Let's seize opportunities.

Together

Manual Go! Partner widget
Version 1.2

A manual for external parties integrating with OTYS
to implement widgets with external (partner) content
shown in the OTYS Go! system

Version management

Below you will find an overview of the versions available for this document.

Version	Date	Author	Description
1.0	02-06-2021	Bastiaan Brans	Created initial version of document, including four chapters: 'General' (chapter 1), 'Activation & configuration' (chapter 2) & 'Create & process widgets' (chapter 3).
1.1	02-02-2022	Bastiaan Brans	Changed numbering of sub paragraphs of 'Activation by OTYS for initial client(s)' (paragraph 2.1), to ensure correct numbering. Changed text of 'Register a partner widget' (paragraph 2.1.2), to explain the possibilities of having a proxied or an iframe widget.
1.2	25-08-2023	Bastiaan Brans	Updated 'OTYS Go!strap' (paragraph 3.5) with references to version 2 of OTYS Go!strap which is in line with new version of OTYS Go!

Contents

1. General

In this chapter we will provide you some generic information about OTYS, the OTYS Go! Partner framework and OTYS Go! Partner widgets.

1.1 OTYS Recruiting Technology

OTYS Recruiting Technology (hereafter 'OTYS') develops, maintains and optimizes software for around 1.000 clients worldwide. The core of this software is created for recruiting purposes (agencies, corporate recruitment & job boards).

The most important elements of the OTYS solution are:
- OTYS Go!
  This is a browser based software solution in which the main users (for example recruiters) of the client work on a daily basis. Each client has a client specific URL from which they access OTYS Go! (https://clientprefix.otysapp.com). Users then login using either their OTYS username & password or using an external SSO option (for example Azure). After they are logged in, they will have access to the modules & functionalities based upon the permissions assigned to their account.
- OTYS website
  In most cases the client also has one or multiple websites build, hosted & maintained by OTYS linked to their system. This is normally a website which is publicly available (so that the company can for example use it to show & tell more about their company and publish their jobs), with some portals behind a login (for candidates, customers, hiring managers and/or suppliers). These 'OTYS websites' interact directly with the OTYS system. Some clients choose to let a third party build, host & maintain their website; in which case database interaction is for example done through the OTYS web services.

1.2 OTYS Go! Partner Framework

OTYS believes it should focus on the elements they excel in and that their focus should be on just that. Other parties are able to do other things better and OTYS believes that their clients are best helped by having a 'best of breed'-solution using partners. To support this 'best of breed'-solution for both clients & partners, OTYS created the 'OTYS Go! Partner framework' which allows partners to easily connect to the OTYS solution and provide users a nice (seamless) experiences.

The OTYS Go! Partner framework consists of the following elements:
1. OTYS Web Services (OWS)
   OTYS has very extensive web services to connect to the OTYS system. Where other similar parties have web services as an 'add on' to their own application (with normally limited capabilities), OTYS chose to create a web service layer which is an integral part of their current software solution. All actions users take through the user interface (OTYS Go!) are done by OWS request, thus allowing external parties to connect with the web services and (technically) be able to do all the things end users are able to do through the GUI.
2. OTYS Go! Partner OWS Webhooks
   If an external party connects to OTYS using OWS, there is always some kind of 'trigger' to exchange data. If this trigger should be based upon a user action in OTYS Go! (for example a user changing a status) , it is possible to create OWS webhooks. If configured, the partner can receive an 'active signal' that a user is taking the action. This way as a partner you are able to 'instantly' start a process if for example a user changes a status in the OTYS Go! system.

3. OTYS Go! Partner SSO
   If an OTYS Go! user interacts with a partner functionality, it is probably a wise thing to add some kind of authentication. Larger clients will probably have an Active Directory (such as Microsoft Azure) set up to make user management & authentication work smoothly. Smaller clients will probably not have set this up, so for those we created an OTYS Go! Partner SSO functionality, which allows partners to automatically sync users with OTYS Go! users and to easily authenticate users using Single Sign On (with OTYS being the 'Active Directory').

4. OTYS Go! Partner widgets
   In some cases a partner wants to be able to show data from their own system to users of OTYS Go! within the context of OTYS Go! (for example show additional information you have about a candidate within an OTYS Go! candidate detail). You might even want to add some 'interaction' in this context (for example a button to click or a form to be submitted). For these kinds of scenarios we have created OTYS Go! Partner widgets, which allows partners to provide iframe-ish content which can be loaded directly into the right context in OTYS Go!

