

如何上手大型项目？

冲刺起跑！

· 额外部AP入手，顺藤摸瓜

• 基于基础识别(音频采集系统接口),搜索定位关键函数类

• 静态阅读源码(代码跳转/全局搜索)单步调试

创建 VideoCapturer、启动预览的代码分布在三处，这里笔者将其合并到一起，便于大家理解：

```
_localVideoView = [[RTCCameraPreviewView alloc] initWithFrame:CGRectZero];
```

```
RTCCameraVideoCapturer *capturer = [[RTCCameraVideoCapturer alloc] initWithDelegate:source];
```

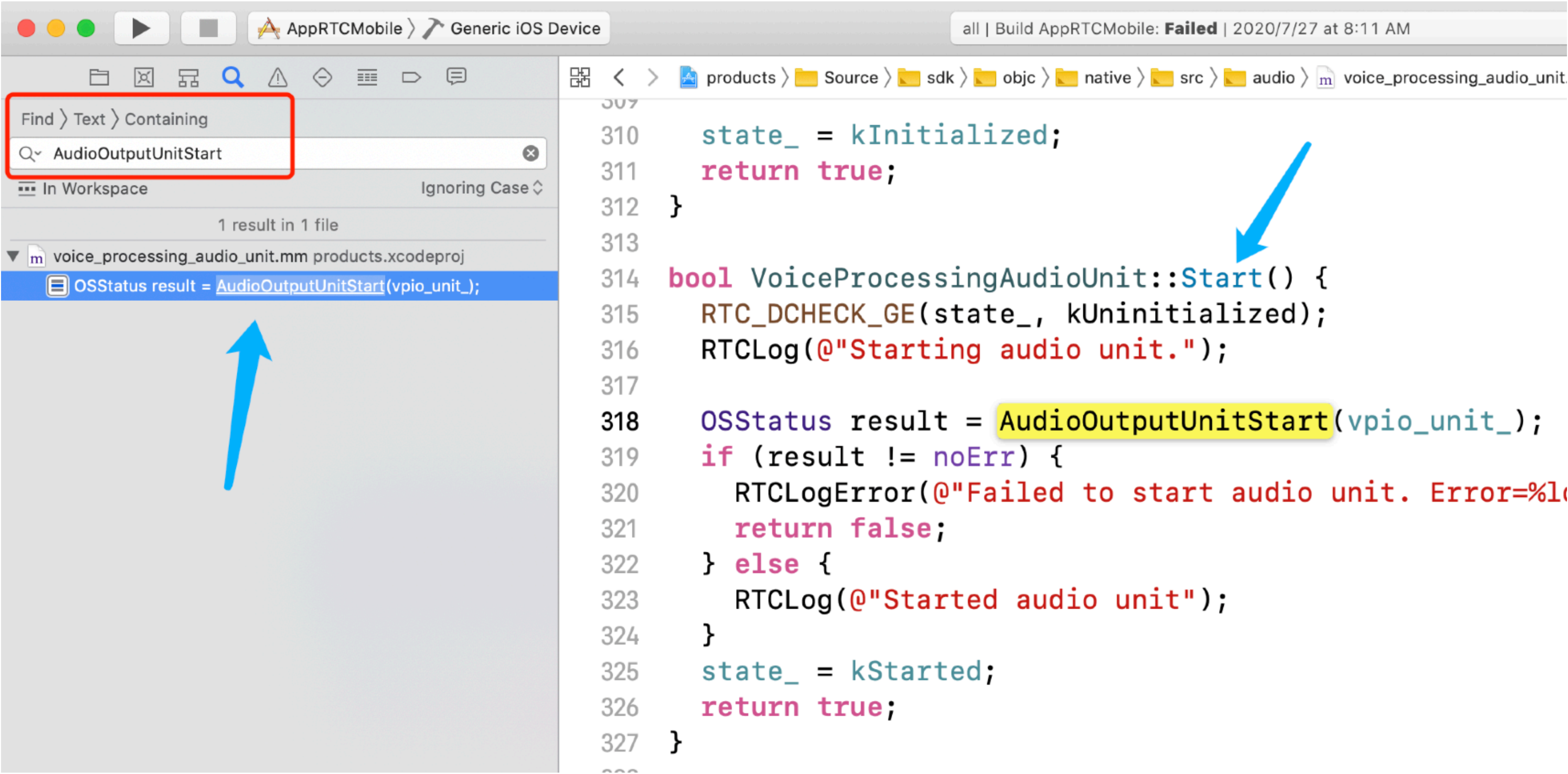
```
_videoCallView.localVideoView.captureSession = localCapturer.captureSession;
```

```
ARDSettingsModel *settingsModel = [[ARDSettingsModel alloc] init];
```

```
_captureController =
```

```
    [[ARDCaptureController alloc] initWithCapturer:localCapturer settings:settingsModel];
```

```
[_captureController startCapture];
```




```
0 ::-[RTCVideoEncoderH264 encode:codecSpecificInfo:frameTypes:](RTCVideoFrame *, id, NSArray *)
1 webrtc::(anonymous namespace)::ObjCVideoEncoder::Encode(webRTC::VideoFrame const&, std::__1::vector<webrtc::VideoFrameTyp...
2 webrtc::VideoStreamEncoder::EncodeVideoFrame(webRTC::VideoFrame const&, long long)
3 webrtc::VideoStreamEncoder::MaybeEncodeVideoFrame(webRTC::VideoFrame const&, long long)
4 webrtc::VideoStreamEncoder::OnFrame(webRTC::VideoFrame const&)::$_9::operator>() const
```

```
5 webrtc::webrtc_new_closure_impl::ClosureTask<webrtc::VideoStreamEncoder::OnFrame(webRTC::VideoFrame const&)::$_9>::Run()
6 webrtc::(anonymous namespace)::TaskQueueGcd::RunTask(void*)
7 _dispatch_client_callout
8 _dispatch_lane_serial_drain
9 _dispatch_lane_invoke
10 _dispatch_workloop_worker_thread
11 _pthread_wqthread
12 start_wqthread
```

