

DVD to DV-AVI with VirtualDub-MPEG2

This procedure converts un-encrypted DVD vob files to **DV-AVI with PCM wav audio**, suitable for use in your video editor. This is useful if your editor can't import the dvd you want to edit.

You can also extract **soundtrack only**, to use in your sound editor.

You can accomplish this conversion in just 6 basic steps, each step consisting of a few mouse clicks. Actually, excluding file browsing, it can be done in 20 clicks. Very thrifty!

If, like me, you suffer from VirtualDub phobia, try this procedure and lose your fear. It gives me good results; I hope it works as well for you.

the CountryMouse

Nit-Picker At Large

updated 15 Nov 2006

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Download and install software

Installation is painless, I promise.

Click the links to go to download pages.

Use Windows XP "Compressed Folders" utility to extract zip files, or WinZip, or a free program like [7-Zip](#).

Video processing tool –

[VirtualDub-MPEG2](#) < 1.2 mb installed >

To install --- unzip to any folder you like. To remove, simply delete files.

VirtualDub-MPEG2 is designed to work with mpeg2 video.

It can open **un-encrypted dvd files** from the disk, or from your hard drive.

A feature you might find useful is the option to use filters and 3rd-party plugins to improve video quality during capture and format conversion; that can simplify final video editing. To learn more, check Help, and visit [VirtualDub.org](#) forum.

Codec to convert video to DV-Avi –

[Panasonic DV codec](#) < 260 kb installed >

To install ---

Extract zip file to a temporary folder anywhere, such as Desktop.

Inside that new folder, **Right-click PANADV.INF**

Click **Install**

When you see message ". . . has not passed logo testing . . ."

Click **Continue Anyway**

This installs pdvcodec.dll in the Windows\System32 folder.

You may delete the temporary folder.

– OPTIONAL –

[DVD Decrypter](#) < 1 mb installed >

To install --- Install to any folder you like, use Un-installer to remove

[VOBMerge](#) < 500 kb installed >

To install --- Unzip to any folder you like. To remove, simply delete files.

Using a single vob of the entire movie can help avoid **audio sync problems**.

I use Dvd Decrypter to rip movie from disk to hard-drive as a single vob file.

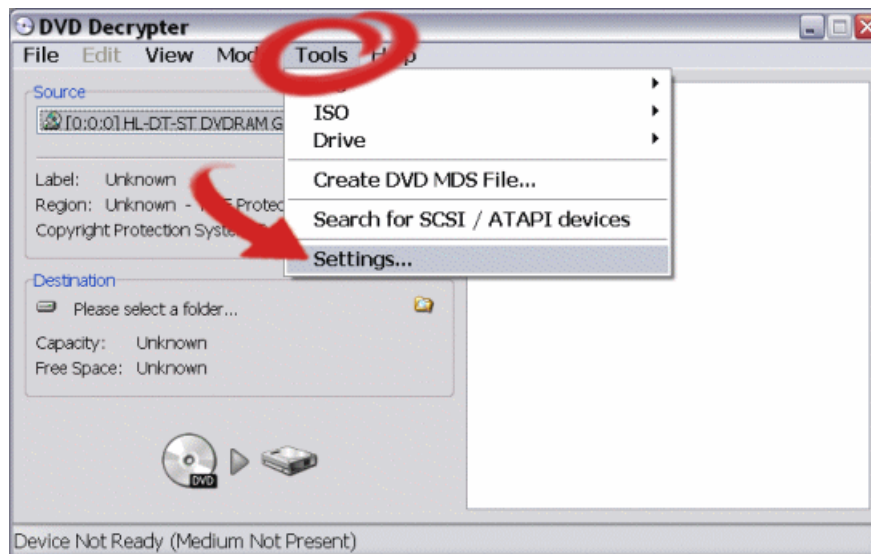
VobMerge can join files already on the hard-drive.

OPTIONAL ~ Using a single large vob file

After having audio sync problems with a couple of projects that used “split” 1-gb vob files, I now avoid that by using a single large vob of the entire movie.

A Rip the movie to hard-drive as a single vob

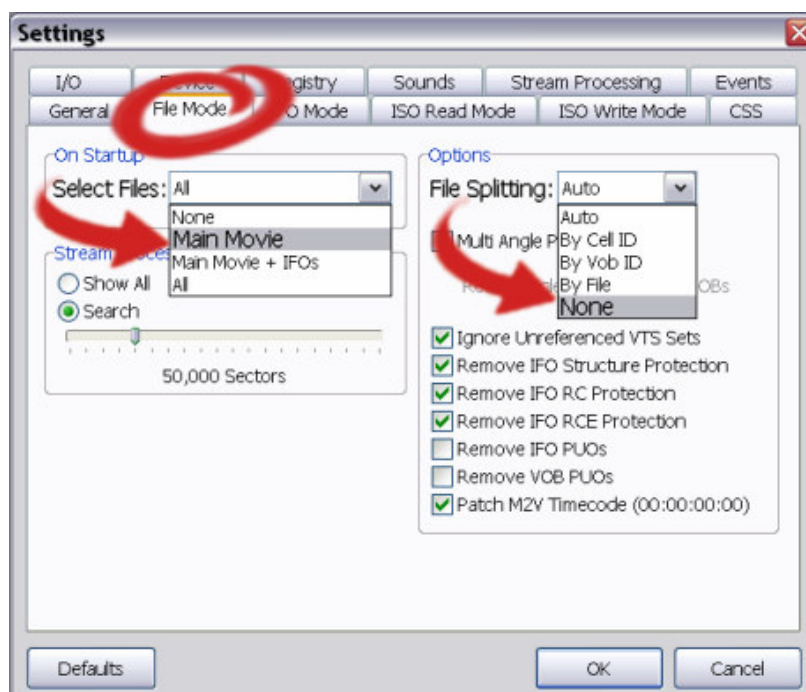
Open Dvd Decrypter and adjust settings to rip in File Mode.
Go to **Tools > Settings**.



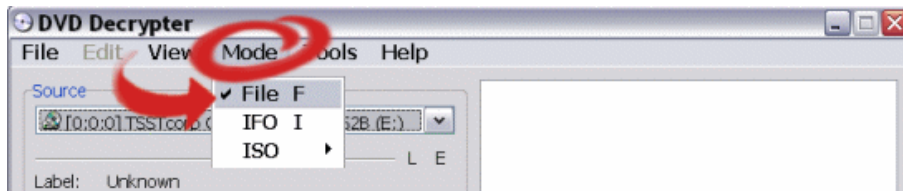
In **Settings** window, click tab for **File Mode**.