5. OTYS Go! Partner custom actions
   The above mentioned OTYS Go! Partner widgets can be of great added value if you want to show some information within the context of OTYS Go!, however if you have more complex ('full blown') interfaces or simply want to 'trigger a specific action', the widgets might not be the best choice. For these kinds of interactions we have created 'OTYS Go! Partner custom actions' which allows partners to create custom buttons which can be added on various places in the OTYS Go! system (for example in a candidate detail). Clicking this button will open a URL on your side (with for example the candidate OUID as a parameter) in the current browser tab, a new browser tab or on the background.

1.3 OTYS Go! Partner widgets

In OTYS Go! we have various widgets which can be placed on all different kinds of places, for example a candidate detail, a vacancy detail or on a dashboard. These widgets normally load information from the OTYS database, for example the 'Candidate information' widget showing basic candidate information from the candidate in the OTYS database.

We can imagine that partners of OTYS in some cases want to show information from their external systems within OTYS Go!, for example showing the job boards a vacancy is published on using an external multi poster within an OTYS Go! vacancy detail. In some cases you also want to include 'actions' from there, for example a 'repost' icon in the list of job boards mentioned before.

To be able to do this OTYS always needed to create an integration with you as a partner (retrieving information about job board postings from the multi poster), create a specific database structure within the OTYS platform to store this information in a structured way and create a very specific widget to show this information. In this process you were dependent upon us (OTYS), while most partners really want to integrate their solution within OTYS and are more than willing to develop for that. So for this we have created a generic solution called 'OTYS Go! Partner widgets' which allows us to create these widgets without any development on our side and just a little bit of activation (by for example an OTYS Consultant) and configuration (by for example a customer Key-user). Of course you as a partner should be willing to develop something for it, but as mentioned before it makes you much (less) dependent upon us and can create 'cool stuff' (or reuse existing cool stuff) and integrate it in OTYS.

The general idea behind the Go! Partner widgets is that you as a partner will create a URL which shows the information from the widget, for example 'https://www.multiposter.com/apps/otys/showposts/(ex_ouid)'. We are then able to load this URL

in for example a vacancy detail, merging the [ouid] in the URL (so that you knows which vacancy it is about) and posting authentication data (so you know it is a specific user from a specific client). The end result will be external information being shown within OTYS which can (thanks to 'OTYS Go!strap') can even easily be styled in the look & feel of OTYS Go! so that it feels like a real OTYS Go! widget for the end user.

Just like normal widgets, Go! Partner widgets are intended to show limited information/functionalities within a 'context' (for example a candidate detail). If a you have a 'full blown user interface' (for example a user interface which shows a list with filters and buttons and other goodies) a (Partner) widget is probably not the best way to go. However, we have OTYS Go! Partner custom actions for that (see our separate documentation about that functionality).

1.4 About this document

This document describes the concept of OTYS Go! Partner widgets and how external parties can use them in their processes. This document will <u>not</u> describe the generic working of OWS and is not a document where you learn how to develop these kinds of integrations in general. It is therefore intended for external parties already connecting to OTYS using OWS and want to improve this integration by implementing partner widgets.

Examples are provided in PHP. If you will be using PHP to create an endpoint to create these partner widgets, you can copy-paste our examples and work your way from there. If you are using a different scripting language, we are quite sure that the PHP examples give you good guide marks to write appropriate code in the scripting language of your choice.

Although we do our best to help your brain convert this information into the usage of the OTYS Go! Partner widgets for the topics you want to implement it (for example by providing examples), your brain will still need to do the hard work by figuring out how your process can use this OTYS Go! Partner widgets in an optimal way.

If you have feedback about this document, we would love to hear it from us. Please send us an email at partners@otys.com and provide us your feedback.

2. Activation & configuration

In this chapter we will explain how the OTYS Go! Partner widgets can be activated and configured. Please note that after you have completed this chapter you will be able to start creating the endpoints which will handle all requests. In the next chapter we will explain how you are able to process the requests send to your endpoint.

2.1 Activation by OTYS for initial client(s)

In most cases you will want your partner widget to have some kind of authentication. For this we have created OTYS Go! Partner SSO. If you have not implemented OTYS Go! Partner SSO before, please check our manual about that functionality for more details.

