# 6 SRS 4.0 RTMP to WebRTC原理分析

#### 1 测试环境

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- 1.2 客户端使用ffmpeg进行rtmp推流
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#### 架构

#### 断点

SrsRtcSource::SrsRtcSource

SrsRtcFromRtmpBridger::SrsRtcFromRtmpBridger

SrsRtcConsumer::SrsRtcConsumer

SrsGoApiRtcPublish::do\_serve\_http

SrsRtcServer::on\_udp\_packet

SrsUdpMuxSocket::SrsUdpMuxSocket

SrsRtcPlayStream::SrsRtcPlayStream

SrsGoApiRtcPlay::SrsGoApiRtcPlay 处理rtc play

SrsRtcConnection::SrsRtcConnection

SrsRtcServer::do\_create\_session 负责创建RTCConnection以及初始化sdp

SrsRtcPlayStream::SrsRtcPlayStream player需要对应playstream

SrsRtcSendTrack::SrsRtcSendTrack

SrsRtcSendTrack::SrsRtcSendTrack

SrsRtcConsumer::SrsRtcConsumer

SrsRtcSSRCGenerator::generate\_ssrc

SrsRtcSSRCGenerator::generate\_ssrc

SrsRtcPlayStream::start

SrsRtcPlayStream::start

SrsRtcConsumer::dump\_packet

SrsRtcConnection::negotiate\_play\_capability

SrsResourceManager::add

SrsResourceManager::add\_with\_name

SrsUdpMuxSocket::SrsUdpMuxSocket

零声学院: 音视频高级课程: https://ke.qq.com/course/468797?tuin=137bb271

当前srs版本为srs.4.0.123。

#### 注意和3.x版本函数命名的区别

srs3.x	srs.4.0.123
SrsSource	SrsLiveSource (4.0.112)
SrsRtcStream	SrsRtcSource (4.0.113)
SrsConsumer	SrsLiveConsumer (4.0.114)

把SrsSource改成SrsLiveSource, 把SrsRtcStream改成SrsRtcSource,

把SrsConsumer改成SrsLiveConsumer, 保持SrsRtcConsumer不变。

# 1测试环境

# 1.1 启动srs服务器

使用rtc.conf

启动服务器

```
git clone https://gitee.com/ossrs/srs.git srs.4.0.123
cd srs.4.0.123
git checkout srs.4.0.123
cd trunk
./configure --gb28181=on && make
./objs/srs -c conf/rtc.conf
```

#### 记得修改

```
rtc_server { enabled on;

# Listen at udp://8000
listen 8000;

#

# The $CANDIDATE means fetch from env, if not configed, use * as default.

#

# The * means retrieving server IP automatically, from all network interfaces,

# @see https://github.com/ossrs/srs/wiki/v4_CN_RTCWiki#config-candidate

# candidate $CANDIDATE; 在云服务器为外网ip
candidate 120.27.131.197;
}
```

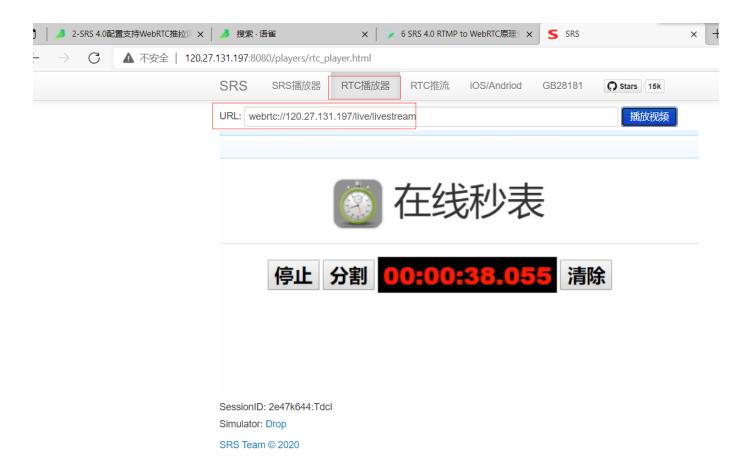
# 1.2 客户端使用ffmpeg进行rtmp推流

比如:

# 1.3 WebRTC拉流播放

推送流成功之后,使用srs自带的rtc\_player播放器进行播放,直接请求srs服务的8080端口即可

http:///120.27.131.197:8080/players/rtc\_player.html



# 2 提出问题-灵魂拷问

#### 第一层 通识原理

- rtmp和webrtc协议怎么转换
- webrtc播放基本的逻辑是怎么样的

#### 第二层 SRS4.0 对象关系

- SrsLiveSource
- SrsRtcFromRtmpBridger
- SrsRtcSource
- SrsRtcConsumer
- SrsRtcServer
- SrsRtcConnection
- SrsGoApiRtcPlay
- SrsRtcPlayStream
- SrsRtcSendTrack
- SrsRtcAudioSendTrack
- SrsRtcVideoSendTrack
- 等等

#### 第三层 协议解析

- DTLS(Datagram Transport Layer Security) 即数据包传输层安全性协议。TLS不能用来保证UDP上传输的数据的安全,因此Datagram TLS试图在现存的TLS协议架构上提出扩展,使之支持UDP,即成为TLS的一个支持数据包传输的版本。
- RTP (Real-time Transport Protocol或简写RTP) 实时传输协议。
- RTCP (Real-time Transport Control Protocol或RTP Control Protocol或简写RTCP) 是实时传输协议 (RTP) 的一个姐妹协议。
- STUN (Session Traversal Utilities for NAT, NAT会话穿越应用程序)是一种网络协议,它允许位于NAT(或多重NAT)后的客户端找出自己的公网地址,查出自己位于哪种类型的NAT之后以及NAT为某一个本地端口所绑定的Internet端端口。
- SDP对ICE、RTP的描述。

# 3 RTMP2WebRTC协议转换

从源码我们可以找到

- SrsRtcConsumer::SrsRtcConsumer构造函数,从以前我们所学知识知道webrtc播放的时候一定会创建SrsRtcConsumer对象。
- SrsRtcSourceManager管理SrsRtcSource
- SrsRtcSource分发数据给SrsRtcConsumer
- SrsRtcSource怎么接收rtmp转发的数据?
- webrtc音频使用opus, 怎么进行转码?

Breakpoint 1, main (argc=3, argv=0x7fffffffe408) at src/main/srs\_main\_server.cpp:227227 { (gdb) b SrsLiveSource::SrsLiveSource()

Breakpoint 2 at 0x511949: file src/app/srs\_app\_source.cpp, line 1847.

(gdb) b SrsRtcFromRtmpBridger::SrsRtcFromRtmpBridger(SrsRtcSource\*)

Breakpoint 3 at 0x64adac: file src/app/srs\_app\_rtc\_source.cpp, line 713.

(gdb) b SrsRtcSource::SrsRtcSource()

Breakpoint 4 at 0x6494d7: file src/app/srs\_app\_rtc\_source.cpp, line 339.

(gdb) b SrsRtcConsumer::SrsRtcConsumer(SrsRtcSource\*)

Breakpoint 5 at 0x64883d: file src/app/srs\_app\_rtc\_source.cpp, line 163.

# 4 RTMP2WebRTC逻辑

# 架构

看上课演示框图。

https://www.processon.com/view/link/60f047bf1efad40732081590, 密码: v3v3

```
来自play请求
```

```
srs_error_t SrsRtcServer::listen_api(){
   srs_error_t err = srs_success;
   // TODO: FIXME: Fetch api from hybrid manager, not from SRS.
   SrsHttpServeMux* http_api_mux = _srs_hybrid->srs()->instance()->api_server();// 默认1985
的端口
   if ((err = http_api_mux->handle("/rtc/v1/play/", new SrsGoApiRtcPlay(this))) !=
srs_success) {
      return srs_error_wrap(err, "handle play");
  }
   if ((err = http_api_mux->handle("/rtc/v1/publish/", new SrsGoApiRtcPublish(this))) !=
srs success) {
     return srs_error_wrap(err, "handle publish");
  }
#ifdef SRS SIMULATOR
   if ((err = http_api_mux->handle("/rtc/v1/nack/", new SrsGoApiRtcNACK(this))) !=
srs success) {
      return srs_error_wrap(err, "handle nack");
  }
#endif
   return err;
}
```

## 断点

SrsRtcSource::SrsRtcSource

SrsRtcConsumer::SrsRtcConsumer

SrsRtcFromRtmpBridger::SrsRtcFromRtmpBridger

SrsGoApiRtcPlay::SrsGoApiRtcPlay 处理webrtc play的入口 SrsGoApiRtcPlay::serve\_http 处理play, 并封装server的sdp SrsRtcConnection::SrsRtcConnection 创建webrtc连接

创建webrtc的阶段

SrsDtlsImpl

#### SrsRtcSource::SrsRtcSource

```
#0 SrsRtcSource::SrsRtcSource (this=0x5555560b4ae0) at
src/app/srs_app_rtc_source.cpp:339#1 0x000055555581fa3b in
SrsRtcSourceManager::fetch or create (this=0x5555560afb10, r=0x555556204060,
pps=0x555556214980)
  at src/app/srs_app_rtc_source.cpp:282
#2 0x00005555556e1cff in SrsRtmpConn::acquire_publish (this=0x5555561da560,
source=0x555556217520)
  at src/app/srs_app_rtmp_conn.cpp:981
#3 0x00005555556e0e4f in SrsRtmpConn::publishing (this=0x5555561da560,
source=0x555556217520)
  at src/app/srs_app_rtmp_conn.cpp:856
#4 0x00005555556de38a in SrsRtmpConn::stream_service_cycle (this=0x5555561da560) at
src/app/srs_app_rtmp_conn.cpp:566
#5 0x00005555556dd088 in SrsRtmpConn::service cycle (this=0x5555561da560) at
src/app/srs_app_rtmp_conn.cpp:420
#6 0x00005555556dbb88 in SrsRtmpConn::do_cycle (this=0x5555561da560) at
src/app/srs_app_rtmp_conn.cpp:233
#7 0x00005555556e4a6a in SrsRtmpConn::cycle (this=0x5555561da560) at
src/app/srs_app_rtmp_conn.cpp:1485
#8 0x000055555571380a in SrsFastCoroutine::cycle (this=0x5555561da6f0) at
src/app/srs app st.cpp:270
#9 0x00005555557138a6 in SrsFastCoroutine::pfn (arg=0x5555561da6f0) at
src/app/srs_app_st.cpp:285
#10 0x000055555583bc48 in _st_thread_main () at sched.c:363
```

