

Linux Audio Conference 2015

February 8, 2015

Workshop/tutorial proposal: *Arch Linux as a lightweight audio platform*

For the better part of the past eight years I have been an involved user of [Arch Linux](#). Although being a frequent Debian administrator by job, for several purposes and reasons I chose a rolling release distribution over a frequent release candidate one.

This has several reasons and those translate very well into the field of pro-audio application:

- Higher possibility for configurability
- Software versions are up-to-date
- Newer kernels guarantee (or at least raise the possibility for) better compatibility with hardware (old and new)
- Easier to build own packages, if not limited by outdated core components
- Distribution documentation is up-to-date (less possibility for ambiguity)
- Better chance for lightweight customization (if that's your thing)

In a 60-90 minute tutorial I would like to elaborate further on the concepts and environments I chose, to create concert- and installation-ready environments. This will include (but is not limited to):

- Arch Linux package management (pacman and aura)
- [Arch Audio](#)
- Systemd
- Awesome WM
- Realtime kernels
- Custom JACK2 startup scripts

I would be honored to receive the possibility to support **Linux Audio Conference 2015** with my tutorial on **Arch Linux as a lightweight audio platform**.

Yours Sincerely,
David Runge

Audio

Cables	Balanced 6,3mm Jack -> XLR (Audio interface -> PA) will be available, Adaptor needed, if PA offers no XLR in.
--------	---

Video

Computer	Ideally a widescreen beamer with miniDisplayPort or HDMI is provided. VGA as a backup solution will work, too
----------	---

Power supply

Computer	For the computer and audio interface two standard 220V power supplies (Schuko sockets) are needed
----------	---

Location

Computer and audio interface	Stand/ table for computer and audio interface (minimum: 1m x 1m surface)
------------------------------	--

Formation

November 1985	Born in Diepholz, Lower Saxony
May 2005	Abitur at the Graf-Friedrich-Schule – Diepholz, Germany
2006 – 2011	Media Informatics B.Sc. at Hochschule Bremen (Autovisual: Automatic Visuals for Live Performers – "A Max For Live device designed to create automatic visuals with Ableton Live")
2011 – now	Audio Communication and Technology M.Sc. at Technical University of Berlin

Work

2010 – 2013	Web development freelancing for various agencies
2012 – now	Linux systems administrator at Technical University of Berlin

Programming

Scripting	Java, Javascript, Python, PHP, SQL, some C & C++ , Ruby, Bash
Audio (Synthesis)	SuperCollider, PureData, Ardour

Performative Music

2005 – now	Das Bluul (experimental/drone/noise/ambient)
2007 – now	Mêlon Kallisti (prog/70s/metal)
2011 – now	Drafted To Haunt (folk/singer-songwriter)
2012 – now	13\1532 (experimental/drone/noise)
2013 – now	Wasserturm (lofi/indie/electronic)

Installative

Waldeck Freakquenz (2012 & 2013)	The Sound of People (six channel installation, synthesizing sounds from the human genome)
Manu's Place, New Delhi (2013)	The Sound of People (six channel installation, synthesizing sounds from the human genome)
UDK Berlin, 3DMIN (2014)	No place like /dev/random? (stereo installation, synthesizing sounds from a random number generator made with an Americium 241 sample)
Bendend Realities (2014)	The Sound of People (six channel installation, synthesizing sounds from the human genome)

Biography

From an early age on, I have been interested in creating sounds apart from mainstream media. The first vessel allowing me to channel my interests, is my longterm project [Das Bluul](#). Creating sounds from feedback manipulation of several guitar and bass amplifiers, the path was set for high amplitude music creations in years to come.

Shifting through many genres in between (i.e. as singer for progressive/metal band [Mêlon Kallisti](#)), I found another passion in code, throughout my Bachelor studies. During that time I got in touch with common synthesis softwares and audio work stations like Max/MSP & Jitter and Ableton Live. For the first time I realized the complicated interplay of my field of study and my artistic work with licensing industries. I sought a radical change in the way and what tools I work with. From my thesis on I decided to only use free software, a path I have followed ever since.

Further work with different synthesis softwares like SuperCollider and PureData, led to first installation experiences with multi-channel systems (The Sound of People) and a deeper dive into open development structures. Especially latter pushed its working environment and its recipients to their respective limits (concerning length and resources).

Very impressed by minimalism over the past years, I realized some of its premises and attributes had subconsciously already leaked into my way of working with and perceiving music before I started studying about it.

By the beginning of my Master studies a new music project (13\1532) emerged. More concentrating on self-made (modular) devices and sound environments, than ever before. Apart from its extreme and sometimes violently noisy nature, this project stems from the same explorative roots, as my installation work: The desire to create sound from (seemingly) random processes or systems.