

This document describes the steps how to build a remote license generator with LiveCode server and Zygodact to use with FASTSPRING.

This document does not describe the basic setup steps for the FASTSPRING seller account nor the steps how to add a product to your FASTSPRING seller account.

1. Requirements

You need

1. A cgi key generator stack **gen.rev**, created with Zygodact Key Generator http://hyperactivesw.com/solutions_zygodact.html
2. A hosting account with **LiveCodeServer commercial**. The community edition of LiveCodeServer does not work with Zygodact.
3. A FASTSPRING seller account
4. At least one product in the FASTSPRING seller account.

2. Adding the fulfillment action

In your FASTSPRING account under **Products and Pages** open your product and click on **Add** under **Fulfillment Actions**

convert to MP3 then lossless conversion cannot be guaranteed.

Fulfillment Actions

[+ Add](#)

Fulfillment actions define what a customer receives for this product in an order. Examples include a license, file download, and custom email.

Active

Disabled

Product Choices

[Edit](#)



3. Choose Fulfillment Action

1. Select **Generate a License**
2. Select **Remote Server Request**
3. Click **Next**

Choose Fulfillment Action

☐ **Send Email / Show Web Notification**
Send an email to the customer and optionally display information in the web receipt. Information from other fulfillment actions may be included, such as file URLs or licenses.

☒ **Generate a License** 1
Generate a license via hosted JavaScript, PHP, supported third party library, or remote server URL.

Remote Server Request 2

☐ **Provide a File Download**
Securely distribute a file download to the customer for a limited period of time.

☐ **Create a Signed PDF**
Create a signed PDF which is uniquely stamped with the customer's name and order information. Maximum supported PDF size is 250MB.

☐ **Ship CD/DVD/USB Drive**
Manufacture and ship a CD/DVD/USB Drive to the customer on-demand using a third party account at Acutrack or CustomCD.

Next 3

Overview
Choose the type of fulfillment action to create. Multiple fulfillment actions may be assigned to a product. For example, combining an email with a license or file download. Return to this screen to add each additional fulfillment action.

Related Help
[Adding Fulfillment Actions \(Emails, License Codes, Download Links\)](#)
[How to Include Multiple Download Files in an Email Fulfillment](#)
[How to Include Multiple Licenses in an Email Fulfillment](#)
[Setting Up a Remote License Script](#)

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4. Configure Remote License - General

1. Enter the URL to your license script.
2. Select **HTTP POST (recommended)**
3. Select **UTF-8**
4. Select **Single License Only**
5. press **Create**

General

URL
http://yourserver.com/yourfolder.com/yourscript.lc 1
Remote URL the system will access to generate a license. It must begin with http:// or https://.

Method
HTTP POST (recommended) 2
HTTP method used to access the remote URL.

POST Encoding
UTF-8 3
Character encoding to use for the POST method. Not applicable to GET.

Output Format
Single License Only 4
The type of license format the system should expect from the remote server.

5 **Create**

Testing
After creating the remote license generator, test calls may be made to your remote server.

Sending Full Order Information
License generation is designed to be simple, fast, and repeatable. It should not have a side effect such as storing information in a remote database.
For these reasons only a limited set of parameters are passed to the remote server. To receive full order information for the purpose of storing information in a remote database, we support highly customizable post-order notification functionality.
Post-order notifications may include all order information, including all licenses generated for the order. [View additional notification options here.](#)

Related Help
[MIME 1.0 License Output Format](#)
[Setting Up a Remote License Script](#)
[What is the maximum length for the license string?](#)

5. Configure Remote License - Security

1. Copy your **Private Key**. You will need it for your LivecodeServerScript.

Note: Please do not use the private key from the image below. This is just a sample. Your private key looks different.

Please don't publish your private key!

GeneralSecurityParametersAdvanced

Private Key Security

This form of security uses a private key that is only known to our system and your system, and is never passed between the two systems.

