

Case Study: Oasis Hospitality Software Ltd

Enhancing Security and Connectivity to AWS

Customer Overview:

Oasis Hospitality Software Ltd specializes in providing software solutions for the hospitality industry. As the company scaled its operations, it sought to integrate its on-premises infrastructure with AWS cloud services while strengthening its overall security posture.

Challenges:

1. Secure Connectivity Requirement:

The customer needed a secure and reliable connection between their 4 on-premises servers and an AWS EC2 instance to ensure seamless data flow and application access.

2. Security Gaps and Threat Visibility:

There was limited visibility into potential vulnerabilities and threats across their AWS environment, posing risks of unauthorized access or security breaches.

3. Compliance and Monitoring Needs:

The customer required centralized security monitoring and automated threat detection across their AWS resources to meet compliance standards and reduce manual oversight.

Solutions Implemented:

1. Secure Site-to-Site VPN Configuration:

- Established a Site-to-Site VPN to create an encrypted, secure, and low-latency connection between the customer's on-premises servers and their AWS VPC hosting the EC2 instance.
- Ensured high availability and failover capability for uninterrupted connectivity.

2. Deployment of AWS Security Services:

• AWS Security Hub:

Enabled AWS Security Hub to aggregate, analyze, and prioritize security findings across multiple AWS accounts and regions. This provided a centralized dashboard for real-time visibility into the security posture.

• Amazon Inspector:

Implemented Amazon Inspector for continuous vulnerability scanning of EC2 instances and related AWS resources. This helped identify and remediate vulnerabilities before they could be exploited.

3. Access Control and Server Hardening:

- Strengthened server security by implementing strict access control policies and securing the EC2 instance configurations to prevent unauthorized access.
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Results:

Reliable and Secure Connectivity:

- Site-to-Site VPN was successfully deployed, enabling secure and stable communication between the on-premises servers and AWS EC2 instances.

Enhanced Security Monitoring and Threat Detection:

- Continuous vulnerability assessments and real-time threat detection were established using Amazon Inspector and Security Hub.

Unauthorized Access Mitigation:

- By tightening access controls and hardening server configurations, unauthorized server access issues were fully resolved.

Improved Compliance and Visibility:

- The infrastructure is now more secure, compliant, and consistently monitored across AWS regions, helping Oasis Hospitality Software Ltd meet industry-standard security requirements.

Success Metrics:

- **Connectivity Success Rate:** 100% uptime in Site-to-Site VPN connection post-deployment.
- **Security Improvement:** Achieved over 90% reduction in critical vulnerabilities within the first month.
- **Compliance Coverage:** Full alignment with AWS security best practices across regions.

Conclusion:

By implementing secure connectivity solutions and deploying robust AWS security services, Oasis Hospitality Software Ltd significantly improved both the reliability of its hybrid infrastructure and its overall security posture. This project ensured seamless operations, reduced risk exposure, and improved regulatory compliance moving forward.