Enqueued from com.apple.avfoundation.videodataoutput.bufferqueue (Thread 10)

```
0 dispatch_async_f
1 webrtc::(anonymous namespace)::TaskQueueGcd::PostTask(std::__1::unique_ptr<webrtc::QueuedTask, std::__1::default_delete<web...
2 rtc::TaskQueue::PostTask(std::__1::unique_ptr<webrtc::QueuedTask, std::__1::default_delete<webrtc::QueuedTask> >)
3 void rtc::TaskQueue::PostTask<webrtc::VideoStreamEncoder::OnFrame(webRTC::VideoFrame const&)::$_9, (void*)0>(webrtc::VideoS...
4 webrtc::VideoStreamEncoder::OnFrame(webRTC::VideoFrame const&)
5 rtc::VideoBroadcaster::OnFrame(webRTC::VideoFrame const&)
6 rtc::AdaptedVideoTrackSource::OnFrame(webRTC::VideoFrame const&)
7 webrtc::ObjCVideoTrackSource::OnCapturedFrame(RTCVideoFrame*)
8 ::-[RTCVideoSource capturer:didCaptureVideoFrame:](RTCVideoCapturer *, RTCVideoFrame *)
9 -[RTCCameraVideoCapturer captureOutput:didOutputSampleBuffer:fromConnection:]
```

```
10 -[AVCaptureVideoDataOutput _processSampleBuffer:]
11 __47-[AVCaptureVideoDataOutput _updateRemoteQueue:]_block_invoke
12 __FigRemoteOperationReceiverCreateMessageReceiver_block_invoke
13 __FigRemoteQueueReceiverSetHandler_block_invoke.2
14 _dispatch_client_callout
15 _dispatch_continuation_pop
16 _dispatch_source_invoke
17 _dispatch_lane_serial_drain
18 _dispatch_lane_invoke
19 _dispatch_lane_serial_drain
20 _dispatch_lane_invoke
21 _dispatch_workloop_worker_thread
22 _pthread_wqthread
23 start_wqthread
```

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内容大纲

- WebRTC 代码库简介
- 分析方法
- 视频流程介绍
- 实战：客户端视频录制