



Allbirds – Using the AWS Well-Architected Framework to achieve SAP on AWS cloud best practices and operational efficiency, while optimizing costs.



allbirds

About Allbirds

Allbirds is a footwear brand that specializes in making sustainable sneakers and casual shoes. It is based in San Francisco. The company was established in 2016 and has been progressive in producing footwear inspired by natural materials. Allbirds takes a sustainable approach when sourcing their materials, with a long-term goal of eliminating their carbon footprint. Visit www.allbirds.com for more information.



“EPI-USE has been an awesome partner. They quickly identified a number of opportunities to both improve our overall hosting level of service while at the same time significantly reduce our monthly AWS hosting costs.”

Jon Kula, Engineering Director, Allbirds



The Challenge



Efficiently manage SAP
environment hosted on AWS



Improve SAP infrastructure
set up on AWS platform



Align environment to
follow **Cloud best practices**



Eliminating
unnecessary costs



The Solution



Leveraging AWS security
services like GuardDuty and
Security Hub



**Data protection and
Disaster recovery**



Monitoring and governance by
leveraging Amazon CloudTrail and
Amazon CloudWatch



AWS best practices for SAP, implementing
the rightsizing recommendations from
Compute Optimizer



Cost Optimization



Ensured business continuity
AWS Well-Architected-Reviews
for Allbirds



Billing-as-a-Service,
which gives valuable insights
into AWS cost and usage





The Challenge

Allbirds approached EPI-USE Services for AWS in 2022 about their need to manage their SAP® environment efficiently. We recognized the importance of identifying opportunities to improve their SAP infrastructure hosted on AWS. Using the AWS Well-Architected Framework, we planned to align their environment with cloud best practices, achieving operational efficiency and eliminating unnecessary costs.

The Solution

After a comprehensive review of Allbirds' AWS infrastructure, we were able to make recommendations on improving security and performance while optimizing costs. We devised an action plan to make these changes in their environment effectively.

Security

- By using AWS security services like GuardDuty and Security Hub, we were able to harden Allbirds' security posture and continuously get real-time visibility to prevent any potential security incidents. We also enabled SNS support for alerts and notifications.

Data protection and disaster recovery

- To minimize data loss, we suggested introducing appropriate backup strategies for EC2 instances. In addition, we encrypted unencrypted volumes to protect data.

Performance

- By adhering to AWS best practices for SAP and implementing the rightsizing recommendations from Compute Optimizer, we were successful in eliminating the performance bottlenecks associated with EC2 Production workloads.
- We upgraded the EBS volumes from gp2 to gp3, ensuring better price performance.

Monitoring and governance

- As part of enhancing infrastructure monitoring and governance, we enabled Amazon CloudWatch. This allows Allbirds to monitor all servers in detail and to receive SNS-based alarm notifications for CPU, memory, and disk usage.
- To closely monitor SAP HANA parameters, we evaluated integration with Datadog monitoring to provide machine learning-based intelligent monitoring features like anomaly detection and prediction.
- Additionally, anomaly detection using CloudWatch was used to reduce false positive memory alerts of HANA systems.
- We leveraged Amazon CloudTrail for monitoring and tracking account activities within Allbirds' AWS environment.

Cost optimization

- We observed that the increase in storage associated with Amazon EFS was contributing significantly to costs. By incorporating well-defined life cycle management policies, we could automate the transfer of infrequently-accessed data to EFS-IA. We switched from EFS-only backup to EFS- and S3-based backup, achieving substantial cost savings (approximately 120 percent decrease in EFS costs).

Managed Services

- As a Managed Service provider, we have always been proactive in performing AWS Well-Architected Reviews for Allbirds. Moreover, we conduct monthly account audits to ensure compliance with AWS best practices. We are available to them 24/7, providing personalized technical support for their SAP workloads and ensuring business continuity.

Billing as a Service

- As an extension to our Managed Services, we also provide Allbirds with Billing as a Service, providing valuable insights into AWS costs and usage. This service includes customized, easy-to-understand AWS monthly cost reports. Our dedicated team can assist with cost and billing queries, ensuring transparency of Allbirds infrastructure costs.



The Benefits

We assisted Allbirds in achieving an optimized and cost-efficient SAP-compliant environment on AWS. The main benefits were:



Improved security, data protection and disaster recovery using AWS security tools and back strategies.



Better performance by rightsizing and upgrading resources.



Full observability and governance for AWS infrastructure using monitoring tools, like CloudWatch and CloudTrail.



Cost optimization for EFS through life cycle management.



Well-Architected Review and monthly account audits.



Cost reporting and management through Billing as a Service.



About EPI-USE Services and AWS

EPI-USE Services for AWS offers robust and scalable hosting solutions, based on AWS. As a Next-Gen Managed Services Provider (MSP) we provide managed services and consulting services for AWS, including assessment, development, migration, management, and optimization, allowing our clients to focus on their core business. By providing a flexible cloud migration methodology, we tailor our migrations to each client's unique requirements. This allows any business to move from traditional server environments to AWS quickly and efficiently, with little to no impact on existing environments.

To learn more about how we can help your business, contact info-aws@epiuse.com or visit epiuse.com/aws-services.



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