

2021

Installation Manual Mortgage Widget

For Developers

```
<bci-widget  
  api-key="00898656-c6b9-43c5-84f7-fe197ea9709c"  
  proyecto="Iniciativa Dharma"  
  vendedor="Inmobiliaria"  
  rut="111111111"  
  tipo-propiedad="casa"  
  antiguedad-propiedad="nueva"  
  precio-propiedad="3000"  
  user-id="portal-id"  
></bci-widget>
```

 **Bci** API Market

INTRO

This manual contains technical language and is dedicated to developers, we suggest that if you are not familiar with Html, CSS, or Frontend, contact a developer to accompany you during the integration process.



WE WANT TO HELP YOU

If you need assistance or if you have any questions, you can send us an email to teamwidgetchip@bci.cl and we will contact you shortly.

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GENERAL STEPS FOR MORTGAGE WIDGET INSTALLATION



Sign Up and Create your Project in the API Market

Complete the form on the main Page. Then you can access to your account and manage your projects.



Test in Sandbox Environment

Sandbox environment has the same characteristics as productive environment. APIs can be used with test data.



Get access to Productive Environment

Contact your Bci Home manager to use the APIs in a production environment.

SIGN UP AND CREATE YOUR APPLICATION



1



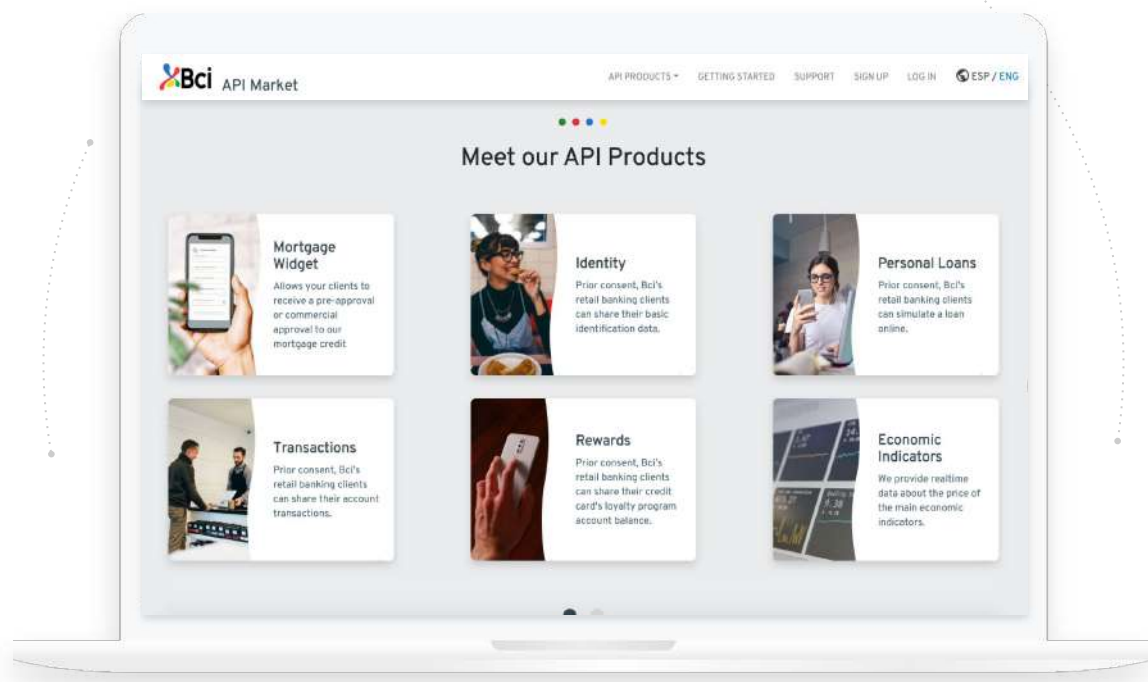
1. SIGN UP AND REGISTER YOUR APPLICATION

1.1 Navigate the API Market

<https://apimarket.bci.cl/en>

In our catalog you will find the available API Products, with their description and an explanation about its functionality and the technical documentation for each API.

To see the technical documentation of the Mortgage Widget you must be [logged in](#).



