# **NetCore SDK**

Push Notification Integration Help for iOS.

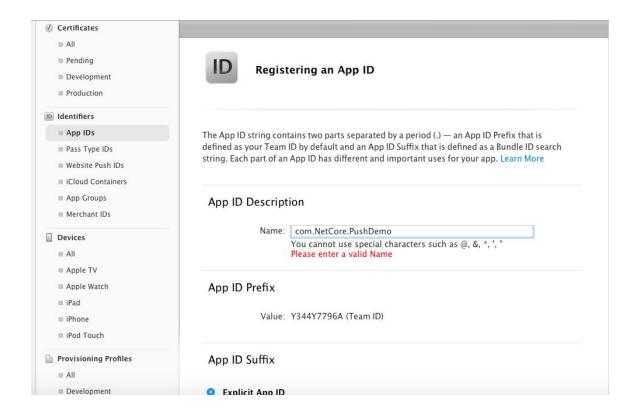
### Steps are as follows:

- 1. Creating App ID And Configure Push notification Certificates
- 2. Creating Provisional Profile.
- 3. Configure Application in NetCore
- 4. Setup the NetCore Push SDK into your project.
- 5. Integrate NetCore SDK & Push Methods.

## 1.1 Creating Explicit App Id

For Push Notification you need create explicit App id and enable push notification for you app id, following are list of step to create app id.

- 1. Sign in to developer.apple.com/account, and click Certificates, IDs & Profiles.
- 2. Under Identifiers, select App IDs.
- 3. Click the Add button (+) in the upper-right corner.
- 4. Enter a name or description for the App ID in the description field.
- 5. To create an explicit App ID, select Explicit App ID and enter the app's bundle ID in the Bundle ID field. An explicit App ID exactly matches the bundle ID of an app you're building. For example, **com.NetCore.PushDemo**. An explicit App ID can't contain an asterisk (\*).
- 6. Select the Push Notification checkbox to enable the app Push Notification service
- 7. Click Continue.
- 8. Review the registration information, and click Register.
- 9. Click Done.

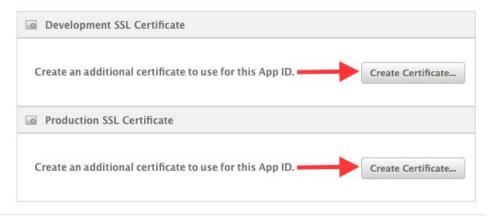


# 1.2 Configuring Push Notification for your application



#### **Apple Push Notification service SSL Certificates**

To configure push notifications for this iOS App ID, a Client SSL Certificate that allows your notification server to connect to the Apple Push Notification Service is required. Each iOS App ID requires its own Client SSL Certificate. Manage and generate your certificates below.



## **Creating Push Notification Certificates & CSR File**



#### About Creating a Certificate Signing Request (CSR)

To manually generate a Certificate, you need a Certificate Signing Request (CSR) file from your Mac. To create a CSR file, follow the instructions below to create one using Keychain Access.

#### Create a CSR file.

In the Applications folder on your Mac, open the Utilities folder and launch Keychain Access.

Within the Keychain Access drop down menu, select Keychain Access > Certificate Assistant > Request a Certificate from a Certificate Authority.

- In the Certificate Information window, enter the following information:
  - · In the User Email Address field, enter your email address.
  - In the Common Name field, create a name for your private key (e.g., John Doe Dev Key).
  - · The CA Email Address field should be left empty.
  - In the "Request is" group, select the "Saved to disk" option.
- · Click Continue within Keychain Access to complete the CSR generating process.





#### Generating Certificates and Download it



Your certificate is ready.

#### Download, Install and Backup

Download your certificate to your Mac, then double click the .cer file to install in Keychain Access. Make sure to save a backup copy of your private and public keys somewhere secure.