Private Key

3bca30945efa76e765dce731ab98f0ca1

Sort all parameters passed from our system to your system by parameter name (ordinal value sorting). Concatenate the value of each parameter into a single string. Ignore the parameter named "security_request_hash" when generating this string. Append the private key value to the end of the string and generate an MD5 hex digest on the final combined string. The resulting MD5 digest should be identical to the value passed in the parameter named "security_request_hash".

PHP Example

```
<?php
ksort($_REQUEST);
$hashparam = 'security_request_hash';
$data = '';
$privatekey = 'SECURITY TAB PRIVATE KEY';
/* USE urldecode($val) IF YOUR SERVER DOES NOT AUTOMATICALLY */
foreach ($_REQUEST as $key => $val) {
    if ($key != $hashparam) { $data .= stripslashes($val); }
}
if (md5($data . $privatekey) != $_REQUEST[$hashparam]){
    return; /* FAILED CHECK */
}
/* SUCCESS - YOUR SCRIPT GOES HERE */
?>
```

Ruby Example

```
def security_check_license_gen( params, private_key )
    skey = ['security_request_hash', 'action', 'controller']
    str = ''
    params.keys.sort.each() { |k|
        str += params[k] unless skey.include?( k )
    }
    str += private_key
    digest = Digest::MD5.hexdigest( str )
    return digest == params[skey[0]]
end
```

Actions

Available actions that may be performed.

☒ Save

☐ Run Test

Related Help

[MIME 1.0 License Output Format](#)

6. Configure Remote License - Parameters

- 1. Select the value **Email Address** for the parameter **name**, because i am using the customers email address for creating the license key in my sample script.
- 2. Click **Save**

GeneralSecurityParametersAdvanced

Name	Value
name	Email Address1
quantity	Quantity
reference	Order Reference / ID
email	Email Address
company	Company Name
referrer	Referrer that originated the order.
internalProductName	Product that the license is being generated for.
tags	Tag names assigned to products in the order.
tagValues	Tag values assigned to products in the order.
sourceKey	Source Key
sourceCampaign	Source Campaign
test	'true' if it is a test order.
subscriptionReference	Subscription Reference / ID
Custom Name 1	Custom Value 1
Custom Name 2	Custom Value 2
Custom Name 3	Custom Value 3
Custom Name 4	Custom Value 4
Custom Name 5	Custom Value 5
Custom Name 6	Custom Value 6
Custom Name 7	Custom Value 7
Custom Name 8	Custom Value 8
Custom Name 9	Custom Value 9

Actions

Available actions that may be performed.

