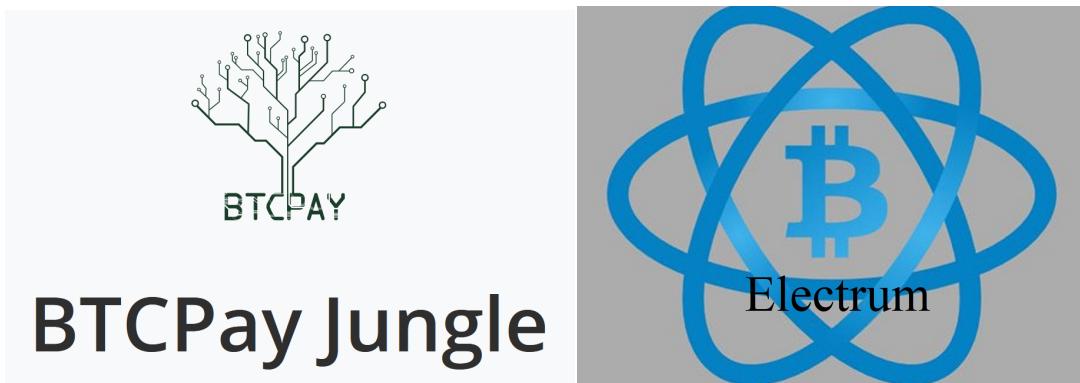


How to accept non-KYC bitcoin with BTCPay Jungle and Electrum

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Introduction

I discuss how to connect an Electrum bitcoin software wallet to BTCPay Jungle to start receiving non-KYC bitcoin payments in exchange for goods and services online. BTCPay Jungle is a fork of BTCPay Server, a full bitcoin payment processor, which offers free hosting services for anyone looking to start receiving bitcoin payments. Electrum is a bitcoin software wallet which is compatible with BTCPay Jungle, free, secure, easy to use, and disposable. In this article, I go over creating an account on BTCPay Jungle, creating a store, connecting an xpub, and creating an online Point-of-sale (POS) app. This article is for users who have a product or service to offer in exchange for bitcoin and want to have an online presence. By the end of this article, users should have set up a basic online store that accepts on-chain bitcoin as payment with BTCPay Jungle and Electrum bitcoin wallet.

The trade-offs

Note, by using BTCPay Jungle's free third-party server, we will expose the xpub we give to them. This is why I do not recommend importing an existing xpub, especially if it is the one to the main stash. Instead, I recommend using a xpub from a disposable wallet, such as Electrum, as a mitigation strategy. Further, Electrum is a hot wallet and relies on third-party Electrum servers to verify transactions. Despite xpub exposure and using a hot wallet, and, given the recommended mitigation strategies, the rewards outweigh the risks. For example, we gain the ability to accept bitcoin online through BTCPay Jungle's payment services in exchange for a disposable xpub. Other mitigation strategies include: Only keep small amounts of bitcoin on the wallet, coinjoin the earned bitcoin, sweep funds regularly, and/or delete the old xpub and replace it with a new disposable one.

Create a new account on BTCPay Jungle

Register a new account on <https://btcpayjungle.com/Account/Register/>. BTCPay Jungle has a .onion site for those that are interested. Next, consider bookmarking the BTCPay Jungle login page for convenience. Lastly, be mindful about the email used when signing up—especially after the recent Leger database hack. See "[How to create a throw away email address](#)" if a more private email address is desired.

Create a store on BTCPay Jungle

Once the new account is created, navigate to the "Stores" tab and select "+Create a new store." Name the store. Once the new store is created it will be listed in the "Stores" tab, then access to the settings will be granted. Next, enter an xpub in the "General settings" tab under "Wallet" and in "BTC" by selecting "Setup." As mentioned above, I am using an xpub from Electrum bitcoin software wallet for this article.

Download the Electrum wallet from <https://electrum.org/#download> (available on android mobile too) and verify the PGP signature before running. Search <https://diverter.hostyourown.tools/as-easy-as-pgp/> to learn more about

PGP and verifying signatures. Before continuing with the store set up on BTCPay Jungle, Electrum wallet must first be configured and the seed must be securely backed up. With this seed, the Electrum wallet can also be imported to and managed from an Android mobile phone.

