

Creating a podcasting show on windows

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What you need

- Windows XP (or maybe an earlier version, although this is untested).
- Audio recording software, in this section the free application Audacity (<http://audacity.sourceforge.net>) is used. Be sure to also download the lame encoder library linked there to convert your podcast shows to MP3.
- A microphone.
- Optionally: some songs, jingles and a player to play them (iTunes, Winamp).
- Optionally: Skype (<http://www.skype.com>) for doing interviews.

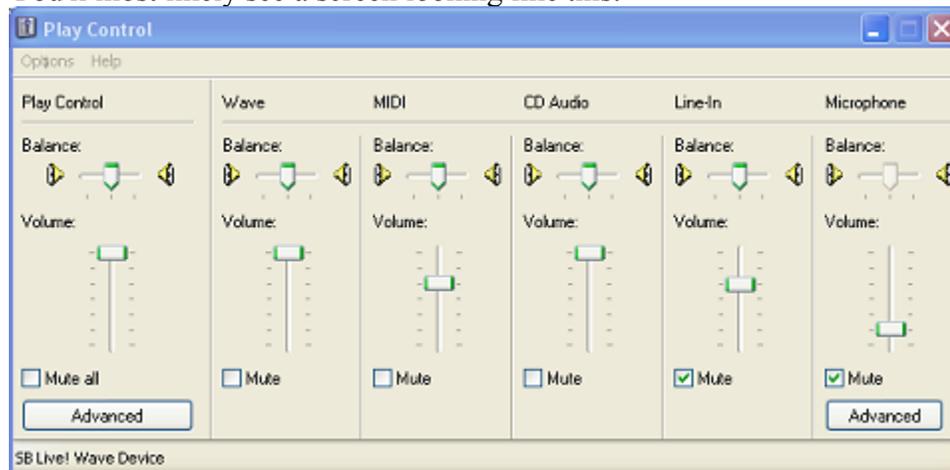
Setting up the hardware

First you have to connect your microphone to your computer. Depending on the microphone and how close you sit next to your audio speakers, you might want to route your audio output to your headphones instead, this can normally be done by simply plugging in the headphone jack.

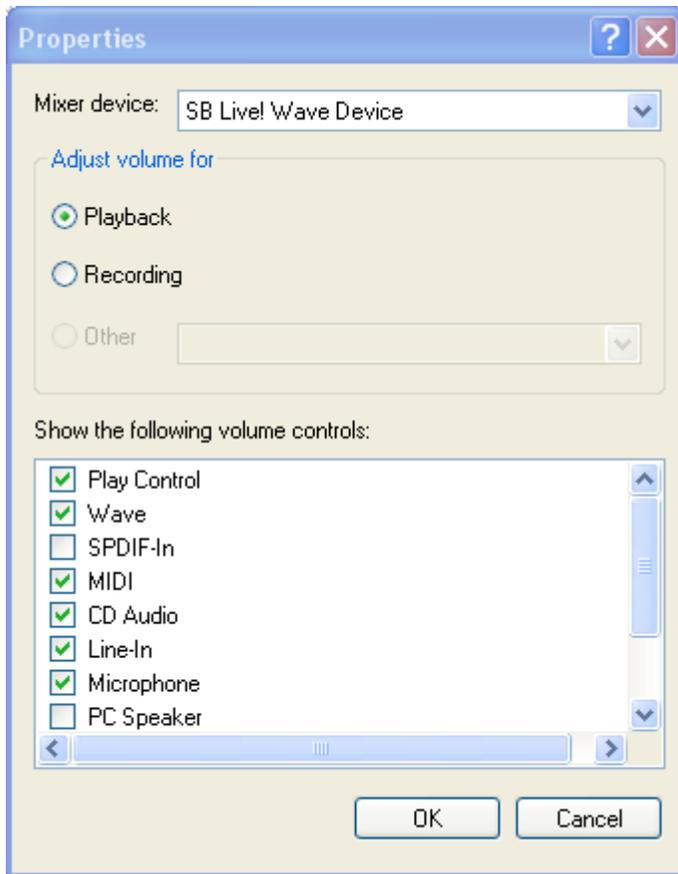
Configure your soundcard

Then, the hard part: you have to find the correct settings to record both your voice and music at the same time. To do this, open up your volume controls. You can do that by clicking on the Volume tray icon or through Start > Control panel > Sound and audio devices > Audio tab and then click one of the volume buttons.

