

# SMARTCLIENTIOS



# smartclip

## Migration Guide for Version 3.0.0

After exchanging the old version of the SmarclipSDKiOS with version 3.0.0, you will experience some warnings and errors.

You will have to take the following steps to remove them.

### Changes in the SCAVPlayerController implementation:

#### Changes in existing functions:

```
private func observeAVPlayer(change: [NSKeyValueChangeKey : Any] ) {
```

```
...
```

```

case AVPlayer.TimeControlStatus.paused.rawValue:
    break
default: //.playing
    // only handle this for changed states!
    if oldState != AVPlayer.TimeControlStatus.playing.rawValue {

        eventListener?.playerEventCallback(with: EventTypePlay)

        //Initialize starting of progressBar
        if avPlayer.currentItem == currentAdvertisementItem {
            avPlayerListener?.videoStartsPlayback?()
        }
    }
}

private func observePlayerItem(change: [NSKeyValueChangeKey : Any]) {

    ...

    case AVPlayerItem.Status.failed.rawValue:
        if oldState != AVPlayerItem.Status.failed.rawValue {
            if avPlayer.currentItem == currentAdvertisementItem {
                eventListener?.loadAdFailure()
                saveLastError()
                eventListener?.playerEventCallback(with: EventTypeError)
            } else if let item = avPlayer.currentItem, let error = item.error {
                avPlayerListener?.contentVideoError(error)
            }
        }
    default:
        break
}

func startPlayback() {
    guard avPlayer.currentItem != nil else { return }

    if avPlayer.timeControlStatus != .playing {
        avPlayer.play()
    }
}

func pausePlayback() {
    guard avPlayer.currentItem != nil else { return }

```

```

    if avPlayer.timeControlStatus == .playing {
        avPlayer.pause()
    }
}

fileprivate func addAdItemObservers() {
    ...

    addPresentationSizeObserver()
}

fileprivate func removeAdItemObservers() {
    ...

    removePresentationSizeObserver()
}

```

Add a member variable:

```
fileprivate var lastError: SCMediaError?
```

Add a function to save the lastError, depending on the place where the last error occurred (either AVPlayer or AVPlayerItem):

```

private func saveLastError() {
    if avPlayer.status == AVPlayer.Status.failed {
        if let error = avPlayer.error {
            lastError = SCMediaError(error: error)
        }
    } else if avPlayer.currentItem?.status == AVPlayerItem.Status.failed {
        if let error = avPlayer.currentItem?.error {
            lastError = SCMediaError(error: error)
        }
    }
}
}

```

Add following functions – for implementation details see  
SCAVPlayerController.swift (according to SCAdPlayerFacade changes):

```
func getPlayerSize() -> SCElementSize?  
  
func getViewportSize() -> SCElementSize?  
  
func loadAd(withCaptions loadDict: [AnyHashable : Any], disableSeeking: Bool,  
completion:SCEmptyCompletionBlock?) -> Bool
```

## Rename following functions:

from:

```
func setCurrentContentSource()
```

to:

```
func lockContent()
```

from:

```
func resetCurrentContentSource() -> Bool
```

to:

```
func releaseContent() -> Bool
```

## Changes in function declarations (due to nullable/nonnull changes of SCAdFacadeDelegate):

```
func getAdInfo(_ completion: @escaping SCAdInfoCompletionBlock)  
  
func getAdError(_ completion: @escaping SCAdErrorCompletionBlock)  
  
func onEventCallback(_ event: SCAdEvent)  
  
func getError() -> String?  
  
func displayClickThroughAlert(_ alert: UIAlertController)  
  
func loadAd(withUrlString urlString: String, disableSeeking: Bool,  
completion:SCEmptyCompletionBlock?) -> Bool
```

Change the implementation of the `loadAd(withUrlString urlString: String, disableSeeking: Bool)` function in the following way

```
func loadAd(withUrlString urlString: String, disableSeeking: Bool,
completion:SCEmptyCompletionBlock?) -> Bool {
    guard let urlStr = NSString.urlSaveHTTPString(with: urlString),
        let url = URL.init(string: urlStr) else { return false }

    lastError = nil

    ...

    DispatchQueue.main.async { [weak self] in
        self?.avPlayer.replaceCurrentItem(with: self?.currentAdvertisementItem)
        completion?()
    }
}
```

Change the implementation of the `getError() -> String?` function to return your added `lastError` variable or `nil`

```
func getError() -> String? {
    guard let lastErrorToReturn = lastError else { return nil }
    lastError = nil
    return lastErrorToReturn.description()
}
```

## Changes in the `SCOutstreamBaseViewController`:

Changes in function declarations (due to nullability changes of `SCAdListener`):

```
func contentVideoError(_ error: Error)

func displayClickThroughAlert(_ alert: UIAlertController)
```

Add following functions:

```

override func viewWillAppear(_ animated: Bool) {
    super.viewWillAppear(animated)
    adController?.activate(true)
}

override func viewWillDisappear(_ animated: Bool) {
    super.viewWillDisappear(animated)
    adController?.activate(false)
}

```

If your app uses a UITabBar you have to be able to activate or deactivate the visibility observer when you select or deselect a tab under which your video view resides in a viewController:

As an example this is shown inside the ReferenceApp, which also uses a tabBar:

```

extension SCOutstreamBaseViewController: SCTabBarControllerDelegate {
    func activate(_ isActive: Bool) {
        adController?.activate(isActive)
    }
}

```

## Changes in the SCSequencerViewController:

### Changes in existing functions:

Change the implementation of viewWillDisappear to viewDidDisappear

```

override func viewWillAppear(_ animated: Bool) {
    super.viewWillAppear(animated)
    sequencer?.activate(true)
    guard sequencer?.isPaused() ?? false else { return }
    sequencer?.resumeSequencer()
}

override func viewDidDisappear(_ animated: Bool) {
    super.viewDidDisappear(animated)
    sequencer?.pause()
    sequencer?.activate(false)
}

```

Add following functions (as part of the SCAdSequencerDelegate implementation):

```
func getPlayerSize() -> SCElementSize? {
    let playerRect = view.convert(playerViewController.videoBounds, from:
playerViewController.view)
    return SCElementSize(viewMode: ViewModeNormal, boundingRect: playerRect)
}

func getViewportSize() -> SCElementSize? {
    return SCElementSize(viewMode: ViewModeNormal, boundingRect:
self.view.frame)
}
```

Hint: If you display the AVPlayerViewController in fullscreen, create SCElementSize with value ViewModeFullscreen .

```
func adStartsPlayback() {
    deleteProgressTimer()
    progressBar.isHidden = true
    createProgressTimer()
}
```

If your app uses a UITabBar you have to be able to activate or deactivate the visibility observer when you select or deselect a tab under which your video view resides in a viewcontroller:

As an example this is shown inside the RefenceApp, which also uses a tabBar:

```
extension SCSequencerViewController: SCTabBarControllerDelegate {
    func activate(_ isActive: Bool) {
        sequencer?.activate(isActive)
    }
}
```