# **ToTokGameSDK API Document**

# (iOS)

Name	Date	version	remark
Yuanjun	2020.3.18	1.0.0	created
Yuanjun	2020.3.27	1.0.1	improvements
Yuanjun	2020.3.31	1.0.2	add game invite
Yuanjun	2020.4.07	1.0.3	add single sign-on
Yuanjun	2020.4.12	1.0.4	improvements
Yuanjun	2020.4.17	1.0.5	1.launch animation deleted
			(2.1.1)
			2.add agreement view (4.1) &
			delete 4.2 of last version
			3.Domain Changed
			4.add login with apple (4.2)
Yuanjun	2020.4.27	1.0.6	improvements
Yuanjun	2020.5.13	1.0.7	improvements
Yuanjun	2020.5.27	1.0.8	SDK rename
			1.Replace
			ToTokGameManager class
			name with TTkGameManager
			2.Replace
			TTGCLoginType_ToTok with
			TTGCLoginType_TTk
Yuanjun	2020.5.29	1.1.0	improvements

# 1. Description and definition

### 1.1 API call

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
```

### 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:

TTGCOderStatus //Payment order status

## 1.3.7 Payment Result Callback

class: TTGCOrderCompletionHandler

fields:

orderInfo //the payment order object

error

## 1.3.8 AppVersion Info Callback

class: TTGCVersionCompletionHandler

fields:

hasNewVersion //has new version

## 1.3.9 Common Callback

class: TTGCCompletionHandler

fields:

result //operation result

error

## 1.4 Errors

TTGCPlatformErrorType_Unknow	unkown error
TTGCPlatformErrorType_AuthorizeFailed	authorized failed
TTGCPlatformErrorType_ForUserInfoFailed	request user data failed
TTGCPlatformErrorType_LoginFailed	login failed
TTGCPlatformErrorType_FriendsListFailed	get firends 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 implement 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 Enviroment
    [[TTkGameManager defaultManager] setServerDomainTest];
    // set Pay Enviroment
    [[TTkGameManager defaultManager] setPayEnvironmentTest];
    // open log
    [[TTkGameManager defaultManager] openLogInfo];

    // launch SDK
    NSString *appId = @"xxxxxx";
    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:

### 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

#### 2.2.1 Check Version

Method	checkAppVersio	onCompletion
Callback	TTGCVersionCompletionHandler	
	hasNewVersion	// has new version <bool></bool>
	versionInfo	// the version detail information. class model <ttgcappversion></ttgcappversion>
	build	// app build code
	version	// app new version
	versionInfo	// the version information
	forceUpdate	// need to force upgrade <bool></bool>
	currentVersion	nCode // 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];

# 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	TTGCUserCompletionHandler

```
- (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"]);
    }
}
```

```
}1;
}
```

## 4.3 Login with GameCenter

Method	loginWithGameCenterCompletion
Callback	TTGCUserCompletionHandler

#### 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	TTGCUserCompletionHandler

```
- (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 Guest

Method	guestLoginCompletion
Callback	TTGCUserCompletionHandler

```
- (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
    }
};
```

## 4.6 Get User Info

Method	userInfoCompletion	
Callback	TTGCUserCompletionHandler	
Params	TTGCUserModel	
	userType	user type (TTGCLoginType by 3.7)
	userId	user's indentifier
	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")
        TTGCUserModel *model = userInfo;
        [self freshUserInfo:model];
    } else {
        //error info
        TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
    }
};
}
```

## 4.7 Get Login Type

Method	loginType
Return	TTGCLoginType

#### Definition:

Enum	TTGCLoginType	
Description	Enum type for Login	
Enum Values	Enum Values	
TTGCLoginType_unloggedIn not login		
TTGCLoginType_TTk ToTok user		
TTGCLoginType_	_GameCenter GameCenter player	
TTGCLoginType_	_Facebook Facebook user	
TTGCLoginType_	_Guest ToTokGame guest	

### example:

```
- (void) showLoginView {
    if ([[TTkGameManager defaultManager] loginType] == TTGCLoginType_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];
        });
    }
}
```

## 4.8 Notification of offline

Method	accountKickedNotification
Callback	TTGCAccountKickedHandler

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

```
//Your account has been logged in on another device, please login again.
TTGCHUD_HINT(information);
[self showLoginView];
}];
```

# 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:**

TTGCOrderStatus_ProductQuerying	query product
TTGCOrderStatus_Generating	order init
TTGCOrderStatus_ProductPurchasing	order in trading progress
TTGCOrderStatus_ProductPurchased	order purchased
TTGCOrderStatus_ReceiptChecking	order verifying

Method	buyProductWithSKU: Progress: Completion:	
Params	Params	
sku	String, product id	
Progress	TTGCOrderProgressHandler	
Completion	TTGCOrderCompletionHandler	
	class TTGCOrderModel	
	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	

#### 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: <ToTokGame 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	TTGCOrderCompletionHandler
	TTGCOrderModel by 5.1

```
- (IBAction) query: (id) sender {
    [[TTkGameManager defaultManager] queryOrderWithOrderId:@"xxx"

Completion:^(id _Nullable orderInfo, NSError * _Nullable error) {
    if (orderInfo) {
        //get order info
    } else {
        //error message
    }
}];
```

# 7. API: SNS & Share

### 7.1 ToTok Friends

Not yet open

## 7.2 Share

Share to Facebook, WhatsApp.

ToTok Sharing is not yet open.

### 7.2.1 Share To Facebook

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

```
// 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:@"totokgame_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></uiimage>
completion	TTGCShareCompleteHandler

## 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

```
- (void) recieveMessage {
```