BTCPAY
Voltage Case Study

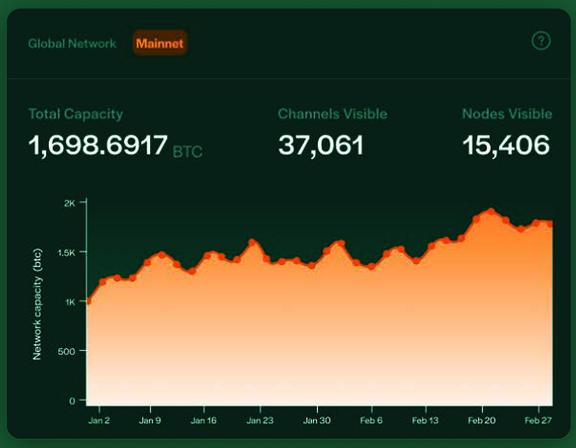
Voltage is a Bitcoin Development Platform and infrastructure provider that enables engineers, developers, and business owners to take full control over their Bitcoin experience.

Worlds Fastest

BTCPay Deployments With Voltage – Generating 45,000 Invoices Per Month

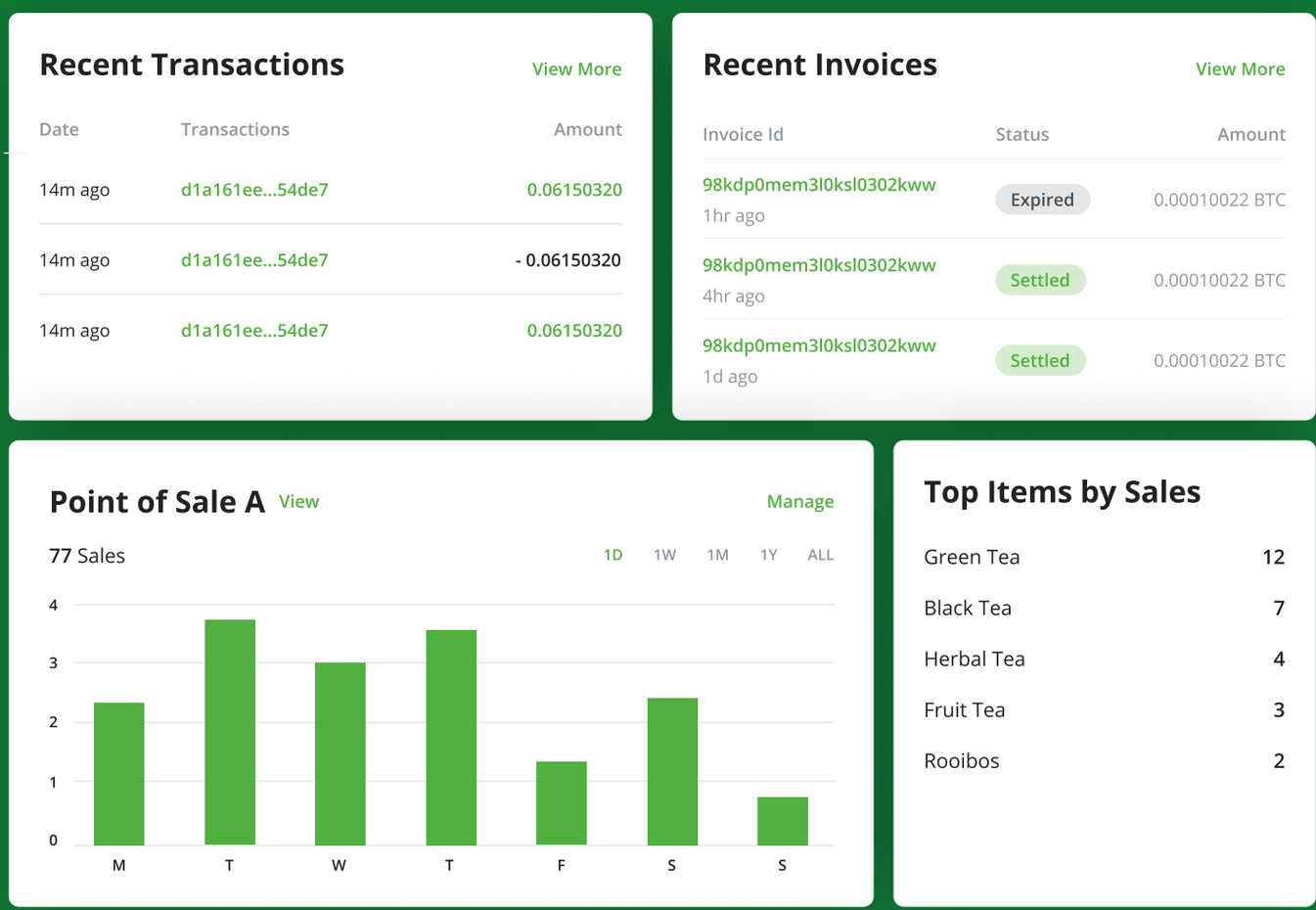
Overview

Voltage offers BTCPay Server instances to anyone with a Voltage account. When you have a BTCPay Server with Voltage, you can build a donation button, webshop, crowdfund, and more. Further, if you have a lightning node on Voltage, it will connect to your BTCPay Server instance seamlessly, providing a near frictionless non-custodial bitcoin-native commerce platform.



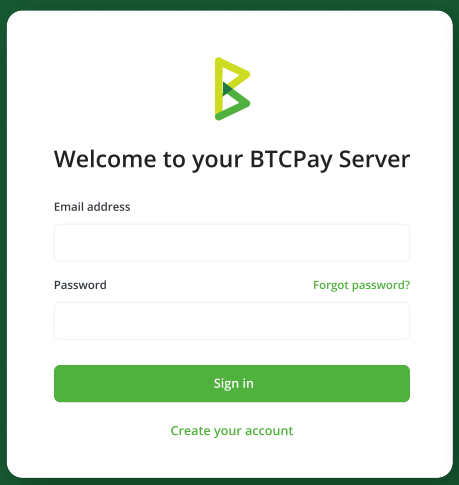
Needs and Goals

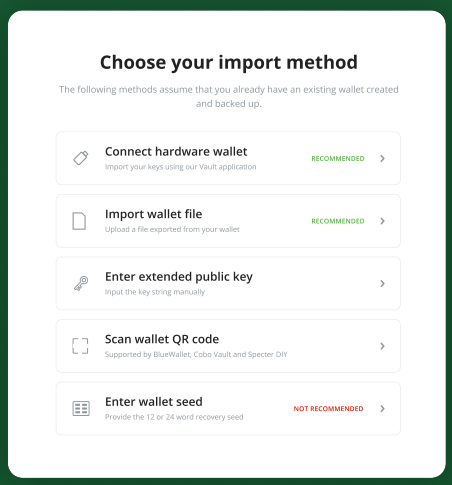
