

Widget Customizations - Messaging SDK iOS

DYNAMICS 365 CONTACT CENTER

Messaging Widget Customizations

ContactCenterMessagingWidget framework exposes a fully functional LiveChatMessagingViewController that can be launched from your application. Framework exposes custom UI properties which allows App developer to customize the look and feel of the LiveChatMessagingViewController.

Available methods:

1. LaunchMessagingViewController

This method initializes the messaging view controller also get the delegate instance.

```
public func launchMessagingViewController(delegate : LCWMessagingDelegate? = nil) -> LiveChatMessagingViewController
```

delegate	If you want to listen to various SDK events, you must pass the viewcontroller instance to delegate and extend your class with LCWMessagingDelegate.
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2. Get Livechatcontext

In Omnichannel, the "Livechatcontext" feature handles live chat sessions. It contains information such as requestId and chatToken, which are useful for reconnecting a customer to an ongoing conversation if they disconnect and then reconnect.

We store the live chat context from the beginning of a new chat session until it ends.

You can retrieve this livechatcontext using the LiveChatMessaging class. The getLivechatcontext API is available for this purpose.

If livechatcontext is present you get full data dictionary and if not present you will get blank dictionary.

Method Signature

```
public func getLiveChatContext() -> [String : Any]
```

Usage Example

```
LiveChatMessaging.shared.getLiveChatContext()
```

3. The function below checks the SDK version.

```
NuanMessaging.getVersion()
```

4. The function below checks the chat status.

```
NuanMessaging.getInstance().getChatProgress()
```

5. The following function allows you to check the environment.

```
NuanMessaging.getInstance().getEnvironment()
```

LCWMessagingDelegate:

To enable your application to monitor various SDK events, pass an instance of the LCWMessagingDelegate class as explained earlier. Following are the delegate-methods exposed to get the events.

```
func onChatMinimizeButtonClicked() {  
    print("*** ViewController onChatMinimizeButtonClicked")  
}  
  
func onChatCloseButtonClicked() {  
    print("*** ViewController onChatCloseButtonClicked")  
}
```

```
}

func onViewDisplayed() {

    print("*** ViewController onViewDisplayed")

}

func onChatInitiated() {

    print("*** ViewController onChatInitiated")

}

func onCustomerChatEnded() {

    print("*** ViewController onCustomerChatEnded")

}

func onAgentChatEnded() {

    print("*** ViewController onAgentChatEnded")

}

func onTitleOption1Clicked() {

    print("*** ViewController onTitleOption1Clicked")

}

func onTitleOption2Clicked() {

    print("*** ViewController onTitleOption2Clicked")

}

func onAgentAssigned(){

    print("*** ViewController onAgentAssigned")

}

func onLinkClicked(url: String) {

    print("*** ViewController linkMessage url : ",url)

}

func onNewCustomerMessage(message: String?) {

    print("*** ViewController onNewCustomerMessage message:", message as Any)

}

func onNewMessageReceived(message:LCWGetMessageResponse?) {

    print("*** ViewController onNewMessageReceived message:",message?.content as Any)
```

```
}  
  
func onError(state: MessagingErrorStates, errorMessage: String?) {  
    print("*** ViewController onError message:", state, errorMessage as Any)  
}  
  
func onChatRestored() {  
    print("*** ViewController onChatRestored")  
}  
  
func onPreChatSurveyDisplayed() {  
    print("*** ViewController onPreChatSurveyDisplayed")  
}  
  
func onPostChatSurveyDisplayed() {  
    print("*** ViewController onPostChatSurveyDisplayed")  
}
```

Delegate Methods

- @objc optional func onChatMinimizeButtonClicked()

Description: Called when the chat is minimized.

- @objc optional func onChatCloseButtonClicked()

Description: Called when the chat is closed.

- @objc optional func onViewDisplayed()

Description: Called when the chat is displayed.

- @objc optional func onChatInitiated()

Description: Called when the chat is started.

- `@objc optional func onCustomerChatEnded()`

Description: Called when the chat is ended.

- `@objc optional func onAgentChatEnded()`

Description: Called when the agent ends the chat.

- `@objc optional func onTitleOption1Clicked()`

Description: Called when the first title option is selected.

- `@objc optional func onTitleOption2Clicked()`

Description: Called when the second title option is selected.

- `@objc optional func onAgentAssigned()`

Description: Called when an agent is assigned to the chat.

Parameters:

name: The name of the assigned agent.

- `@objc optional func onLinkClicked(url: String)`

Description: Called when a link is clicked.

Parameters:

url: The URL of the clicked link in String format.

- [@objc optional func onNewCustomerMessage\(message: String?\)](#)

Description: Called when a customer message is received.

Parameters:

message: The customer message in String format.

- [@objc optional func onNewMessageReceived\(message: LCWGetMessageResponse?\)](#)

Description: Called when a new message is received.

Parameters:

message: The new message received model in LCWGetMessageResponse format.

- [@objc optional func onError\(state: MessagingErrorStates, errorMessage: String?\)](#)

Description: Called when an error occurs.

Parameters:

state: The state of the error.

errorMessage: Error message received

- [@objc optional func onPostChatSurveyDisplayed\(\)](#)

Description: Called when post chat survey displayed on screen

- [@objc optional func onPreChatSurveyDisplayed\(\)](#)

Description: Called when prechat survey displayed on screen

- [@objc optional func onChatRestored\(\)](#)

Description: Called when chat get restored

Custom Properties:

FooterSeparationProperties

Name	Type	Default Value	Description
showFooterSeparation	Bool	false	Boolean to show footer separation.
height	Int	3	Specifies the height of the footer separation.
backgroundColor	UIColor	.gray	Sets the background color of the footer separation.

e.g. :

```
func footerSeparationProperties(vc : LiveChatMessagingViewController) {  
    let footerSep = FooterSeparationProperties()  
    footerSep.showFooterSeparation = true  
    vc.setFooterSeparationViewProperties(properties: footerSep)  
}
```

TitleBarProperties

Name	Type	Default Value	Description
statusBarColorLight	Bool	true	Boolean to set status bar text color is light.
headerTitle	String	""	The title text of the header.
headerBackgroundColor	UIColor	UIColor(red: 47/255.0, green: 90/255.0, blue: 146/255.0, alpha: 1.0)	The background color of the header.
headerTitleColor	UIColor	.white	The color of the header title text.
headerTitleFontStyle	UIFont	UIFont(name: "Helvetica", size: 12.0)!	The font style of the header title text.
isHeaderTitleBold	Bool	true	Boolean to set header title text to bold.
shareButtonTextColor	UIColor	.white	The text color of the

			share button.
shareImageData	Data?	nil	The image data for the share button.
shareTextName	String	"Share"	The label for the share button.
shareButtonWidth	Int	35	The width of the share button.
shareButtonHeight	Int	35	The height of the share button.
option1ButtonTextColor	UIColor	.white	The text color of the option1 button.
option1ImageData	Data?	nil	The image data for the option1 button.
option1TextName	String	"Option1"	The label for the option1 button.

option1ButtonWidth	Int	35	The width of the option1 button.
option1ButtonHeight	Int	35	The height of the option1 button.
option2ButtonTextColor	UIColor	.white	The text color of the option2 button.
option2ImageData	Data?	nil	The image data for the option2 button.
option2TextName	String	"Option2"	The label for the option2 button.
option2ButtonWidth	Int	35	The width of the option2 button.
option2ButtonHeight	Int	35	The height of the option2 button.
chimeButtonTextColor	UIColor	.white	The text color of the chime button.

chimeOnImageData	Data?	nil	The image data for the chime button when on.
chimeOffImageData	Data?	nil	The image data for the chime button when off.
chimeTextName	String	"Chime"	The label for the chime button.
chimeTextOn	String	"On"	The label for the chime button when on.
chimeTextOff	String	"Off"	The label for the chime button when off.
chimeButtonWidth	Int	25	The width of the chime button.
chimeButtonHeight	Int	25	The height of the chime button.

chimeSoundData	NSData?	nil	The sound data for the chime button.
emailButtonTextColor	UIColor	.white	The text color of the email button.
emailImageData	Data?	nil	The image data for the email button.
emailTextName	String	"Email"	The label for the email button.
emailButtonWidth	Int	35	The width of the email button.
emailButtonHeight	Int	35	The height of the email button.
closeButtonTextColor	UIColor	.white	The text color of the close button.
closeImageData	Data?	nil	The image data for the close button.

closeTextName	String	"Close"	The label for the close button.
closeButtonWidth	Int	35	The width of the close button.
closeButtonHeight	Int	35	The height of the close button.
minimizeButtonTextColor	UIColor	.white	The text color of the minimize button.
minimizeImageData	Data?	nil	The image data for the minimize button.
minimizeTextName	String	"Minimize"	The label for the minimize button.
minimizeButtonWidth	Int	35	The width of the minimize button.
minimizeButtonHeight	Int	35	The height of the minimize button.

minimumSpaceBetweenHeaderButton	Int	10	The minimum space between header buttons.
showShareButton	Bool	false	Boolean to show share button.
showLogo	Bool	true	Boolean to show logo.
logoImageData	Data?	nil	The image data for the logo.
logoImageWidth	Int	35	The width of the logo image.
logoImageHeight	Int	35	The height of the logo image.
leftHeaderIcons	[Int]	[] as [Int]	The icons on the left side of the header. Use integers from 0 to 7 to add specific icons: 0: close