From **Select Files** drop-down list, select **Main Movie**.
For **File Splitting**, select **NONE**.

Other settings may be left at their defaults. Click **OK** to save settings.



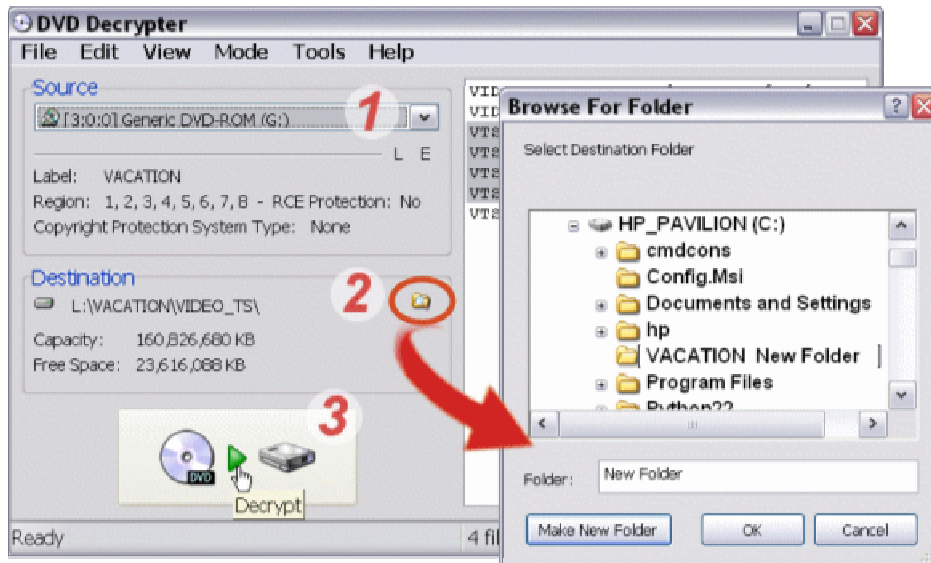
Back at the main window, select **MODE > File**.



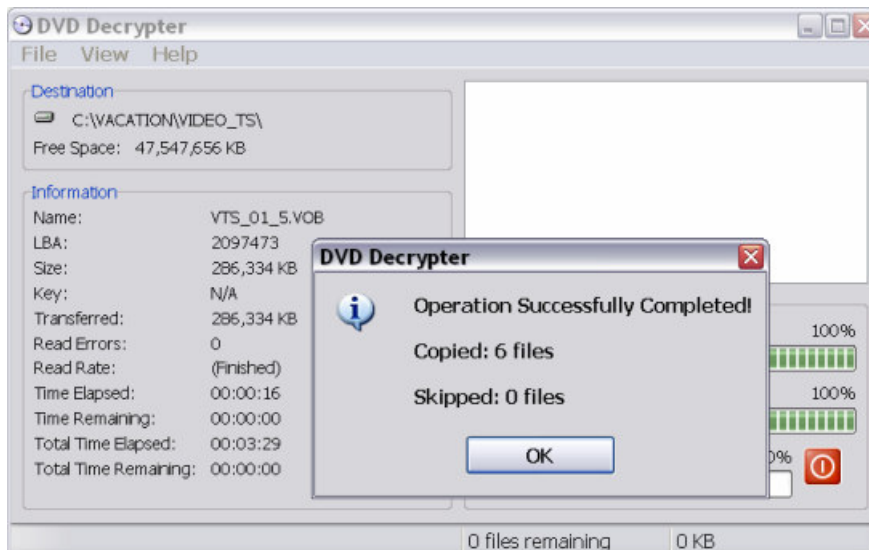
Place dvd disk in drive. Select the drive from **Source** drop-down list. After analysing, Decrypter displays the files in right-hand pane. Only the selected (highlighted) files will be ripped.

At default setting, Decrypter creates new folder on its most recently used drive. If desired, in **Destination** section, click the folder icon to browse to and/or create a different folder.

When ready, click the **Decrypt** green arrow button at bottom left.



Information window displays time and processing data. Exit when process is complete.



B Join existing files with VobMerge

For files already on the hard-drive, you can use this simple tool to merge them.

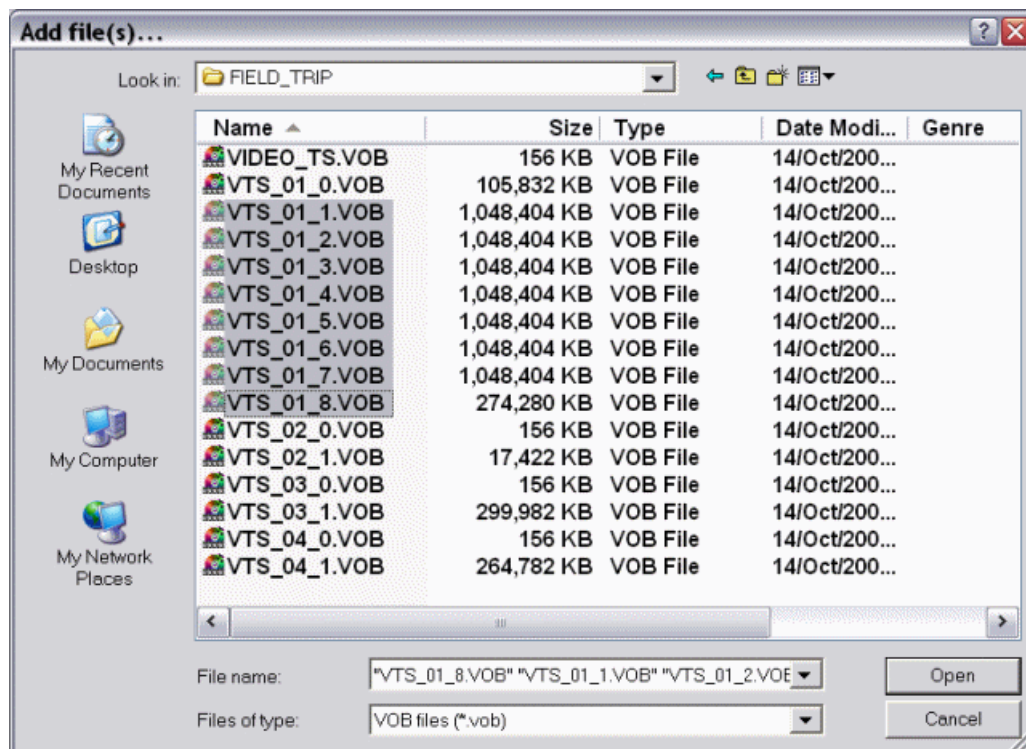
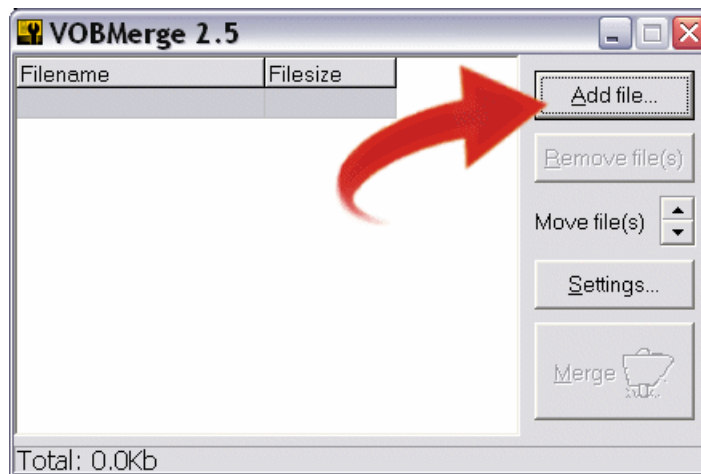
If the dvd has multiple titles, you might have to preview individual vobs with [VDubMpeg](#) or a software player like [Media Player Classic](#) to determine which ones you need.

