

nClouds | AWS Case Studies

EZ Software Solutions

How nClouds helped EZ Software Solutions improve its AWS infrastructure to align with best practices of the AWS Well-Architected Framework for its POS applications.



EZ Software Solutions LLC

Industry

Software, Hospitality, Retail, POS

Location

Indianapolis, IN

Challenge

Improve cost optimization and enhance security aligned with AWS Well-Architected best practices guidance.

Featured Services

AWS Well-Architected Framework Review, DevOps Services

About EZ Software Solutions

Founded in 2001, EZ Software Solutions provides point-of-sale (POS) applications for the hospitality and retail industries. The company also provides commercial video surveillance solutions for all businesses. EZ Software Solutions has thousands of systems installed in bars and nightclubs, grocery stores, clothing retail stores, fast food and dine-in type restaurants, and many other types of commercial businesses. To learn more, go to ezsoftpos.com.

Benefits Summary



Improved cost optimization



Enhanced security

CHALLENGE

Improve cost optimization and enhance security aligned with AWS Well-Architected best practices guidance.

Why AWS and nClouds

Based on nClouds' AWS expertise, EZ Software Solutions asked nClouds to perform an AWS Well-Architected Framework Review (WAFR) of their priority workload. The workload consisted of Amazon Elastic Compute Cloud (Amazon EC2-Classical) and Amazon Relational Database Service (Amazon RDS). nClouds used the nOps cloud management tool during the WAFR. The nOps tool revealed opportunities to enhance EZ Software Solutions' infrastructure across the five pillars of the AWS Well-Architected Framework: cost optimization, reliability, performance efficiency, security, and operational excellence.

Based on the WAFR recommendations, EZ Software Solutions asked nClouds to apply AWS Well-Architected best practices guidance to improve cost optimization and enhance security.

EZ Software Solutions leveraged several Amazon Web Services:

- **Amazon Elastic Compute Cloud (Amazon EC2)** - A web service that provides secure, resizable compute capacity in the cloud. It is designed to make web-scale cloud computing easier for developers. It provides complete control of computing resources and runs on Amazon's proven computing environment.
- **Amazon Relational Database Service (Amazon RDS)** - Makes it easy for EZ Software to set up, operate, and scale a relational database in the cloud. It provides cost-efficient and resizable capacity while automating time-consuming administration tasks such as hardware provisioning, database setup, patching, and backups.
- **Amazon Simple Storage Service (Amazon S3)** - A flexible way to store and retrieve data, providing EZ Software with cost optimization, access control, and compliance.
- **AWS Identity and Access Management (IAM)** - To control users' access to AWS services.



nClouds' Solution Architecture for EZ Software:

EZ Software Solutions' infrastructure was set up on Amazon EC2-Classic and Amazon RDS. The deployment and infrastructure were done manually. EZ Software asked nClouds to remediate the issues that were identified during the WAFR. nClouds improved cost optimization by cleaning up unused AWS resources and rightsizing resources. To enhance security, nClouds set up policies for multi-factor authentication (MFA), lifecycle, clearing inactive keys, and resource encryption at rest. nClouds also provided step-by-step documentation, runbooks, and a working demo in EZ Software's AWS account.

“As a result of nClouds performing an AWS Well-Architected Framework Review, we identified necessary remediations for our Amazon EC2 and Amazon RDS workload. nClouds then applied their AWS and DevOps expertise to implement those remediations so that we're now saving AWS costs and have enhanced security to protect our data.”

Ali Hesaraki Jr.
Chief Operating Officer, EZ Software Solutions

The Benefits

Teaming with nClouds, EZ Software Solutions has enhanced cost optimization and security aligned with the AWS Well-Architected Framework. The project offers numerous benefits:



Enhanced cost optimization

nClouds cleaned up unused “zombie” instances (that add cost but no value) and rightsized workloads by matching instance types and sizes to EZ Software's workload performance and capacity requirements at the lowest possible cost.



Enhanced security

Having MFA-protected IAM users is the best way to protect AWS resources and services against attackers. An MFA device signature adds an extra layer of protection on top of existing IAM user credentials (username and password), making EZ Software's AWS account virtually impossible to penetrate without the MFA-generated passcode. Implementing Amazon S3 lifecycle policies ensures that EZ Software's data is managed safely (without experiencing unnecessary costs) and that data is cleanly deleted once it is no longer required. Identifying and deactivating any unnecessary IAM access keys is a security best practice to ensure that only one access key remains active for a given IAM user. Amazon RDS encrypted database instances provide an additional layer of data protection by securing EZ Software's data from unauthorized access to the underlying storage.

About nClouds

nClouds is a certified, award-winning provider of AWS and DevOps consulting and implementation services. We partner with our customers, as extensions of their teams, to build and manage modern infrastructure solutions that deliver innovation faster. We leap beyond the status quo.

Copyright © 2022 nClouds, Inc. All rights reserved