You'll most likely see a screen looking like this:



You're now on the Play Control screen. You can switch between the Play Control screen and the Record Control screen through File > Properties, by clicking either on the "Playback" or "Recording" radio button:



In this window you can also enable the volume controls you see. Be sure that with the play controls at least the “Microphone” one is enabled. At the recording volume controls, be sure the “Record Master” one is enabled.

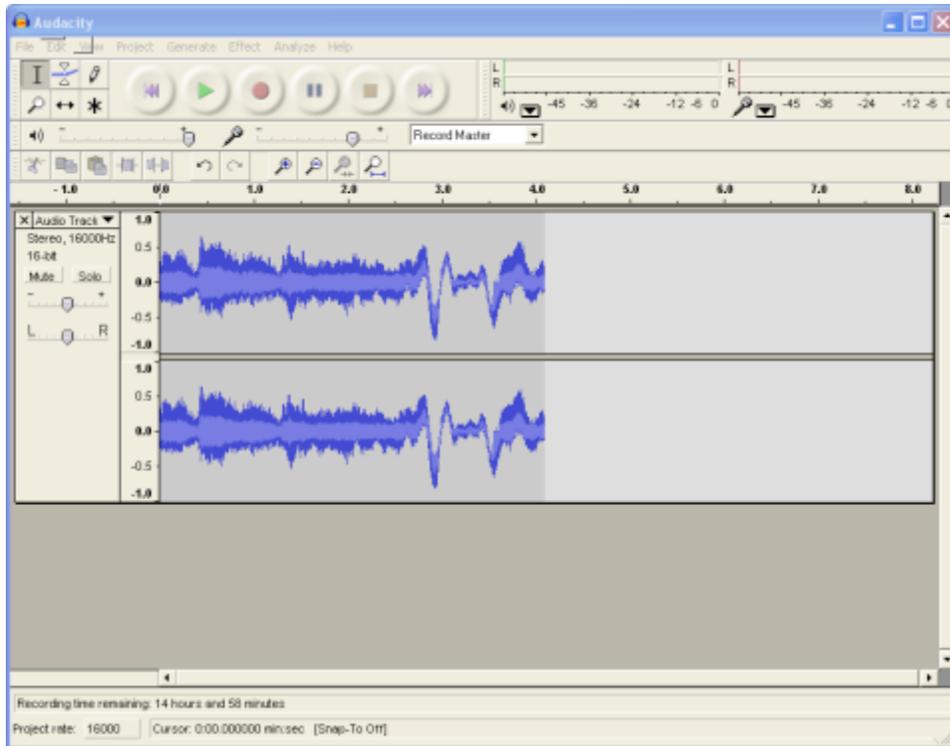
Go to the record control screen and select the “Record master” volume control as the active one. This will make Windows record all audio being played.

Now switch to the play control screen and uncheck the Mute checkbox on the "Microphone" volume control. If you talk into the microphone you should now hear yourself through the speakers (or headphone, if that's what you're using). If not, increase the volume of the microphone using the slide bar.

You should now be set. Start up a media player, play a tune and while it plays start talking, if you hear both yourself and the music through the speakers you're probably set up correctly.

