

**Case Study**

# Application Security Testing of a Global Ticket Booking eCommerce Application

## BUSINESS SITUATION

Client developed a smart ticketing platform, designed in collaboration with over 700 venues across Australia, New Zealand, Asia, Canada, and the United States. As an industry first, it gives customers total customization, flexibility and control.

Packed with sophisticated intelligence including custom built CRM, full business API integration, the ability to build venues and seat maps in real time, along with visual and usable dashboard reports driven by Tableau – Ticket Search is a SAAS product with allow client and their customer to buy tickets over the internet and box office.

This product was configurable to be used to four different payment gateways including Stripe, SecurePay, Paypal, CyberSource.

Client was looking at vulnerability assessment and penetration testing for the entire SaaS solution including testing integrations with the payment gateways

## SNAPSHOT

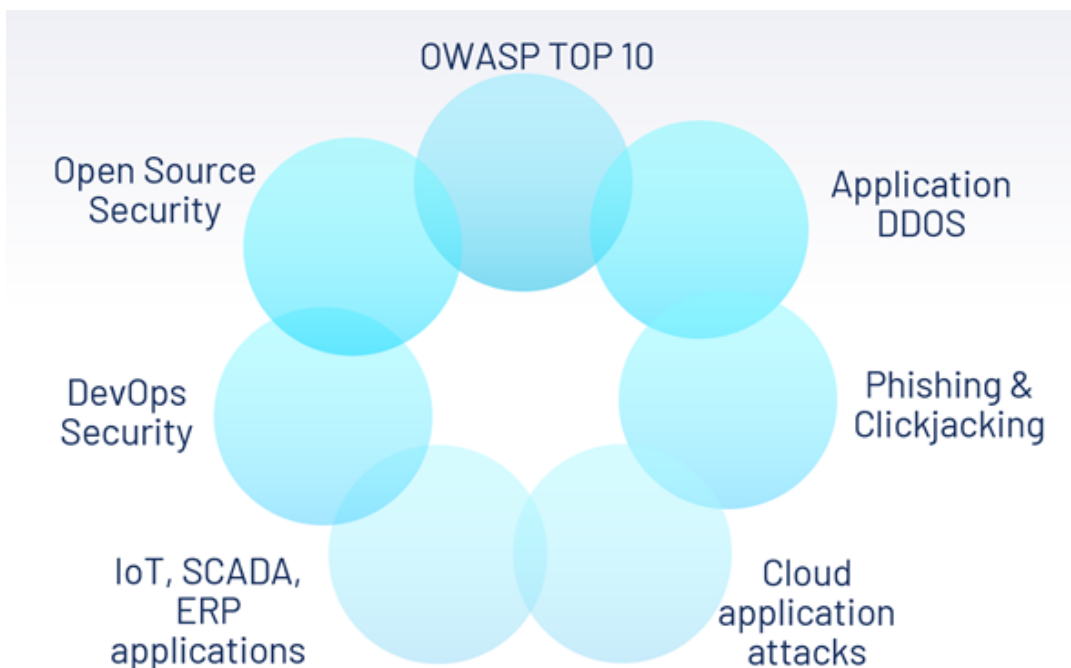
<b>Industry:</b>	Event Management and eCommerce
<b>Business Unit:</b>	Cyber Security
<b>Services:</b>	Web Application Security Testing

## SOLUTION

Our testing methodology was adapted from the following security frameworks and vulnerability categories:

1. [Open Web Application Security Project Framework \(OWASP\)](#)
2. [Web Application Security Consortium \(WASC\)](#)
3. [National Institute of Standards and Technology \(NIST\)](#)

Our testing methodology was adapted from the following security frameworks and vulnerability categories:

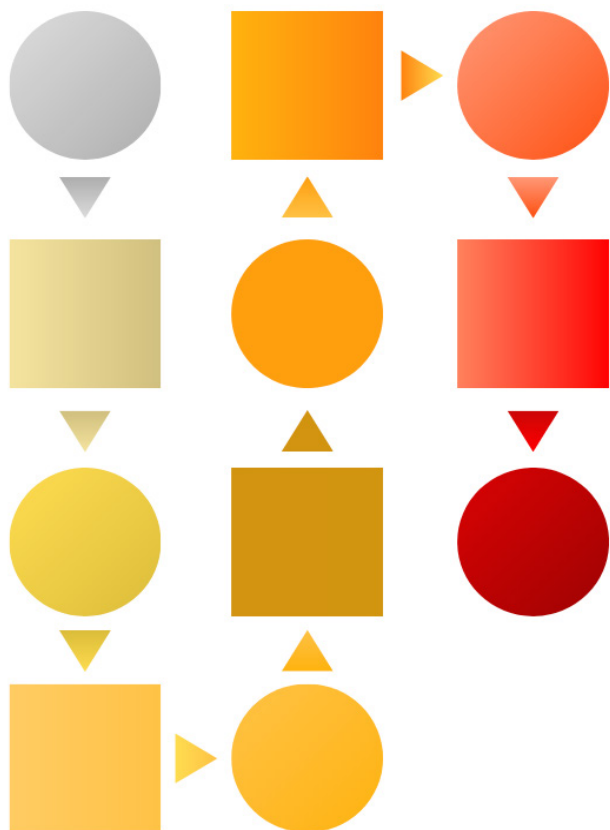


The assessment was limited to the following categories:

1. Grey Box Assessment
2. Vulnerability Assessment
3. Penetration Testing

## WHAT WAS DEVELOPED:

Penetration testing approach



## REPORT FORMAT



Sections ( Technical Report)

- Issue Title
- Severity Level (as per CVSS Scoring)
- Affected URL & Parameters or IP address & Port
- Analysis (Including steps to reproduce with evidences)
- Impact (in business terms)
- Recommendation (including code snippets if need)
- References

## BENEFITS

Number of Vulnerabilities found as per below:

- 8 key vulnerabilities found during penetration testing
- Timely fixes saved against any financial implications
- Provided secure development training to the client development team
- Reviewed and provided recommendation on client application design

## KEY TOOLS USED

- Nessus
- Netsparker
- BurpSuite Pro
- PortSecure
- KALI Linux
- Metasploit
- Cain and Abel
- Wireshark
- Pwdump
- Firewalk
- Ike-Scan, Ike-Probe, Ike-Crack
- Fport
- NTP Enumerator

## TECHNOLOGY STACK

- ASP.Net
- AWS
- WebAPIs
- Tableau
- SQL Server
- AWS Lamba
- Dockers
- Node.js
- GitLab



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