Open VobMerge, click **Add File** button.

Browse to and select the desired vob files. To select multiple files, hold down the CTRL key while clicking file names.

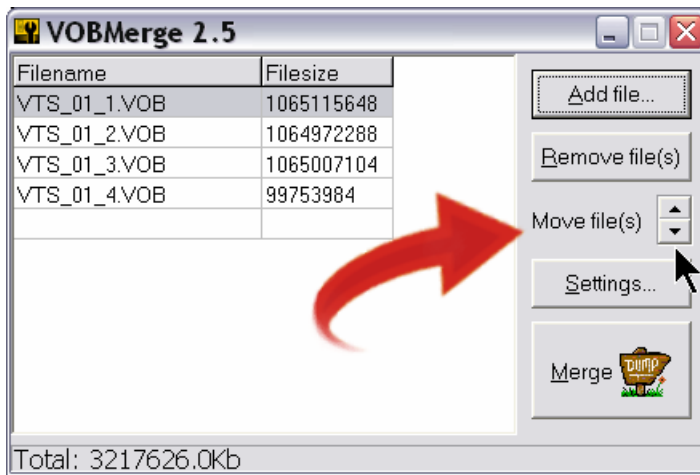
Switching to *Detail view* enables you to sort by name, and view file sizes to help select correct files.

Generally, files named VTS_xx_0 are not movie files, they may be menus or blank titles.



Back at the main window, if needed, re-arrange files in correct sequence.

Select a filename to highlight it, click **Move Files arrows** to move the file up or down the list.



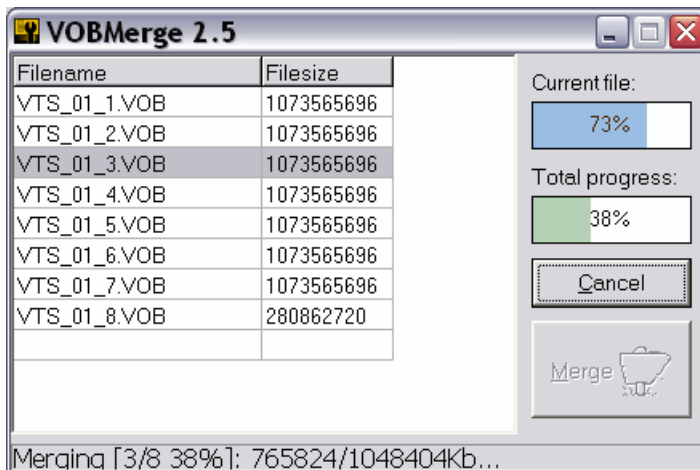
Settings button gives option to automatically delete source files after merge. It's recommended to **not** use this setting.

When ready, click **Merge**.

Enter a filename for the merged file, i.e. MyBigFatMergedVob.vob, and click **Save**.

Take a beverage break while it works.

My P4 3-ghz computer takes about one minute for each GB of data.



Convert your dvd files

The next 6 steps will be painless, too.

1 Open a dvd vob file

You can open from Windows Explorer.

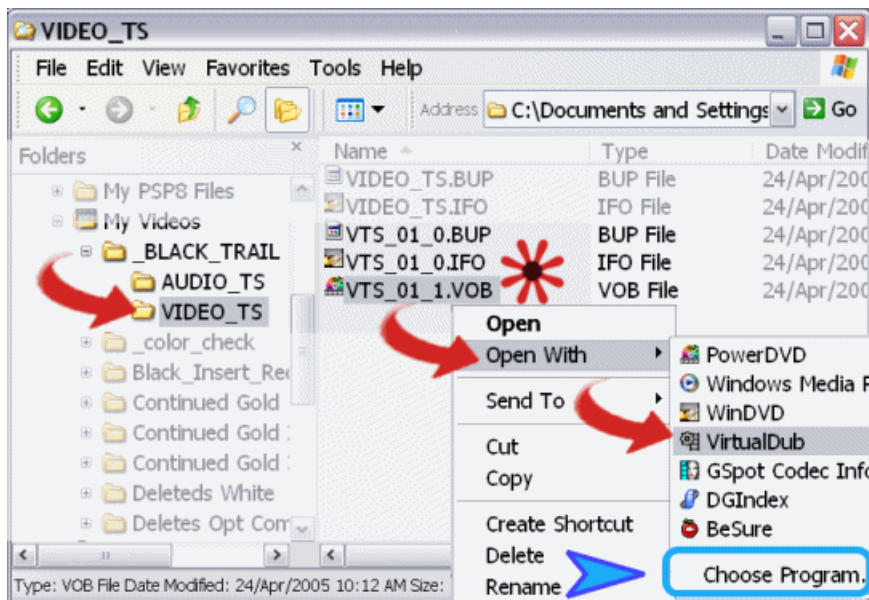
Browse to a .vob file, usually found inside the "Video_TS" folder, but some dvd-creation apps put the files right in the main folder.

