

MpRTP plugin in Gstreamer

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Supervisors: Prof. Jörg Ott², Dr. Béla Almási¹, Varun Singh²

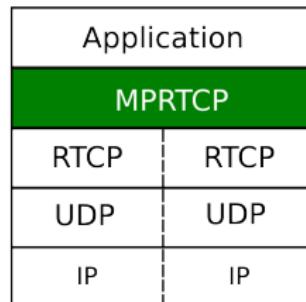
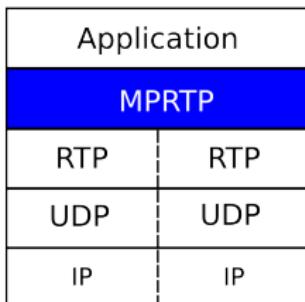
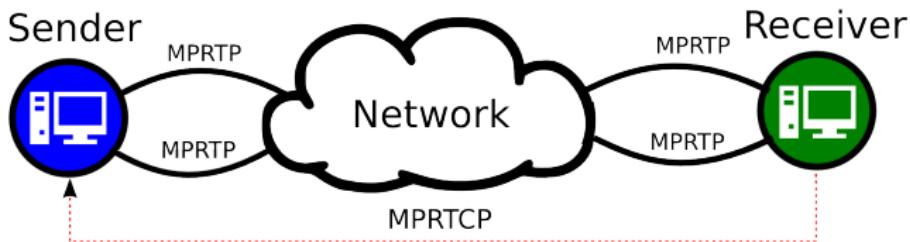


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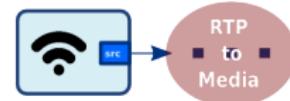
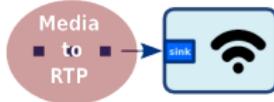
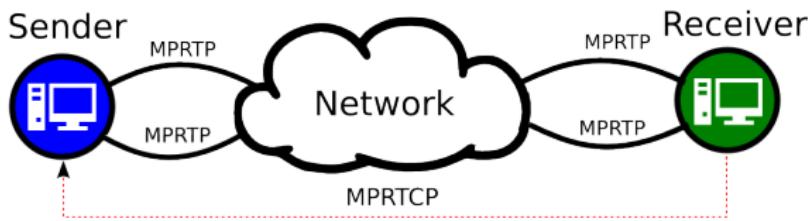
October 8, 2015

Overview of Multipath RTP

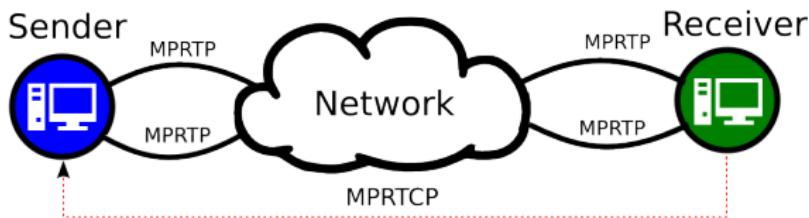


RFC draft: <https://tools.ietf.org/html/draft-ietf-avtcore-mprtp-01>

Gstreamer pipelines using RTP

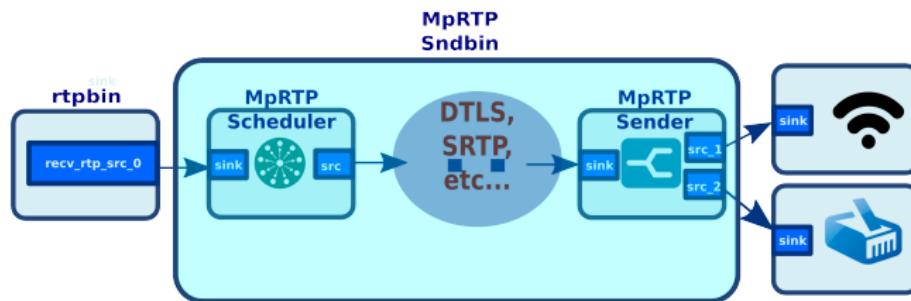


Gstreamer pipelines using MpRTP



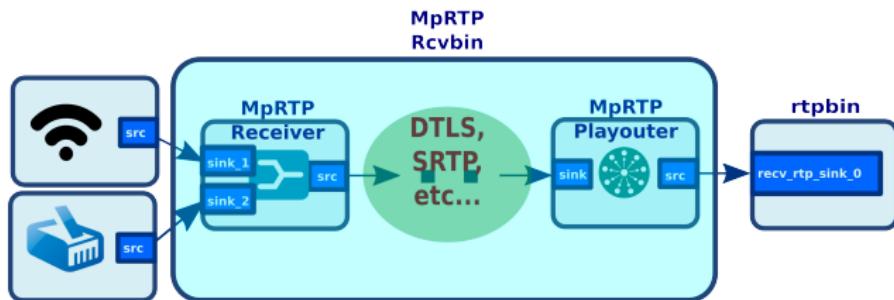
Example of using MpRTP plugin (Sender)

```
rtpbin.send_rtp_src_0 ! mpsch.rtp_sink mpsch.mprtp_src ! ... ! mpsnd.src_1 !  
udpsink port=5000 mpsnd.src_2 ! udpsink port=5002
```

