

Case Study: Web- Application Security Assessment for a Billing Management Company

Date: 22nd October 2013

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About the Customer

Our Client is a global software technology consulting and outsourcing Services Company..

The Challenge

To test the in-house developed e-billing application. As the application was developed for third party customers such as Telecom, Banking, Insurance, Medical etc. it was important that the website is free from any vulnerability that may lead to compromise of the application.

The Solution

By using Security Brigade's unique in-house developed EDITE framework, the consultants completed Web-Application Security Assessment. Key highlights of the security assessment are as below:

- 1) Functional Mapping of the entire website with every detail about the URLs, parameters that are passed. Additionally special attention was given to areas which involved financial transaction.
- 2) Test cases were created based on the application mapping.
- 3) Automated scans (including manual browsing and spidering of the application) using various open-source and in-house developed scanner.
- 4) Test case verification by manually confirming each of the potential test cases identified above.
- 5) Vulnerability correlation (Manual and Automated)

Once the first cycle of the engagement was completed and vulnerabilities were identified in the Client's application, the consultants leveraged the known vulnerabilities to further penetrate the Client's application architecture and identify the *True Impact* of the vulnerabilities.

The Deliverables

The reports and remediation information provided were customized to match the Client's operational environment and development framework. The following reports were submitted to the customer:

- **Executive Presentation:** Overview of the entire engagement, the vulnerabilities discovered and the recommendations made to mitigate the threats identified on the Client's websites.
- **Detailed Technical Report:** Comprehensive information, proof of concept examples and detailed exploitation instructions of all the threats identified.
- **Excel Tracker:** Simple and comprehensive vulnerability tracker aimed at helping the IT asset owner keep track of the vulnerabilities, remediation status, action items, etc.

The Benefits

By conducting thorough security tests and identifying vulnerabilities, Security Brigade reduced the Client's risk exposure in a climate where Banking Regulatory Bodies are taking an extremely strict approach to security.

Additionally, the Client gained the following benefits:

- **Risk Benefits:** Security Brigade minimized security risks by assessing the customer's infrastructure vulnerabilities and recommended solutions with proven methods to enhance security.
- **Cost Savings:** Security Brigade suggested cost-effective risk-mitigation measures based on the customer's business requirements that would ensure security and continuity of the business.

- **Customer Satisfaction:** Web-Application Security Assessment was conducted with minimum interruption and damage across customer systems to identify security vulnerabilities, impacts and potential risks.
- **Compliance:** As an added bonus, the Client was able to utilize the information gained from this Web-Application Security Assessment to easily gain industry certifications and provide a higher level of service to its customers.



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