

CASE STUDY

CoinLion LLC Leverage AWS for Security, Disaster Recovery, and Cost Optimization



Platform

- AWS

AWS Services Implemented

- CloudFormation
- CloudFront
- CloudTrail
- CloudWatch
- EBS
- EC2
- ECR
- EKS
- IAM
- Lambda
- KMS
- RDS
- RI
- Route 53
- S3
- SNS
- SQS
- Secrets Manager
- WAF

Founded in 2017, CoinLion is a cryptocurrency trading company with an exchange for buying and selling cryptocurrencies. But unlike other crypto exchanges, CoinLion has an auto-trader that buys and sells crypto automatically for the user. Their auto-trader leverages bots that look for key market signals for buying and selling, and acts on those signals 24/7.

Experienced crypto traders have their own language. CoinLion is on a mission to make crypto trading simple and accessible for everyone. From pairs to positions, bots, halvings, and alt coins, crypto terminology can be confusing. CoinLion is here to remove the crypto jargon and create a single platform that makes sense to the everyday users trying to enter the world of cryptocurrency.

CoinLion makes trading crypto simple by putting everything customers need in one place, one platform. At its core, CoinLion is an auto trader that allows inexperienced users to follow more experienced crypto traders' strategies. They also have their own utility token, CoinLion Token, which provides additional benefits on the platform. CoinLion isn't yet marketing to the masses and instead has been growing via word of mouth and came to work with Connectria the same way.

"I was first introduced to Connectria during my time as CEO at DocuTAP. When I stepped into my role at CoinLion and understood the complexities we had managing our environment in AWS and the talent that we previously had managing AWS, I knew the first call I had to make was to Connectria," says Eric McDonald, CoinLion CEO.

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The Challenge

CoinLion is selective regarding which crypto tokens it works with on its platform. “We work predominantly with Bitcoin, Bitcoin Cash, Ethereum, Chainlink, and Litecoin. Keeping this to a limited set helps protect our users and prevent them from getting into more risky situations,” says McDonald.

CoinLion’s trading platform takes advantage of crypto market volatility – it’s constantly swinging up and down. Users create trading strategies that help customers buy and sell crypto at the right time. Therefore, there’s a lot of work that goes into CoinLion’s platform. In working with Connectria, CoinLion had three primary challenges to address – security, disaster recovery (DR), and cost efficiency.

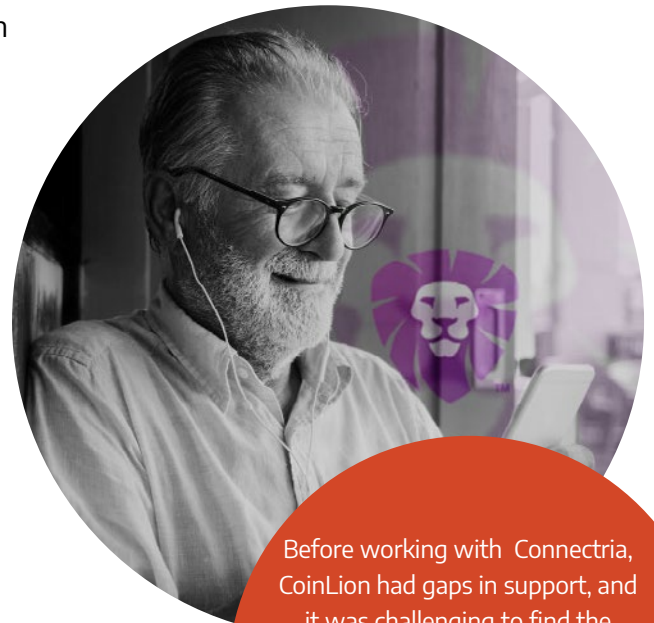
“First and foremost, as CEO I need to have confidence that the infrastructure is secure. I need to know everything is buttoned up. Therefore, I needed to have resources ensuring its security. I also needed to know that I worked with a team capable of designing our environment with the ability to scale up and down, whenever necessary,” says McDonald.