Don't try to open .ifo or .bup files ---

watch the file tips, or un-hide file extensions in Explorer.

Right-click file name, click **Open With...** >> **VirtualDub**

(The first time, click **Choose Program**, browse to and tell Windows to use VDM. After that it should appear on the "open with" menu.)

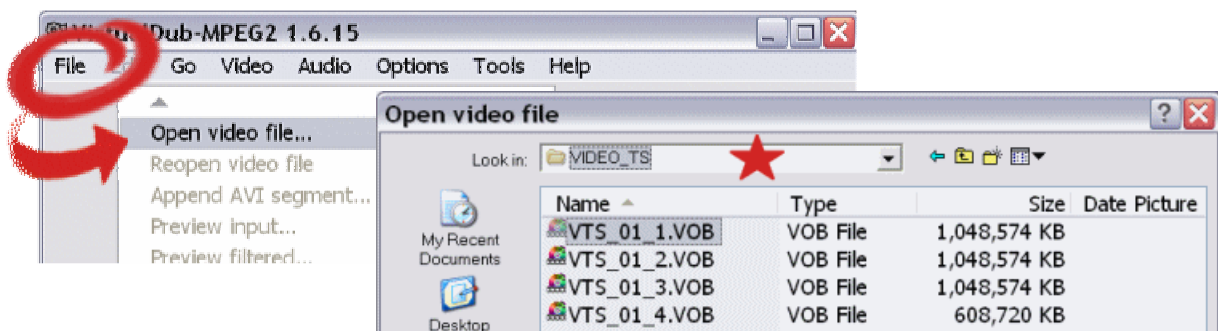


OR,

Open VirtualDub-MPEG2.

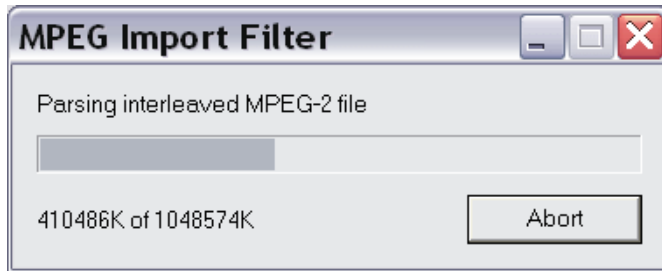
Go to **File >> Open Video File**

Browse to and open the desired vob file.



Wait while the Mpeg Import Filter works.

It will take several minutes, and slightly longer from dvd disk than from hard drive.



Some notes about the interface

The menus ---

Each menu lists the main commands for that category, and selecting some items may disable others (so if something you need is grayed out, try UN-checking some related command).

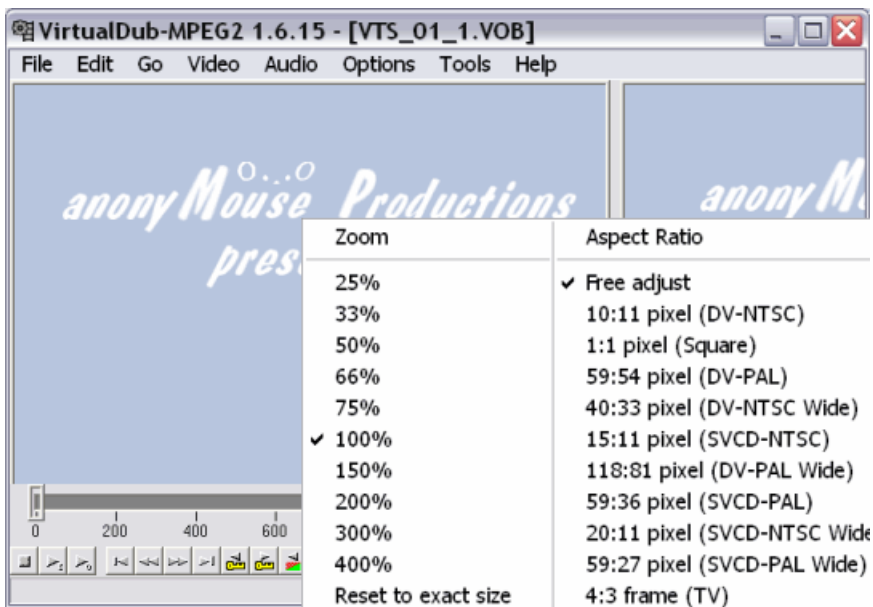
The preview window --

A very useful feature is the double-pane display, to compare before-and-after when working with filters, cropping, re-sizing, etc.

Go to **Options** to Enable / Disable and/or Swap pane displays.

Drag frame edges to re-size panes.

Right-click the window to get a menu for **playback** zoom and aspect ratio settings; these do **not** affect rendered video.



Controlling playback --

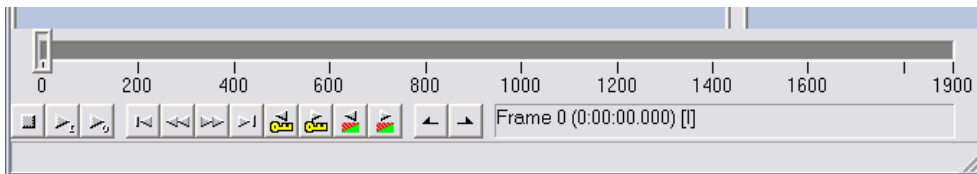
You can use keyboard for some playback operations –
spacebar to start and stop playback, right & left arrow keys to scroll the track.

Do NOT use **Home** and **End** keys to navigate;
those keys set start and end points of selections.

You will get a nasty surprise; I certainly did. (See step 2, Track Duration.)

Playback button **tooltips** are sometimes a bit balky.

So here is a list, in order of appearance, and Help has more details.



Stop playback // keyboard spacebar



Input pane playback. Note the tiny “I”



Input & Output playback if both are enabled, Note the “O”



Go to **track start** // Ctrl + Left arrow

Go to **track end** // Ctrl + Right arrow



Reverse one frame // Left arrow

Advance one frame // Right arrow



Previous key frame

Next key frame



Previous scene change

Next scene change



Mark In a selection start point // Home key

Mark Out a selection end point // End key

2 Set Track Duration

If you want the entire vob, skip this step.

By default, it opens with the entire track selected.