			1: minimize 2: email 3: share 4: chime 5: logo 6: option1 Button 7: option2 Button
rightHeaderIcons	[Int]	[] as [Int]	The icons on the right side of the header. Use integers from 0 to 7 to add specific icons: 0: close 1: minimize 2: email 3: share 4: chime 5: logo 6: option1 Button 7: option2 Button

setHeaderTitlePosition	TitlePosition	TitlePosition.left	The position of the header title.
isHeaderTitleLogoTogetherRequired	Bool	false	Boolean to show header title and logo together.
headerTitleImageData	Data?	nil	The image data for the header title.
headerTitleImageWidth	Int	35	The width of the header title image.
headerTitleImageHeight	Int	35	The height of the header title image.
headerTitleLeftPadding	Int	0	Add left padding for header title
headerTitleRightPadding	Int	0	Add right padding for header title

e.g. :

```
func titleBarProperties(vc : LiveChatMessagingViewController) {
```

```
let titleBar = TitleBarProperties()

titleBar.statusBarColorLight = false

titleBar.headerTitle = "Messages"

titleBar.headerBackgroundColor = .lightGray

titleBar.headerTitleColor = .yellow

titleBar.headerTitleFontStyle = UIFont(name: "Helvetica", size: 12.0)!

titleBar.isHeaderTitleBold = false

titleBar.shareButtonTextColor = .yellow

titleBar.shareImageData = UIImage(named: "share")?.pngData()

titleBar.shareTextName = "Share"

titleBar.shareButtonWidth = 50

titleBar.shareButtonHeight = 50


let bundle = Bundle(for: ViewController.self)

if let audioFilePath = Bundle.main.path(forResource: <bundleId>, ofType: "mp3") {

    titleBar.chimeSoundData = NSData(contentsOf: URL(fileURLWithPath:
audioFilePath))!

}

vc.setTitleBarProperties(properties: titleBar)

}
```

FooterProperties

Name	Type	Default Value	Description
------	------	---------------	-------------

footerViewHeight	Int	120	The height of the footer view.
hideDownloadTranscriptButton	Bool	false	Boolean used to hide download transcript button or not.
hideEmailTranscriptButton	Bool	false	Boolean used to hide email transcript button or not.
hideAudioNotificationButton	Bool	false	Boolean used to hide audio notification button or not.

footerBackgroundColor	UIColor	.white	The background color of the footer.
inputContainerBackgroundColor	UIColor	.white	The background color of the input container.
footerBorderColor	UIColor	.clear	The border color of the footer.
footerBorderWidth	Int	0	The border width of the footer.
footerCornerRadius	Int	0	The corner radius of the footer.

footerCorners	[CornerRadiusStyle]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual corner radius
textFieldBorderColor	UIColor	UIColor(red: 224/255.0, green: 224/255.0, blue: 224/255.0, alpha: 1.0)	The border color of the text field.
textFieldBorderWidth	Int	1	The border width of the text field.
textFieldCornerRadius	Int	5	The corner radius of the text field.
textFieldCorners	[CornerRadiusStyle]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual corner radius
textFieldTopPadding	Int	0	The top padding

			g of the text field.
textFieldBottomPadding	Int	0	The bottom padding of the text field.
textFieldLeftPadding	Int	5	The left padding of the text field.
textFieldRightPadding	Int	5	The right padding of the text field.
textFieldFont	UIFont	UIFont(name: "Helvetica", size: 14.0)!	The font of the

			text field.
textFieldTextColor	UIColor	.black	The text color of the text field.
textFieldPlaceholderColor	UIColor	.lightGray	The placeholder color of the text field.
textFieldHintText	String	"Type your message here.."	The hint text of the text field.
textFieldMaxLines	Int	4	The maximum number of lines for the text field.

textFieldTextAlignment	NSTextAlignment	NSTextAlignment.left	The text alignment of the text field.
textFieldBackgroundColor	UIColor	.white	The background color of the text field.
isDynamicSizeTextFieldRequired	Bool	false	Boolean to toggle dynamic text field resizing.
isCharacterLimitRequired	Bool	false	A Boolean to establish a character limit.

showRemainingLimitCharacters	Bool	false	Boolean to display the view of remaining character limit.
characterLimitTextColor	UIColor	.white	The text color of the character limit label.
characterLimitTextFont	UIFont	UIFont(name: "Helvetica", size: 12)!	The font of the character limit label.
characterLimitBackgroundColor	UIColor	.white	The background color of the character

			ter limit label.
textFieldCharacterLimit	Int	120	The charac ter limit of the text field.
characterLimitBottomPadding	Int	0	The botto m paddin g of the charac ter limit label.
characterLimitRightPadding	Int	0	The right paddin g of the charac ter limit label.
characterLimitTopPadding	Int	0	The top

			paddin g of the charac ter limit label.
characterLimitLeftPadding	Int	0	The left paddin g of the charac ter limit label.
characterLimitViewWidth	Int	50	The width of the charac ter limit view.
characterLimitViewHeight	Int	50	The height of the charac ter limit view.

keyboardType	UIKeyboardType	UIKeyboardType.default	The keyboard type for the text field.
sendMessageOnReturn	Bool	false	Boolean for sending a message on return key.
dismissKeyBoardOnReturn	Bool	true	Boolean to hide the keyboard on return.
showTextForChime	Bool	false	Boolean to display text for the chime button.
chimeButtonTextFont	UIFont	UIFont(name: "Helvetica", size: 12)!	The font of the

			chime button text.
chimeButtonTextColor	UIColor	.white	The text color of the chime button.
chimeOnImageData	Data?	nil	The image data for the chime button when on.
chimeOffImageData	Data?	nil	The image data for the chime button when off.
chimeTextName	String	"Chime"	The text name for the

			chime button.
chimeTextOn	String	"On"	The text for the chime button when on.
chimeTextOff	String	"Off"	The text for the chime button when off.
chimeSoundData	NSData?	nil	The sound data for the chime button.
showTextForEmailButton	Bool	false	Boolean to display text for the email button.

showEmailTextFont	UIFont	UIFont(name: "Helvetica", size: 12)!	The font of the email button text.
emailTranscriptButtonTextColor	UIColor	.white	The text color of the email transcript button.
emailTranscriptImageData	Data?	nil	The image data for the email transcript button.
emailTranscriptText	String	"Email"	The text for the email transcript button.
showTextForDownloadTranscript	Bool	false	Boolean to

			display text for the download transcript button.
downloadTranscriptTextFont	UIFont	UIFont(name: "Helvetica", size: 12)!	The font of the download transcript button text.
downloadTranscriptButtonTextColor	UIColor	.white	The text color of the download transcript button.
downloadTranscriptImageData	Data?	nil	The image data for the downl

			oad transcr ipt button.
downloadTranscriptTextName	String	"Download"	The text name for the downl oad transcr ipt button.
BANNER_FILE_NULL_ERROR	String	"There was an error uploading the file, please try again."	The error messa ge for a null file upload .
BANNER_FILE_SIZE_EXTENSION_ERR OR	String	"File exceeds the allowed limit of 5 MB and .txt files are not supported."	The error messa ge for a file size and extensi on error.

BANNER_FILE_EXTENSION_ERROR	String	".txt files are not supported."	The error message for an unsupported file extension.
BANNER_FILE_IS_EMPTY_ERROR	String	"This file can't be attached because it's empty. Please try again with a different file."	The error message for an empty file upload.
BANNER_ERROR_MESSAGE	String	"Upload failed, please try again."	The generic error message for a file upload failure.
BANNER_FILE_SIZE_ERROR	String	"File exceeds the allowed limit of 5 MB."	The error message for a

			file size limit exceeded.
MIDDLEWARE_BANNER_FILE_SIZE_WITHOUT_EXTENSION_ERROR	String	"File .txt exceeds the allowed limit of 5 MB and please upload the file with an appropriate file extension."	The error message for a file size limit exceeded without extension.
MIDDLEWARE_BANNER_FILE_WITHOUT_EXTENSION	String	"File upload error. Please upload the file image01 with an appropriate file extension."	The error message for a file upload without extension.

e.g.

```
func footerSeparationProperties(vc : LiveChatMessagingViewController) {
```

```
let footerSep = FooterSeparationProperties()

footerSep.showFooterSeparation = true

footerSep.height = 1

footerSep.backgroundColor = .black

vc.setFooterSeparationViewProperties(properties: footerSep)

}
```

SendButtonProperties

Name	Type	Default Value	Description
buttonImageData	Data?	nil	The image data for the button.
disableImageData	Data?	nil	The image data for the disabled button.
borderColor	UIColor	.white	The border color of the button.

