When Appetize Needed to Meet a Tight Deadline Migrating Their Applications to Amazon Web Services, They Called Taos.

Summary:
Appetize is a modern point-of-sale software company delivering solutions to the largest and highest volume clients around the globe in retail, food service, entertainment, leisure, and education. Appetize selected Taos to assist in its cloud migration to AWS, as well as its CI/CD automation and re-platforming to cloud-native services.

Challenge:
When Appetize engaged Taos, they were in the process of migrating from a managed hosting environment into AWS. A subset of the applications had been moved, however there was still a significant number left to migrate. Appetize had a hard deadline for exiting their colocation facility and assistance was needed to meet that deadline.

Additionally, the legacy environment had little automation or configuration management in place, and management tasks were manual and time intensive. While Appetize had OpsWorks in place, they were unable to quickly and automatically scale infrastructure based upon rapid demand and peak loads during a very active sports season.

Appetize also faced a shortage of employees that could support both the legacy on-premises environment and the new AWS cloud environment. The legacy environment required a significant amount of maintenance, and this was slowing the migration into AWS.

Company Profile
Appetize
Modern Enterprise Point of Sale

About the Client
Appetize develops point-of-sale and payment systems for entertainment, leisure and education enterprise businesses around the world.

Solution at a glance
Taos leveraged a unique combination of Professional Services and Managed DevOps Services teams to fork-lift critical services into AWS. After the services had been migrated, Taos rearchitected the workload dependencies to AWS services such as Elastic Beanstalk for application infrastructure, ElastiCache for existing redis clusters, and RDS for existing databases.

Taos implemented additional AWS products including EC2, S3, CloudWatch, Route53, Opsworks, EFS, RDS, and VPC in collaboration with other tools such as Graylog, FreeIPA, Nginx, MySQL, and Zabbix to ensure an integrated CI/CD pipeline and improved configuration management.
Results
Utilizing Taos’ Professional and Managed Services, Appetize was able to fully decommission its datacenter presence and shift to cloud-native capabilities in AWS. The cloud-native approach allows Appetize to leverage next generation tooling, automation, and self-healing capabilities.

The following were seen as real results from this initiative:
• Customer on-premises environment was stabilized, enabling the migration into AWS
• Fork-lift migration into AWS
• Re-platforming of critical services once in AWS
• Implementation of automation AWS automation tooling
• Customer environment running completely within AWS
• Decommission of old data center environment

Benefit to Client:
Cost and Operational Optimization:
Shifting to AWS has enabled Appetize to control system performance and sizing, which has allowed for better alignment with the needs of product development teams. For example, Taos identified a solution to properly size to a larger EC2 instance, to increase stability for LDAP services. Capacity planning based on historic metric usage has also allowed for cost savings via EC2 Reserved Instances.

Improved Scalability:
The ability to scale on demand to meet the needs of Appetize’s rapidly growing customer base has provided them with the assurance that their platform is both highly available and performing optimally.

Improved Business and Service Continuity:
Moving from the datacenter to AWS has also improved resiliency, as the core service is now in a high availability configuration, and recoverable by design. The continuity also carries over to maintenance activities, which are seamless to the user with AWS, and now workload downtime has been decreased significantly, and in several cases, removed entirely.

Pathway to Modernization:
Moving to AWS has created a path towards modernization of Appetize solutions and services. Initiatives are underway that will shift application stacks from traditional monolithic architectures to microservices, as well as serverless and container technologies. This has resulted in improved testing between development environments, and as a result a better front-end experience for customers.

Lessons Learned
For the Appetize initiative, Taos’ approach to migrate services immediately into AWS through the lift and shift approach fit client timelines. Taos moved the workloads and then began re-architecting workloads for cloud-native tooling. We expect some future clients to follow a similar approach, as well as a segment of clients seeking to re-platform prior moving into AWS. Taos looks forward to continuing to partner with its clients like Appetize to accelerate cloud adoption.