First Boot of jOrgan Pup 2011.6

Once you have booted the CD you will see the Puppy 5.2.5 boot screen, and then a whole bunch of text messages as Puppy informs you of what it is loading.

Eventually you will be presented with the Graphics/Screen configuration dialogue.

Welcome to the Puppy Video Wizard! 'Xorg' (or just 'X') is software that will run Puppy in graphics mode, that is, display a desktop with windows, mouse, etc. Xorg has a dozen or so drivers for specific video hardware, and if you choose the <probe> button then the Wizard will attempt to determine the correct driver for your video hardware.</probe>						
With some hardware there is no specific driver, or maybe there is one but it doesn't work (or doesn't work properly), in which case you can fall back to the generic 'vesa' driver. The Wizard will offer to fall back to the vesa driver later, but if you know already that you have to use vesa, then you may choose it now						
If you know that some other driver works, <choose> will select it now. EX: There are two drivers for Intel video, 'intel' and 'i810' and it may be necessary to choose one now as probe of the wrong one may hang the PC.</choose>						
Press ENTER key to probe for correct hardware-specific driver Or, TAB then ENTER to choose another driver Or, TAB, TAB then ENTER to select the generic vesa driver						
<pre></pre>						

Select the 'Probe' option to automatically configure your graphics hardware and select the resolution to continue.

Puppy-Video Wizard						
Automatic probing of your monitor was unsuccessful, so you now need						
to choose from a list of generic monitor types.						
Choose the highest specification that describes your monitor.						
LCD: Liquid Crystal Display.						
CRT: Cathode Ray Tube (normal monitor).						
Choose "Z" if you have the monitor user manual, and it has the						
horizontal and vertical frequency specifications.						
DOWN-ARROW to highlight choice, ENTER key to finish						
A h31.5v40-70 LCD Panel 640x480						
B h31.5-37v40-70 LCD Panel 800x600						
BZ h31.5-90v60 LCD Panel 1024×600						
h31.5-48.5v40-70 LCD Papel 1024x768						
D b31.5-90060 LCD Papel 1280×800						
E h31.5-67050-75 ICD Papel 1280x1024						
F h31 5-90060 LCD Panel 1360x768						
6 h31 5-90059-75 ICD Panel 1400x1050						

The jOrgan Pup 2011.6 desktop will then load, and the first boot options dialogue screen will show.

🛠 Personalize Settings						
The graphical desktop has been configured automatically. Just change the ones you want and click OK. To change UTF-8 status, choose your language from the drop-down menu and click OK. If you are booting a USB disk and want to use a USB Wifi device, you should Shut Down and create a save file *before* you set up networking						
Hostname: puppypc Screen resolution						
Country Settings		- mena.				
🔺 en_US English,UNITED ST/ 💌	If your desired resolution is not shown on the list, you have a chance with running the 'XorgWizard',					
③ GMT+8 ▼						
📃 Use UTC Hardware Clock	and may need to choose the video driver.					
🖼 us (U.S. English) 🗨	🧪 Xorg	Wizard				
📃 Num Lock						
	Confirm the settings and click OK	. <u>(</u> ок				

You can click on 'Ok' or configure Puppy to your personal requirements.

When the boot options dialogue screen has been closed, Jack Control will have loaded and you will be able to start with your audio testing configuration.

Creating a SAVE File

This option saves a file onto your harddrive or USB Memory stick that contains the working file system of Puppy Linux. When you boot into jOrgan Pup using the CD, the data contained in the save file is loaded using a layered file system, so that your changes load on top of the jOrgan Pup CD, allowing you to keep the modifications that you have made to configure jOrgan Pup to your system.