This is a bitcoin-focused business. As such, there needs to be a way to accept Bitcoin from customers for Voltage billing and give customers the maximum amount of freedom in a non-custodial manner to utilize their lightning node infrastructure. We believe that BTCPay Server is the most robust solution for commerce on Bitcoin while maintaining the core Bitcoin ethos of permissionless, censorship-resistant payments.

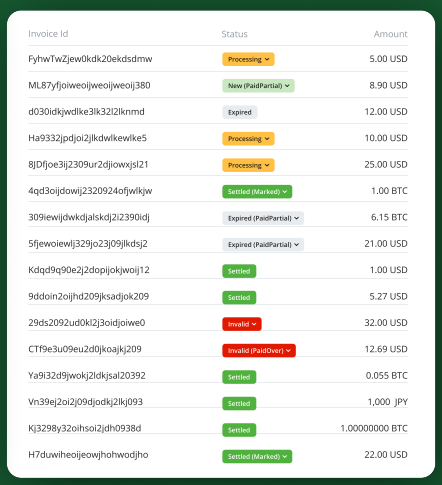


Choice of BTCPay Server

Nearly all other Bitcoin commerce solutions have some custodial KYC component. This is something that we wish to avoid at Voltage. With those services put aside, the competition for Bitcoin native commerce platforms that are open source is relatively slim. BTCPay Server's core ethos and mission align perfectly with our own, and that made the choice to use BTCPay Server fairly easy. On top of that, the sheer amount of features and customizability of BTCPay Server is unmatched in the industry.







