

# LiveEngage Enterprise In-App Messenger SDK: iOS (swift)

[See Objective-C](#)

## Deployment Guide

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## [Quick Start](#)

[Step 1: Download and unzip the SDK](#)

[Step 2: Configure project settings to connect LiveEngage SDK](#)

[Step 3: Initialization](#)

## [Advanced Configurations](#)

[SDK Initialization and Lifecycle](#)

[Authentication](#)

[UI](#)

[Conversation Lifecycle](#)

[Notifications](#)

[User Data](#)

[Logs & info](#)

## [API Methods](#)

[Initialization](#)

[showConversation](#)

[Conversation Query](#)

[Authentication code](#)

[Container View Controller](#)

[removeConversation](#)

[reconnect](#)

[toggleChatActions](#)

[checkActiveConversation](#)

[markAsUrgent](#)

[isUrgent](#)

[dismissUrgent](#)

[resolveConversation](#)

[clearHistory](#)

[Logout](#)

[Destruct](#)

[handlePush](#)

[registerPushNotifications](#)

[didReceivePushNotification](#)

[shouldShowPushNotification](#)

[customLocalPushNotificationView](#)

[notificationTapped](#)

[setUserProfile](#)

[getAssignedAgent](#)

[subscribeLogEvents](#)

[logInvoked](#)

[getSDKVersion](#)

## Callbacks index

[LPMessagingSDKConnectionStateChanged](#)  
[func LPMessagingSDKError\(error: NSError\)](#)  
[LPMessagingSDKHasConnectionError\(error: String?\)](#)  
[LPMessagingSDKAuthenticationFailed\(error: NSError\)](#)  
[LPMessagingSDKTokenExpired](#)  
[LPMessagingSDKActionsMenuToggled\(toggled: Bool\)](#)  
[LPMessagingSDKCustomButtonTapped](#)  
[LPMessagingSDKAgentIsTypingStateChanged\(isTyping: Bool\)](#)  
[LPMessagingSDKOffHoursStateChanged\(isOffHours: Bool, brandID: String\)](#)  
[LPMessagingSDKConversationViewControllerDidDismiss\(\)](#)  
[LPMessagingSDKConversationStarted\(conversationID: String?\)](#)  
[LPMessagingSDKConversationEnded\(conversationID: String?\)](#)  
[LPMessagingSDKConversationCSATDismissedOnSubmission\(conversationID: String?\)](#)  
[LPMessagingSDKCSATScoreSubmissionDidFinish\(brandID: String, rating: Int\)](#)  
[LPMessagingSDKNotification\(didReceivePushNotification notification: LPNotification\)](#)  
[LPMessagingSDKNotification\(shouldShowPushNotification notification: LPNotification\)](#)  
[-> Bool](#)  
[LPMessagingSDKNotification\(customLocalPushNotificationView notification: LPNotification\) -> UIView](#)  
[LPMessagingSDKNotification\(notificationTapped notification: LPNotification\)](#)  
[LPMessagingSDKAgentDetails\(agent: LPUser?\)](#)  
[LPMessagingSDKObsoleteVersion\(error: NSError\)](#)

## Config index

### Updating an existing version of the SDK

### String localization in SDK

#### Locale - Timestamps Formatting

[Time/Date styles:](#)

[Time/Date formats:](#)

#### Off Hours

[Date & Time](#)

[Timezone](#)

[Bubble timestamp](#)

[Separator timestamp](#)

[Resolve message](#)

### OS Certificate creation

[Creating a Certificate Signing Request file](#)

[Creating a key .p12 file](#)

[Creating a push notification certificate. \(der format .crt file\)](#)

### LiveEngage Configuration

[Push Notifications](#)

### Open source list

### Security

---

## Quick Start

The LivePerson SDK provides brands with a simple, yet enterprise-grade and secure in-app messaging solution. Through in-app messaging, brands will foster connections with their customers and increase app engagement and retention.

This Quick Start will quickly get you up and running with a project powered by LivePerson. When you're done, you'll be able to send messages between an iOS device and LiveEngage. To complete this Quick Start, you will need a LiveEngage account. You can get the number and login information from the LivePerson account team.

The LiveEngage In-App Messenger is supported on both iOS 8, iOS 9 operating systems, and on the following devices: iPhone 6s+, iPhone 6s, iPhone 6+, iPhone 6, iPhone 5s, iPhone 5, and iPhone 4s.

### Step 1: Download and unzip the SDK

Click [here](#) to download the SDK package. Once downloaded, extract the ZIP file to a folder on your Mac.

### Step 2: Configure project settings to connect LiveEngage SDK

1. Copy the files into the project.
2. In project settings, navigate to the **General** tab, and add all Framework files to the **Embedded Binaries** section.



3. If you are using Xcode 8 with iOS 10 (or later): In project setting, navigate to **Capabilities** and enable **Keychain Sharing**. LiveEngage iOS SDK uses keychain to store sensitive settings and data. This step is a workaround for an open Apple's bug that fails to use keychain store in Xcode 8 and iOS 10: <https://openradar.appspot.com/27422249>
4. In project settings, navigate to the **Build Phases** tab, and click the + button to add a **New Run Script Phase**. Add the following script in order to loop through the frameworks embedded in the

application and remove unused architectures (used for simulator). This step is a workaround for a known iOS issue <http://www.openradar.me/radar?id=6409498411401216> and is necessary for archiving your app before publishing it to the App Store.

```
bash "${BUILT_PRODUCTS_DIR}/${FRAMEWORKS_FOLDER_PATH}/LPInfra.framework/frameworks-strip.sh"
```

### Step 3: Initialization

Now that you have the configuration file for your project, you're ready to begin implementing. To initialize the SDK, you must have a LivePerson account number.

Inside `AppDelegate`, add:

```
import LPMessagingSDK
import LPInfra
import LPAMS
```

#### 1. Initialization

Inside `AppDelegate`, under `didFinishLaunchingWithOptions`, add the following code:

```
do {
    try LPMessagingSDK.instance.initialize()
} catch {
    // SDK has an initialization error...
    return
}
```

#### 2. Set up and call the conversation view. You'll need to provide your LivePerson account number and a container view controller.

```
let conversationQuery = LPMessagingSDK.instance.getConversationBrandQuery(accountNumber)
LPMessagingSDK.instance.showConversation(conversationQuery, authenticationCode:
    accountNumber, containerViewController: self)
```

#### 3. In order to remove the conversation view when your container is deallocated, run the following code:

```
let conversationQuery = LPMessagingSDK.instance.getConversationBrandQuery(accountNumber)
LPMessagingSDK.instance.removeConversation(conversationQuery)
```

#### 4. In the **General** tab, make sure that the framework files are under **Embedded Libraries**.

5. In Build settings make sure **Embedded content contains Swift code** is set to **YES**.

## Advanced Configurations

### SDK Initialization and Lifecycle

In order to get started and initialize the In-App Messaging SDK, utilize the following functions:

1. **public func** initialize(brandID: String? = nil) throws
2. **public func** showConversation(conversationQuery: ConversationParamProtocol, authenticationCode: String? = nil, containerViewController: UIViewController? = nil)
3. **public func** removeConversation(conversationQuery: ConversationParamProtocol)
4. <LPMessagingSDKdelegate> **optional func** LPMessagingSDKConnectionStateChanged(isReady: Bool, brandID: String)
5. <LPMessagingSDKdelegate> **func** LPMessagingSDKError(error: NSError)
6. <LPMessagingSDKdelegate> **optional func** LPMessagingSDKHasConnectionError(error: String?)

Supporting functions:

7. **public func** getConversationBrandQuery(brandID: String) -> ConversationParamProtocol
8. **public func** getConversationBrandAndSkillQuery(brandID: String, skillID: String) -> ConversationParamProtocol
9. **public func** getConversationConsumerQuery(consumerID: String?, brandID: String, agentToken: String) -> ConversationParamProtocol
10. **public func** isBrandReady(brandID: String) -> Bool

### Authentication

For users of oAuth2 for customer authentication, the following functions apply:

1. **public func** reconnect(conversationQuery: ConversationParamProtocol, authenticationCode: String)
2. <LPMessagingSDKdelegate> **func** LPMessagingSDKAuthenticationFailed(error: NSError)
3. <LPMessagingSDKdelegate> **func** LPMessagingSDKTokenExpired(brandID: String)

### UI

To determine the layout of messaging within the app, you can utilize various actions to control the behavior and UI such as menus, custom buttons, typing indication, etc.

