

SWEET Project: Web Application Auditing

Purpose: A Web application has to be accessible to all of its customers. Ports 80 and 443 have to be open to the world to provide ubiquitous access to the Web application. A full-featured Web application is connected to a corporation's database storing customer, order, and pricing information. Securing Web applications is critical and not easy. This project outlines some simple steps to audit the security of a Web application.

Teams: The project is for a team of 3-4 students.

Problems:

The SANS Technology Institute provides some simple steps to audit the security of a Web application using a browser. However, a more comprehensive audit will include source code reviews and more advanced techniques to circumvent security measures. The steps to audit the Web application include robots.txt, Cross site scripting (XSS), SQL injection, Cookies and Hidden Fields, Sessions, Google Hacking and Spidering.

Pace Bank has provided banking services online through a web site for their customers. Follow the steps from http://www.sans.edu/resources/securitylab/audit_web_apps.php and perform the test. Write a report to answer the following question:

- 1) What do you find for each step?

Readings:

<http://www.cgisecurity.com/articles/xss-faq.shtml>: The Cross Site Scripting (XSS) FAQ
<http://www.spidynamics.com/papers/SQLInjectionWhitePaper.pdf>: SQL Injection White Paper
<http://www.robotstxt.org>: The Web Robots Page
<http://johnny.ihackstuff.com>: The Google Hacking Database

Project report

The reports should summarize what you have accomplished for your term project. It should have the following sections:

- **Cover page** – List the topic, the names and email addresses of all team members.
- **Introduction** – Introduces the topic, the problem and the goal of the project.
- **Background** – provides background information about the topic being investigated.
- **Lab Design** – Describes the lab exercises that you designed to investigate the problems.
- **Results** – Describes the results from your lab and what you have learned from this lab.
- **Conclusions** – Discusses your contributions, impact of your results and maybe future works.
- **References** – List any bibliography that you have used in the project.

Presentation & Lab Demo

Your team will present the project in PowerPoint slides and demo your results using SWEET virtual machine. The presentation should give some background on your topic, describe the problems that you are trying to solve and explain what you did to tackle the problems.