Open Source Software for Creating Multimedia OER Content

OpenLearningWV Community of Practice

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Introduction

Who am I?

Rob Szarka:

- ▶ Assistant Professor of Economics, Shepherd University
- ▶ Sysadmin hosting Internet services since 1992
- ▶ Bitcoiner
- ▶ Swing dancer
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Last Year's Presentation

"Markdown+Pandoc: A Swiss Army Knife for Content Creation"

- ▶ Creating "documents" in Markdown format to export to PDF, HTML, EPUB, PPTX, DOCX, etc.
- ▶ Using open-source software (Pandoc, etc.)

What am I doing this semester?

Creating videos:

- ▶ GIMP (editing images)
- ▶ Audacity (editing sound)
- ▶ OBS Studio (recording video)
- ▶ Kdenlive (editing video)

What do I hope to accomplish today?

- ▶ Convince you to use open source software
- ▶ Demonstrate some common use cases
- ▶ Explain how to "do it live" with OBS Studio

GIMP

What is GIMP?

- GNU Image Manipulation Program
- Venerable, cross-platform image editor
- Replaces, e.g., Photoshop

Example: Extracting Graphics from PDF

PDF files are just big bundles of graphics. . .

Let's import a page from a scanned book, crop it, and export it to another format.

Audacity

What is Audacity?

- Audacity
- Venerable cross-platform audio editor

Example: Editing a Sound Clip for Later Use in OBS Studio

- ▶ Infamous/beloved Bill O'Reilly "we'll do it live" clip has profanity
- ▶ Use reverse effect to obscure the profanity?
- ▶ Clip out profanity and shorten the clip?

OBS Studio

What is OBS Studio?

- Open Broadcaster Software
- Mature cross-platform software for screencasting, live streaming . . . & more!

OBS Use Cases

- ▶ Virtual camera for Zoom, etc.
- ▶ Live streaming to multiple platforms simultaneously
- ▶ Anything that involves mixing multiple A/V sources in real time
- ▶ Recording video with multiple audio tracks (in MKV format)

A/V Sources for OBS

- Display capture
- Window capture (loses tooltips)
- Audio inputs/outputs
- Media files
- Ad-hoc text (GDI+)
- Built-in web browser

MKV

MKV (Matroska Video) is an open container format for high-quality A/V content. OBS can record to MKV and then remux to MP4 (or use Kdenlive to convert) for further editing or uploading to an LMS.

Short Explainer Video

How I Use OBS: "Do it live!"

OBS is oriented toward mixing video live, as in broadcasting. Mixing live takes practice, but requires *much* less post-processing work! You can still edit the recording afterward to remove mistakes, insert new sections, etc. (though some types of editing will be more difficult in post).

Kdenlive

What is Kdenlive?

- Kdenlive
- Venerable cross-platform multitrack video editor built on KDE & QT frameworks

How I use Kdenlive

Although Kdenlive is very powerful, I find its interface confusing. (Probably more my lack of experience than the program.)

I do as much as possible "live" in OBS, but Kdenlive is there if I need it to "fix it in post".

Open Source

Open Access Started With Open Source

The movement toward Open Culture, Open Access, OER, etc., started with Open Source / Free Software. And OSS has its roots in Unix. Unix and OSS have *their* roots in academia and research labs (AT&T). Creating OER content and OSS is a perfect match.

Today's Sermon

Universities shouldn't be paying to lock up knowledge in proprietary silos, dependent on closed source software and proprietary formats. We can control the tools we use to author content, but we need to demand more from our institutions and our vendors, too.

Support Open Source, Don't Buy Proprietary

- Use grant money to pay for adding features to OSS
- Support creators via Github, Patreon, etc.
- Create tutorials, documentation, etc.

The End?

Thank You

▶ Email me at `rszarka@shepherd.edu` for slides.
▶ Maybe we should have an OER tech mailing list?
▶ Questions?