

THE CUSTOMER

[DataScan](#) is a financial services company that provides lenders with wholesale asset financing and inventory risk management solutions.

The engineering team is responsible for maintaining the physical infrastructure used to host their Wholesale Intelligence (Wi) solution, a loan accounting and portfolio management solution that provides lenders with the ability to manage their loans to their dealer and manufacturer partners.



We would recommend WKP which allowed us to own and manage our infrastructure while building a consistent technical bridge to a client-facing cloud presence. Having worked with the Weaveworks client success team for our cluster deployments, service testing, specific use cases to deploy configuration changes and management of in-place upgrades, we are genuinely impressed with their organizational dedication to our success.” - Lance Allred, Infrastructure Manager

CHALLENGES

Like many infrastructure teams, the engineering team at DataScan is concerned with keeping the uptime of their system close to 100%, keeping customer data secure and their costs down.

Cluster upgrades result in downtime

One of the biggest challenges teams face is keeping on-premise nodes secure and upgraded with the latest patches and other required upgrades. Patching nodes manually can be time consuming and can result in too much down time for the development team.

Data privacy concerns

As a financial service provider, their clients are concerned with data privacy. The team preferred an on-premise deployment. This allows DataScan to protect the data and easily identify the device where the data is stored to provide a degree of security for their business partners.

Inflated infrastructure costs

Like most organizations, a big concern is infrastructure costs. Based on their client portfolio size and usage patterns, demands are constantly changing which can become expensive.



Industry: Financial Services

Location: United States of America

HIGHLIGHTS

- 20% increase in overall deployments
- 50% increase in deployment frequency
- 20% reduction in operational tasks
- MTTR reduced from days to hours

KEY BENEFITS

- Weave Kubernetes Platform (WKP) for management of on-premise clusters
- Automated GitOps approach for deployments
- WKP provides insights into customer patterns reducing costs

CONTACT US



www.weave.works



sales@weave.works

DataScan needed a solution that could scale with the demands of their customers. Traditionally they would have deployed their monolithic applications and set the compute resources to the high water mark for what was required at peak utilization. This ultimately resulted in wasted compute resources.

SOLUTION

DataScan runs their testing environment in the cloud on AWS. Their Development and QA teams have been leveraging on-demand scalable cloud resources to support their coding efforts for several years. Their environments (QA, Engineering, User Acceptance Testing (UAT), and Production) are all on-premise. The ability to deploy in a hybrid set-up provides DataScan with two major advantages:

1. They can expand and contract their on-demand compute footprint when needed.
2. This set-up configuration provides an opportunity to demonstrate that their product can be deployed and hosted in the cloud.

DataScan's product needed to be refactored to take advantage of scalable agnostic cloud resources. As they began to refactor their code base into a microservices model and containerized specific functions in their application, they were in a better position to deploy a scalable footprint on which to host the application.

Initially, the containers ran adjacent to the monolith, but as their container management experience improved, they could scale different components of the application, based on observed client usage patterns.

Multi-cloud and on-premise solution

DataScan reviewed a variety of commercial products that would allow them to host Kubernetes on-premise.



“We interviewed several players in the container management space to identify their direction and get a better idea of their capabilities. Many of the products fit our requirements, but a few either had a management plan that was not on-premise or had a cost model that was resource usage-based and not a predictable environment based cost model.”

DataScan decided to move forward with Weave Kubernetes Platform (WKP) due to its flexibility and on-premise Kubernetes capabilities.

Consistent configuration reduces ops complexity

DataScan provisions purpose-built clusters for their internal teams to deploy their applications. The engineering team that

supports the physical infrastructure and the cloud Kubernetes implementation also have administrative ownership for the WKP cluster configuration. The other teams (Development, QA, Systems Administrators, Client Success) view the clusters as targets for application deployment. The idea behind this setup is to ensure that all clusters are consistently configured and that the operational complexity of Kubernetes is hidden from the users who deploy to and use DataScan's software.

With the onboarding of WKP in each of these clusters, they adopted the GitOps approach for cluster deployment.

RESULTS

DataScan continues to modify their approach to infrastructure and application deployments based on the advances that Weave Kubernetes Platform brings to their toolset.



“WKP has been installed in our environment for a couple of months now. We continue to modify our approach to infrastructure and application deployment based on the advances that WKP brings to our toolset.”

Secure and consistent Kubernetes platforms for all environments

GitOps-based configuration management of their Kubernetes platforms ensures that all of their environments are the same and that they are secure. Git's strong correctness and security guarantees, backed by the strong cryptography used to track and manage changes, as well as the ability to sign changes to prove authorship and origin are key to a correct and secure definition of the cluster's desired state.

DataScan's application is highly configurable with several components that can be scaled based on their client portfolio size and usage patterns. As they tailor deployments around container management and leverage the tools provided by WKP for container monitoring, DataScan engineers believe that they will have greater insight into their client's usage patterns.

Cost reduction

DataScan's use of Kubernetes enables higher utilization and better capacity management which results in a cost saving.

Decreased deployment times

By implementing an automated GitOps approach for all of their WKP clusters, they are able to deploy changes 20% faster.

Greater mean time to recovery

The engineering team is confident that should a major incident occur, they will be able to recover all of their production environments within hours, instead of days.

Increased deployment density

Frequency of deployments increased by up to 50% since implementing WKP using a GitOps approach for all of their on-premise clusters.

WEAVE KUBERNETES PLATFORM

The Weave Kubernetes Platform (WKP) is a production ready platform that uses GitOps as the underlying architecture and developer experience. It simplifies cluster configuration and management across your organization by bringing together all the tools, services, and components that your team needs to run into a single platform. WKP also provides policy and Git-based rules to specify, audit, and control who can change what in the cluster configuration.

[Contact us for a demo.](#)