- Click on Menu > Shutdown -> Reboot computer
- Within the shutdown sequence...Select Save to File

You have booted off a live-CD or DVD, and you can now save your personal settings and files to a USB Flash drive, Zip drive, floppy disk, or any hard drive partition (including NTFS). The session will be saved as a single file, named lupusave.2fs, which has a ext2 filesystem inside it.						
However, if you have burnt the CD/DVD as multisession (not closed), then sessions can be saved as additional tracks to the CD/DVD each saved session will appear on the CD/DVD as a directory with all the saved files in it, not as a single file. THIS IS STILL EXPERIMENTAL						
Select <save file="" to=""> (just press ENTER key) to choose a partition to save the session as file lupusave.2fs Select <save cd="" to=""> (TAB then ENTER) to save session to CD/DVD (multisession) (EXPERIMENTAL) Select <do not="" save=""> to shutdown without saving session Or, wait 60 seconds to shutdown without saving session</do></save></save>						
<pre><save file="" to=""></save></pre> < save to cd > <do not="" save=""></do>						

• Then select OK

Now select where the saved file is to be located (if you are unsure what the numbers and letters mean here, just let me know and I'll help you with them)

Please choose a partition to create a pup_save.2fs file on. It can be any of the partitions listed. It is recommended that you choose a partition with over 512M free, but Puppy can create a smaller save file if there is less space. The file will contain a Linux ext2 filesystem.					
Note, next time Puppy boots, this file, with all saved personal data, will be automatically loaded.					
biv bown miniow keys to mightight aestica choice) then press minin key					
sda1 Filesystem: ext3 Size: 8191M Free: 6482M					
<u>< 0</u> K >					

- Select OK
- Next, select the ext3 file system

Choose filesystem of save-file Previously, Puppy has only used 'ext2', now there is a choice. Regarding power-failure, note that Puppy will do a f.s. check at next boot so ext2 can recover, however journalled filesystems can recover even without a f.s. check. If in doubt, just press ENTER to choose 'ext2', otherwise TAB down then ENTER ext2 Maximum storage space, encrypted save-file must use ext2 Fxt3 Journalled f.s., safest if power failure etc.
<u>< 0</u> K >

• In the Name text box, type in something like jOrganPupLiveCD or something that makes sense to you.

Would you like to customise the name of the 'lupusave.3fs' file? This is optional, but it is convenient if you have lots of 'lupusave' files and you want to choose the right one at startup. For example, if you enter 'john' here, the file will become 'lupusave-john.3fs'. Type any characters you wish, then press ENTER key: jOrganPupLiveCD_				
<mark>< ОК ></mark>				

- Then select OK
- Select Normal (no encryp.)

Do you want to encrypt the lupusave-jOrganPupLiveCD.3fs file? If the 'lupusave' is encrypted, then a password will have to be entered at every bootup. The reason for doing this is security, as noone else will be able to see what is inside the lupusave. Encryption does slow Lucid Puppy down slightly, the 'heavy' encryption the most. Two scenarios:					
 If the lupusave file is on a Flash drive, encryption is protection in case the drive is mislaid. Heavy encryption is recommended, as Lucid Puppy minimises writes to the save file (to prolong life of the Flash drive, but this also minimises encryption slowdown). If the lupusave file is on a hard drive, 'light' encryption is recommended to minimise slowdown, particularly on older PCs. 					
Encrypted lupusave files have another advantage, they allow multiple users. Recommended if spouse and kids are going to be using the same Lucid Puppy installation.					
Unless you have a good reason to use encryption, it is recommended not to, to avoid the overhead. Recommend choose <normal></normal>					
<u>(NORMAL (no encryp.))</u> < Light encrypted > < Heavy encrypted >					

- Now select the size that suits your environment (I use option 8 1.25 GB)
- Then click on Yes, save

- Then wait for the save file to be generated... this may take quite a while
- Select Yes regarding the 'Copy lupu-525.sfs' question (this will speed up your boot sequence from the CD)
- Leave the jOrgan Pup CD in the drive
- The computer will now reboot back into jOrgan Pup 2011.6 (if you need to press F8 or some other boot option please do so), using the settings that you have now saved

You will still need to boot using the Puppy CD, but everything will be run using the save file space, so anything you save will be usable after a reboot.

Installing to a USB Flash Memory Drive

Easy Install

Puppy Linux has a Universal Installer that can be used to install jOrgan Pup to boot and run from a USB Flash memory stick. The following steps describe what to do.