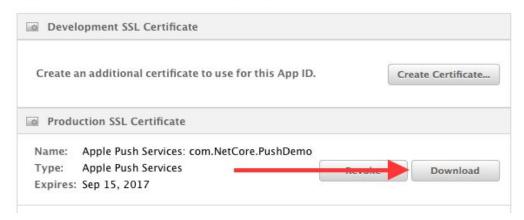






#### Apple Push Notification service SSL Certificates

To configure push notifications for this iOS App ID, a Client SSL Certificate that allows your notification server to connect to the Apple Push Notification Service is required. Each iOS App ID requires its own Client SSL Certificate. Manage and generate your certificates below.



- Double click on the downloaded SSL certificate to install it in your Keychain.
- In Keychain Access, under "My Certificates", find the certificate you just added.
- Export certificates .p12 file and add "NetCorePush.p12" name Reference link for SSL generation

## 2. Creating Provisioning Profile

A provisioning profiles is use to install your application to iPhone device ,following are type of provisioning profiles

**1)Development provisioning profiles**: This profile use install application on limited team members devices. Follow the steps in Creating Development Provisioning Profiles if you want to create your own development provisioning profile.

#### **2)Distribution provisioning profiles :** Distribution profile having 2 types

**1)Ad Hoc Distribution :-** you can create this profile when you export an app archive and select the ad hoc deployment option, as described in Exporting Your App for Testing Outside the Store. To create an ad hoc provisioning profile directly in your developer account, read Creating Ad Hoc Provisioning Profiles

#### 2)App Store Distribution

We Create store App Store Distribution file when we want deploy application over app store. To create a store provisioning profile directly in your developer account, read Creating Store Provisioning Profiles.

Note: For push notification you can create Ad Hoc Provisioning Profiles for testing, NetCore is configure production level environment for push notification.

#### **Creating Ad Hoc Provisioning Profiles (iOS, tvOS, watchES)**

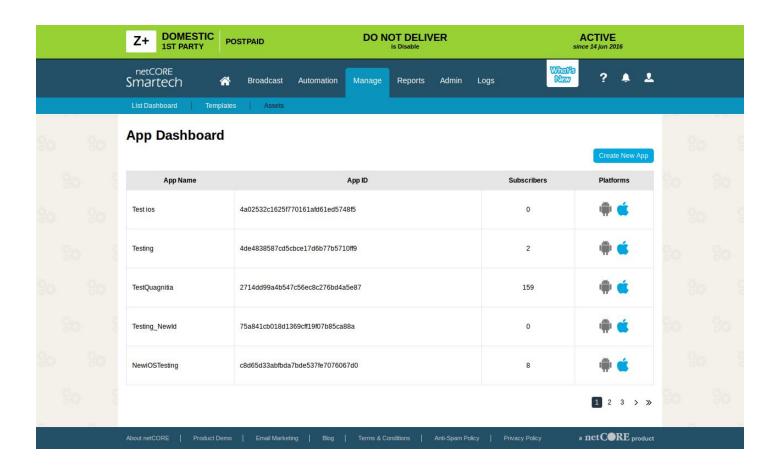
To create an ad hoc provisioning profile