He continues, “I also needed a team with the ability to validate our backups. The DR side of the business is a large component of my relationship with Connectria. With a platform like ours, which is all setup in the cloud housing business critical data, we really needed to have an airtight DR plan. Our environment also needed to be as cost efficient as possible. Before working with Connectria, we had massive gaps in support, and it was challenging to find the right AWS talent.”

The Solution

CoinLion previously setup their EKS clusters on AWS so that the Elastic Load Balancers (ELBs) and Auto Scaling Groups (ASGs) could span other AZs in the US-East-1 region. CoinLion engineers previously connected to the AWS infrastructure via bastion hosts in their AWS Virtual Private Cloud (VPCs).

Connectria migrated CoinLion off of preexisting bastion hosts and into a VPN solution for better security. CoinLion initially had a few Security Groups that allowed access to specific IP ranges. Connectria helped CoinLion engineers follow AWS best practices to further limit access to specific IP ranges. Connectria assisted with CoinLion in planning out their cloud network address ranges. To further address CoinLion’s concerns around security, we focused on using IAM policies within AWS to ensure their teams were following the principles of least privilege. This ensures users only have access to the resources and tools within AWS necessary to complete their job.



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Connectria leveraged CloudWatch logs which help consolidate information by looking at CloudTrail tracing, logs from different systems, applications, and centralizes everything into one place. This helps CoinLion find all the information they need, sort through it, identify issues, and isolate other potential security risks. Having these logs is important because, without them, CoinLion could not perform additional analysis to identify and remediate risks.

Connectria further assisted CoinLion by remediating some VPC Classless Inter-Domain Routing (CIDR) overlaps. We also assisted CoinLion with Kubernetes configurations and trouble shooting. Our cloud experts created a DR environment along with additional environment planning and testing. We assisted with rebuilding infrastructure components to provide better environment separation. We also created virtual workstations to support CoinLion employee access.

The Results

“Since working with Connectria, we’ve dramatically increased our uptime and I also sleep a lot better at night knowing our environment is in Connectria’s hands. Having a cost efficient and cost minded cloud partner, like Connectria, is amazing. They know exactly when to spin things up or down, which helps keep my cloud costs in check. I knew Connectria could deliver the support I needed because I trust their deep bench of talent to do things quickly and easily. There was a bunch of hardening of our environment that I know wouldn’t have happened without Connectria,” says McDonald.

Connectria ensured CoinLion’s AWS environments were managed securely with properly appropriated backups. Connectria also provided cloud cost optimization which resulted in cost reductions.

“What’s great about Connectria is they have such a nimble mentality. There isn’t a bunch of red tape for putting in a ticket or request. It doesn’t have to be at a certain time, or even (x) days in advance. Connectria has the ability to act quickly. This is a great benefit for folks like me in the tech world when things come up suddenly and need to be addressed quickly,” says McDonald.

About CoinLion

CoinLion, LLC was formed in 2017 out of the need for a better way to trade and manage emerging cryptocurrencies. CoinLion is a trading and portfolio management platform that allows users to easily and efficiently manage and trade cryptocurrency. There are over 1,500 different cryptocurrencies with more emerging every day. CoinLion is the world’s first cryptocurrency trading platform with built-in portfolio management, social integration, and token incentivization. We are based in Sioux Falls, South Dakota, a business-friendly state.

For more information visit www.coinlion.com

Connect with us today

Talk to one of our modernization specialists by calling **800.781.7820** or visit us at www.connectria.com to learn more.

Why Connectria?

Connectria delivers an extensive portfolio of managed and professional services built on more than 25 years of experience designing and supporting mission-critical infrastructure that businesses rely on every day. By becoming a true extension of your team, our mission is to drive meaningful impact and deliver innovative, reliable, and secure solutions that help you connect the dots between today’s technology and tomorrow’s possibilities.

