



COLLABORA

An Improved Latency Tracer

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Open First



Inspired by GstShark inter-latency tracer

- Per-element latency
- Per-element reported latency
- Unique pad identifier



Using the Tracer

```
GST_TRACERS="latency(flags=element+pipeline+reported)" \  
GST_DEBUG=GST_TRACER:7 \  
gst-launch-1.0 videotestsrc num-buffers=500 is-live=1 \  
! x264enc ! h264parse ! rtph264pay ! udpsink 2> gst.log
```




Reporting

```
$> gst-stats-1.0 gst.log
```

Latency Statistics:

```
0x182bc40.videotestsrc0.src|0x1853250.udpsink0.sink:
```

```
mean=0:00:01.535974847 min=0:00:01.521282943 max=0:00:01.638318148
```

Element Latency Statistics:

```
0x18350f0.x264enc0.src: mean=0:00:01.535311613 min=0:00:01.520888898 max=0:00:01.637129708
0x1837f00.h264parse0.src: mean=0:00:00.000299553 min=0:00:00.000040094 max=0:00:00.000898999
0x18480a0.rtpH264pay0.src: mean=0:00:00.000255036 min=0:00:00.000035716 max=0:00:00.000471058
```

Element Reported Latency:

```
0x182bc40.videotestsrc0: min=0:00:00.033333333 max=99:99:99.999999999 ts=0:00:01.742919851
0x18350f0.x264enc0: min=0:00:01.633333334 max=0:00:00.000000000 ts=0:00:01.743001279
0x1837f00.h264parse0: min=0:00:00.033333333 max=0:00:00.000000000 ts=0:00:01.743045283
0x18480a0.rtpH264pay0: min=0:00:00.000000000 max=0:00:00.000000000 ts=0:00:01.743100542
```




To be Improved

- Better reporting (indentation, colourization, highlight ?)
- Per-pipeline reported latency
- A simpler command line interface
- Thread Safety (patch pending by Jan Schmidt)



Thank you!