1. **public func** toggleChatActions(accountID: String, sender: UIBarButtonItem? = nil)
2. <LPMessagingSDKdelegate> **optional func** LPMessagingSDKActionsMenuToggled(toggled: Bool)
3. <LPMessagingSDKdelegate> **optional func** LPMessagingSDKCustomButtonTapped()
4. <LPMessagingSDKdelegate> **optional func** LPMessagingSDKAgentIsTypingStateChanged(isTyping: Bool)
5. <LPMessagingSDKdelegate> **optional func** LPMessagingSDKOffHoursStateChanged(isOffHours: Bool, brandID: String)
6. <LPMessagingSDKdelegate> **optional func** LPMessagingSDKConversationViewControllerDidDismiss()

## Conversation Lifecycle

During the course of the conversation, consumers can take several actions such as Mark as urgent to receive a faster service, or Resolve conversation to let your agents know they have received their answers.

1. `<LPMessagingSDKdelegate> optional func LPMessagingSDKConversationStarted(conversationID: String?)`
2. `<LPMessagingSDKdelegate> optional func LPMessagingSDKConversationEnded(conversationID: String?)`
3. `public func checkActiveConversation(conversationQuery: ConversationParamProtocol) -> Bool`
4. `public func markAsUrgent(conversationQuery: ConversationParamProtocol)`
5. `public func isUrgent(conversationQuery: ConversationParamProtocol) -> Bool`
6. `public func dismissUrgent(conversationQuery: ConversationParamProtocol)`
7. `public func resolveConversation(conversationQuery: ConversationParamProtocol)`
8. `<LPMessagingSDKdelegate> optional func LPMessagingSDKConversationCSATDismissedOnSubmission(conversationID: String?)`
9. `<LPMessagingSDKdelegate> optional func LPMessagingSDKCSATScoreSubmissionDidFinish(brandID: String, rating: Int)`
10. `public func clearHistory(conversationQuery: ConversationParamProtocol) throws`
11. `public func logout()`
12. `public func destruct()`

## Notifications

Push and local notifications are a key factor that make the experience better for consumers - they never have to stay in your app or keep the window open as they will get a proactive notification as soon as a reply or notice is available.

*Note: In order to enable push notifications, you must also configure them within the LiveEngage UI. [See instructions](#).*

1. `public func handlePush(userInfo: [NSObject : AnyObject])`
2. `public func registerPushNotifications(token token: NSData, notificationDelegate: LPMessagingSDKNotificationDelegate? = nil, alternateBundleID: String? = nil)`
3. `<LPMessagingSDKNotificationDelegate> optional func LPMessagingSDKNotification(didReceivePushNotification notification: LPNotification)`
4. `<LPMessagingSDKNotificationDelegate> optional func LPMessagingSDKNotification(shouldShowPushNotification notification: LPNotification) -> Bool`
5. `<LPMessagingSDKNotificationDelegate> optional func LPMessagingSDKNotification(customLocalPushNotificationView notification: LPNotification) -> UIView`
6. `<LPMessagingSDKNotificationDelegate> optional func LPMessagingSDKNotification(notificationTapped notification: LPNotification)`

## User Data

Pass and display consumer information to agents, and agent information to consumers.

1. `public func setUserProfile(lpuser: LPUser, brandID: String)`
2. `public func getAssignedAgent(conversationQuery: ConversationParamProtocol) -> LPUser?`

3. `<LPMessagingSDKdelegate> optional func LPMessagingSDKAgentDetails(agent: LPUser?)`

## Logs & info

Send logs from LiveEngage to your app. Logs include different severity levels of errors and warnings.

1. `public func subscribeLogEvents(logLevel: LogLevel)`
2. `<LPMessagingSDKdelegate> func LPMessagingSDKObseleteVersion(error: NSError)`
3. `public func logInvoked(text: String?, logLevel: LogLevel?, timestamp: String?, className: String?, funcName: String?)`
4. `<LPMessagingSDKdelegate> optional func L`
5. `public func getSDKVersion() -> String?`

## API Methods

### Initialization

The SDK initialization is done only once, inside `AppDelegate`. This function checks that the SDK has all mandatory preconditions. For example, it is able to find the bundle file, verify that all the pre-defined configurations are valid, and more.

If any of the preconditions are not met, an exception is thrown. Once an exception is thrown, you must not do any other call to the SDK.

```
do {  
    try LPMessagingSDK.instance.initialize()  
} catch {  
    // SDK has an initialization error...  
    return  
}
```

### showConversation

This method is used to open the conversation screen. It accepts 3 parameters:

- **Conversation Query**

The conversation query represents a 'filter' for the conversation screen, determining which of the conversations will be displayed in the following screens. The default conversationQuery sorts the conversations by account number.

See [helpers methods](#) above for how to generate a conversation query.

- **Authentication code**

The SDK can enable code-flow SSO. If your account uses SSO, pass the auth-code here. Otherwise, skip this parameter.

- **Container View Controller**

The SDK needs a container view controller. This can be done in two ways:



a. View Controller mode

If you provide a container viewController, the SDK will put itself inside as a child viewController. This mode allows you to keep your own navigation bar intact. Using this method, you can use the provided callbacks to retrieve data from the SDK and show it in the navigation bar (users profile data, avatar URL, calling menu items, etc.)

b. Window mode

If you don't provide a container view controller, the SDK places its UI components on top of the app UI, including the navigation bar.

```
LPMessagingSDK.instance.showConversation(conversationQuery, authenticationCode:
accountNumber, containerViewController: self)
```

### **removeConversation**

When navigating out of the conversation screen, remove the view controller from its container. This is done by calling remove conversation API. The method will remove the SDK UI and clean the service or network operation that was running.

```
LPMessagingSDK.instance.removeConversation(conversationQuery)
```

### **reconnect**

When using SSO in an authenticated connection, an auth-code is passed to the SDK (see `showConversation` API). The session in this case might have an expiration date (see `LPMessagingSDKTokenExpired` ). To reconnect with a new token, use the following 'reconnect' API and pass the new token.

```
LPMessagingSDK.instance.reconnect(query, authenticationCode: "Authentication code")
```

### **toggleChatActions**

This API call is used to open or close the SDK menu.

- If you're using [window mode](#), you won't need to utilize this method as the SDK will have a dedicated button in the navigation bar to toggle the menu.
- If you are using [view controller](#) mode - you may call this API to open the SDK menu, or use other APIs to build your own menu.

### **checkActiveConversation**

Check if there is an active conversation by passing a conversation query.

- Note that conversation query defines a filter that fetches conversations which match certain conditions. Each query can have one active conversation at most.

- Conversation is said to be active the moment an 'ack' is received from the server. It may not yet have an assigned agent.
- You may call this API only if you are sure that the SDK is in sync with the server, meaning `LPMessagingSDKConnectionStateChanged` was invoked and `isReady` is set to true.

```
LPMessagingSDK.instance.checkActiveConversation(conversationQuery)
```

## **markAsUrgent**

A consumer can mark a conversation as urgent in order to request a faster response from the agent.

You can call the API only if there's an active conversation, otherwise an alert will be triggered. The conversation is marked as urgent only after an ACK is received from the server.

```
LPMessagingSDK.instance.markAsUrgent(conversationQuery)
```

## **isUrgent**

Checks if the active conversation (if existing) is marked as urgent. Otherwise returns false.

