



The Algopix application widget is a component that is used to embed Algopix UI on a partner web page. The purpose of this component is to provide the Alogpix application from within the customer website. This allows the user to directly query Algopix and receive meaningful data on products like regular Algopix users.

This document explains how to integrate the authentication of the Algopix widget with the customer webpage and backend servers.


Getting Private Keys and Generating the Widget

Algopix Will Provide You With The Following In Order To Integrate The Widget:

- 1 Private RSA key to be used to sign the JWT tokens: Algopix will use the counterpart public key to decrypt the JWT signature.
- 2 KID: a key identifier that is sent as part of the token to identify the specific key that was used to sign the JWT token.

To Generate Your Widget:

- 1 Navigate to <https://algopix.com/xapp/partner-widget>.
- 2 Set the widget title text (optional).
- 3 Set the widget title color (optional). You can choose a hex color in format #XXXXXX or RGB color in format RGB(xx,xx,xx).
- 4 Set the widget title logo (optional). You can paste in a link to any image. A transparent background is recommended.
- 5 Set the Server token request URI (**required**). This is the callback URL to your server that will refresh the token.
- 6 Click the "Generate my script" button to create your personalized script.



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Partner widget script generator

Widget title text:

Widget title color:

#Hex or RGB Value

Widget title logo:

URL to image of your logo

*Server token request URI:

Server URI to call in order to request a new token

GENERATE MY SCRIPT

Your widget script:

```
<script>var iframeElem=null,containerElem=null,savedToken=null,closeWic
```

COPY

Widget Instructions

Copy the widget script and paste into your HTML, just before the closing body tag.

In order to show the Algopix partner widget, via an event handler, call the function:

```
window.algopixPartnerWidget.showWidget()
```

How to use the widget

- 1 Copy the generated script and paste it into your HTML, preferably before the closing `</body>` tag.

Your widget script:

```
<script>var iframeElem=null,containerElem=null,savedToken=null,closeWic
```

COPY

- 2 Create a handler on the event which will be responsible for opening the widget, and add the following:


```
window.algopixPartnerWidget.showWidget()
```
- 3 Please note: The `showWidget` method can receive two optional parameters:


```
(Product Identifier Text, Purchase Price)
```

 in order to auto-populate the widget search form.

Widget security

In order to authenticate API calls from the snippet, the snippet is required to make a REST API call to a designated endpoint assigned in your backend. This endpoint should be provided in the [Algopix snippet generation page](#).

Endpoint Spec

The endpoint is expected to provide the following:

- Receive HTTPS method GET.
- Return a JWT token generated, using the private key Algopix provided to you.

JWT

Algopix chose to use a widely used standard of security: **JWT**, JSON Web Tokens are an open, industry-standard RFC 7519 method for representing claims securely between two parties.

The token should have the following keys and claims, in addition to the signature part:

- Header
 - kid** - **[Required]** (String) the KID Algopix provided with the private key for token generation.
 - alg** - **[Required]** (String) the algorithm this JWT token is signed with.
- Payload
 - exp** - **[Required]** (integer) an expiration timestamp in seconds since epoch. The maximum expiration time Algopix allows for a token is five minutes from the moment the token was generated.
 - sub** - **[Optional]** (String) an ID which is used to identify the partner/customer; e.g. email or some other kind of unique user ID.
 - iss** - **[Optional]** (String) The "iss" (issuer) claim identifies the principal that issued the JWT. The processing of this claim is generally application-specific. The "iss" value is a case-sensitive string containing a StringOrURI Value.

The <https://jwt.io/> site contains many links to open source libraries and various languages that can be used to generate the JWT tokens.