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Viber API Documentation

7.3.0

Docs / Tools / Keyboards

Keyboards

The public accounts API allows sending a custom keyboard with each message, to supply the user with a set of predefined replies or actions. The keyboard can be attached to any message type or sent on it's on. Once received, the keyboard will appear to the user instead of the device's native keyboard. The keyboards are fully customizable and can be created and designed specifically for the PA's needs.

The client will always display the last keyboard that was sent to it.

Table of Contents

- Attaching a keyboard to a message
- General keyboard parameters
- Buttons parameters
- Keyboard design
 - Text design
 - Keyboard Reply logic
 - Keyboard design guidelines
- Favorites Metadata
- Keyboard examples

Attaching a keyboard to a message

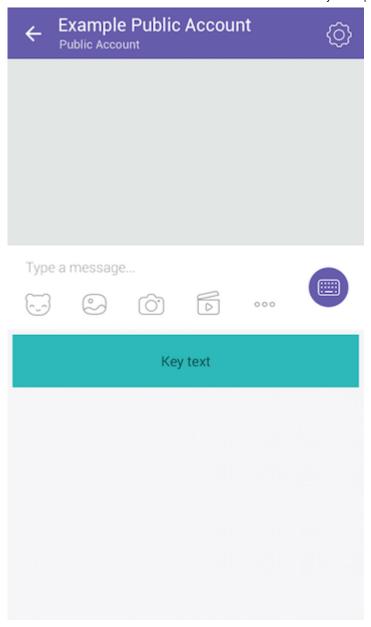
Keyboards can be attached to any message type and be sent and displayed together. To attach a keyboard to a message simply add the keyboard's parameters to the message JSON.

The keyboard JSON object defines different visual and logic attributes. From the background color, number of buttons and so on.

The example below shows a keyboard sent with a single message.

```
{
        "keyboard": {
                "DefaultHeight": true,
                "BgColor": "#FFFFFF",
                "Buttons": [{
                        "Columns": 6,
                         "Rows": 1,
                         "BgColor": "#2db9b9",
                         "BgMediaType": "gif",
                         "BgMedia": "http://www.url.by/test.gif",
                         "BgLoop": true,
                         "ActionType": "open-url",
                        "ActionBody": "www.tut.by",
                         "Image": "www.tut.by/img.jpg",
                         "Text": "Key text",
                         "TextVAlign": "middle",
                        "TextHAlign": "center",
                         "TextOpacity": 60,
                         "TextSize": "regular"
                }]
        }
}
```

Which in turn will look like this:



General keyboard parameters

Please note: The api level 3 is supported on devices running Viber version 7.6 and above. If you use api level 3 parameters you will have to set the min_api_version parameter on right api level as well.

Name	Description	Possible values	Default value
Buttons	required. Array containing all keyboard buttons by order. See buttons parameters below for buttons parameters details		

Name	Description	Possible values	Default value
BgColor	optional. Background color of the keyboard	Valid color HEX value	Default Viber keyboard background
DefaultHeight	optional. When true - the keyboard will always be displayed with the same height as the native keyboard. When false - short keyboards will be displayed with the minimal possible height. Maximal height will be native keyboard height	true, false	false
Custom Default Height	optional (api level 3). How much percent of free screen space in chat should be taken by keyboard. The final height will be not less than height of system keyboard	4070	
HeightScale	optional (api level 3). Allow use custom aspect ratio for Carousel content blocks. Scales the height of the default square block (which is defined on client side) to the given value in percents. It means blocks can become not square and it can be used to create Carousel content with correct custom aspect ratio. This is applied to all blocks in the Carousel content	20100	100
ButtonsGroupColumns	optional (api level 4). Represents size of block for grouping buttons during layout	1-6	6
ButtonsGroupRows	optional (api level 4). Represents size of block for grouping buttons during layout	1-7	7 for Carousel content; 2 for Keyboard
InputFieldState	optional (api level 4). Customize the keyboard input field. regular - display regular size input field. minimized - display input field minimized by default. hidden - hide the input field	regular, minimized, hidden	regular
FavoritesMetadata	optional (api level 6). JSON Object, which describes Carousel content to be saved via favorites bot, if saving is available	See Favorites Metadata	

Buttons parameters

The following parameters can be defined for each button in the "buttons" array separately. Each button must contain at least one of the following optional parameters: text, BgMedia, image,

BgColor.