#### SrsRtcFromRtmpBridger::SrsRtcFromRtmpBridger

```
#0 SrsRtcFromRtmpBridger::SrsRtcFromRtmpBridger (this=0x5555562e84a0,
                          at src/app/srs app rtc source.cpp:713
source=0x5555560b4ae0)
#1 0x00005555556e1e91 in SrsRtmpConn::acquire publish (this=0x5555562e7780,
source=0x555556217520)
  at src/app/srs_app_rtmp_conn.cpp:999
#2 0x00005555556e0e4f in SrsRtmpConn::publishing (this=0x5555562e7780,
source=0x555556217520)
  at src/app/srs_app_rtmp_conn.cpp:856
#3 0x00005555556de38a in SrsRtmpConn::stream service cycle (this=0x5555562e7780) at
src/app/srs app rtmp conn.cpp:566
#4 0x00005555556dd088 in SrsRtmpConn::service_cycle (this=0x5555562e7780) at
src/app/srs_app_rtmp_conn.cpp:420
#5 0x00005555556dbb88 in SrsRtmpConn::do_cycle (this=0x5555562e7780) at
src/app/srs_app_rtmp_conn.cpp:233
#6 0x00005555556e4a6a in SrsRtmpConn::cycle (this=0x5555562e7780) at
src/app/srs_app_rtmp_conn.cpp:1485
#7 0x000055555571380a in SrsFastCoroutine::cycle (this=0x5555562dea40) at
src/app/srs_app_st.cpp:270
#8 0x00005555557138a6 in SrsFastCoroutine::pfn (arg=0x5555562dea40) at
src/app/srs app st.cpp:285
#9 0x000055555583bc48 in st thread main () at sched.c:363
#10 0x0000555555583c4e4 in st thread create (start=0x555555713886
<SrsFastCoroutine::pfn(void*)>, arg=0x5555562dea40,
  joinable=1, stk size=65536) at sched.c:694
Backtrace stopped: previous frame inner to this frame (corrupt stack?)
```

创建SrsRtcFromRtmpBridger 进行SrsLiveSource和SrsRtcSource之间的桥接。

#### 在SrsRtmpConn::acquire publish

1. 创建rtc源

```
err = _srs_rtc_sources->fetch_or_create(req, &rtc))
```

2. 创建bridger

SrsRtcFromRtmpBridger \*bridger = new SrsRtcFromRtmpBridger(rtc); 新建桥接

3. 将SrsLiveSource和SrsRtcSource绑定

```
bridger->initialize(req)
source->set_bridger(bridger);
```

5. 转发音频数据: SrsLiveSource::on\_audio\_imp

```
bridger_->on_audio(msg)
format->on_audio(msg) 缓存音频帧
    aac_raw_append_adts_header(msg, format, &adts_audio, &nn_adts_audio) 添加7 bytes
header
    transcode(&aac) 转码和分发数据
        codec_->transcode(audio, out_audios) 真正转码的函数
        package_opus(out_audio, pkt) 将opus封装成rtp包
        source_->on_rtp(pkt) 分发rtp包给各个rtc consumer

6. 转发视频数据: SrsLiveSource::on_video_imp
bridger_->on_video(msg)
    filter(msg, format, has_idr, samples) 过滤B帧
    package_stap_a(source_, msg, pkt)如果有hdr帧则发送sps pps 包
    package_nalus(msg, samples, pkts) 解析nalu封装成pkt
    consume_packets(pkts); // 发送数据
```

#### SrsRtcConsumer::SrsRtcConsumer

```
#0 SrsRtcConsumer::SrsRtcConsumer (this=0x5555562d71f0, s=0x5555560b4ae0) at
src/app/srs_app_rtc_source.cpp:163#1 0x000055555582095b in
SrsRtcSource::create consumer (this=0x5555560b4ae0, consumer=@0x5555563cc568: 0x0)
  at src/app/srs_app_rtc_source.cpp:482
#2 0x00005555557dccc1 in SrsRtcPlayStream::cycle (this=0x5555562ed720) at
src/app/srs_app_rtc_conn.cpp:563
#3 0x000055555571380a in SrsFastCoroutine::cycle (this=0x5555562c7e80) at
src/app/srs_app_st.cpp:270
#4 0x00005555557138a6 in SrsFastCoroutine::pfn (arg=0x5555562c7e80) at
src/app/srs_app_st.cpp:285
#5 0x000055555583bc48 in st thread main () at sched.c:363
#6 0x000055555583c4e4 in st_thread_create (start=0x0, arg=0x5555562c7e80,
joinable=21845, stk size=1445884208)
  at sched.c:694
#7 0x00005555557db190 in SrsRtcPLIWorker::start (this=0x5555562a3880) at
src/app/srs_app_rtc_conn.cpp:325
#8 0x00005555557dcaa8 in SrsRtcPlayStream::start (this=0x5555562ed720) at
src/app/srs app rtc conn.cpp:533
#9 0x00005555557e62a9 in SrsRtcConnection::on connection established
(this=0x5555562e8870)
  at src/app/srs_app_rtc_conn.cpp:2205
```

```
#10 0x00005555557da7c4 in SrsSecurityTransport::on dtls handshake done
(this=0x5555562e2ff0)
  at src/app/srs_app_rtc_conn.cpp:164
#11 0x000055555580d319 in SrsDtlsServerImpl::on_handshake_done (this=0x5555562d73b0) at
src/app/srs_app_rtc_dtls.cpp:952
#12 0x000055555580bb08 in SrsDtlsImpl::do handshake (this=0x5555562d73b0) at
src/app/srs_app_rtc_dtls.cpp:619
#13 0x000055555580b431 in SrsDtlsImpl::do on dtls (this=0x0, data=0x0, nb data=0) at
src/app/srs app rtc dtls.cpp:534
#14 0x00005555561ca270 in ?? ()
#15 0x0000555555efa4b0 in vtable for _SrsContextId ()
#16 0x00007ffff7fdfb58 in ?? ()
#17 0x000000000000000 in ?? ()
#18 0x386e616b716c3239 in ?? ()
#19 0x00007fffffffde00 in ?? ()
#20 0x00007ffff7fdfc50 in ?? ()
#21 0x0000555555f03858 in vtable for SrsUdpMuxSocket ()
#22 0x0000555500000000 in ?? ()
#23 0x0000555556099d08 in ?? ()
#24 0x5cc26fb90000000 in ?? ()
#25 0x0000555556373530 in ?? ()
```

## SrsGoApiRtcPublish::do\_serve\_http

```
#0 SrsUdpMuxSocket::SrsUdpMuxSocket (this=0x1140150, fd=0x105e0b0) at src/app/srs_app_listener.cpp:295
#1 0x0000000005de891 in SrsUdpMuxSocket::copy_sendonly (this=0x7ffff7fd2b80) at src/app/srs_app_listener.cpp:477
#2 0x000000000060e449 in SrsRtcConnection::update_sendonly_socket (this=0x114ed70, skt=0x7ffff7fd2b80) at src/app/srs_app_rtc_conn.cpp:2319
#3 0x00000000060c6ca in SrsRtcConnection::on_stun (this=0x114ed70, skt=0x7ffff7fd2b80, r=0x7ffff7fd2930) at src/app/srs_app_rtc_conn.cpp:1981
#4 0x000000000644b12 in SrsRtcServer::on_udp_packet (this=0xf5c410, skt=0x7ffff7fd2b80) at src/app/srs_app_rtc_server.cpp:406
#5 0x0000000005df774 in SrsUdpMuxListener::cycle (this=0x104dfa0) at src/app/srs_app_listener.cpp:636
#6 0x00000000005375e2 in SrsFastCoroutine::cycle (this=0x105e0e0) at src/app/srs_app_st.cpp:270
```

```
#7 0x00000000537678 in SrsFastCoroutine::pfn (arg=0x105e0e0) at src/app/srs_app_st.cpp:285  
#8 0x0000000006a7a99 in _st_thread_main () at sched.c:363
```

## SrsRtcServer::on\_udp\_packet

```
Breakpoint 8, SrsRtcServer::on_udp_packet (this=0x5555560b4fe0, skt=0x7ffff7fdfb70) at src/app/srs_app_rtc_server.cpp:343343 {
(gdb) bt
#0 SrsRtcServer::on_udp_packet (this=0x5555560b4fe0, skt=0x7ffff7fdfb70) at src/app/srs_app_rtc_server.cpp:343
#1 0x00005555557b86ac in SrsUdpMuxListener::cycle (this=0x5555560fddd0) at src/app/srs_app_listener.cpp:636
#2 0x000055555571380a in SrsFastCoroutine::cycle (this=0x5555561b7410) at src/app/srs_app_st.cpp:270
#3 0x00005555557138a6 in SrsFastCoroutine::pfn (arg=0x5555561b7410) at src/app/srs_app_st.cpp:285
#4 0x000055555583bc48 in _st_thread_main () at sched.c:363
#5 0x000055555583c4e4 in st_thread_create (start=0x7ffff6e689d8
<__libc_multiple_threads>, arg=0x5b00000006e, joinable=119,
    stk_size=124) at sched.c:694
```