2.1.1 Register as a partner

If you have not been using any of our functionalities 'OTYS Go! Partner SSO', 'OTYS Go! Partner widgets' or 'OTYS Go! Partner custom actions' before, we will first need to activate you as an OTYS Go! Partner. For this, we will need the following information from you as a partner:

- Partner name
  The name your company should show in our user interface. Probably not your 'Official name', but the name people will recognize your company with.
- Partner description
  It would be nice to have a small description of what your company / solution does. We prefer to have some specific information of what your product actually does (for example 'We automatically send LinkedIn requests to selected candidates, based upon configurable templates'), instead of having a nice (yet less clear) marketing text like 'We connect people to make the world a better place'.
- Endpoint URL
  A generic endpoint URL which will be handling our SSO requests. If you do not intend to use the authentication using OTYS Go! Partner SSO just yet, It is fine to skip this field for now.
- Logo
  Your company logo, preferably both in SVG- & PNG-format. Although we prefer to receive the SVG & PNG, please don't convert your JPG to a PNG (we can do that as well) or delay development because you are not able to find your SVG logo (we can always add better versions before actual 'go live').
- OTYS client(s) for initial activation
  OTYS Partner SSO can be enabled for specific (mutual) clients or for all OTYS clients (only if we are sure this is of added value). During the development phase you will probably only enable it for very specific clients (for example your own OTYS testing client and maybe for an actual client you want to include in the development process). Please let us know for which OTYS clients the OTYS Go! Partner SSO integration should initially be activated. Of course we will be able to add clients at a later stage upon your request.

Please send the information mentioned above to partners@otys.com. In return we will provide you with an OTYS Go! Partner API key, which can be used when validating OTYS Go! Partner session tokens (more about that in the next chapter).

We are only able to provide this OTYS Go! Partner API key once, so please make sure it is stored in a safe place. If you at some time lost it, we are able to generate a new key, however this will cause your old key not to work anymore.

2.1.2 Register a partner widget

New partner widgets will need to be registered on our side. For this, we will need the following information about your (intended) widget:

- Widget name
  The name your widget as it should show in our user interface. So a clear naming based upon which users understand the 'purpose' of your widget.
- Entity
  The entity in which the widget should be available, where you can choose from:
  - Dashboard
  - Candidate
  - Vacancies
  - CRM customers
  - CRM contact persons
  - Projects
  - Assignments
  - Tasks
  - Sales trajectories
- Endpoint URL
  The URL which should be used to display the widget. You can include the merge field (ex_ouid) which will merge into the (OU)ID of the item (so for example 'https://www.multiposter.com/apps/otys/showposts/(ex_ouid)'). Please note that the Dashboards-widgets are shown on a user's dashboard and can thus not include this merge field (since it is only intended for 'generic' widgets).
- Default height
  The default height in pixels we should 'reserve' for your widget in a detail view. A Key-user adding the widget is able to change this, but it is kind of nice having some indication how much space we should reserve for the widget. We can easily change this for you at a later stage, so don't make too complex calculations to define it (it might be better to then simply give us your 'gut feeling height, play around with it a little bit and ask us to adjust it at a later stage). Please note dashboard widgets work a bit different, so the default height does not apply to dashboard widgets.
- Session token to be posted
  Let us know if you want the widget to post the users OTYS Go! Partner SSO user token, so that you can use it to authenticate the user who is retrieving the user.
- Method of retrieving contents
  OTYS Partner widgets are by default 'proxied'. So the OTYS server will retrieve the contents from your server and 'send' it to the end user in OTYS Go! ('proxied' and all). This is the best choice for most interactions, however it can be that this 'proxy solution' can also be limiting in specific cases. If your widget contents is not suitable to being proxied, we can also show your widget as an iframe within the application. If you are unsure about what the best way is for retrieving your contents, our strong advise is to first try proxying the widget (if that fails, we can always change it to an iframe).
- OTYS client(s) for initial activation
  OTYS Partner widget can be enabled for specific (mutual) clients or for all OTYS clients (only if we are sure this is of added value). During the development phase you will probably only enable it for very specific clients (for example your own OTYS testing client and maybe for an actual client you want to include in the development process). Please let us know for which OTYS clients the OTYS Go! Partner widget should initially be activated. Of course we will be able to add clients at a later stage upon your request.

Please send the information mentioned above to partners@otys.com. We will confirm to you once we have added the widget.

Of course it is no problem to 'combine the requests' mentioned above. So if you are not registered as a partner yet and want us to activate two widgets, feel free to send us one email with your partner information and information from both widgets (for the 'insiders': see it as a MultiService.execute :).

2.2 Configuration in OTYS client

Once OTYS Go! Partner widget has been activated by us and you have received our confirmation, you will need to enable the partner widget in the specific OTYS client(s).