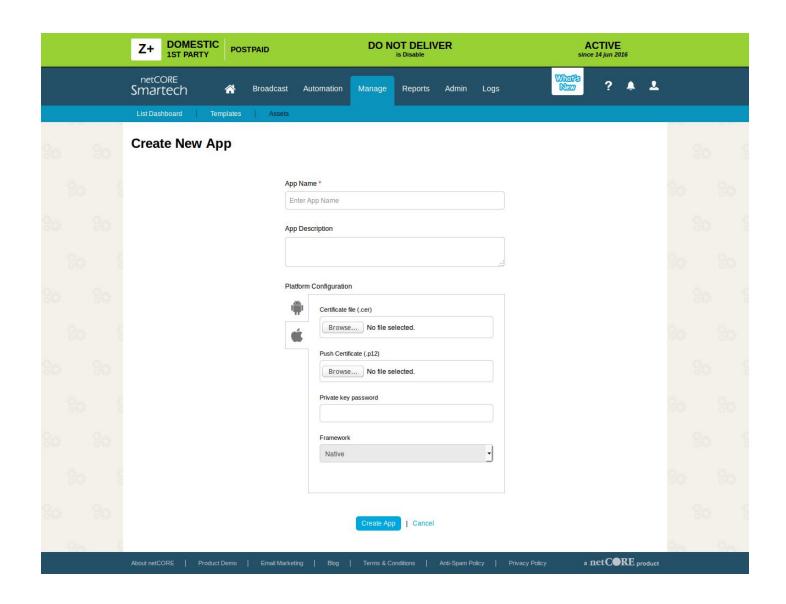
- 1. Sign in to developer.apple.com/account, and click Certificates, IDs & Profiles.
- 2. Under Provisioning Profiles, select All.
- 3. Click the Add button (+) in the upper-right corner.
- 4. Select Ad Hoc as the distribution method, and click Continue.
- 5. Choose the App ID you used for development, which matches your bundle ID, from the App ID pop-up menu, and click Continue.
- 6. If you used a team provisioning profile during development and the menu contains only the XC Wildcard, select it. If the menu contains another Xcode-managed explicit App ID (it begins with "XC" followed by the bundle ID), select that App ID. If you created your own App ID, select that one.
- 7. Select the distribution certificate you want to use, and click Continue.

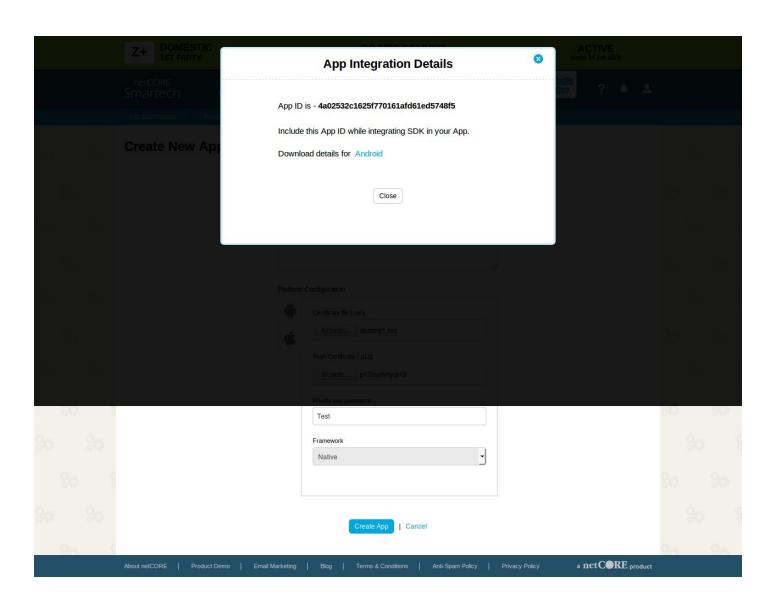
- 8. If you don't have a distribution certificate, create one using Xcode, as described in Creating Signing Identities, before continuing.
- 9. Select the devices you want to use for testing, and click Continue.
- 10. Enter a profile name, and click Continue.
- 11. Wait while your developer account generates the provisioning profile.
- 12. At the bottom of the page, Click Done.

# 3. Configure Application in NetCore

To Use NetCore push notification you have to first create application inside NetCore website and upload .p12 certificate of your application.







# 4. Setup the NetCore Push SDK

# **NetCore Integration Using Cocoa Pod**

- 1)Install CocoaPods on your computer.
- 2) open your project add Create pod file using below command

Pod init

3) Add following Line in your podfile

pod 'Netcore-Smartech-iOS-SDK'

4)Run following command in your project directory

Pod Install

5) open App.xcworkspace and build app.