Move the slider to desired start point,

click **Edit >> Set Selection Start**

OR press **HOME** key

OR click **Mark In** toolbutton under slider track

Move the slider to desired end point,

click **Edit >> Set Selection End**

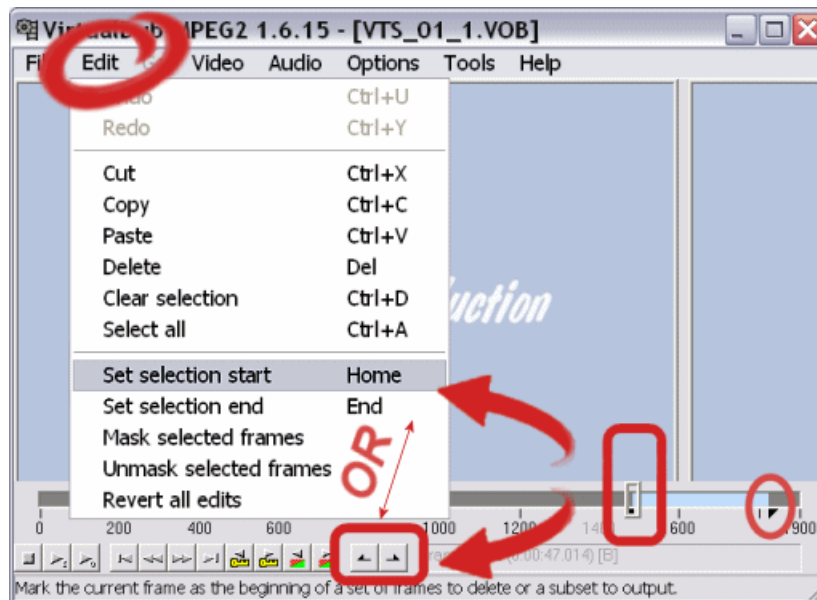
OR press **END** key

OR click **Mark Out** toolbutton under slider track

Small arrows under slider track will show start and end of selection.

You can repeat to change the selection.

(I add one second on each end to add some elbow room for later editing.)



3 Audio Settings

A quick note about using **Direct Stream Copy** – VDM will copy audio using the source format *IF* a codec is available, but some results, such as AC3, might not be compatible with your sound or video editor.

These steps produce Uncompressed PCM Wav audio, which is widely compatible.

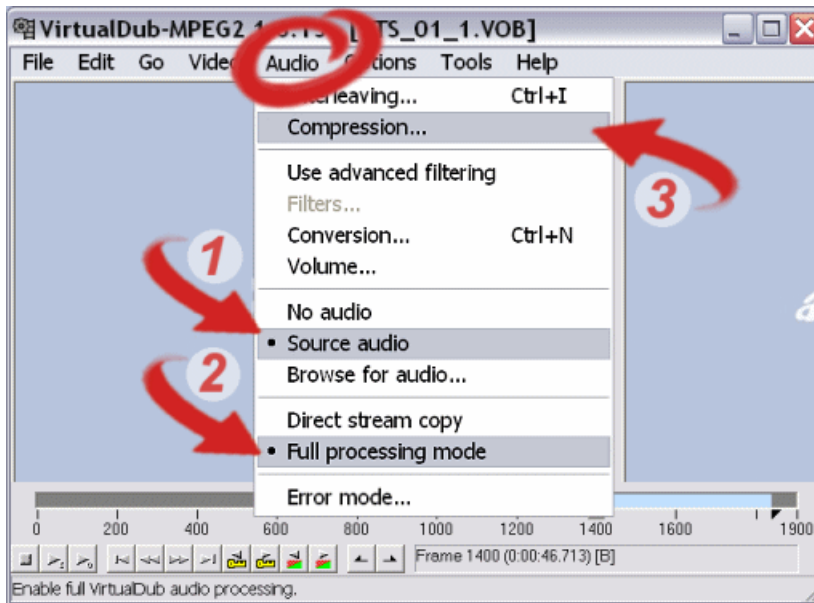
Audio Compression ---

Go to **Audio >>**

Select **Source Audio**

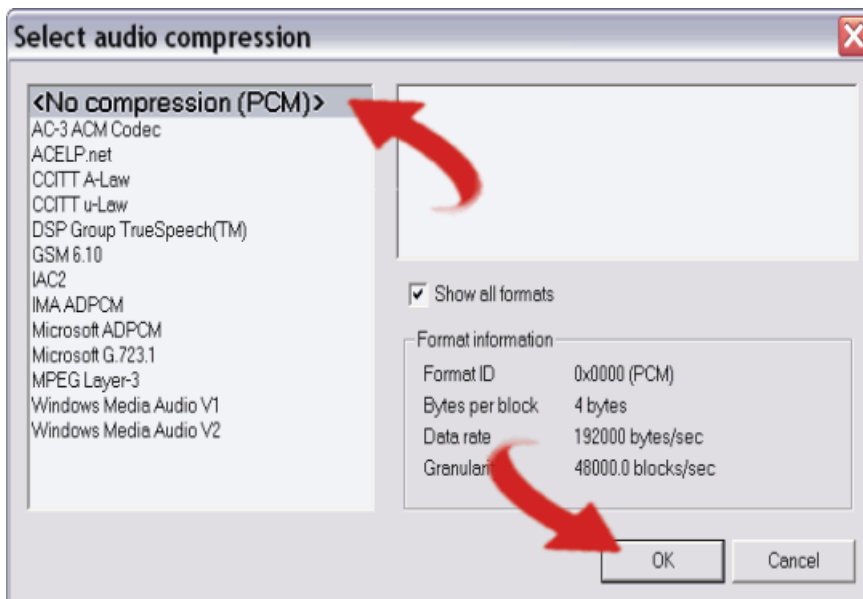
Select **Full Processing mode**

Click **Compression ...**



In **Select Audio Compression** window

Select **No Compression PCM**, click **OK**. (it's the first one on the list)



OPTIONAL STEP

Audio Volume ---

You can adjust volume before rendering.

Go to **Audio >>**

Full Processing mode must be selected

Be sure "Advanced Filtering" is **not** checked

Click **Volume...** >>

In **Audio Volume** window

click to check "Adjust volume . . .", and set the slider



OPTIONAL STEP

Audio Conversion ---

You can change audio PCM formats before rendering.

(I leave them unchanged and let my audio editor handle it, such as changing sampling rate to 44100 for burning to cd.)

