

Сборка примеров при помощи Xcode до версии 10

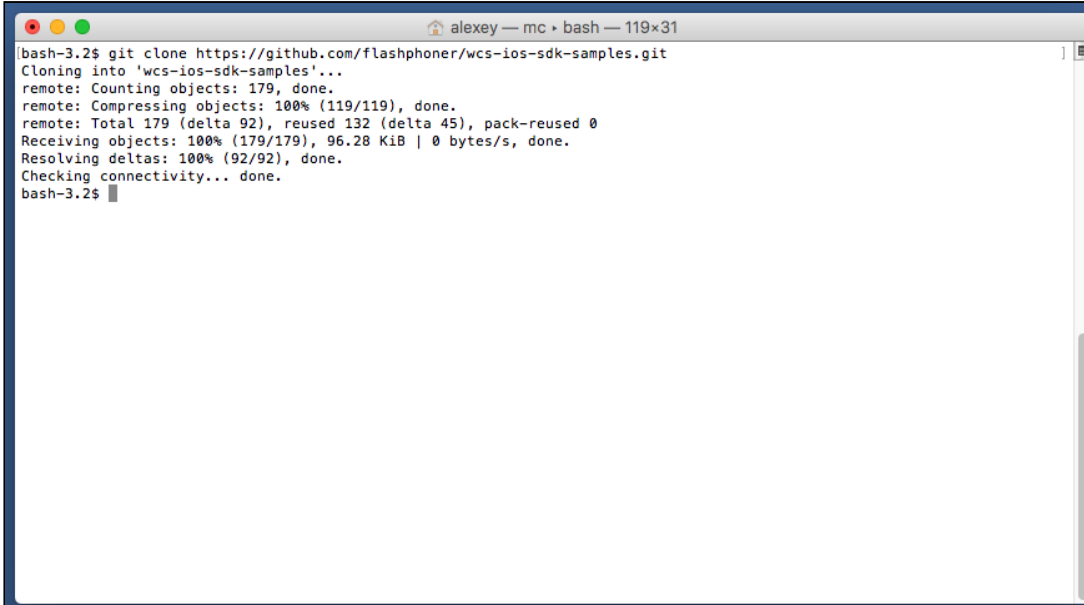
Подготовка примеров для сборки

1. Устанавливаем Cocoapods для сборки зависимостей.

```
sudo gem install cocoapods
```

2. Скачиваем исходный код примеров на Mac.

```
git clone https://github.com/flashphoner/wcs-ios-sdk-samples.git
```



```
alexey — mc • bash — 119x31
bash-3.2$ git clone https://github.com/flashphoner/wcs-ios-sdk-samples.git
Cloning into 'wcs-ios-sdk-samples'...
remote: Counting objects: 179, done.
remote: Compressing objects: 100% (119/119), done.
remote: Total 179 (delta 92), reused 132 (delta 45), pack-reused 0
Receiving objects: 100% (179/179), 96.28 KiB | 0 bytes/s, done.
Resolving deltas: 100% (92/92), done.
Checking connectivity... done.
bash-3.2$
```

3. Скачиваем архив iOS SDK

```
wget http://flashphoner.com/downloads/builds/flashphoner_client/wcs-ios-
sdk/WCS-iOS-SDK-2.2.2.tar.gz
```

```
alexey — mc — bash — 119x31
[bash-3.2$ wget http://flashphoner.com/downloads/builds/flashphoner_client/wcs-ios-sdk/WCS-iOS-SDK-2.2.2.tar.gz
--2016-11-18 21:06:20-- http://flashphoner.com/downloads/builds/flashphoner_client/wcs-ios-sdk/WCS-iOS-SDK-2.2.2.tar.g
z
Resolving flashphoner.com (flashphoner.com)... 216.224.182.33
Connecting to flashphoner.com (flashphoner.com)|216.224.182.33|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 11505812 (11M) [application/x-gzip]
Saving to: <<WCS-iOS-SDK-2.2.2.tar.gz>>

WCS-iOS-SDK-2.2.2.tar.gz      100%[=====] 10.97M  405KB/s  in 19s

2016-11-18 21:06:40 (597 KB/s) - <<WCS-iOS-SDK-2.2.2.tar.gz>> saved [11505812/11505812]

bash-3.2$
```

4. После распаковки iOS SDK представляет собой фреймворк в папке FPWCSApi2.framework

```
tar -xvzf WCS-iOS-SDK-2.2.2.tar.gz
```

```
alexey — mc — bash — 119x31
[bash-3.2$ tar -xvzf WCS-iOS-SDK-2.2.2.tar.gz
x FPWCSApi2.framework/
x FPWCSApi2.framework/FPWCSApi2
x FPWCSApi2.framework/Headers/
x FPWCSApi2.framework/Info.plist
x FPWCSApi2.framework/Version.txt
x FPWCSApi2.framework/Headers/FPWCSApi2.h
x FPWCSApi2.framework/Headers/FPWCSApi2Model.h
x FPWCSApi2.framework/Headers/FPWCSApi2Session.h
x FPWCSApi2.framework/Headers/FPWCSApi2Stream.h
x FPWCSApi2.framework/Headers/RTCAudioSource.h
x FPWCSApi2.framework/Headers/RTCAudioTrack.h
x FPWCSApi2.framework/Headers/RTCAVFoundationVideoSource.h
x FPWCSApi2.framework/Headers/RTCDataChannel.h
x FPWCSApi2.framework/Headers/RTCEAGLVideoView.h
x FPWCSApi2.framework/Headers/RTCFileLogger.h
x FPWCSApi2.framework/Headers/RTCI420Frame.h
x FPWCSApi2.framework/Headers/RTCIceCandidate.h
x FPWCSApi2.framework/Headers/RTCIceServer.h
x FPWCSApi2.framework/Headers/RTCLogging.h
x FPWCSApi2.framework/Headers/RTCMediaConstraints.h
x FPWCSApi2.framework/Headers/RTCMediaSource.h
x FPWCSApi2.framework/Headers/RTCMediaStream.h
x FPWCSApi2.framework/Headers/RTCMediaStreamTrack.h
x FPWCSApi2.framework/Headers/RTCSGLVideoView.h
x FPWCSApi2.framework/Headers/RTCOpenGLVideoRenderer.h
x FPWCSApi2.framework/Headers/RTCPair.h
x FPWCSApi2.framework/Headers/RTCPeerConnection.h
x FPWCSApi2.framework/Headers/RTCPeerConnectionDelegate.h
```

