

# Client Actions

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## What are client actions?

Client actions are actions that Flock clients take when a user interacts with controls like [Slash Commands](#), [Attachment Pickers](#), [Launcher Buttons](#), and so on.

Flock currently supports three kinds of client actions. They are:

- [Opening a widget](#) inside the Flock client
- [Opening a URL](#) in the system browser;
- [Sending an event to the event listener URL](#).

## Opening a Widget

You can use [widgets](#) to render web applications inside an iframe or a webview within Flock. They can not only do everything that a normal webapp can, but also interact with the Flock client hosting them.

To open a widget, the following info is required:

- URL of the widget
- Type of widget in desktop – it can be either `modal` or `sidebar`
- Type of widget in mobile – this is usually optional. The only acceptable value is `modal`.

## Opening the Browser

You can also choose to open a URL in the browser. To open the browser, provide the following:

- The URL to open.
- Whether to send event context or not. When enabled, [event parameters](#) are appended to the URL.

## Sending an event to the event listener URL

Or if you prefer to remain silent, you can send an event to the [event listener URL](#).

## What happens when a client action is triggered?

An [event](#) is generated every time a client action is triggered.

- If the configured action is to open a widget or browser URL, the event is appended as a [query parameter to the URL](#).
- Or if the configured action is to [send the event to the event listener URL](#), it is sent to the app service URL.

The events sent by various controls when a client action is triggered are listed below:

Trigger	Event
Button	<a href="#">client.pressButton</a>
Slash Command	<a href="#">client.slashCommand</a>
Widget	<a href="#">client.widgetAction</a>

FlockML	client.flockmlAction
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The event name along with its attribute provides sufficient context for the client action.

## How do I configure a client action?

There are multiple ways to configure client actions in Flock, all of which are described below.

### Developer Dashboard

Use the developer dashboard to configure an action for a [Slash Command](#), [Launcher Button](#), [Chat Tab Button](#) OR [Attachment Picker](#). Once you have enabled the control, you can select the appropriate action and provide any additional info that's required.

#### Attachment picker

Enable to configure attachment picker for your app



**Tooltip Text (required)**

**Select action for Attachment picker (required)**

Open widget ▼

**Type of widget in desktop (required)**

Modal  Sidebar

**Action URL (required)**

### Attachment Buttons

Client actions for [attachment buttons](#) are configured while creating the corresponding [Attachment](#). Use the `action` property of a button to set the appropriate [ActionConfig](#) object.

### Configuring Actions in Attachment Buttons

```
{
  "description": "attachment description",
  "views": {
    "widget": { "src": "<widget url>", "width": 400, "height": 400 }
  },
  "buttons": [{
    "name": "<button 1>",
    "icon": "<icon 1 url>",
    "action": { "type": "openWidget", "desktopType": "modal",
"mobileType": "modal", "url": "<action url>" },
    "id": "<button id 1>"
  }, {
    "name": "<button 2>",
    "icon": "<icon 2 url>",
    "action": { "type": "openBrowser", "url": "<url>", "sendContext":
true }
    "id": "<button id 2>"
  }
  ]
}
```

## flock.js

Widgets can open another widget or the browser using [flock.js](#).

### Opening a widget using flock.js

```
flock.openWidget("<widget url>", "modal")
```

### Opening the browser using flock.js

```
flock.openBrowser("<url>", true);
```

## FlockML

FlockML's `action` tag can also be used to trigger client actions:

### Opening a widget using FlockML

```
<flockml>click <action type="openWidget" url="<url>" desktopType="sidebar"
mobileType="modal">here</action> to launch a widget.</flockml>
```

### Opening the browser using FlockML

```
<flockml>click <action type="openBrowser" url="<url>" sendContext="true"
>here</action> to open the browser.</flockml>
```

### Sending event to the event listener using FlockML

```
<flockml>client <action type="sendEvent">here</action> to send an event to
the event listener URL.</action>
```

## Can client actions be triggered for users who haven't installed the app?

Yes. Your app may send a message to a user who may not have installed your app, or a group where some users may not have installed your app. When these users interact with this message's attachment (e.g. click on an attachment button, or take some action inside the attachment widget), a client action is triggered.

If you verify that the [event token](#) sent with the corresponding event is really signed using your app's secret (you should always do this anyways), you can be certain that the event originated from Flock and was actually triggered by the user whose `userId` is included in the event token (even if they haven't installed the app).