borderWidth	Int	0	The border width of the button.
cornerRadius	Int	0	The corner radius of the button.
buttonCorners	[CornerRadius Style]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual corner radius
buttonTitle	String	""	The title of the button.
backgroundColor	UIColor	.white	The background color of the button.
textColor	UIColor	.white	The text color of the button.
gradientEffect	[UIColor]	[.white, .white, .white]	The gradient effect

			colors of the button.
gradientEffectLocations	[NSNumber]	[0.0, 0.0, 0.0]	The locations of the gradient effect colors.
useGradientEffect	Bool	false	Boolean to use the gradient effect or not.
buttonFieldRightMargin	Int	10	The right margin of the button field.
buttonFieldTopMargin	Int	5	The top margin of the button field.
buttonFieldBottomMargin	Int	10	The bottom margin of the

			button field.
buttonWidth	Int	30	The width of the button.
buttonHeight	Int	30	The height of the button.
sendButtonWidth	Int	50	The width of the send button.
toggleSendStateAfterMsgSend	Bool	true	Boolean for toggle the send state after sending a message or not.
disableBorderColor	UIColor	.white	The border color of the disabled button.

disableBorderWidth	Int	0	The border width of the disabled button.
disableCornerRadius	Int	5	The corner radius of the disabled button.
disableButtonCorners	[CornerRadius Style]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual corner radius
disableButtonTitle	String	""	The title of the disabled button.
disableBackgroundColor	UIColor	.white	The background color of the disabled button.
disableTextColor	UIColor	.white	The text color of the

			disabled button.
disableGradientEffect	[UIColor]	[.white, .white, .white]	The gradient effect colors of the disabled button.
disableGradientEffectLocations	[NSNumber]	[0.0, 0.0, 0.0]	The locations of the gradient effect colors for the disabled button.
disableUseGradientEffect	Bool	false	Boolean to use gradient effect for the disabled button or not.

e.g.

```
func sendButtonProperties(vc : LiveChatMessagingViewController) {
    let sendBtnProp = SendButtonProperties()
```

```
sendBtnProp.borderWidth = 5  
sendBtnProp.cornerRadius = 0  
sendBtnProp.backgroundColor = .systemPink  
sendBtnProp.gradientEffect = [.black, .white, .white]  
vc.setSendButtonProperties(properties: sendBtnProp)  
}
```

CustomerInformationMessages

Name	Type	Default Value	Description
networkNotAvailable	String	"Network interruption occur. Reconnecting .. "	Message displayed when the network is not available.
networkNotAvalaibleNotification	String	"Unable to connect - Please check your internet connection"	Notification message for network unavailability.
disconnectedNotification	String	"Your conversation has been disconnected. For additional assistance, please start a new chat."	Notification message for disconnection.
networkLongTime	String	"Taking longer than usual to connect."	Message displayed for long network

			connection time.
networkAvailable	String	"You\'re back online"	Message displayed when the network is available.
defaultCustomerName	String	""	Default customer name.
closeButtonAccessibilityMessage	String	"Close chat window."	Accessibility message for the close button.
minimizeButtonAccessibilityMessage	String	"Minimize chat window."	Accessibility message for the minimize button.
emailButtonAccessibilityMessage	String	"Send copy of chat transcript."	Accessibility message for the email button.
shareButtonAccessibilityMessage	String	"Send copy of chat transcript."	Accessibility message for the share button.
downloadButtonAccessibilityMessage	String	"Download copy of chat transcript."	Accessibility message for the download button.
option1ButtonAccessibilityMessage	String	"Option1 button."	Accessibility message for the option1 button.

option2ButtonAccessibilityMessage	String	"Option2 button."	Accessibility message for the option2 button.
chimeButtonOnAccessibilityMessage	String	"Incoming chat chime, ON"	Accessibility message for the chime button when on.
chimeButtonOffAccessibilityMessage	String	"Incoming chat chime, OFF"	Accessibility message for the chime button when off.
sendButtonAccessibilityMessage	String	"Send"	Accessibility message for the send button.
inputTextAccessibilityMessage	String	"InputText"	Accessibility message for the input text field.
titleAccessibilityMessage	String	""	Accessibility message for the title.

e.g.

```
func customerInformationMessages(vc : LiveChatMessagingViewController) {  
    let customerInfo = CustomerInformationMessages()  
    customerInfo.networkNotAvailable = "Network not available"  
    customerInfo.networkLongTime = "Taking longer than usual to connect."  
    customerInfo.emailButtonAccessibilityMessage = "Send chat transcript."
```

```
vc.setStringProperties(properties: customerInfo)
}
```

MessagingViewProperties

Name	Type	Default Value	Description
customerName	String?	nil	The name of the customer.
rehydrate	Bool	false	Indicates whether to rehydrate the message.
keyboardDismissMode	UIScrollView.KeyboardDismissMode	.interactive	The mode for dismissing the keyboard.

hugCustomerMessageContent	Bool	true	Adjusts bubble size as per content or screen width for customer messages.
hugAgentMessageContent	Bool	true	Adjusts bubble size as per content or screen width for agent messages.
setSpaceBetweenBubble	Int	7	The space between messages

			ge bubble s.
isChatFromBottom	Bool	true	Indicates whether the chat starts from the bottom.
messagingTranscriptBackgroundColor	UIColor	UIColor(red: 248/255.0, green: 248/255.0, blue: 248/255.0, alpha: 1.0)	The background color of the messaging transcript.
adaptiveCardViewBackground	UIColor	.white	The background color of the adaptive card view.

agentIconImageData	Data?	nil	The image data for the agent icon.
showNameInBubbles	Bool	false	Indicates whether to show names in message bubbles.
showNameInTimeStamp	Bool	true	Indicates whether to show names in the timestamp.
_agentNameColor	UIColor	.darkGray	The color of the agent's

			name text.
agentNameTextColor	UIColor	.darkGray	The text color of the agent's name.
_customerTextColor	UIColor	.darkGray	The color of the customer's name text.
customerNameTextColor	UIColor	.darkGray	The text color of the customer's name.
agentMessageBackgroundColor	UIColor	UIColor(red: 47/255.0, green: 90/255.0, blue: 146/255.0, alpha: 1.0)	The background color of the agent's

			message.
agentMessageTextColor	UIColor	.white	The text color of the agent's message.
agentMessageBorderColor	UIColor	UIColor(red: 47/255.0, green: 90/255.0, blue: 146/255.0, alpha: 1.0)	The border color of the agent's message.
agentMessageCornerRadius	Int	5	The corner radius of the agent's message.
agentMessageCorners	[CornerRadiusStyle]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual

			corner radius
agentMessageBorderWidth	Int	1	The border width of the agent' s messa ge.
agentMessageFontStyle	UIFont	UIFont(name: "Helvetica", size: 17.0)!	The font style of the agent' s messa ge.
applyCellWidthForAgent	Bool	false	Apply fix cell width for agent cell
agentMessageCellWidth	Int	200	cell width
agentTopPadding	Int	10	The top paddin g of

			the agent's message.
agentBottomPadding	Int	10	The bottom padding of the agent's message.
agentLeftPadding	Int	10	The left padding of the agent's message.
agentRightPadding	Int	10	The right padding of the agent's

			message.
agentMessageTextAlignment	NSTextAlignment	NSTextAlignment.left	The text alignment of the agent's message.
agentMessageLeftMargin	Int	10	The left margin of the agent's message.
agentMessageRightMargin	Int	10	The right margin of the agent's message.
showAgentSpeechIcon	Bool	true	Flag which hide and

			show agent icon
agentSpeechIcon	Data?	nil	The image data for the agent's speech icon.
agentSpeechInitialBackgroundColor	UIColor	UIColor(red: 47/255.0, green: 90/255.0, blue: 146/255.0, alpha: 1.0)	The background color of the agent's speech initial.
agentSpeechInitialFontStyle	UIFont	UIFont(name: "HelveticaNeue-bold", size: 14)!	The font style of the agent's speech initial.

agentSpeechInitialTextAlignment	NSTextAlignment	NSTextAlignment.center	The text alignment of the agent's speech initial.
agentSpeechInitialTextColor	UIColor	.white	The text color of the agent's speech initial.
agentSpeechInitialSize	CGRect	CGRectMake(0, 0, 40, 40)	The size of the agent's speech initial.
customerMessageBackgroundColor	UIColor	.white	The background color

			of the customer's message.
customerMessageTextColor	UIColor	.black	The text color of the customer's message.
customerMessageBorderColor	UIColor	.lightGray	The border color of the customer's message.
customerMessageCornerRadius	Int	5	Corner radius of customer message cell
customerMessageCorners	[CornerRadiusStyle]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual

			corner radius
customerMessageBorderWidth	Int	1	The border width of the customer's message.
customerMessageFontStyle	UIFont	UIFont(name: "Helvetica", size: 17.0)!	The font style of the customer's message.
applyCellWidthForCustomer	Bool	false	Apply fixed cell width for customer's cell
customerMessageCellWidth	Int	200	Add fix width for cell

customerTopPadding	Int	10	The top padding of the customer's message.
customerBottomPadding	Int	10	The bottom padding of the customer's message.
customerLeftPadding	Int	10	The left padding of the customer's message.
customerRightPadding	Int	10	The right padding

			g of the customer's message.
customerMessageLeftMargin	Int	10	The left margin of the customer's message.
customerMessageRightMargin	Int	10	The right margin of the customer's message.
customerSpeechIcon	Data?	nil	The image data for the customer's speech icon.

