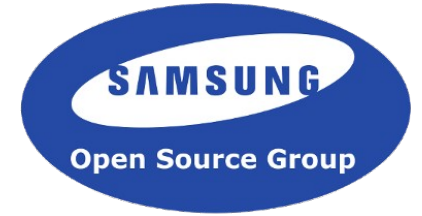


Analyzing Caps Negotiation (Using GstTracer)

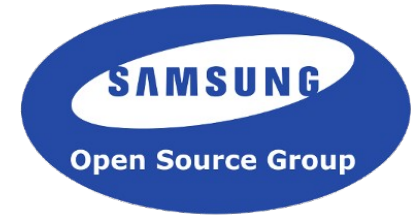
Thiago Santos
Samsung Open Source Group
thiagoss@osg.samsung.com

GstTracer



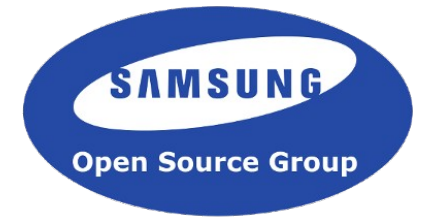
- Merged in git
- Hooks for all internal 'events' in Gstreamer
- Great for writing accessory tools

Analyzing Caps Negotiation



```
0:00:00.148345480 : query-caps : deinterlace(30):sink(58) - filter: video/x-raw
0:00:00.148439960 : query-caps : vdbin(29):proxypad12(57) - filter: NULL :
0:00:00.148479044 : query-caps : vbin(27):sink(54) - filter: NULL : res
0:00:00.148546635 : query-caps : vqueue(26):sink(82) - filter: NULL
0:00:00.148581344 : query-caps : vconv(20):sink(53) - filter: NU
0:00:00.148620727 : query-caps : xvimagesink0(12):sink(22)
0:00:00.148654957
0:00:00.148832039
0:00:00.148981699
0:00:00.149111817
0:00:00.149233636
0:00:00.150655503
```

Analyzing Caps Negotiation

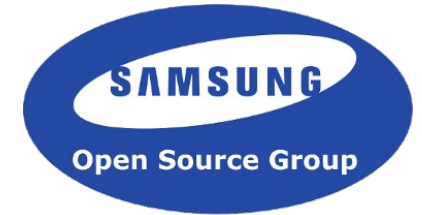


```
0:00:00.153343310
0:00:00.153476856
0:00:00.153601476
00:00.155135428
00.155222981

00.152483093 : accept-caps : deinterlace(30):sink(58) - caps: video/x-raw, format=(string)I420, width=(int)
00:00.152552608 : query-caps : deinterlace(30):sink(58) - filter: video/x-raw, format=(string)I420, width=
0:00:00.152619615 : query-caps : vdbin(29):proxypad12(57) - filter: NULL : res: video/x-raw, format=(string)
0:00:00.152876049 : query-caps : vbin(27):sink(54) - filter: NULL : res: video/x-raw, format=(string)
0:00:00.152913007 : query-caps : vqueue(26):sink(82) - filter: NULL : res: video/x-raw, format=(string)
0:00:00.152949751 : query-caps : vconv(20):sink(53) - filter: NULL : res: video/x-raw, format=(string)
0:00:00.152986360 : query-caps : xvimagesink0(12):sink(22) - filter: NULL : res: video/x-raw, format=(string)
0:00:00.153022052
0:00:00.153208031
0:00:00.153343310
0:00:00.153476856
0:00:00.153601476
00:00.155135428
00.155222981

00.152483093 : accept-caps : deinterlace(30):sink(58) - caps: video/x-raw, format=(string)I420, width=(int)
00:00.152552608 : query-caps : deinterlace(30):sink(58) - filter: video/x-raw, format=(string)I420, width=
0:00:00.152619615 : query-caps : vdbin(29):proxypad12(57) - filter: NULL : res: video/x-raw, format=(string)
0:00:00.152876049 : query-caps : vbin(27):sink(54) - filter: NULL : res: video/x-raw, format=(string)
0:00:00.152913007 : query-caps : vqueue(26):sink(82) - filter: NULL : res: video/x-raw, format=(string)
```

Analyzing Caps Negotiation



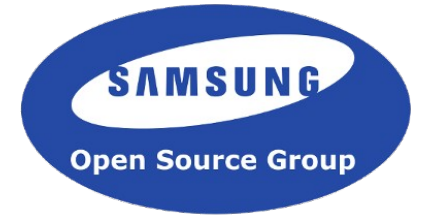
```
xvimagesink0(12):sink(22)
  filter: NULL
  caps: video/x-raw, format=(string)YUY2, width=(int)[ 1, 16384 ],
  res: True
  Repeated: 9 (total time: 374944ns)

  filter: video/x-raw
  caps: video/x-raw, format=(string)YUY2, width=(int)[ 1, 16384 ],
  res: True
  Repeated: 1 (total time: 86184ns)

  filter: video/x-raw, width=(int)[ 1, 32767 ], height=(int)[ 1, 32767 ],
  caps: video/x-raw, width=(int)[ 1, 16384 ], height=(int)[ 1, 16384 ],
  res: True
  Repeated: 2 (total time: 267630ns)

  filter: video/x-raw, width=(int)854, height=(int)480, interlace-mode=0,
  caps: video/x-raw, width=(int)854, height=(int)480, interlace-mode=0,
  res: True
  Repeated: 1 (total time: 77493ns)
```

Analyzing Caps Negotiation



```
=== TOTALS ===  
Total query trees: 101  
Total queries: 234  
Total time: 81243445ns  
Preroll time: 200678299ns
```



Thank You!