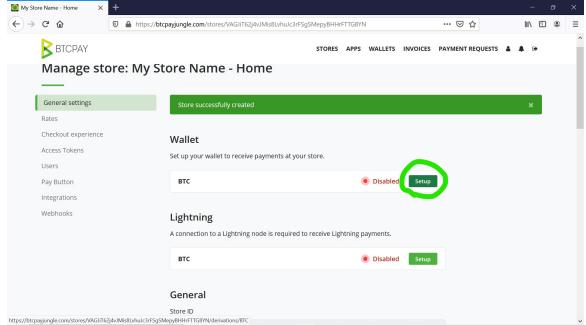


Figure 1: Add xpub to BTCPay Jungle.

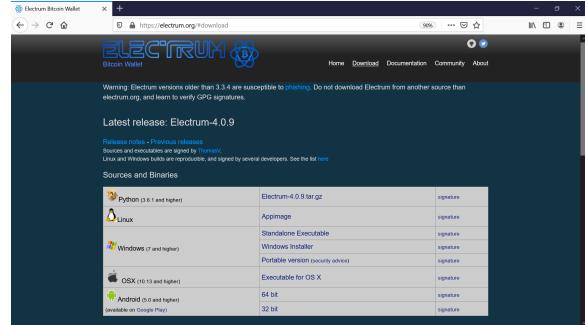


Figure 2: Download Electrum bitcoin software wallet.

Add an xpub on to BTCPay Jungle

Now that Electrum has been downloaded, let's link the xpub from Electrum to BTCPay Jungle. Find the xpub in the Electrum app by navigating to the "Wallet" tab>"Information">"Master Public Key". Copy and paste the xpub into BTCPay Jungle's "Derivation scheme" field and select continue. On Electrum mobile wallet, the xpub is found by selecting the wallet name on the top-left corner of the app, also labeled "Master Public Key". Leave the "Enabled" checkbox checked.

Next, BTCPay Jungle will produce a series of bitcoin addresses. Verify that the first address listed matches the receive address produced in Electrum. To do this, navigate to the "Receive" tab in Electrum>"New Address", and check that the address produced in Electrum matches the one presented on BTCPay Jungle. If they match, then proceed by selecting "confirm" in BTCPay Jungle and exit from Electrum. At this point, we should have successfully linked the Electrum wallet xpub to BTCPay Jungle. Any funds received through BTCPay Jungle will be stored on Electrum wallet.

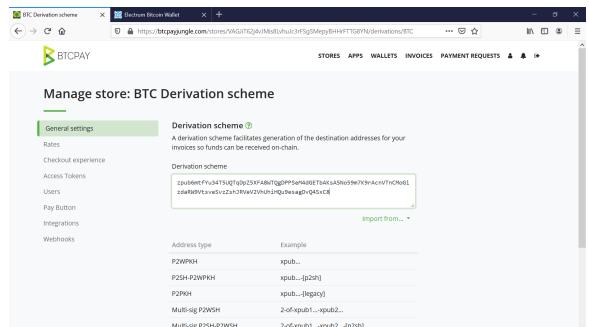


Figure 3: Adding the xpub to BTCPay Jungle.

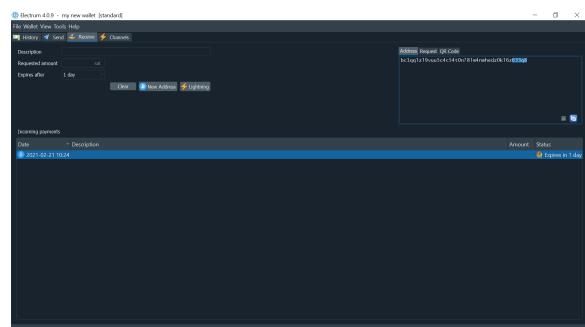


Figure 4: Verifying the bitcoin addresses match.