Note that you must check that the SDK is in [ready state](#) before calling this method.

```
let isMarkedAsUrgent = LPMessagingSDK.instance.isUrgent(conversationQuery)
```

## **dismissUrgent**

This API is used to cancel [markAsUrgent](#) API. It will reset the SLA for the agent response back to default. This API can be called only for open conversations.

```
LPMessagingSDK.instance.dismissUrgent(conversationQuery)
```

## **resolveConversation**

This API enables a conversation to be resolved. The API will request the server to mark the active conversation as resolved. If there is no active conversation, an alert will be displayed.

```
LPMessagingSDK.instance.resolveConversation(conversationQuery)
```

## clearHistory

This API may be used only when there is no active conversation. This API clears the local database. The history is still available on the server, but won't be retrieved from the specific device, unless a fresh installation is made.

```
do {  
    try LPMessagingSDK.instance.clearHistory(conversationQuery)  
} catch {  
    // Clear history error...  
}
```

## Logout

This method is a destructive method that is typically used to clean a user's data before a second user logs into the same device. This method conducts the following:

- Unregisters from the push notification service
- Clears all SDK persistent data
- Cleans running operations ([see destruct](#))

```
LPMessagingSDK.instance.logout()
```

## Destruct

This method is used to clean running operations of the SDK. Note that this method closes all active connections and removes conversation views.

```
LPMessagingSDK.instance.destruct()
```

## handlePush

In order to receive all incoming push notifications in a single function and handle them, add the following method. This method cooperates with 2 other API methods:

- This method calls [shouldShowPushNotification](#) method. If the host app returns false, the SDK will not show anything to the UI.

- Otherwise, the SDK will ask the host app to provide a view as an in-app notification. If the host app doesn't implement this method, the SDK will use its own implementation.

```
func application(application: UIApplication, didReceiveRemoteNotification userInfo:
    [NSObject : AnyObject], fetchCompletionHandler completionHandler:
    (UIBackgroundFetchResult) -> Void) {

    LPMessagingSDK.instance.handlePush(userInfo)

}
```

## registerPushNotifications

Register to LPMessagingSDK push notifications with the following code in AppDelegate:

- LivePerson push service uses the bundle ID to identify your app.
  - “alternateBundleID” is an optional value that can be used so that the LivePerson pusher service identifies your app with this identifier.
  - In debug mode the SDK appends “-dev” string to the bundle id.
- Note that push notifications must be pre-configured, and an APN certificate has to be uploaded to LiveEngage platform. See more info on [‘how to configure push notifications’](#),

```
func application(application: UIApplication,
    didRegisterForRemoteNotificationsWithDeviceToken deviceToken: NSData) {

    LPMessagingSDK.instance.registerPushNotifications(token: deviceToken,
        notificationDelegate: self, alternateBundleID: “__alternateBundleID__”)

}
```

## didReceivePushNotification

When handling the push notifications, the SDK will form up a struct: LPNotification, which will then be passed to the host app.

## shouldShowPushNotification

After calling [handlePush](#), the SDK will ask the host app if it should show an in-app notification in the UI. (See [handle push](#) for the full description).

## customLocalPushNotificationView

If `shouldShowPushNotification` is not implemented, or it returns yes, the app can implement this method for showing an in-app notification in the UI. In case the method is not implemented, the SDK will provide and show its own view.

## notificationTapped

When tapping a local notification message bar, the following delegate is called:

```
func LPMessagingSDKNotification(notificationTapped notification: LPNotification) {  
    ((UIApplication.sharedApplication().delegate as!  
AppDelegate).mainViewController?.centerViewController as?  
LPNavigationController)?.navigateTo("chatView",data: ["brand":true])  
}
```

## setUserProfile

Add custom parameters about the user and set them for the messaging agent.  
Passed object is an instance of `LPUser` (a subclass of `NSObject`) with the following properties:

```
var firstName: String?  
var lastName: String?  
var profileImageUrl: String?  
var phoneNumber: String?  
var employeeID: String?  
var uid: String?
```

```
let user = LPUser(firstName: "John", lastName: "Doe", profileImageUrl: "URL of image",  
phoneNumber: "555-555555")  
LPMessagingSDK.instance.setUserProfile(user)
```

## getAssignedAgent

Get assigned agent details of the last or current conversation - depending on `retrieveAssignedAgentFromLastClosedConversation` in the `LPConfig defaultConfiguration`. You must check that the [SDK is ready](#) before calling this method.

```
let agent = LPMessagingSDK.instance.getAssignedAgent(conversationQuery)
```

## subscribeLogEvents

Subscribe to log events (Trace, Debug, Info, Warning, Error). Each time a log event with the passed log level occurs, the callback will be invoked with the log object.

Passed object is an instance of `LPLog` (a subclass of `NSObject`) with the following properties:

```
var timestamp: String?
var className: String?
var funcName: String?
var text: String?
var logLevel: LogLevel?
```

LogLevel enum:

```
case TRACE
case DEBUG
case INFO
case WARNING
case ERROR
case OFF
public var description: String { get }
public init(string: String)
```

```
LPMessagingSDK.instance.subscribeLogEvents(LogLevel.INFO) { (log) -> () in
    NSLog(log.text)
}
```

## logInvoked

After subscribing to log events, you'll get the logs inside this method.

## getSDKVersion

Get current SDK version string.

```
let sdkVersionString = LPMessagingSDK.instance.getSDKVersion()
```

## Callbacks index

### **LPMessagingSDKConnectionStateChanged**

Invoked when the connection state is changed.

- **isReady**: Bool - Set to true when the SDK is connected and in sync with the server.
- **brandID**: String - Brand account number

### **func LPMessagingSDKError(error: NSError)**

Called when the SDK has a general error and cannot proceed.

### **LPMessagingSDKHasConnectionError(error: String?)**

Called whenever the SDK receives a connection error from the socket.

### **LPMessagingSDKAuthenticationFailed(error: NSError)**

Called when the current session fails due to an authentication error.

### **LPMessagingSDKTokenExpired**

Called when the current session fails due to an authentication error.

### **LPMessagingSDKActionsMenuToggled(toggled: Bool)**

Called when the action menu is toggled.

### **LPMessagingSDKCustomButtonTapped**

[In window mode only](#), the app can place a custom button in the SDK UI. When the button is tapped, the following delegate method is invoked:

```
LPMessagingSDK.instance.delegate = self
```

**When this button is pressed, it will call the following delegate:**

```
func LPMessagingSDKCustomButtonTapped() {  
    UIApplication.sharedApplication().openURL(NSURL(string: "tel://55555555")!)  
}
```

### **LPMessagingSDKAgentIsTypingStateChanged(isTyping: Bool)**

Called when the typing state of the agent is changed.

### **LPMessagingSDKOffHoursStateChanged(isOffHours: Bool, brandID: String)**

Delegate which called when an off hours state changes.

### **LPMessagingSDKConversationViewControllerDidDismiss()**

Delegate which called when the conversation viewcontroller is dismissed (both for window mode and viewController mode).

### **LPMessagingSDKConversationStarted(conversationID: String?)**

Called when a new conversation is started.

### **LPMessagingSDKConversationEnded(conversationID: String?)**

Called when an open conversation is ended by the consumer or by the agent.

### **LPMessagingSDKConversationCSATDismissedOnSubmission(conversationID: String?)**

Called after CSAT screen is dismissed by clicking **Submit**.

### **LPMessagingSDKCSATScoreSubmissionDidFinish(brandID: String, rating: Int)**

When a conversation is resolved, a feedback page is presented (CSAT - Customer Satisfaction). This delegate method is invoked after the CSAT is submitted. If the user chooses to skip the CSAT, the delegate method is called with score=0.



**LPMessagingSDKNotification(didReceivePushNotification notification: LPNotification)**

**LPMessagingSDKNotification(shouldShowPushNotification notification: LPNotification) -> Bool**

**LPMessagingSDKNotification(customLocalPushNotificationView notification: LPNotification) -> UIView**

**LPMessagingSDKNotification(notificationTapped notification: LPNotification)**

**LPMessagingSDKAgentDetails(agent: LPUser?)**

Called when agent details are received or updated. For every message, the SDK checks for agent details in order to determine whether the assigned agent was changed. If there is no assigned agent, agent will be nil, for instance, when the consumer is returned to queue.

**LPMessagingSDKObsoleteVersion(error: NSError)**

Called when the SDK version is obsolete and needs to be updated.

## Config index

The SDK allows you to configure the look and feel of your app using **LPConfig** object. To apply a custom look and feel, create your own configuration instance and assign the attributes you want to customize.

