this option. Entering 0 will fill as many as possible.

Splitting depth

Here you can enter how many folder levels should be splitted before selection will take place. What this means is explained in the folder splitting tutorial.

Keep splitted folders

This option is only relevant for users using a splitting depth above 0. If selected, the files/folders will keep the splitted folder names. Read the folder splitting tutorial for more information.

Results window

Here, all file/folder selections which fill one medium will be shown. Press on the + icon to expand a selection to show all individual file/folder names.

New in version 2, you can drag and drop a selection straight to your burning program! Note that due to Windows drag-n-drop limitations it is not possible to keep splitted folder names.

Message window

Here, all messages about what's happening are shown.

Status current search

Percentage filled will show you how much of the medium will be filled with the currently best selection.

During the scanning of folders, # items shows you how many files and folder it has scanned, in batches of 1024 (so for normal use you won't see it at all). During calculation, it will show the number of files/folders it has used (you may remember that this number will be minimized).

Progress

This search will show you how far the search to fill the current medium has progressed. When the bar is complete, all options have been considered (though this is generally not needed at all).

Total filled shows the progress of the distribution of all selected files and folders over the media. If BTTB stops calculating while this bar hasn't become full, the remaining files and folders caused more slack space than you requested.

Enable group creation

If you uncheck this, BTTB will not create groups, won't show the [groups screen](#) and immediately start calculating after you've selected a folder (making it work just like version 1).

File/folder groups
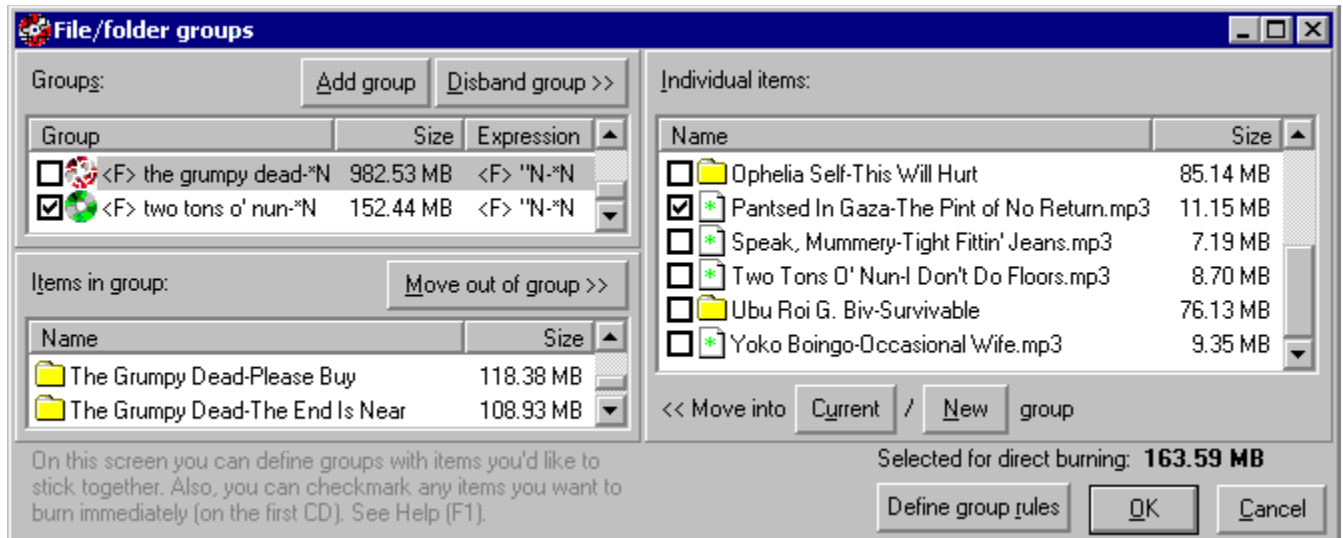
The group feature allows you to select files and folders you'd like to burn together on 1 CD. BTTB can pre-group items based on filename matching and MP3 tag genres. You can change these rules with **Define group rules**, which will show the Group settings dialog.

On the left you can view and alter the groups BTTB has found based on the group rules you have defined and/or MP3 genre tags. Use **Add** to create an empty new group you can put items in, and **Disband group** to remove it and place all files in the right (individual files/folders) pane.

You can drag and drop items between the windows to move them in or out of groups. Besides dragging you can also move the currently selected items out of groups by pressing **Move out of group**. Move into **Current** or **New** group do the opposite.

Groups which fit on the medium you requested have a **Green CD** icon. Groups too large to fit will have a **Red exploding CD** icon

You can checkmark items you want to burn immediately, on the first CD. BTTB will search through the other (unchecked) items to fill the remainder of the CD. Keep an eye on the **Selected for direct burning** indicator to see whether everything still fits on the CD size you selected- of course, the more space you leave, the easier BTTB can fill the CD to the maximum.