customerMessageTextAlignment	NSTextAlignment	NSTextAlignment.left	The text alignment of the customer's message.
customerNameFontStyle	UIFont	UIFont(name: "Helvetica", size: 20.0)!	The font style of the customer's name.
agentNameFontStyle	UIFont	UIFont(name: "HelveticaNeue", size: 12.0)!	The font style of the agent's name.
systemMessageTextColor	UIColor	UIColor(red: 224/255.0, green: 224/255.0, blue: 224/255.0, alpha: 1.0)	The text color of the system message.

systemMessageFontStyle	UIFont	UIFont(name: "Helvetica", size: 12.0)!	The font style of the system message.
systemMessageBackgroundColor	UIColor	.clear	The background color of the system message.
systemMessageBorderColor	UIColor	.clear	The border color of the system message.
systemMessageCornerRadius	Int	0	The corner radius of the system

			message.
systemMessageCorners	[CornerRadiusStyle]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual corner radius
systemMessageBorderWidth	Int	0	The border width of the system message.
systemMessageAlignment	NSTextAlignment	NSTextAlignment.left	The text alignment of the system message.
systemMessageTopMargin	Int	0	The top margin of the system

			message.
systemMessageBottomMargin	Int	0	The bottom margin of the system message.
systemMessageLeftMargin	Int	15	The left margin of the system message.
systemMessageRightMargin	Int	15	The right margin of the system message.
systemMessageLeftPadding	Int	0	The left padding of

			the syste m messa ge.
systemMessageTopPadding	Int	2	The top paddin g of the syste m messa ge.
systemMessageRightPaddi ng	Int	0	The right paddin g of the syste m messa ge.
systemMessageBottomPad ding	Int	2	The botto m paddin g of the syste m

			message.
agentTypingMessageBackgroundColor	UIColor	.clear	The background color of the agent's typing message.
agentTypingTextBackgroundColor	UIColor	.clear	The background color of the agent's typing text.
agentTypingMessageBorderColor	UIColor	.clear	The border color of the agent's typing message.

agentTypingMessageCornerRadius	Int	5	The corner radius of the agent's typing message.
agentTypingMessageCorners	[CornerRadiusStyle]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual corner radius
agentTypingMessageBorderWidth	Int	1	The border width of the agent's typing message.
agentTypingTextColor	UIColor	UIColor(red: 113/255.0, green: 121/255.0, blue: 126/255.0, alpha: 1.0)	The text color of the agent's typing

			message.
agentTypingTextFontStyle	UIFont	UIFont(name: "HelveticaNeue", size: 13.0)!	The font style of the agent's typing message.
agentTypingTextAlignment	NSTextAlignment	NSTextAlignment.left	The text alignment of the agent's typing message.
agentTypingAccessibilityMessage	String	""	The accessibility message for the agent's typing

			message.
agentTypingMessageTopMargin	Int	5	The top margin of the agent's typing message.
agentTypingMessageBottomMargin	Int	5	The bottom margin of the agent's typing message.
agentTypingMessageLeftMargin	Int	0	The left margin of the agent's typing message.

agentTypingMessageRightMargin	Int	0	The right margin of the agent's typing message.
agentTypingTextLeftMargin	Int	10	The left margin of the agent's typing text.
agentTypingTextTopMargin	Int	2	The top margin of the agent's typing text.
agentTypingTextRightMargin	Int	0	The right margin of the agent's

			typing text.
agentTypingTextBottomMargin	Int	2	The bottom margin of the agent's typing text.
hideStoppedTyping	Bool	false	Indicates whether to hide the stopped typing indicator.
showTypingAnimation	Bool	true	Indicates whether to show the typing animation.

showTypingAnimationText	Bool	true	Indicates whether to show the typing animation text.
typingAnimationTextFontStyle	UIFont	UIFont(name: "HelveticaNeue", size: 13.0)!	The font style of the typing animation text.
typingAnimationTextColor	UIColor	UIColor(red: 113/255.0, green: 121/255.0, blue: 126/255.0, alpha: 1.0)	The text color of the typing animation text.
typingAnimationImage	UIImage?	UIImage.animatedImage(with: showIndicatorAnimation(), duration: 0)	The image for the typing

			animation.
typingAnimationImageBackgroundColor	UIColor	.clear	The background color of the typing animation image.
typingAnimationImageWidth	Int	30	The width of the typing animation image.
typingAnimationImageHeight	Int	30	The height of the typing animation image.
typingAnimationImageLeftMargin	Int	10	The left margin of the typing animation

			ion image.
typingAnimationImageTopMargin	Int	0	The top margin of the typing animation image.
typingStaticImage	UIImage?	nil	The static image for typing.
typingStaticImageBackgroundColor	UIColor	.clear	The background color of the static typing image.
typingStaticImageWidth	Int	30	The width of the static typing image.

typingStaticImageHeight	Int	30	The height of the static typing image.
typingStaticImageLeftMargin	Int	10	The left margin of the static typing image.
typingStaticImageTopMargin	Int	3	The top margin of the static typing image.
showNetworkStatusAnimationImage	Bool	true	Indicates whether to show the network status animation.

			ion image.
showNetworkStatusAnimationText	Bool	true	Indicates whether to show the network status animation text.
networkStatusAnimationImage	UIImage?	UIImage.animatedImage(with: showNetworkErrorAnimation(), duration: 1)	The image for the network status animation.
networkAnimationCellTopMargin	Int	0	The top margin of the network animation cell.

networkAnimationCellBottomMargin	Int	0	The bottom margin of the network animation cell.
networkAnimationCellLeftMargin	Int	0	The left margin of the network animation cell.
networkAnimationCellRightMargin	Int	0	The right margin of the network animation cell.
networkAnimationCellBackgroundColor	UIColor	.clear	The background

			color of the network animation cell.
networkAnimationTextBackgroundColor	UIColor	.clear	The background color of the network animation text.
networkAnimationCellBorderColor	UIColor	.clear	The border color of the network animation cell.
networkAnimationCellCornerRadius	Int	5	The corner radius of the network

			k animat ion cell.
<code>networkAnimationCellCorners</code>	<code>[CornerRadiusStyle]</code>	<code>[.topRight,.topLeft,.bottomRight,.bottomLeft]</code>	Set individ ual corner radius
<code>networkAnimationCellBorderWidth</code>	Int	1	The border width of the networ k animat ion cell.
<code>networkStatusAnimationImageWidth</code>	Int	20	The width of the networ k status animat ion image.
<code>networkStatusAnimationImageHeight</code>	Int	20	The height of the networ

			k status animat ion image.
networkStatusAnimationIm ageLeftMargin	Int	10	The left margin of the networ k status animat ion image.
networkStatusAnimationIm ageTopMargin	Int	0	The top margin of the networ k status animat ion image.
networkStatusAnimationIm ageBackgroundColor	UIColor	.clear	The backgr ound color of the networ

			k status animat ion image.
networkStatusAnimationTextFontStyle	UIFont	UIFont(name: "HelveticaNeue", size: 13.0)!	The font style of the networ k status animat ion text.
networkStatusAnimationTextColor	UIColor	UIColor(red: 113/255.0, green: 121/255.0, blue: 126/255.0, alpha: 1.0)	The text color of the networ k status animat ion text.
networkStatusAnimationTextTopMargin	Int	10	The top margin of the networ k

			status animat ion text.
networkStatusAnimationTex tBottomMargin	Int	10	The botto m margin of the networ k status animat ion text.
networkStatusAnimationTex tLeftMargin	Int	10	The left margin of the networ k status animat ion text.
networkStatusAnimationTex tRightMargin	Int	10	The right margin of the networ k

			status animat ion text.
networkStatusStaticImage	UIImage?	nil	The static image for networ k status.
networkStaticCellTopMargin	Int	0	The top margin of the networ k static cell.

Name	Type	Default Value	Descrip tion
networkStaticCellBottomMargin	Int	0	The bottom margin of the network static cell.

networkStaticCellLeftMargin	Int	0	The left margin of the network static cell.
networkStaticCellRightMargin	Int	0	The right margin of the network static cell.
networkStaticCellBackgroundColor	UIColor	.clear	The background color of the network static cell.
networkStaticCellBorderColor	UIColor	.clear	The border color of the network static cell.
networkStaticCellCornerRadius	Int	5	The corner radius of the

			network static cell.
networkStaticCellCorners	[CornerRadiusStyle]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual corner radius
networkStaticCellBorderWidth	Int	1	The border width of the network static cell.
networkStaticImageWidth	Int	20	The width of the network static image.
networkStaticImageHeight	Int	20	The height of the network static image.
networkStaticImageLeftMargin	Int	10	The left margin of the network

			static image.
networkStaticImageTopMargin	Int	2	The top margin of the network static image.
networkStaticImageBackgroundColor	UIColor	.clear	The background color of the network static image.
networkStaticTextFontStyle	UIFont	UIFont(name: "HelveticaNeue", size: 13.0)!	The font style of the network static text.
networkStaticTextColor	UIColor	UIColor(red: 113/255.0, green: 121/255.0, blue: 126/255.0, alpha: 1.0)	The text color of the network static text.
networkStaticTextTopMargin	Int	10	The top margin

			of the network static text.
networkStaticTextBottomMargin	Int	10	The bottom margin of the network static text.
networkStaticTextLeftMargin	Int	10	The left margin of the network static text.
networkStaticTextRightMargin	Int	10	The right margin of the network static text.
agentBackgroundImageData	Data?	nil	The image data for the agent's background.

