

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

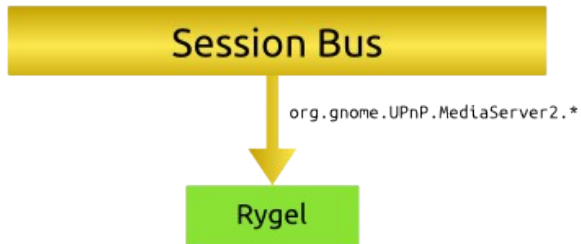
Why is it hard?

- 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

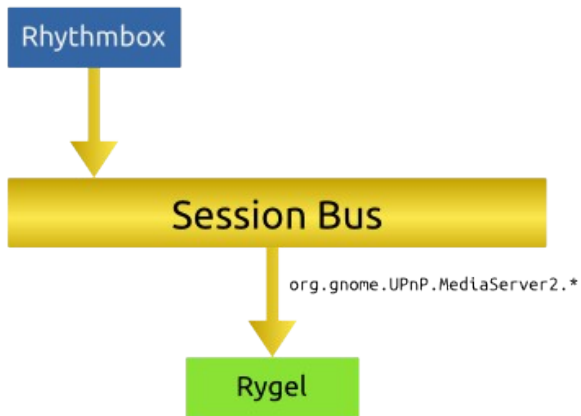
How does this help you?

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

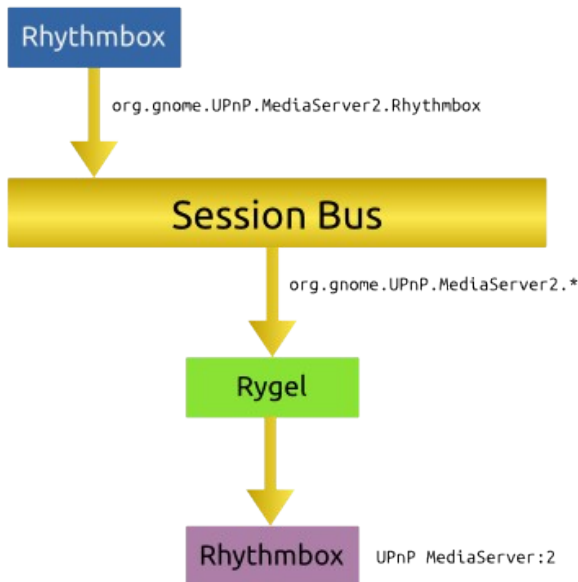
Extending via D-Bus



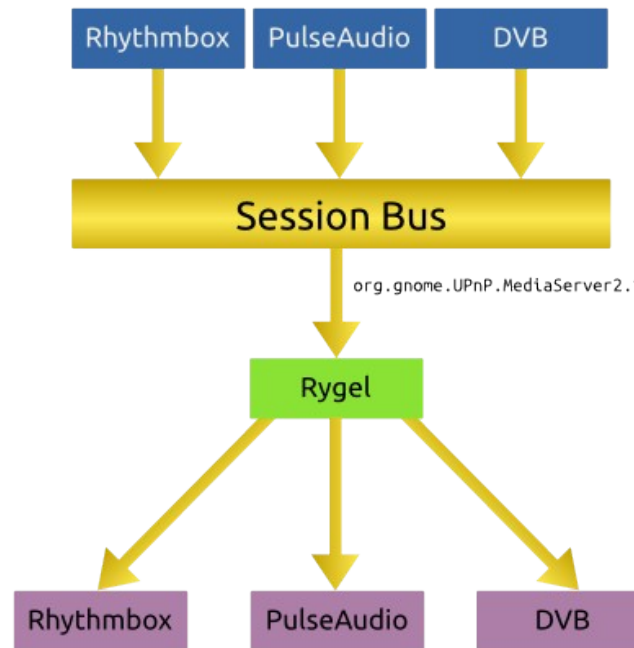
Extending via D-Bus



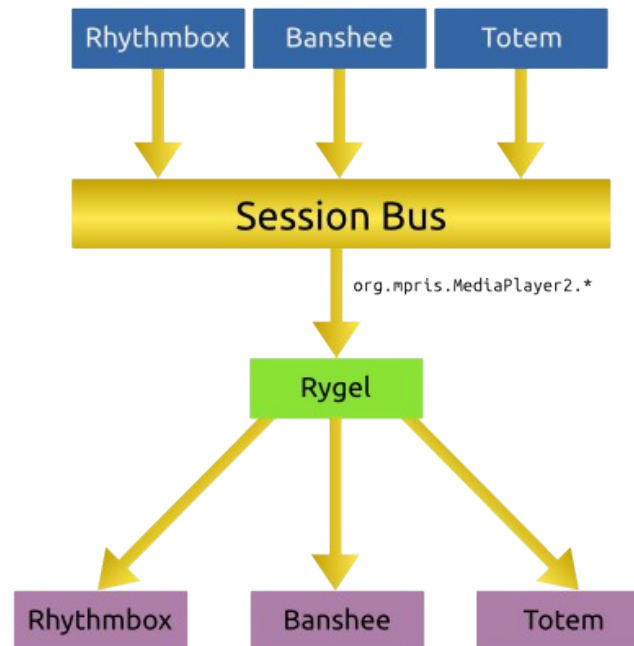
Extending via D-Bus



Extending via D-Bus



Extending via D-Bus: MPRIS



Contact us

- Web:
 - <http://rygel-project.org>
 - <http://gupnp.org>
- Mailinglist:
 - rygel-list@gnome.org
 - gupnp-list@gnome.org
- IRC:
 - #gupnp @ GIMPnet

Thank you for your attention.

Questions?