

AmuseGameSDK API Document

(iOS)

Name	Date	version	remark
Yuanjun	2021.09.28	2.0.0	created

1. Description and definition

1.1 API call

Import <AmuseGameSDK/AmuseGameSDK.h>

Every API is called by [TTkGameManager defaultManager] instance

1.2 Callback

`error` is a common field for every callback class. if `error` equals to `nil`, it means the api call is success.

1.3 Callback classes:

1.3.1 Login Callback

```
class: TTGCUserCompletionHandler
fields:
userInfo //the user information
error
```

1.3.2 Receive Notification Callback

```
class: TTGCNotificationCompletionHandler  
fields:  
result      //the notification message  
error
```

1.3.3 Logout Callback

```
class: TTGCLogoutCompleteHandler  
fields:  
success      // BOOL type, indicate operation result  
error
```

1.3.4 Get Friends Callback

```
class: TTGCFriendsCompletionHandler  
fields:  
list          //fields list, contains from 0 -> N friend object  
error
```

1.3.5 Share Callback

```
class: TTGCShareCompleteHandler  
fields:  
success      // BOOL type, indicate operation result  
error
```

1.3.6 Payment Callback

```
class: TTGCOrderProgressHandler  
fields:  
TTGCOrderStatus //Payment order status
```

1.3.7 Payment Result Callback

```
class: TTGCOderCompletionHandler  
fields:  
orderInfo //the payment order object  
error
```

1.3.8 AppVersion Info Callback

```
class: TTGCVersionCompletionHandler  
fields:  
hasNewVersion //has new version  
versionInfo //the version detail information. class model <TTGCApVersion>  
error
```

1.3.9 Common Callback

```
class: TTGCCompletionHandler  
fields:  
result //operation result  
error
```

1.3.10 Account Kicked Callback

```
class: TTGCAccountKickedHandler  
fields:  
information //information of notification
```

1.3.11 Account Banned Callback

```
class: TTGCAccountBannedHandler  
fields:  
information //the reason of banned  
time
```

1.4 Errors

TTGCPlatformErrorType_Unknown	unknown error
TTGCPlatformErrorType_AuthorizeFailed	authorized failed
TTGCPlatformErrorType_ForUserInfoFailed	request user data failed
TTGCPlatformErrorType_LoginFailed	login failed
TTGCPlatformErrorType_FriendsListFailed	get friends failed
TTGCPlatformErrorType_MessageSendFailed	send message failed
TTGCPlatformErrorType_PayFailed	payment failed
TTGCPlatformErrorType_ShareFailed	share failed
TTGCPlatformErrorType_NotInstall	app is not installed
TTGCPlatformErrorType_NotNetwork	network exception
TTGCPlatformErrorType_SourceError	third error
TTGCPlatformErrorType_NoPermission	no permissions
TTGCPlatformErrorType_UnauthorizedRequest	unauthorized request, need login.

2. Setup Initialize (must)

2.1 Launch

Methods in AppDelegate are implemented like below:

2.1.1 Setup Configuration:

The launch animation for SDK-1.0.5 has been removed and the specific launch animation needs to be implemented by the game developers.

```
- (BOOL)application:(UIApplication *)application
didFinishLaunchingWithOptions:(NSDictionary *)launchOptions {

    // set SDK Api Environment

    [[TTGameManager defaultManager] setServerDomainTest];
}
```

```

// set Pay Enviroment

[[TTkGameManager defaultManager] setPayEnvironmentTest];

// open log

[[TTkGameManager defaultManager] openLogInfo];


// launch SDK

NSString *appId = @"xxxxx";

NSString *appSecret = @"xxxxxx";

NSString *gameid = @"xxxxxxx";

[[TTkGameManager defaultManager] setupWithAppId:appId Secret:appSecret
GameId:gameid Application:application Options:launchOptions];

return YES;
}

```

2.1.2 External Callback:

```

- (BOOL)application:(UIApplication *)app openURL:(NSURL *)url
options:(NSDictionary<UIApplicationOpenURLOptionsKey,id> *)options {

    return [[TTkGameManager defaultManager] application:app openURL:url
options:options];
}