Go to **Audio >>**

Full Processing mode must be selected

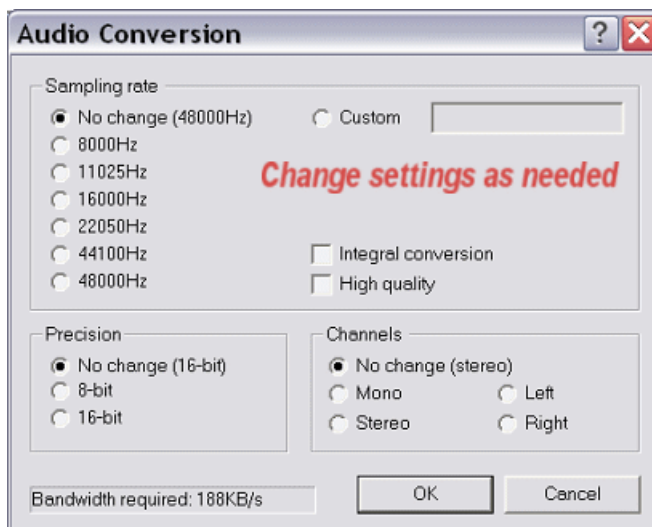
Be sure "Advanced Filtering" is **not** checked

Click **Conversion...** >>

In **Audio Conversion** window,

you can change sample rate, bit-rate, and number of channels.

See the VirtualDub Help file for some details about the settings.



OPTIONAL STEP

Extract Soundtrack

If you want the audio only,
to lay into another video project, to burn to cd, etc ---

After selecting audio settings in previous steps ---

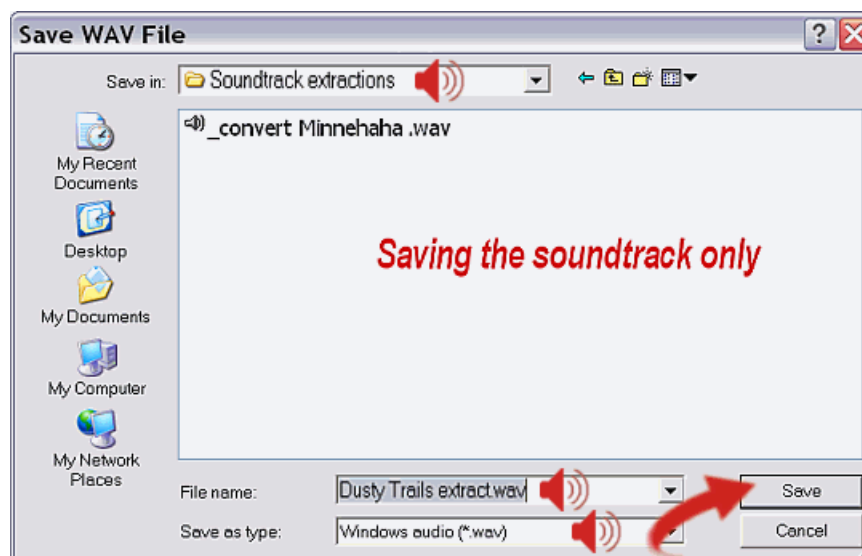
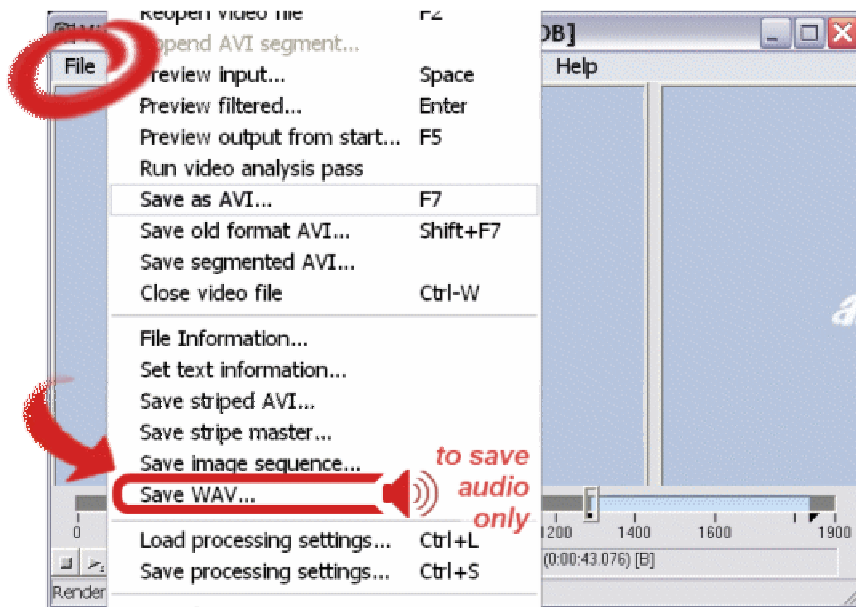
Go to **File >> Save Wav**.

Browse to and/or create a folder to save the file.

Enter a file name, for File Type select "wav". Click **Save**.

The wav file is saved to the folder you chose, ready to use in your sound editor.

You can continue on to set up the same vob for video conversion,
or open and process another file, or exit the program.



4 Video Settings

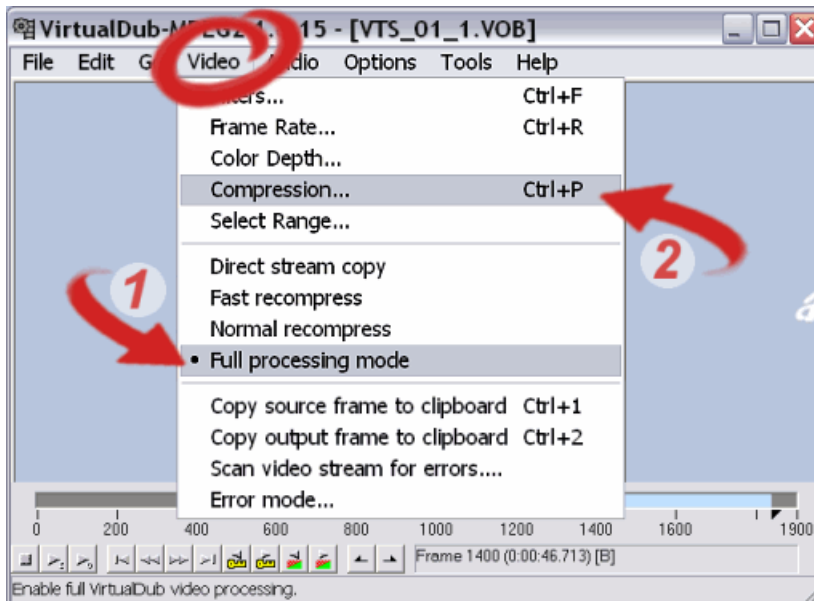
Note, VirtualDub cannot convert dvd-mpeg2 files to avi using Direct Stream Copy.