Name	Description	Possible values	Default value
Columns	optional. Button width in columns. See keyboard design for more details	1-6	6
Rows	optional. Button height in rows. See keyboard design for more details	1-2	1
BgColor	optional. Background color of button	Valid color HEX value	Default Viber button color
Silent	optional. Determine whether the user action is presented in the conversation	true/false	false
BgMediaType	optional. Type of the background media	picture, gif.For picture - JPEG and PNG files are supported. Max size: 500 kb	picture
BgMedia	optional. URL for background media content (picture or gif). Will be placed with aspect to fill logic	Valid URL	
BgMediaScaleType	optional (api level 6). Options for scaling the bounds of the background to the bounds of this view: crop - contents scaled to fill with fixed aspect. some portion of content may be clipped. fill - contents scaled to fill without saving fixed aspect. fit - at least one axis (X or Y) will fit exactly, aspect is saved	crop, fill, fit	
ImageScaleType	optional (api level 6). Options for scaling the bounds of an image to the bounds of this view: crop - contents scaled to fill with fixed aspect. some portion of content may be clipped. fill - contents scaled to fill without saving fixed aspect. fit - at least one axis (X or Y) will fit exactly, aspect is saved	crop, fill, fit	

Name	Description	Possible values	Default value
BgLoop	optional. When true - animated background media (gif) will loop continuously. When false - animated background media will play once and stop	true , false	true
ActionType	optional. Type of action pressing the button will perform. Reply - will send a reply to the PA. open-url - will open the specified URL and send the URL as reply to the PA. See reply logic for more details	reply, open-url, location- picker, share- phone, none	reply
ActionBody	required. Text for reply and none. ActionType or URL for open-url. See reply logic for more details	For ActionType reply - text For ActionType open-url - Valid URL.	
Image	optional. URL of image to place on top of background (if any). Can be a partially transparent image that will allow showing some of the background. Will be placed with aspect to fill logic	Valid URL. JPEG and PNG files are supported. Max size: 500 kb	
Text	optional. Text to be displayed on the button. Can contain some HTML tags - see keyboard design for more details	Free text. Valid and allowed HTML tags Max 250 characters. If the text is too long to display on the button it will be cropped and ended with ""	
TextVAlign	optional. Vertical alignment of the text	top, middle, bottom	middle
TextHAlign	optional. Horizontal align of the text	left, center, right	center

Name	Description	Possible values	Default value
TextPaddings	optional (api level 4). Custom paddings for the text in points. The value is an array of Integers [top, left, bottom, right]	per padding 012	[12,12,12,12]
TextOpacity	optional. Text opacity	0-100	100
TextSize	optional. Text size out of 3 available options	small, regular, large	regular
OpenURLType	optional. Determine the open-url action result, in app or external browser	internal, external	internal
OpenURLMediaType	optional. Determine the url media type. not-media - force browser usage. video - will be opened via media player. gif - client will play the gif in full screen mode. picture - client will open the picture in full screen mode	not-media , video , gif , picture	not-media
TextBgGradientColor	optional. Background gradient to use under text, Works only when TextVAlign is equal to top or bottom	Hex value (6 characters)	
TextShouldFit	optional. (api level 6) If true the size of text will decreased to fit (minimum size is 12)	true , false	false
TextSize	optional. Text size out of 3 available options	small, regular, large	regular
InternalBrowser	optional (api level 3). JSON Object, which includes internal browser configuration for open-url action with internal type	See below	