```

2.1.3 App Events:

```

- (void)applicationDidEnterBackground:(UIApplication *)application {

    [[TTkGameManager defaultManager] applicationDidEnterBackground:application];
}

- (void)applicationWillEnterForeground:(UIApplication *)application {

    [[TTkGameManager defaultManager] applicationWillEnterForeground:application];
}

- (void)applicationDidBecomeActive:(UIApplication *)application {

    [[TTkGameManager defaultManager] applicationDidBecomeActive:application];
}

- (void)applicationWillTerminate:(UIApplication *)application {

    [[TTkGameManager defaultManager] applicationWillTerminate:application];
}

```

2.1.4 Push Register:

```

- (void)application:(UIApplication *)application
didRegisterForRemoteNotificationsWithDeviceToken:(NSData *)deviceToken {
    [[TTkGameManager defaultManager] registerDeviceToken:deviceToken];
}

- (void)application:(UIApplication *)application
didReceiveRemoteNotification:(NSDictionary *)userInfo fetchCompletionHandler:(void
(^)(UIBackgroundFetchResult))completionHandler {
    [[TTkGameManager defaultManager] application:application
didReceiveRemoteNotification:userInfo];
}

```

2.1.5 Universal Link:

```

- (BOOL)application:(UIApplication *)application continueUserActivity:(NSUserActivity
*)userActivity restorationHandler:(void (^)(NSArray<id<UIUserActivityRestoring>> *
_Nullable))restorationHandler {
    return [[TTkGameManager defaultManager] application:application
continueUserActivity:userActivity restorationHandler:restorationHandler];
}

```

2.2 Check App Version

After SDK is launched, be sure to check the version to ensure that the current version is available. If you need to force upgrade, you can go to the appstore to download the latest version, otherwise the SDK function may not be available.

example

```

- (void)checkVersion {
    [[TTkGameManager defaultManager] checkAppVersionCompletion:^(BOOL hasNewVersion,
TTGCApVersionModel * _Nullable versionInfo, NSError * _Nullable error) {
        if (hasNewVersion) {
            BOOL forceUpdate = versionInfo.forceUpdate;

            if (forceUpdate) {
                // If you need to force update, you cannot continue to use it, and you need
                to jump to the appstore to update.

                // Open appstore
            }
        }
    }
}

```

```

        [[TTkGameManager defaultManager]
openAppStoreWithStoreIdentifier:@"xxx"];

        } else {

            // If update is not required, you can optionally prompt for an upgrade.

        }

    }

    }];
}
}

```

2.2.1 Check Version

Method	checkAppVersionCompletion
Callback	TTGCVersionCompletionHandler hasNewVersion // has new version <BOOL> versionInfo // the version detail information. class model <TTGCApVersion> build // app build code version // app new version versionInfo // the version information forceUpdate // need to force upgrade <BOOL> currentVersionCode // current version code

2.2.2 Open AppStore

Method	openAppStoreWithStoreIdentifier
Params	identifier //App Store item identifier (NSNumber) of the product

3. API: Configuration

3.1 Enbale Log Output

```

[[TTkGameManager defaultManager] openLogInfo];

```

3.2 Disable Log Output(default)

```
[[TtkGameManager defaultManager] closeLogInfo];
```

3.3 Set Test Environment

```
[[TtkGameManager defaultManager] setServerDomainTest];
```

3.4 Set Production Environment(default)

```
[[TtkGameManager defaultManager] setServerDomainProduction];
```

3.5 Set Sandbox Payment

```
[[TtkGameManager defaultManager] setPayEnvironmentTest];
```

3.6 Set Production Payment(default)

```
[[TtkGameManager defaultManager] setPayEnvironmentProduction];
```

3.7 Customer Service (Messenger)

```
[[TtkGameManager defaultManager] contactusWithMessenger];
```

4. API: Login&User Info

User must agree the User Agreement & Privacy before do Login action

4.1 Show Agreement View

```
- (IBAction)agreement:(id)sender {
```



```
[[TTkGameManager defaultManager] showAgreementView];
}
```

4.2 Login with Apple

Login with Apple only supports iOS13 and higher.