This step assigns the Panasonic codec to convert the file to DV-Avi.

Go to **Video** >>

Select **Full Processing mode**

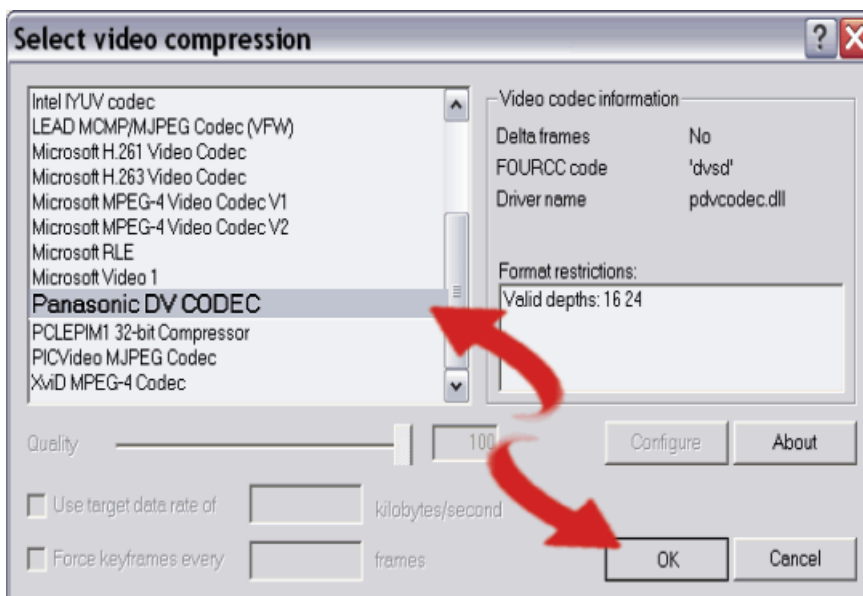
Click **Compression ...**



In **Select Video Compression** window

Select **Panasonic DV Codec**

This codec has no configuration settings, so click **OK**.



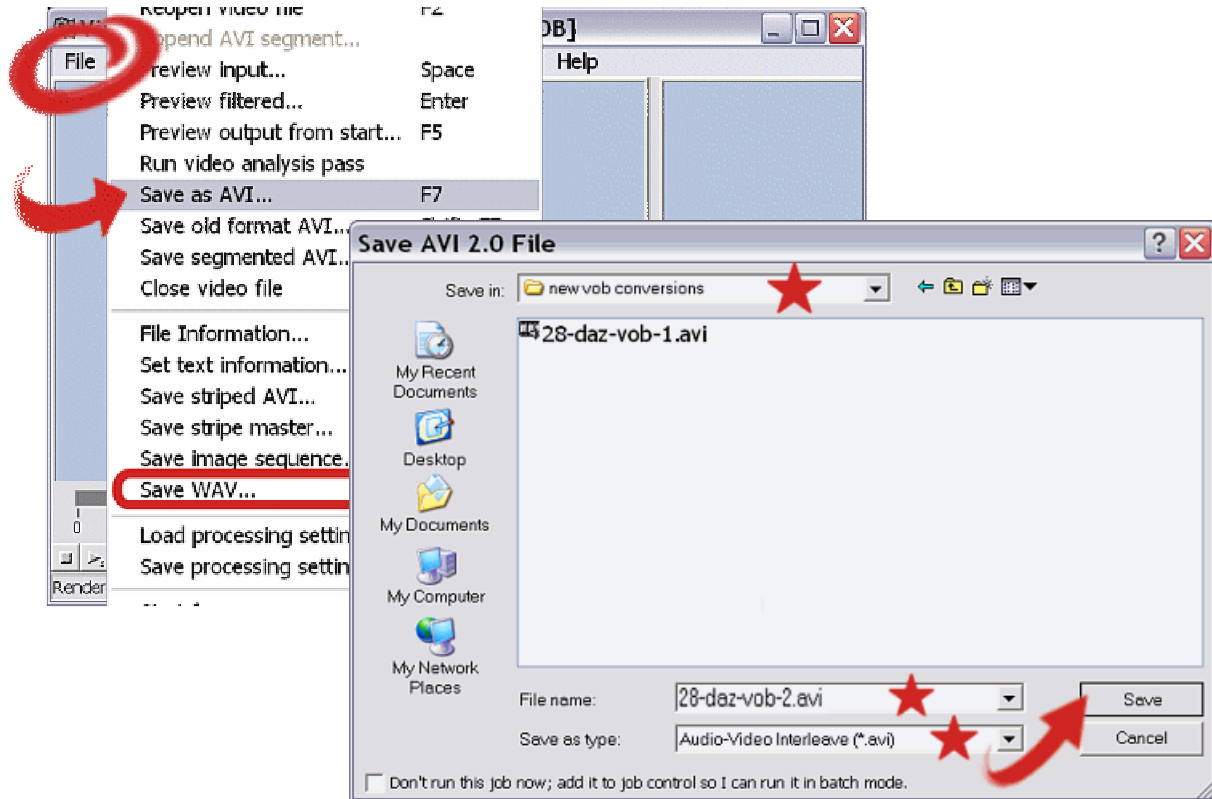
5a Process a single file

Go to **File >> Save As Avi...**

Browse to and/or create **folder** to save your new avi file.

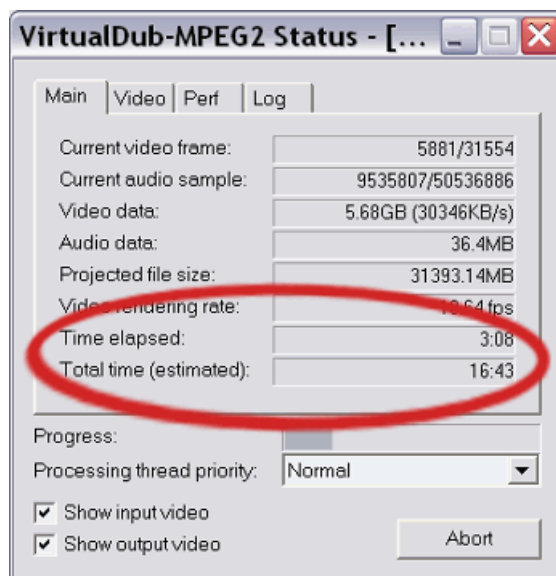
For "**Save As Type**" select **Audio-Video Interleave avi**.