5. Копируем распакованную iOS SDK (фреймворк) в папку с примерами

```
cp -R FPWCSApi2.framework wcs-ios-sdk-samples
```

```
alexey — mc • bash — 119×31
|bash-3.2$ cp -R FPWCsApi2.framework wcs-ios-sdk-samples
|bash-3.2$
```

6. В результате получаем папку примеров с фреймворком (iOS SDK). Можно приступить к сборке.

```
alexey — mc • bash — 119×31
|bash-3.2$ ls -la
total 40
drwxr-xr-x 12 alexey admin 408 Nov 18 21:08 .
drwxr-xr-x  6 alexey admin 204 Nov 18 21:07 ..
drwxr-xr-x 13 alexey admin 442 Nov 18 21:04 .git
-rw-r--r--  1 alexey admin  39 Nov 18 21:04 .gitignore
drwxr-xr-x  6 alexey admin 204 Nov 18 21:08 FPWCsApi2.framework
-rw-r--r--  1 alexey admin 245 Nov 18 21:04 Info.plist
-rw-r--r--  1 alexey admin 242 Nov 18 21:04 Podfile
-rw-r--r--  1 alexey admin  35 Nov 18 21:04 README.txt
drwxr-xr-x 10 alexey admin 340 Nov 18 21:04 WCSEExample
drwxr-xr-x  6 alexey admin 204 Nov 18 21:04 WCSEExample.xcodeproj
drwxr-xr-x  5 alexey admin 170 Nov 18 21:04 WCSEExample.xcworkspace
-rwxr-xr-x  1 alexey admin 1588 Nov 18 21:04 build_example.sh
|bash-3.2$
```