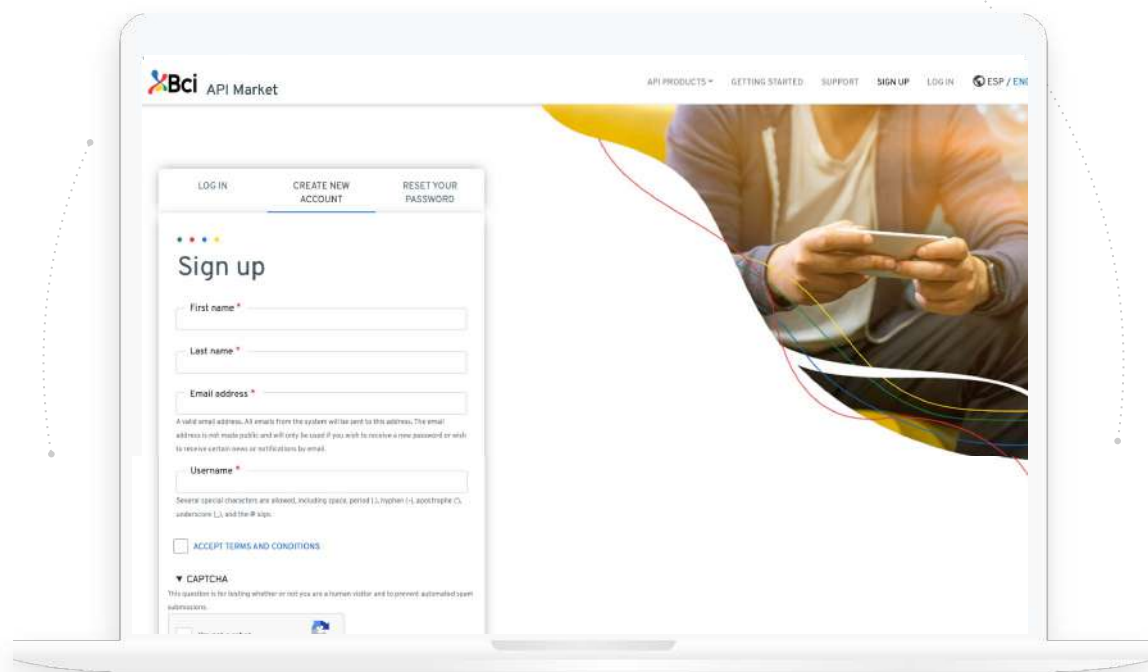
1. SIGN UP AND REGISTER YOUR APPLICATION

1.2 Sign up in API Market

The Mortgage Widget is available for you to test in a Sandbox Environment.

To use it you just need to Sign Up in the API Market by [completing the form](#). Then, you can access to your account and manage your applications.

***How to get access to Production Environment:** On the same page, request [become an Official Partner of BCI](#) and if you are accepted you will have access to our API Products in Production Environment.



1. SIGN UP AND REGISTER YOUR APPLICATION

1.3 Register your application (project)

To use our API Products in Sandbox Environment you need to follow these steps:

1. [Log In](#) into API Market
2. Enter to [My apps](#) from “Edit My Account” in the top menu.
3. Click in the bottom “Create Application”. A form will be enabled to complete the information.

How to complete the form:

- **Application Name:** Indicate the name that your application has or will have that will consume APIs. This name will be shown to the BCI client when giving consent.
- **Callback url:** Here you must inform the URL of your site to which the Oauth process (BCI Access) must return at the end.
- **Description:** Describe briefly what is your application about.
- **PublicKey:** This is not necessary to integrate the Widget, nevertheless you must complete the field with: “*widget*”.
- **TPPID:** Complete with a 5-digit numeric value that will later be used to inform requests where required by the published APIs.
- Select the API Product “Mortgage Widget Sandbox”
- Your application will be shown with the your others applications that you have registered within the main list in My Apps section.

The screenshot shows a web interface for creating a new application. The title is "Create new app". The form contains the following fields and options:

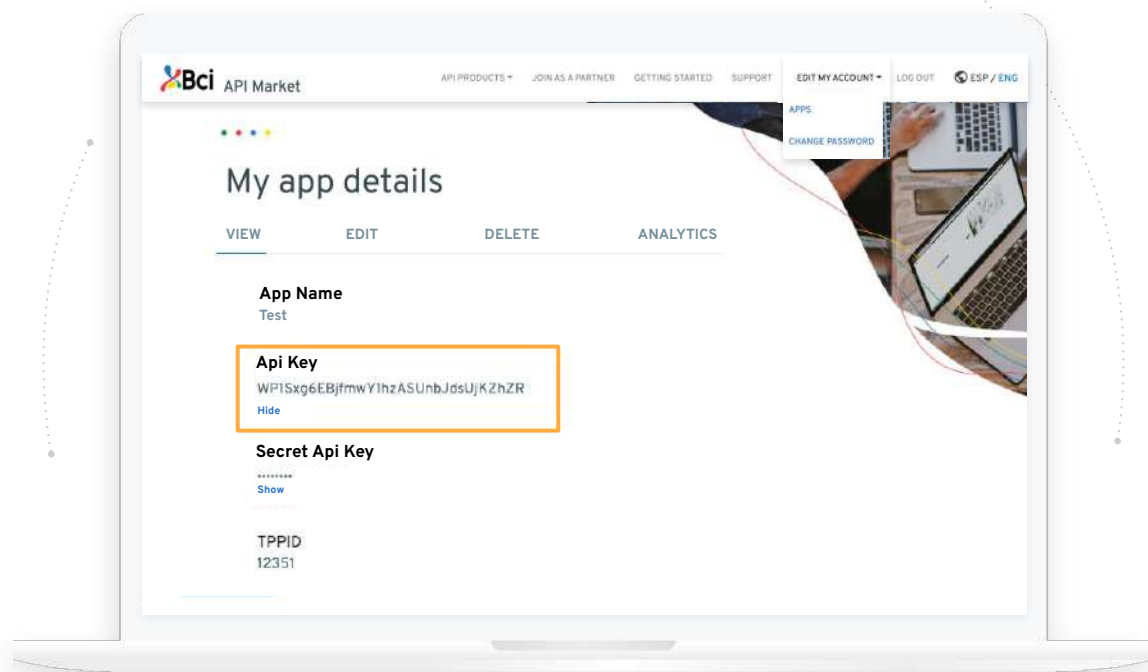
- App name ***: Text input with "Test" entered.
- Callback URL ***: Text input with "https://www.loremipsum.com" entered.
- Description ***: Text area with "The App will be lorem ipsum" entered.
- TPPID ***: Text input with "12345" entered.
- Public Key ***: Text input with "widget" entered.
- APIs ***: A grid of buttons representing different API products. The "Widget hipotecario Sandbox" button is highlighted with an orange border.
- ADD APP**: A green button at the bottom of the form.