# SrsUdpMuxSocket::SrsUdpMuxSocket

## SrsRtcPlayStream::SrsRtcPlayStream

```
Breakpoint 6, SrsRtcPlayStream::SrsRtcPlayStream (this=0x5555562bb690, s=0x5555562d43e0, cid=...) at src/app/srs_app_rtc_conn.cpp:369
369 SrsRtcPlayStream::SrsRtcPlayStream(SrsRtcConnection* s, const SrsContextId& cid) (gdb) bt
#0 SrsRtcPlayStream::SrsRtcPlayStream (this=0x5555562bb690, s=0x5555562d43e0, cid=...) at src/app/srs_app_rtc_conn.cpp:369
#1 0x00005555557ee77b in SrsRtcConnection::create_player (this=0x5555562d43e0, req=0x5555562a3970, sub_relations=std::map with 2 elements = {...}) at src/app/srs_app_rtc_conn.cpp:3415
#2 0x00005555557e4912 in SrsRtcConnection::add_player (this=0x5555562d43e0, ruc=0x55555631c020, local_sdp=...) at src/app/srs_app_rtc_conn.cpp:1930
#3 0x000055555581bfa7 in SrsRtcServer::do_create_session (this=0x5555560b4fe0, ruc=0x55555631c020, local_sdp=..., session=0x5555562d43e0) at src/app/srs_app_rtc_server.cpp:505
```

```
#4 0x000055555581bdba in SrsRtcServer::create session (this=0x5555560b4fe0,
ruc=0x55555631c020, local sdp=...,
  psession=0x55555631b930) at src/app/srs_app_rtc_server.cpp:483
#5 0x00005555558323f8 in SrsGoApiRtcPlay::do_serve_http (this=0x555556104cc0,
w=0x55555631c6c0, r=0x55555634ff10, res=
  0x555562ce6d0) at src/app/srs app rtc api.cpp:201
#6 0x0000555555831016 in SrsGoApiRtcPlay::serve_http (this=0x555556104cc0,
w=0x55555631c6c0, r=0x55555634ff10)
  at src/app/srs_app_rtc_api.cpp:65
#7 0x0000555555697a5d in SrsHttpServeMux::serve_http (this=0x5555560b4690,
w=0x55555631c6c0, r=0x55555634ff10)
  at src/protocol/srs http stack.cpp:730
#8 0x000055555569884e in SrsHttpCorsMux::serve http (this=0x55555629f280,
w=0x55555631c6c0, r=0x55555634ff10)
  at src/protocol/srs_http_stack.cpp:878
#9 0x000055555577b1e4 in SrsHttpConn::process request (this=0x5555562bbc70,
w=0x55555631c6c0, r=0x55555634ff10, rid=1)
  at src/app/srs_app_http_conn.cpp:250
#10 0x000055555577ae29 in SrsHttpConn::process requests (this=0x5555562bbc70,
preq=0x55555631c798)
  at src/app/srs_app_http_conn.cpp:223
#11 0x000055555577a9af in SrsHttpConn::do_cycle (this=0x5555562bbc70) at
src/app/srs app http conn.cpp:177
#12 0x000055555577a3a4 in SrsHttpConn::cycle (this=0x5555562bbc70) at
src/app/srs_app_http_conn.cpp:122
#13 0x000055555571380a in SrsFastCoroutine::cycle (this=0x5555562bbac0) at
src/app/srs_app_st.cpp:270
#14 0x00005555557138a6 in SrsFastCoroutine::pfn (arg=0x5555562bbac0) at
src/app/srs_app_st.cpp:285
#15 0x000055555583bc48 in st thread main () at sched.c:363
```

# SrsGoApiRtcPlay::SrsGoApiRtcPlay 处理rtc play

```
Breakpoint 2, SrsGoApiRtcPlay::SrsGoApiRtcPlay (this=0x105e1a0, server=0xf5c410) at src/app/srs_app_rtc_api.cpp:3939 SrsGoApiRtcPlay::SrsGoApiRtcPlay(SrsRtcServer* server) (gdb) bt #0 SrsGoApiRtcPlay::SrsGoApiRtcPlay (this=0x105e1a0, server=0xf5c410) at src/app/srs_app_rtc_api.cpp:39 #1 0x000000000644e74 in SrsRtcServer::listen_api (this=0xf5c410) at src/app/srs_app_rtc_server.cpp:447
```

```
#2 0x000000000647037 in RtcServerAdapter::run (this=0xf5c3f0) at src/app/srs_app_rtc_server.cpp:714

#3 0x0000000005fe884 in SrsHybridServer::run (this=0xf575c0) at src/app/srs_app_hybrid.cpp:288

#4 0x00000000006a6e7d in run_hybrid_server () at src/main/srs_main_server.cpp:495

#5 0x0000000006a69b8 in run_directly_or_daemon () at src/main/srs_main_server.cpp:425

#6 0x0000000006a5385 in do_main (argc=3, argv=0x7fffffffe408) at src/main/srs_main_server.cpp:219

#7 0x0000000006a5530 in main (argc=3, argv=0x7fffffffe408) at src/main/srs_main_server.cpp:228
```

#### SrsRtcConnection::SrsRtcConnection

# // 创建连接 类似客户端RTCPeercConnection Breakpoint 3, SrsRtcConnection::SrsRtcConnection (this=0x1188360, s=0xf5c410, cid=...) at src/app/srs\_app\_rtc\_conn.cpp:16791679 SrsRtcConnection::SrsRtcConnection(SrsRtcServer\* s, const SrsContextId& cid) (gdb) bt #0 SrsRtcConnection::SrsRtcConnection (this=0x1188360, s=0xf5c410, cid=...) at src/app/srs\_app\_rtc\_conn.cpp:1679 #1 0x00000000064520d in SrsRtcServer::create session (this=0xf5c410, ruc=0x1182600, local sdp=..., psession=0x1181a30) at src/app/srs\_app\_rtc\_server.cpp:482 #2 0x00000000065be36 in SrsGoApiRtcPlay::do\_serve\_http (this=0x105e1a0, w=0x1182cd0, r=0x11868b0, res=0x11851a0) at src/app/srs app rtc api.cpp:201 #3 0x0000000065aaaa in SrsGoApiRtcPlay::serve\_http (this=0x105e1a0, w=0x1182cd0, r=0x11868b0) at src/app/srs\_app\_rtc\_api.cpp:65 #4 0x0000000004b9c7d in SrsHttpServeMux::serve\_http (this=0xf5bdb0, w=0x1182cd0, r=0x11868b0) at src/protocol/srs\_http\_stack.cpp:730 #5 0x0000000004baaba in SrsHttpCorsMux::serve\_http (this=0x115cf60, w=0x1182cd0, r=0x11868b0) at src/protocol/srs\_http\_stack.cpp:878 #6 0x000000005a2197 in SrsHttpConn::process request (this=0x1171d90, w=0x1182cd0, r=0x11868b0, rid=1) at src/app/srs app http conn.cpp:250 #7 0x0000000005a1df2 in SrsHttpConn::process\_requests (this=0x1171d90, preq=0x1182da8) at src/app/srs\_app\_http\_conn.cpp:223 #8 0x0000000005a1992 in SrsHttpConn::do cycle (this=0x1171d90) at src/app/srs\_app\_http\_conn.cpp:177

#9 0x0000000005a13b5 in SrsHttpConn::cycle (this=0x1171d90) at

src/app/srs\_app\_http\_conn.cpp:122

```
#10 0x000000005375e2 in SrsFastCoroutine::cycle (this=0x1172000) at src/app/srs_app_st.cpp:270
#11 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x1172000) at src/app/srs_app_st.cpp:285
#12 0x0000000006a7a99 in _st_thread_main () at sched.c:363
#13 0x0000000006a8316 in st_thread_create (start=0x537658
<SrsFastCoroutine::pfn(void*)>, arg=0x1172000, joinable=1, stk_size=65536) at sched.c:694
Backtrace stopped: previous frame inner to this frame (corrupt stack?)
```

# SrsRtcServer::do\_create\_session 负责创建RTCConnection以及初始化sdp

```
Breakpoint 4, SrsRtcServer::do_create_session (this=0xf5c410, ruc=0x1163a40, local_sdp=...,
session=0x1175210) at src/app/srs app rtc server.cpp:494494
(gdb) bt
#0 SrsRtcServer::do_create_session (this=0xf5c410, ruc=0x1163a40, local_sdp=...,
session=0x1175210) at src/app/srs_app_rtc_server.cpp:494
#1 0x000000000645232 in SrsRtcServer::create session (this=0xf5c410, ruc=0x1163a40,
local sdp=..., psession=0x1162e70)
  at src/app/srs_app_rtc_server.cpp:483
#2 0x00000000065be36 in SrsGoApiRtcPlay::do serve http (this=0x105e1a0, w=0x1164110,
r=0x116fb50, res=0x114cba0) at src/app/srs_app_rtc_api.cpp:201
#3 0x00000000065aaaa in SrsGoApiRtcPlay::serve_http (this=0x105e1a0, w=0x1164110,
r=0x116fb50) at src/app/srs_app_rtc_api.cpp:65
#4 0x0000000004b9c7d in SrsHttpServeMux::serve http (this=0xf5bdb0, w=0x1164110,
r=0x116fb50) at src/protocol/srs_http_stack.cpp:730
#5 0x0000000004baaba in SrsHttpCorsMux::serve_http (this=0x10bf1e0, w=0x1164110,
r=0x116fb50) at src/protocol/srs_http_stack.cpp:878
#6 0x0000000005a2197 in SrsHttpConn::process request (this=0x114b5a0, w=0x1164110,
r=0x116fb50, rid=1) at src/app/srs_app_http_conn.cpp:250
#7 0x0000000005a1df2 in SrsHttpConn::process_requests (this=0x114b5a0, preq=0x11641e8)
at src/app/srs_app_http_conn.cpp:223
#8 0x0000000005a1992 in SrsHttpConn::do cycle (this=0x114b5a0) at
src/app/srs_app_http_conn.cpp:177
#9 0x000000005a13b5 in SrsHttpConn::cycle (this=0x114b5a0) at
src/app/srs app http conn.cpp:122
#10 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x11459b0) at
src/app/srs_app_st.cpp:270
#11 0x00000000537678 in SrsFastCoroutine::pfn (arg=0x11459b0) at
src/app/srs_app_st.cpp:285
#12 0x0000000006a7a99 in _st_thread_main () at sched.c:363
```

#13 0x0000000006a8316 in st\_thread\_create (start=0x537658 <SrsFastCoroutine::pfn(void\*)>, arg=0x11459b0, joinable=1, stk\_size=65536) at sched.c:694 Backtrace stopped: previous frame inner to this frame (corrupt stack?)