7. Запускаем сборку скриптом и ждем сборки всех зависимостей и примеров

```
./build_example.sh
```

```
alexey — mc — bash — 183x43
CodeSign /Users/alexey/Library/Developer/Xcode/DerivedData/WCSExample-ezpwslmpaxstzdvlfiqhnhclcl/Build/Intermediates/ArchiveIntermediates/Player/InstallationBuildProductsLocation/Applications/Player.app
  cd /Volumes/Data/projects/wcs-ios-sdk-samples
  export CODESIGN_ALLOCATE=/Applications/Xcode.app/Contents/Developer/Toolchains/XcodeDefault.xctoolchain/usr/bin/codesign_allocate
  export PATH="/Applications/Xcode.app/Contents/Developer/Platforms/iPhoneOS.platform/Developer/usr/bin:/Applications/Xcode.app/Contents/Developer/usr/bin:/opt/local/bin:/opt/local/sbin:/usr/bin:/usr/sbin:/sbin:/usr/local/bin:/opt/X11/bin:/Library/Frameworks/Mono.framework/Versions/Current/Commands"
Signing Identity:      "iPhone Developer: (UDA328E535)"
Provisioning Profile: "iOS Team Provisioning Profile: com.flashphoner.*"
(771d6251-1d59-4169-96c4-9d52072c3798)

/usr/bin/codesign --force --sign 769C719A8408E0D240363792B0858309A31D701A --entitlements /Volumes/Data/projects/wcs-ios-sdk-samples/out-build/Player/WCSExample.build/Release-iphones/Player.build/Player.app.xcent --timestamp=none /Users/alexey/Library/Developer/Xcode/DerivedData/WCSExample-ezpwslmpaxstzdvlfiqhnhclcl/Build/Intermediates/ArchiveIntermediates/Player/InstallationBuildProductsLocation/Applications/Player.app

Validate /Users/alexey/Library/Developer/Xcode/DerivedData/WCSExample-ezpwslmpaxstzdvlfiqhnhclcl/Build/Intermediates/ArchiveIntermediates/Player/InstallationBuildProductsLocation/Applications/Player.app
  cd /Volumes/Data/projects/wcs-ios-sdk-samples
  export PATH="/Applications/Xcode.app/Contents/Developer/Platforms/iPhoneOS.platform/Developer/usr/bin:/Applications/Xcode.app/Contents/Developer/usr/bin:/opt/local/bin:/opt/local/sbin:/usr/bin:/usr/sbin:/sbin:/usr/local/bin:/opt/X11/bin:/Library/Frameworks/Mono.framework/Versions/Current/Commands"
  export PRODUCT_TYPE=com.apple.product-type.application
  builtin-validationUtility /Users/alexey/Library/Developer/Xcode/DerivedData/WCSExample-ezpwslmpaxstzdvlfiqhnhclcl/Build/Intermediates/ArchiveIntermediates/Player/InstallationBuildProductsLocation/Applications/Player.app -validate-for-store

Touch /Users/alexey/Library/Developer/Xcode/DerivedData/WCSExample-ezpwslmpaxstzdvlfiqhnhclcl/Build/Intermediates/ArchiveIntermediates/Player/BuildProductsPath/Release-iphones/Player.app.dSYM
  cd /Volumes/Data/projects/wcs-ios-sdk-samples
  export PATH="/Applications/Xcode.app/Contents/Developer/Platforms/iPhoneOS.platform/Developer/usr/bin:/Applications/Xcode.app/Contents/Developer/usr/bin:/opt/local/bin:/opt/local/sbin:/usr/bin:/usr/sbin:/sbin:/usr/local/bin:/opt/X11/bin:/Library/Frameworks/Mono.framework/Versions/Current/Commands"
  /usr/bin/touch -c /Users/alexey/Library/Developer/Xcode/DerivedData/WCSExample-ezpwslmpaxstzdvlfiqhnhclcl/Build/Intermediates/ArchiveIntermediates/Player/BuildProductsPath/Release-iphones/Player.app.dSYM

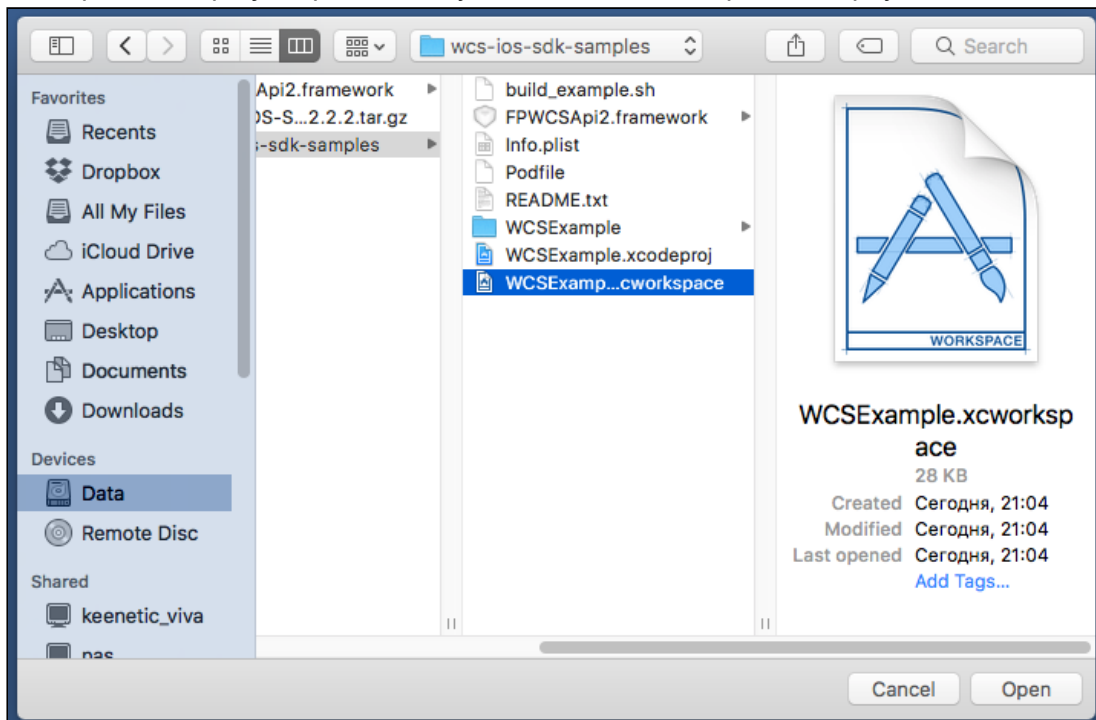
** ARCHIVE SUCCEEDED **

2016-11-18 21:16:08.205 xcodebuild[9728:396289] [MT] IDEDistribution: -[IDEDistributionLogging _createLoggingBundleAtPath:]: Created bundle at path '/var/folders/hj/sy47yp4x0vd_2hg8q7Sh4t44008gn/T/Player_2016-11-18_21-16-08.205.xcodebuildDistributionLogs'.
1.2.840.113635.100.1.61
Exported Player.xcarchive to: /Volumes/Data/projects/wcs-ios-sdk-samples/out-build
** EXPORT SUCCEEDED **

Build complete
bash-3.2$
```