Save2

Run Test

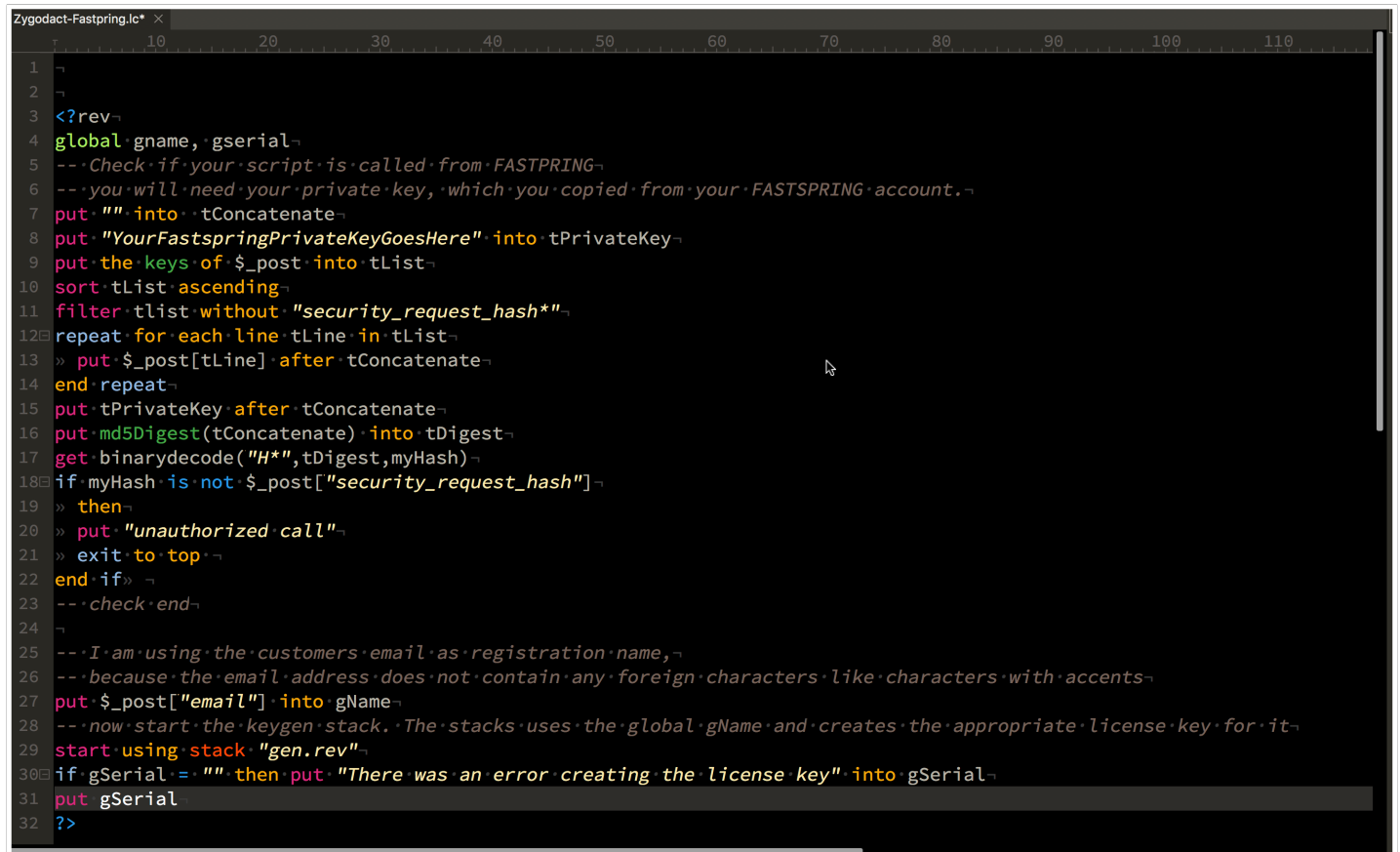
Related Help

MIME 1.0 License Output Format

7. The script as an image

Copy the cgi stack "ren.rev" and your LiveCodeServer script onto your webserver.

Please take care that the storage path matches the URL you've entered in the FASTSPRING for the **Remote License**.