customerBackgroundImageData	Data?	nil	The image data for the customer's background.
setConversationBackgroundImage	Bool	false	Indicates whether to set a background image for the conversation.
setSpeechBubbleView	Bool	true	Indicates whether to set a speech bubble view.
setAgentBackgroundImageStretchTopInset	Int	0	The top inset for stretching the agent's background.

			und image.
setAgentBackgroundImageStretchLeftInset	Int	0	The left inset for stretching the agent's background image.
setAgentBackgroundImageStretchRightInset	Int	0	The right inset for stretching the agent's background image.
setAgentBackgroundImageStretchBottomInset	Int	0	The bottom inset for stretching the agent's background image.
setCustomerBackgroundImageStretchTopInset	Int	0	The top inset for stretching the

			customer's background image.
setCustomerBackgroundImage StretchLeftInset	Int	0	The left inset for stretching the customer's background image.
setCustomerBackgroundImage StretchRightInset	Int	0	The right inset for stretching the customer's background image.
setCustomerBackgroundImage StretchBottomInset	Int	0	The bottom inset for stretching the customer's background

			und image.
setAgentBackgroundImageStretchingPoint	UIEdgeInsets?	nil	The stretching point for the agent's background image.
setCustomerBackgroundImageStretchingPoint	UIEdgeInsets?	nil	The stretching point for the customer's background image.
setMessageTimeStamp	Bool	true	Indicates whether to set a timestamp for messages.
setMessageTimeStampFormat	String	"HH:mm"	The format for the message

			e timesta mp.
showTimestampLowerCase	Bool	true	Indicate s whether to show the timesta mp in lowerca se.
agentTimeStampBackgroundCo lor	UIColor	.clear	The backgro und color of the agent's timesta mp.
agentTimeStampTextColor	UIColor	.darkGray	The text color of the agent's timesta mp.
agentTimeStampBorderColor	UIColor	.clear	The border color of the agent's

			timestamp.
agentTimeStampCornerRadius	Int	0	The corner radius of the agent's timestamp.
agentTimeStampCorners	[CornerRadiusStyle]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual corner radius
agentTimeStampBorderWidth	Int	0	The border width of the agent's timestamp.
agentTimeStampFontStyle	UIFont	UIFont(name: "HelveticaNeue", size: 11.0)!	The font style of the agent's timestamp.
agentTimeStampTextAlignment	NSTextAlignment	NSTextAlignment.natural	The text alignment of the agent's

			timestamp.
agentTimeStampLeftPadding	Int	2	The left padding of the agent's timestamp.
agentTimeStampRightPadding	Int	0	The right padding of the agent's timestamp.
agentTimeStampTopPadding	Int	0	The top padding of the agent's timestamp.
agentTimeStampBottomPadding	Int	0	The bottom padding of the agent's timestamp.
agentTimeStampLeftMargin	Int	0	The left margin of the

			agent's timesta mp.
agentTimeStampRightMargin	Int	0	The right margin of the agent's timesta mp.
agentTimeStampTopMargin	Int	2	The top margin of the agent's timesta mp.
agentTimeStampBottomMargin	Int	0	The bottom margin of the agent's timesta mp.
customerTimeStampBackgroun dColor	UIColor	.clear	The backgro und color of the custom er's

			timesta mp.
customerTimeStampTextColor	UIColor	.darkGray	The text color of the custom er's timesta mp.
customerSendingFailedTextCol or	UIColor	.red	The text color for failed custom er messag es.
customerTimeStampBorderCol or	UIColor	.clear	The border color of the custom er's timesta mp.
customerTimeStampCornerRad ius	Int	0	The corner radius of the custom er's

			timestamp.
customerTimeStampCorners	[CornerRadiusStyle]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual corner radius
customerTimeStampBorderWidth	Int	0	The border width of the customer's timestamp.
customerTimeStampFontStyle	UIFont	UIFont(name: "HelveticaNeue", size: 11.0)!	The font style of the customer's timestamp.
customerTimeStampTextAlignment	NSTextAlignment	NSTextAlignment.right	The text alignment of the customer's timestamp.

customerTimeStampLeftPadding	Int	0	The left padding of the customer's timestamp.
customerTimeStampRightPadding	Int	2	The right padding of the customer's timestamp.
customerTimeStampTopPadding	Int	0	The top padding of the customer's timestamp.
customerTimeStampBottomPadding	Int	0	The bottom padding of the customer's timestamp.
customerTimeStampLeftMargin	Int	0	The left margin

			of the customer's timestamp.
customerTimeStampRightMargin	Int	0	The right margin of the customer's timestamp.
customerTimeStampTopMargin	Int	2	The top margin of the customer's timestamp.
customerTimeStampBottomMargin	Int	0	The bottom margin of the customer's timestamp.
setAgentIconImagePosition	Int	0	Specifies the position of the

			agent's icon image. Set integer values as follows: top = 0, center = 1, bottom = 2.
setCustomerIconImagePosition	Int	0	The position of the customer's icon image. Set integer values as follows: top = 0, center = 1, bottom = 2.
htmlLinkColor	UIColor	.blue	The color of

			HTML links.
htmlLinkGreyScaleModeColor	UIColor	.blue	The color of HTML links in greyscale mode.
agentTypingMessage	String	""	The message displayed when the agent is typing.
ignoreDefaultChime	Bool	false	Indicates whether to ignore the default chime.
playVoiceOverOnRestore	Bool	false	Indicates whether to play voice-

			over on restore.
groupMsgs	Bool	true	Indicate s whether to group messag es.
groupMsgsByTimeStampOnly	Bool	true	Indicate s whether to group messag es by timesta mp only.
spaceBetweenGroupingCells	Int	10	The space between n groupin g cells.
showActivityIndicator	Bool	true	Indicate s whether to show the activity indicato r.

messageSendingText	String	"Sending... "	The text displayed when a message is being sent.
messageSentText	String	"Sent"	The text displayed when a message is sent.
messageFailedText	String	"Failed"	The text displayed when a message fails to send.
timestampMessageSeparator	String	" - "	The separator for timestamp messages.

imageCardTitleFontStyle	UIFont	UIFont(name: "HelveticaNeue-bold", size: 17.0)!	Imagecard title font style.
imageCardTitleAlignment	NSTextAlignment	.natural	Imagecard title text alignment.
imageCardTitleColor	UIColor	.black	Text color of ImageCard title.

Name	Title	Default Value	Description
suggestedActionBackgroundColor	Suggested Action Background Color	UIColor.clear	Suggested action full view background color
suggestedActionButtonBackgroundColor	Suggested Action Button Background Color	.white	Suggested action button background color
suggestedActionButtonBorderColor	Suggested Action Button Border Color	UIColor(red: 47/255.0, green: 90/255.0, blue: 146/255.0, alpha: 1.0)	Suggested action buttons border color

suggestedActionButtonBorderWidth	Suggested Action Button Border Width	2	Suggested action buttons border width
suggestedActionButtonCornerRadius	Suggested Action Button Corner Radius	0	Suggested action buttons corner radius
suggestedActionButtonCorners	Suggested Action Button Corners	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Suggested action buttons add corners for individual section e.g. topRight
suggestedActionButtonTitleColor	Suggested Action Button Title Color	UIColor(red: 47/255.0, green: 90/255.0, blue: 146/255.0, alpha: 1.0)	Suggested action buttons title color
suggestedActionButtonTitleFontStyle	Suggested Action Button Title Font Style	UIFont(name: kFontName, size: 19)!	Suggested action buttons title font size

Name	Title	Default Value	Description
suggestedActionRightArrowBackgroundColor	Suggested Action Right Arrow	.darkGray	Right arrow button color

	Background Color		
suggestedActionLeftArrowBackgroundColor	Suggested Action Left Arrow Background Color	.darkGray	Left arrow button color
suggestedActionRightArrowBorderColor	Suggested Action Right Arrow Border Color	.darkGray	Right arrow button border color
suggestedActionLeftArrowBorderColor	Suggested Action Left Arrow Border Color	.darkGray	Left arrow button border color
suggestedActionRightArrowBorderWidth	Suggested Action Right Arrow Border Width	2	Right arrow button border width
suggestedActionLeftArrowBorderWidth	Suggested Action Left Arrow Border Width	2	Left arrow button border width
suggestedActionRightArrowCornerRadius	Suggested Action Right Arrow Corner Radius	15	Right arrow button corner radius
suggestedActionLeftArrowCornerRadius	Suggested Action Left Arrow Corner Radius	15	Left arrow button corner radius

suggestedActionRightArrowImage	Suggested Action Right Arrow Image	None	Right arrow button image
suggestedActionLeftArrowImage	Suggested Action Left Arrow Image	None	Left arrow button image

e.g.

```
func messagingViewProperties(vc : LiveChatMessagingViewController) {
    let transcriptView = MessagingViewProperties()
    transcriptView.rehydrate = true
    transcriptView.agentMessageTextAlignment = .justified
    transcriptView.agentTypingTextTopMargin = 10
    vc.setTranscriptViewProperties(properties: transcriptView)
}
```

EmailPaneProperties

Name	Type	Default Value	Description
isErrorImageRequired	Bool	true	Indicates whether an error image is required.