- Plug the USB Flash drive into a USB port
- Run the Puppy Universal Installer (Menu -> Setup -> Puppy universal installer)
- Follow the onscreen instructions which will walk you through the Puppy USB installation process
- When finished with the Puppy USB install, reboot your PC and go into system BIOS to change your boot order to boot from the USB device
- Save your settings and reboot your PC to enjoy running jOrgan Pup from your USB Flash drive

Manual Install (for when things don't work as they should)

The USB Flash Memory drive installation will produce a 'frugal' installation of jOrgan Pup 2011.6. This means that the CD image will be copied across to your USB drive, and a Save File layer will be used to store your changes.

First you need a 2Gb or larger USB flash drive. This tutorial will use the whole drive, so if you do not have a dedicated USB drive please go and purchase one. Also, make sure that your computer is set up to boot from the USB device(this is set in the BIOS).

- Run the jOrgan Pup 2011.6 Live CD without a Save File (use the 'puppy pfix=ram' option at bootup)
- Plug the USB Flash drive in
- Use the System -> GParted partition manager to format the whole partition to the Linux ext3 disk format (this is a safer format than

FAT32 or NTFS)

- Once GParted is finished formating the drive partition, close GParted
- Now mount the USB drive by clicking on its icon (and take note of what it is called - something like sdb1)
- From the Live CD copy the lupu_525.sfs , vmlinuz and initrd.gz files to the USB drive
- Now run the System -> Grub4dos bootloader config from the system menu
- Select the USB drive from the dropdown
- Then select the "search only this drive or partition" option
- Now click on 'OK' to install the grub4dos boot system, allow it to write to the drive's MBR and make a new menu.lst
- You can now reboot and create a new Save File on the USB drive during the shutdown process
- Boot using the USB drive
- Once you have booted successfully from the USB drive you can configure the system to match your Audio and MIDI settings and customize the jOrgan dispositions
- Click on the 'Save' button when you have made significant changes (there is an autosave feature, but better safe than sorry)

If you are unsure about what to do at any stage in this installation please let me know so that I can improve the tutorial...

Installing to a Harddrive

Puppy Linux's Puppy Universal Installer will also intstall jOrgan Pup to an internal hard drive. The process will also depend on variables you will supply answers to: selecting default settings where applicable and/or recommended.

- Right click on your desktop, and under Setup, select Puppy Universal installer.
- From the available media options, select Internal (IDE or SATA) hard

drive.

- Choose the drive you wish to install it to, if more than one is displayed.
- Puppy Linux will display the specifications of the drive you are about to use.

NOTE: It is highly advisable to install on a hard drive that has been formated with either EXT2 or EXT3 file system. If your hard drive is not reflecting either of these file systems, you should run GParted application to correct this.

- When ready to install onto the hard drive, click the icon next to Install Puppy to... (Please note that the drive description could change from one system to another based on configuration. In the case of most older single IDE drive based computers, this will typically display as SDA1.)
- Acknowledge your selection to install jOrgan Pup to the hard drive by clicking on the OK button
- Select the CD option on the next window. This tells the wizard where the installation files can be found
- Make sure the CD is still in the drive and click OK to continue
- Select the FULL installation option to install Puppy Linux on the entire drive. (Although the Wizard recommends the Frugal option, it is best to dedicate the entire drive to Puppy Linux, since this is what we are actually aiming to do. If you prefer to run the Frugal option, you will need to choose partition sizes and other variables that may not be suitable for beginners. More experienced Linux users will typically choose the Frugal option.)
- Puppy Linux will begin its installation to the hard drive and prompt you when it is done
- For its booting option, select Install/Update GRUB
- Select Install to proceed; then choose OK at the next window to confirm
- For the GRUB Configuration, choose the default simple value and click on OK
- Choose the default standard resolution and click on OK
- For the GRUB partition, keep the default path and click OK

- For the GRUB destination, keep the default Root value and click OK
- When the installation is complete, you will see the GRUB INSTALL SUCCESS window. Click OK

You may be prompted to reinstall GRUB. If so, simply select No to exit.

Configuring Your Audio and MIDI

Jack Connections

Jack is an audio and midi connections tool. We will be using it to create and test connections between MIDI hardware devices and Virtual MIDI devices, and between Audio Channels and Audio Effects.