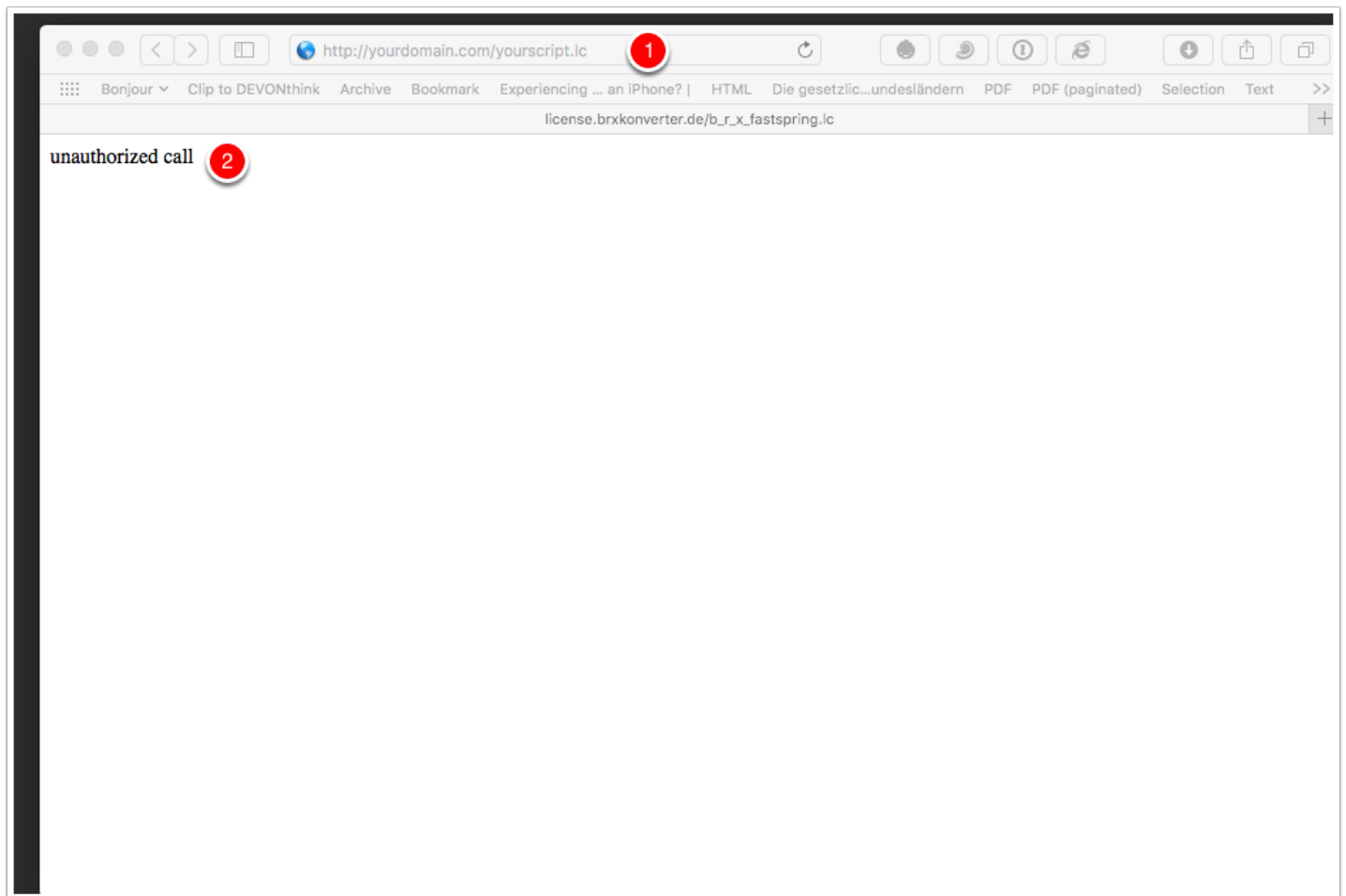
```
Zygodact-Fastpring.lc
1
2
3 <?rev
4 global gname, gserial
5 -- Check if your script is called from FASTSPRING
6 -- you will need your private key, which you copied from your FASTSPRING account
7 put "" into tConcatenate
8 put "YourFastspringPrivateKeyGoesHere" into tPrivateKey
9 put the keys of $_post into tList
10 sort tList ascending
11 filter tList without "security_request_hash"
12 repeat for each line tLine in tList
13   put $_post[tLine] after tConcatenate
14 end repeat
15 put tPrivateKey after tConcatenate
16 put md5Digest(tConcatenate) into tDigest
17 get binarydecode("H*", tDigest, myHash)
18 if myHash is not $_post["security_request_hash"]
19   then
20     put "unauthorized call"
21     exit to top
22 end if
23 -- check end
24
25 -- I am using the customers email as registration name,
26 -- because the email address does not contain any foreign characters like characters with accents
27 put $_post["email"] into gName
28 -- now start the keygen stack. The stacks uses the global gName and creates the appropriate license key for it
29 start using stack "gen.rev"
30 if gSerial = "" then put "There was an error creating the license key" into gSerial
31 put gSerial
32 ?>
```