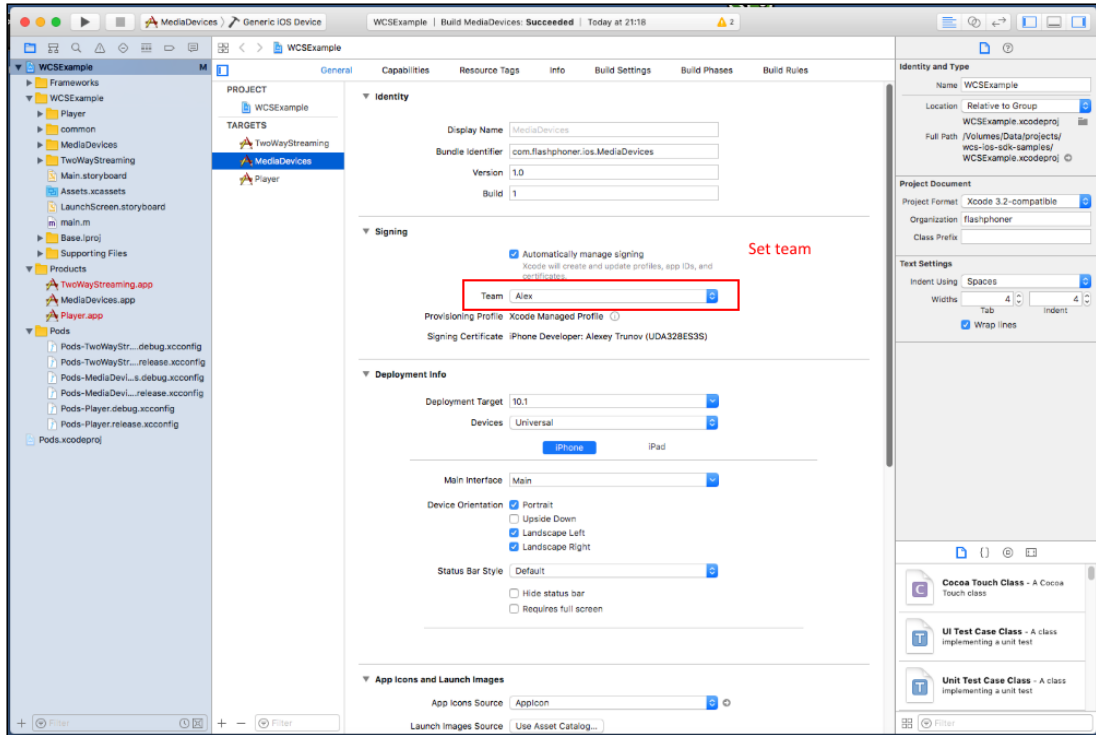
Сборка и запуск примеров в Xcode

1. Теперь, после того как все зависимости собрались (спасибо cocoapods), открываем workspace в Xcode. **Обратите внимание!** Открываем именно workspace, а не проект-файл. Это нужно, чтобы не испортить сборку

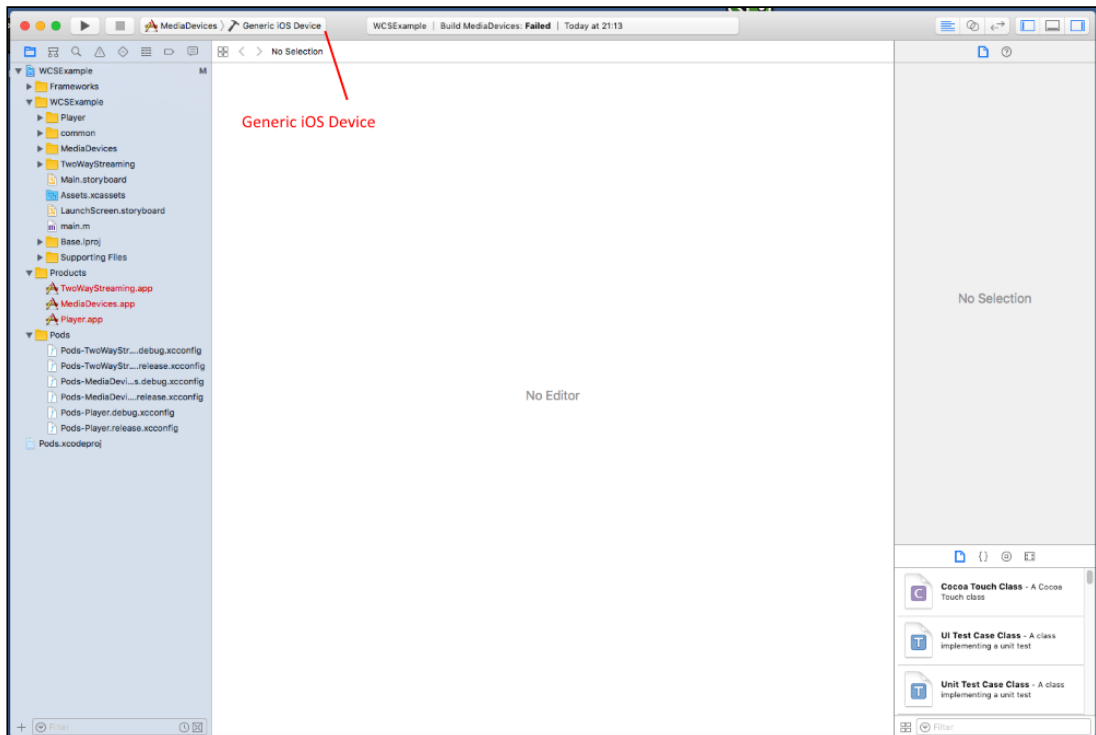


2. Если на шаге 7 возникли проблемы `Please set team`, попробуйте в Xcode указать команду в настройках каждого из собираемых примеров. Для этого кликните по WCSExample в левом меню. После указания `Team`, еще раз