enableSendButton	Bool	true	Indicates whether the send button is enabled.
placeholderPadding	[CGFloat]	[5.0, 5.0, 5.0, 5.0]	The padding for the placeholder.
transparentBackgroundColorOpacity	Float	0.8	The opacity of the transparent background color.
transparentBackgroundColor	UIColor	UIColor(red: 47/255.0, green: 90/255.0, blue: 146/255.0, alpha: 1.0)	The transparent background color.
emailPaneBackgroundColor	UIColor	.white	The background color of the

			email pane.
emailPaneHeight	Double	150.0	The height of the email pane.
emailPaneHeightAtLandscape	Double	150.0	The height of the email pane in landscape mode.
emailPaneTextGroupSpacing	Int	15	The spacing between text groups in the email pane.
hideTitle	Bool	false	Hide title.
titleText	String	"Please provide e-mail address to send transcript."	The text of the title.
titleTextColor	UIColor	.black	The color of

			the title text.
titleTextFontStyle	UIFont	UIFont(name: "Helvetica", size: 20.0)!	The font style of the title text.
titleTextAlignment	NSTextAlignment	NSTextAlignment.natural	The alignment of the title text.
hideSubTitle	Bool	false	Hide subtitle.
subTitleText	String	"The transcript will be sent after the chat ends."	The text of the subtitle.
subTitleTextColor	UIColor	.black	The color of the subtitle text.
subTitleTextFontStyle	UIFont	UIFont(name: "Helvetica", size: 15.0)!	The font style of the subtitle text.
subTitleTextAlignment	NSTextAlignment	NSTextAlignment.natural	The alignment of the

			subtitle text.
cancelButtonText	String	"Cancel"	The text of the cancel button.
cancelButtonBackgroundColor	UIColor	.white	The background color of the cancel button.
cancelButtonTextColor	UIColor	UIColor(red: 113/255.0, green: 121/255.0, blue: 126/255.0, alpha: 1.0)	The text color of the cancel button.
cancelButtonBorderColor	UIColor	UIColor(red: 113/255.0, green: 121/255.0, blue: 126/255.0, alpha: 1.0)	The border color of the cancel button.
cancelButtonFontStyle	UIFont	UIFont(name: "HelveticaNeue-bold", size: 14.0)?.withWeight(.bold)!	The font style of the cancel button.

buttonGroupViewHeight	Int	60	The height of the button group view.
buttonGroupInBetweenBorderWidth	Int	10	The border width between buttons in the group.
buttonGroupViewTopBorderWidth	Int	3	The border width of the button group view.
buttonGroupBackgroundColor	UIColor	.white	The background color of the button group.
sendButtonBorderColor	UIColor	UIColor(red: 47/255.0, green: 90/255.0, blue: 146/255.0, alpha: 1.0)	The border color of

			the send button.
sendButtonTextColor	UIColor	.white	The text color of the send button.
sendButtonText	String	"Send"	The text of the send button.
sendButtonBackgroundColor	UIColor	UIColor(red: 47/255.0, green: 90/255.0, blue: 146/255.0, alpha: 1.0)	The background color of the send button.
sendButtonFontStyle	UIFont	UIFont(name: "HelveticaNeue-Bold", size: 14.0)?.withWeight(.bold)!	The font style of the send button.
emailTextFieldCornerRadius	Int	2	The corner radius of the email text field.
emailTextFieldCorners	[CornerRadiusStyle]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual

			corner radius
emailTextFieldBorderWidth	Int	1	The border width of the email text field.
emailTextFieldBorderColor	UIColor	.white	The border color of the email text field.
emailTextFieldColor	UIColor	.black	The color of the email text field.
emailTextFieldFontStyle	UIFont	UIFont(name: "HelveticaNeue-bold", size: 17.0)!	The font style of the email text field.
emailTextFieldAccessibilityLabel	String	"Please provide e-mail address to send transcript. The	The accessi

		transcript will be sent after the chat ends."	bility label for the email text field.
emailHintText	String	" johnsmith@outlook.com "	The hint text for the email text field.
emptyEmailAddressErrorMessage	String	"Enter a valid email address."	The error message for an empty email address.
invalidEmailAddressErrorMessage	String	"Enter a valid email address."	The error message for an invalid email address.
errorMessageTextColor	UIColor	.red	The text color of the error

			message.
emailErrorImage	Data?	nil	The image data for the email error.
emailErrorFontStyle	UIFont	UIFont(name: "Helvetica", size: 13.0)!	The font style of the email error message.
emailErrorImageHeight	Int	20	The height of the email error image.
emailErrorImageWidth	Int	20	The width of the email error image.
errorFieldBottomSpacing	Int	6	The bottom spacing

			of the error field.
errorFieldTopSpacing	Int	6	The top spacing of the error field.
errorFieldBottomSpacingAtLandscape	Int	5	The bottom spacing of the error field in landscape mode.
emailPaneCornerRadius	Int	10	The corner radius of the email pane.
emailPaneCorners	[CornerRadiusStyle]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual corner radius
emailPaneBorderWidth	Int	1	The border width of

			the email pane.
emailPaneBorderColor	UIColor	.white	The border color of the email pane.
mailSentFailureErrorMessage	String	"Sorry, problem with sending mail, please try again."	The error message for a failed email send.
emailFieldMaxChars	Int	80	The maximum number of characters for the email field.
emailRequestSuccessNotificationText	String	"Email will be sent after chat ends."	The success notification text for an

			email api request.
emailRequestFailedNotificationText	String	"Email could not be saved, try again later."	The failure notification text for an email api request.
attachmentMessage	String	"The following attachment was uploaded during the conversation:"	The message for an uploaded attachment.

e.g.

```
func emailPaneProperties(vc : LiveChatMessagingViewController) {  
    let emailProp = EmailPaneProperties()  
    emailProp.isErrorImageRequired = true  
    emailProp.enableSendButton = false  
    emailProp.emailPanebackgroundColor = .brown  
    vc.setEmailPaneProperties(properties: emailProp)  
}
```

LoadingPaneProperties

Name	Type	Default Value	Description
hideLoading	Bool	false	Hide the loading pane.
backgroundColor	UIColor	UIColor(red: 52/255.0, green: 92/255.0, blue: 165/255.0, alpha: 1.0)	The background color of the loading pane.
backgroundColorOpacity	Float	1	The opacity of the background color.
hideTitle	Bool	false	Hide the title.
hideSubTitle	Bool	false	Hide the subtitle.
hideSpinnerText	Bool	false	Hide the spinner text.
spaceBetweenLoadingPaneChildren	Int	50	The space between child elements in the

			loading pane.
chatImageHeight	Int	120	The height of the chat image.
chatImage	UIImage?	nil	The chat image.
titleText	String	"Welcome to"	The text of the title.
titleColor	UIColor	.white	The color of the title text.
titleTextAlignment	NSTextAlignment	NSTextAlignment.center	The alignment of the title text.
subTitleText	String	"live chat support ..."	The text of the subtitle.
subTitleColor	UIColor	.white	The color of the subtitle text.
subTitleTextAlignment	NSTextAlignment	NSTextAlignment.center	The alignment of the subtitle text.

subTitleTopMargin	Int	10	The top margin of the subtitle.
spinnerText	String	"Loading ..."	The text of the spinner.
spinnerTextColor	UIColor	.white	The color of the spinner text.
spinnerTextAlignment	NSTextAlignment	NSTextAlignment.center	The alignment of the spinner text.
spinnerTextTopMargin	Int	5	The top margin of the spinner text.
titleFontStyle	UIFont	UIFont(name: "Helvetica", size: 14.0)!	The font style of the title text.
subTitleFontStyle	UIFont	UIFont(name: "Helvetica", size: 18.0)?.withWeight(.bold)!	The font style of the subtitle text.
spinnerTextFontStyle	UIFont	UIFont(name: "Helvetica", size: 10.0)!	The font style of the

			spinner text.
loadingPaneAccessibilityText	String	""	The accessibility text for the loading pane.

e.g.

```
func loadingPaneProperties(vc : LiveChatMessagingViewController) {
    let loadPaneProp = LoadingPaneProperties()
    loadPaneProp.hideLoading = true
    loadPaneProp.subTitleText = "live chat"
    loadPaneProp.titleFontStyle = UIFont(name: "HelveticaNeue-Light", size: 14.0)!
    vc.setLoadingPaneProperties(properties: loadPaneProp)
}
```

NotificationPaneProperties

Name	Type	Default Value	Description
headerBackgroundColor	UIColor	UIColor(red: 252/255.0, green: 205/255.0, blue: 126/255.0, alpha: 1.0)	The background color of the header.

headerTitleText	String	"Notifications: Click here to see details"	The text of the header title.
headerTitleColor	UIColor	.darkGray	The color of the header title text.
headerInfoImageData	NSData?	nil	The image data for the header info icon.
headerCloseImageData	NSData?	nil	The image data for the header close icon.
headerTitleTextAlignment	NSTextAlignment	NSTextAlignment.natural	The alignment of the header title text.
cellSuccessBackgroundColor	UIColor	UIColor(red: 248/255.0, green: 248/255.0, blue: 248/255.0, alpha: 1.0)	The background color of the success cell.
cellWarningBackgroundColor	UIColor	UIColor(red: 248/255.0, green: 248/255.0, blue: 248/255.0, alpha: 1.0)	The background color of the warning cell.