8. The Script as text (you can copy it)

```
<?rev
global gname, gserial
-- Check if your script is called from FASTSPRING, you will need your private key, which
you copied from your FASTSPRING account.
put "" into tConcatenate
put "YourFastspringPrivateKeyGoesHere" into tPrivateKey
put the keys of $_post into tList
sort tList ascending
filter tlist without "security_request_hash*"
repeat for each line tLine in tList
    put $_post[tLine] after tConcatenate
end repeat
put tPrivateKey after tConcatenate
put md5Digest(tConcatenate) into tDigest
get binarydecode("H*",tDigest,myHash)
if myHash is not $_post["security_request_hash"]
    then
        put "unauthorized call"
        exit to top
    end if
-- check end-- I use the customers email as registration name,
-- because the email address does not contain any foreign characters like characters
with accents
put $_post["email"] into gName
-- now start the keygen stack. The stacks uses the global gName and creates the
appropriate license key for it
start using stack "gen.rev"
if gSerial = "" then put "There was an error creating the license key" into gSerial
put gSerial
?>
```


9. A simple Test in your browser

1. Open the URL to your script in your web browser
2. You should just see a "unauthorized call"



10. Test the Script from your FASTSPRING account

1. Click *Run Test*

GeneralSecurityParametersAdvanced

Name	Value
name	Email Address
quantity	Quantity
reference	Order Reference / ID
email	Email Address
company	Company Name
referrer	Referrer that originated the order.
internalProductName	Product that the license is being generated for.
tags	Tag names assigned to products in the order.
tagValues	Tag values assigned to products in the order.
sourceKey	Source Key
sourceCampaign	Source Campaign
test	'true' if it is a test order.
subscriptionReference	Subscription Reference / ID
Custom Name 1	Custom Value 1
Custom Name 2	Custom Value 2
Custom Name 3	Custom Value 3
Custom Name 4	Custom Value 4
Custom Name 5	Custom Value 5
Custom Name 6	Custom Value 6
Custom Name 7	Custom Value 7
Custom Name 8	Custom Value 8
Custom Name 9	Custom Value 9

Actions

Available actions that may be performed.

Save

Run Test

Related Help

MIME 1.0 License Output Format

11. Test result

1. If the test is successful then you can see a license key under ***Licenses Captured***.

If you see ***unauthorized call*** instead of a license key, then that would mean, that your script is using the wrong private key or there is an error in the script part which is responsible for the security check.

If you see a LiveCodeServer error, then there is some error in the script.

Test Input

License Name

Вагиф Самәдоғлу

License Company

FooBar Inc.

License Email

vagif.samadoghlu@example.com

License Quantity

1

Product Name

BRx Konverter

Order Reference

TEST_REF

Subscription Reference

TEST_SUB_REF

Licenses Captured

AAAA-BBBB-CCCC-DDDD.EEEE-FFFF

1

Log

-- REQUEST --
POST /b_r_x_fastspring.lc HTTP/1.1
Content-Type: application/x-www-form-urlencoded; charset=UTF-8
User-Agent: FS
Host: license.brskonverter.de
Content-Length: 256
company=FooBar+Inc.&email=vagif.samadoghlu%40example.com&internalProductName=BRx+Konverter&name=vagif.s
amadoghlu%40example.com&quantity=1&reference=TEST_REF&subscriptionReference=TEST_SUB_REF&test=true&sec
urity_request_hash=b6065d6471239bad743bc14d6d467102

-- RESPONSE --
HTTP/1.1 200 OK
Content-Type: text/html; charset=iso-8859-1
Transfer-Encoding: chunked
Date: Wed, 03 Aug 2016 20:40:01 GMT
Accept-Ranges: bytes
Vary: Accept-Encoding
Connection: close
AAAA-BBBB-CCCC-DDDD.EEEE-FFFF

Actions

Available actions that may be performed.

Run Test

12. The script is working. That´s it, isn´t it?

Yes and No.

Yes, the remote license web service is working now.

And No.

To get an email with the license key sent to the customer you need to add a 2nd **Fullfilment action**.