**The most suitable time to customize configuration is right after the SDK initialization and before calling `showConversation()`.**

To get the default configuration:

```
let configuration = LPConfig.defaultConfiguration
```

To print all configurable attributes and their default values call:

```
LPConfig.printAllConfigurations()
```



To customize an attribute, follow this example:


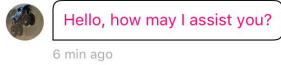
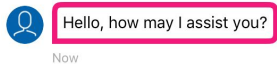
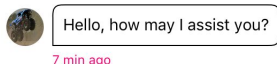

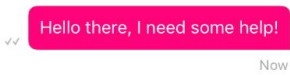
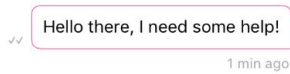



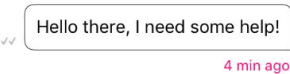
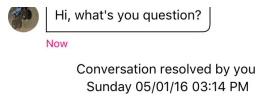
```
configuration.agentBubbleBackgroundColor = UIColor.purpleColor()
configuration.brandName = "Brand Name"
configuration.agentBubbleBorderWidth = 0.5
```

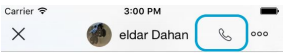
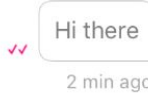
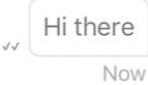
## Updating an existing version of the SDK

In case your SDK is using **configFile.plist**, you should use the following map in order to set new configurations:

[Old ConfigFile to new LPConfig Map](#)

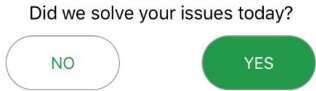
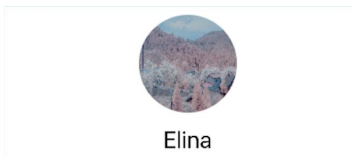
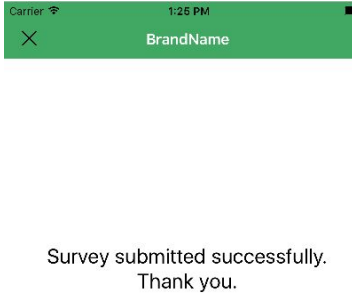
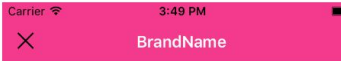
Attribute name	Type	Description	Example	Default
<code>remoteUserBubbleBackgroundColor</code>	<code>UIColor</code>	Color code for the background of the remote user bubble.	 Hello, how may I assist you? 1 min ago	#0362AC
<code>remoteUserBubbleBorderColor</code>	<code>UIColor</code>	Color code for the outline color.	 Hello, how may I assist you? 4 min ago	#0362AC

<b>remoteUserBubbleLinkColor</b>	<b>UIColor</b>	Color code for links in the text of the remote user bubble.	 A remote user bubble with a circular profile picture, the text "Hi, please visit <a href="http://www.liveperson.com">www.liveperson.com</a> ", and a timestamp "Now".	<b>#FFFFFF</b>
<b>remoteUserBubbleTextColor</b>	<b>UIColor</b>	Color code for the text of the remote user bubble.	 A remote user bubble with a circular profile picture, the text "Hello, how may I assist you?", and a timestamp "6 min ago".	<b>#FFFFFF</b>
<b>remoteUserBubbleBorderWidth</b>	<b>Double</b>	Double number for the outline width.	 A remote user bubble with a circular profile picture, the text "Hello, how may I assist you?", and a timestamp "Now". The bubble has a thick pink border.	<b>2</b>
<b>remoteUserBubbleTimestampColor</b>	<b>UIColor</b>	Color code for the timestamp of the remote user bubble.	 A remote user bubble with a circular profile picture, the text "Hello, how may I assist you?", and a timestamp "7 min ago".	<b>#AAAAAA</b>
<b>remoteUserTypingTintColor</b>	<b>UIColor</b>	Color of the remote user typing bubbles animation	 A remote user typing animation consisting of a circular profile picture and three small pink bubbles.	<b>#FFFFFF</b>
<b>userBubbleBackgroundColor</b>	<b>UIColor</b>	Color code for the background of the visitor bubble.	 A visitor bubble with a pink background, the text "Hello there, I need some help!", and a timestamp "Now".	<b>#FFFFFF</b>
<b>userBubbleBorderColor</b>	<b>UIColor</b>	Color code for the outline color.	 A visitor bubble with a white background, the text "Hello there, I need some help!", and a timestamp "1 min ago". The bubble has a pink border.	<b>#BEBEBE</b>
<b>userBubbleLinkColor</b>	<b>UIColor</b>	Color code for links in the text of the visitor bubble.	 A visitor bubble with a white background, the text " <a href="http://www.liveperson.com">www.liveperson.com</a> ", and a timestamp "Now".	<b>#0000ee</b>
<b>userBubbleTextColor</b>	<b>UIColor</b>	Color code for the text of the visitor bubble.	 A visitor bubble with a white background, the text "Hello there, I need some help!", and a timestamp "3 min ago". The text is pink.	<b>#7C7C7C</b>
<b>userBubbleBorderWidth</b>	<b>Double</b>	Double number for the outline width.	 A visitor bubble with a white background, the text "Hello there, I need some help!", and a timestamp "Distributed Now". The bubble has a thick pink border.	<b>1</b>
<b>userBubbleTimestampColor</b>	<b>UIColor</b>	Color code for the timestamp of the visitor bubble.	 A visitor bubble with a white background, the text "Hello there, I need some help!", and a timestamp "4 min ago".	<b>#AAAAAA</b>
<b>systemBubbleTextColor</b>	<b>UIColor</b>	Color code for the text of the system messages.	 A system message bubble with a circular profile picture, the text "Hi, what's your question?", a timestamp "Now", and a footer "Conversation resolved by you Sunday 05/01/16 03:14 PM".	<b>#000000</b>

<b>customButtonImage</b>	<b>UIImage</b>	<p><a href="#">In window mode</a> only:</p> <p>Custom button icon image. This will be displayed on the navigation bar.</p> <p>When the button is pressed, a dedicated callback will be invoked. (See <code>LPMessagingSDKCustomButtonTapped</code> for more information)</p>		nil
<b>customButtonDescription</b>	<b>String</b>	Accessibility voiceover string for the custom button.	###	"call"
<b>checkmarkVisibility</b>	<b>CheckmarksState (Integer Enum)</b>	<p>Checkmark visibility of the following options (type <code>CheckmarksState</code>):</p> <p><b>SentOnly</b> - Show checkmarks for only Sent messages.</p> <p><b>SentAndAccepted</b> - Show checkmarks for only Sent and Accepted messages.</p> <p><b>All</b> - Show checkmarks for Sent, Accepted and Read messages.</p>	###	Checkmarks State .All
<b>checkmarkReadColor</b>	<b>UIColor</b>	Color of checkmark indication signs of Read messages		#004dc9
<b>checkmarkDistributedColor</b>	<b>UIColor</b>	Color of checkmark indication signs of Distributed messages		#808080




<b>checkmarkSentColor</b>	<b>UIColor</b>	Color of checkmark indication signs of Sent messages		#808080
<b>readReceiptTextSent</b>	<b>String</b>	Text for sent indication		"Sent"
<b>readReceiptTextDistributed</b>	<b>String</b>	Text for distributed indication		"Distributed"
<b>readReceiptTextRead</b>	<b>String</b>	Text for read indication.		"Read"
<b>isReadReceiptTextMode</b>	<b>Bool</b>	<p>Two options for read indication:</p> <ul style="list-style-type: none"> <li>• Read Receipt with Text Mode</li> <li>• Read Receipt with Icon Mode</li> </ul> <p>If the parameter set as true the mode will be Text. If the parameter set as false the mode will be Icon. Default value is true.</p>		true
<b>csatSubmitButtonCornerRadius</b>	<b>Double</b>	Corner radius of the Submit button		30
<b>csatSubmitButtonBackgroundColor</b>	<b>UIColor</b>	Background color code of the Submit button		#229A49
<b>csatSubmitButtonTextColors</b>	<b>UIColor</b>	Text color code of the Submit button		#FFFFFF
<b>csatRatingButtonSelectedColor</b>	<b>UIColor</b>	Background Color code of the rating buttons		#229A49