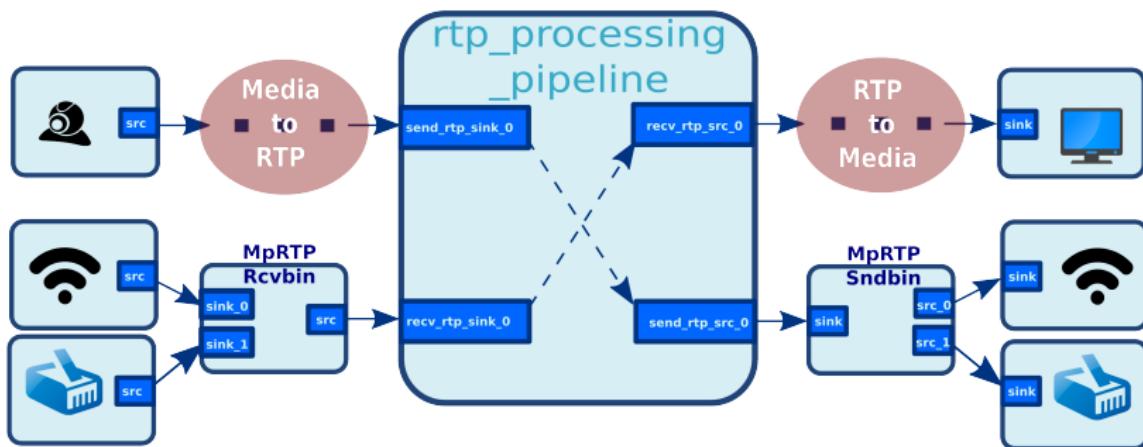


Example of using MpRTP plugin (Receiver)

```
udpsrc CAPS port=5000 ! mprcv.sink_1 udpsrc CAPS port=5002 ! mprrcv.sink_2  
mprcv.mprtp_src ! ... ! mpply.mprtp_sink mpply.mprtp_src !  
rtpbin.recv_rtp_sink_0
```