## SrsRtcPlayStream::SrsRtcPlayStream player需要对应playstream

```
Breakpoint 8, SrsRtcPlayStream::SrsRtcPlayStream (this=0x1172300, s=0x1175210, cid=...) at
src/app/srs_app_rtc_conn.cpp:369369
SrsRtcPlayStream::SrsRtcPlayStream(SrsRtcConnection* s, const SrsContextId& cid)
(gdb) bt
#0 SrsRtcPlayStream::SrsRtcPlayStream (this=0x1172300, s=0x1175210, cid=...) at
src/app/srs app rtc conn.cpp:369
#1 0x000000000615d11 in SrsRtcConnection::create_player (this=0x1175210, req=0x1171030,
sub_relations=std::map with 2 elements = {...})
   at src/app/srs app rtc conn.cpp:3415
#2 0x0000000000000be in SrsRtcConnection::add_player (this=0x1175210, ruc=0x1163a40,
local_sdp=...) at src/app/srs_app_rtc_conn.cpp:1930
#3 0x000000000645412 in SrsRtcServer::do_create_session (this=0xf5c410, ruc=0x1163a40,
local sdp=..., session=0x1175210)
   at src/app/srs_app_rtc_server.cpp:505
#4 0x000000000645232 in SrsRtcServer::create_session (this=0xf5c410, ruc=0x1163a40,
local sdp=..., psession=0x1162e70)
   at src/app/srs_app_rtc_server.cpp:483
#5 0x00000000065be36 in SrsGoApiRtcPlay::do_serve_http (this=0x105e1a0, w=0x1164110,
r=0x116fb50, res=0x114cba0) at src/app/srs_app_rtc_api.cpp:201
#6 0x00000000065aaaa in SrsGoApiRtcPlay::serve http (this=0x105e1a0, w=0x1164110,
r=0x116fb50) at src/app/srs app rtc api.cpp:65
#7 0x0000000004b9c7d in SrsHttpServeMux::serve_http (this=0xf5bdb0, w=0x1164110,
r=0x116fb50) at src/protocol/srs_http_stack.cpp:730
#8 0x0000000004baaba in SrsHttpCorsMux::serve http (this=0x10bf1e0, w=0x1164110,
r=0x116fb50) at src/protocol/srs_http_stack.cpp:878
#9 0x0000000005a2197 in SrsHttpConn::process_request (this=0x114b5a0, w=0x1164110,
r=0x116fb50, rid=1) at src/app/srs app http conn.cpp:250
#10 0x000000005a1df2 in SrsHttpConn::process_requests (this=0x114b5a0, preq=0x11641e8)
at src/app/srs_app_http_conn.cpp:223
#11 0x0000000005a1992 in SrsHttpConn::do_cycle (this=0x114b5a0) at
src/app/srs_app_http_conn.cpp:177
#12 0x0000000005a13b5 in SrsHttpConn::cycle (this=0x114b5a0) at
src/app/srs_app_http_conn.cpp:122
```

```
#13 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x11459b0) at src/app/srs_app_st.cpp:270
#14 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x11459b0) at src/app/srs_app_st.cpp:285
#15 0x0000000006a7a99 in _st_thread_main () at sched.c:363
#16 0x0000000006a8316 in st_thread_create (start=0x537658
<SrsFastCoroutine::pfn(void*)>, arg=0x11459b0, joinable=1, stk_size=65536) at sched.c:694
Backtrace stopped: previous frame inner to this frame (corrupt stack?)
```

#### SrsRtcSendTrack::SrsRtcSendTrack

```
Breakpoint 7, SrsRtcSendTrack::SrsRtcSendTrack (this=0x1172620, session=0x1175210,
                                      at src/app/srs_app_rtc_source.cpp:2444
track_desc=0x1175fb0, is_audio=true)
         SrsRtcSendTrack::SrsRtcSendTrack(SrsRtcConnection* session.
SrsRtcTrackDescription* track_desc, bool is_audio)
(gdb) bt
#0 SrsRtcSendTrack::SrsRtcSendTrack (this=0x1172620, session=0x1175210,
track desc=0x1175fb0, is audio=true) at src/app/srs app rtc source.cpp:2444
#1 0x000000000653f77 in SrsRtcAudioSendTrack::SrsRtcAudioSendTrack (this=0x1172620,
session=0x1175210, track desc=0x1175fb0)
   at src/app/srs app rtc source.cpp:2562
#2 0x0000000000603aa4 in SrsRtcPlayStream::initialize (this=0x1172300, req=0x1171030,
sub relations=std::map with 2 elements = \{...\})
   at src/app/srs_app_rtc_conn.cpp:438
#3 0x000000000615d51 in SrsRtcConnection::create player (this=0x1175210, req=0x1171030,
sub_relations=std::map with 2 elements = {...})
   at src/app/srs_app_rtc_conn.cpp:3416
#4 0x0000000000000be in SrsRtcConnection::add_player (this=0x1175210, ruc=0x1163a40,
local_sdp=...) at src/app/srs_app_rtc_conn.cpp:1930
#5 0x000000000645412 in SrsRtcServer::do_create_session (this=0xf5c410, ruc=0x1163a40,
local_sdp=..., session=0x1175210)
   at src/app/srs app rtc server.cpp:505
#6 0x000000000645232 in SrsRtcServer::create session (this=0xf5c410, ruc=0x1163a40,
local sdp=..., psession=0x1162e70)
   at src/app/srs_app_rtc_server.cpp:483
#7 0x00000000065be36 in SrsGoApiRtcPlay::do serve http (this=0x105e1a0, w=0x1164110,
r=0x116fb50, res=0x114cba0) at src/app/srs_app_rtc_api.cpp:201
#8 0x00000000065aaaa in SrsGoApiRtcPlay::serve_http (this=0x105e1a0, w=0x1164110,
r=0x116fb50) at src/app/srs_app_rtc_api.cpp:65
```

```
#9 0x0000000004b9c7d in SrsHttpServeMux::serve http (this=0xf5bdb0, w=0x1164110,
r=0x116fb50) at src/protocol/srs http stack.cpp:730
#10 0x0000000004baaba in SrsHttpCorsMux::serve_http (this=0x10bf1e0, w=0x1164110,
r=0x116fb50) at src/protocol/srs_http_stack.cpp:878
#11 0x0000000005a2197 in SrsHttpConn::process request (this=0x114b5a0, w=0x1164110,
r=0x116fb50, rid=1) at src/app/srs_app_http_conn.cpp:250
#12 0x0000000005a1df2 in SrsHttpConn::process_requests (this=0x114b5a0, preq=0x11641e8)
at src/app/srs app http conn.cpp:223
#13 0x0000000005a1992 in SrsHttpConn::do cycle (this=0x114b5a0) at
src/app/srs_app_http_conn.cpp:177
#14 0x0000000005a13b5 in SrsHttpConn::cycle (this=0x114b5a0) at
src/app/srs_app_http_conn.cpp:122
#15 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x11459b0) at
src/app/srs_app_st.cpp:270
#16 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x11459b0) at
src/app/srs app st.cpp:285
#17 0x0000000006a7a99 in _st_thread_main () at sched.c:363
```

#### SrsRtcSendTrack::SrsRtcSendTrack

```
Breakpoint 7, SrsRtcSendTrack::SrsRtcSendTrack (this=0x1167fe0, session=0x1175210,
                                       at src/app/srs app rtc source.cpp:2444
track desc=0x11727f0, is audio=false)
         SrsRtcSendTrack::SrsRtcSendTrack(SrsRtcConnection* session,
SrsRtcTrackDescription* track_desc, bool is_audio)
(gdb) bt
#0 SrsRtcSendTrack::SrsRtcSendTrack (this=0x1167fe0, session=0x1175210,
track desc=0x11727f0, is audio=false) at src/app/srs app rtc source.cpp:2444
#1 0x0000000006541c5 in SrsRtcVideoSendTrack::SrsRtcVideoSendTrack (this=0x1167fe0,
session=0x1175210, track_desc=0x11727f0)
   at src/app/srs_app_rtc_source.cpp:2606
#2 0x0000000000603b45 in SrsRtcPlayStream::initialize (this=0x1172300, reg=0x1171030,
sub_relations=std::map with 2 elements = {...})
   at src/app/srs app rtc conn.cpp:443
#3 0x000000000615d51 in SrsRtcConnection::create_player (this=0x1175210, req=0x1171030,
sub_relations=std::map with 2 elements = {...})
   at src/app/srs_app_rtc_conn.cpp:3416
#4 0x0000000000060c0be in SrsRtcConnection::add player (this=0x1175210, ruc=0x1163a40,
local_sdp=...) at src/app/srs_app_rtc_conn.cpp:1930
#5 0x000000000645412 in SrsRtcServer::do_create_session (this=0xf5c410, ruc=0x1163a40,
local_sdp=..., session=0x1175210)
```

```
at src/app/srs_app_rtc_server.cpp:505
#6 0x000000000645232 in SrsRtcServer::create session (this=0xf5c410, ruc=0x1163a40,
local sdp=..., psession=0x1162e70)
  at src/app/srs_app_rtc_server.cpp:483
#7 0x00000000065be36 in SrsGoApiRtcPlay::do serve http (this=0x105e1a0, w=0x1164110,
r=0x116fb50, res=0x114cba0) at src/app/srs_app_rtc_api.cpp:201
#8 0x00000000065aaaa in SrsGoApiRtcPlay::serve_http (this=0x105e1a0, w=0x1164110,
r=0x116fb50) at src/app/srs app rtc api.cpp:65
#9 0x0000000004b9c7d in SrsHttpServeMux::serve_http (this=0xf5bdb0, w=0x1164110,
r=0x116fb50) at src/protocol/srs_http_stack.cpp:730
#10 0x0000000004baaba in SrsHttpCorsMux::serve_http (this=0x10bf1e0, w=0x1164110,
r=0x116fb50) at src/protocol/srs http stack.cpp:878
#11 0x0000000005a2197 in SrsHttpConn::process request (this=0x114b5a0, w=0x1164110,
r=0x116fb50, rid=1) at src/app/srs_app_http_conn.cpp:250
#12 0x000000005a1df2 in SrsHttpConn::process_requests (this=0x114b5a0, preq=0x11641e8)
at src/app/srs_app_http_conn.cpp:223
#13 0x0000000005a1992 in SrsHttpConn::do_cycle (this=0x114b5a0) at
src/app/srs_app_http_conn.cpp:177
#14 0x0000000005a13b5 in SrsHttpConn::cycle (this=0x114b5a0) at
src/app/srs_app_http_conn.cpp:122
#15 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x11459b0) at
src/app/srs_app_st.cpp:270
#16 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x11459b0) at
src/app/srs_app_st.cpp:285
#17 0x0000000006a7a99 in st thread main () at sched.c:363
#18 0x0000000006a8316 in st_thread_create (start=0x537658
<SrsFastCoroutine::pfn(void*)>, arg=0x11459b0, joinable=1, stk size=65536) at sched.c:694
Backtrace stopped: previous frame inner to this frame (corrupt stack?)
```