Name	Description	Possible values	Default value
InternalBrowser.ActionButton	optional (api level 3). Action button in internal's browser navigation bar. forward - will open the forward via Viber screen and share current URL or predefined URL. send - sends the currently opened URL as an URL message, or predefined URL if property ActionPredefinedURL is not empty. open-externally - opens external browser with the current URL. send-to-bot - (api level 6) sends reply data in msgInfo to bot in order to receive message. none - will not display any button	forward, send, open- externally, send-to- bot, none	forward
InternalBrowser.ActionPredefinedURL	optional (api level 3). If ActionButton is send or forward then the value from this property will be used to be sent as message, otherwise ignored	String with 1 or more characters	
InternalBrowser.TitleType	optional (api level 3). Type of title for internal browser if has no CustomTitle field. default means the content in the page's <og:title> element or in <title> tag. domain means the top level domain</td><td>domain ,
default</td><td>default</td></tr><tr><td>InternalBrowser.CustomTitle</td><td>optional (api level 3). Custom
text for internal's browser title,
TitleType will be ignored in case
this key is presented</td><td>String up to
15 characters</td><td></td></tr><tr><td>InternalBrowser.Mode</td><td>optional (api level 3). Indicates that browser should be opened in a full screen or in partial size (50% of screen height). Full screen mode can be with orientation lock (both orientations supported, only landscape or only portrait)</td><td>fullscreen,
fullscreen-
portrait,
fullscreen-
landscape,
partial-
size</td><td>fullscreen</td></tr><tr><td>InternalBrowser.FooterType</td><td>optional (api level 3). Should the
browser's footer will be displayed
(default) or not (hidden)</td><td>default ,
hidden</td><td>default</td></tr></tbody></table></title></og:title>		

Name	Description	Possible values	Default value
Internal Browser. Action Reply Data	optional (api level 6). Custom reply data for send-to-bot action that will be resent in msgInfo	Valid string	
Мар	optional (api level 6). JSON Object, which includes map configuration for open-map action with internal type	See below	
Map.Latitude	optional (api level 6). Location latitude (format: "12.12345")	Valid latitude	
Map.Longitude	optional (api level 6). Location longitude (format: "3.12345")	Valid longitude	
Frame	optional (api level 6). JSON Object. Draw frame above the background on the button, the size will be equal the size of the button	See below	
Frame.BorderWidth	optional (api level 6). Width of border	010	1
Frame.BorderColor	optional (api level 6). Color of border	Hex color #xxxxxx	#000000
Frame.CornerRadius	optional (api level 6). The border will be drawn with rounded corners	010	0
MediaPlayer	optional (api level 6). JSON Object. Specifies media player options. Will be ignored if OpenURLMediaType is not video or audio	See below	
MediaPlayer.Title	optional (api level 6). Media player's title (first line)	String	
MediaPlayer.Subtitle	optional (api level 6). Media player's subtitle (second line)	String	
MediaPlayer.ThumbnailURL	optional (api level 6). The URL for player's thumbnail (background)	Valid URL	
MediaPlayer.Loop	optional (api level 6). Whether the media player should be looped forever or not	true , false	false

For example if you would like to open the url in internal browser (min_api_version 3):

```
{
        "keyboard": {
                "DefaultHeight": true,
                "BgColor": "#FFFFFF",
                "Buttons": [{
                         "Columns": 6,
                         "Rows": 1,
                         "BgColor": "#2db9b9",
                         "BgMediaType": "gif",
                         "BgMedia": "http://www.url.by/test.gif",
                         "BgLoop": true,
                         "ActionType": "open-url",
                         "OpenURLType": "internal",
                         "InternalBrowser": {
                                 "Mode": "fullscreen",
                                 "CustomTitle": "Hello World - Custom Title"
                         },
                         "ActionBody": "www.tut.by",
                         "Image": "www.tut.by/img.jpg",
                         "Text": "Key text",
                         "TextVAlign": "middle",
                         "TextHAlign": "center",
                         "TextOpacity": 60,
                         "TextSize": "regular"
                }]
        }
}
```

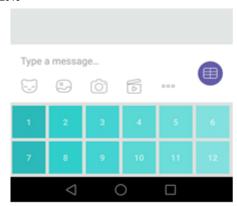
Note: The Silent parameter is supported on devices running Viber version 6.7 and above.