# **NetCore Manual Integration**

Download NetCore iOS SDK from below links

**GitHub** 

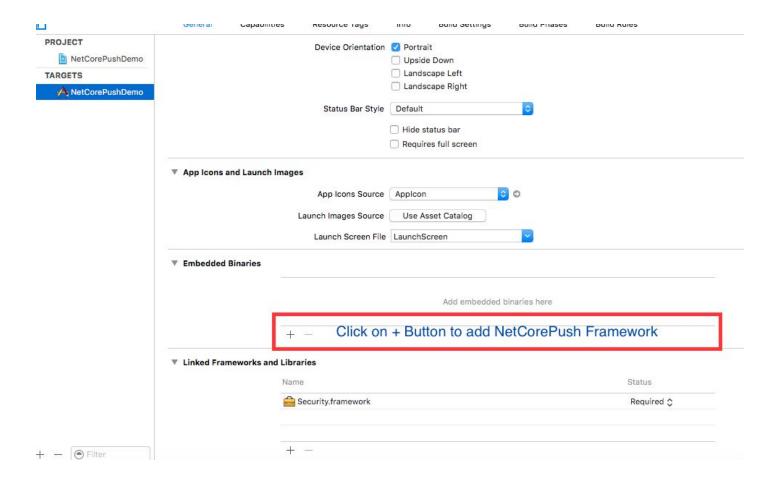
<u>git clone https://github.com/NetcoreSolutions/Smartech-ios-sdk</u>

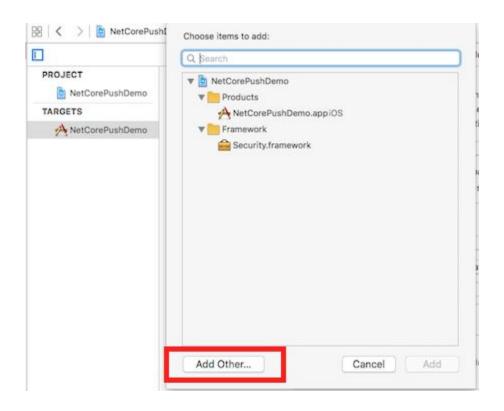
#### From Browser

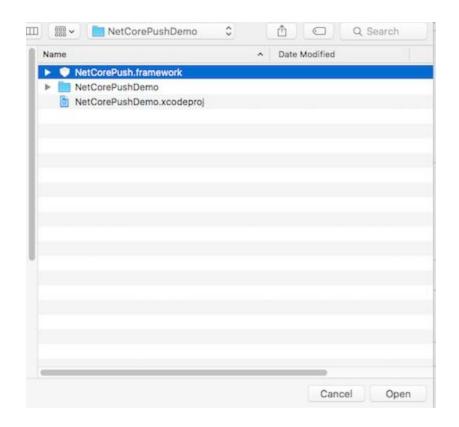
https://github.com/NetcoreSolutions/Smartech-ios-sdk/archive/master.zip

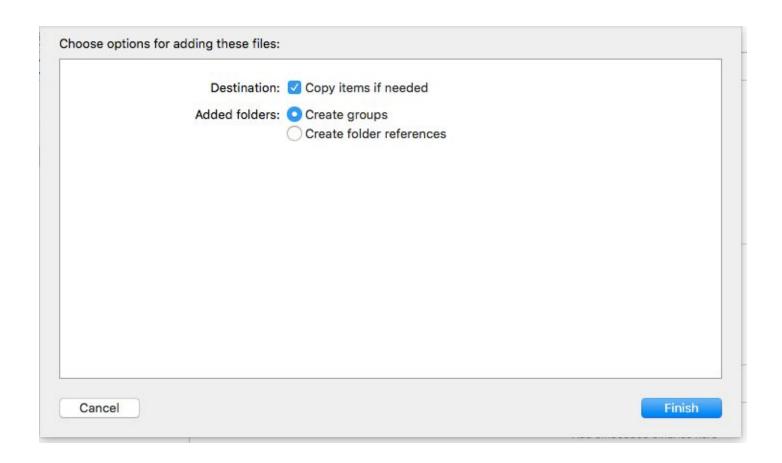
1) **Download iOS SDK** and Unzip the file. Open Framework folder - inside it you will see NetCorePush.framework file.