Audio Recording Software Setup

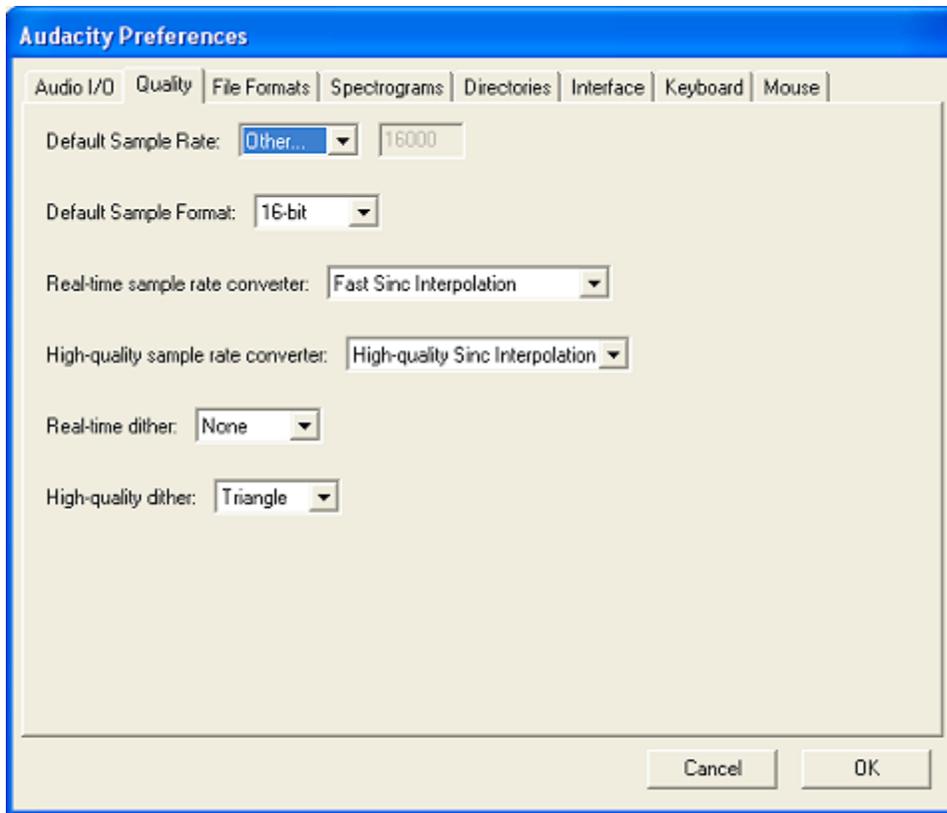
Now, start up your audio recording software, such as Audacity.



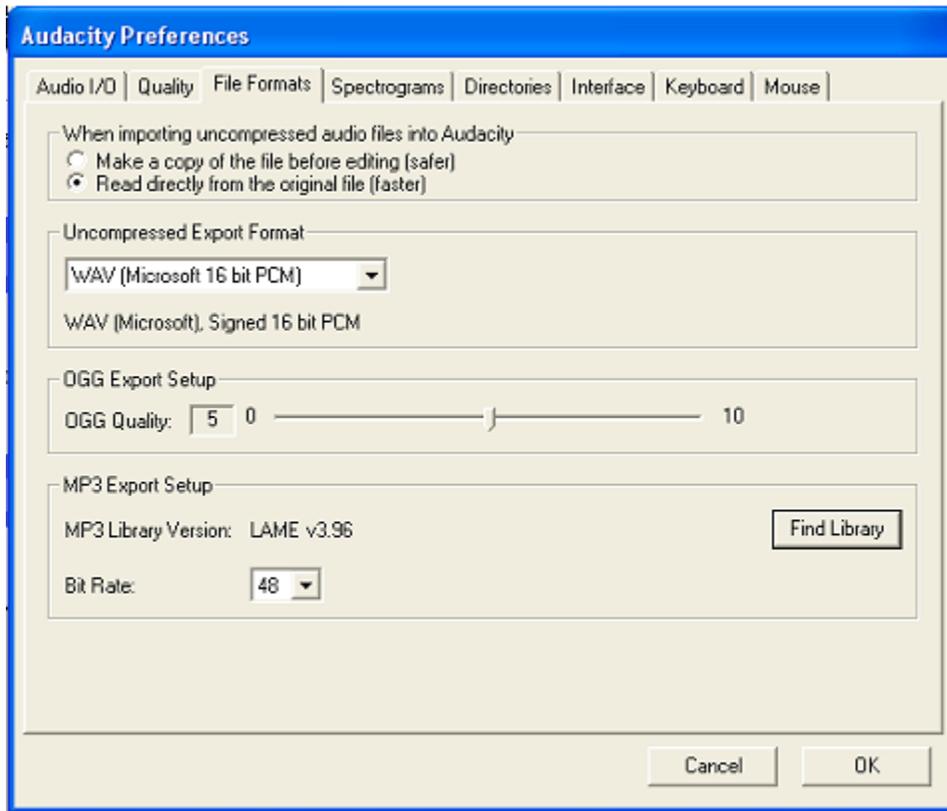
Software like this is usually quite intuitive in its usage. You can start recording by pressing the big button with the red circle in it, just like your VCR.

Record a little something and play it back to see if it works. If not, the problem most likely is in your play and record control settings, fiddle around with them a bit until it works. It's really hard to give settings that work with every soundcard setup, so you'll just have to play with the settings a little.