2.2.1 Configure a dashboard widget
You can configure a partner widget on the dashboard, by taking the following steps:
1. Open OTYS Go!
2. Login to your OTYS account
3. Open Dashboards
4. Use the dashboard selector at the bottom of the window to select the dashboard to which you want to add the partner widget (if applicable)
5. Click on the icon 'Configure boards' on top of the window to open configuration mode.
6. A panel will appear on the right side. In main section 'Add widgets', sub section 'Other', you will see an icon 'Partner widget'. Drag it to the desired position on the dashboard.
7. Click on the configuration icon on the top right of the partner widget which has just been added to the dashboard
8. At 'Widget' select the partner widget you want to use
9. Click on 'Save'
10. Using the 'corner' of the widget at the bottom right, you can resize your widget if needed. Please note that widgets on the dashboards use a 'grid' (to automatically align the widgets nicely) so adjusting the size can will be done in 'steps' of about 50 pixels).
11. Click on the icon 'Configure boards' on top of the window to close configuration mode.

You will now see the widget on your dashboard.

If you are not familiar with the generic working of configuring dashboards, please check the 'Manual OTYS Go! Dashboard module' (see https://www.otys.com/go-manuals) for more information about how you can configure these dashboards.

2.2.1 Configure a detail widget
You can configure a partner widget in a detail (for example a candidate or vacancy detail), by taking the following steps:
1. Open OTYS Go!
2. Login to your OTYS account
3. Open the module to which you want to add a partner widget (for example Candidates)
4. Open any record in the list (for example any candidate)
5. Click on the name of your current detail view at the bottom of the detail
6. A modal opens with all detail views. Click on the detail view to which you want to add the widget.
7. Open the tab to which you want to add the widget at top of the detail (if applicable)
8. Click on the configuration icon at the bottom of your current detail view to open configuration mode.

9. A panel will appear on the right side. Search for or scroll to 'Partner widget' and drag it to the desired position on the detail.
10. Click on the configuration icon on the top right of the partner widget which has just been added to the detail
11. At 'Widget' select the partner widget you want to use
12. At 'Widget height' you will see the configured default height. Change it if you want to.
13. Click on 'Save'
14. Click on the configure icon 'at the bottom of the detail to close configuration mode.

You will now see the widget in your detail.

If you are not familiar with the generic working of configuring detail views, please check the 'Manual OTYS Go! Detail views' (see https://www.otys.com/go-manuals) for more information about how you can configure these detail views.

2.3 Activation by OTYS for additional clients

After you have created a nicely working widget based upon your OTYS testing client, we can enable the widget for additional OTYS clients upon your request. It is also possible to globally enable your widget for all OTYS clients, however this will of course need to be sure your widget will work and will be of added value for all our clients (worldwide). In 'normal cases' we will activate your widget for (a group of) specific clients.

Please note that after the widget has been activated for additional clients on our side, the client will still need to add it to the correct views on their end.

3. Create & process widgets

In chapter 2 you found out how you can activate & configure your OTYS Go! Partner widget, so we expect you now have an 'place' in the OTYS Go! system which loads the content from your endpoint (which will probably still be empty for now). In this chapter we will explain how you can create & process the partner widget.

3.1 General structure

The OTYS Go! Partner widgets use the following elements:
- Proxying endpoint URL output
  The base of the widget is that we show the output of your endpoint URL. If this endpoint URL would be 'https://www.google.com', the widget would simply show the start page of Google. For technical reasons we chose not to use an iframe for this, but to proxy your content.
- Retrieve (OU)ID from URL parameters
  As mentioned in 'Activation by OTYS for initial client(s)' it is possible (and probably desired) to include a merge field in the endpoint URL that merges in the records (OU)ID. This way you 'know' from what context your widget is processed (for example which candidate) and let your script show the relevant data.
- Post session token for user authentication
  As mentioned in 'Activation by OTYS for initial client(s)' it is possible (and probably desired) to post the users email address & OTYS Go! Partner user session token upon opening the URL. This allows you to authenticate the user and for example only show relevant data for authorized users.
- OTYS Go!strap
  Since you are creating the code, you are in charge of what the widget 'does' including the 'look & feel'. If you prefer the look & feel to match your companies style, feel free to do so. We can however also understand that you prefer the widget to have a more 'native OTYS Go! widget' look & feel. If you choose that approach you can of course style the widget yourself, however we also created a small framework (let's call it 'OTYS Go!strap') which will help you in styling your partner widget with a more 'native OTYS Go! widget' look & feel.

The exact usage will be explained in depth in the following paragraphs.

3.2 Proxying endpoint URL output

As mentioned above; the base of the widget is that we show the output of your endpoint URL. For technical reasons we chose not to use an iframe for this, but to proxy your content.

So as a first step, you will create a piece of code that outputs some text.

```php
<?php

// Echo hello world
echo "Hello world";

?>
```

Plain and simple. Opening the widget now should show you the outputted text.

