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CDP Installation Notes - MAC

~ Installation of the CDP System on MAC - 64-bit version ~

The Installation

This installation of the complete CDP System for MAC computers is contained in separate zip files:
- one for the Installation instructions,
- one for the CDP software (the software executables and basic system directory structure),
- one for the *SoundLoom* GUI, and
- one for the Documentation.

All of these are downloaded *via* the CDP Download site. Other key sites are listed for your information.

The CDP Download site is **https://www.unstablesound.net/cdp.html**
Robert Fraser's Download site **is: http://www.ensemble-software.net/dloads.html**
Trevor Wishart's Website is **http://www.trevorwishart.co.uk**
Richard Dobson's Website is **http://www.rwdobson.com**
The CDP Forum is: **https://www.unstablesound.net/cdpforum**

Should there be any problem with opening/running this CDP installation or installing the *SoundLoom* GUI, it could be because of Apple's new Gatekeeper mechanism, which tends to exclude non-Apple software. If this occurs, the problem should be resolved by entering (typed in – don't copy & paste):

- **for the installation mpkg:**

```
xattr -rc ./CDPRelease711u.mpkg.zip
```

- **and for the *SoundLoom* GUI:**

```
xattr -rc /Applications/soundloom.app
```

NB: You will need to type these in–don't cut and paste; otherwise non-visible formatting characters will be present which will keep this 'fix' from working.

There are four items to download:

1) The Installation and Check_Installation documents: **InstallationDocumentsPC-MAC.pdf**. You will need to read *CDP-InstallationNotesMAC.pdf* (this document: for the installation procedure), and *CDP-*

Check_installation_MAC.pdf (to see where everything is located). Also, **Catalina and later users: Please ensure that you look at Manualconfig.pdf** (see overleaf)

2) The CDP system software: **CDP-Release711u.mpkg.zip**

3) The *SoundLoom* GUI: **sloom1703D.app.zip**

4) The CDP documentation: **CDPR711documentationPC-MAC.zip**

Prepare

If you already have *CDP-InstallationNotesMAC.pdf* (this document) and *CDP-Check_Installation-MAC.pdf* (so that you can familiarise yourself with where to find everything after installation), please read the Installation document first / print it out so that you will have all the installation steps to hand.

If you do not already have the Installation Documents, please DOWNLOAD ***InstallationDocsPC-MAC.zip***. The installation instructions for both PC and MAC are included in this zip file.

Installation Step 1.
Download **CDP-Release711u.mpkg.zip** (to the Desktop) and click to unpack it. This is what you will see:

  CDP-Release711u.mpkg

When you click on and unpack CDPRelease711u.mpkg you get:
 /cdpr7 folder created in your home directory, inside which will be:

  /_cdp and its subfolders. This is the main CDP environment, with the CDP executables in '_cdprogs' and the required *SoundLoom* files in the other folders.

  /doc containing
    Manualconfig.pdf - a backup document that shows how to set up the CDP System on the MAC if there is any problem with the automatic setup. **IMPORTANT: Catalina and later users** will find important information in this document because the ZSH shell rather than the Bash Shell became the default shell with Catalina. For this reason, the automatic setting of the path to the CDP programs does not work in the CDP installation .mpkg, so the path has to be set manually. The instructions for doing this are in *Manualconfig.pdf*. The key paragraph about this is as follows: "The only relevant difference from the bash shell is that instead of using *.bash_profile* for user configurations it uses the file *. .zhrc*. Follow the steps above, but (if necessary) create the text file *. .zshrc* in the same way, and enter or append the PATH commands as shown." The lines that need to be entered (typed in – don't copy & paste) are:

```
PATH=$HOME/cdpr7/_cdp/_cdprogs:$PATH
export PATH
```

    twSoundLoomGuide.pdf - Trevor Wishart's comprehensive guide to the CDP System as run from his SoundLoom GUI.

/Installfiles
   cdpinstall.sh   - used by the automatic installation
   cdpsetbashpath.pl - used by the automatic installation

Installation Step 2.

Click on and unpack **sloom1703D.app.zip** - containing the *Sound Loom* GUI, the only CDP GUI currently running on the MAC.

This will unpack **SoundLoom.app**, which you should drag to the Applications Bar

 NB: MAC system profile files in the background, as described in **Manualconfig.pdf**, connect **SoundLoom** to the CDP programs ─ this should all happen automatically, but should there be a hiccup, you can consult **Manualconfig.pdf**. This document describes setting up the command shell for your OS version, i.e., how to create the all-important *profile* files that tell the MAC where things are ─ these files *should* have been created by the .mpkg, so this is a fail-safe.

Updates to *Sound Loom* can be downloaded from **http://www.trevorwishart.co.uk**.

Installation Step3.