Implementation

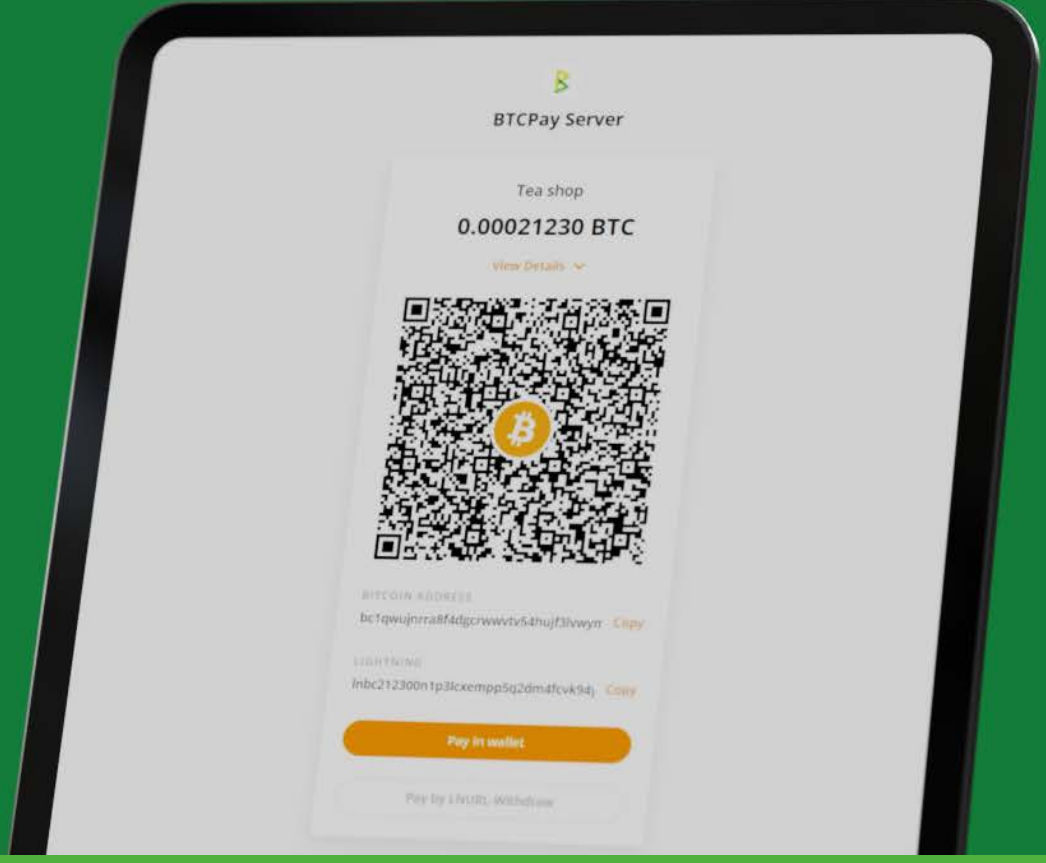
- **The Process:** Integrating BTCPay Server into Voltage was fairly easy. We use the standard open source tools, like the Docker Compose repository. We use the APIs that come default with BTCPay Server to administer the server on behalf of our users. BTCPay Server comes with all the features and settings needed out of the box. It's been simple and easy to use.

- **Challenges:** At Voltage, we experience scale beyond the standard deployment of BTCPay Server. For those reasons, we had to be prepared. To best ensure our customer's data, we switched out the default deployment of the Postgres database for our own Postgres installation which is highly available and takes frequent backups.