Method	loginWithAppleCompletion
Callback	TTGCUUserCompletionHandler

example:

```
- (IBAction)appleLogin:(id)sender {
    TTGCHUD_NO_Stop(@"login...")

    __weak __typeof(self) weakSelf = self;

    [[TTkGameManager defaultManager] loginWithAppleCompletion:^(id _Nonnull userInfo,
NSError * _Nonnull error) {
        if (!error) {
            //login success

            TTGCHUD_SUCCESS(@"success")

            [weakSelf closeLoginView];
        } else {
            //error info

            TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
        }
    }];
}
```

4.3 Login with GameCenter

Method	loginWithGameCenterCompletion
Callback	TTGCUUserCompletionHandler

example:

```
- (void)gamecenterLogin {
    TTGCHUD_NO_Stop(@"login...")
}
```

```

    __weak __typeof(self) weakSelf = self;

    [[TTkGameManager defaultManager] loginWithGameCenterCompletion:^(id _Nonnull
userInfo, NSError * _Nonnull error) {

        if (!error) {

            //login success

            TTGCHUD_HINT(@"success")

            [weakSelf closeLoginView];

        } else {

            //error info

            TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);

        }

    }]];
}

```

4.4 Login with Facebook

Method	loginWithFacebookCompletion
Callback	TTGCUCompletionHandler

example:

```

- (void)facebookLogin {

    TTGCHUD_NO_Stop(@"login...")

    __weak __typeof(self) weakSelf = self;

    [[TTkGameManager defaultManager] loginWithFacebookCompletion:^(id _Nonnull
userInfo, NSError * _Nonnull error) {

        if (!error) {

            //login success

            TTGCHUD_HINT(@"success")

            [weakSelf closeLoginView];

        } else {

            //error info

            TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);

        }

    }]];
}

```

```
}
```

4.5 Login with Twitter

Method	loginWithTwitterCompletion
Callback	TTGCUCompletionHandler

example:

```
- (IBAction)twitterLogin:(id)sender {
    TTGCHUD_NO_Stop(@"login...")

    __weak __typeof(self)weakSelf = self;

    [[TTkGameManager defaultManager] loginWithTwitterCompletion:^(id _Nonnull userInfo,
NSError * _Nonnull error) {
        if (!error) {
            //登录成功

            TTGCHUD_SUCCESS(@"success")

            [weakSelf closeLoginView];
        } else {
            //查看 error 信息

            TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
        }
    }];
}
```

4.6 Login with Botim

Method	loginWithBotimCompletion
Callback	TTGCUCompletionHandler

example:

```
- (IBAction)botimLogin:(id)sender {
    if ([[TTkGameManager defaultManager] botimIsInstall]) {
        TTGCHUD_NO_Stop(@"login...")

        __weak __typeof(self)weakSelf = self;
    }
}
```

```

[[TTkGameManager defaultManager] loginWithBotimCompletion:^(id _Nonnull userInfo,
NSError * _Nonnull error) {

    if (!error) {

        //login success

        TTGCHUD_SUCCESS(@"success");

        [weakSelf closeLoginView];

    } else {

        //error info

        TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);

    }

}];

} else {

    // no app please hide login button

}

}

```

4.7 Login with Guest

Method	guestLoginCompletion
Callback	TTGCUUserCompletionHandler

example

```

- (void)guestLogin {

    TTGCHUD_NO_Stop(@"login...")

    __weak __typeof(self)weakSelf = self;

    [[TTkGameManager defaultManager] guestLoginCompletion:^(id _Nonnull userInfo,
NSError * _Nonnull error) {

        if (!error) {

            //login success

            TTGCHUD_HINT(@"success")

            [weakSelf closeLoginView];

        } else {

            //error info

            TTGCHUD_Stop