<b>csatResolutionButtonSelectedColor</b>	<b>UIColor</b>	Color code for the resolution confirmation buttons (YES/NO) when selected	<div>Did we solve your issues today? <div>NO</div><div>YES</div></div>	#229A49
<b>csatResolutionFeedbackText</b>	<b>String</b>	Text for the feedback label		"Your feedback helps us serve you better.\nIt will not be shared with\nany Customer Service Representative."
<b>csatResolutionQuestionText</b>	<b>String</b>	Text for the resolution confirmation question		"Did we solve your issues today?"
<b>csatAllTitlesTextColor</b>	<b>UIColor</b>	Titles text colors for all labels	<div>Carrier 3:47 PM X BrandName  How would you rate the connection with our agent? <div>☆ ☆ ☆ ☆ ☆</div> Did we solve your issues today! <div>NO</div><div>YES</div> Your feedback helps us serve you better. It will not be shared with any Customer Service Representative. <div>Submit</div></div>	#000000

<b>csatResolutionHidden</b>	<b>Bool</b>	Hides the yes/no question		false
<b>csatAgentViewHidden</b>	<b>Bool</b>	Hides the view of agent avatar and name		true
<b>csatThankYouScreenHidden</b>	<b>Bool</b>	Hides the Thanks You screen after tapping 'Submit' button.		false
<b>csatNavigationBackgroundColor</b>	<b>UIColor</b>	Background color of the navigation of the survey		#229A49
<b>csatNavigationTitleColor</b>	<b>UIColor</b>	Text color of the the title in the survey navigation		#FFFFFF
<b>csatSkipButtonColor</b>	<b>UIColor</b>	Skip survey button color		#000000
<b>csatUIStatusBarStyleLightContent</b>	<b>Bool</b>	Allow the UI status bar to take the color of the survey navigation bar color		true
<b>csatShowSurveyView</b>	<b>Bool</b>	Hides the whole survey view and disables it. Default value is true		true

<b>maxPreviousConversationToPresent</b>	<b>UInt</b>	Amount of conversations to show in advance		2
<b>deleteClosedConversationOlderThanMonths</b>	<b>UInt</b>	Upon SDK initialization, all closed conversation with end date older than X months, will get deleted from the database. Setting 0 will delete all closed conversation.		13
<b>country</b>	<b>String?</b>	Country code. If no value is provided, the SDK will use the country according to the device's locale.	###	nil
<b>language</b>	<b>String?</b>	The language is defined by a two-letter <a href="#">ISO 639-1</a> language code, for example, “en” for English. If no value is provided, the SDK will use the language according to the device's locale.	###	nil
<b>brandName</b>	<b>String</b>	The brand name will be shown as a title on toolbar when there is no active conversation.		"BrandName"
<b>conversationBackgroundColor</b>	<b>UIColor</b>	Color code for the entire view background. Default is white color.		#FFFFFF
<b>dateSeparatorTitleBackgroundColor</b>	<b>UIColor</b>	Color code for date separator title background color		#BEBEBE
<b>dateSeparatorTextColor</b>	<b>UIColor</b>	Color code for date separator text color		#FFFFFF



<b>dateSeparatorLineBackgroundColor</b>	<b>UIColor</b>	Color code for date separator line background color		#DCDCDC
<b>dateSeparatorBackgroundColor</b>	<b>UIColor</b>	Color code for date separator background color		#FFFFFF
<b>sendButtonDisabledTextColor</b>	<b>UIColor</b>	Color code for 'Send' button title in disabled mode		#AAAAAA
<b>sendButtonEnabledTextColor</b>	<b>UIColor</b>	Color code for 'Send' button title in enabled mode		#0362AC
<b>editTextUnderlineColor</b>	<b>UIColor</b>	Color code for underline background in 'edit' view		#C4C4C4
<b>retrieveAssignedAgentFromLastClosedConversation</b>	<b>Bool</b>	When using "getAssignedAgent" method, this option let you decide whether to get assigned agents from active conversation only, or also from the last closed conversation in case there is no active conversation. If not assigned agent is available this method will return nil.		true
<b>notificationShowDurationInSeconds</b>	<b>Double</b>	Display duration of the local notification in seconds. Such as: TimeToRespond notification, local notification etc.		3
<b>ttrShowShiftBanner</b>	<b>Bool</b>	Ability to enable/disable shift toaster ('An agent will respond...')		true

ttrFirstTimeDelay	Double	TTR - Time To Respond Number of seconds before the first TTR notification appears		10
ttrShouldShowTimestamp	Bool	TTR - Time To Respond <b>Enable:</b> Shows a time stamp in the TTR notification. <b>Disable:</b> Shows: "An agent will respond shortly"	 	false
ttrShowFrequencyInSeconds	UInt	Control the TTR frequency - Don't show the TTR more than once in X seconds		8
showUrgentButtonInTTRNotification	Bool	TTR - Time To Respond Enable presentation of 'Urgent' button in the TTR notification	 	false
showOffHoursBanner	Bool	Ability to disable/enable the off-hours toaster		true
ttrBannerBackgroundColor	UIColor	Color of background for banner		#52A742
ttrBannerTextColor	UIColor	Text color of the banner		#52A742
ttrBannerOpacityAlpha	Double	Opacity level of the banner background (values: 0.0 - 1.0)		0.8
offHoursTimeZoneName	String	Off Hours time zone name string based on [NSTimeZone knownTimeZoneNames]. If sending empty string, the local timezone will be used (Server sends UTC time).		""

<b>lpDateFormat</b>	String?	Custom formatting for date string (day, year..), for example: 'd MMM'. If not defined, one of the default styles will be used (see <a href="#">timestamps formatting</a> )	###	nil
<b>lpTimeFormat</b>	String?	Custom formatting for time string (hours, lpDateTimeFormat minutes..), for example: 'hh:mm a'. If not defined, one of the default styles will be used (see <a href="#">timestamps formatting</a> )	###	nil
<b>lpDateTimeFormat</b>	String?	Custom formatting for date and time string, for example: 'EEEE MM/dd/YY hh:mm a'. If not defined, one of the default styles will be used (see <a href="#">timestamps formatting</a> )	###	nil
<b>toastNotificationsEnabled</b>	Bool	Used for local system notifications such as 'no network'. <b>True:</b> Enable toast notifications such as offline notifications <b>False:</b> Disable toast notifications		false
<b>csdsDomain</b>	String	CSDS Domain URL. For brands that need to control the URL that is the gateway for LivePerson services,		"https://admin login.livepers on.net/csdr/a ccount/%@/s ervice/baseU

		use this key to set a URL of your choice.		RI.json?version=1.0"
<b>remoteUserAvatarBackgroundColor</b>	<b>UIColor</b>	Background color of the remote user's avatar		#0362AC
<b>remoteUserAvatarIconColor</b>	<b>UIColor</b>	Icon's avatar color within the avatar's background		#FFFFFF
<b>brandAvatarImage</b>	<b>UIImage?</b>	Set avatar image for brand. This is an optional UIImage that if is set to nil a default avatar will be presented. Image ratio should be 1:1 (square) and at least 50x50 pixels		nil
<b>csatAgentAvatarBackgroundColor</b>	<b>UIColor</b>	Background color of Agent's default avatar in CSAT		#0362AC
<b>csatAgentAvatarIconColor</b>	<b>UIColor</b>	Icon color of Agent's default avatar in CSAT		#FFFFFF
<b>enableClientOnlyMasking</b>	<b>Bool</b>	Determines whether to enable using regular expression to control which part of the text to mask, all masked data will appear as asterisks, will be saved to local db masked and will be sent to the server unmasked. Default = false		false
<b>enableRealTimeMasking</b>	<b>Bool</b>	Determines whether to enable using regular expression to control which part of the text to		false

		mask, all masked data will appear as asterisks, will be saved to local db masked and sent to the server masked. Default is false		
<b>clientOnlyMaskingRegex</b>	<b>String</b>	<p>Regular expression string to control which part of the text to mask, all masked data will appear as asterisks, will be saved to local db masked and will be sent to the server unmasked. Default is empty, means no regex. The regular expression patterns and behavior are based on <b>Perl's</b> regular expressions.</p> <p>Apple Reference:  <a href="https://developer.apple.com/library/ios/documentation/Foundation/Reference/NSRegularExpression_Class/index.html">https://developer.apple.com/library/ios/documentation/Foundation/Reference/NSRegularExpression_Class/index.html</a></p>		""
<b>realTimeMaskingRegex</b>	<b>String</b>	<p>Regular expression string to control which part of the text to mask, all masked data will appear as asterisks, will be saved to local db masked and will be sent to the server unmasked. Default is empty, means no regex. The regular expression patterns and behavior are based on <b>Perl's</b> regular expressions.</p> <p>Apple Reference:  <a href="https://developer.apple.com/library/ios/documentation/Foundation/Reference/">https://developer.apple.com/library/ios/documentation/Foundation/Reference/</a></p>		""