Jack Settings

Right click on the Jack Control icon on the bottom left side of the task bar



Select 'Setup' from the Jack Control menu that appears

🙆 Setup - JACK Audio Connection Kit 🛛 💶 💌					
Settings Options Display Misc					
Preset <u>N</u> ame: (default)					
Server					
Server <u>P</u> ath: /usr/bin/jack	cd.	→	lame: (default) 🗸	Driv <u>e</u> r: alsa	•
Parameters					
Realtime	Priorit <u>y</u> :	(default) 💂	Interface:	(default)	• >
No Memory Lock	Frames/Period	512 🗸	Dit <u>h</u> er:	None	=
Unlock Memory	Sample <u>R</u> ate:	48000 🗸	<u>A</u> udio:	Playback Only	•
So <u>f</u> t Mode	Periods/ <u>B</u> uffer	2	Input Device:	(default)	¥ >
<u>M</u> onitor	Word Length:	16 🖌	Output Device:	(default)	V >
Force <u>1</u> 6bit	Wait (usec):	21333	Input Channels:	(default)	
H/W M <u>o</u> nitor	Chappels		Output Chappele	(default)	
H/ <u>W</u> Meter	<u>C</u> nanneis:	(derault)	Output Channels:		
Ignore H/W	Port Ma <u>x</u> imum:	256 🖌	Input Latency:	(default)	
<u>V</u> erbose messages	<u>T</u> imeout (msec):	5000 🗸	Output Latency:	(default)	
MIDI Driv <u>e</u> r: none 🔷	Start D)e <u>l</u> ay (secs):	2	Latency: 21.	3 msec
				ОК	X Cancel

- The settings shown here are a good starting point for most computers/soundcards
- Click on the '>' button of the 'Interface' option to see the list of audio devices on your system
- If you have more than one soundcard, select the one that jOrgan will be using from this list
- If you are using an older computer or a slower CPU, deselect the 'realtime' option
- A lower Frames/Period will equal lower latency, so experiment with this value

 Higher Frames/Period and Periods/Buffer values increases latency but also increases stability of the audio stream. So if you experience crackles, pops, or other bang type noises experiment with higher values (distortion can also be caused by amplitude values being too high for your audio system, so if you are experiencing distortion also check the fludisynth gain values in the jOrgan Customize wizard of the disposition that you are playing)

Creating Connections from your Hardware MIDI device to a Virtual MIDI device

In my setup I configure all the jOrgan dispositions to use the first Virtual MIDI device for the keyboard elements, and then connect all three MIDI devices to that Virtual MIDI device in the ALSA tab of Jack Control. I have also created a patchbay setting that retains these connections each time I boot into jOrgan Pup (more on the patchbay later).

Right click on the Jack Control icon on the bottom left side of the task bar.



- Select 'Connections' from the Jack Control menu that appears
- The Connection screen will now show, and you will see three tabs indicating the three types of connections available - Audio, MIDI, and ALSA.
- Note: ALSA stands for Advanced Linux Sound Architecture and that tab

will contain all the installed hardware MIDI devices and the configured Virtual MIDI devices. The MIDI tab configures Jack MIDI ports which require specific software drivers with the application. Fluidsynth will be using ALSA MIDI ports by default and so these will only appear in the ALSA tab.

- Click on the ALSA tab. You will see all the MIDI Out devices (those that are sending MIDI data) on the left had side, and all the MIDI In devices (those that are receiving MIDI data) on the right.
- Click on the (+) node of one of the devices to expand the device node and show the available MIDI Ports
- To connect a hardware MIDI keyboard to a virtual MID device and Port, click on the name of the MIDI device in the left hand column, then click on the Virtual MIDI device in the right hand column, and then click on the 'Connect' button

Modifying Connections

You can disconnect Jack connections and make new connects that suit your particular hardware setup.

Working with Convolution Reverb

Jc Gui

I have pre-configured Jc Gui with the BCA EMU Casper Cathedral 00 reverb. Use the method described in the section below if you want to change the impulse response.