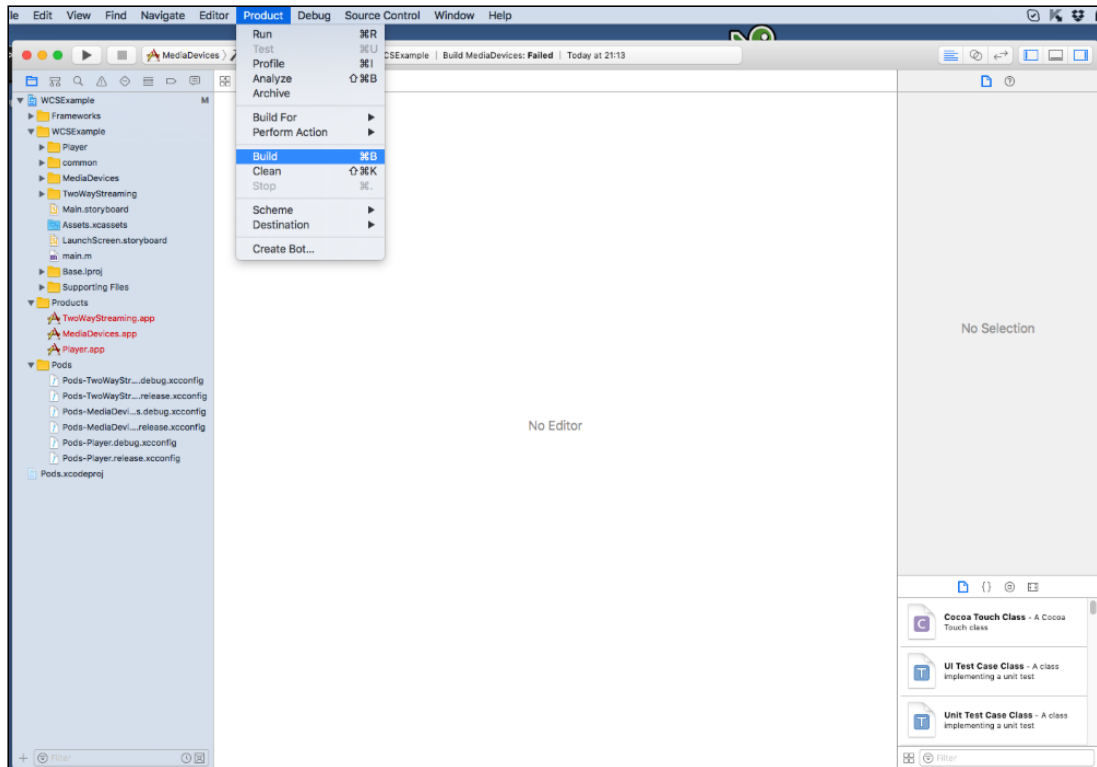
соберите примеры скриптом как показано на шаге 7



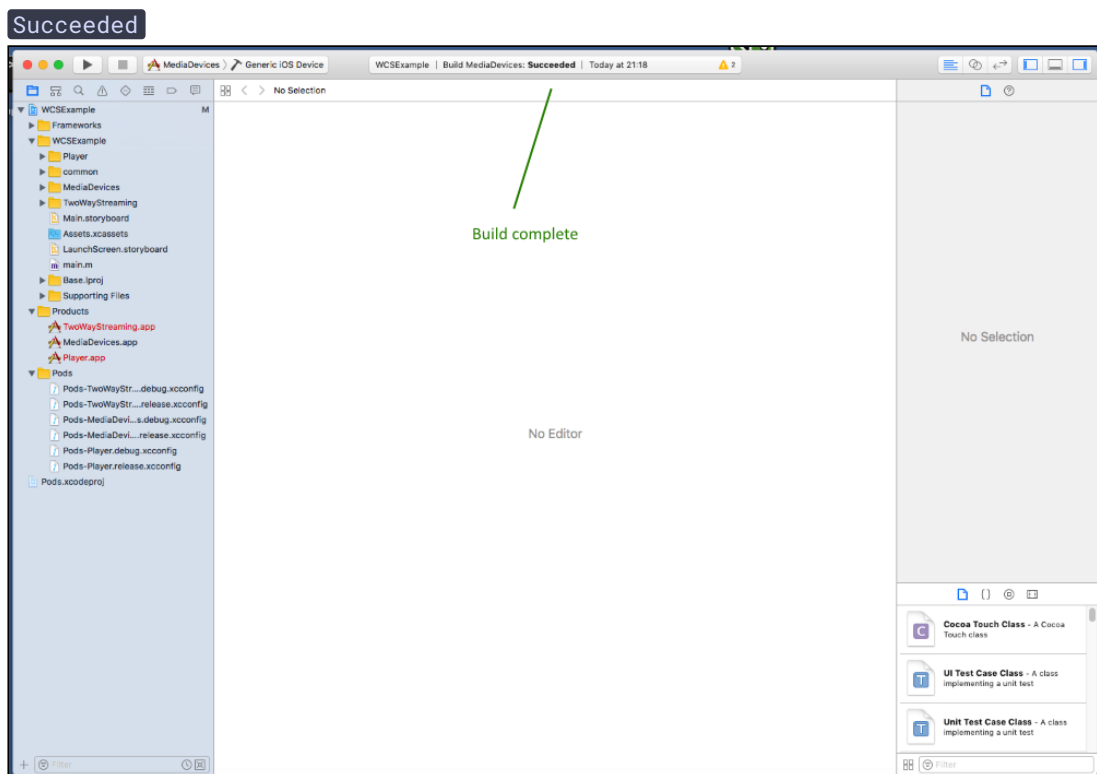
3. Приступаем к сборке примера Media Devices в Xcode. Для этого выберите Generic iOS Device в целях сборки



