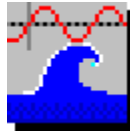


Surf, this document and all related materials are Copyright ©1992,1993 New Executable Workshop
Print Me! *This document is formatted and it was designed to be printed out.*

Welcome to Surf !



Surf, Version 1.1, June 1993

New Executable Workshop
PO Box 57336 Jacksonville, FL 32241-7336 (904) 645-5568

- See the "*WHATS NEW*" file for a short list of the latest features -

Surf is Shareware. You are allowed to use it for up to ten days as an evaluation, but you must register to continue use. Registration is simple and provides the following benefits:

- **New versions!** Surf has had several released versions and this version may already be replaced!
- You can get **copies of other programs** available from N.E.W.
- With a license number **you can be registered instantly** over the phone. No waiting for the mail.
If you order a new version you can receive that in just a couple of days (even faster with Express shipping!).
- Your license number is good for **all** future versions!
- **Upgrades are cheap**, usually under \$8.00!
- Flexible pricing lets you get exactly what you want.
- Site licenses available for 5 or more users.

Registering Surf:



By phone: Just call us at (904) 645-5568.



By mail: Just print and fill out the "ORDER.FRM" file and send your check or money order (US Dollars only) to us at:

**New Executable Workshop
PO Box 57336
Jacksonville, FL 32241-7336**

Prices:

Surf	(License number only)	\$24.99
Surf	(Latest version shipped to you)	\$29.99
Statline	(The Ultimate Windows Status line)	\$24.99 (more info on this software below)
Client Biller	(Invoice-maker extraordinaire!)	\$19.99 (more info on this software below)

Special SuperPack:

Surf, Statline, SeaShell, a collection of WAV files, and a collection of True Type fonts \$49.99

Shipping options:

Express shipping (USA only)	\$5.00
Shipping outside the USA	\$2.00

-

Introduction to Surf

Surf is designed to be a toolbox for modifying and editing Windows 3.1 WAV files. You'll need Windows 3.1 and a sound device capable of digital output (e.g. SoundBlaster, Pro Audio Spectrum, Adlib Gold, etc). Regular Adlib cards cannot play WAV files. There is a driver for the built-in speaker inside your PC that was released after Windows 3.1. The quality is poor, but it is free from Microsoft.

Surf is designed to be fun and useful. I've tried to leave out the technical details wherever possible. A lot of people won't understand if you say "inverting the sample", but if you say "sounds like playing in a garage", they get the idea. I'm by no means an expert, and this is a good place to thank Jason Bell (my brother) and Na'im Ru for explanations, ideas, and even some source code.

Surf is a file-based toolbox, which means that WAV files are never held in memory (except partially, during playback), so the only limitation on WAV file size is the size of your hard drive.

This is the third official release of Surf and there is still one glaring limitation: Surf is currently limited to 8-bit monophonic sound editing. If DEMAND for stereo or 16-bit work picks up, then I'll have to change things, but so far no one has made such requests.

-

If you have an idea for a function for Surf, drop us a line:

Attn: James Bell

New Executable Workshop

PO Box 57336

Jacksonville, FL 32241-7336

Phone: (904) 645-5568

Internet: jb1@cis.ufl.edu

-

Installing Surf - Automatic installation

Just run the "INSTALL.EXE" program included with Surf. Be sure the SURF.EXE file is still in the same drive/directory as the INSTALL.EXE program.

That's it. The Install program will copy SURF.EXE to a directory on your hard drive and even start up Surf for you.

Don't forget that this file, the "WHATS NEW" file, the Install program, and the ORDER.FRM order form file aren't copied by the Install program, so don't delete them.

Installing Surf - Manual installation

1. Copy the SURF.EXE file to your Windows directory.
2. Click on the Program Manager group you'd like Surf to be in.
3. Select "File" then "New..." from the menu, click OK for a new program item.
4. Give the Command Line as "SURF.EXE", click OK, and you're done.

Using Surf

Just start-up Surf by double-clicking on its icon. You should see the Surf window appear with a status bar at the bottom.

Choose "File...Open" and select a WAV file for editing.

If you do a right-button click on Surf's window you'll get a "Peaks" display of the WAV file's samples. A "Peaks" display is explained in more detail below.