#### SrsRtcConsumer::SrsRtcConsumer

Breakpoint 9, SrsRtcConsumer::SrsRtcConsumer (this=0x114ce10, s=0x10bf590) at src/app/srs\_app\_rtc\_source.cpp:163163 SrsRtcConsumer::SrsRtcConsumer(SrsRtcSource\* s) (gdb) bt #0 SrsRtcConsumer::SrsRtcConsumer (this=0x114ce10, s=0x10bf590) at src/app/srs\_app\_rtc\_source.cpp:163 #1 0x00000000064a019 in SrsRtcSource::create\_consumer (this=0x10bf590, consumer=@0x11640d8: 0x0) at src/app/srs\_app\_rtc\_source.cpp:482 #2 0x0000000006046ed in SrsRtcPlayStream::cycle (this=0x1172300) at src/app/srs\_app\_rtc\_conn.cpp:563

```
#3 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x114ccf0) at
src/app/srs_app_st.cpp:270
#4 0x00000000537678 in SrsFastCoroutine::pfn (arg=0x114ccf0) at
src/app/srs_app_st.cpp:285
#5 0x0000000006a7a99 in st thread main () at sched.c:363
#6 0x0000000006a8316 in st thread create (start=0x0, arg=0x114ccf0, joinable=0,
stk size=18292560) at sched.c:694
#7 0x0000000000602c41 in SrsRtcPLIWorker::start (this=0x1171ef0) at
src/app/srs app rtc conn.cpp:325
#8 0x00000000006044f5 in SrsRtcPlayStream::start (this=0x1172300) at
src/app/srs_app_rtc_conn.cpp:533
#9 0x0000000000060d9a8 in SrsRtcConnection::on connection established (this=0x1175210) at
src/app/srs_app_rtc_conn.cpp:2205
#10 0x00000000006022ac in SrsSecurityTransport::on_dtls_handshake_done (this=0x11712d0)
at src/app/srs_app_rtc_conn.cpp:164
#11 0x0000000006364af in SrsDtlsServerImpl::on handshake done (this=0x116d810) at
src/app/srs_app_rtc_dtls.cpp:952
#12 0x000000000634d25 in SrsDtlsImpl::do_handshake (this=0x116d810) at
src/app/srs app rtc dtls.cpp:619
#13 0x00000000063466d in SrsDtlsImpl::do on dtls (this=<error reading variable: Cannot
access memory at address 0xfffffffffffffffffb1>,
   data=<error reading variable: Cannot access memory at address 0xfffffffffffffdfa9>,
   nb data=<error reading variable: Cannot access memory at address 0xffffffffffffffdfa5>) at
src/app/srs_app_rtc_dtls.cpp:534
Backtrace stopped: previous frame inner to this frame (corrupt stack?)
```

# SrsRtcSSRCGenerator::generate\_ssrc

```
Breakpoint 7, SrsRtcSSRCGenerator::generate_ssrc (this=0x1071040) at src/app/srs_app_rtc_source.cpp:26702670 if (!ssrc_num) {
(gdb) bt

#0 SrsRtcSSRCGenerator::generate_ssrc (this=0x1071040) at src/app/srs_app_rtc_source.cpp:2670

#1 0x0000000000649973 in SrsRtcSource::init_for_play_before_publishing (this=0x10bf5f0) at src/app/srs_app_rtc_source.cpp:396

#2 0x000000000064983e in SrsRtcSource::initialize (this=0x10bf5f0, r=0x10aaee0) at src/app/srs_app_rtc_source.cpp:372

#3 0x00000000006490da in SrsRtcSourceManager::fetch_or_create (this=0xf57bc0, r=0x10aaee0, pps=0x10bb6f8) at src/app/srs_app_rtc_source.cpp:283

#4 0x00000000005057cd in SrsRtmpConn::acquire_publish (this=0x10811f0, source=0x10bd790) at src/app/srs_app_rtmp_conn.cpp:981
```

```
#5 0x000000000504835 in SrsRtmpConn::publishing (this=0x10811f0, source=0x10bd790) at
src/app/srs_app_rtmp_conn.cpp:856
#6 0x000000000501de4 in SrsRtmpConn::stream_service_cycle (this=0x10811f0) at
src/app/srs_app_rtmp_conn.cpp:566
#7 0x000000000500b16 in SrsRtmpConn::service cycle (this=0x10811f0) at
src/app/srs_app_rtmp_conn.cpp:420
#8 0x0000000004ff5d5 in SrsRtmpConn::do cycle (this=0x10811f0) at
src/app/srs app rtmp conn.cpp:233
#9 0x000000000508489 in SrsRtmpConn::cycle (this=0x10811f0) at
src/app/srs_app_rtmp_conn.cpp:1485
#10 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x1081570) at
src/app/srs app st.cpp:270
#11 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x1081570) at
src/app/srs_app_st.cpp:285
#12 0x0000000006a7a99 in _st_thread_main () at sched.c:363
Breakpoint 7, SrsRtcSSRCGenerator::generate_ssrc (this=0x1071040) at
                                             if (!ssrc num) {
src/app/srs_app_rtc_source.cpp:26702670
(gdb) bt
#0 SrsRtcSSRCGenerator::generate ssrc (this=0x1071040) at
src/app/srs_app_rtc_source.cpp:2670
#1 0x000000000649ae7 in SrsRtcSource::init_for_play_before_publishing (this=0x10bf5f0) at
src/app/srs app rtc source.cpp:411
#2 0x00000000064983e in SrsRtcSource::initialize (this=0x10bf5f0, r=0x10aaee0) at
src/app/srs_app_rtc_source.cpp:372
#3 0x0000000006490da in SrsRtcSourceManager::fetch_or_create (this=0xf57bc0,
r=0x10aaee0, pps=0x10bb6f8) at src/app/srs app rtc source.cpp:283
#4 0x000000005057cd in SrsRtmpConn::acquire_publish (this=0x10811f0,
source=0x10bd790) at src/app/srs_app_rtmp_conn.cpp:981
#5 0x000000000504835 in SrsRtmpConn::publishing (this=0x10811f0, source=0x10bd790) at
src/app/srs_app_rtmp_conn.cpp:856
#6 0x00000000501de4 in SrsRtmpConn::stream_service_cycle (this=0x10811f0) at
src/app/srs_app_rtmp_conn.cpp:566
#7 0x000000000500b16 in SrsRtmpConn::service cycle (this=0x10811f0) at
src/app/srs_app_rtmp_conn.cpp:420
#8 0x0000000004ff5d5 in SrsRtmpConn::do_cycle (this=0x10811f0) at
src/app/srs_app_rtmp_conn.cpp:233
#9 0x000000000508489 in SrsRtmpConn::cycle (this=0x10811f0) at
src/app/srs_app_rtmp_conn.cpp:1485
```

```
#10 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x1081570) at
src/app/srs_app_st.cpp:270
#11 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x1081570) at
src/app/srs_app_st.cpp:285
#12 0x0000000006a7a99 in st thread main () at sched.c:363
#13 0x0000000006a8316 in st_thread_create (start=0x537658
<SrsFastCoroutine::pfn(void*)>, arg=0x1081570, joinable=1, stk_size=65536) at sched.c:694
Backtrace stopped: previous frame inner to this frame (corrupt stack?)
Breakpoint 7, SrsRtcSSRCGenerator::generate_ssrc (this=0x1071040) at
src/app/srs_app_rtc_source.cpp:26702670
                                              if (!ssrc num) {
(gdb) bt
#0 SrsRtcSSRCGenerator::generate_ssrc (this=0x1071040) at
src/app/srs_app_rtc_source.cpp:2670
#1 0x0000000006133e5 in SrsRtcConnection::negotiate_play_capability (this=0x1193af0,
ruc=0x118dc00, sub_relations=std::map with 0 elements)
  at src/app/srs_app_rtc_conn.cpp:3159
#2 0x000000000060be33 in SrsRtcConnection::add player (this=0x1193af0, ruc=0x118dc00,
local_sdp=...) at src/app/srs_app_rtc_conn.cpp:1901
#3 0x000000000645412 in SrsRtcServer::do_create_session (this=0xf5c410, ruc=0x118dc00,
local_sdp=..., session=0x1193af0)
  at src/app/srs_app_rtc_server.cpp:505
#4 0x000000000645232 in SrsRtcServer::create session (this=0xf5c410, ruc=0x118dc00,
local sdp=..., psession=0x118d030)
  at src/app/srs_app_rtc_server.cpp:483
#5 0x00000000065be36 in SrsGoApiRtcPlay::do_serve_http (this=0x105e1a0, w=0x118e2d0,
r=0x1192040, res=0x1190930) at src/app/srs_app_rtc_api.cpp:201
#6 0x00000000065aaaa in SrsGoApiRtcPlay::serve_http (this=0x105e1a0, w=0x118e2d0,
r=0x1192040) at src/app/srs app rtc api.cpp:65
#7 0x0000000004b9c7d in SrsHttpServeMux::serve_http (this=0xf5bdb0, w=0x118e2d0,
r=0x1192040) at src/protocol/srs_http_stack.cpp:730
#8 0x0000000004baaba in SrsHttpCorsMux::serve_http (this=0x114a920, w=0x118e2d0,
r=0x1192040) at src/protocol/srs http stack.cpp:878
#9 0x0000000005a2197 in SrsHttpConn::process_request (this=0x117a000, w=0x118e2d0,
r=0x1192040, rid=1) at src/app/srs_app_http_conn.cpp:250
#10 0x000000005a1df2 in SrsHttpConn::process_requests (this=0x117a000, preq=0x118e3a8)
at src/app/srs_app_http_conn.cpp:223
#11 0x0000000005a1992 in SrsHttpConn::do_cycle (this=0x117a000) at
src/app/srs_app_http_conn.cpp:177
```

```
#12 0x0000000005a13b5 in SrsHttpConn::cycle (this=0x117a000) at src/app/srs_app_http_conn.cpp:122
#13 0x000000005375e2 in SrsFastCoroutine::cycle (this=0x117d740) at src/app/srs_app_st.cpp:270
#14 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x117d740) at src/app/srs_app_st.cpp:285
#15 0x0000000006a7a99 in _st_thread_main () at sched.c:363
#16 0x0000000006a8316 in st_thread_create (start=0x537658
<SrsFastCoroutine::pfn(void*)>, arg=0x117d740, joinable=1, stk_size=65536) at sched.c:694
Backtrace stopped: previous frame inner to this frame (corrupt stack?)
```