2) Open existing or create a new project in Xcode and drag drop or add framework in Target > Embedded Binaries section









## 3. Add following frameworks inside your application if required

- 1)Security
- 2)CoreLocation
- 3)SystemConfiguration
- 4)JavaScriptCore

## 4) Add Following capability inside your application

- 1)Push Notification
- 2)Keychain

#### 5) Swift Bridge file Reference

Create Bridge file in existing swift project if required and add Following code inside file

import NetCorePush

## **NetCore SDK Initialization**

#### 1) Import following file in Appdelegate File

## Objective C

```
#import <NetCorePush/NetCorePush.h>
#import <UserNotifications/UserNotifications.h>
#import <UserNotificationsUI/UserNotificationsUI.h>
```

#### Swift

import User Notifications import UserNotificationsUI import NetCorePush

# 2. Add NetCore Application AppID in support in Finish Launching Methods (AppDelegate file)

## Objective C

#define kAppID @"Your App Id which you get from Netcore smartech admin panel ";

[[NetCoreSharedManager sharedInstance]setUpApplicationId:kAppID]; [NetCorePushTaskManager sharedInstance].delegate = self;

// set up your third party framework initialization process as per their document

```
let netCore_AppID = "your App Id which you get from Netcore smartech admin panel"

// Set up NetCore Application Id-----
NetCoreSharedManager.sharedInstance().setUpApplicationId(netCore_AppID)

//set up push delegate
NetCorePushTaskManager.sharedInstance().delegate = self

// set up your third party framework initialization process as per their document
```

# 3. Add Push Notification support in Finish Launching Methods (AppDelegate file)

## Objective C

```
if ([[[UIDevice currentDevice] systemVersion] floatValue] >= 10.0){
     UNUserNotificationCenter *center = [UNUserNotificationCenter
currentNotificationCenter];
     center.delegate = self;
     [center requestAuthorizationWithOptions:(UNAuthorizationOptionSound |
UNAuthorizationOptionAlert | UNAuthorizationOptionBadge)
completionHandler: ^(BOOL granted, NSError * Nullable error) {
        if(granted){
          [[UIApplication sharedApplication] registerForRemoteNotifications];
       }
     }];
     [[UIApplication sharedApplication] registerForRemoteNotifications];
     UIUserNotificationType userNotificationTypes = (UIUserNotificationTypeAlert |
UIUserNotificationTypeBadge | UIUserNotificationTypeSound);
     UIUserNotificationSettings *settings = [UIUserNotificationSettings
settingsForTypes:userNotificationTypes categories:nil];
     [[UIApplication sharedApplication] registerUserNotificationSettings];
     [[UIApplication sharedApplication] registerForRemoteNotifications];
  }
```

```
if #available(iOS 10, *) {
        UNUserNotificationCenter.current().delegate = self
UNUserNotificationCenter.current().requestAuthorization(options:
[.alert, .badge, .sound]) { (granted, error) in
           quard error == nil else {
              return
           }
           if granted {
              UIApplication.shared.registerForRemoteNotifications()
          }
        }
        UIApplication.shared.registerForRemoteNotifications()
     } else {
        let settings: UIUserNotificationSettings =
           UIUserNotificationSettings(types: [.alert, .badge, .sound],
categories: nil)
        UIApplication.shared.registerUserNotificationSettings(settings)
        UIApplication.shared.registerForRemoteNotifications()
     }
```

