# **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	

# 1. Description and definition

## 1.1 API call

Every API is called by [ToTokGameManager 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:

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

versionInfo //the version detail information. class model <TTGCAppVersion>

error

### 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 Environment
    [[ToTokGameManager defaultManager] setServerDomainTest];
```

```
// set Pay Environment
[[ToTokGameManager defaultManager] setPayEnvironmentTest];

// open log
[[ToTokGameManager defaultManager] openLogInfo];

// launch SDK

NSString *appId = @"xxxxx";

NSString *appSecret = @"xxxxxx";

NSString *gameid = @"xxxxxx";

[[ToTokGameManager 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 [[ToTokGameManager defaultManager] application:app openURL:url
options:options];
}
```

#### 2.1.3 App Events:

```
- (void) applicationDidEnterBackground: (UIApplication *) application {
    [[ToTokGameManager defaultManager] applicationDidEnterBackground:application];
}
- (void) applicationWillEnterForeground: (UIApplication *) application {
    [[ToTokGameManager defaultManager] applicationWillEnterForeground:application];
}
- (void) applicationDidBecomeActive: (UIApplication *) application {
    [[ToTokGameManager defaultManager] applicationDidBecomeActive:application];
}
- (void) applicationWillTerminate: (UIApplication *) application {
    [[ToTokGameManager defaultManager] applicationWillTerminate:application];
}
```

#### 2.1.4 Push Register:

```
- (void) application: (UIApplication *) application
didRegisterForRemoteNotificationsWithDeviceToken: (NSData *) deviceToken {
    [[ToTokGameManager defaultManager] registerDeviceToken:deviceToken];
}
- (void) application: (UIApplication *) application
didReceiveRemoteNotification: (NSDictionary *) userInfo fetchCompletionHandler: (void
(^) (UIBackgroundFetchResult)) completionHandler {
    [[ToTokGameManager 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.

```
- (void) checkVersion {
    [[ToTokGameManager defaultManager] checkAppVersionCompletion:^(BOOL hasNewVersion,

TTGCAppVersionModel * _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
```

#### 2.2.1 Check Version

Method	checkAppVersionCompletion	
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

```
[[ToTokGameManager defaultManager] openLogInfo];
```

## 3.2 Disable Log Output(default)

[[ToTokGameManager defaultManager] closeLogInfo];

### 3.3 Set Test Environment

[[ToTokGameManager defaultManager] setServerDomainTest];

# 3.4 Set Production Environment(default)

[[ToTokGameManager defaultManager] setServerDomainProduction];

### 3.5 Set Sandbox Payment

[[ToTokGameManager defaultManager] setPayEnvironmentTest];

## 3.6 Set Production Payment(default)

 $\hbox{\tt [[ToTokGameManager defaultManager] setPayEnvironmentProduction];}$ 

# 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 {
    [[ToTokGameManager defaultManager] showAgreementView];
}
```

## 4.2 Login with Apple

#### Login with Apple only supports iOS13 and higher.

Method	loginWithAppleCompletion
Callback	TTGCUserCompletionHandler

#### example:

```
- (IBAction)appleLogin:(id)sender {
   TTGCHUD_NO_Stop(@"login...")
   __weak __typeof(self)weakSelf = self;
   [[ToTokGameManager 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	TTGCUserCompletionHandler

```
- (void) gamecenterLogin {
    TTGCHUD_NO_Stop(@"login...")
    __weak __typeof(self) weakSelf = self;
    [[ToTokGameManager 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;
    [[ToTokGameManager 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

#### example

```
- (void)guestLogin {
   TTGCHUD_NO_Stop(@"login...")
   __weak __typeof(self)weakSelf = self;
   [[ToTokGameManager 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(@"")
    [[ToTokGameManager 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_	e_ToTok ToTok user	
TTGCLoginType_	e_GameCenter GameCenter player	
TTGCLoginType_	e_Facebook Facebook user	
TTGCLoginType_	e_Guest ToTokGame guest	

```
- (void) showLoginView {
   if ([[ToTokGameManager 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

#### example:

```
[[ToTokGameManager 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

```
- (IBAction) logout: (id) sender {
   TTGCHUD_NO_Stop(@"logout...")
   [[ToTokGameManager 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	
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)>

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

### example:

```
- (IBAction) query: (id) sender {
    [[ToTokGameManager 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 image to facebook
- (IBAction) fbpic: (id) sender {
   UIImage *image = [UIImage imageNamed:@"totokgame logo 1024"];
   TTGCSocialFBImages *obj = [[TTGCSocialFBImages alloc] init];
   obj.photoImage = image;
   [[ToTokGameManager 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";
   [[ToTokGameManager 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

```
// share invite link to whatsApp
- (IBAction)whatsAppShare:(id)sender {
   TTGCSocialWAInvite *obj = [[TTGCSocialWAInvite alloc] init];
   obj.contentString = @"play games";
   [[ToTokGameManager 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:@"totokgame logo 1024"];
   obj.photos = @[image];
   [[ToTokGameManager defaultManager] whatsAppShareMessage:obj completion:^(BOOL success,
NSError * Nullable error) {
      if (success) {
      } else {
```

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

## 8. API: Push

## 8.1 Register

in AppDelegate:

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

## 8.2 Receive Push Message

Method	getRemoteNotification
Callback	TTGCNotificationCompletionHandler

```
- (void)recieveMessage {
    [[ToTokGameManager defaultManager] getRemoteNotification:^(id _Nullable result,

NSError * _Nullable error) {
        //Receive a push message and can customize the event based on the message.
        //Do something ...
}];
```