

Linux DVB API Discussion

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Discussions on last summit

- Must add mmapped stream & dmabuf support, currently DVB only supports read()
- propose to wrap packets within a structure with timestamps
 - aid in seeking for encrypted streams
- Currently the kernel demux only allows us to filter one section per pid per file descriptor - we would like to remove this limit
- Hardware demux: be able to service multiple frontends in a single shared physical demux filters
 - current implementation doesn't allow to properly control it.
 - same file descriptor can handle more than one section / pid filter
- Use videobuf2 post-demux for delivery?
 - Consensus: vb2 should be used internally, but might need some work to make vb2 less v4l2 specific.
- Ultimately, we should use the media controller to aid in pipeline connections

Topics for discussion

Frontend API

- New standards support: DVB-C2, DVB-S2x
- DVB-Turbo what are the properties used? Doc is likely incomplete and library may be wrong

Demux API

- Need to implement newer delivery methods: mmap(), dmabuf
 - Could videobuf2 help or should we do something else?
- Need to do some changes at DVB filters at the Kernel
 - Some hardware has a set of filters that could be common to more than one frontend – the way the maximum filter limit works right now don't allow that
 - Currently, the demux API doesn't allow more than one PES filter for the same table
 ID
 - Currently, one file descriptor is needed per filter
 - Are there anything that could be imported from DVBv4 API incomplete work?
- Media Controller API
 - Integration with DVB frontends, demuxes and CAM drivers