1. SIGN UP AND REGISTER YOUR APPLICATION

1.4 Api Key

To use our API Products it is required the api-key, that is the token of the Access Request.

You will find the api-key going to Edit My Account → My Apps → click in the application name and then in Api Key.



TESTS IN SANDBOX ENVIRONMENT



2. SANDBOX ENVIRONMENT

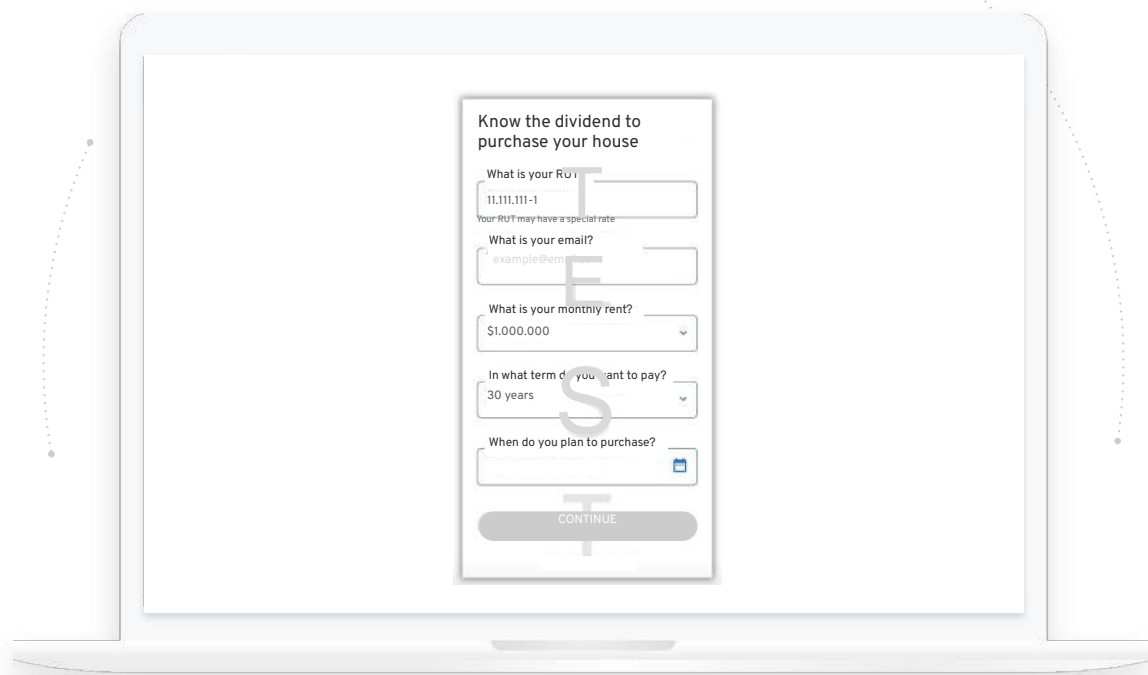
2.1

Test with the API in Sandbox environment

This is the previous step before you start using the API productively.

These tests are done in our Sandbox Environment or also called test environment, that has the same characteristics as the productive one, where you can execute and test the API with dummy test data.

It will allow you to perform the necessary tests and most likely as it will look when productive.



2. SANDBOX ENVIRONMENT

2.2 Import JavaScript

This step is essential, it carries out the import of the widget in the portal, which allows its incorporation into the HTML.

You must import the javascript library in the **header**:



Copy and paste this code in your html



```
<html>
  <head>
    <script
      src="https://personas.bci.cl/nuevaWeb/fe-ecochip-widget-sandbox/bci-w
      idget.js" defer>
    </script>
  </head>
  <body>
    .
    .
    .
  </body>
</html>
```

2. SANDBOX ENVIRONMENT

2.3 Add the Widget to the body

The widget must be added to the site with the api-key assigned (**required**)



If you need to know how to obtain the Api Key, please check [the section about Api Key](#).

In this part of the code you must replace the value with the Api Key that was assigned to you.

