

Bilyoner Interactive Services launches live betting platform with Red Hat OpenShift



When live sports betting was legalized in Turkey, Bilyoner Interactive Services needed a supported, scalable, and highly available technology foundation to support this new service. By migrating from community open source to Red Hat OpenShift and Red Hat Ansible Automation Platform, Bilyoner used container and microservices technology to quickly create and launch its new live betting platform. As a result, the company has achieved a five-fold increase in traffic and close to 100% service uptime.

Software and services

Red Hat® OpenShift®
Container Platform

Red Hat OpenShift
Container Storage

Red Hat Enterprise Linux®

Red Hat Ansible®
Automation Platform

Red Hat Satellite

Red Hat Consulting

Red Hat Training



Media & entertainment

162 employees

More than
3.5 million customers

Benefits

- Achieved close to 100% uptime for betting services
- Scaled to meet five-fold increase in traffic
- Reduced risk with supported, enterprise open source technology
- Launched new services in just two weeks with agile and continuous integration and delivery (CI/CD) approaches

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Sefa Can Acar
Linux Administrator,
Bilyoner Interactive Services



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Staying competitive by launching new, real-time betting service

Bilyoner Interactive Services was established in 2004 through a partnership between Çukurova Holding, Intralot, and Teknoloji Holding, owned by Hitay Holding and Intralot since 2013. Bilyoner Interactive Services is the creator of Turkey’s first legal online gambling platform, Bilyoner.com. The platform offers chance and sports betting to Turkish citizens, accessed through mobile devices and computers and operated through a legal agreement with Spor Toto, Turkey’s sports governing body.

When Spor Toto and the Turkish government saw a rise in the use of illegal gambling sites, they legalized live betting in August 2019. To protect its revenue from illegal alternatives, Bilyoner needed to quickly deliver a live betting service. However, its existing infrastructure platform lacked the scalability and availability to support the massive traffic increase that its new service would bring.

“Our legacy platform was unsupported and lacked the computing power, scalability, and quality of service required for live betting,” said Sefa Can Acar, Linux Administrator at Bilyoner Interactive Services. “Just one minute of downtime would result in losing customers and revenue.”

To successfully support its new service and speed development, the company sought to build a robust, highly available architecture based on microservices and container technology.

Building a scalable, container-based platform with enterprise open source technology

Bilyoner decided to build its new architecture with enterprise versions of the open source technology it already used, including Kubernetes container orchestration and ManageIQ cloud management. After researching, the company chose to work with Red Hat to take advantage of its expert enterprise support.

“Red Hat technologies were clearly highly scalable and extremely robust,” said Acar, “We saw that they would help us give new features to our customers much faster. We also liked their software offered rollback capabilities, so we could return back to an earlier version if we encountered any issues.”

Working with Red Hat Consulting, Bilyoner deployed Red Hat OpenShift Container Platform as the foundation of its new service environment. Based on Red Hat Enterprise Linux and Kubernetes, OpenShift Container Platform provides a single platform for faster, more reliable development, deployment, and management of container-based applications across cloud infrastructure.

To support this platform, Bilyoner also deployed:

- Red Hat OpenShift Container Storage, software-defined storage that stores containers and logs for its OpenShift deployment.
- Red Hat Ansible Automation Platform, an agentless automation solution for complex deployments that automates patch and update management.
- Red Hat Satellite, a management solution for Red Hat deployments that uses automation to help keep systems running efficiently, with security, and in compliance.

Bilyoner used its new Red Hat environment to rapidly create a container- and microservices-based application and launch its live betting service in just four months – well ahead of its deadline. The application consists of close to 100 microservices, running on more than 600 containers deployed across 16 on-premise servers.

Speeding delivery to meet betting service demand faster

Achieved near-zero downtime for customer-facing betting

Like in many other industries, user satisfaction is key to differentiation in the sports betting market. With the combination of Red Hat OpenShift Container Platform and Red Hat Container Storage, Bilyoner has achieved high availability for its services to support 500,000 active users and growing. Additionally, automating patch management with Ansible Automation Platform and Satellite helps keep the company's service infrastructure up-to-date and protected from bugs or flaws that might affect the customer experience.