# 4. Check Application Launching from Push/Local Notification support in Finish Launching Methods (AppDelegate file)

## Objective C

```
// Handle launch event
  if (launchOptions != nil){
    [[NetCorePushTaskManager sharedInstance]handelApplicationLaunchEvent:
launchOptions];
  }
```

#### 5. Register Device With NetCore SDK (AppDelegate file)

## Objective C

```
- (void)application:(UIApplication*)application
didFailToRegisterForRemoteNotificationsWithError:(NSError*)error{
  // manage notification token failure process as per third party SDK as per their
document
}
- (void)application: (UIApplication*)application
didRegisterForRemoteNotificationsWithDeviceToken:(NSData*)deviceToken{
// Register device token with third party SDK as per their document
  // Set up device token inside NetCoreSharedManager
  [[NetCoreSharedManager sharedInstance]setDeviceToken:deviceToken];
 //strEmail = your application identity
    [[NetCoreSharedManager sharedInstance]setUpIdentity:strEmail];
  [[NetCoreInstallation sharedInstance]netCorePushRegisteration:strEmail
Block: ^(NSInteger statusCode) {
  }];
}
```

#### Swift

```
func application(_ application: UIApplication,
didRegisterForRemoteNotificationsWithDeviceToken deviceToken: Data) {
```

```
// Register device token with third party SDK as per their document

NetCoreSharedManager.sharedInstance().setDeviceToken(deviceToken)
//strEmail = your application identity

NetCoreSharedManager.sharedInstance().setUpIdentity(strEmail as!
String!)

// Register User Device with NetCore

NetCoreInstallation.sharedInstance().netCorePushRegisteration(strEmail as!
String!, block: { (code) in})
}

func application(_ application: UIApplication,
didFailToRegisterForRemoteNotificationsWithError error: Error) {

// manage notification token failure process as per third party SDK as per their document
}
```

#### 6) Handle Push/Local Notification Delegate Events (AppDelegate file)

## Objective C

```
-(void)application:(UIApplication *)application
didReceiveLocalNotification:(UILocalNotification *)notification{
    [[NetCorePushTaskManager
sharedInstance]didReceiveLocalNotification:notification.userInfo];
}
- (void)application:(UIApplication*)application
didReceiveRemoteNotification:(NSDictionary*)userInfo{
    [[NetCorePushTaskManager
sharedInstance]didReceiveRemoteNotification:userInfo];
}
//Called when a notification is delivered to a foreground app.
-(void)userNotificationCenter:(UNUserNotificationCenter*)center
willPresentNotification:(UNNotification*)notification withCompletionHandler:(void
```

```
(^)(UNNotificationPresentationOptions options))completionHandler{
    completionHandler(UNAuthorizationOptionSound | UNAuthorizationOptionAlert |
UNAuthorizationOptionBadge);
    [[NetCorePushTaskManager
sharedInstance]userNotificationWillPresentNotification:notification];
}
//Called to let your app know which action was selected by the user for a given
notification.
-(void)userNotificationCenter:(UNUserNotificationCenter* )center
didReceiveNotificationResponse:(UNNotificationResponse* )response
withCompletionHandler:(void(^)())completionHandler{
    [[NetCorePushTaskManager
sharedInstance]userNotificationdidReceiveNotificationResponse:response];
}
```

```
func application( application: UIApplication, didReceiveRemoteNotification
userInfo: [AnyHashable: Any]){
NetCorePushTaskManager.sharedInstance().didReceiveRemoteNotification(userInfo)
  }
  // MARK: - didReceiveLocalNotification method
  func application(_ application: UIApplication, didReceive notification:
UILocalNotification){
NetCorePushTaskManager.sharedInstance().didReceiveLocalNotification(notification.u
serInfo)
  }
extension AppDelegate: UNUserNotificationCenterDelegate {
  // called when application is open when user click on notification
@objc(userNotificationCenter:didReceiveNotificationResponse:withCompletionHandler
:) @available(iOS 10.0, *)
  func userNotificationCenter(_ center: UNUserNotificationCenter, didReceive
response: UNNotificationResponse, withCompletionHandler completionHandler:
@escaping () -> Void) {
```

```
NetCorePushTaskManager.sharedInstance().userNotificationdidReceive(response)
}
// This is key callback to present notification while the app is in foreground
@objc(userNotificationCenter:willPresentNotification:withCompletionHandler:)
@available(iOS 10.0, *)
func userNotificationCenter(_ center: UNUserNotificationCenter, willPresent
notification: UNNotification, withCompletionHandler completionHandler: @escaping
(UNNotificationPresentationOptions) -> Void) {
    completionHandler( [.alert,.sound,.badge])

NetCorePushTaskManager.sharedInstance().userNotificationWillPresent(notification)
}
}
```