A laptop screen displaying code. The code is:

```
<bci-widget  
  api-key="00898656-c6b9-43c5-84f7-fe197ea9709c"  
</bci-widget>
```

 The value "00898656-c6b9-43c5-84f7-fe197ea9709c" is highlighted with a green rounded rectangle. A green arrow points from this rectangle to the text below. Dotted lines form a frame around the laptop screen.

```
<bci-widget  
  api-key="00898656-c6b9-43c5-84f7-fe197ea9709c"  
</bci-widget>
```

2. SANDBOX ENVIRONMENT

2.4 Parametry

- **api-key (required):** Variable id that identifies the Partner, given by API Market, at the time of signing the collaboration contract (required when invoking the widget).
- **project (optional):** Project on which the user is consulting
- **seller (optional):** Realtor / broker name
- **rut (optional):** User's Rut. It is used to preload the widget data. Must be a valid rut (admits . and -, ex: 11.111.111-1)
- **property-type (optional):** The type of the property that the user is querying. It is used to preload the widget data. Accepted values: "house", "apartment" (case insensitive)
- **antiquity-property (optional):** Age of the property that the user is viewing. It is used to preload the widget data. Accepted values: "new", "used"(case insensitive)
- **price-property (optional):** Property value in UF that the user is querying. It is used to preload the widget data. Must be a valid number
- **user-id (optional):** In the case of portals that have the user registered on their platform, it is possible to associate this data with the events available through the Widget.
- **email (optional):** User's email and is used to be preloaded in the forms and, it must be a valid email or otherwise its value will be omitted.
- **purchase-intention-date (optional):** Estimated date of purchase of the property, it is used to be preloaded. It must be a valid date in the format DD-MM-YYYY, ex: 10-24-2020 and must be greater than the current date, otherwise its value will be ignored.
- **duration-credit (optional):** Duration of the credit that the user wants, must be a value greater than or equal to 5 and less than or equal to 30, otherwise its value will be omitted.
- **phone (optional):** Telephone number of the user, it must have at least 8 numbers, if it has more, the last 8 are taken and the area code is prepended +569 in all cases, ex: +56900000000 or 900000000 or 00000000.



Copy and paste this code in your html

```
<bci-widget
  api-key="00898656-c6b9-43c5-84f7-fe197ea9709c"
  proyecto="Iniciativa Dharma"
  vendedor="Inmobiliaria"
  rut="111111111"
  tipo-propiedad="casa"
  antiguedad-propiedad="nueva"
  precio-propiedad="3000"
  user-id="portal-id"
  email="ejemplo@micorreo.com"
  fecha-intencion-compra="02-02-2021"
  duracion-credito="20"
  telefono="+56999999999">
</bci-widget>
```

WIDGET DATA EXPLORATION



3



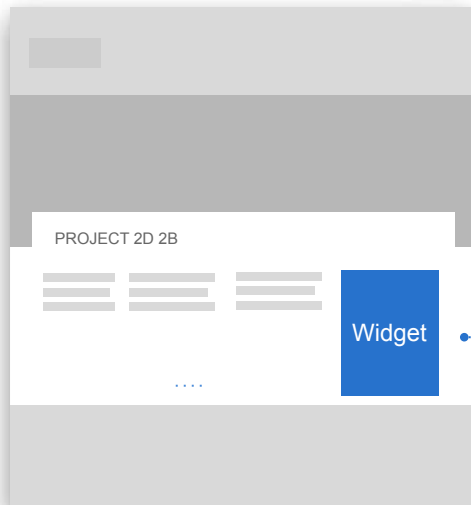
DATA CAPTURE WITH LISTENING EVENTS

The widget allows to capture the data registered by the client to:

- Simulation
- Commercial Pre-approval

How?

Through listening events, real estate companies will have the freedom to define where to make the data available to their commercial executives.

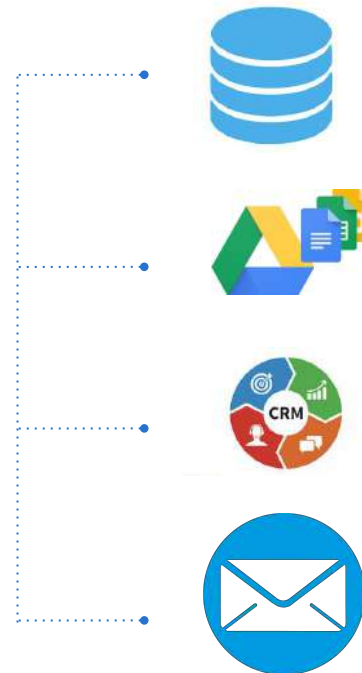


Use coding indicated for the event you want to capture (pre-approval simulation)

Depending on where you want to make the data available, the integration must be developed depending on the destination of the data.

Note: Programming knowledge is required

Example of data destinations



3. WIDGET DATA EXPLORATION

3.1 Events emitted by the Widget:

The Widget emits custom events at three points in its flow: When the user simulates or pre-approves. To connect to these events you only need to add an **event listener** to the widget (1).

It should be noted that the capture of the events will allow to follow the simulations and pre-approvals carried out on the site. These captures can be stored in the way deem appropriate (text file, database, etc.)