```

```

    }

    }];
}

```

4.8 Get User Info

Method	userInfoCompletion
Callback	TTGCUUserCompletionHandler
Params	TTGCUUserModel userType user type (TTGCLoginType by 3.7) userId user's identifier thirdUid third-party user identifier nickname nickname photoUrl head image url pushOff push switch 0:push switch on 1:push switch off

example

```

- (void)getUserInfo {
    TTGCHUD_NO_Stop(@"")

    [[TTkGameManager defaultManager] userInfoCompletion:^(id _Nullable userInfo,
    NSError * _Nullable error) {

        if (!error) {
            TTGCHUD_HINT(@"success")

            TTGCUUserModel *model = userInfo;

            [self freshUserInfo:model];
        } else {

            //error info

            TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
        }
    }];
}

```

4.9 Get Login Type

Method	loginType
Return	TTGCLoadingType

Definition:

Enum	TTGCLoadingType
Description	Enum type for Login
Enum Values	
TTGCLoadingType_unloggedIn	not login
TTGCLoadingType_TTk	TTk user
TTGCLoadingType_GameCenter	GameCenter player
TTGCLoadingType_Facebook	Facebook user
TTGCLoadingType_Twitter	Twitter user
TTGCLoadingType_Guest	Game guest

example:

```
- (void)showLoginView {  
    if ([[TTkGameManager defaultManager] loginType] == TTGCLoadingType_unloggedIn) {  
        //unlogged in and show login UI  
        [self backgroundUI];  
        [self loginView];  
    } else {  
        dispatch_after(dispatch_time(DISPATCH_TIME_NOW, (int64_t)(2.5 * NSEC_PER_SEC)),  
dispatch_get_main_queue(), ^{  
            [self getUserInfo];  
        });  
    }  
}
```

4.10 Notification of offline

Method	accountKickedNotification
Callback	TTGCAccountKickedHandler

example:

```
[[TTkGameManager defaultManager] accountKickedNotification:^(NSString * _Nullable
information) {

    //Your account has been logged in on another device, please login again.

    TTGCHUD_HINT(information);

    [self showLoginView];

}];
```

4.11 Notification of banned

Method	accountBannedNotification
Callback	TTGCAccountBannedHandler

example:

```
[[TTkGameManager defaultManager] accountBannedNotification:^(NSString * _Nullable
information, NSString * _Nullable time) {

    //Your account has been banned.

}];
```

4.12 Get Available Token

Method	getAvailableAccessToken
Callback	TTGCUCompletionHandler

example:

```
[[TTkGameManager defaultManager] getAvailableAccessToken:^(id _Nullable userInfo,
NSError * _Nullable error) {

    if (userInfo) {
```

```

        TTGCUserModel *userModel = userInfo;

        NSLog(@"userid: %@", userModel.userId);

        NSLog(@"token: %@", userModel.accessToken);

    }

}];

```

5. API: Logout

Method	logout
Callback	TTGCLogoutCompleteHandler

example:

```

- (IBAction)logout:(id)sender {
    TTGCHUD_NO_Stop(@"logout...")

    [[TTkGameManager defaultManager] logout:^(BOOL success, NSError * _Nullable error) {
        if (success) {
            TTGCHUD_HINT(@"success")

            [self showLoginView];
        } else {
            //error info

            NSLog(@"%@", error.userInfo);

            TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
        }
    }];
}

```

6. API: Game Payment

6.1 Product Purchase

Order Status Definition:

TTGCOderStatus_ProductQuerying	query product
TTGCOderStatus_Generating	order init
TTGCOderStatus_ProductPurchasing	order in trading progress
TTGCOderStatus_ProductPurchased	order purchased
TTGCOderStatus_ReceiptChecking	order verifying

IAP

Method	buyProductWithSKU: Progress: Completion: buyProductWithSKU: WithName: Progress: Completion:(v1.1.17 or later)
Params	
sku	String,product id
name	String,product name or description
Progress	TTGCOderProgressHandler
Completion	TTGCOderCompletionHandler <pre> class TTGCOderModel orderId orderRef //transaction_id channel //1 env //0=sandbox, 1=production sku //product id amount //price createTime payTime cancelTime status //0=order created, 1=order payed, 2=order reset </pre>