		NSRegularExpression_Class/index.html		
<b>conversationNavigationBackgroundColor</b>	<b>UIColor</b>	Background color of navigation bar in conversation screen		#0362AC
<b>conversationNavigationTitleColor</b>	<b>UIColor</b>	Navigation title color in conversation screen		#FFFFFF
<b>conversationStatusBarStyle</b>	<b>UIStatusBarStyle</b>	Status bar style in conversation screen		.LightContent

## String localization in SDK

The SDK allows you to override the string localization of any supported language in LiveEngage. To apply a custom localization file with your own strings, use your existing localization files or, if needed, create a new .strings file with the desired language as a file name in your app, and then simply override the values with the SDK keys.

Example: Overriding the SDK string of ‘send’ in English:

1. Create/Use existing **English.strings** file in your app.
2. Add new key: “send” = “<ANY NEW VALUE>;”;

Your ‘send’ string implementation will override the localization in English in the SDK

In order to get all localized keys with a default English value in the SDK, call the following:

```
LPMessagingSDK.instance.printAllLocalizedKeys()
```

In order to get all localized supported languages in the SDK, call the following:

```
LPMessagingSDK.instance.printSupportedLanguages()
```

List of all localized keys with English localization string:

Attribute name	String Localization
conversationEndedByAgent	"Conversation ended by %@ \n %@"
conversationEndedByYou	"Conversation ended by You \n %@"
conversationResumedByAgent	"Conversation resumed by %@ \n %@"
parseConversationError	"Cannot parse conversation id"
theBrand	"the brand"
connectionErrorTitle	"Could not connect"
connectionErrorMessage	"We could not reach %@. Please try again later."
cancel	"Cancel"
hiMessage	"Hi, what can I do for you today?"
sendMessageErrorTitle	"Message not sent"
sendMessageErrorMessage	"The message did not reach %@. Please try again."
retry	"Retry"
sentMailErrorTitle	"Mail not sent"
sentMailErrorMessage	"Email could not be sent. Please try again later."
userActionTitle	"What would you like to do?"
userActionMessage	"Please select from the following actions"
callTo	"Call %@"
sendMessage	"Send Message"
facetimeAudio	"FaceTime Audio"
sendEmailTitle	"Send Email"
sendEmailMessage	"Would you like to send an email to %@?"
notNow	"Not now"

yes	"Yes"
sorry	"Sorry"
noEmailOnDeviceError	"Can't send email since no email is defined on this device"
dismissUrgent	"Dismiss urgent"
dismissUrgentConfirmation	"Are you sure you want to dismiss the urgent state?"
dismiss	"Dismiss"
markAsUrgent	"Mark as urgent"
markAsUrgentConfirmation	"Are you sure you want to mark this conversation as urgent?"
urgent	"Urgent"
noInternetConnection	"No Internet Connection"
ok	"OK"
markAsEnded	"End the conversation"
markAsEndedConfirmation	"Are you sure you want to end the conversation?"
endTheConversation	"End the conversation"
ttrResponseMessage	"The associate should respond within the next %@"
dismissUrgent noActiveConversationTitle	"Dismiss urgent"
noActiveConversationTitle	"No active conversation"
noActiveConversationMessage	"Please start a conversation first by sending a message."
rateConnectionWithAgent	"How would you rate\nthe connection with our agent?"
rateConnectionWithName	"How would you rate\nthe connection with %@"
veryDissatisfied	"Very Dissatisfied"
dissatisfied	"Dissatisfied"



neither	"Neither"
satisfied	"Satisfied"
verySatisfied	"Very Satisfied"
provideFirstNameError	"Please provide your first name."
provideLastNameError	"Please provide your last name."
provideEmailAddressError	"Please provide a valid email address."
applicationLoadingError	"The application could not load. Please check your connection and try again."
aboutMe	"Tell us about yourself..."
setProfileImageError	"Oops! Something went wrong. Try again later."
writeMessage	"Write a message"
olderMessages	"Older messages"
loadingSavedDataError	"There was an error creating or loading the application's saved data."
initializingSavedDataError	"Failed to initialize the application's saved data"
unresolvedError	"Unresolved error %@, %@"
agentTitle	"Agent: %@"
numberOfDays	"%d days"
day	"day"
numberOfHours	"%d hours"
oneHour	"1 hour"
oneMinute	"1 minute"
numberOfMinutes	"%d minutes"
oneMinuteAgo	"1m ago"
now	"Now"

minutesAgo	"%d min ago"
numberOfMinutesAgo	"%%d%@m ago"
oneHourAgo	"An hour ago"
numberOfHoursAgo	"%%d%@hrs ago"
yesterday	"Yesterday"
numberOfDaysAgo	"%%d %@days ago"
lastWeek	"Last week"
numberOfWeeksAgo	"%%d %@weeks ago"
lastMonth	"Last month"
numberOfMonthsAgo	"%%d %@months ago"
lastYear	"Last Year"
numberOfYearsAgo	"%%d %@years ago"
domain	"Domain"
chooseDomain	"Please choose preferred domain"
notSecure	"Not Secure"
secure	"Secure"
send	"Send"
submit	"Submit"
returnToConversation	"Return to conversation"
messageTitle	"Message: "
sentOnTitle	" Sent on "
receivedOnTitle	" Received on "
readOnTitle	" Read on "
error	"Error"

today	"Today"
noSocketConnectivity	"No connectivity to server\nPlease try again"
conversationAlreadyEnded	"This conversation has already ended."
loadingHistoryMessages	"Loading..."
and	"and"
anAgentWillRespondShortly	"An agent will respond shortly"
nowTimestamp	"Now"
surveySubmittedSuccessfullyThankYou	"Survey submitted successfully.\nThank you."
ttrOffHoursResponseMessage	"Thanks for your message. We will be back online at %@"
sunday	"Sunday"
monday	"Monday"
tuesday	"Tuesday"
wednesday	"Wednesday"
thursday	"Thursday"
friday	"Friday"
saturday	"Saturday"
tomorrow	"Tomorrow"
maskedMessageResendError	"Message failed to send. Please re-enter message and send again."
systemMessageRealTimeMasked	"Your personal data has been masked to protect your security and cannot be read by the agent."
systemMessageClientOnlyMasked	"Your personal data has been masked to protect your security but can be read by the agent."
offlineNotification	"Offline. Check your internet connection."
resolve	"Resolve"

## Locale - Timestamps Formatting

### Time/Date styles:

The iOS platform provides 4 different default types of date and time styles:

**SHORT** is completely numeric

**MEDIUM** is longer and contains the first 3 letters of the month

**LONG** is longer and contains the full month name

**FULL** specifies the complete time and date

iOS examples:

**SHORT** 12/13/52 or 3:30 PM

**MEDIUM** Jan 12, 1952

**LONG** January 12, 1952 or 3:30:32 PM

**FULL** Tuesday, April 12, 1952 AD or 3:30:42 PM PST.

In LPMessagingSDK, we are using default styles. Each feature has its own style.

The style is flexible and adapts the 'locale' configuration of the device.

Example: US locale SHORT date looks like "9/25/16", and Japanese locale SHORT date is: "2016/9/25".