The status bar will display information about the WAV file you opened, and will look something like this:



Interpreting the status bar

The "6000 Hz" refers to the "Sample Rate" of the WAV file. This is the number of samples that were collected in one second during recording. For 8-bit recordings, a "sample" is one byte. You may hear of sample rates in the kilohertz (kHz), so note that "1000 Hz" is the same as "1 kHz".

For various (technical) reasons the sample rate determines the highest frequency of sound that can be reproduced. The sample rate must be twice as high as the highest frequency to be recorded or played back.

For reference, most people's speaking pitch is below 5000 Hz, and most of us cannot hear tones over 20,000 Hz. Below are some common sample rates:

<u>Sample Rate</u>	<u>Highest Freq.</u>	<u>Comment</u>
4000 Hz	2000 Hz	The slowest possible sample rate for many common [*] sound devices.
11025 Hz	5512 Hz	A common sample rate (1/4 of CD rate).
12000 Hz	6000 Hz	Highest possible (recording) sample rate for many common sound devices.
22050 Hz	11025 Hz	A common sample rate (1/2 of CD rate).
23000 Hz	11500 Hz	Highest possible (playback) sample rate for many common sound devices.
44100 Hz	22050 Hz	Sample rate for CD-quality sound.

* "common" = Creative Labs' original SoundBlaster card

Using Surf's Effects

Once you have your sound file open, you're ready to start modifying the sound.

This symbol:



Marks functions that are on the "button-bar" for easy access.

Here are some of the things you can do with Surf:



Show

You can view the WAV file you're working on in five ways, four of the views scale themselves to the current window size:

The "Current" choice on the "Show" menu is the quickest way to look at the sound. It will select 1 sample out of several and draw it as one line on the screen.

The "Compare" choice shows you the current sound as well as the previous one. This will let you compare, for example, the original samples with the sound after you've added echo.

The "Extended" choice is slow, but gives a more accurate picture of the sound samples. It draws ALL the samples (on top of one another if necessary) in the window.

The "Peaks only" display is probably the best mix of speed versus accuracy. It shows the highest and lowest samples. You can also get this display by clicking with the right mouse button anywhere on the window.

The "Zoomed" display shows you all the samples individually, without letting samples run over each other. So you can see in detail what the samples are. The "Zoom View" window will come up separately which lets you have two view on the screen at once, the "Zoomed" and one of the other four above.



Play

This (of course) plays the current sound. You can restart the playback by selecting Play again before the sample finishes. The playback is in the background, so you can continue editing while it is playing.



Undo

This will "undo" the last function. After you undo, you can "redo" if you change your mind again.

ReOpen
out

This will reopen the original file you started working with, effectively throwing out your changes to the file.

**Save**

Lets you save your all your changes to a WAV file.

**Cut/Copy**

This is where you can cut out or make a copy of some part of your WAV file. You'll see a miniature version of the WAV image and you just click on the image to select the beginning and end of the sound you want. Then you can click on "Cut" or "Copy" depending on which you want to do. There's also a "Test (play)" button that'll play the part of the sample you outlined.

**Insert/Mix**
is

Once you've cut or copied some audio, you'll want to paste it in somewhere; this is how you do it. You'll see another miniature image of your WAV file, and you just pick the spot where you'd like to put in the piece you cut or copied.

Now you have to decide whether you'd like to mix it in or insert it. If you mix, you'll be combining the audio that you cut or copied with what is displayed. If you insert, you'll be adding the audio you cut or copied in front of the point you selected.

Copy From

This will let you copy a WAV audio file for use in inserting or mixing.

Paste To

This will let you save some audio that you cut or copied as a separate WAV file.

**Use Cut/
Copied**

This will switch from whatever file you have open to the buffer used to hold Cut & Copied samples. The net result here is that you can use samples you cut or copied just like any other WAV file. If you make changes that you want to save, you MUST save the file to a new name.

**Add Echo**

You can add five levels of artificial echo to your samples.

- 1) The "Reverb" echo is an extremely short echo.
- 2) The "Short" echo repeats about every 0.15 seconds and sounds like talking in a large room.
- 3) The "Medium" echo repeats about every 0.25 seconds and it sounds like the echo on a stadium P.A. system.
- 4) The "Long" echo repeats about every 0.60 seconds and it is like the echo you hear if you shout from a mountaintop.
- 5) The "Very Long" echo is even longer.