When you unpack **CDP-DocumentationRelease711PC-MAC.zip** you get

  /docs - a folder containing the CDP Reference (**/html**) and Tutorial documentation (**/htmltuts**), with several subfolders and other documents and soundfiles. These contents are itemised in *CDP-Check_Installation.pdf*, where the full setup is listed. **Copy and paste this folder into the /cdpr7 folder.**

  /docs-pdf - a folder containing pdf versions of the CDP Reference Documentation. These files can be very useful should you want to print out specific documents or pages for easy reference. **Copy and paste this folder into the /cdpr7 folder.**

Installation Step 4.

Compare your setup with the overview document: **CDP-Check_Installation.pdf** (to check on what's where). This provides an overview of all the main files in the CDP System, whereby you can check your installation and get orientated regarding all the files and what they do.

YOUR INSTALLATION IS COMPLETE. THE REST OF THIS DOCUMENT PROVIDES INFORMATION TO HELP YOU UNDERSTAND THE CDP SYSTEM AND GET STARTED.

SUPPLEMENTARY INFORMATION

You are now ready to go. You can run the CDP System from the *Sound Loom* GUI or via the **Terminal**.

Getting started with *SoundLoom*

For the *SoundLoom* GUI, you are recommended to start with Archer Endrich's *SLguide-basic.pdf* which introduces you to the layout and operation of the GUI, and has two exercises to work through to get you started, one for the Time Domain (sound files) and one for the Spectral Domain (analysis files). **You will find this in the top level of /docs.**

Sound Loom is designed as an 'intelligent' interface. Among other things, this means that it 'knows' what inputs should be present to run a given process. If they are not all present in CHOSEN FILES, that process remains greyed out. If this happens when you expect to run a process, double-check the inputs required by looking in the Desk Reference or the HTML Reference Documentation ─ to do this you may need to figure out the program/process name in these documents that matches the *SoundLoom* name, as they aren't necessarily the same. *SoundLoom* names tend to be more descriptive. There ought to be a list of all the process names in *SoundLoom* and their corresponding CDP Reference File (= Command line) names, but it hasn't been done yet.

Trevor Wishart's *twSoundLoomGuide.pdf* is also in the top level of **/docs**. with a backup copy in **/doc**. It provides a comprehensive overview of the CDP System as approached via *SoundLoom.*

Working Directory

It would be a good idea to create **your own working directory** and put one or two mono soundfiles in it, e.g., using your initials or a project name as its name.

- If using *SoundLoom*, use **Find Any Directory** to select your directory (Click on **Select**, not Open), then **Grab** a file and **Use on Workspace** as explained in *slguide-basic.pdf.*

- If using the **Terminal**, cd to this directory. Enter dirsf to get a listing of the soundfiles in your directory. If the list is displayed, your CDP system is working properly. Then try a simple command such as **modify speed 2 yoursoundfileIN.wav processedsoundfileOUT.wav -12** to lower the sound by an octave.

- Listen to it with **pvplay processoundfileOUT.wav**. The wav extension is required with **pvplay**, and hearing the lowered sound will confirm that CDP sound transformation processing is up and running.

Input soundfile not recognised

If CDP programs fail to recognise your soundfiles, you can fix this by running COPYSFX to make a CDP-compatible copy (which complies with the .wav standard). This is simply done via the Terminal (command line) with **copysfx infile.wav outfile.wav**. (The MAC used to use .aif or .aiff soundfile formats, but now use .wav. CDP programs retain whatever sample type the infile is unless overruled by using the **–f** prefix to the outfile name. When converting formats, the extension needs to be

specified. Note that the CDP software does not handle mp3 files ─ these can be converted with a sound editor such as *Audacity*.)

Reference Documentation

The Reference Documentation shows the command line usage for the CDP programs. The index to this documentation is in the top level of **/docs** and is called ***index.html***. For handy use, you might want to create an alias for it on your Desktop.

Formats of supplementary files

An alias is also recommended for the file ***filestxt.htm***, which gives the formats for all the different supplementary text files that CDP programs use ─ the real power of the system lies in being able to tweak fine detail

Demos

Note the three sets of demonstrations in **/cdpr7/docs/demo**. They will help you get much deeper into sound transformation processing more quickly as they show the operation of the software in considerable detail.

Tutorial Workshops

As you get more familiar with using the CDP System, you may want to delve deeper via three major Workshop tutorials. These can be downloaded from the CDP Website: **https://www.composersdesktop.com/workshops.html**.

  CDPWorkshop1 - 170 + worked examples in 9 program groups with a playlist
  CDPWorkshop2 - in-depth study of the TEXTURE Set
  CDPWorkshop3 - about transposition and shifting, especially the advanced possibilities in COMBINE, with additional information about the use of the **-p** and **-f** flags when extracting formants.

NEW: *A Learning Manual for CDP* by Archer Endrich: 33 separate documents about 5 topics, with many sound examples. It draws upon my experience as a CDP user, covering basic operation, processes that I have found especially useful, and explanations of some things that can be a bit tricky.

[Archer Endrich & Richard Dobson - 19 October 2021]