cellErrorBackgroundColor	UIColor	UIColor(red: 254/255.0, green: 235/255.0, blue: 235/255.0, alpha: 1.0)	The background color of the error cell.
cellTitleTextAlignment	NSTextAlignment	NSTextAlignment.natural	The alignment of the cell title text.
cellTitleSuccessColor	UIColor	UIColor(red: 47/255.0, green: 157/255.0, blue: 53/255.0, alpha: 1.0)	The color of the success cell title text.
cellTitleErrorColor	UIColor	UIColor(red: 167/255.0, green: 4/255.0, blue: 4/255.0, alpha: 1.0)	The color of the error cell title text.
cellTitleWarningColor	UIColor	.darkGray	The color of the warning cell title text.
cellSuccessInfoImageData	NSData?	nil	The image data for the success cell info icon.
cellSuccessCloseImageData	NSData?	nil	The image data for the success

			cell close icon.
cellErrorInfolImageData	NSData?	nil	The image data for the error cell info icon.
cellErrorCloseImageData	NSData?	nil	The image data for the error cell close icon.
cellWarningInfolImageData	NSData?	nil	The image data for the warning cell info icon.
cellWarningCloseImageData	NSData?	nil	The image data for the warning cell close icon.
spaceBetweenHeaderChilds	Int	10	The space between child elements in the header.
spaceBetweenCellChilds	Int	10	The space between child elements in the cell.

e.g.

```
func notificationPaneProperties (vc : LiveChatMessagingViewController) {  
    let notiProp = NotificationPaneProperties()  
    notiProp.cellSuccessBackgroundColor = .brown  
    notiProp.cellTitleErrorColor = .systemPink  
    notiProp.headerTitleColor = .blue  
    vc.setNotificationPaneProperties(properties: notiProp)  
}
```

OOOHoursViewProperties

Name	Type	Default Value	Description
hideOOOHPane	Bool	false	Hide the out-of-office hours pane.
backgroundColor	UIColor	.white	The background color of the pane.
headerText	String	"We're offline"	The text displayed in the header.
hideTitle	Bool	false	Hide the title.

titleText	String	"Thanks for contacting us. You have reached us outside of our operating hours. An agent will respond when we open. Please see link https://microsoft.com "	The text displayed in the title.
titleTextColor	UIColor	.black	The color of the title text.
titleFontStyle	UIFont	UIFont(name: "HelveticaNeue", size: 19.0)!	The font style of the title text.
titleTextAlignment	NSTextAlignment	NSTextAlignment.center	The alignment of the title text.
htmlLinkColor	UIColor	.blue	The color of the HTML links.

e.g.

```
func oooHoursViewProperties(vc : LiveChatMessagingViewController) {  
    let oooProp = OOOHoursViewProperties()  
    oooProp.hideOOOHPane = false  
    oooProp.backgroundColor = .blue  
    oooProp.headerText = ""  
    vc.setOOOHoursViewProperties(properties: oooProp)  
}
```

StartChatErrorViewProperties

Name	Type	Default Value	Description
backgroundColorOpacity	Float	1	The opacity of the background color.
viewTitle	String	""	The title of the view.
hideErrorTitle	Bool	false	Hide the error title.
hideErrorSubtitle	Bool	false	Hide the error subtitle.
errorPaneChildSpacing	Int	60	The spacing between child elements in the error pane.
errorTitleColor	UIColor	.black	The color of the error title text.
errorSubtitleColor	UIColor	.black	The color of the error subtitle text.
errorTitleFontStyle	UIFont	UIFont(name: "HelveticaNeue", size: 19.0)!	The font style of the

			error title text.
errorTitleAlignment	NSTextAlignment	NSTextAlignment.left	The alignment of the error title text.
errorSubtitleFontStyle	UIFont	UIFont(name: "Helvetica", size: 18.0)!	The font style of the error subtitle text.
errorSubtitleAlignment	NSTextAlignment	NSTextAlignment.left	The alignment of the error subtitle text.
errorSubtitleTopMargin	Int	20	The top margin of the error subtitle.
errorViewBackgroundColor	UIColor	.white	The background color of the error view.
hideErrorIcon	Bool	false	Hide the error icon.
errorIconData	Data?	nil	The image data for the error icon.
networkErrorIconData	Data?	nil	The image data for the

			network error icon.
errorTitleText	String	"We are unable to load chat at this time."	The text of the error title.
errorSubTitleText	String	"Please try again later."	The text of the error subtitle.
errorTitlePersistentChatRetrievalFailure	String	"We are unable to load chat at this time."	The error title for persistent chat retrieval failure.
errorTitleChatInitializationFailure	String	"We are unable to load chat at this time."	The error title for chat initialization failure.
errorTitleChatTokenRetrievalFailure	String	"Chat authentication has failed."	The error title for chat token retrieval failure.
errorTitleUninitializedChatSDKFailure	String	"We are unable to load chat at this time."	The error title for uninitialized chat SDK failure.

errorTitleAuthSetupErrorTitleText	String	"Chat authentication has failed."	The error title for authentication setup failure.
errorTitleNetworkErrorText	String	"We are unable to load chat at this time."	The error title for network error.

e.g.

```
func startChatErrorViewProperties (vc : LiveChatMessagingViewController) {
    let startChatProp = StartChatErrorViewProperties ()
    startChatProp.hideErrorTitle = true
    startChatProp.hideErrorSubtitle = true
    startChatProp.errorTitleText = "Alert!"
    vc.setStartChatErrorViewProperties(properties: startChatProp)
}
```

ConfirmationPaneProperties

Name	Type	Default Value	Description
closeConfirmationDialogBackgroundTintColor	UIColor	.blue	The background color of the close

			confirmati on dialog.
closeConfirmationDialogTitleForEmailAndDo wnload	String	"Want a copy of this chat?"	The title for the close confirmati on dialog when both email and download options are available.
closeConfirmationDialogSubTitleForEmailAn dDownload	String	"Select Cancel and then select the download or email icon."	The subtitle for the close confirmati on dialog when both email and download options are available.
closeConfirmationDialogTitleForEmail	String	"Want a copy of this chat?"	The title for the close confirmati

			on dialog when only the email option is available.
closeConfirmationDialogSubTitleForEmail	String	"Select Cancel and then select the email icon."	The subtitle for the close confirmation dialog when only the email option is available.
closeConfirmationDialogTitleForDownload	String	"Want a copy of this chat?"	The title for the close confirmation dialog when only the download option is available.
closeConfirmationDialogSubTitleForDownload	String	"Select Cancel and then select the download icon."	The subtitle for the close confirmation dialog

			when only the download option is available.
hideTitle	Bool	false	Indicates whether to hide the title.
titleText	String	"Close chat"	The text of the title.
titleTextColor	UIColor	.black	The color of the title text.
titleFont	UIFont	UIFont(name: kFontName, size: 16.0)?.withWeight(.bold)!	The font style of the title text.
hideSubTitle	Bool	false	Indicates whether to hide the subtitle.
subtitleText	String	"Do you really want to close this chat?"	The text of the subtitle.
subtitleTextColor	UIColor	.darkGray	The color of the

			subtitle text.
subtitleFont	UIFont	UIFont(name: kFontName, size: 14.0)!	The font style of the subtitle text.
hideConfirmButton	Bool	false	Hide the confirm button.
confirmButtonText	String	"Close"	The text of the confirm button.
confirmButtonAccessibilityLabel	String	"Close Chat"	The accessibility string for the confirm button.
confirmButtonTextColor	UIColor	blueOCStandardColor	The text color of the confirm button.
hideCancelButton	Bool	false	hide the cancel button.

cancelButtonText	String	"Cancel"	The text of the cancel button.
cancelButtonAccessibilityLabel	String	"Cancel. Return to Chat"	The accessibility string for the cancel button.
cancelButtonTextColor	UIColor or	grayOCStandardColor	The text color of the cancel button.

e.g.

```
func confirmationPaneProperties (vc : LiveChatMessagingViewController) {  
    let confirmProp = ConfirmationPaneProperties()  
    confirmProp.hideTitle = true  
    confirmProp.titleText = "Close Conversation"  
    confirmProp.confirmButtonText = "Confirm"  
    vc.setConfirmationPaneProperties(properties: confirmProp)  
}
```

PreChatPaneProperties

Name	Type	Default Value	Description
requiredFieldMissingMessage	String	"A required field cannot be empty"	The message displayed when a required field is missing.
hidePreChatSurveyPane	Bool	false	Hide the pre-chat survey pane.

PostChatPaneProperties

Name	Type	Default Value	Description
hidePostChatSurveyPane	Bool	false	Determines whether the post-chat survey pane is hidden.
postChatLoadingBackground	UIColor	UIColor(red: 47/255.0, green: 90/255.0, blue: 146/255.0, alpha: 1.0)	The background color of the post-chat loading screen.
postChatLoadingTitle	String	"Please take a moment to give us feedback about your chat experience."	The title text displayed on the post-chat loading screen.
postChatLoadingTitleFont	UIFont	UIFont(name: "Helvetica", size: 17)!	The font used for the post-chat loading title.

postChatLoadingTitleColor	UIColor	.white	The color of the post-chat loading title text.
postChatLoadingTitleAlignment	NSTextAlignment	.center	The alignment of the post-chat loading title text.
postChatLoadingSubtitle	String	"We are loading the survey for you now."	The subtitle text displayed on the post-chat loading screen.
postChatLoadingSubtitleFont	UIFont	UIFont(name: "Helvetica", size: 17)!	The font used for the post-chat loading subtitle.
postChatLoadingSubtitleColor	UIColor	.white	The color of the post-chat loading subtitle text.
postChatLoadingSubtitleAlignment	NSTextAlignment	.center	The alignment of the post-chat loading subtitle text.
distanceBetweenLoadingViewTitleSubtitle	Integer	30	The distance between the title and subtitle on the post-chat loading screen.