Xsolla

Method	xslBuyProductWithSKU: Currency: Completion:(v2.0.0 or later)
Params	
sku	String,product id

currency	String,pay currency
Completion	TTGCOderCompletionHandler <pre> class TTGCOderModel { orderId orderRef //transaction_id channel //1 env //0=sandbox, 1=production sku //product id amount //price createTime payTime cancelTime status //0=order created, 1=order payed, 2=order reset } </pre>

remark:

the Game Server should send the product to user's account after the order be payed, then check the order status by server api, Order status check is necessary for anti-spam

Server API: <AmuseGame Server API Document (to Game Developer)>

example:

```

- (IBAction)pay:(id)sender {
    TTGCHUD_NO_Stop(@"pay...")

    [[TTkGameManager defaultManager] buyProductWithSKU:@"LangChaoJD001"]

    Progress:^(TTGCOderStatus orderStatus) {
        NSLog(@"order status: %ld", (long)orderStatus);
    } Completion:^(id _Nullable orderInfo, NSError * _Nullable error) {
        if (orderInfo) {
            TTGCHUD_HINT(@"success")
        }

        if (error) {
            NSLog(@"%@", error.userInfo);

            TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
        }
    }
}

```

```

    }

    }];
}

```

6.2 Query Order

Method	queryOrderWithOrderId: Completion:
Params	
orderId	the order's id
Completion	TTGCOOrderCompletionHandler TTGCOOrderModel by 6.1

example:

```

- (IBAction)query:(id)sender {

    [[TTkGameManager defaultManager] queryOrderWithOrderId:@"xxx"
Completion:^(id _Nullable orderInfo, NSError * _Nullable error) {

        if (orderInfo) {

            //get order info

        } else {

            //error message

        }

    }];
}

```

6.3 Get Product Info

Method	getProductDetailWithSKU: Completion:
Params	
sku	String,product id
Completion	TTGCProductCompletionHandler class TTGCProductModel sku; //The string that identifies the product to the Apple App Store.

	<pre>price; //The cost of the product in the local currency. localeCurrency; //The currency code associated with the locale. localizedTitle; //The name of the product. localizedDescription; //A description of the product.</pre>
--	--

example:

```
- (void)getInfo:(NSString *)sku {

    [[TTkGameManager defaultManager] getProductDetailWithSKU:sku
Completion:^(id _Nullable productInfo, NSError * _Nullable error) {

    if (productInfo) {

        TTGCPProductModel *model = productInfo;

        NSLog(@" sku           : %@", model.sku);

        NSLog(@" price           : %@", model.price);

        NSLog(@" localeCurrency      : %@", model.localeCurrency);

        NSLog(@" localizedTitle       : %@", model.localizedTitle);

        NSLog(@" localizedDescription : %@", model.localizedDescription);

    } else {

        // error info

    }

    }];
}
```

7. API: SNS & Share

7.1 Field Description

TTGCBotimFriendModel

Params	Note
bimUid	botim user id
name	friend's name
photoUrl	friends' avatars

TTGCBotimPlayingFriendModel

Params	Note
bimUid	botim user id

userId	user id of friend
name	friend's name
photoUrl	friends' avatars

TTGCSocialBimMessage

Params	Note
bimUid	botim user id
contenString	shared text content
imageUrl	shared web picture address
title	shared title

7.2 Share (Third-Party)

Share to Facebook, WhatsApp.

7.2.1 Share To Facebook

Method	facebookShareMessage: completion:
Params	
Message	1.TTGCSocialFBInvite quote //message text
	2.TTGCSocialFBImages photoImage //photo image <UIImage>
	3.TTGCSocialFBFriendsGameInvite inviteString //invite message text
completion	TTGCShareCompleteHandler