"Using our old architecture and waterfall development approach, any problem had a catastrophic effect," said Acar. "The complexity of troubleshooting and root cause analysis led to downtime, which risked affecting our revenue and losing us customers. With OpenShift, our services are containerized for distribution within our infrastructure, making it easier to find and address any issues without affecting other services or containers. We have almost zero downtime now, even for our live betting service."

Improved scalability to meet peak demand

As the customer base for its live betting service grows, Bilyoner can now automatically scale with Red Hat OpenShift to ensure resources are reallocated in response to both ongoing demand increases and traffic peaks. When the company needs to respond to extremely high demand during key sporting events by provisioning new OpenShift instances, Satellite and Ansible Automation Platform automate the process.

"We been able to support a five-fold increase in customers since launching live betting," said Acar. "Migrating to Red Hat software means we can provide our users with a responsive experience, even as a large number of users access our service at the same time. OpenShift gives us the stability and scalability to handle more traffic with the same infrastructure."

Reduced risk with enterprise support and management capabilities

In addition to working with Red Hat Consulting, the company engaged Red Hat training for two weeks of classroom instruction on best practices for using OpenShift and containers.

"Red Hat's experts clarified the process of developing services and apps on Red Hat technologies from design to production implementation," said Acar. "With the knowledge they shared, we now can develop, run, and deploy everything ourselves and take advantage of automation."

In addition, automating provisioning capabilities with Red Hat OpenShift and Ansible Automation Platform, Bilyoner has reduced the risk associated with manual tasks. Additionally, rollback capabilities provided by Satellite and Ansible let the company revert to a previous version of a feature or service to avoid downtime or outages.

Increased efficiency with agile, collaborative work approach

Building a more flexible, stable IT environment based on Red Hat technologies has provided a foundation for Bilyoner's teams to also change their way of working. The company has adopted an agile approach and continuous integration and delivery (CI/CD) workflows to meet and exceed ever-changing customer expectations and respond to feedback by quickly developing and launching innovative new features.

“For example, with an agile methodology and our OpenShift-based architecture, we developed our coupon-sharing feature within our social online betting platform, Tribün, in a very short time,” said Acar. “Now, users can follow other users and share coupons that may increase their chance of winning, directly within the app.”

When the COVID-19 pandemic indefinitely postponed nearly all sporting events, Bilyoner worked with Spor Toto and Milli Piyango İdaresi, Turkey’s lottery organization, to quickly add new sports-related games to its betting portfolio, including table tennis, ice hockey, and two new lotteries.

“Development of these new offerings took just two weeks from start to live launch, with zero downtime and no outages,” said Acar. “With our monolithic architecture and legacy infrastructure, the same work may have taken months.”

Betting on a successful future

Bilyoner is now focused on continuing to grow its customer base. The company plans to continue using its Red Hat-based container environment to meet future demand, including adding new games to the platform and introducing performance and user experience improvements.

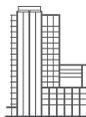
“As our application grows, our infrastructure will need to be even more stable and powerful,” said Acar. “With Red Hat, we are confident our platform will continue to readily deliver the performance and availability our customers expect as we grow.”

About Bilyoner Interactive Services

Bilyoner.com is the first electronic games platform in Turkey. Bilyoner Interactive Services founded the platform in 2004, with more than 3.5 million total members as of 2020. Bilyoner currently holds the rights to offer remote sports-related betting services and to provide national lottery tickets through its platforms. Members over the age of 18 can access Bilyoner.com’s services and make swift online money transfers via the internet, call centers, mobile phones, and ATMs.

About Red Hat

Red Hat is the world’s leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organizations prepare for the digital future.



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linkedin.com/company/red-hat

North America
1 888 REDHAT1
www.redhat.com

**Europe, Middle East,
and Africa**
00800 7334 2835
europe@redhat.com

Asia Pacific
+65 6490 4200
apac@redhat.com

Latin America
+54 11 4329 7300
info-latam@redhat.com