All of the BCA argonon dispositions require added reverb. So we will use the Jc Gui reverb. Therefore, before you load a BCA argonon, start Jc Gui first (and make sure the 'run jconvolver' button is showing in green). Once Jc Gui is load, and the BCA argonon is loaded, look for the 'Jack **Reverb'** button on the BCA console. Click on the button to activate the Jack Connections script that I have written to disconnect the fluidsynth outputs from the system speakers and connect them to the Jc Gui Reverb. Wait a few seconds for the new connections to be activated.



Now play the organ, and use the sliders and knobs in Jc Gui to get the right amount of reverb for your environment.

Adjusting the Jc Gui Settings

With the Jack audio server running, start Jc-Gui (Multimedia -> Media Tools -> JcGui)

Alsamixer Asunder CD Ripper FFConvert multimedia converter GNOME MPlayer Guvcview webcam viewer JACK Rack Jc<u>G</u>ui Jc<u>G</u>ul Pdvdrsab DVD rip/shrink/author/burn Pmetatagger audio file tag editor Pmusic audio player QjackCtl Qsynth Otractor Swami Instrument Editor jOrgan jOrgan BCA BKA 1.1 jOrgan BCA Cavaille Coll 2.0 jOrgan BCA HBO 1.2 jOrgan BCA SVO 1.0 jOrgan BCA Sagrada Familia 2.1

Click on 'jconvolver settings' (this will open the jConv Settings window, you may need to drag the window to the center of your screen)



Click on the 'Open file' icon (the folder image)



Navigate to the impulse response reverb wav files and select one by clicking on it (the path to the included impulse response reverbs is /root/my-applications/reverbs)

Select a *.wav file						×	
📝 📢 🛅 root my-a	pplications	reverbs ।	BCA_ImpulseRespo	nses_1.1			
<u>P</u> laces	Name			▼ Siz	e	Modified	*
🔍 Search	BCA_EAX	(_Alley.wav		427	7.1 KB	06/03/2011	
🥙 Recently Used	📄 BCA_EAX	(_Arena.wav		964	4.4 KB	06/03/2011	
🛅 root	📄 BCA_EAX	_Auditorium	1.wav	681	l.9 KB	06/03/2011	
🛃 File System	📄 BCA_EAX	(_City.wav		359	9.4 KB	06/03/2011	
	📄 BCA_EAX	Club.wav		649	9.7 KB	06/03/2011	
	📄 BCA_EAX	Cockpit.wa	av	217	7.7 KB	06/03/2011	
	📄 BCA_EAX	ConcertHa	all.wav	706	5.3 KB	06/03/2011	
	📄 BCA_EAX	(_DarkCoolR	leverb.wav	916	5.9 KB	06/03/2011	
	📄 BCA_EAX	BCA_EAX_DreamScape.wav			MB	06/03/2011	
	📄 BCA_EAX	BCA_EAX_Generic.wav		409	9.3 KB	06/03/2011	
	📄 BCA_EAX	📄 BCA_EAX_Hallway.wav		407	7.9 KB	06/03/2011	
	📄 BCA_EAX	(_Hangar.wa	v	1.3	MB	06/03/2011	
	📄 BCA_EAX	(_Room.wav		129	.3 KB	06/03/2011	20
	📄 BCA_EAX	_StoneRoor	n.wav	460	0.1 KB	06/03/2011	
	📄 BCA_EMU	J_Casper_C	athedral_00.wav	852	2.4 KB	06/03/2011	
Add www. <u>B</u> emove	BCA_EMU	J_Casper_C	athedral_01.wav	655	5.7 KB	06/03/2011	*
					ancel	Dper	1

- Then click on Open (the folder icon) [if your text is white on the light blue background, just look closely at the screen to see the text]
- Wait for the wav file to be loaded. You should now see it in the preview window.
- Don't worry about the other buttons and dials, those are for tweaking the reverb
- Click on Ok to close the Jconv Settings window
- Now click on the 'run jconvolver' button
- After a few seconds (or a little longer with the older computers) the 'run jconvolver' button should turn bright green, indicating that jconvolver is loaded and running
- Take note of the wet/dry slider above the four dials above the buttons that we have used

Now we need to re-connect the output of the fluidsynth soundfonts to the reverb, and connect the reverb to the jack system (speaker) outputs. Find the 'Jack Reverb' button on the BCA console and click on it to activate the script that will reset the connections.