New store settings

Now that an xpub has been linked with BTCPay Jungle, we can continue setting up the store. The following recommended settings are required for success. Follow them as is for now but feel free to return later and experiment with alternative settings. To continue: Uncheck the “Allow anyone to create invoice” box, leave the “Enable payjoin/P2EP” box checked, adjust “Payment invalid if transactions fail to confirm ... after invoice expiration” to 2880 minutes (i.e., ~48 hours), change “Consider the invoice confirmed when the payment transaction ...” to at least 6 confirmations, and, finally, select “Save Store Settings.”

The next tab to select will be the “Checkout experience” tab. I suggest only changing the “Recommended fee confirmation target blocks” to 144. This setting adjusts the recommended miner fee for the buyer to low priority but still high enough to confirm in +/-24 hours. Once set, select “Save.” The stores main settings are now complete. Now that the stores main settings are complete, next I will go over how to create a new app which will serve as the stores Point-of-sale (POS) web page.

Create a new app

Navigate to the “Apps” tab and select “+Create a new app.” Please keep in mind that all the changes must be saved before exiting this section of BTCPay Jungle. I will make it clear when everything has been saved appropriately. Next,

give the store a name and select “Create”. This name will be the first thing displayed on the web page. Leave the “App type” and “Store” settings as they are. Next, title the store and select “Default view”. “Static” allows purchases for one item at a time and “Cart” allows multiple purchases at a time (see, figures 6 and 7). Next, uncheck “User can input custom amount,” “User can input discount in %,” and “Enable tips.” The remainder of the settings before the “Products” section can be left as they are.

Create a product

Next, in the Products section, delete all the automatically generated products and select “+ Add” to list customized products and/or services. In “Create item”, give the item a title, set the price, change custom price to “no” and add a description, and inventory (if applicable). For example, I use physical products in my store but the user can easily list products and/or services, such as consulting, A/C repair, freelance writing, etc. Before continuing, make sure the title of the item/service is unique because BTCPay Jungle automatically uses the title to generate an “Id” and cannot list multiple items with the same ID. A way around this is to add numbers after each item title, as I did in my example below, or to use the same titles but make unique IDs for each item. I find it easier to make each name unique.

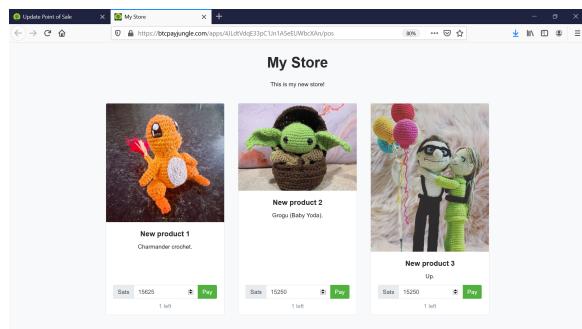


Figure 6: Static view.

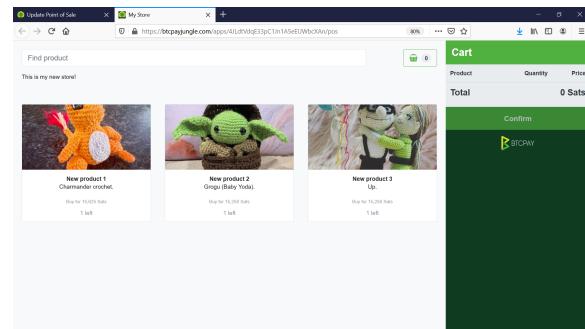


Figure 5: Cart view.

Uploading an image

I will now discuss how to add an image to the product for BTCPay Jungle. We must first have an image (e.g., jpg or png) of the product and upload it to

<https://postimages.org/>. Once uploaded, select “Share” and copy the “Direct link” to clipboard. This is what will be pasted into “image” field on BTCPay Jungle.