#### SrsRtcSSRCGenerator::generate\_ssrc

```
Breakpoint 7, SrsRtcSSRCGenerator::generate_ssrc (this=0x1071040) at
src/app/srs_app_rtc_source.cpp:26702670
                                              if (!ssrc_num) {
(gdb) bt
#0 SrsRtcSSRCGenerator::generate ssrc (this=0x1071040) at
src/app/srs_app_rtc_source.cpp:2670
#1 0x0000000006133e5 in SrsRtcConnection::negotiate_play_capability (this=0x1193af0,
ruc=0x118dc00, sub relations=std::map with 1 elements = \{...\})
  at src/app/srs app rtc conn.cpp:3159
#2 0x000000000060be33 in SrsRtcConnection::add_player (this=0x1193af0, ruc=0x118dc00,
local sdp=...) at src/app/srs app rtc conn.cpp:1901
#3 0x000000000645412 in SrsRtcServer::do_create_session (this=0xf5c410, ruc=0x118dc00,
local_sdp=..., session=0x1193af0)
   at src/app/srs_app_rtc_server.cpp:505
#4 0x000000000645232 in SrsRtcServer::create session (this=0xf5c410, ruc=0x118dc00,
local sdp=..., psession=0x118d030)
   at src/app/srs_app_rtc_server.cpp:483
#5 0x00000000065be36 in SrsGoApiRtcPlay::do_serve_http (this=0x105e1a0, w=0x118e2d0,
r=0x1192040, res=0x1190930) at src/app/srs_app_rtc_api.cpp:201
#6 0x00000000065aaaa in SrsGoApiRtcPlay::serve_http (this=0x105e1a0, w=0x118e2d0,
r=0x1192040) at src/app/srs_app_rtc_api.cpp:65
#7 0x0000000004b9c7d in SrsHttpServeMux::serve http (this=0xf5bdb0, w=0x118e2d0,
r=0x1192040) at src/protocol/srs http stack.cpp:730
#8 0x0000000004baaba in SrsHttpCorsMux::serve_http (this=0x114a920, w=0x118e2d0,
r=0x1192040) at src/protocol/srs_http_stack.cpp:878
#9 0x000000005a2197 in SrsHttpConn::process request (this=0x117a000, w=0x118e2d0,
r=0x1192040, rid=1) at src/app/srs_app_http_conn.cpp:250
#10 0x0000000005a1df2 in SrsHttpConn::process_requests (this=0x117a000, preq=0x118e3a8)
at src/app/srs_app_http_conn.cpp:223
```

```
#11 0x0000000005a1992 in SrsHttpConn::do_cycle (this=0x117a000) at src/app/srs_app_http_conn.cpp:177
#12 0x0000000005a13b5 in SrsHttpConn::cycle (this=0x117a000) at src/app/srs_app_http_conn.cpp:122
#13 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x117d740) at src/app/srs_app_st.cpp:270
#14 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x117d740) at src/app/srs_app_st.cpp:285
#15 0x0000000006a7a99 in _st_thread_main () at sched.c:363
#16 0x0000000006a8316 in st_thread_create (start=0x537658
<SrsFastCoroutine::pfn(void*)>, arg=0x117d740, joinable=1, stk_size=65536) at sched.c:694
Backtrace stopped: previous frame inner to this frame (corrupt stack?)
```

#### SrsRtcPlayStream::start

```
reakpoint 4, SrsRtcPlayStream::start (this=0x1194970) at src/app/srs_app_rtc_conn.cpp:516516
(gdb) bt
#0 SrsRtcPlayStream::start (this=0x1194970) at src/app/srs app rtc conn.cpp:516
#1 0x000000000060da86 in SrsRtcConnection::on_connection_established (this=0x1193af0) at
src/app/srs_app_rtc_conn.cpp:2211
#2 0x00000000006022ac in SrsSecurityTransport::on dtls handshake done (this=0x1196340)
at src/app/srs_app_rtc_conn.cpp:164
#3 0x000000006364af in SrsDtlsServerImpl::on_handshake_done (this=0x1196d80) at
src/app/srs_app_rtc_dtls.cpp:952
#4 0x000000000634d25 in SrsDtlsImpl::do handshake (this=0x1196d80) at
src/app/srs_app_rtc_dtls.cpp:619
#5 0x0000000006345fd in SrsDtlsImpl::do_on_dtls (this=0x1196d80, data=0x1071150
"\026\376", <incomplete sequence \375>, nb_data=579)
  at src/app/srs_app_rtc_dtls.cpp:528
#6 0x00000000063436d in SrsDtlsImpl::on dtls (this=0x1196d80, data=0x1071150
"\026\376", <incomplete sequence \375>, nb_data=579)
  at src/app/srs app rtc dtls.cpp:491
#7 0x000000000636933 in SrsDtls::on dtls (this=0x114d820, data=0x1071150 "\026\376",
<incomplete sequence \375>, nb_data=579)
  at src/app/srs_app_rtc_dtls.cpp:1047
#8 0x000000000006020dd in SrsSecurityTransport::on dtls (this=0x1196340, data=0x1071150
"026\376", <incomplete sequence 375, nb data=579)
  at src/app/srs_app_rtc_conn.cpp:140
```

## SrsRtcPlayStream::start

```
Breakpoint 4, SrsRtcPlayStream::start (this=0x1194970) at
src/app/srs app rtc conn.cpp:516516
(gdb) bt
#0 SrsRtcPlayStream::start (this=0x1194970) at src/app/srs app rtc conn.cpp:516
#1 0x00000000000da86 in SrsRtcConnection::on_connection_established (this=0x1193af0) at
src/app/srs_app_rtc_conn.cpp:2211
#2 0x00000000000022ac in SrsSecurityTransport::on_dtls_handshake_done (this=0x1196340)
at src/app/srs app rtc conn.cpp:164
#3 0x0000000006364af in SrsDtlsServerImpl::on handshake done (this=0x1196d80) at
src/app/srs_app_rtc_dtls.cpp:952
#4 0x000000000634d25 in SrsDtlsImpl::do_handshake (this=0x1196d80) at
src/app/srs_app_rtc_dtls.cpp:619
#5 0x0000000006345fd in SrsDtlsImpl::do on dtls (this=0x1196d80, data=0x1071150
"\026\376", <incomplete sequence \375>, nb_data=579)
  at src/app/srs app rtc dtls.cpp:528
#6 0x00000000063436d in SrsDtlsImpl::on dtls (this=0x1196d80, data=0x1071150
"\026\376", <incomplete sequence \375>, nb_data=579)
  at src/app/srs_app_rtc_dtls.cpp:491
#7 0x000000000636933 in SrsDtls::on dtls (this=0x114d820, data=0x1071150 "\026\376",
<incomplete sequence \375>, nb data=579)
  at src/app/srs_app_rtc_dtls.cpp:1047
```

```
#8 0x00000000006020dd in SrsSecurityTransport::on dtls (this=0x1196340, data=0x1071150
"026\376", <incomplete sequence 375, nb data=579)
  at src/app/srs_app_rtc_conn.cpp:140
#9 0x000000000060c799 in SrsRtcConnection::on_dtls (this=0x1193af0, data=0x1071150
"026\376", <incomplete sequence 375, nb data=579)
  at src/app/srs_app_rtc_conn.cpp:1997
#10 0x000000000644ce9 in SrsRtcServer::on_udp_packet (this=0xf5c410,
skt=0x7ffff7fd2b80) at src/app/srs app rtc server.cpp:435
#11 0x0000000005df774 in SrsUdpMuxListener::cycle (this=0x104dfa0) at
src/app/srs_app_listener.cpp:636
#12 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x105e0e0) at
src/app/srs_app_st.cpp:270
#13 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x105e0e0) at
src/app/srs_app_st.cpp:285
#14 0x0000000006a7a99 in _st_thread_main () at sched.c:363
#15 0x0000000006a8316 in st thread create (start=0x7ffffffddf0, arg=0x12000,
joinable=32767, stk size=-152012000) at sched.c:694
#16 0x00007ffff6f07b20 in ?? () from /lib/x86_64-linux-gnu/libc.so.6
```