Group settings
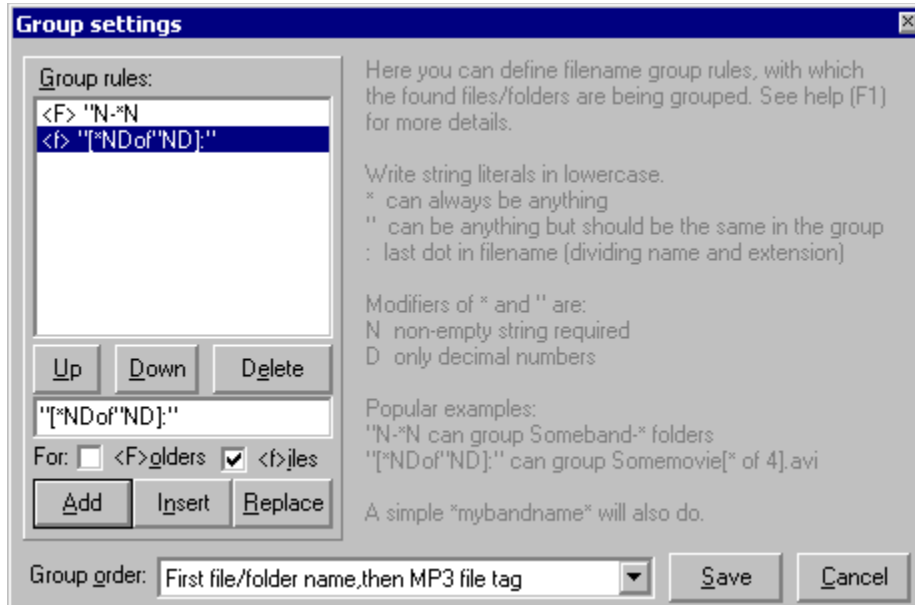
The rules you define here are used to group files/folders together. Before you modify them look up the rule syntax.

Editing rules is quite straightforward. If you want to add a new rule, first select a rule to replace or to add a new one in front/behind, then enter the rule in the input box.

Checkmark **Folders** and/or **files** to make the rule active for these kinds of items. In front of every rule in the list box shows these selections with respectively **<F> and <f>**. Note that by selecting none you can temporarily disable a rule without deleting it.

Then click **Add** to add it behind, and **Insert** to add it in front of the currently selected rule. **Replace** replaces the current rule.

Rules are applied top to bottom. Use **Up** and **Down** to move a rule, or drag and drop them within the list. Figure out **Delete** for yourself :-)

A second way of grouping is using MP3 genre tags. With **Group order** you can select the order of applying filename matching and/or this method. Tags with genre ID 255 are ignored as having no genre.

You can also select *None* to have no groups automatically created. You can then still create groups manually in the file/folder groups window, which you can not if you disable group creation on the main screen.

Rule syntax

Since this may take some time getting used to, it is best to play around with the rules to see how different rules group different files.

Rules are made of concatenations of:

- lower case string constants, say **myband** or **.mp3**- matching is case insensitive.
- ***** wildcard, matches anything
- **"** is a matching wildcard (*it needs to be the same within a group*)
- **:** denotes the dot dividing filename and extension

There are 2 uppercase modifiers of the ***** and **"** wildcards you can add behind them:
- **D**: matched string should be a decimal number
- **N**: matched string should not be an empty string

Underscores (**_**) are treated as spaces, so **the band** matches **the_band**.

For matches with the " wildcard, spaces around it will be removed, thus "-* will group *"band-album"* (without space between band and minus sign) and *"Band - album2"* (with space).

Wildcards are non-greedy; they end as soon as the constant string (when included) behind it in the rule string is found.

You cannot put 2 wildcards together (examples: **,*ND",*"N) or put 2 **:** signs in 1 rule.

After all files/folders have been grouped with the rules, all groups consisting of only 1 item are removed and their contents moved to the 'Individual files/folders' pane.

Examples:

Music folders:
"N-*N will group *someband-album1* and *SomeBand-anotheralbum* but won't include *anotherband-album1* in this *'someband-*'* group (for the last one a *'anotherband-*'* group will be created).

Movie files:
"[*NDof"ND]:" will group *somemovie[1of4].avi* and *somemovie [2 of 4].avi* (in group *'somemovie[*of4].avi'*) but won't include *othermovie[1of4].avi*, *somemovie[2of5].avi* or *somemovie[1of4].mpg*. These would each get their own group. Note that this example would also, if such files were included, create a group with no movie name (say *[* of 6].mpg*).

Disk size selection
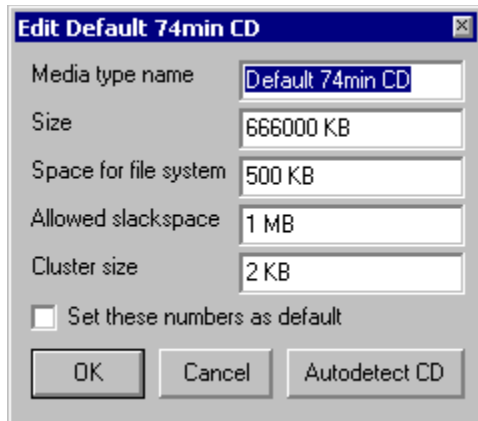
Here you can add media types you own, so BTTB knows how far to push to the limit. For CDs, using the autodetect feature is by far the easiest way.

You can enter sizes in bytes (just type the number), KB and MB (add these to the end of the number).

The **space reserved for the file system** should be plenty at the default 500KB (400KB should even be sufficient for normal use, say 10 folders with a total of 100 files).

The **slackspace** is the amount of empty space you're willing to keep empty if it is not possible to make a perfectly full CD. The default 1 MB is less than 1/6 of a percent of a 74 minute CD, yet not even that is usually needed in my experience. Change as you see fit.

You'll need to know the **cluster size** of the medium, for data CDs it's 2 KB.

If you **set the numbers as default**, all new items will have these values (gee).

Finally, a very useful feature is **autodetect CD**, which reads the total stated empty space on a CD. A very easy way to fill in all data.

Note that CD makers are known to change the specifications of their CDs every once in a while without changing the CD name, so if data suddenly doesn't fit you may want to autodetect again (and perhaps look closely at the serial numbers on the package and CD for any sudden changes. You can keep up-to-date with the various types being sold at www.cdmediaworld.com*).*