Adding a description

Finally, add a description and set an inventory, if applicable. Please keep in mind to avoid using colons (i.e., “:”) in the description, BTCPay Jungle does not allow it and the store will not save. Instead, try using hyphens, such as “-”. Leave “Id” alone, it will generate itself for each item. Finally, save changes for adding the product. Repeat this for each item and continue until all the desired products are listed. Now that the products are listed, next we can add the content that will display to the web page. All the products created will be listed below this content.

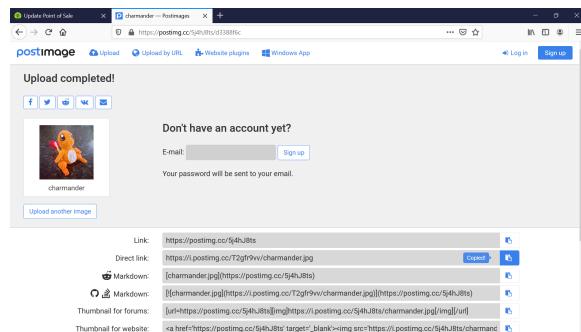


Figure 7: Uploading an image to Post Image.

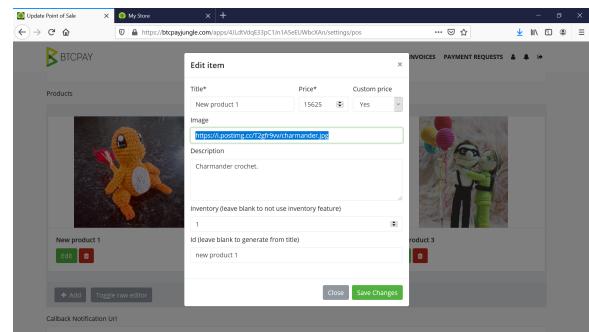


Figure 8: Adding the Direct Link to BTCPay Jungle.

Adding the page content

Next scroll down to description and add the text people will see when visiting the website. Format it as desired with the menu bar. Those who are familiar with HTML can enter into HTML mode by selecting the “</>” button located in the menu bar. Keep the page content simple for now and return to it later to add embellishments. Once text has been added to the description section, select save settings at the bottom of the page. Now, everything has been saved appropriately. Next, let’s see the Point-of-sale (POS) app looks online.

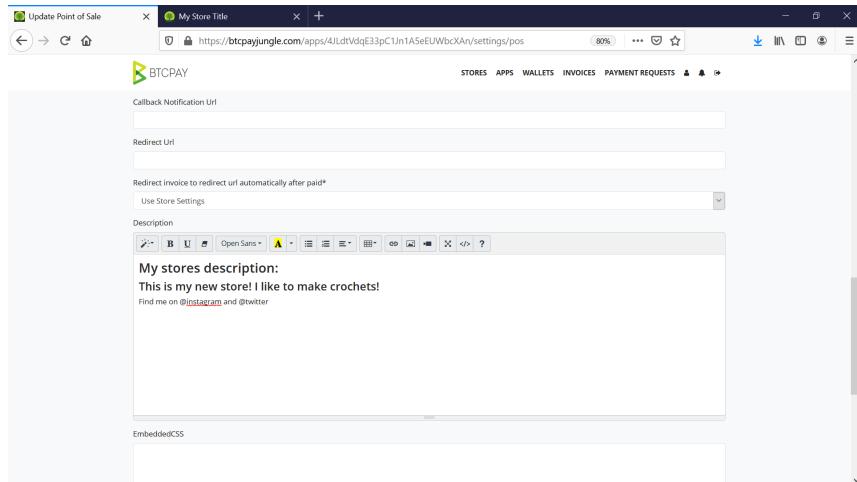


Figure 9: Adding content to the description.

Previewing the web page

Now we can see what the app looks like online by scrolling all the way back down and selecting the arrow next to “view app” button. This will open a new tab to the online store. The URL on that page is what would be shared with others to get to the store. If a user has a domain name, they can direct to this URL. For example, I own the domain HeadyTieDyes.com so anyone who types that in to an address bar will actually be directed to my BTCPay Jungle URL. Those familiar with the process can go to their domain name provider’s settings and paste the BTCPay Jungle URL as the forward address. Also, as mentioned above, when someone selects on the “Pay” button they will be taken to a payment QR code, which, if received, will be sent to the Electrum wallet we created.