example:

```
// share invite link to facebook
- (IBAction)fbShare:(id)sender {
    TTGCSocialFBInvite *obj = [[TTGCSocialFBInvite alloc] init];
    obj.quote = @"Join us";
    [[TTkGameManager defaultManager] facebookShareMessage:obj completion:^(BOOL success,
NSError * _Nullable error) {
```

```

        if (success) {
        } else {
            if (error) {
                TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
            }
        }
    }];
}

//share image to facebook
- (IBAction)fbpic:(id)sender {
    UIImage *image = [UIImage imageNamed:@"game_logo_1024"];
    TTGCSocialFBImages *obj = [[TTGCSocialFBImages alloc] init];
    obj.photoImage = image;
    [[TTkGameManager defaultManager] facebookShareMessage:obj completion:^(BOOL success,
NSError * _Nullable error) {
        if (success) {
        } else {
            if (error) {
                TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
            }
        }
    }];
}

//send invite to facebook friends(This feature is only available if you are logged in with
Facebook)
- (IBAction)fbGameInviteFriends:(id)sender {
    TTGCSocialFBFriendsGameInvite *obj = [[TTGCSocialFBFriendsGameInvite alloc] init];
    obj.inviteString = @"join us";
    [[TTkGameManager defaultManager] facebookShareMessage:obj completion:^(BOOL success,
NSError * _Nullable error) {
        if (success) {
            TTGCHUD_SUCCESS(@"sent the message");
        } else {
            if (error) {

```

```

                TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
            }
        }
    }];
}

```

7.2.2 Share To WhatsApp

Method	whatsAppShareMessage: completion:
Params	
Message	1.TTGCSocialWAInvite contentString // whatsApp message text
	2.TTGCSocialWAImages photos //NSArray image <UIImage>
completion	TTGCShareCompleteHandler

example:

```

// share invite link to whatsapp
- (IBAction)whatsAppShare:(id)sender {
    TTGCSocialWAInvite *obj = [[TTGCSocialWAInvite alloc] init];
    obj.contentString = @"play games";
    [[TTkGameManager defaultManager] whatsAppShareMessage:obj completion:^(BOOL success,
NSError * _Nullable error) {
        if (success) {
        } else {
            if (error) {
                TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
            }
        }
    }];
}

// share picture to whatsapp
- (IBAction)wapic:(id)sender {
    TTGCSocialWAImages *obj = [[TTGCSocialWAImages alloc] init];

```

```

UIImage *image = [UIImage imageNamed:@"game_logo_1024"];

obj.photos = @[image];

[[TTkGameManager defaultManager] whatsappShareMessage:obj completion:^(BOOL success,
NSError * _Nullable error) {

    if (success) {

    } else {

        if (error) {

            TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);

        }

    }

}];

}

```

7.3 Share (Botim)

7.3.1 Get Botim Friends

Method	getFriendsFromBotimCompletion
Callback	TTGCBimFriendsCompletionHandler

example:

```

- (void)getFriends {

    [[TTkGameManager defaultManager] getFriendsFromBotimCompletion:^(NSArray * _Nullable
list, NSError * _Nullable error) {

        // list of botim friends

        // user model TTGCBotimFriendModel

    }];

}

```

7.3.2 Get Botim Playing Game Friends

Method	getPlayingFriendsFromBotimCompletion
--------	--------------------------------------

Callback	TTGCBimFriendsCompletionHandler
----------	---------------------------------

example:

```
- (void)getFriends {
    [[TTkGameManager defaultManager] getPlayingFriendsFromBotimCompletion:^(NSArray *
_Nullable list, NSError * _Nullable error) {
        // list of botim friends
        // user model TTGCBotimPlayingFriendModel
    }];
}
```

7.3.3 Share Botim Message

Method	sendMessageToBotim:(id)message Completion:
Callback	TTGCShareCompleteHandler

example:

```
- (void)sendMessageToFriend {
    TTGCSocialBimMessage *model = [[TTGCSocialBimMessage alloc] init];
    model.bimUid = @"xxxxxxxxx";
    model.contentString = @"come and join us";
    model.title = @"play game";
    model.imageUrl =
@"http://t8.baidu.com/it/u=1484500186,1503043093&fm=79&app=86&f=JPEG?w=1280&h=853";
    [[TTkGameManager defaultManager] sendMessageToBotim:model Completion:^(BOOL success,
NSError * _Nullable error) {
        }];
}
```