- (1) The implementation of these events is optional and does not prevent the correct functioning of the widget



Copy and paste this code in your html

```
document.querySelector('bci-widget').addEventListener(
  'simulacion',
  event => { // tratamiento del evento simulación
    console.log(event.detail.rut) // Ejemplo de imprimir en
    consola
  }
)

document.querySelector('bci-widget').addEventListener(
  'preaprobacion',
  event => { // tratamiento del evento preaprobación
    console.log(event.detail.rut) // Ejemplo de imprimir en
    consola
  }
)

document.querySelector('bci-widget').addEventListener(
  'finalizacion',
  event => { // tratamiento del evento preaprobación
    console.log(event.detail.flujo) // Ejemplo de imprimir en
    consola
  }
)
)
```

3. WIDGET DATA EXPLORATION

3.2 Events emitted by the Widget:

The event field is of type [CustomEvent](#).
The specific data of each event is available in event.detail

Events:

Simulation:

Name (simulation)
Issued when the user performs a simulation. In the detail field of the event the following data is sent:

```
interface SimulatedEvent {  
  rut: string  
  plazo: number  
  tipoPropiedad: string  
  propiedadNueva: boolean  
  valorPropiedad: number  
  pie: number  
  dividendo: number  
  tasa: number  
  cae: number  
  userId: string | null  
  email: string  
  tramoRenta: string  
  proyecto: string  
  vendedor: string  
}
```



Copy and paste this code in your html

3. WIDGET DATA EXPLORATION

3.3 Events emitted by the Widget:

Pre-approval:

Name (pre-approval)

Issued when the user performs a pre-approval. The following data is sent in the detail field of the event:

It should be noted that the client's email and telephone number are included in the pre-approval letter that is received in the mail or box defined by the real estate agency.

Possible status values:

Pre-approved, Rejected, Counteroffer

```
interface PreApprovedEvent {
  rut: string
  plazo: number
  tipoPropiedad: string
  propiedadNueva: boolean
  valorPropiedad: number
  telefono: string
  email: string
  tipoContrato: string
  antiguedadLaboral: number
  tipoRenta: string
  renta: number
  userId: string
  proyecto: string
  vendedor: string
  montoSolicitado: number
  montoAprobado: number
  dividendo: number
  tasa: number
  cae: number
  estado: 'Pre-aprobado' | 'Rechazado' | 'Contraoferta'
}
```



Copy and paste this code in your html

3. WIDGET DATA EXPLORATION

3.4 Events emitted by the Widget:

Approval:

Name (approval)

Issued when the user makes an approval. The following data is sent in the *detail* field of the event:

Possible status values:

*Approved, Rejected,
Counteroffer, Possible-Codeudor*



Copy and paste this code in your html

```
interface ApprovedEvent {
  rut: string
  nombre: string
  nivelEstudios: string
  estadoCivil: string
  extranjero: boolean
  residenciaDefinitiva?: boolean
  tipoPropiedad: string
  propiedadNueva: boolean
  valorPropiedad: number
  telefono: string
  email: string
  tipoContrato: string
  antiguedadLaboral: number
  tipoRenta: string
  renta: number
  userId: string
  proyecto: string
  vendedor: string
  montoSolicitado: number
  montoAprobado: number
  plazoSolicitado: number
  plazoAprobado: number
  dividendo: number
  tasa: number
  cae: number
  estado: 'Aprobado' | 'Rechazado' | 'Contraoferta' | 'Posible-Codeudor'
}
```

3. WIDGET DATA EXPLORATION

3.5 Events emitted by the Widget:

Ending:

Name (*Finalization*)

It is emitted when the user interacts with the end buttons of the flows or aborts at some point in them. The following data is sent in the *detail* field of the event:

Possible flow values:

Pre-approval or Simulation.

Possible type values:

Return ASimulate, Terminate or Abort.

```
interface FinalizationEvent {  
  flujo: string;  
  tipo: string;  
}
```



Copy and paste this code in your html



GO TO PRODUCTIVE ENVIRONMENT



4



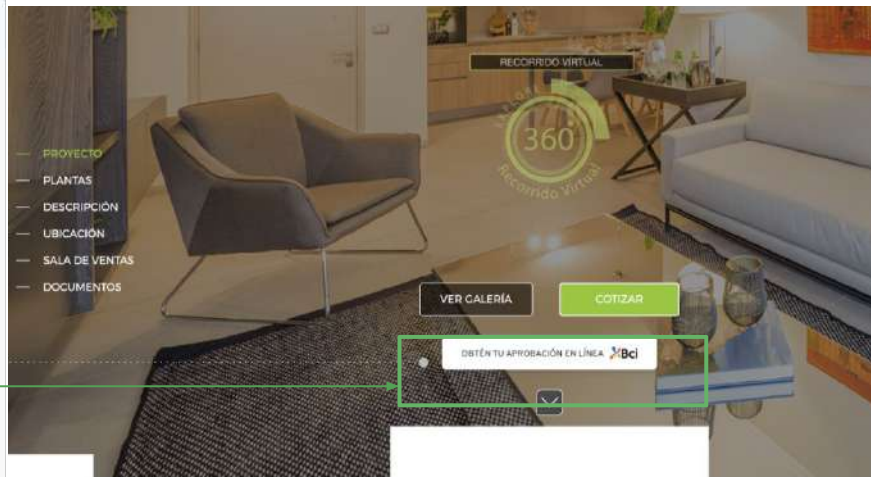
4. STEP TO PRODUCTIVE ENVIRONMENT

4.1 Get in touch with your manager

Contact your manager to continue with the process and get access to production environment.

Send him a screenshot of your website with the Widget installed so that he can validate it and request access to the production environment.