At a later stage you will of course add a lot of other things, which can for example include adding a link to an external stylesheet.

3.3 Retrieve (OU)ID from URL parameters

As mentioned above; it is possible (and probably desired) to include a merge field in the endpoint URL that merges in the records (OU)ID. This way you 'know' from what context your widget is processed (for example which candidate) and let your script show the relevant data.

So let's retrieve this (OU)ID and place it in our script.

If your URL has the format 'https://www.multiposter.com/apps/otys/showposts/($ex_ouid)/', you can create a piece of code which looks as follows:

```php
<?php

// Create URI array
$path = preg_split("/\//", $_SERVER['REQUEST_URI']);

// Define OUID variable
$ouid = $path[4];

// Echo hello world OUID
echo "Hello world " . $ouid;

?>
```

If your URL has the format 'https://www.multiposter.com/apps/otys/showposts/?ouid=($ex_ouid)',
you can create a piece of code which looks as follows:

```php
<?php

// Define OUID variable
$ouid = $_GET["ouid"];

// Echo hello world OUID
echo "Hello world " . $ouid;

?>
```

3.4 Post session token for user authentication

As mentioned above; it is possible (and probably desired) to post the users email address & OTYS Go!
Partner user session token upon opening the URL. This allows you to authenticate the user and for
example only show relevant data for authorized users.

In such a case we will post an array to your endpoint which (currently only) includes one object
'loginData' in a similar way as how we post data in OTYS Go! Partner SSO login triggers.

If your URL has the format 'https://www.multiposter.com/apps/otys/showposts/($ex_ouid)/', you
can create a piece of code which looks as follows:

```php
<?php

// Execute actions if posted data includes integration data
if($_POST['loginData']) {

     // Retrieve JSON with integration data from array
     $json = $_POST['loginData'];

     // Convert JSON to associative array
     $data = json_decode($json, true);

     // Define user primary email & session token variables
     $userPrimaryEmail = $data['userPrimaryEmail'];
     $userSessionToken = $data['sessionToken'];

     // Create URI array
     $path = preg_split("/\//", $_SERVER['REQUEST_URI']);

     // Define OUID variable
     $ouid = $path[4];

     // CREATE WIDGET USING $userPrimaryEmail, $userSessionToken & $ouid

}

?>
```

If your URL has the format 'https://www.multiposter.com/apps/otys/showposts?ouid=($ex_ouid)', you can create a piece of code which looks as follows:

```php
<?php

// Execute actions if posted data includes integration data
if($_POST['loginData']) {

    // Retrieve JSON with integration data from array
    $json = $_POST['loginData'];

    // Convert JSON to associative array
    $data = json_decode($json, true);

    // Define user primary email & session token variables
    $userPrimaryEmail = $data['userPrimaryEmail'];
    $userSessionToken = $data['sessionToken'];

    // Define OUID variable
    $ouid = $_GET["ouid"];

    // CREATE WIDGET USING $userPrimaryEmail, $userSessionToken & $ouid

}

?>
```

Using the Go! Partner user session token in combination with your Go! Partner API key, you are able to authenticate the user (see our Manual Go! Partner SSO for further details).

Using the (OU)ID you are able to interact with the OTYS web services (OWS) to get or update field from the specific record.

The rest of the magic is up to you and what the widget actually needs to 'do'.

3.5 OTYS Go!strap

While you are creating your OTYS Go! Partner widget, you will probably first focus on getting the right data & interaction there. Once this is completed, you probably want the widget to look 'nice'.

If you prefer the look & feel to match your companies style, feel free to do so. If you however prefer the widget to have a more 'native OTYS Go! widget' look & fee, we have created a small framework as an addition to Bootstrap (let's call it 'OTYS Go!strap') which will help you in styling your partner widget with a more 'native OTYS Go! widget' look & feel.

An example of HTML structure and included CSS & JavaScript can be found on: https://www.otys.com/partners/go-widgets/v2/widget.html

If you open the HTML code, the structure & supporting files are quite self explanatory. Feel free to include the CSS & JavaScript file from our server or to make a copy and host it on your own server (and make adjustments if you like). Your partner widget is now ready to Go!

Please note that there are two versions of OTYS Go!: an 'old version' (let's call it 'version 1') and a 'new version' (let's call it 'version 2'). Since the look & feel of both versions differ, we also have two versions of OTYS Go!strap. The link above refers to the new version of OTYS Go!strap.

The old version is still available on:
https://www.otys.com/partners/go-widgets/v1/widget.html

If you still have the old version implemented, please note that simply updating the reference to the updated CSS file should in most cases do the trick.