Now you're almost ready to record your show. First you have to set the sample rate to something lower, like 16 KHz. This is done in Audacity by going to File > Preferences.... There, go to the "Quality" tab and change the "Default Sample Rate" by choosing "Other..." and then set it to 16.000 Hz (16 KHz).



On the “File formats” tab you have to locate your lame encoder installation (using the “Find Library” button) and set the bit-rate for your target MP3 file (I use 48kbit):



Close the dialog by pressing “OK”. After this, you’re ready to record your first show.

Recording your show

This part is entirely up to you. Talk, sing, play music, do whatever you want. Just hit record and go. You can stop recording by hitting the stop button (the square yellow one, like the one on your VCR). Every sound produced on your computer is recorded. This also implies that sounds produced by applications like MSN or ICQ are recorded. It therefore is probably best to shut down any application, except the ones you need, that produces any kind of sound.

An advantage of having your audio recording software recording everything is that if you want to do an interview with somebody, you can use Skype (<http://www.skype.com>). Skype is internet telephony software. It allows you to call other Skype users for free, but also call regular phone numbers from your computer for fairly low prices using SkypeOut. Using Skype you can easily do a phone interview with someone and record it.

Distributing

Podcasts are usually distributed in the MP3 format. MP3 is the most well known for distributing (illegal) music, but it has legitimate uses as well, such as podcasting. The reason that MP3 is so popular is that it compresses files to about a tenth of its normal size. A normal audio CD for example is around 650 megabytes big, when compressed using MP3, it’s only around 60 megabytes. As the sound quality of podcasts doesn’t have to be as high as of a CD, it can be compressed even more. This way an hour of podcast

can be around 30 megabyte, which is perfectly fine for broadband internet users and MP3 players.

You can export your show to an MP3 file in Audacity using File > Export As MP3.

The next thing you need is a place to upload your podcasting show and make it possible it for other people to subscribe to it. The easiest way to do this is using weblog software with podcasting support, such as WordPress version 1.5 and up (<http://www.wordpress.org>). In order to run this software you need a web hosting account with PHP and MySQL support. Once you got a web host you can set up WordPress, once you've done that, you can upload your podcast shows. WordPress-specific remarks on how to do podcasting can be found here: <http://codex.wordpress.org/podcasting>.

Web hosts

If you don't have a web host yet, there are two particularly important criteria on selecting one for podcasting:

- Space
- Bandwidth

Because podcast files are still fairly big and you probably want to archive some of your shows, you need a lot of web space. If your show is 20 megabytes per episode, for example, and you have a weekly show, you'd already need over a gigabyte (1,024 megabytes) to store a year's worth of podcasts. It, therefore, isn't sensible to archive that many old show. Still, it is recommended to get a web host with a couple of hundred megabytes of web space. Luckily, web space isn't very expensive anymore.

A bigger problem is bandwidth. Hosts usually have a limit on the amount of traffic on your webpage. Every time somebody downloads a podcast from you, this is registered. For example, if you have a 2 gigabytes monthly traffic limit, and your show is 20 megabytes big, 100 downloads of one of your shows already uses up your bandwidth. Depending on your host, they may temporarily shut down your website down when the limit is exceeded, or they may charge you extra. Therefore it is good to think about how many listeners you expect to get, how big your shows are, and doing some calculations with these. Bandwidth limits are the biggest problem in podcasting today.

RSS

People subscribe to your podcast by subscribing to a so-called RSS feed. RSS stands for "Really Simple Syndication" and is a simple file format for reporting updates to whatever you like. Until recently RSS was mainly used for weblogs. If you were interested in a particular weblog you could subscribe to it. This was done using a feed aggregator application like FeedDemon (<http://www.bradsoft.com/feeddemon/>) or Thunderbird (<http://www.mozilla.org/products/thunderbird/>). These applications automatically notify you when one of the weblogs you are subscribed to updates, for example when posting a new story.

Podcasting takes advantage of one particular feature of RSS: enclosures. Enclosures allow you to link to (media) files in your RSS feeds. Special feed aggregators can then

automatically download these files. This is what applications like iPodder (<http://ipodder.sf.net>) and, lately, iTunes do. They allow you to subscribe to podcast RSS feeds, automatically download its enclosed files and put them on your iPod or other MP3 player.

Software like WordPress automatically generates a RSS feed for you, all your listeners have to do is subscribe to it (using iTunes or iPodder) and your podcast will be delivered to their virtual doorstep.