#### SrsRtcConsumer::dump\_packet

```
Breakpoint 6, SrsRtcConsumer::dump_packet (this=0x1195390, ppkt=0x7ffff7f8fae8) at
src/app/srs_app_rtc_source.cpp:210210 {
(gdb) bt
#0 SrsRtcConsumer::dump packet (this=0x1195390, ppkt=0x7ffff7f8fae8) at
src/app/srs_app_rtc_source.cpp:210
#1 0x0000000000604c72 in SrsRtcPlayStream::cycle (this=0x1194970) at
src/app/srs_app_rtc_conn.cpp:599
#2 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x111f5c0) at
src/app/srs_app_st.cpp:270
#3 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x111f5c0) at
src/app/srs app st.cpp:285
#4 0x0000000006a7a99 in st thread main () at sched.c:363
#5 0x0000000006a8316 in st_thread_create (start=0x0, arg=0x111f5c0, joinable=0,
stk size=18435616) at sched.c:694
#6 0x0000000000602c41 in SrsRtcPLIWorker::start (this=0x1194fd0) at
src/app/srs_app_rtc_conn.cpp:325
#7 0x00000000006044f5 in SrsRtcPlayStream::start (this=0x1194970) at
src/app/srs_app_rtc_conn.cpp:533
```

#### SrsRtcConnection::negotiate\_play\_capability

```
#0 SrsRtcConnection::negotiate_play_capability (this=0x1164ad0, ruc=0x11c5d00,
sub_relations=std::map with 0 elements) at src/app/srs_app_rtc_conn.cpp:3049
#1 0x000000000060be33 in SrsRtcConnection::add_player (this=0x1164ad0, ruc=0x11c5d00,
local sdp=...)
  at src/app/srs_app_rtc_conn.cpp:1901
#2 0x000000000645412 in SrsRtcServer::do_create_session (this=0xf5c410, ruc=0x11c5d00,
local_sdp=..., session=0x1164ad0)
  at src/app/srs app rtc server.cpp:505
#3 0x000000000645232 in SrsRtcServer::create session (this=0xf5c410, ruc=0x11c5d00,
local_sdp=..., psession=0x11c5130)
  at src/app/srs_app_rtc_server.cpp:483
#4 0x00000000065be36 in SrsGoApiRtcPlay::do_serve_http (this=0x105e1a0, w=0x11c63d0,
r=0x112cdd0, res=0x1197370)
  at src/app/srs_app_rtc_api.cpp:201
#5 0x00000000065aaaa in SrsGoApiRtcPlay::serve_http (this=0x105e1a0, w=0x11c63d0,
r=0x112cdd0
  at src/app/srs_app_rtc_api.cpp:65
#6 0x0000000004b9c7d in SrsHttpServeMux::serve_http (this=0xf5bdb0, w=0x11c63d0,
r=0x112cdd0
  at src/protocol/srs_http_stack.cpp:730
#7 0x0000000004baaba in SrsHttpCorsMux::serve_http (this=0x10ab070, w=0x11c63d0,
r=0x112cdd0
```

```
at src/protocol/srs http stack.cpp:878
#8 0x0000000005a2197 in SrsHttpConn::process request (this=0x111f9d0, w=0x11c63d0,
r=0x112cdd0, rid=0)
  at src/app/srs_app_http_conn.cpp:250
#9 0x000000005a1df2 in SrsHttpConn::process requests (this=0x111f9d0, preq=0x11c64a8)
  at src/app/srs_app_http_conn.cpp:223
#10 0x0000000005a1992 in SrsHttpConn::do_cycle (this=0x111f9d0) at
src/app/srs app http conn.cpp:177
#11 0x0000000005a13b5 in SrsHttpConn::cycle (this=0x111f9d0) at
src/app/srs_app_http_conn.cpp:122
#12 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x1160280) at
src/app/srs app st.cpp:270
#13 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x1160280) at
src/app/srs_app_st.cpp:285
#14 0x0000000006a7a99 in _st_thread_main () at sched.c:363
#15 0x0000000006a8316 in st thread create (start=0x537658
<SrsFastCoroutine::pfn(void*)>, arg=0x1160280, joinable=1,
  stk_size=65536) at sched.c:694
```

## SrsResourceManager::add

```
rtmp
#0 SrsResourceManager::add (this=0xf5a5e0, conn=0x10811f0, exists=0x0) at
src/app/srs app conn.cpp:130#1 0x0000000004f06a7 in SrsServer::accept client
(this=0xf5bf50, type=SrsListenerRtmpStream, stfd=0x10811c0)
  at src/app/srs_app_server.cpp:1582
#2 0x000000004e6c08 in SrsBufferListener::on_tcp_client (this=0xfa98a0, stfd=0x10811c0)
at src/app/srs_app_server.cpp:134
#3 0x0000000005ddd55 in SrsTcpListener::cycle (this=0xfa9ad0) at
src/app/srs app listener.cpp:287
#4 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0xfa9bb0) at
src/app/srs_app_st.cpp:270
#5 0x00000000537678 in SrsFastCoroutine::pfn (arg=0xfa9bb0) at
src/app/srs app st.cpp:285
#6 0x0000000006a7a99 in st thread main () at sched.c:363
#7 0x0000000006a8316 in st_thread_create (start=0x0, arg=0x7ffffffde10, joinable=0,
stk size=2) at sched.c:694
```

```
http
#0 SrsResourceManager::add (this=0xf5a5e0, conn=0x1195870, exists=0x0) at
src/app/srs_app_conn.cpp:130#1 0x0000000004f06a7 in SrsServer::accept_client
(this=0xf5bf50, type=SrsListenerHttpStream, stfd=0x111f950)
  at src/app/srs_app_server.cpp:1582
#2 0x0000000004e6c08 in SrsBufferListener::on_tcp_client (this=0xfa9a00, stfd=0x111f950)
at src/app/srs app server.cpp:134
#3 0x000000005ddd55 in SrsTcpListener::cycle (this=0xfa9b20) at
src/app/srs_app_listener.cpp:287
#4 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0xfcdcf0) at
src/app/srs app st.cpp:270
#5 0x00000000537678 in SrsFastCoroutine::pfn (arg=0xfcdcf0) at
src/app/srs_app_st.cpp:285
#6 0x0000000006a7a99 in _st_thread_main () at sched.c:363
#7 0x0000000006a8316 in st thread create (start=0x2, arg=0x12010, joinable=32767,
stk size=-152012000) at sched.c:694
#8 0x000000000012000 in ?? ()
#0 SrsResourceManager::add (this=0xf5a5e0, conn=0x11631b0, exists=0x0) at
src/app/srs app conn.cpp:130#1 0x0000000004f06a7 in SrsServer::accept client
(this=0xf5bf50, type=SrsListenerHttpApi, stfd=0x111f950)
  at src/app/srs_app_server.cpp:1582
#2 0x0000000004e6c08 in SrsBufferListener::on_tcp_client (this=0xfa4a90, stfd=0x111f950)
at src/app/srs_app_server.cpp:134
#3 0x0000000005ddd55 in SrsTcpListener::cycle (this=0xfa9970) at
src/app/srs_app_listener.cpp:287
#4 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0xfa5630) at
src/app/srs_app_st.cpp:270
#5 0x00000000537678 in SrsFastCoroutine::pfn (arg=0xfa5630) at
src/app/srs_app_st.cpp:285
#6 0x0000000006a7a99 in st thread main () at sched.c:363
```