Type in a **file name**, and click **Save** (or press Enter key)



Status window shows conversion progress.

"Total Time estimated" tells you how long you must wait.



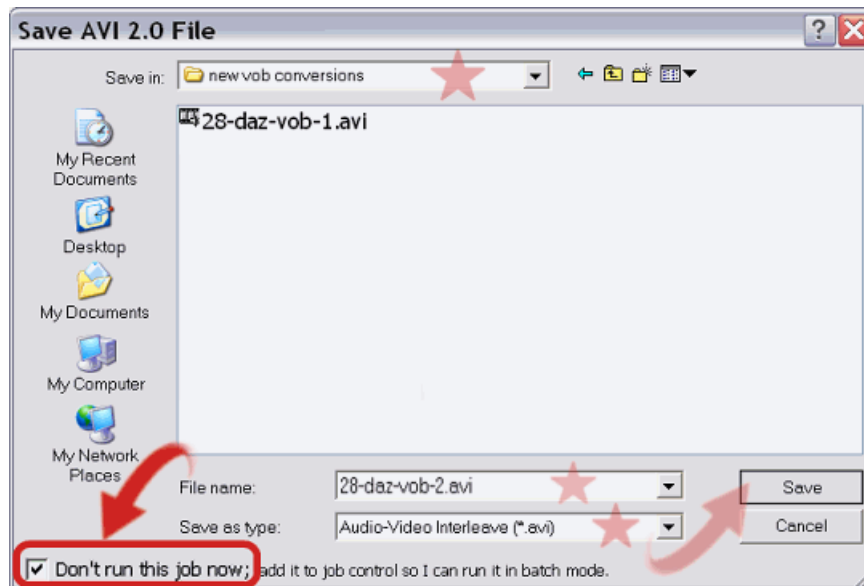
5b Batch-processing

Optionally, you can batch-process multiple files.

When you select **File >> Save As Avi**, and the window opens :

At bottom left, click to select “**Don’t Run This Job Now**”

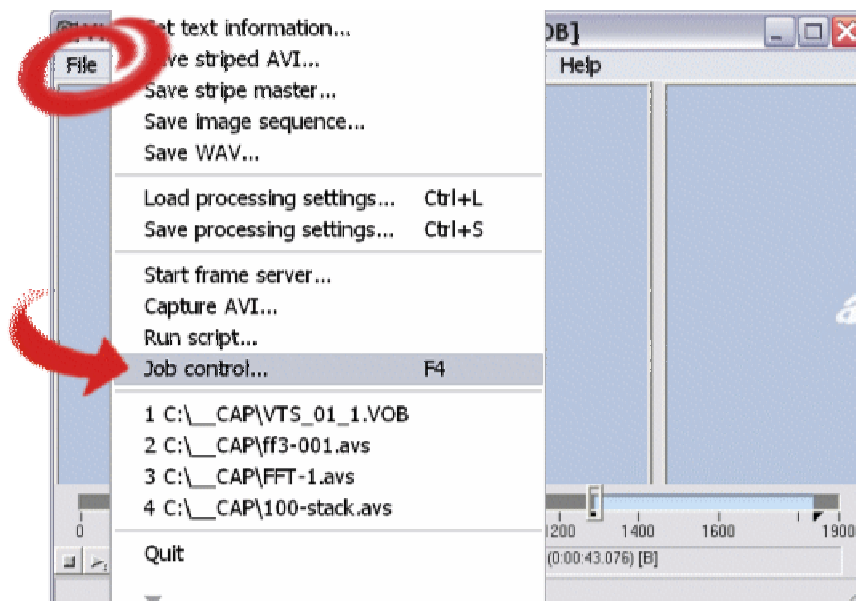
Set up folder and file name as above. Click **Save**.



Repeat opening, setting up, and Saving files to add to the job list.

Use unique names for each one, to prevent files from being over-written.
VDM will NOT warn when it over-writes files during batch processing.

When all files have been set up,
click **File >> Job Control**.



Job Control window opens, listing the files you have set up.
All files remain in the list, even after closing program, until you Delete them.

If needed, rearrange listed files.

Select name, use buttons **Move Up**, **Move Down**, **Delete**.

Click **Postpone** or double-click file name to toggle between
“**waiting**” (for current job) and “**postponed**” (to a later job)
Handy if you suddenly notice duplicate file names. . . .

When ready, click **Start** button.

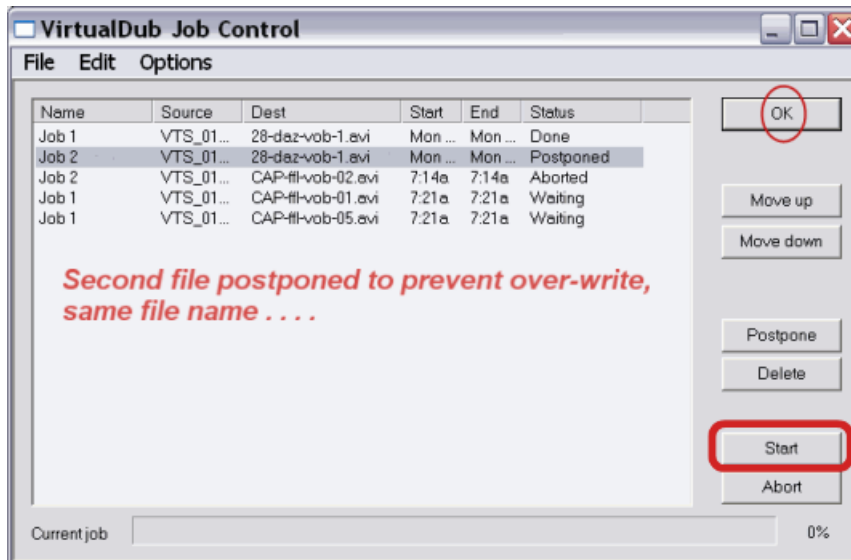
Progress bar displays as each file is processed.

The **Start** button turns into a **Stop** button.

Stop -- current file finishes processing, and then stops.

Abort -- stops immediately, leaving current file undone.

When processing finishes, click **OK** to close the window.



6 Exit the program

Use **File >> Quit**, or **ALT F4**, or click top right corner **X** button.

You're finished, and your new avi file is waiting for its tryout.