

Dating Platform Conglomerate Seamlessly Integrates Newly Acquired Dating Site Into Cloud Infrastructure



Executive Summary

Spark Networks SE is a global dating company with a presence in 29 countries and an extensive collection of popular apps. Since it was founded in 1997, Spark Networks has grown into the second-biggest publicly listed dating company in the world, with more than one million customers. Spark Networks' portfolio includes major brands such as Christian Mingle, Elite Singles, and Jdate.

In 2019, Spark Networks acquired Zoosk, one of the leading dating sites in North America. The acquisition required a major IT consolidation effort. With ClearScale's help, Spark Networks was able to integrate Zoosk's platform seamlessly into its broader portfolio on the Amazon Web Services (AWS) platform.

"Part of acquiring Zoosk was the integration of the existing systems in Spark Networks. The Zoosk data warehouse was comprised of on-premise physical hardware which was antiquated, unstable and under-provisioned. We could not keep or upgrade the physical data center since it was a cost overhead for us and not aligned with our long-term strategy; the tech was foreign – we had no in-house expertise on MSSQL and associated products – so we appealed to the AWS team and the AWS Premier Consulting Network. With ClearScale we found a trusted partner who could get us out of the data center on time, kept us in the loop with regular updates and good project planning, and delivered a modern, well suited architecture."

Alin Nica, Head of Platform Integrations, Spark Networks

The Challenge

When Spark Networks bought Zoosk, one of the bigger challenges of the acquisition was merging the two disparate IT environments. Spark Networks already used the AWS platform extensively. Zoosk, on the other hand, still ran many of its systems and applications in on-premises infrastructure.

In particular, Zoosk had an on-premises Microsoft SQL Server data warehouse with SQL Server Integration Services (SSIS) and SQL Server Analysis Services (SSAS) that had outgrown legacy hardware. The platform couldn't complete native database backups due to its lack of disk space and poor hardware capabilities. Also, the data warehouse was in the Zoosk domain, which meant it wasn't accessible to Spark Networks.

Spark Networks needed to integrate Zoosk into its AWS environment without affecting existing users. Doing so required database refactoring and a smooth migration from on-premises systems to the cloud. However, Spark Networks didn't have experience with such projects. The leadership team needed a third-party expert to guide them to a desirable end state. Additionally, Spark Networks believed there could be opportunities down the road to optimize its cloud usage if it were to find the right long-term partner. Enter ClearScale.

The ClearScale Solution

ClearScale began by digging into Zoosk's data warehouse needs. The team evaluated Zoosk's computing and storage requirements, as well as its data usage patterns, to determine an optimal AWS architecture.

ClearScale settled on an Infrastructure as Code (IaC) automation approach. The cloud expert worked closely with leaders from Spark Networks and Zoosk to migrate databases from multiple database servers to AWS without disrupting existing services.

Several AWS features were instrumental throughout the unification effort, including:

- Amazon Relational Database Service (RDS) for Microsoft SQL
- Amazon Elastic Compute Cloud (EC2)
- Amazon Simple Storage Service (S3)
- Amazon CloudWatch
- AWS CloudTrail