A specific 'locale' which is different from the device locale can be set through the language and country configurations:

country: String?, language: String?

### Time/Date formats:

It is also possible to configure a specific format for time and date instead of style.

If the host app has configured its own formatting, this formatting will be used instead of style (and therefore will not be affected by 'locale').

To configure the formatting by the host app, we added 3 configurable formatting resources:

1. For date only (separator):

lpDateFormat: String?

2. For time only (bubble's timestamp & off hours time in case of today/tomorrow):

lpTimeFormat: String?

3. For date & time together (resolve message & off hours time in case of other date):

lpDateTimeFormat: String?

## Off Hours

### Date & Time

Today and tomorrow off hours message use default **SHORT time** without date according to the locale (default or custom).

If device is set to 12 hours format :

“Thanks for your message. We will be back online today/tomorrow at 3:30 PM”

If device is set to 24 hours format :

“Thanks for your message. We will be back online today/tomorrow at 15:30”

In case you want special **hour** format, you can use:

lpTimeFormat: String?

With any **time** format. For ex. - “hh:mm a”, “HH:mm” etc..

**Date off hours message** (not today/tomorrow) use default **LONG date** and **SHORT time** according to the locale (default or custom).

If device is set to 12 hours format :

“Thanks for your message. We will be back online *January 12, 2017* at 3:30 PM”

If device is set to 24 hours format :

“Thanks for your message. We will be back online *January 12, 2017* at 15:30”

In case you want special **date/hour** format, you can use:

lpDateFormat: String?

With any **date & time** format. For ex. - “MMM d, yyyy hh:mm a”, “EEEE dd/mm/yy HH:mm” etc..

### Timezone

Off hours can appear in different time zones with this resource ID :

offHoursTimeZoneName: String = ""

Can find list of timezones id [here](#)

For ex. - “US/Pacific”, “Europe/Berlin”...

## Bubble timestamp

Bubbles contains only time in **SHORT time** format, according to the locale (default or custom) and to device setting.

If device is set to 12 hours format : *"3:30 PM"*

If device is set to 24 hours format : *"15:30"*

If you wish to configure this time format - override this resource id :

lpTimeFormat: String?

With any **time** format. For ex. - "hh:mm a", "HH:mm" etc..

This will apply to all bubble's timestamp.

## Separator timestamp

Separator contains only date in **SHORT date** format, according to the locale (default or custom) and to device setting.

*"9/25/16"* for US locale / *"2016/9/25"* for JP locale

If you wish to configure this time format - override this resource id :

lpDateFormat: String?

With any **date** format. For ex. - "MMM d, yyyy", "EEEE dd/mm/yy" etc..

## Resolve message

Resolve message use default **SHORT date** and **SHORT time** according to the locale (default or custom) and to device setting.

If device is set to 12 hours format (US locale):

*"Conversation resolved by [agent name] \n 9/25/16, 3:30 PM"*

If device is set to 24 hours format (US locale):

*"Conversation resolved by [agent name] \n 9/25/16, 15:30"*

In case you want special **date/hour** format, you can use:

lpDateTimeFormat: String?

With any **date & time** format. For ex. - "MMM d, yyyy hh:mm a", "EEEE dd/mm/yy HH:mm" etc..

**Limitation:** If the formatting is changed after resolve messages already appears, this change will take no effect. It will be fixed in the next versions.

## OS Certificate creation

In order for the push notification to work, you'll need 2 .pem files:

1. A certificate file stored using a pem format.
2. A Key file stored using a pem format without a password.

### Creating a Certificate Signing Request file

*Note: With this file we'll create both a .p12 file and a .crt file).*

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.

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

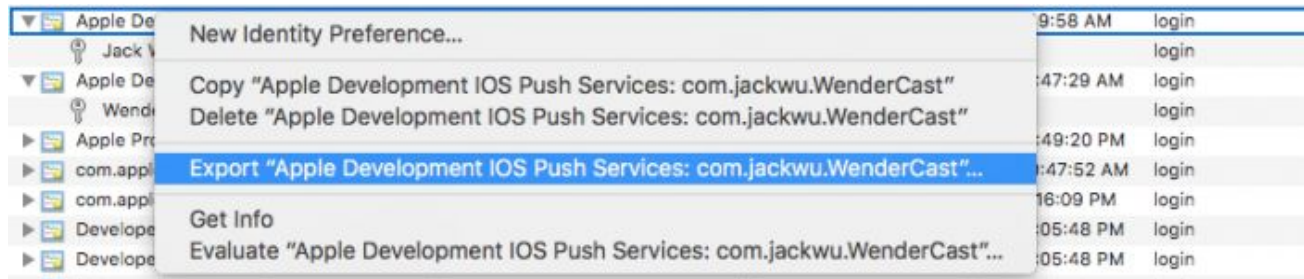
Within the Keychain Access dropdown menu, select **Keychain Access > Certificate Assistant > Request a Certificate from a Certificate Authority**.

2. 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, for example, John Doe Dev Key.
  - The CA Email Address field should be left empty.
  - In the Request is group, select the Saved to disk option.
3. In Keychain Access, click Continue to complete the CSR generating process.
4. Download and run the certificate. The certificate is now added to your Keychain, paired with a private key:

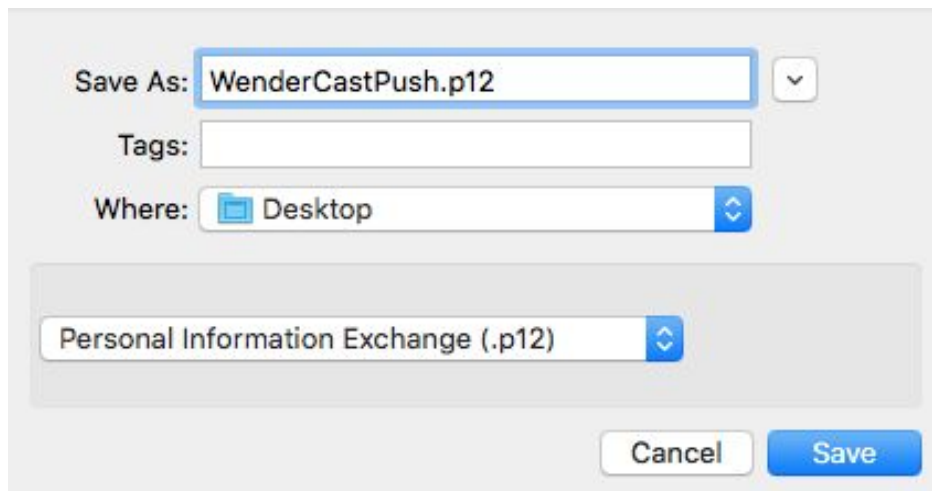
Name	Kind	Expires	Keychain
Apple Development iOS Push Services: com.jackwu.WenderCast	certificate	Jan 4, 2017, 1:49:58 AM	login
Jack Wu	private key	--	login

### Creating a key .p12 file

1. Right-click on your new push certificate and choose **Export**.



2. Save the certificate as pushNotification.p12 as a .p12 file:



3. You will be prompted to enter a password for the p12. You can either leave this blank or enter a password of your choosing.

### Creating a push notification certificate. (der format .crt file)

1. In the iOS member area, go to your app area.





## Push Notifications

● Configurable

### 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.

Development SSL Certificate	
Create an additional certificate to use for this App ID.	Create Certificate...
Production SSL Certificate	
Create an additional certificate to use for this App ID.	Create Certificate...

- Under Push Notification service SSL Certificates, select **Create Certificate** (Developer or Production).

### Upload CSR file.

Select .certSigningRequest file saved on your Mac.

Choose File...

- Choose the .csr file that you created in the previous stage.

