

Acoustic Content SDK

Unit Testing approach for iOS

Requirements:

1. It is recommended to have up to date **macOS** installed.
2. Installed **Xcode** and **Command Line Tools** version 11.3 and above.
3. Minimum deployment target which **Xcode** should support now set to **iOS 13.2**
4. Awareness in basic tests automation process described in [Automating the Test Process](#)
5. **AcousticMockTests** are self-contained and do not require any additional actions to do. Just run.
6. **AcousticLiveTests** however depends on live resource, username and password configured as described below. There is **Sample_Test_Data** which contains a snapshot of required data to run tests successfully.

Available schemes:

- AcousticContentSDK - defaults to **AcousticMockTests**
- AcousticLiveTests
- AcousticMockTests

Available environment variables:

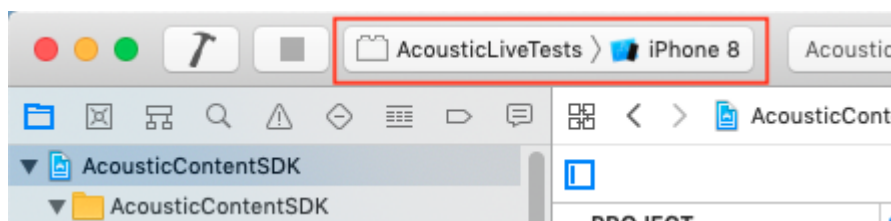
- API_URL
- USERNAME
- PASSWORD

How to run:

From Xcode

In general case just open Xcode and run *Tests* for appropriate *Test schema*:

1. Open Project folder, navigate to **AcousticContentSDK** folder
2. Find and open **AcousticContentSDK.xcodeproj**
3. Select **AcousticLiveTests** or **AcousticMockTests** schema as shown below:

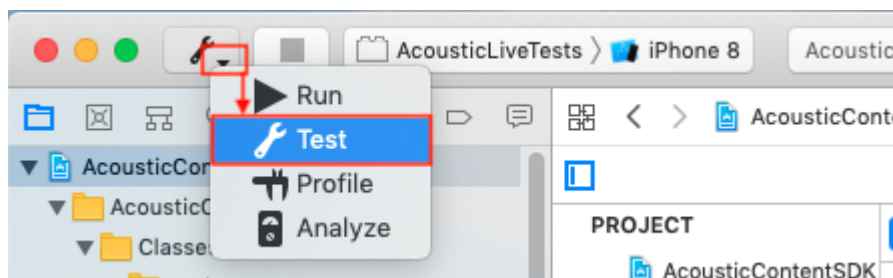


It is required to run tests on **Simulator**

To run sample app on a Device there is a necessity to enroll and configure [Apple Developer Program](#).

To distribute SDK it is necessary to understand such topics like [fat framework](#) and [stripping unneeded architectures in frameworks](#).

2. Run Tests as shown below:



For Continuous Integration purposes ([command line](#))

Tests can be run from command line by using following approaches:

- Open Project folder in [Terminal](#)
- Navigate to [AcousticContentSDK](#) folder where [AcousticContentSDK.xcodeproj](#) is located
- Run `xcodebuild test` command with parameters described below
- To run [live](#) version:
 - specify `-scheme AcousticLiveTests` in command line or
 - specify `API_URL='some-api-url'` environment variable in command line
 - specify `USERNAME='username'` if needed
 - specify `PASSWORD='passowrd'` if needed
- To run [mocked](#) version:
 - specify `-scheme AcousticMockTests` in command line or
 - do not specify `API_URL` environment variable in command line

Command line example:

```
xcodebuild test
    -project AcousticContentSDK.xcodeproj
    -sdk iphonesimulator
    -destination 'platform=iOS Simulator,name=iPhone 8,OS=13.3'
    -scheme AcousticLiveTests
    API_URL='api_url'
```

[API_URL](#), [USERNAME](#) and [PASSWORD](#) should be configured as described in [How to configure](#)

Edit [destination](#) parameter to appropriate installed iOS SDK version. To get more information how to get the list of destinations please refer [iOS SDK XCFramework How-To](#) document, section [Additional xcodebuild related notes](#).

How to configure:

To configure required test parameters like *apiURL*, *username*, *password* please use the following:

1. Specify environment variables when running from command line:

```
xcodebuild test
    -project AcousticContentSDK.xcodeproj
    -sdk iphonesimulator
    -destination 'platform=iOS Simulator,name=iPhone 8,OS=13.3'
    -scheme AcousticLiveTests
    API_URL='api_url'
    USERNAME='username'
    PASSWORD='password'
```

Please note that all parameters should go in one line separated by space. They broken in several lines only for example.

2. Specify environment variables in target Build Settings:

- Tap on project **AcousticContentSDK** -> **TARGETS** -> **AcousticLiveTests** -> Build Settings -> scroll to the bottom and find **API_URL**, **USERNAME** and **PASSWORD** parameters

This step is required to run Live tests from Xcode and optional to run from command line. When both configurations were used then command line parameters have a priority.