#### 7) Handle Deep Linking

## Objective C

```
- (BOOL)application:(UIApplication *)application openURL:(NSURL *)url
sourceApplication:(NSString *)sourceApplication annotation:(id)annotation
{
    //handel deep Link here
    return YES;
}
// PushManagerDelegate Method
-(void)handleNotificationOpenAction:(NSDictionary *)userInfo
DeepLinkType:(NSString *)strType{
    if (strType !=nil ){
        //handel deep Link here
      }
}
```

#### Swift

func application(\_ application: UIApplication, open url: URL, sourceApplication:
String?, annotation: Any) -> Bool{

```
// handle deep link here
return true
}

extension AppDelegate : NetCorePushTaskManagerDelegate{
  func handleNotificationOpenAction(_ userInfo: [AnyHashable : Any]!,
  deepLinkType strType: String!) {
    if strType.lowercased().contains ("your app deep link"){
      // handle deep link here
    }
}
```

#### 9) Login with NetCore

## Objective C

```
// strEmail = pass your device identity
[[NetCoreInstallation sharedInstance]netCorePushLogin:strEmail Block:^(NSInteger statusCode) {
    }];
```

#### Swift

```
// strEmail = pass your device identity
NetCoreInstallation.sharedInstance().netCorePushLogin(strEmail) { (statusCode:Int) in }
```

## 10) Logout

## Objective C

```
[[NetCoreInstallation sharedInstance]netCorePushLogout:^(NSInteger statusCode) {
     }];
```

#### **Swift**

```
// strEmail = pass your device identity
NetCoreInstallation.sharedInstance().netCorePushLogout { (statusCode:Int) in }
```

#### 11) Profile Push

#### Objective C

```
NSDictionary *info = @{@"name":@"Tester",@"age":
@"23",@"mobile":@"32424342"};
[[NetCoreInstallation sharedInstance]netCoreProfilePush:strEmail payload:info
Block:nil];
```

#### Swift

```
// strEmail = pass your device identity
let info = ["name":"Tester","age": "23","mobile":"32424342"]
NetCoreInstallation.sharedInstance().netCoreProfilePush(strEmail, payload: info, block: nil)
```

## 12) Events Tracking:

Following is the list of tracking events

```
tracking_CheckOut = 3,
tracking_FirstLaunch = 20,
tracking_AppLaunch = 21
```

You can use this events following ways

## 13)Track normal event

## Objective C

[[NetCoreAppTracking sharedInstance]sendAppTrackingEvent:tracking\_FirstLaunch Block:^(NSInteger statusCode) {

```
}];
[[NetCoreAppTracking sharedInstance]sendAppTrackingEvent:tracking_AppLaunch
Block:^(NSInteger statusCode) {
    }];
```

```
// for sending application launch event

NetCoreAppTracking.sharedInstance().sendEvent(Int(UInt32(tracking_FirstLaunch.ra wValue)), block: nil)

NetCoreAppTracking.sharedInstance().sendEvent(Int(UInt32(tracking_AppLaunch.ra wValue)), block: nil)
```