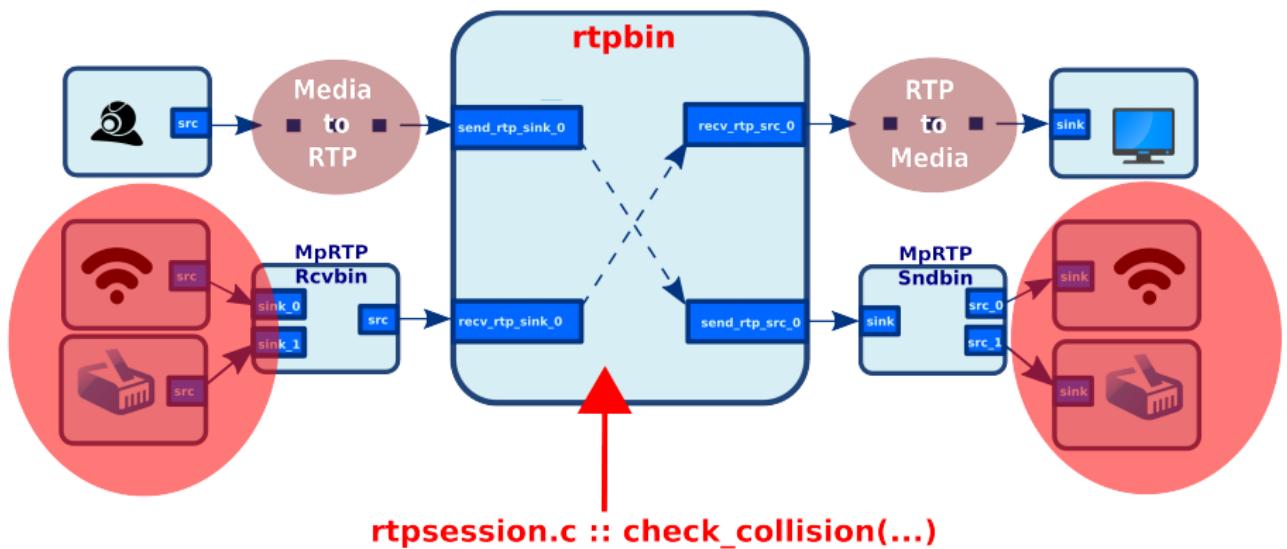


Bidirectional overview of Gstreamer pipeline using MpRTP



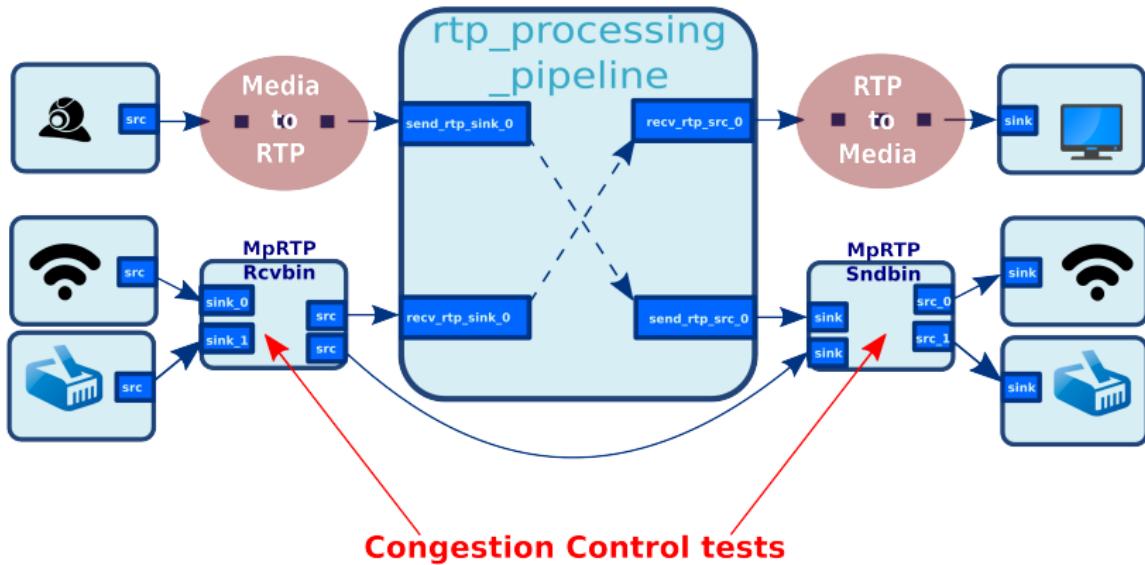
<https://github.com/multipath-rtp>

Changing request

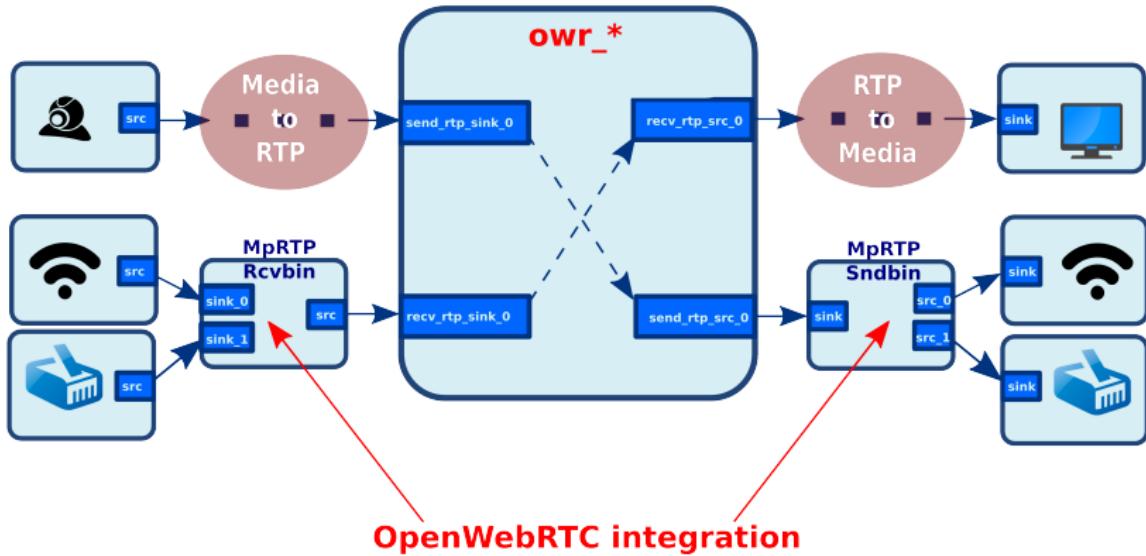


<https://github.com/multipath-rtp>

Ongoing works in MpRTP plugin



Ongoing works in MpRTP plugin



Contacts and references

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-  Singh, Varun, Saba Ahsan, and Jörg Ott.
MPRTP: multipath considerations for real-time media.
Proceedings of the 4th ACM Multimedia Systems Conference., 2013.
-  MpRTP RFC draft, <https://tools.ietf.org/html/draft-ietf-avtcore-mprtp-01>, 2014.
-  MpRTP Gstreamer plugin, OpenWebRTC modification
<https://github.com/multipath-rtp>