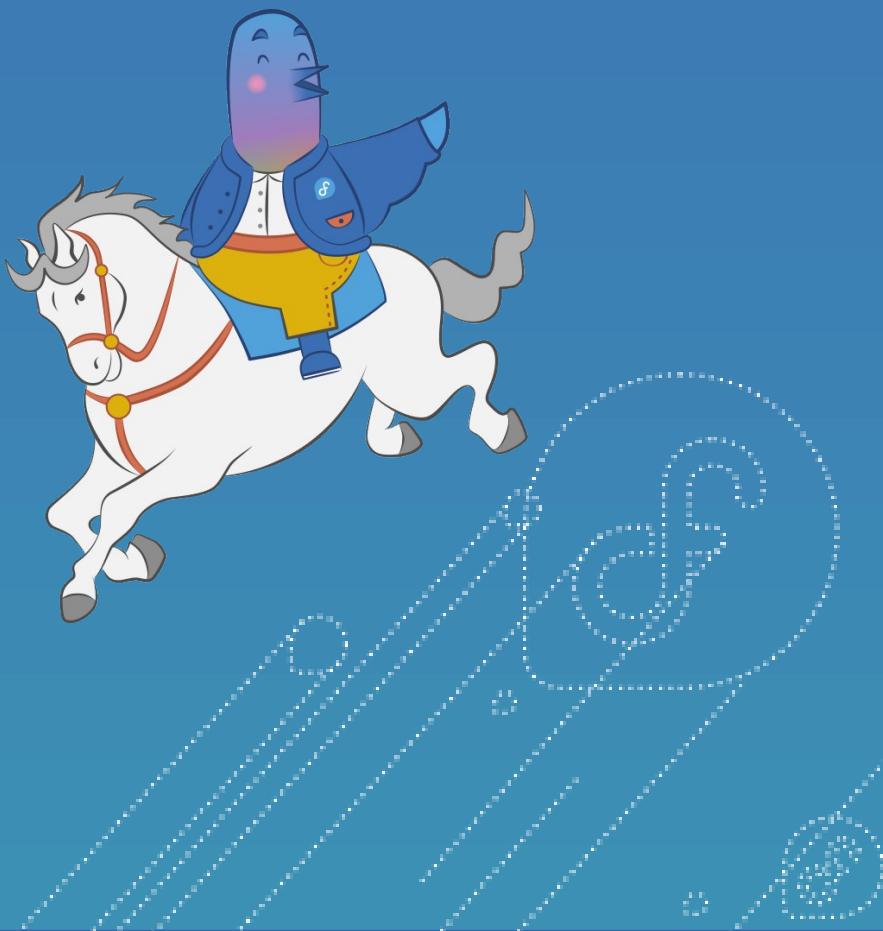




# Multimedia in Fedora

Why we can't have all the nice things?

Dominik 'Rathann' Mierzejewski



# Agenda

or why we're here

- About me
- The story so far
- The things we can't have (yet)
- The nice things we do have
- How You can help



# About me

or why should You listen to this guy?

## Open source contributor

- 25+ years of open source contributions
- Multimedia software (MPlayer, FFmpeg, libdvd\*, XMP)
- Scientific software (CP2K, MDAnalysis, GROMACS, ELPA, Gabedit, InChI)
- Fedora Linux (FPC, FESCo, SciTech SIG, Multimedia SIG)

## Unix admin, System and Security Engineer

- 20+ years of IT experience
- University of Warsaw
- CERN
- Citi

# The story so far

or how we got here

2001	<i>FreshRPMS</i>
2003	<i>Livna</i>
2004	GStreamer, Theora, Vorbis
2005	XMMS
2006	Xine
2007	Dirac, <i>RPM Fusion</i>
2008	QMMP, XMMS2
2010	VP8, VP9
2011	Opus
2015	H.264 AVC (OpenH264)
2016	MP3 (libmad)

# The story so far

or how we got here

2001	<i>FreshRPMS</i>
2003	<i>Livna</i>
2004	GStreamer, Theora, Vorbis
2005	XMMS
2006	Xine
2007	Dirac, <i>RPM Fusion</i>
2008	QMMP, XMMS2
2010	VP8, VP9
2011	Opus
2015	H.264 AVC (OpenH264)
2016	MP3 (libmad)

Mar 2017	AC-3 (a52dec)
Jan 2018	MP2 (twolame)
Sep 2018	AAC (fdk-aac-free)
Dec 2018	AV1 (dav1d)
Feb 2019	LDAC (libldac)
May 2019	MPEG-1/2 (libmpeg2)
Feb 2022	<b>ffmpeg-free</b>
Sep 2022	mpv
Jan 2023	KDEnlive, DTS (libdca)
Jan 2023	H.264 ASP (xvidcore)
Mar 2023	HEIF (libheif)

# The story so far

or how we got here

2001	<i>FreshRPMS</i>
2003	<i>Livna</i>
2004	GStreamer, Theora, Vorbis
2005	XMMS
2006	Xine
2007	Dirac, <i>RPM Fusion</i>
2008	QMMMP, XMMS2
2010	VP8, VP9
2011	Opus
2015	H.264 AVC (OpenH264)
2016	MP3 (libmad)

Mar 2017	AC-3 (a52dec)
Jan 2018	MP2 (twolame)
Sep 2018	AAC (fdk-aac-free)
Dec 2018	AV1 (dav1d)
Feb 2019	LDAC (libldac)
May 2019	MPEG-1/2 (libmpeg2)
Feb 2022	<b>ffmpeg-free</b>
Sep 2022	mpv
Jan 2023	KDEnlive, DTS (libdca)
Jan 2023	H.264 ASP (xvidcore)
Mar 2023	HEIF (libheif)

Apr 2023	OBS Studio
Jun 2023	<i>Multimedia SIG</i>
Aug 2023	MAC, OpenShot
Dec 2023	VLC, Kaffeine
Apr 2024	SMPlayer
May 2024	MPC-QT, QMPlay2
Jun 2024	Flowblade, Shotcut
Sep 2024	GPAC
Dec 2024	Olive
May 2025	OpenAPV, MPEG-5
Jun 2025	<i>Flock to Fedora</i>

# The things we can't have (yet)

distributed as part of Fedora, at least

- Video codecs
  - H.264/MPEG-4 AVC extensions (SVC, MVC, ...)
  - H.265/MPEG-H (HEVC)
  - H.266/MPEG-I (VVC)
  - VC-1\*
- Audio codecs
  - HE-AAC
  - aptX\*, aptX HD\*
  - DTS-HD\*, DTS++\*

# The nice things we do have

out of the box

- Media libraries and frameworks (FFmpeg, GStreamer, QtMultimedia, ...)
- Video players (MPV, VLC, Kaffeine, Clapper, MPC-QT, QMPlay2, SMPlayer, Totem, ...)
- Audio players (Amarok, Audacious, Decibels, Lollypop, QMMP, Rhythmbox, XMMS2, ...)
- Video editors (KDEnlive, Olive, Openshot, Pitivi, Shotcut, ...)
- Audio editors (Audacity, Ardour, traverso, ...)
- Subtitle editors (Aegisub, Subtitleeditor, ...)
- DLNA servers (MiniDLNA, Rygel, ...)

# How You can help

Yes, You!

- Promote unencumbered codecs (AV1, VP9, Opus)
- Join the Multimedia SIG
- Help with getting missing codecs into Fedora
- Package new apps and move existing eligible packages from third-party repos
- Work with upstreams
- Test and report issues

# Questions?



# Thank you!



**“Reinventing the wheel certainly  
is annoying, but as long as all  
other wheels are square...”**

Reimar Döfingher