Volume

it

You can change the volume level of the WAV file. You should take care using this - if you make the sample too loud, something called "clipping" happens and

sounds *awful*. Use the "Show" feature and make sure that you don't make the sound so loud that any samples shown reach the top of the display window.

in

If you make a sample very loud or soft, don't expect to be able to change the volume back and have the same sound. It is similar to "washing out" the colors

a picture. You should try to keep the volume as high as possible without clipping. Check the display after each function to make sure the volume isn't too loud or soft.

Take a WAV file and play around with the volume, it is useful to see what it looks and sounds like at each step.

Continuous Play

Plays the current sound over and over. Surf will shrink to an icon during playback. When you double-click on Surf's icon, it stops playing.

Smooth

under

Attempts to "even out" sharp changes in consecutive samples. This sort of "dampens" the sound, making it sound like it was played in the next room or a blanket.

Hiss

the

be

on

(Removing) Sets samples that are nearly "silent" to silence. This has the effect of removing the hiss that can be heard during long periods of silence. The Heavy, Medium, and Light levels reflect what samples Surf will consider to be "nearly-silent". Note that if many samples are "silenced", it can make the speaker "pop" during playback. What happens is that once the smaller samples are removed, larger ones that are left tend to "pop" the speaker abruptly. This can sometimes be worse than the hiss you were removing! You'll hear what I mean if you try this on a few sounds.

creating

(Adding) This adds random values to the samples of the sound, effectively hiss.

Chorusing

This is bit like a varying echo. The idea is to add layers of slight echo to give the impression that a "chorus" is present instead of a single sound source. "Medium" effect usually has the best results. Try doing this function 1-3 times, each on top of the last. With a suitable sample, it really can sound like a chorus.



Inversion

bit

This produces a sound like speaking in a room with concrete walls. It's quite a

second

like playing the sample in a garage. Even more so if you Invert the sound a or third time.



Phazer-
Like
Chorus

This is something of a mix between a phaser and the chorus function. inversion, it only sounds good with some samples, others sound awful.



**Sample
Rate**

This is probably the most fun to play with. You can change the rate at which the samples are played. This will slow down or speed up the pitch and length (timewise) of the sound. As mentioned above, you should keep sample rates between 4000 Hz and 23,000 Hz.

Shrink

This can let you save some space with longer samples. What it does is remove every fourth sample and then decrease the sample rate by 25%. With some WAV files there is only a slight loss in quality, even when the file is "shrunk" 2-3 times. You'll have to decide if this quality-for-space tradeoff is useful for your files.

Reverse

This simply reverses the order of the samples in the WAV file, so your audio is backwards. Note that this function has fast (memory) and a slow (disk) versions.

Other Software from N.E.W.

Statline - The Ultimate Windows Status Line

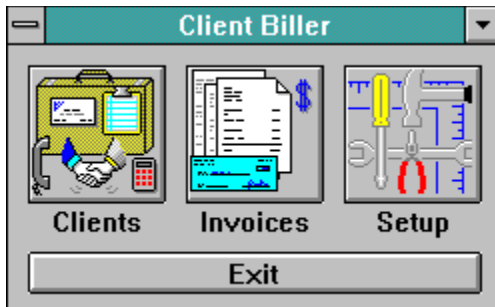


Statline is *the* status line for Windows 3.1 and Windows NT, capable of displaying the date, time, amount of memory free, percentage of "system resources" free, and hard drive space free.

Statline goes a step further by providing a program launcher, a small menu for often-used programs, a small notepad, printer control, and a quick exit out of Windows.

Client Biller

(available July 1993)



Brand New! The easiest way to bill, for consultants, contractors, small businesses, anyone who hates to type up invoices. Keep track of clients and what you've billed them, and print great looking *automatically-generated* invoices. Its as easy as 1-2-3!

1. Punch in your client's name and address (just once!).
2. Type in the charges for the bill.
3. Print! There's even a print preview feature.

SeaShell



It's still in beta-form but SeaShell is already an attention grabber. Keep programs and information side-by-side for instant use. A flexible display where you decide how and what is on your desktop.

This display is only one of the combinations you can have!

Surf was written by James Bell. E-Mail comments/questions/suggestions to (Internet) jb1@cis.ufl.edu
Surf, this document and all other related materials are Copyright © 1991,1992,1993 New Executable Workshop.
See ORDER.FRM for registration information or call (904) 645-5568 for Visa and MasterCard orders.