**WhiteSource streamlines application delivery and development with Microsoft Azure and Azure Kubernetes Service**



### WhiteSource is a Microsoft partner and global leader in open-source component security and compliance management, also referred to as Software Composition Analysis. The company has more than 700 customers worldwide, including many of the Fortune 100. To increase the portability of its solution, WhiteSource moved to containerized development using Kubernetes, and it chose Microsoft Azure and Azure Kubernetes Service (AKS) as its development and delivery platform. Using AKS, WhiteSource benefits from easy deployment, stellar support, and efficient management of Kubernetes clusters.

### Using open-source software has become a necessity—you simply can’t develop at today’s pace without it. WhiteSource research shows that 60 to 80 percent of the code base in applications developed in 2018 is open source. The problem is that security information about open-source components is scattered across many sources with varied levels of credibility. According to a report from WhiteSource, vulnerabilities are developers’ top concerns when working with these components. WhiteSource helps mitigate those concerns about security with a comprehensive, end-to-end open-source management solution running in [Microsoft Azure](https://azure.microsoft.com/en-us/).

### The right technology for product improvements

### The high quality of WhiteSource’s cloud-based solution has led to rapid growth, and the company saw the need to change its application delivery mechanism to better support its customers’ needs. Containerized development with Kubernetes provided the answer. “With Kubernetes, we can easily distribute containers for faster deployments and rollbacks,” says Uzi Yossef, Senior DevOps Engineer at WhiteSource. “I can have my entire environment set up as a manifest file, which makes it straightforward to keep everything in one place and under source control. For our customers, using Kubernetes makes our product cloud-agnostic, so it can work with whatever cloud they have.”

### After initially trying a different Kubernetes product, WhiteSource chose to deploy its solution in Azure using [Microsoft Azure Kubernetes Service (AKS)](https://azure.microsoft.com/en-us/services/kubernetes-service/), which offered a wide range of advantages. “AKS is much easier to use than other Kubernetes offerings,” says Yossef. “We don’t have to do the manual integrations that are necessary with other products. AKS has the fast scalability we need and the ability to connect to the serverless container framework, so we’re moving more and more workloads to it.”

### By using serverless computing within Azure, WhiteSource gains the advantages of running Kubernetes as a service without the overhead of building and maintaining its own managed cluster—Azure handles the provisioning, scaling, and management of resources. This is a key feature for WhiteSource, due to the sensitive nature of the information its solution handles.

### “We’re working with our customers’ application data, so it’s important that we can quickly scale out the necessary resources and then immediately delete them when execution is complete,” explains Yossef. “Azure Kubernetes Service provides all the functionality to give our customers exactly what they need, and more importantly, you can have a cluster up and running in a few minutes due to the intuitiveness of the product.”

### A comprehensive cloud stack and a strong partnership

### WhiteSource has found the cohesive, end-to-end nature of the Azure stack to be another advantage. The company is using [Azure DevOps](https://azure.microsoft.com/en-us/services/devops/), [Azure Application Gateway](https://azure.microsoft.com/en-us/services/application-gateway/), [Azure Blob storage](https://azure.microsoft.com/en-us/services/storage/blobs/), [Azure Container Registry](https://azure.microsoft.com/en-us/services/container-registry/), and [Azure Database for MySQL](https://azure.microsoft.com/en-us/services/mysql/). “We see Azure as a very mature, integrated environment that helps accelerate delivery of our solution and provide seamless, rolling updates,” says Yossef. “It’s great that we can get all this functionality from a single vendor.”

### Throughout its AKS deployment and adoption, WhiteSource has been able to rely on support from Microsoft to remain focused on its main goal of pleasing its customers. “We trust the direction Microsoft is going with Azure and AKS, and that helps us focus on our own innovation,” says Yossef. “We’ve gotten amazing technical help from the Microsoft global black belt team, and there are lots of examples and walkthroughs that made it easy to get up and running with AKS. Everything is well documented, and that’s not the case with other services.”

### WhiteSource is a member of the Microsoft Partner Network—and Microsoft is a WhiteSource customer. The companies’ relationship has been a classic win-win scenario. WhiteSource has found some pleasant surprises in working with Microsoft. “Microsoft is a huge enterprise, and you often think of such companies as being heavy and slow moving,” says Maya Rotenberg, Vice President of Marketing at WhiteSource. “But we’ve found Microsoft to be a very open and flexible company that invests in its partners like no other company we’ve worked with. We get amazing support on the technical side and the go-to-market side—we’re on this journey together.”

### This [Q&A with Doron Cohen,](https://customers.microsoft.com/en-us/story/whitesource-professional-services-azure) Vice President of Research and Development at WhiteSource, further discusses open-source development and how the company uses Azure to help its customers.

