

# Synchronised Playback with GStreamer

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GStreamer?

Multimedia framework

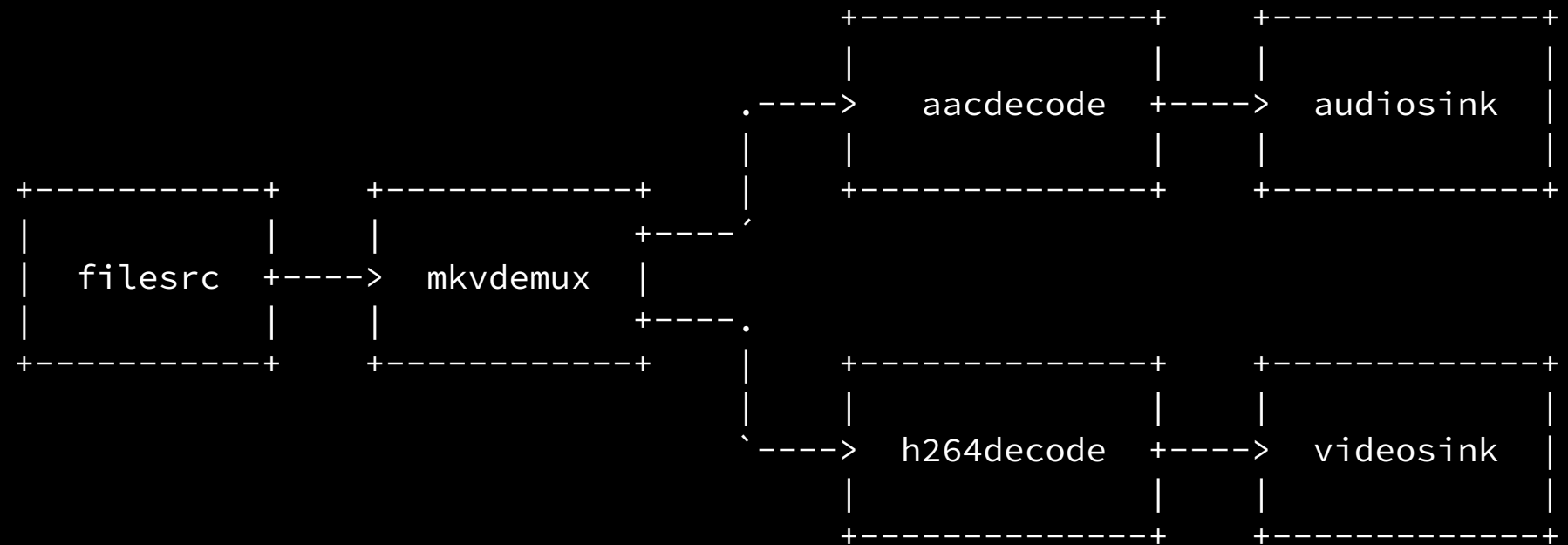
Pipeline-based

Modular

mp3 playback



matroska (audio + video) playback



# Motivation



How is sync formed?



LCA 2016

Sebastian Dröge: Synchronised Multi-room Media Playback...

Media

Timing

Control

Needs deep GStreamer knowledge

Can we make this easier?

gst-sync-server

~~X~~ Media

✓ Timing

✓ Control

Client  $\leftrightarrow$  Server

# Server

- Playlist
- Control
- Transforms
- Client notifications

# GstSyncServer

- `gst_sync_server_new()`
- `gst_sync_server_playlist_new()`
- `gst_sync_server_start()`
- `gst_sync_server_set_paused()`