#### 14)Track event with custom payload

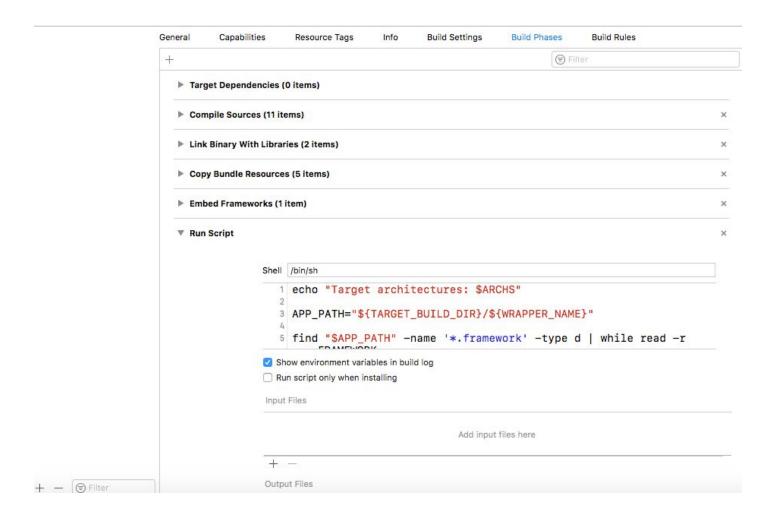
## Objective C

```
[[NetCoreAppTracking sharedInstance]sendAppTrackingEvent:tracking_CheckOut
payload: checkOutArray Block:^(NSInteger statusCode) {
     }];
```

NetCoreAppTracking.sharedInstance().sendEvent(withCustomPayload: Int(tracking\_CheckOut), payload: checkOutArray, block: nil)

#### **Deployment Over Apple Store**

Add Following runscript in your application target ,when you are deploying application over apple store, this run script use remove unused architecture in release mode



```
echo "Target architectures: $ARCHS"
APP_PATH="${TARGET_BUILD_DIR}/${WRAPPER_NAME}"
find "$APP PATH" -name '*.framework' -type d | while read -r FRAMEWORK
do
FRAMEWORK EXECUTABLE NAME=$(defaults read "$FRAMEWORK/Info.plist"
CFBundleExecutable)
FRAMEWORK EXECUTABLE PATH="$FRAMEWORK/$FRAMEWORK_EXECUTABLE_NAM
echo "Executable is $FRAMEWORK EXECUTABLE PATH"
echo $(lipo -info $FRAMEWORK EXECUTABLE PATH)
FRAMEWORK TMP PATH="$FRAMEWORK EXECUTABLE PATH-tmp"
# remove simulator's archs if location is not simulator's directory
case "${TARGET BUILD DIR}" in
*"iphonesimulator")
echo "No need to remove archs"
*)
if $(lipo $FRAMEWORK EXECUTABLE PATH -verify arch "i386"); then
lipo -output $FRAMEWORK TMP PATH -remove "i386"
$FRAMEWORK EXECUTABLE PATH
echo "i386 architecture removed"
rm $FRAMEWORK EXECUTABLE PATH
mv $FRAMEWORK TMP PATH $FRAMEWORK EXECUTABLE PATH
fi
if $(lipo $FRAMEWORK EXECUTABLE PATH -verify arch "x86 64"); then
lipo -output $FRAMEWORK TMP PATH -remove "x86 64"
$FRAMEWORK EXECUTABLE PATH
echo "x86 64 architecture removed"
rm $FRAMEWORK EXECUTABLE PATH
mv $FRAMEWORK_TMP_PATH $FRAMEWORK_EXECUTABLE_PATH
fi
esac
echo "Completed for executable $FRAMEWORK EXECUTABLE PATH"
echo $(lipo -info $FRAMEWORK EXECUTABLE PATH)
done
```