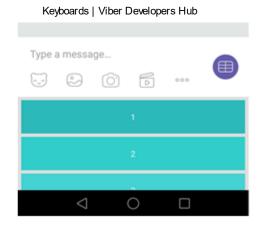
Keyboard design

The keyboard is divided into 6 columns. Each button has a width of 1-6 columns. The client will display the buttons according to the order they were sent in, and will fit as many buttons as possible into each row. If the next button to display can't be fitted into the current row it will be displayed in the row below. For landscape mode, keyboard's width will be doubled to 24 columns, and buttons will be displayed according to the same logic. Button height can be 1-2 rows.

Note: keyboards can contain up to 24 rows.

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Text design

The buttons' text can contain some HTML tags for design purposes. The allowed tags are listed in the table below.

Tag	Description
X	Bold text
<i>X</i>	Italic text
<u>X</u>	Underlined text
	Line break
<s>X</s>	Strikethrough text (api level 4)
X	Custom size N for text block inside the tag ($\tt api\ level\ 4$). Minimum size is 12, maximum size is 32 .
X</font 	Specific text color. Must be a HEX value. Double quotes in JSON should be escaped.

Adding special characters or spaces at the beginning of the row can be done using Unicode. For example, setting a button's text that starts with a space should look like this:

```
"Text": "\u00A0 Button text"
```

Keyboard Reply logic

Pressing a keyboard button would trigger a different reply depending on the buttons "actionType" value.

For ActionType reply:

The value of ActionBody is sent as a text message to account (via message event).

- The value of text appears in the chat thread as message from the user.
- If no text available, the value of image is used.
- If no image available, the value of BgMedia is used.
- If no BgMedia available, the value of BgColor is used.
- If no BgColor available, the default value of BgColor (white) is used.

For ActionType open-url:

- The value of ActionBody is sent as a text message to account (via message event).
- The value of ActionBody is opened in the browser.
- The value of ActionBody appears in the chat thread as message from the user.

For ActionType share-phone - api level 3 and above:

• The client will share be able to share its phone number via a ContactMessage object.

For ActionType location-picker - api level 3 and above:

The client will share be able to share their location via a LocationMessage object.

For ActionType none:

• Nothing is sent to the user or account. Just an informative button.

Note: The none action type is supported on devices running Viber version 6.7 and above.

Keyboard design guidelines

You can learn more about keyboard design guidelines in the following spec.

Favorites Metadata

Let the user save your content (gif, link, video) to the user's favorite extension. Later, when the user enters the favorites extended keyboard and sends an item, the original Carousel content (rich message) will be sent.

The following parameters can help you customize the favorite action:

Name	Description	Possible
Name	Description	values

Name	Description	Possible values
type	required. The type of content you serve	gif, link, video
url	required. Accessible url of content	Valid URL string
title	optional. Title for your content	Valid string
thumbnail	optional. Accessible thumbnail for your content (PNG , JPEG)	Valid image (PNG , JPEG) URL string
domain	optional. The top domain of your content url	Valid string
width	optional. Width of your thumbnail image in pixels	Integer with positive value
height	optional. Height of your thumbnail image in pixels	Integer with positive value
alternativeUrl	optional. Alternative url for clients with apiVersion < minApiVersion, this will be sent by bot to client, then the client has to send it back	Valid URL string
alternativeText	optional. Alternative title for the url for clients with apiVersion < minApiVersion , this will be sent by bot to client, then the client has to send it back	Valid string

For example, if you would like to allow a link to be saved:

```
"type": "link",
    "url": "https://en.wikipedia.org/wiki/Viber",
    "title": "Interesting article about Viber",
    "thumbnail": "https://www.viber.com/app/uploads/icon-purple.png",
    "domain": "www.wikipedia.org",
    "width": 480,
    "height": 320,
    "minApiVersion": 4,
    "alternativeUrl": "https://www.viber.com/about/",
    "alternativeText": "About Viber"
}
```

Keyboard examples

Check our examples section for different keyboard use cases.

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