Screenshot example



4. STEP TO PRODUCTIVE ENVIRONMENT

4.2 You will receive a new URL



The Manager will contact you to provide a new URL and inform new instructions.

In this part of the code you must enter the URL received by teamwidgetchip@bci.cl

```
<html>
  <head>
    <script
      src="https://personas.bci.cl/nuevaWeb/fe-ecohip-widget-sandbox/b
      ci-widget.js" defer>
    </script>
  </head>
  <body>
    .
    .
    .
  </body>
</html>
```


SECURITY REQUIREMENTS AND SUPPORT CHANNEL



5



5. SECURITY / SUPPORT

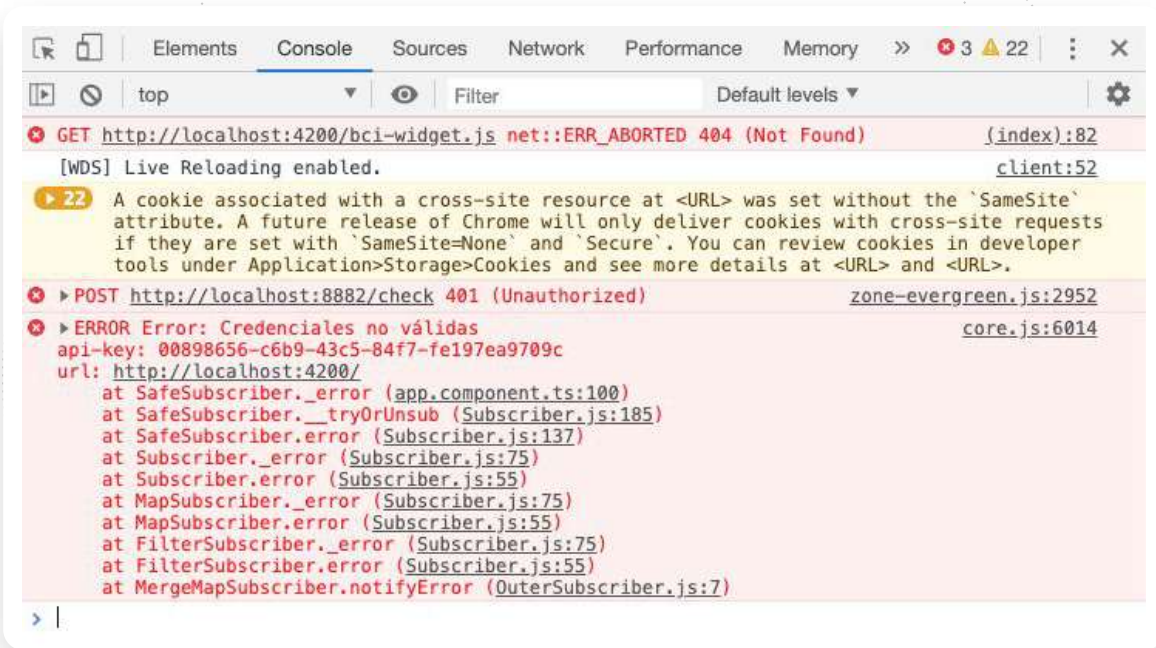
Add “X-Frame-Options” headers to the HTTP response to the Web Server configuration, or through the web application, with the value “SAMEORIGIN”.

Bug report

If there is an error when installing the widget or during its operation, the following information should be sent to facilitate the solution process.

Please send us an email with all the information to:

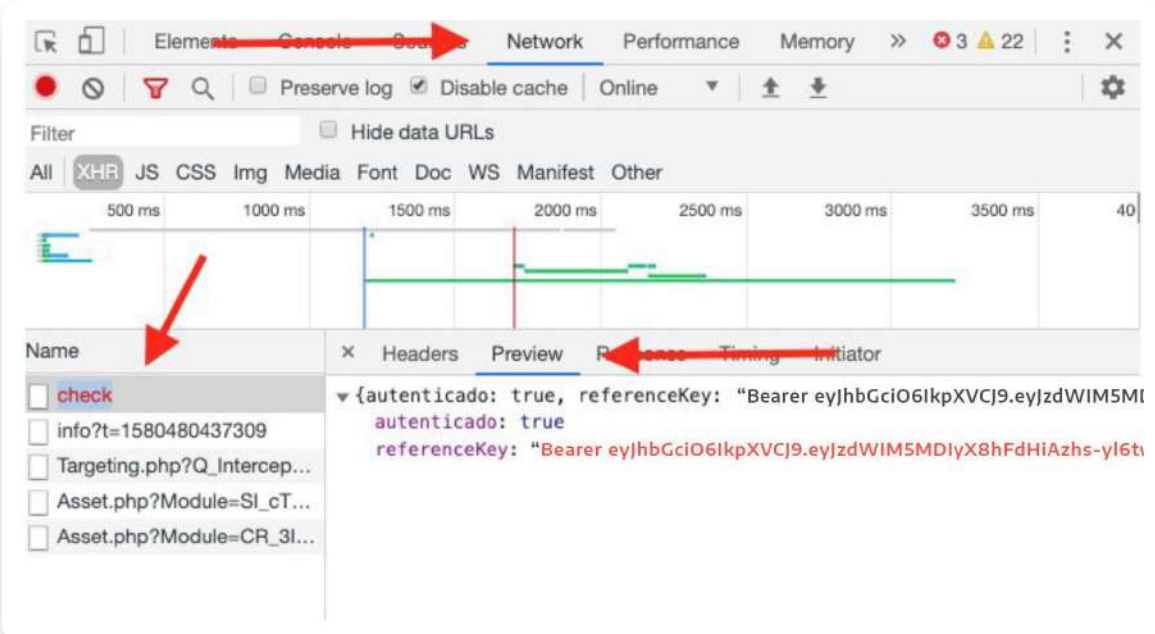
teamwidgetchip@bci.cl



Example: Screenshot of the error on the console

5. SECURITY / SUPPORT

Screenshot of the response of the http call that failed.



The screenshot shows the Chrome DevTools Network tab. The 'Network' tab is selected, and the 'XHR' filter is active. A list of requests is shown, with the first one, 'check', highlighted in red. A red arrow points to this request. The 'check' request is expanded, showing its response in the 'Preview' pane. The response is a JSON object with the following structure:

```
{autenticado: true, referenceKey: "Bearer eyJhbGciOiJIUzI1NiIsInR5cGU6IjY9.ejzdWIM5M...
autenticado: true
referenceKey: "Bearer eyJhbGciOiJIUzI1NiIsInR5cGU6IjY9.ejzdWIM5MDIyX8hFdHIAzhs-yl6t...
```

The response is displayed in red text, indicating an error. The 'check' request is also marked with a red 'X' in the status column. The 'check' request is selected, and the 'Preview' pane is active, showing the response. The response is a JSON object with the following structure:

5. SECURITY / SUPPORT

Example: Screenshot of the headers of the http call that failed.

The screenshot shows the Chrome DevTools Network tab. The 'XHR' filter is selected. A list of requests is shown, with 'simulaciones' highlighted in red. The 'Headers' sub-tab is active, showing the following details:

- General**
 - Request URL: `http://localhost:8882/simulaciones`
 - Request Method: `POST`
 - Status Code: `500 Internal Server Error`
 - Remote Address: `127.0.0.1:8882`
 - Referrer Policy: `no-referrer-when-downgrade`
- Response Headers (7)**
- Request Headers** (view source)
 - Accept: `application/json, text/plain, */*`
 - Accept-Encoding: `gzip, deflate, br`
 - Accept-Language: `en-US,en;q=0.9,es;q=0.8`

5. SECURITY / SUPPORT

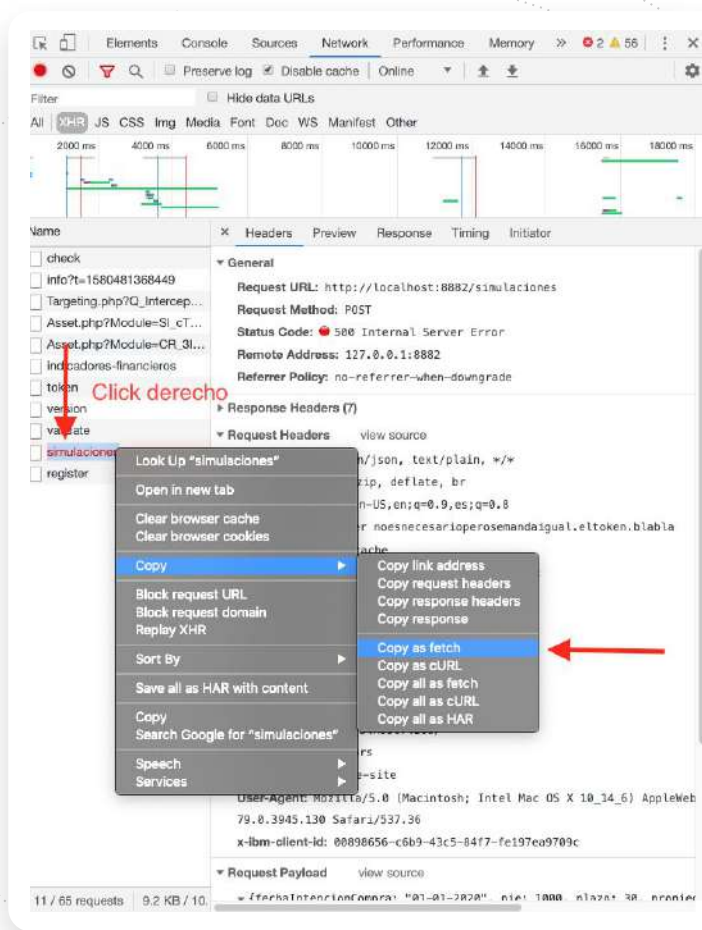
Screenshot of the data sent in the http call that failed.