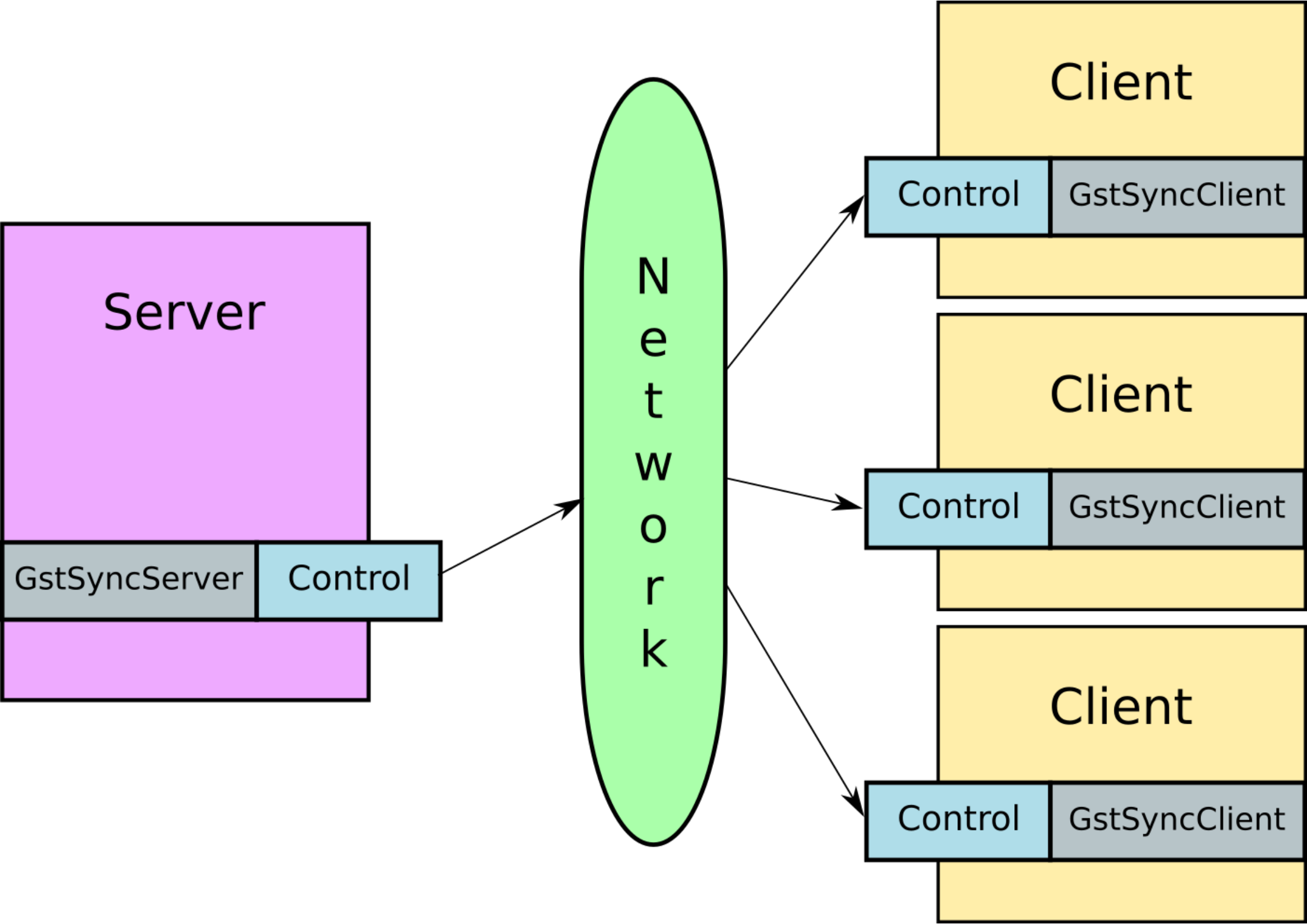


# Client

- Server address
- Playbin

# GstSyncClient

- `gst_sync_client_new()`
- `gst_sync_client_start()`
- `gst_sync_client_stop()`



Control

# Control Server

- Address
- Sync info
- Start / stop
- Client notifications

# Control Client

- Address
- Sync info
- Start / stop
- ID / config

That's it!

# Next

- Merge to GStreamer repo
- More controls
- More examples
- Tighter sync



A photograph of a dual-monitor computer setup. The two monitors display a cityscape, likely Amsterdam, with a prominent church spire. A large white heart icon is centered over the image. The foreground shows a desk with various cables and a keyboard.

Questions?

[github.com/ford-prefect/gst-sync-server](https://github.com/ford-prefect/gst-sync-server)