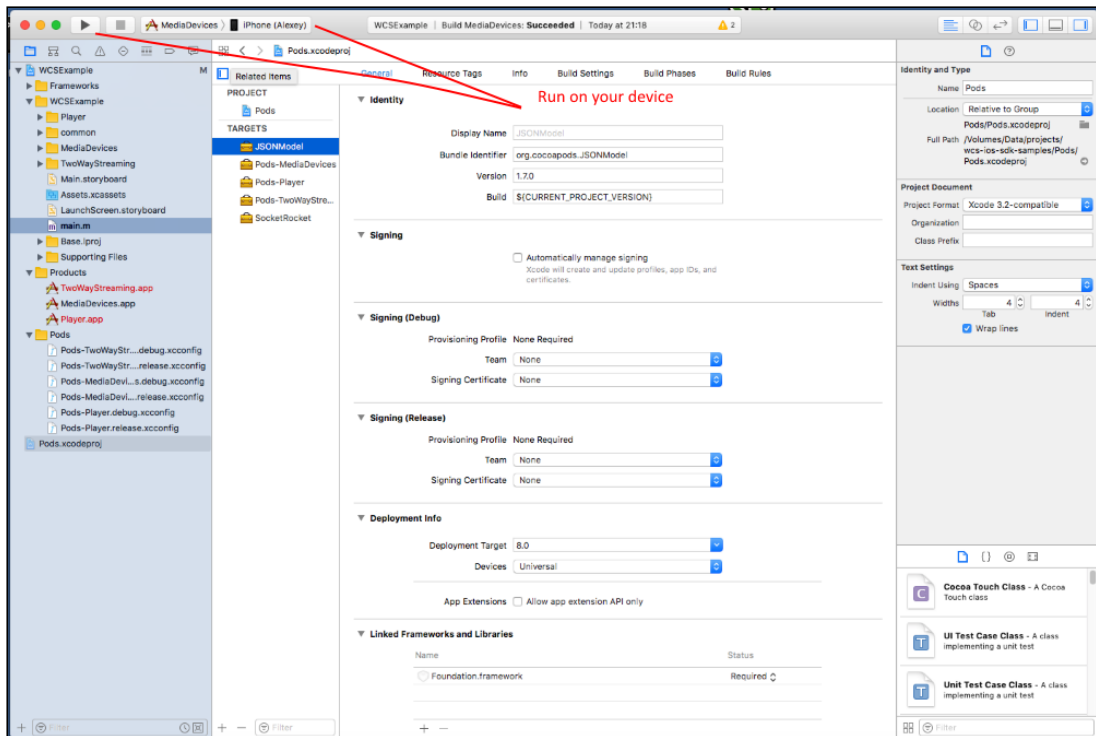
4. И запустите сборку из меню **Product - Build**



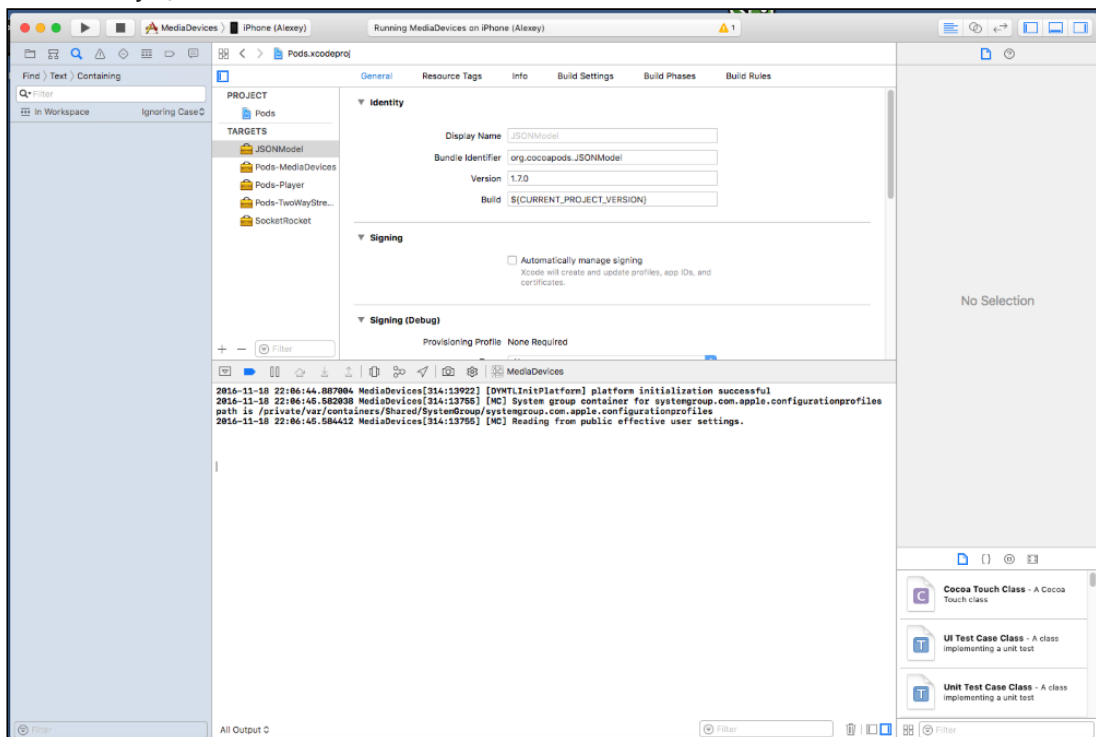
5. Если сборка завершилась успешно, вы увидите сообщение **Build MediaDevices:**