8. API: Push

8.1 Register

in AppDelegate:

```
- (void)application:(UIApplication *)application
didRegisterForRemoteNotificationsWithDeviceToken:(NSData *)deviceToken {
    [[TTkGameManager defaultManager] registerDeviceToken:deviceToken];
}
```

8.2 Receive Push Message

Method	getRemoteNotification
Callback	TTGCNotificationCompletionHandler

example:

```
- (void)recieveMessage {
    [[TTkGameManager defaultManager] getRemoteNotification:^(id _Nullable result,
NSError * _Nullable error) {
        //Receive a push message and can customize the event based on the message.
        //Do something ...
    }];
}
```

9. API: Track

9.1 Field Description

TTGCTrackEvent (NS_ENUM)

Params	Note
TTGCTrackEvent_Activity	activity event
TTGCTrackEvent_Guide	guide event
TTGCTrackEvent_GuideCompletion	guide completion event
TTGCTrackEvent_Reward	reward event
TTGCTrackEvent_Rank	rank event
TTGCTrackEvent_VipInfo	vip info event
TTGCTrackEvent_AdClick	ad click event
TTGCTrackEvent_Other	other event

Track Event Param Keys

Keys Define	Values
TTGCTrackParamActivityId	af_activity_id
TTGCTrackParamActivityAction	af_activity_action
TTGCTrackParamGuideId	af_tutorial_id
TTGCTrackParamGuideDetail	af_tutorial_detail
TTGCTrackParamGuideSuccess	af_success
TTGCTrackParamRewardId	af_reward_id
TTGCTrackParamUserVip	af_user_vip
TTGCTrackParamAdId	af_ad_id

9.2 Track Event

Method	tracker_event: withValues:
--------	----------------------------

example:

```

- (IBAction)activity:(id)sender {
    [[TTkGameManager defaultManager] tracker_event:TTGCTrackEvent_Activity
withValues:@{TTGCTrackParamActivityId:@"activity1",
               TTGCTrackParamActivityAction:@"click"}];
}

- (IBAction)guide1:(id)sender {

```

```

        [[TtkGameManager defaultManager] tracker_event:TTGCTrackEvent_Guide
withValues:@{TTGCTrackParamGuideId:@"guide_test1",
              TTGCTrackParamGuideDetail:@"guide1"}];
    }

- (IBAction)guide2:(id)sender {
    [[TtkGameManager defaultManager] tracker_event:TTGCTrackEvent_Guide
withValues:@{TTGCTrackParamGuideId:@"guide_test2",
              TTGCTrackParamGuideDetail:@"guide2"}];
}

- (IBAction)guideCompletion:(id)sender {
    [[TtkGameManager defaultManager] tracker_event:TTGCTrackEvent_GuideCompletion
withValues:@{TTGCTrackParamGuideId:@"guide_test",
              TTGCTrackParamGuideSuccess:@YES,
              TTGCTrackParamGuideDetail:@"test_finish",}];
}

- (IBAction)reward:(id)sender {
    [[TtkGameManager defaultManager] tracker_event:TTGCTrackEvent_Reward
withValues:@{TTGCTrackParamRewardId:@"reward_222"}];
}

- (IBAction)rank:(id)sender {
    [[TtkGameManager defaultManager] tracker_event:TTGCTrackEvent_Rank
withValues:@{@"af_rank":@"R0"}];
}

- (IBAction)vip:(id)sender {
    [[TtkGameManager defaultManager] tracker_event:TTGCTrackEvent_VipInfo
withValues:@{TTGCTrackParamUserVip:@"Vip5"}];
}

- (IBAction)ad:(id)sender {
    [[TtkGameManager defaultManager] tracker_event:TTGCTrackEvent_AdClick
withValues:@{TTGCTrackParamAdId:@"ad_222"}];
}

```

```
}
```

10. API: Customer Service

10.1 Contact us With Messenger

Method	contactusWithMessenger
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example:

```
[[TTkGameManager defaultManager] contactusWithMessenger];
```