

# Rygel

## Free and Open Mobile DLNA

Rygel  
They said it would be easy

# About me

- Software developer at Openismus
  - <http://www.openismus.com>
- Working at the Harmattan project
- Maintainer of Rygel
- FOSS developer
  - <https://www.ohloh.net/accounts/phako>

What's that DLNA thing?

# DLNA ...

- Easily connect multi-media devices from a multitude of vendors
- Tries to ensure compatibility between devices
- Configurationless
- Found in lots of devices in the wild
  - TVs
  - NAS
  - Phones

What's Rygel then?



# Rygel

- Started its life ~2008 as GUPnP-Media-Server
- Based on GUPnP (<http://www.gupnp.org>)
- LGPL 2 licensed
- Leveraging the power of GStreamer
  - Transcode from everything GStreamer supports
  - DLNA profile matching and guessing
- Written in Vala
- Powers the DLNA server capabilities on the N9

# DLNA on the N9

- In DLNA terms: M-DMS
- Browse with your TV, PlayStation 3, ...
- Share images and videos taken with your device
- Transcode audio to LPCM
- Share MP3 and AAC
- Uses meta-data from Tracker

# DLNA on the N9 (2)

- Unfortunately no pushing of media
  - „Play on“ or „Send to“ feature
- Also no controlling functionality
  - Browse your NAS and play on your receiver controlled by your phone
- *No* sharing of arbitrary material due to
  - DLNA-imposed restrictions
  - Missing bits and pieces in GStreamer

# Goals

- Be small
- No to minimal configuration
- Work out-of-the box with a wide range of devices
- Provide transcoding to mandatory DLNA profiles

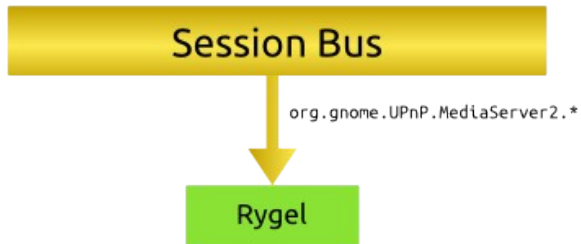
# Why is it hard?

- Excerpt from Roadmap:
  - 0.5: 17.04.2009
    - container update notifications.
    - video thumbnails.
    - 100% DLNA compliance.
- That goal was reached ~December 2011
- Guideline (December 2011): ~760 pages
- Extensive compatibility testsuite

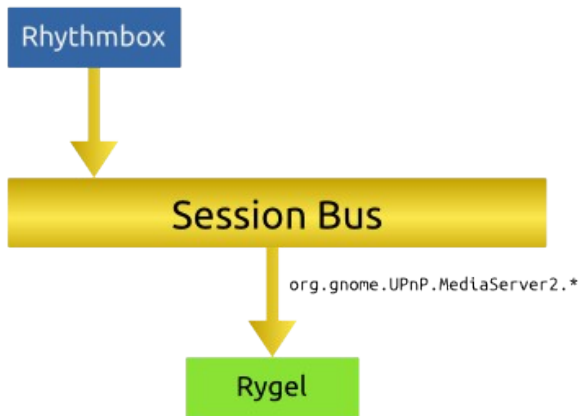
# How does this help you?

- UPnP / DLNA implementation with proven compatibility (<http://upnp.org/product/780>)
- Offers extension points
  - DBus
  - Plug-ins

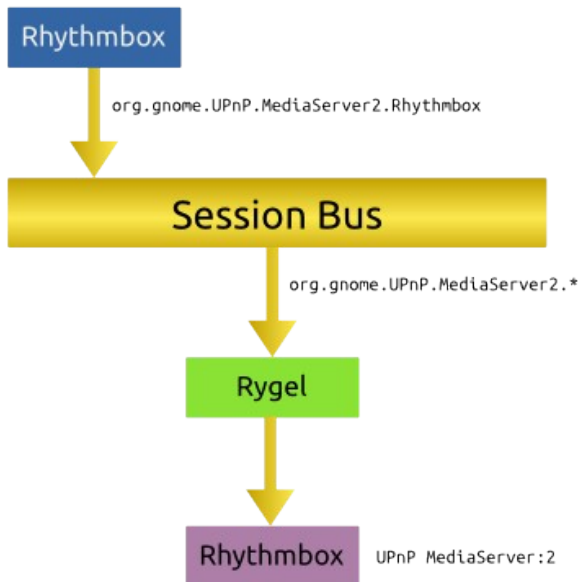
# Extending via D-Bus



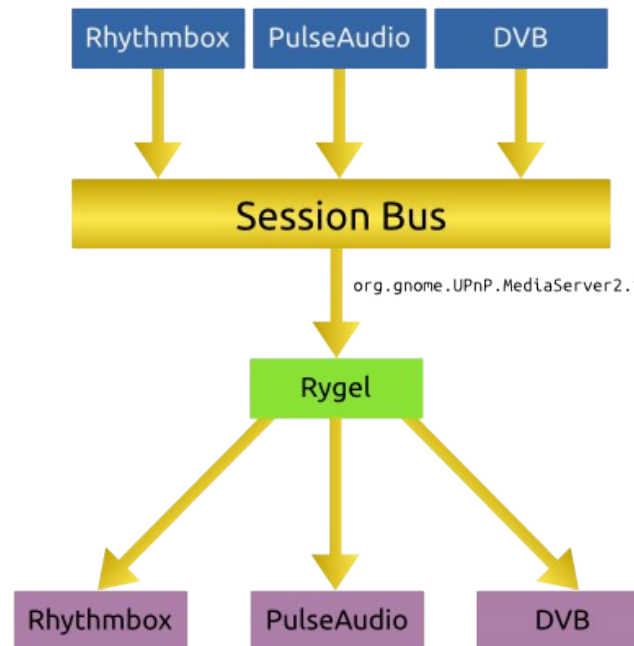
# Extending via D-Bus



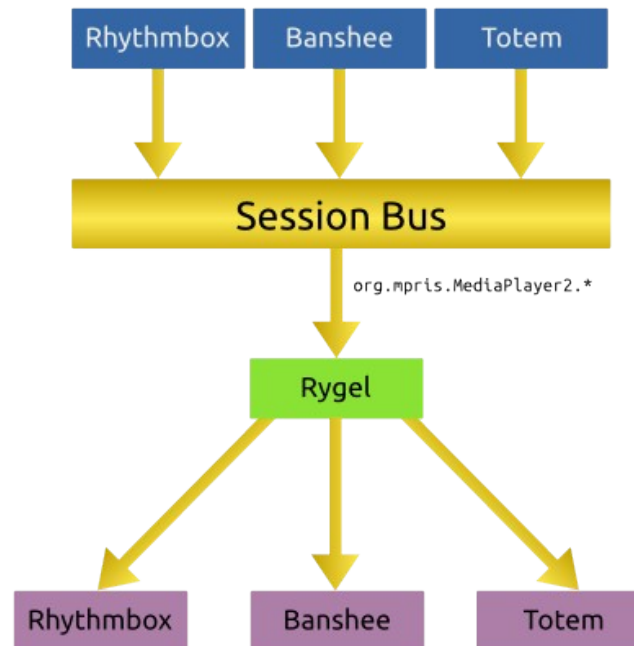
# Extending via D-Bus



# Extending via D-Bus



# Extending via D-Bus: MPRIS



# Contact us

- Web:
  - <http://rygel-project.org>
  - <http://gupnp.org>
- Mailinglist:
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- IRC:
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Thank you for your attention.

Questions?