### 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.



Name:	Apple Development iOS Push Services: com.liveperson.com.ios.Theo
Type:	APNs Development iOS
Expires:	May 23, 2017

Download

4. Download the file. This file will be used to create the .pem format certificate.

### **Creating both key.pem file and cert.pem file** (used when configuring LiveEngage Push Notification)

1. Open the terminal and locate the folder in which you would like to save the file.
2. Create cert pem:  
**openssl x509 -in aps\_development.cer -inform der -out cert.pem**
3. Convert the private keys .p12 file into a .pem file:  
**openssl pkcs12 -nocerts -out keyWithPassword.pem -in key.p12**  
You will be prompted to enter a passphrase for this file. Enter any password and remember it for the next step.
4. RSA .pem key (no password)  
**openssl rsa -in hostkey.pem -out hostkey.pem**  
You will be prompted to enter a passphrase. Enter the same passphrase you used in the previous step.

## **LiveEngage Configuration**

### **Push Notifications**

Follow the instructions below to set up your app key to enable push notifications.

*Note: Before you begin the setup, you must ensure your LiveEngage account is configured and connected to the SDK.*

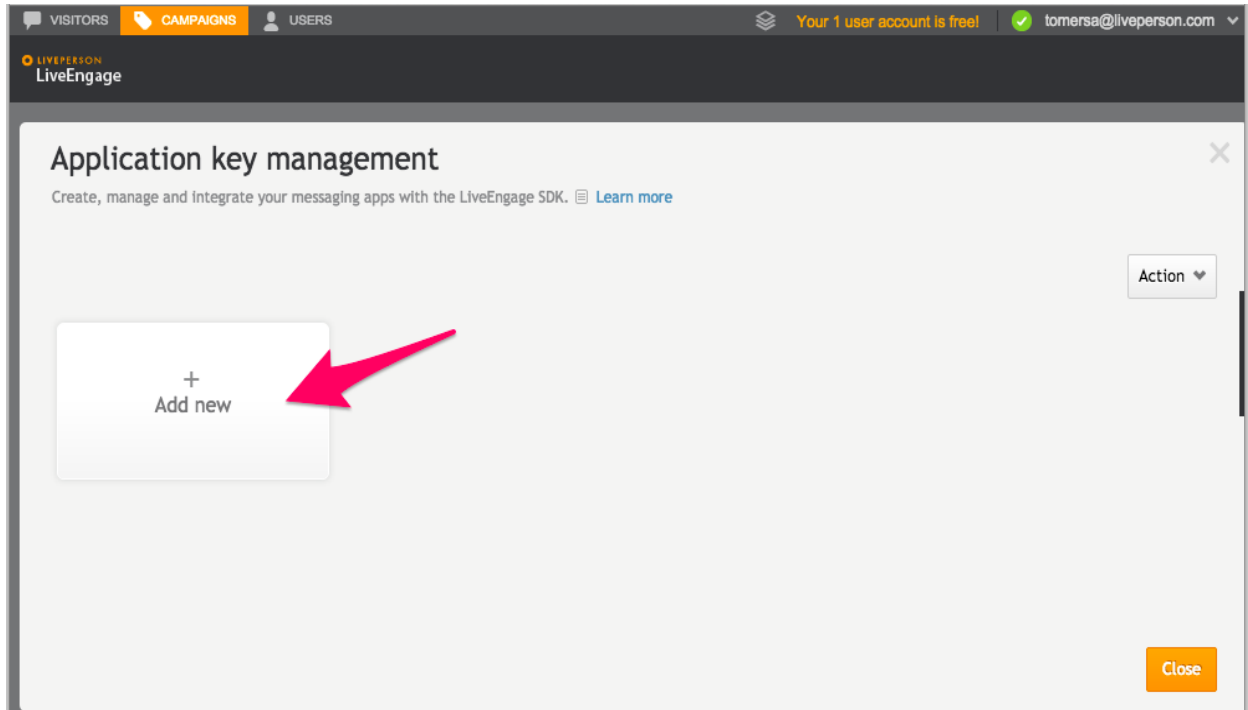
1. Enter your LiveEngage account through this [Login URL](#).  
You will need the following info from your LivePerson account team:
  - LiveEngage account number
  - User ID (must be an administrator user)
  - Password
2. Within LiveEngage, navigate to **Campaigns**.

The screenshot shows the LiveEngage dashboard with the 'CAMPAIGNS' tab selected. The top navigation bar includes 'VISITORS', 'CAMPAIGNS', and 'USERS'. Below the navigation bar, there are statistics for '0 VISITS', '0 PROSPECTS', '0 EXPOSURES', '0 ENGAGEMENTS', and '0 +0 CONVERSIONS'. The main content area shows a table of campaigns with columns: PRIORITY, STATUS, NAME, TIME FRAME, GOAL TYPE, ENGAGEMENTS, and GOAL ACHIEVED. A campaign named 'Live Chat on your site' is listed. A tooltip is displayed over the 'Data Sources' link, providing information on how to enhance campaign performance by integrating with additional data sources. The tooltip includes settings for the percentage of visits (5%), the number of proactive engagements (Unlimited), the currency (USD), the cross session period (31 days), and the conversion attribution model (Last). A red arrow points to the 'Data Sources' link in the tooltip.

3. Click **Data Sources**, and then select **App**.

The screenshot shows the 'Data Sources' modal with the 'APP' tab selected. The modal title is 'Data Sources' and it includes a description: 'Data Sources enable you to elaborate on data, by gathering additional information from multiple sources, track key actions and their monetary value, as well as gain deeper insights into your visitors' details.' Below the tabs, there is a section titled 'Connectors' with a 'DATA SOURCE' label. Under this section, there is a card for 'Mobile app management' with the text 'Create, manage and integrate your messaging apps with the LiveEngage SDK.' and a 'Learn more' link. A red arrow points to the 'Configure' button in the bottom right corner of the modal. Another red arrow points to the 'APP' tab.

4. Click **Configure**.



5. Click **Add new** to associate your app with the LiveEngage account.
6. Select your platform as iOS, enter your app's name, and click **Create app**. Then, upload your app certificate and key file in the appropriate locations.

*Note: If you are using a development certificate you should uncheck the Production checkbox and add Dev postfix to the Mobile app name. For example, if your app bundle ID is Appld, your mobile app name should be "Appld-Dev". If you are using a production certificate you should leave the production checkbox checked and insert to the Mobile App name your App bundle ID as it is.*

VISITORS

CAMPAIGNS

USERS

Your 1 user account is free!

tomersa@liveperson.com

LIVEPERSON

LiveEngage

## Add new App

Set up your messaging app, upload certificates and get a LiveEngage App Key. [Learn more](#)

1 Select app type:

LiveEngage SDK

2 Create App

Platform:  
iOS

Mobile App name:  
My iOS App

Create app

App key: 81826866-48c9-4def-9420-fa52c6fcb9ab

3 Enable push notification by uploading your certificate files:

Production: ☒

Certificate file:  
No file chosen

Key file:  
No file chosen

Close

7. Click Close to complete the process.

## Open source list

The following open source code is used within the LiveEngage SDK. Licensing terms for use of this code require you to mention the list of these sources in the end customer product or documentation. No additional fees or costs are associated with use of these sources.

Name	Licence
<a href="#">Reachability</a>	<a href="#">Apple inc</a>
<a href="#">SocketRocket</a>	<a href="#">BSD</a>
<a href="#">UIRefreshControl+UITableView</a>	<a href="#">MIT</a>
<a href="#">TTTAttributedLabel</a>	<a href="#">Apache</a>
<a href="#">NSDate+Extension</a>	<a href="#">License</a>

## Security

Security is a top priority and key for enabling trusted, meaningful engagements.

LivePerson's comprehensive security model and practices were developed based on years of experience in SaaS operations, close relationships with Enterprise customers' security teams, frequent assessments with independent auditors, and active involvement in the security community.

LivePerson has a comprehensive security compliance program to help ensure adherence to internationally recognized standards and exceed market expectations. Among the standards LivePerson complies with are: SSAE16 SOC2, ISO27001, PCI-DSS via Secure Widget, Japan's FISC, SafeHarbor, SOX, and more.

Our applications are developed under a strict and controlled Secure Development Life-Cycle: Developers undergo secure development training, and security architects are involved in all major projects and influence the design process. Static and Dynamic Code Analysis is an inherent part of the development process and, upon maturity, the application is tested for vulnerabilities by an independent penetration testing vendor. On average, LivePerson undergoes 30 penetration tests each year.