

Customer Case Study: Secure hosting delivers growth for national retailer



Background and Challenges

Our client is a well-established Australian national retailer, servicing customers across the country both on-line and via brick-and-mortar stores.

In 2017, our client's on-line store front was facing increasingly significant challenges. In particular, the on-line store could not sustain high-volume loads, especially during high turnover sales events; there were security concerns based on the knowledge that the solution was not configured with security in mind; and the business had no operational security support from the incumbent hosting provider.



DotSec assisted our client by designing, implementing and subsequently managing a secure and highly available e-commerce environment, successfully completing the initial deployment on time and on budget.

Executive Summary

Business challenge

A national retailer required a scalable, secure and manageable on-line e-commerce environment. The project needed to be completed within fixed time and cost constraints.

Solution

DotSec designed, deployed and continues to manage a secure, highly available and scalable hosting infrastructure over Amazon Web Services (AWS).

Results

Our client continues to enjoy an incident and hassle-free Internet presence that is managed and maintained by Australian secure-hosting specialists. The site now consistently handles many more shoppers than was previously possible and on-line sales have increased as a result.

The Solution

DotSec designed and implemented a secure, highly available and scalable hosting infrastructure over Amazon Web Services (AWS), meeting three key requirements:

- Be designed and maintained with security at the core. Address the Payments Card Industry (PCI) Data Security Standard (DSS), resist attackers from across the Internet, and support clear separation of duties.
- Confidently handle high turn-over events such as Boxing Day, ClickFrenzy and Black Friday sales; also be cost effective and consume few resources during quiet times.
- Be expertly managed, monitored and maintained. Support business processes that involve e-commerce and SEO groups. Support zero-downtime deployments across pre-production and production environments.

DotSec designed, configured and now maintains the hosting infrastructure with information security at its core. The new e-commerce site includes:

- Hardened EC2 instances, secured to a standard that exceeds the requirements dictated by the PCI DSS.
- Continuous management, monitoring, reporting and alerting on all components (including AWS CloudTrail, EC2 hosts, HIDS and WAF) via Splunk.
- Regular patching of all environments using automated, zero-downtime, controlled deployments.
- The Cirrus Web Application Firewall (WAF), providing protection for all Internet-accessible assets.
- Host-intrusion detection software (HIDS), customer-specific AWS IAM policies and roles, and customer-specific AWS Security Groups.

DotSec's secure-hosting environment ensures that our client can focus on their core on-line sales business, confident of the security, robustness and manageability of their new e-commerce environment.



The Outcomes

The success of this project led to a number of noteworthy outcomes, some of which are summarised below:

- DotSec was asked to design and deploy the new secure hosting environment in a short time-frame, and the project was delivered on-budget and on-time.
- Our client now has the confidence to participate in major on-line sales events without being concerned about the availability of the environment.
- The new e-commerce site is built with security at its core. Our client has total visibility of all aspects of the security infrastructure, confident that the security measures that have been integrated with the solution to achieve compliance with the relevant sections of the PCI DSS.
- DotSec's Australian infosec professionals continue to manage the secure hosting environment, relieving our client of the need to employ, train and retain suitably-skilled staff.

Project Legacy

Our client has clearly expressed their satisfaction with their new hosting environment. The improved security and robustness of the site has resulted in a consistent increase in on-line transactions, especially during busy sales periods. These outcomes will continue to benefit the client's business for years to come.

DotSec's emphasis on developing a hosting infrastructure with security at its core ensured that the client invested in an e-commerce solution that actually reduces business risk.

DotSec utilises automation and dev-ops wherever possible. The result has been the development of standardised, integrated and effective processes that have improved a range of business operations and also resulted in reduced overheads, costs and service outages.

By clearly defining roles and responsibilities, our client improved accountability for safeguarding critical assets. In place of unstructured and shared roles, clear role-based access controls separate duties (administration, marketing, etc.) and thereby reduce the likelihood of mistakes and security incidents.

With the help of DotSec's mentoring and guidance, the client has developed the internal capability of its operations and security team, and is now better able to operate, maintain, secure and improve its entire on-line retail environment.



Next Steps

DotSec can provide you with experienced specialists who can securely manage your organisation's on-line retail environment. Our engineers will design your system with manageability, security and robustness at its core, ensuring that your system performs optimally, securely and cost-effectively.

DotSec's expert infosec architects understand the challenges of the PCI DSS-compliance process. We are experienced not just in the theory of compliance and assessment, but in the actual implementation, hosting and management of secure on-line retail systems.



Get in contact with us now to discuss how DotSec can improve your on-line retail system, ensuring security and compliance, improving customer trust and satisfaction, and reducing ongoing hosting costs and charges. You can rely on DotSec to increase customer trust, increase operational certainty and add value to your business.

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