DownloadedTranscriptProperties

Name	Type	Default Value	Description
pageTitle	String	"Customer Transcript"	The title of the page.
attachmentMessage	String	"The following attachment was uploaded during the conversation: "	The message for uploaded attachments.
networkOnlineMessage	String	"Connection restored. Please refresh the page"	The message displayed when the network connection is restored.
networkOfflineMessage	String	"Network Error. Please make sure you are connected to the internet."	The message displayed when the network connection is lost.
transcriptBackgroundColor	String	"#FFF"	The background color of

			the transcript.
agentAvatarBackgroundColor	String	"#E8E8E8"	The background color of the agent's avatar.
agentAvatarFontColor	String	"#000"	The font color of the agent's avatar.
customerAvatarBackgroundColor	String	"#2266E3"	The background color of the customer's avatar.
customerAvatarFontColor	String	"#FFF"	The font color of the customer's avatar.
disableMarkdownMessageFormatting	Bool	false	Indicates whether to disable markdown message formatting.
disableNewLineMarkdownSupport	Bool	false	Indicates whether to disable

			new line markdown support.
cdnUrl	String	" https://oc-cdn-public.azureedge.net/livechatwidget "	The URL for the CDN.
fileName	String	"transcript.html"	The name of the downloaded transcript file.
downloadErrorBannerMessage	String	"An error occurred while downloading the chat transcript."	The message displayed when there is an error downloading the transcript.

e.g.

```
func downloadedTranscriptProperties (vc : LiveChatMessagingViewController) {  
    let downloadProp = DownloadedTranscriptProperties ()  
    downloadProp.transcriptBackgroundColor = "#FF0"  
    downloadProp.agentAvatarBackgroundColor = "#F00"  
    downloadProp.disableMarkdownMessageFormatting = true  
    vc.setDownloadedTranscriptProperties(properties: downloadProp)  
}
```

MediaPaneProperties

Name	Type	Default Value	Description
showMediaImage	Bool	true	Indicates whether to show the media placeholder image.
viewCornerRadius	Int	3	The corner radius of the view.
viewCorners	[CornerRadiusStyle]	[.topRight,.topLeft,.bottomRight,.bottomLeft]	Set individual corner radius
viewBorderWidth	Int	1	The border width of

			the view.
viewSpacing	Int	10	The spacing between views.
viewBorderColor	UIColor	UIColor(red: 224/255.0, green: 224/255.0, blue: 224/255.0, alpha: 1.0)	The border color of the view.
backgroundColorAgent	UIColor	.white	The background color for the agent cell.
downloadSectionBackgroundColorAgent	UIColor	.white	The background color for the download section of the agent cell.

backgroundColorCustomer	UIColor	.white	The background color for the customer cell.
downloadSectionBackgroundColorCustomer	UIColor	.white	The background color for the download section of the customer cell.
dividerBackgroundColor	UIColor	UIColor(red: 224/255.0, green: 224/255.0, blue: 224/255.0, alpha: 1.0)	The background color of the divider.
dividerHeight	Int	1	The height of the divider.
photoMediaImage	UIImage?	nil	The placeholder

			image for photo media.
videoMediaImage	UIImage?	nil	The placeho lder image for video media.
pdfMediaImage	UIImage?	nil	The placeho lder image for PDF media.
audioMediaImage	UIImage?	nil	The placeho lder image for audio media.
attachmentMediaImage	UIImage?	nil	The placeho lder image for attach

			ment media.
mediaImageWidth	Int	15	The width of the media placeho lder image.
mediaImageHeight	Int	15	The height of the media placeho lder image.
downloadImage	UIImage?	nil	The image for the downlo ad button.
downloadImageWidth	Int	25	The width of the downlo ad button image.

downloadImageHeight	Int	25	The height of the download button image.
mediaNameTextColor	UIColor	UIColor(red: 47/255.0, green: 90/255.0, blue: 146/255.0, alpha: 1.0)	The text color of the media name.
mediaNameTextFont	UIFont	UIFont(name: "Helvetica", size: 15)!	The font of the media name text.
mediaNameTextAlignment	NSTextAlignment	NSTextAlignment.natural	The alignment of the media name text.
mediaNameTextLeftPadding	Int	10	The left padding of the media name text.

mediaNameTextRightPadding	Int	10	The right padding of the media name text.
playerTintColor	UIColor	.black	The tint color of the media player.
playerBackgroundColor	UIColor	.clear	The background color of the media player.

e.g.

```
func mediaPaneProperties(vc : LiveChatMessagingViewController) {  
    let mediaProp = MediaPaneProperties()  
    mediaProp.showMediaImage = false  
    mediaProp.photoMediaImage = UIImage(named: "media_image")  
    mediaProp.mediaNameTextLeftPadding = 10  
    mediaProp.mediaNameTextRightPadding = 10  
    vc.setMediaProperties(properties: mediaProp)
```

```
}
```

ReconnectViewProperties

Name	Type	Default Value	Description
hideReconnectView	Bool	false	Determines if the reconnect view should be hidden.
backgroundColor	UIColor	.white	Background color of the reconnect view.
reconnectViewBackgroundColor	UIColor	.white	Background color of the reconnect view specifically.
reconnectViewBorderWidth	CGFloat	1	Width of the border around the reconnect view.
reconnectViewCornerRadius	CGFloat	5	Corner radius for the reconnect view.
reconnectViewCorners	[CornerRadius Style]	[.topRight, topLeft, bottomRight, bottomLeft]	Set individual corner radius
reconnectViewBorderColor	UIColor	UIColor(red: 224/255.0, green: 224/255.0, blue:	Color of the border around the reconnect view.

		224/255.0, alpha: 1.0)	
hideReconnectTitle	Bool	false	Determines if the reconnect title should be hidden.
reconnectTitleText	String	"Previous session detected"	Text for the reconnect title.
hideReconnectSubtitle	Bool	false	Determines if the reconnect subtitle should be hidden.
reconnectSubtitleText	String	"We have detected a previous chat session. Would you like to continue with your previous session?"	Text for the reconnect subtitle.
reconnectTitleColor	UIColor	.black	Color of the reconnect title text.
reconnectSubtitleColor	UIColor	.black	Color of the reconnect subtitle text.
reconnectTitleFontStyle	UIFont	UIFont(name: "Helvetica", size: 19.0)!	Font style for the reconnect title.
reconnectSubtitleFontStyle	UIFont	UIFont(name:	Font style for the reconnect subtitle.

		"Helvetica" , size: 18.0)!	
hideReconnectIcon	Bool	false	Determines if the reconnect icon should be hidden.
reconnectIconData	Data?	nil	Data for the reconnect icon.
hideContinueChatButton	Bool	false	Determines if the continue chat button should be hidden.
continueChatButtonText	String	"Continue conversation"	Text for the continue chat button.
hideStartNewChatButton	Bool	false	Determines if the start new chat button should be hidden.
startNewChatButtonText	String	"Start new conversation"	Text for the start new chat button.
continueChatButtonTitleColor	UIColor	.white	Title color for the continue chat button.
continueChatButtonBackgroundColor	UIColor	UIColor(red: 47/255.0, green: 90/255.0, blue: 146/255.0, alpha: 1.0)	Background color for the continue chat button.
continueChatButtonBorderColor	UIColor	UIColor(red: 47/255.0, green: 90/255.0,	Border color for the continue chat button.

		blue: 146/255.0, alpha: 1.0)	
continueChatButton BorderWidth	CGFloat	1	Border width for the continue chat button.
continueChatButton CornerRadius	CGFloat	5	Corner radius for the continue chat button.
continueChatButton Corners	[CornerRadius Style]	[.topRight,.t opLeft,.bot tomRight,.b ottomLeft]	Set individual corner radius
startNewChatButton TitleColor	UIColor	.white	Title color for the start new chat button.
startNewChatButton BackgroundColor	UIColor	.black	Background color for the start new chat button.
startNewChatButton BorderColor	UIColor	.black	Border color for the start new chat button.
startNewChatButton BorderWidth	CGFloat	1	Border width for the start new chat button.
startNewChatButton CornerRadius	CGFloat	5	Corner radius for the start new chat button.
startNewChatButton Corners	[CornerRadius Style]	[.topRight,.t opLeft,.bot tomRight,.b ottomLeft]	Set individual corner radius

e.g.

```
func ReconnectViewProperties(vc : LiveChatMessagingViewController) {
```




```
let mediaProp = ReconnectViewProperties()
mediaProp.startNewChatButtonBorderColor = false
mediaProp.continueChatButtonBackgroundColor = .black
vc.setReconnectViewProperties(properties: mediaProp)
}
```