The screenshot shows the Network tab in a browser's developer tools. The filter is set to 'XHR'. A list of requests is shown on the left, with 'simulaciones' highlighted. A red arrow points to this entry. The 'Headers' tab is selected for the 'simulaciones' request, showing response headers. A red arrow points to the 'Headers' tab. Below the headers, the 'Request Payload' is expanded, showing a JSON object with the following data:

```
{
  "fechaIntencionCompra": "01-01-2020",
  "pie": 1000,
  "plazo": 30,
  "propiedadNueva": true,
  "tipoBienRaiz": "DPTO",
  "valorPropiedad": 3000,
  "solicitante": {
    "email": "Ejemplo@micorreo.com",
    "renta": 1000000,
    "rut": 11111111
  },
  "dv": "1",
  "vendedor": "Inmobiliaria",
  "proyecto": "Iniciativa Dharma",
  "creditoTasaFija": true,
  "refinanciamiento": false
}
```

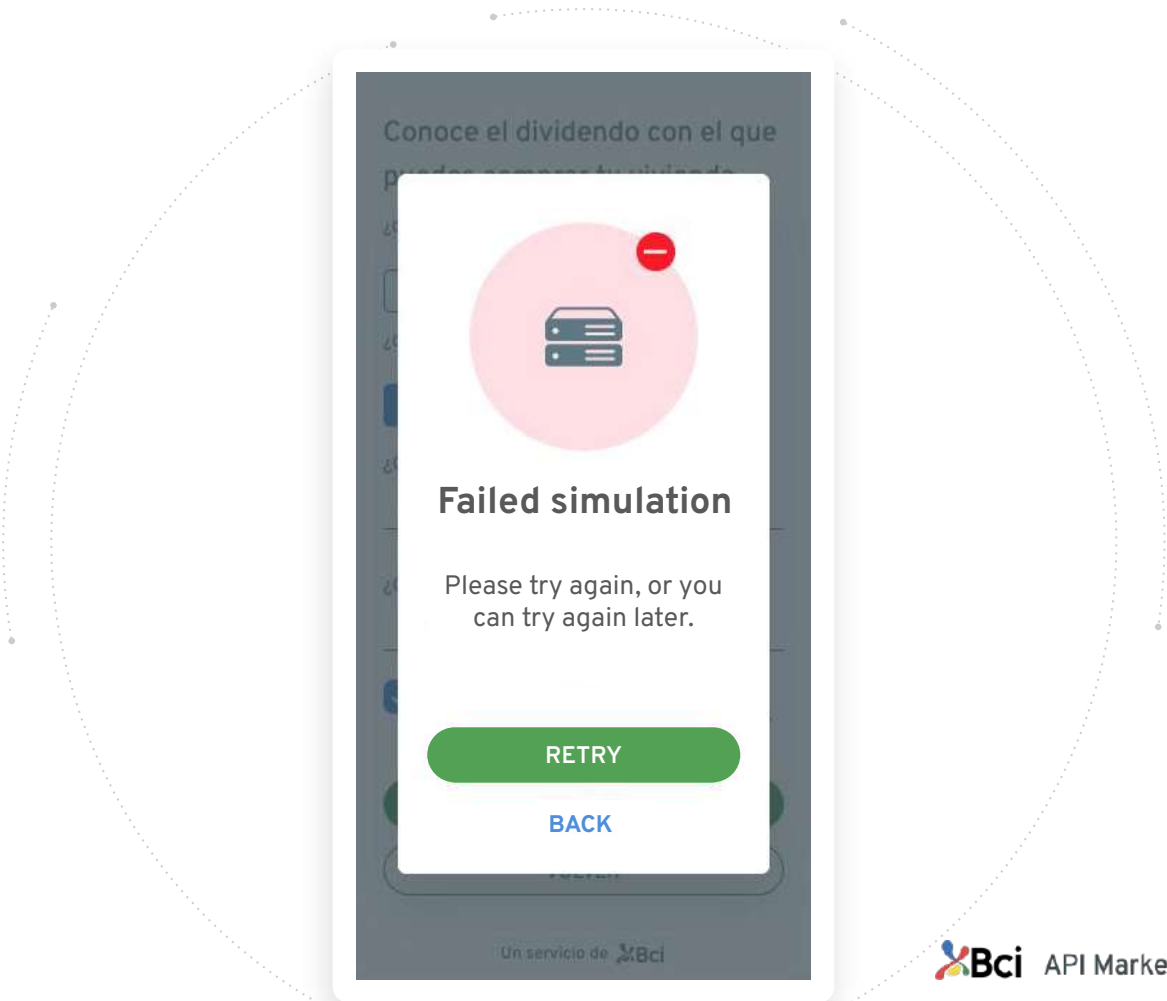
5. SECURITY / SUPPORT

Call details
http that failed.



5. SECURITY / SUPPORT

*Screenshot
error in the widget.*



5. SECURITY / SUPPORT

How to report a bug?

If you need to report a bug
write to our email:

teamwidgetchip@bci.cl

Para reportar un error y facilitar la respuesta de nuestro equipo de soporte, te recomendamos que en el asunto del correo indique lo siguiente:

[Nombre Empresa] [RUT Cliente] [Tipo de Error]

Ejemplo:

[Nombre empresa] Instalación API

[Nombre empresa] Registro de la API

[Nombre empresa] Eventos emitidos por el widget



Make sure to **attach a screenshot** next to the email detail, so we can solve your problem as soon as possible.

Installation Manual
Mortgage Widget