SrsResourceManager::add\_with\_id SrsResourceManager::add\_with\_fast\_id

#7 0x00000000006a8316 in st thread crea

## SrsResourceManager::add\_with\_name

```
#0 SrsResourceManager::add with name (this=0xf57c60, name="05701513:owcV",
conn=0x1164ad0) at src/app/srs app conn.cpp:181
#1 0x000000000645d9f in SrsRtcServer::do_create_session (this=0xf5c410, ruc=0x11c5d00,
local_sdp=..., session=0x1164ad0)
  at src/app/srs_app_rtc_server.cpp:576
#2 0x000000000645232 in SrsRtcServer::create session (this=0xf5c410, ruc=0x11c5d00,
local_sdp=..., psession=0x11c5130)
  at src/app/srs app rtc server.cpp:483
#3 0x00000000065be36 in SrsGoApiRtcPlay::do_serve_http (this=0x105e1a0, w=0x11c63d0,
r=0x112cdd0, res=0x1197370)
  at src/app/srs_app_rtc_api.cpp:201
#4 0x00000000065aaaa in SrsGoApiRtcPlay::serve http (this=0x105e1a0, w=0x11c63d0,
r=0x112cdd0
  at src/app/srs_app_rtc_api.cpp:65
#5 0x0000000004b9c7d in SrsHttpServeMux::serve_http (this=0xf5bdb0, w=0x11c63d0,
r=0x112cdd0
  at src/protocol/srs_http_stack.cpp:730
#6 0x000000004baaba in SrsHttpCorsMux::serve_http (this=0x10ab070, w=0x11c63d0,
r=0x112cdd0
  at src/protocol/srs_http_stack.cpp:878
#7 0x0000000005a2197 in SrsHttpConn::process_request (this=0x111f9d0, w=0x11c63d0,
r=0x112cdd0, rid=0)
  at src/app/srs app http conn.cpp:250
#8 0x0000000005a1df2 in SrsHttpConn::process_requests (this=0x111f9d0, preq=0x11c64a8)
  at src/app/srs_app_http_conn.cpp:223
#9 0x000000005a1992 in SrsHttpConn::do_cycle (this=0x111f9d0) at
src/app/srs_app_http_conn.cpp:177
#10 0x0000000005a13b5 in SrsHttpConn::cycle (this=0x111f9d0) at
src/app/srs_app_http_conn.cpp:122
#11 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x1160280) at
src/app/srs_app_st.cpp:270
#12 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x1160280) at
src/app/srs_app_st.cpp:285
#13 0x0000000006a7a99 in st thread main () at sched.c:363
#14 0x0000000006a8316 in st thread create (start=0x537658
<SrsFastCoroutine::pfn(void*)>, arg=0x1160280, joinable=1,
  stk size=65536) at sched.c:694
```

```
#0 SrsResourceManager::add (this=0xf57c60, conn=0x1164ad0, exists=0x0) at
src/app/srs_app_conn.cpp:130#1 0x0000000004f3b22 in
SrsResourceManager::add_with_name (this=0xf57c60, name="05701513:owcV",
conn=0x1164ad0)
  at src/app/srs_app_conn.cpp:181
#2 0x00000000645d9f in SrsRtcServer::do_create_session (this=0xf5c410, ruc=0x11c5d00,
local sdp=..., session=0x1164ad0)
  at src/app/srs_app_rtc_server.cpp:576
#3 0x000000000645232 in SrsRtcServer::create_session (this=0xf5c410, ruc=0x11c5d00,
local sdp=..., psession=0x11c5130)
  at src/app/srs_app_rtc_server.cpp:483
#4 0x00000000065be36 in SrsGoApiRtcPlay::do_serve_http (this=0x105e1a0, w=0x11c63d0,
r=0x112cdd0, res=0x1197370)
  at src/app/srs_app_rtc_api.cpp:201
#5 0x00000000065aaaa in SrsGoApiRtcPlay::serve_http (this=0x105e1a0, w=0x11c63d0,
r=0x112cdd0
  at src/app/srs app rtc api.cpp:65
#6 0x0000000004b9c7d in SrsHttpServeMux::serve_http (this=0xf5bdb0, w=0x11c63d0,
r=0x112cdd0
  at src/protocol/srs_http_stack.cpp:730
#7 0x0000000004baaba in SrsHttpCorsMux::serve_http (this=0x10ab070, w=0x11c63d0,
r=0x112cdd0
  at src/protocol/srs_http_stack.cpp:878
#8 0x000000005a2197 in SrsHttpConn::process_request (this=0x111f9d0, w=0x11c63d0,
r=0x112cdd0, rid=0)
  at src/app/srs_app_http_conn.cpp:250
#9 0x0000000005a1df2 in SrsHttpConn::process_requests (this=0x111f9d0, preq=0x11c64a8)
  at src/app/srs app http conn.cpp:223
#0 SrsResourceManager::add_with_id (this=0xf57c60, id="192.168.2.206:60206",
conn=0x1164ad0)
                  at src/app/srs_app_conn.cpp:142
#1 0x000000000060e47a in SrsRtcConnection::update sendonly socket (this=0x1164ad0,
skt=0x7ffff7fd2b80
  at src/app/srs_app_rtc_conn.cpp:2320
#2 0x000000000060c6ca in SrsRtcConnection::on stun (this=0x1164ad0, skt=0x7ffff7fd2b80,
r=0x7ffff7fd2930
  at src/app/srs_app_rtc_conn.cpp:1981
```

```
#3 0x000000000644b12 in SrsRtcServer::on_udp_packet (this=0xf5c410, skt=0x7ffff7fd2b80)
  at src/app/srs_app_rtc_server.cpp:406
#4 0x0000000005df774 in SrsUdpMuxListener::cycle (this=0x104dfa0) at
src/app/srs_app_listener.cpp:636
#5 0x000000005375e2 in SrsFastCoroutine::cycle (this=0x105e0e0) at
src/app/srs_app_st.cpp:270
#6 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x105e0e0) at
src/app/srs app st.cpp:285
#7 0x0000000006a7a99 in st thread main () at sched.c:363
#8 0x0000000006a8316 in st_thread_create (start=0x7ffffffddf0, arg=0x12000,
joinable=32767, stk_size=-152012000)
  at sched.c:694
#9 0x00007ffff6f07b20 in ?? () from /lib/x86 64-linux-gnu/libc.so.6
(gdb) bt#0 SrsResourceManager::add (this=0xf57c60, conn=0x1164ad0, exists=0x0) at
src/app/srs app conn.cpp:130
#1 0x0000000004f397c in SrsResourceManager::add_with_id (this=0xf57c60,
id="192.168.2.206:60206", conn=0x1164ad0)
  at src/app/srs app conn.cpp:142
#2 0x000000000060e47a in SrsRtcConnection::update sendonly socket (this=0x1164ad0,
skt=0x7ffff7fd2b80
  at src/app/srs_app_rtc_conn.cpp:2320
#3 0x000000000060c6ca in SrsRtcConnection::on stun (this=0x1164ad0, skt=0x7ffff7fd2b80,
r=0x7ffff7fd2930
  at src/app/srs_app_rtc_conn.cpp:1981
#4 0x000000000644b12 in SrsRtcServer::on_udp_packet (this=0xf5c410, skt=0x7ffff7fd2b80)
  at src/app/srs_app_rtc_server.cpp:406
#5 0x0000000005df774 in SrsUdpMuxListener::cycle (this=0x104dfa0) at
src/app/srs_app_listener.cpp:636
#6 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x105e0e0) at
src/app/srs_app_st.cpp:270
#7 0x00000000537678 in SrsFastCoroutine::pfn (arg=0x105e0e0) at
src/app/srs_app_st.cpp:285
#8 0x0000000006a7a99 in st thread main () at sched.c:363
#9 0x0000000006a8316 in st thread create (start=0x7ffffffddf0, arg=0x12000,
joinable=32767, stk size=-152012000)
  at sched.c:694
Breakpoint 4, SrsResourceManager::add_with_fast_id (this=0xf57c60,
```

id=3380795948727969984, conn=0x1164ad0) at src/app/srs\_app\_conn.cpp:147

```
147 {
(gdb) bt
#0 SrsResourceManager::add_with_fast_id (this=0xf57c60, id=3380795948727969984,
conn=0x1164ad0)
  at src/app/srs app conn.cpp:147
#1 0x000000000060e4ba in SrsRtcConnection::update_sendonly_socket (this=0x1164ad0,
skt=0x7ffff7fd2b80
  at src/app/srs app rtc conn.cpp:2324
#2 0x000000000060c6ca in SrsRtcConnection::on stun (this=0x1164ad0, skt=0x7ffff7fd2b80,
r=0x7ffff7fd2930
  at src/app/srs_app_rtc_conn.cpp:1981
#3 0x000000000644b12 in SrsRtcServer::on_udp_packet (this=0xf5c410, skt=0x7ffff7fd2b80)
  at src/app/srs_app_rtc_server.cpp:406
#4 0x0000000005df774 in SrsUdpMuxListener::cycle (this=0x104dfa0) at
src/app/srs_app_listener.cpp:636
#5 0x000000005375e2 in SrsFastCoroutine::cycle (this=0x105e0e0) at
src/app/srs_app_st.cpp:270
#6 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x105e0e0) at
src/app/srs app st.cpp:285
#7 0x0000000006a7a99 in st thread main () at sched.c:363
#8 0x0000000006a8316 in st_thread_create (start=0x7ffffffddf0, arg=0x12000,
joinable=32767, stk_size=-152012000)
  at sched.c:694
#0 SrsResourceManager::add (this=0xf57c60, conn=0x1164ad0, exists=0x7ffff7fd26cf) at
src/app/srs_app_conn.cpp:130#1 0x0000000004f39e2 in
SrsResourceManager::add_with_fast_id (this=0xf57c60, id=3380795948727969984,
conn=0x1164ad0)
  at src/app/srs_app_conn.cpp:149
#2 0x000000000060e4ba in SrsRtcConnection::update_sendonly_socket (this=0x1164ad0,
skt=0x7ffff7fd2b80
  at src/app/srs_app_rtc_conn.cpp:2324
#3 0x000000000060c6ca in SrsRtcConnection::on_stun (this=0x1164ad0, skt=0x7ffff7fd2b80,
r=0x7ffff7fd2930)
  at src/app/srs_app_rtc_conn.cpp:1981
#4 0x000000000644b12 in SrsRtcServer::on_udp_packet (this=0xf5c410, skt=0x7ffff7fd2b80)
  at src/app/srs_app_rtc_server.cpp:406
#5 0x0000000005df774 in SrsUdpMuxListener::cycle (this=0x104dfa0) at
src/app/srs_app_listener.cpp:636
```

```
#6 0x000000005375e2 in SrsFastCoroutine::cycle (this=0x105e0e0) at src/app/srs_app_st.cpp:270
#7 0x00000000537678 in SrsFastCoroutine::pfn (arg=0x105e0e0) at src/app/srs_app_st.cpp:285
#8 0x0000000006a7a99 in _st_thread_main () at sched.c:363
#9 0x0000000006a8316 in st_thread_create (start=0x7ffffffddf0, arg=0x12000, joinable=32767, stk_size=-152012000)
at sched.c:694
```

#### SrsUdpMuxSocket::SrsUdpMuxSocket

```
#0 SrsUdpMuxSocket::SrsUdpMuxSocket (this=0x122a2d0, fd=0x105e0b0) at
src/app/srs_app_listener.cpp:295#1 0x0000000005de891 in
SrsUdpMuxSocket::copy_sendonly (this=0x7ffff7fd2b80) at src/app/srs_app_listener.cpp:477
#2 0x000000000060e449 in SrsRtcConnection::update sendonly socket (this=0x10c5fc0,
skt=0x7ffff7fd2b80
  at src/app/srs_app_rtc_conn.cpp:2319
#3 0x000000000060c6ca in SrsRtcConnection::on_stun (this=0x10c5fc0, skt=0x7ffff7fd2b80,
r=0x7ffff7fd2930)
  at src/app/srs app rtc conn.cpp:1981
#4 0x000000000644b12 in SrsRtcServer::on_udp_packet (this=0xf5c410, skt=0x7ffff7fd2b80)
  at src/app/srs app rtc server.cpp:406
#5 0x0000000005df774 in SrsUdpMuxListener::cycle (this=0x104dfa0) at
src/app/srs_app_listener.cpp:636
#6 0x0000000005375e2 in SrsFastCoroutine::cycle (this=0x105e0e0) at
src/app/srs app st.cpp:270
#7 0x000000000537678 in SrsFastCoroutine::pfn (arg=0x105e0e0) at
src/app/srs_app_st.cpp:285
#8 0x0000000006a7a99 in _st_thread_main () at sched.c:363
#9 0x0000000006a8316 in st thread create (start=0x7ffffffddf0, arg=0x12000,
joinable=32767, stk size=-152012000)
  at sched.c:694
```