6. Подключите свой iPhone или iPad через USB и выберите его в целях для запуска примера Media Devices



7. После успешного запуска в нижней части отобразится отладочная информация. Это означает что пример Media Devices был корректно установлен на iPhone или iPad и запущен



8. На iPhone появится интерфейс приложения, который можно начинать тестировать с WCS-сервером



0x0



0x0

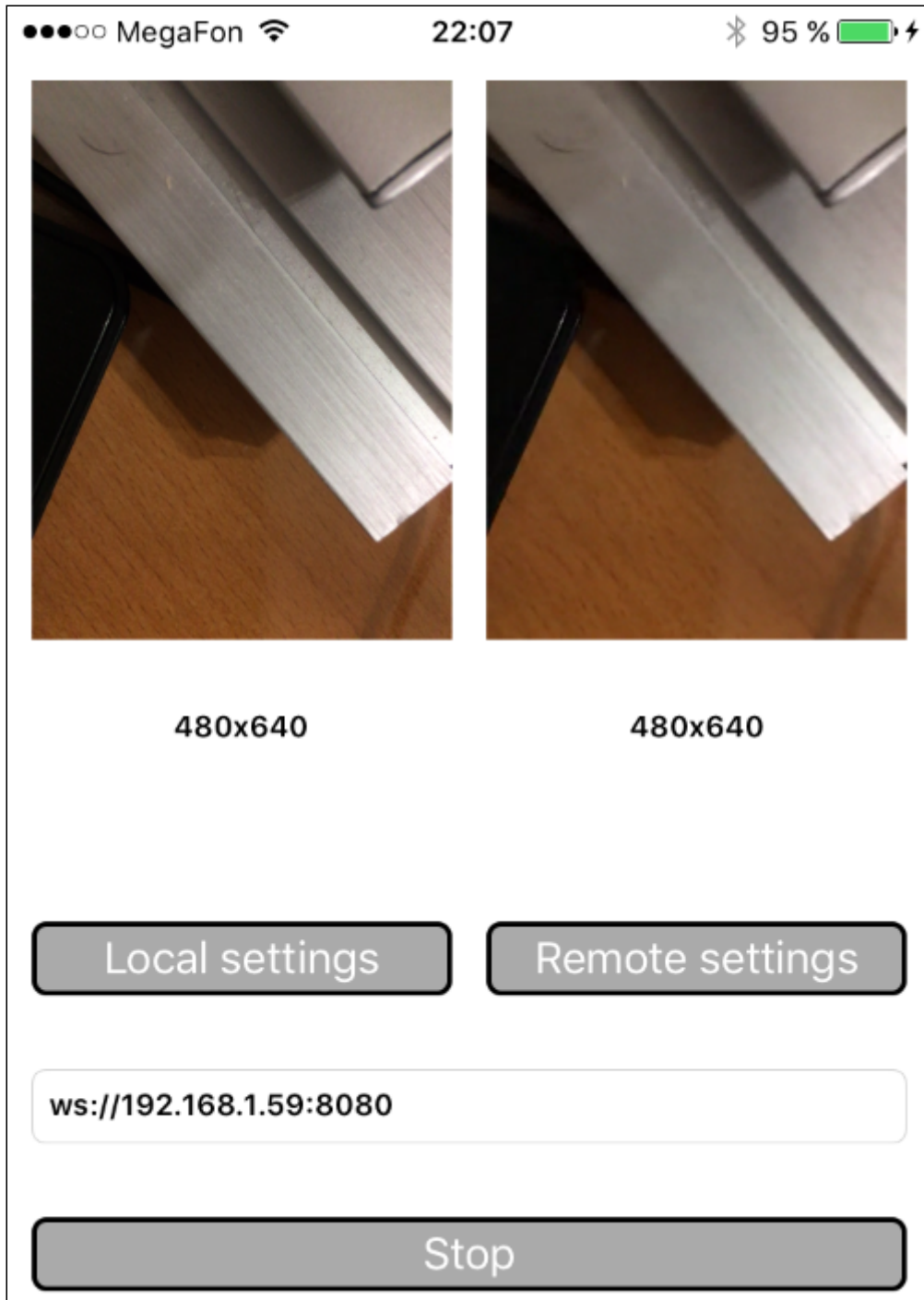
Local settings

Remote settings

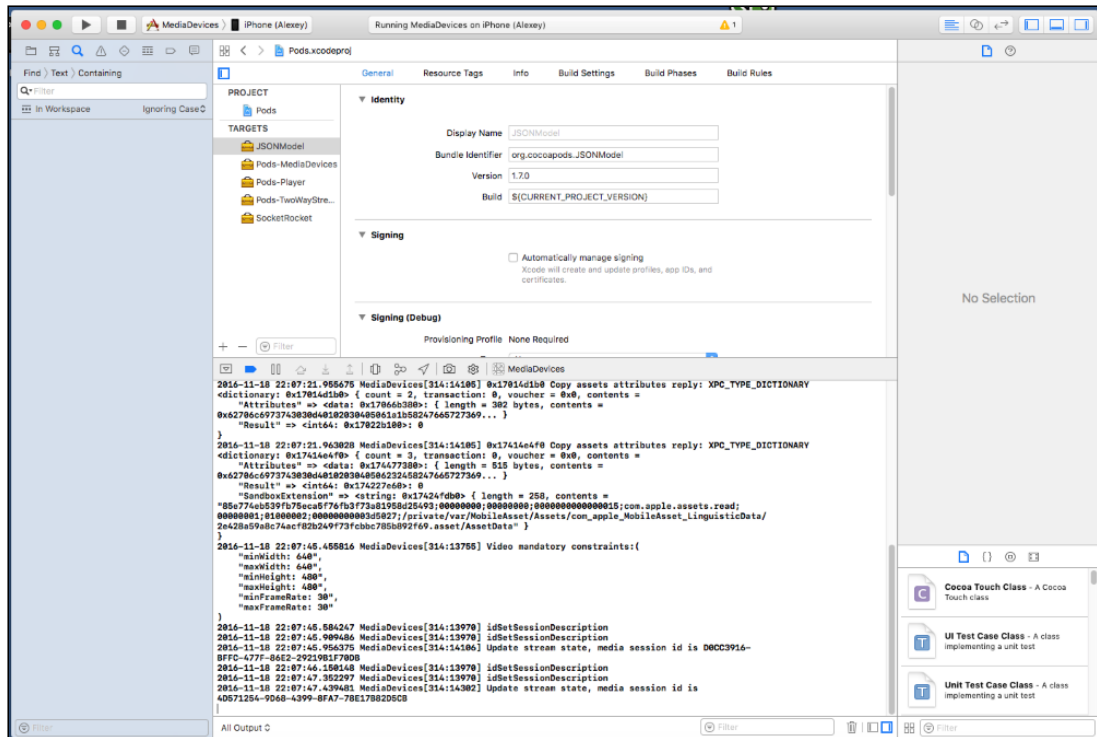
ws://192.168.88.234:8080

Start

9. Соединяемся с сервером и отправляем видеопоток с веб-камеры на iPhone



10. В логах Xcode видим отладочную информацию



The screenshot displays the Xcode IDE interface for a project named 'Pods.xcodeproj'. The main panel shows the 'General' settings for the 'MediaDevices' target, including its identity (JSONModel), bundle identifier (org.cocoapods.JSONModel), version (1.7.0), and build configuration (CURRENT_PROJECT_VERSION). The 'Signing' section is expanded, showing the 'None Required' provisioning profile. The right sidebar indicates 'No Selection'. The bottom panel displays the 'All Output' logs for the 'MediaDevices' target, showing various system messages and data transfer logs, including XPC dictionary exchanges and video mandatory constraints.

```
MediaDevices
2016-11-18 22:07:21.955475 MediaDevices[314:14186] 0x1781d1d0 Copy assets attributes reply: XPC_TYPE_DICTIONARY
<dictionary: 0x1781d1d0> { count = 2, transaction = 0, voucher = 0x0, contents = {
    "Attributes" => <data: 0x17866b308d> { length = 382 bytes, contents =
    0x62786c69777a3830d4d182039d45969e1d11b352d7d668727969... }
    "Result" => <int64: 0x17822b188>: 0
}