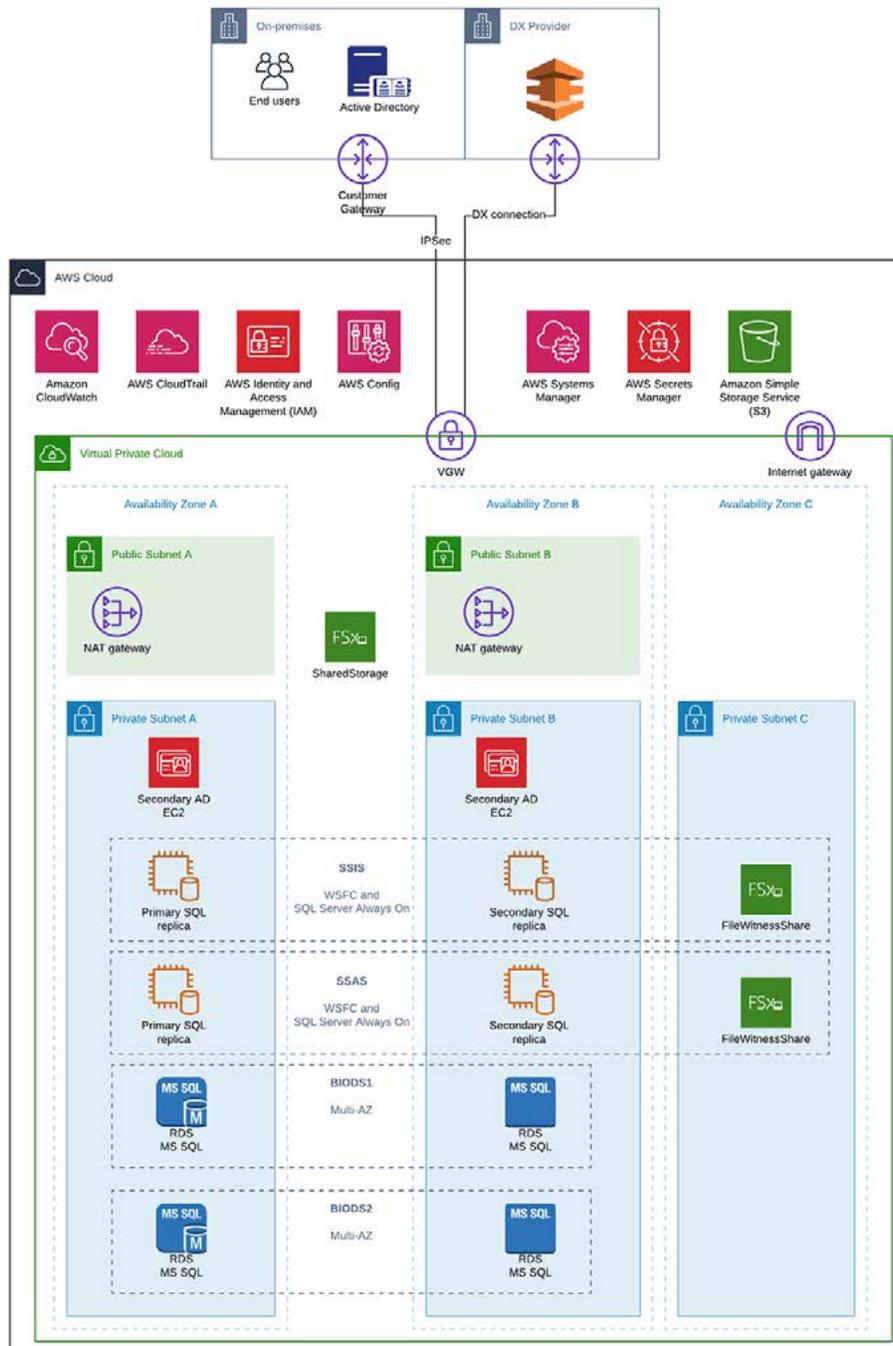
[Amazon RDS](#) is a relational database that is optimized for the cloud. The service provides cost-efficient and resizable capacity. It can also automate administrative tasks, such as hardware provisioning and patching so that IT teams can focus on higher-value activities. With Amazon RDS, Zoosk spends less time managing its data infrastructure.

ClearScale implemented [Amazon EC2](#) to address Zoosk's computing high availability requirements. Amazon EC2 provides secure and resizable computing capacity in the cloud and gives complete control to developers over resource allocation. ClearScale deployed Microsoft SSIS and SSAS clusters across multiple Availability Zones (AZs), taking advantage of Always-on Windows Server Failover Cluster capability.

Using [Amazon CloudWatch](#), Zoosk can closely monitor resource consumption and performance for its applications and infrastructure. On top of that, [AWS CloudTrail](#) simplifies governance, compliance, and risk management, which is important for a dating application that must protect sensitive user data.

Overall, these features equip Zoosk and Spark Networks with better capabilities for managing IT systems and processes across a vast user base. ClearScale followed AWS best implementation practices the entire way to maximize performance and availability while also leaving room for future growth.

Architecture Diagram



The Benefits

Thanks to ClearScale, Spark Networks was able to integrate Zoosk into its existing AWS IT infrastructure without compromising performance.

Zoosk now has a highly available and sophisticated data warehouse that doesn't suffer from performance issues. The application is accessible to the Spark Networks IT team and can take advantage of advanced cloud computing capabilities going forward.

Additionally, Zoosk is more cost-effective and reliable. The platform can deliver better user experiences through its optimized IT cost structure. At the same time, Spark Networks can trust that its new subsidiary has the capabilities it needs to expand across the world and reach new users over the long term.