If the BTCPay Jungle store opened in the other tab successfully and it was able to generate a bitcoin QR code, then congrats! At this point we should have a functioning online bitcoin store set up. From here on it’s tinkering and formatting to get the web page to present as desired—this might require some HTML skills but always feel free to reach out for support.

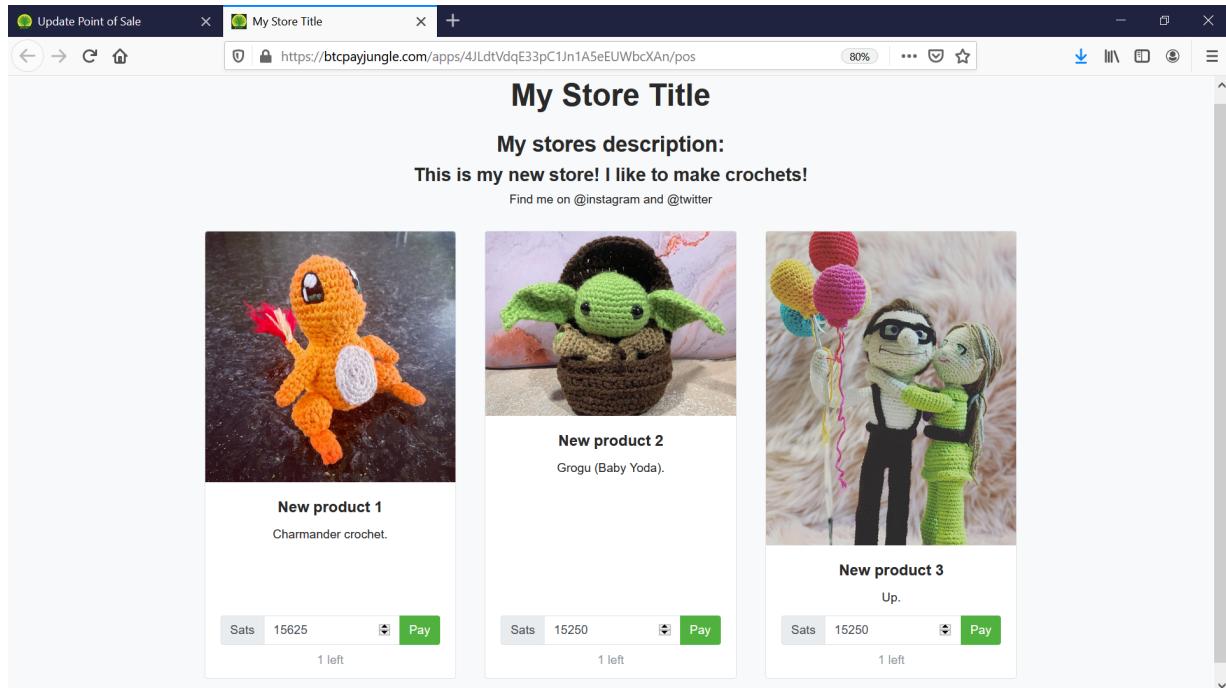


Figure 10: This is how the content is displayed.

Conclusion

In this article, I went over how to create an online store that accepts bitcoin with BTCPay Jungle and Electrum wallet. While this method works, it could be better. For example, more details on formatting how to link domain names could have been provided but this was not the focus of the article, users should consider running their own instance of BTCPay Server rather than using this custodial method, and an easy on-boarding method for adding lightning to BTCPay Jungle should be explored. Despite these limitations, the present article is enough to get someone started on a non-KYC journey to accepting bitcoin as payment in exchange for their products or services via an online store.

If you have found my article(s) useful for acquiring non-KYC bitcoin, please consider a donation:

Visit my donation page:

<https://btcpayjungle.com/apps/2NqQwXoB5ejGPqtHTefrsoE2oeyH/pos>

or

Follow and connect to my PayNym: +whitefirefly714



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