2016-11-18 22:07:21.963828 MediaDevices[314:14186] 0x17414e4f0 Copy assets attributes reply: XPC_TYPE_DICTIONARY
<dictionary: 0x17414e4f0> { count = 3, transaction = 0, voucher = 0x0, contents = {
    "Attributes" => <data: 0x174477388d> { length = 515 bytes, contents =
    0x62786c69777a3830d4d182039d45969e1d11b352d7d668727969... }
    "Result" => <int64: 0x174227e68>: 0
    "SandboxExtension" => <string: 0x17424fd0d> { length = 258, contents =
    "85e774cb539f175eca5f76fb3f72a81958d25493;00000000;00000000;0000000000000015;com.apple.assets.read;
    00000001;01800002;00000000000d5827;/private/var/MobileAsset/Assets/com_apple_MobileAsset_LinguisticData/
    7e428d95b6c7a5ef62b2d49f73fcb0c785b092f69.asset/AssetData" }
}
2016-11-18 22:07:45.465816 MediaDevices[314:13766] Video mandatory constraints:({
    "minWidth": 640",
    "maxWidth": 640",
    "minHeight": 480",
    "maxHeight": 480",
    "minFrameRate": 30",
    "maxFrameRate": 30"
})
2016-11-18 22:07:45.584247 MediaDevices[314:13970] idSetSessionDescription
2016-11-18 22:07:45.909406 MediaDevices[314:13970] idSetSessionDescription
2016-11-18 22:07:45.956375 MediaDevices[314:14186] Update stream state, media session id is D0C03916-
8FFC-477F-86E2-29219B1F7000
2016-11-18 22:07:46.156148 MediaDevices[314:13970] idSetSessionDescription
2016-11-18 22:07:47.352297 MediaDevices[314:13970] idSetSessionDescription
2016-11-18 22:07:47.439401 MediaDevices[314:14302] Update stream state, media session id is
40571254-9d68-4399-8FA7-78E17882D5C8
```

Таким образом, мы в Mac OS Sierra собрали пример Media Devices из исходного кода, с использованием iOS SDK (FPWCSApi2.framework) и запустили этот пример на iPhoneб под управлением iOS 10.1.1. Пример продемонстрировал успешный стриминг видео через Web Call Server 5.