Date	Amount	USD	Memo	Preimage Hash	Invoice	State	Method
Oct 4, 2023, 6:03 AM	432,469 sats	$100.00	WebStore: order# 7249	0915 ... de1d	lnbc ... 7m64	Settled	BOLT11
Feb 28, 5:05 AM	10,000 sats	$0.42	A tip for all your hard work on this project	2da5 ... bc4f	lnbc ... 4gqu	Settled	Keysend
Feb 28, 1:37 AM	443,124 sats	$100.00	WebStore: order# 7248	ff42 ... a0b6	lnbc ... tumn	Settled	BOLT11
Feb 27, 6:03 AM	443,478 sats	$100.00	WebStore: order# 7247	34ae ... ed10	lnbc ... 5afv	Settled	BOLT11
Feb 27, 6:03 AM	936,812 sats	$200.00	WebStore: order# 7246	1cfe ... abb3	lnbc ... 1d83	Settled	BOLT11
Feb 27, 6:03 AM	439,444 sats	$100.00	WebStore: order# 7245	03de ... ba42	lnbc ... 2ju6	Settled	BOLT11
Feb 27, 6:03 AM	1,335,767 sats	$300.00	WebStore: order# 7244	3df3 ... 54c0	lnbc ... a7jn	Settled	BOLT11
Feb 27, 6:03 AM	448,189 sats	$100.00	WebStore: order# 7243	0915 ... de1d	lnbc ... 1v4h	Settled	BOLT11
Feb 27, 6:03 AM	495,123 sats	$100.00	WebStore: order# 7242	2da5 ... bc4f	lnbc ... 1065	Settled	BOLT11
Feb 27, 6:03 AM	20,000 sats	$0.91	GM! It's a satogram!	ff42 ... 134d	lnbc ... 7m64	Settled	Keysend
Feb 26, 6:03 AM	369,076 sats	$75.00	WebStore: order# 7241	34ae ... ed10	lnbc ... 4gqu	Settled	BOLT11
Feb 26, 6:03 AM	611,067 sats	$125.00	WebStore: order# 7240	1cfe ... de1d	lnbc ... tumn	Settled	BOLT11
Feb 26, 6:03 AM	497,512 sats	$100.00	WebStore: order# 7239	03de ... abb3	lnbc ... 5afv	Settled	BOLT11
Feb 26, 6:03 AM	500,325 sats	$100.00	WebStore: order# 7238	3df3 ... de1d	lnbc ... 1d83	Settled	BOLT11
Feb 26, 6:03 AM	503,676 sats	$100.00	WebStore: order# 7237	0915 ... de1d	lnbc ... 2ju6	Settled	BOLT11
Feb 26, 6:03 AM	50,000 sats	$2.53	LNBits POS Sale: Coffee x 1	2da5 ... bc4f	lnbc ... a7jn	Settled	BOLT11
Feb 26, 6:03 AM	50,000 sats	$2.53	Refund 4fce-34c7de-1cde-aab0-1432	ff42 ... a0b6	lnbc ... 1v4h	Settled	BOLT11
Jan 25, 6:03 AM	1,035,143 sats	$200.00	WebStore: order# 7236	34ae ... ed10	lnbc ... 1065	Settled	BOLT11
Dec 22 6:03 AM	3,156,233 sats	$600.00	WebStore: order# 7235	1cfe ... abb3	lnbc ... 7m64	Settled	BOLT11

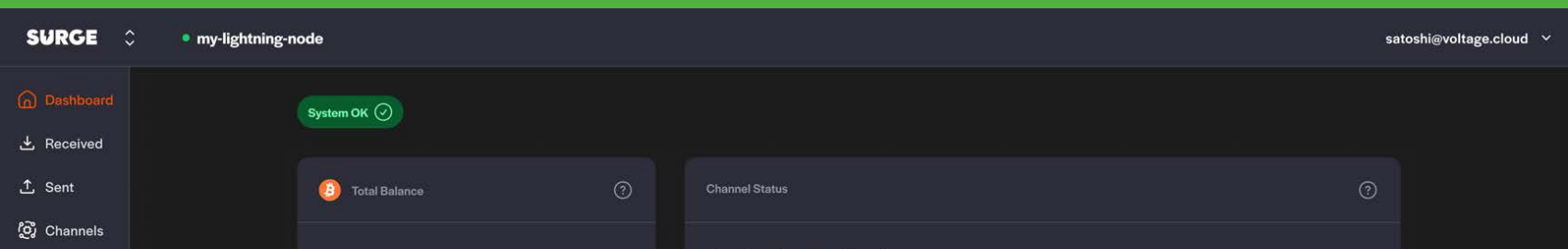
Features and Benefits

An improvement over the previous system: BTCPay Server has been a part of Voltage since day one. It was deployed as the primary software to accept Bitcoin payments from Voltage's first customers and has stayed with us ever since. Shortly after launch, BTCPay Server user accounts were offered as an additional service to Voltage users at a low cost and we still do to this day.



Results

- **Outcomes:** Simple BTC payment checkout for our customers + now all of our customers can spin up a BTCPay instance in minutes and deploy without technical know-how.
- **Data (optional but helpful):** As of October 2023 Voltage is doing 45,000+ transactions monthly.
- **User Feedback:** We made a video series from some of our customers. You can watch those here, and here.



Conclusion

- **Learnings:** The fastest and easiest way for us to accept payments is BTC Pay. We also have found that customers love being able to spin up BTC Pay quickly without having to learn the process of doing it themselves. It is a very popular product that we get new users for daily.

- **Future Prospects:** BTCPay will continue to be the bitcoin payment infra we use to accept bitcoin-denominated payment processing. We are also excited for updates that our customers can use and experience.

Learn More:

btcpayserver.org

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