1. This time select **Send Email / Show Web Notification**.
2. Click **Next**

The screenshot shows the 'Add Fulfillment Action' screen in the Zygodact interface. The top navigation bar includes a home icon, a back arrow, the text 'BRx Konverter', and the current page title 'Add Fulfillment Action'. The main content area is titled 'Choose Fulfillment Action' and lists five options:

- ☒ **Send Email / Show Web Notification** (indicated by a red arrow and a red circle with the number 1). Description: Send an email to the customer and optionally display information in the web receipt. Information from other fulfillment actions may be included, such as file URLs or licenses.
- ☐ **Generate a License**. Description: Generate a license via hosted JavaScript, PHP, supported third party library, or remote server URL. Below this is a 'Remote Server Request' input field with a dropdown arrow.
- ☐ **Provide a File Download**. Description: Securely distribute a file download to the customer for a limited period of time.
- ☐ **Create a Signed PDF**. Description: Create a signed PDF which is uniquely stamped with the customer's name and order information. Maximum supported PDF size is 250MB.
- ☐ **Ship CD/DVD/USB Drive**. Description: Manufacture and ship a CD/DVD/USB Drive to the customer on-demand using a third party account at Acutrack or CustomCD.

At the bottom right of the main content area is a 'Next' button with a red circle and the number 2 next to it.

The right sidebar contains two sections:

- Overview**: Choose the type of fulfillment action to create. Multiple fulfillment actions may be assigned to a product. For example, combining an email with a license or file download. Return to this screen to add each additional fulfillment action.
- Related Help**:
 - [Adding Fulfillment Actions \(Emails, License Codes, Download Links\)](#)
 - [How to Include Multiple Download Files in an Email Fulfillment](#)
 - [How to Include Multiple Licenses in an Email Fulfillment](#)
 - [Setting Up a Remote License Script](#)

The bottom status bar shows a progress indicator, a timer at 13:22, and file information: 623 KB, PNG-Bild, 28.07.20.

13. Configure Email and Web Notification

On this Webpage you can now edit the email and web page delivery notification. You can even create multilingual notifications.

1. Edit the template for **plain text** emails. See [Sample License Delivery Email Template](#) for more information
2. Edit the template for **html** emails (optional). See [HTML Email Content](#) for more information
3. Edit the template for the template for the **web delivery** (optional)
4. Edit the phrases for multilanguage emails (optional). In my example i am using **Template Code Logic** for translations. See [Translating Notification Emails](#) for more information
5. Edit some advanced options (optional)
6. Click **Save**

Email (Text)Email (HTML)WebPhrasesAdvanced

Email Subject
Your #{orderItem.display} Delivery Information

Email Text Contents
<message>
<en>
Hi #{order.customer.fullName},

thank you very much for supporting BRx Converter.

Please copy and paste the following registration data to the registration window

Name:
#{orderItem.fulfillment.license.licenseName}

Registration key:
#{orderItem.fulfillment.license.licenses.list}

If you have any questions, don't hesitate to contact us at f:

Regards,
M-R-D
</en>

<de>
Hallo #{order.customer.fullName},

vielen Dank für den Kauf einer BRx Konverter Lizenz.

Bitte verwenden Sie die folgenden Registrierungsdaten zum Freischalten

Name:
#{orderItem.fulfillment.license.licenseName}

Actions
Available actions that may be performed.

☒ Save

6

☐ Preview

Template Overview

A fulfillment template is a combination of custom text and defined order variables that will be combined into a final customer-visible form.

Available Variables

Two variables are available to templates during order fulfillment. Click on either for information about their available properties.
[order](#) – Contains information about the current order being fulfilled.
[orderItem](#) – Contains information about the current order being fulfilled. Order items are the product level line item order.

Related Help

[Common Email / Web Template Variables](#)
[Editing Pre-Existing Email Fulfillment Templates](#)
[HTML Email Content](#)
[How do I show different text based on quantity in the email fulfillment?](#)
[Sample License Delivery Email Template](#)
[Translating Notification Emails](#)
[Web-Based Delivery Template](#)
[Working with Variables in SpringBoard](#)

14. That's it!

You're done.

Happy selling!